

Transformational Leadership on Work Engagement Through Psychological Empowerment as a Mediating Variable

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Abstract. *Digitalization is an important thing for companies today. Many start-ups utilize technology to improve efficiency, flexibility, and connectivity in various aspects of business. The Indonesian Information and Communication Technology Creative Industry Society (MIKTI) said that the development of start-ups that utilize digital technology in Indonesia is very high and experiencing rapid growth (Rahman, 2024). Indonesia ranked sixth globally at the beginning of 2024 in terms of the highest number of start-ups, totaling 2,562, while Jakarta was recognized as the city with the second-best start-up ecosystem at the global Top Emerging Ecosystem level (Startupranking, 2024). The millennial generation is one of the generations that will fill important positions in companies in the future, a generation that is close to technology, they are often called "Digital Natives". However, this generation has low work engagement, which is in line with the problems with human resources (HR) experienced by the start-up industry. This study aims to test the effect of transformational leadership on work engagement through psychological empowerment as a mediator carried out on millennial generation employees of start-ups in DKI Jakarta. This study uses a quantitative research design with a questionnaire distribution. A total of 203 respondents were analyzed using AMOS 21 to test the research hypothesis. The results showed that transformational leadership has a positive effect on work engagement. In addition, the psychological empowerment variable mediates the effect of transformational leadership on work engagement.*

Keywords: *Transformational leadership, work engagement, psychological empowerment*

How to Cite: Bani, R.S., and Tjahjono, H.K. (2025) Transformational Leadership on Work Engagement Through Psychological Empowerment as a Mediating Variable. *Jurnal Manajemen Teknologi*, 24(3), 264-279. doi:10.12695/jmt.2025.24.3.5

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Received: February 19th, 2025; Revision: July 3th, 2025; Accepted: Desember 8th, 2025

Print ISSN: 1412-1700; Online ISSN: 2089-7928. DOI: <http://dx.doi.org/10.12695/jmt.2025.24.3.5>

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Published by Unit Research and Knowledge- School of Business and Management-Institut Teknologi Bandung

Introduction

In the era of Industry 4.0, many companies utilize digital technology to increase efficiency, flexibility, and connectivity in various aspects of business. Digitalization is a process of transforming business processes by utilizing technology to simplify and optimize a company's operational activities (Valenduc & Vendramin, 2017). The results of data collection and surveys conducted by the Indonesian Information and Communication Technology Creative Industry Society (MIKTI), the development of start-up companies that utilize digital technology in Indonesia is very high and experiencing rapid growth (Rahman, 2024).

Indonesia is ranked sixth in the world with the most start-ups with 2,482 start-ups and ranks first in Southeast Asia, beating Singapore and the Philippines (Startupranking, 2024). Jakarta, apart from being the center of government and a place for many start-ups in Indonesia, is also a city with the predicate of the best start-up ecosystem in Indonesia in 2022 and 2021 (Startupranking, 2024). Meanwhile, in 2020, Jakarta was not only the city with the best start-up ecosystem in Indonesia but also the second best in the global Top 100 Emerging Ecosystems after Mumbai, India (Suara.com, 2021).

Start-ups are pioneering companies that actively seek and develop the right business model amid an uncertain market situation (Blank & Dorf, 2012). In this case, start-ups are pioneers in building a new business identity. Hartarto as the Coordinating Minister for Economic Affairs Airlangga stated that start-ups have an important role in creating jobs, improving welfare, and contributing to the Indonesian economy (Kominfo, 2023). A study conducted by LPEM FEB UI estimated that in 2022, GoTo contributed between IDR 349 trillion and IDR 438 trillion to Indonesia's national economy. This added value accounted for approximately 1.8% to 2.2% of the national Gross Domestic Product (GDP), generated through the company's operations and its extensive ecosystem partners (Kominfo, 2023).

According to President Joko Widodo, the presence of thousands of start-ups in Indonesia has the potential to increase the national GDP by USD 133 billion by 2025, as evidenced by the rapid growth of four unicorns—Traveloka, Tokopedia, Bukalapak, and OVO—with market capitalizations exceeding USD 1 billion, and one decacorn, Gojek, valued at approximately USD 10 billion (Ekonomirepublika, 2021).

MIKTI noted that 62.20% of start-up founders are millennials with a Bachelor's degree in education (Rahman, 2024). This is evidenced by the success of 17 start-ups owned by the millennial generation that have succeeded in various fields, including technology, e-commerce, transportation, and finance (Cermati.com, 2018). The millennial generation is a casual, flexible, collaborative, transparent, and organized generation (Karsh & Templin, 2013). They are often referred to as “Digital Natives”, this is evidence of how the millennial generation is very attached to technology in their lives (Hershatter & Epstein, 2010). However, the millennial generation is a generation that has problems related to the lack of attachment they have to their work (Negoro & Wibowo, 2021).

According to Priyadarshi & Prasad (2023), the millennial generation born between 1980-1997 is the largest population group in the world. There are around 1.78 billion Generation Y worldwide, equivalent to almost 22%-23% of the global population.



Figure 1.

Based on the 2020 population census, the millennial generation is the second largest in Indonesia's demographics, reaching around 25.87% of the total population of Indonesia (Badan Pusat Statistik, 2020). This condition shows that Indonesia is experiencing a demographic bonus, namely a situation where the number of the productive age population (15-64 years) is greater than the non-productive age population, while the millennial generation, known as generation Y, consists of individuals born between 1981 and 1996 (Badan Pusat Statistik, 2020).

According to MIKTI research results, in addition to the problem of access to capital, problems with human resources (HR) are the second most common at 18.75% faced by start-ups in Indonesia. The results of the Growth & Scale Talent Playbook research state that 91% of start-up employees have the desire to leave their workplace. One of the contributing factors is the incompatibility of employees with leaders and company culture (Finance. detik, 2022). Losing employees will harm the resources that the company has invested in employees through training, development, and education. High employee turnover will increase recruitment and training costs, so it needs serious attention (Negoro & Wibowo, 2021).

Today's highly dynamic and competitive business world demands organizations to be able to adapt and continue to innovate. A leader needs to create and implement new ideas so that they can encourage employees to think creatively and find solutions to problems faced by the organization (Hofstede, 1991). Franca & Rua (2016) said that the business world is continuously influenced by trends in various aspects, such as quality, innovation, modernization of production processes, marketing, cooperative relationships, social and environmental responsibility, organizational culture, information, and knowledge. Lack of organizational competitiveness is often associated with low productivity. This can be caused by the existing leadership style not encouraging employee trust and commitment to organizational goals (Rua & Araujo, 2016). Meanwhile, employees who have work engagement and who do their

work with a sense of fun can make them work effectively and more optimally to achieve organizational goals. Employees who do not have work engagement tend to complete their work carelessly and do not provide quality results, Muslimah & Tjahjono (2023).

Therefore, it is important to pay attention to the potential impact of leadership style on organizational performance, especially transformational leadership which is inherent in innovative strategies that involve the entire company structure (Fraga, 2018). In line with Nguyena's research (2020), the role of transformational leadership is important for a leader to increase the sense of responsibility in the team and encourage employees to be creative and inspiring so that responsibility and the level of involvement in work increase. Amor et al. (2020) posit that transformational leadership fosters employee work engagement by facilitating access to critical resources, including information, opportunities, support, and adequate material provisions.. This is also supported by Nurtjahjani et al., (2021) who said that when transformational leaders show genuine concern for each of their employees, they tend to build positive relationships with each other and a sense of belonging to the institution. Transformational leadership has been proven by Muslimah & Tjahjono (2023) to increase employee work engagement.

Work engagement can also be indirectly influenced by psychological empowerment, where psychological empowerment will have an effect when transformational leadership increases or decreases. The relationship between transformational leadership can create a good relationship with work engagement by considering many factors, such as communication, work engagement, and psychology (Nguyen, 2020). Leaders who pay attention to the emotional state and feelings of their employees will reduce the level of employee desire to quit their jobs (Negoro & Wibowo, 2021). Empowerment represents the effect of superior behavior on subordinates (Lee & Koh, 2001). Subordinates experience empowerment through four psychological dimensions: impact, meaningfulness, self-determination, and competence. In alignment

with the findings of Avolio et al. (2004), Muslimah & Tjahjono (2023), and Nguyen (2020), This study proposes that transformational leadership is positively associated with psychological empowerment. Psychological empowerment, as defined by Spreitzer (1995), is a multidimensional construct that includes four essential dimensions: impact, meaningfulness, self-determination, and competence. However, contrary to expectations, Meyerson and Kline (2008) observed a potential negative association between certain transformational leadership dimensions (idealized influence, inspirational motivation, intellectual stimulation, and individual consideration) and employee psychological empowerment. These findings necessitate further investigation to elucidate the nuanced and potentially complex relationship between transformational leadership and employee empowerment. Considering the high level of employee turnover in start-up companies, which are predominantly composed of the millennial workforce, it is essential for organizations to adopt a transformational leadership style that can effectively understand the characteristics of this generation. Furthermore, given the conflicting evidence regarding the relationship between transformational leadership and psychological empowerment, this study specifically investigates the effect of transformational leadership on work engagement, with psychological empowerment serving as a mediating variable.

Literature Review

Transformational Leadership

Transformational leadership is a leadership style that motivates followers to prioritize organizational interests over personal interests. German sociologist Max Weber initially introduced this leadership style in the 1940s, and it was later analyzed and expanded upon during the 1970s and 1980s. Kinicki and Fugate (2018) Emphasize that Bernard Bass, a leading expert in organizational behavior, developed the most widely recognized framework for transformational leadership. As stated by Bass in Yukl (2013), transformational leadership is

characterized by four key dimensions: inspirational motivation, idealized influence, individualized consideration, and intellectual stimulation. Additionally, a more detailed explanation of the four dimensions is provided below:

1. Idealized influence: This facet emphasizes the cultivation of employee pride, respect, and self-esteem (Kinicki & Fugate, 2018). Effective leadership mandates that leaders serve as exemplars, exhibiting courage, dedication, and a willingness to prioritize employee well-being (Yukl, 2013).
2. Inspirational motivation: Demonstrates the behavior of a leader in communicating a vision or long-term view that is attractive to employees. Effective leaders cultivate employee engagement by employing emotional appeals, imbuing work with meaning, and providing inspiring visions. Kinicki and Fugate (2018) argue that this creates an understanding that connects the existing organizational challenges with the envisioned future goals.
3. Intellectual stimulation: This is an act of leadership that motivates followers to view challenges from a broader standpoint and develop solutions with greater creativity (Yukl, 2012).
4. Individualized consideration: A leader's actions encompass providing support, motivation, and guidance to employees. Such a leader dedicates time to exploring employees' interests and strengths, recognizing potential opportunities, and facilitating their professional growth and development (Kinicki & Fugate, 2018).

This transformational dimension emphasizes the importance of empowerment given by leaders to their followers to achieve shared success. By providing inspiration and providing positive examples, leaders can influence and encourage employees to achieve common goals (Tjahjono et al., 2018).

Work Engagement

Work engagement and employee engagement are two terms that are often used interchangeably, although they are specifically different. Work engagement according to

Schaufeli (2010) can be defined as the relationship between employees and their work, while employee engagement includes the relationship between employees and their organization. More deeply according to Schaufeli et al., (2002), work engagement is a positive state of mind, a feeling of satisfaction, and work that is done with enthusiasm (vigor), dedication (dedication), and absorption (absorption) with the following meanings:

1. Vigor: Work that demonstrates exceptional energy, mental fortitude, unwavering determination, and perseverance, even when faced with challenges.
2. Dedication: This concept denotes participation that is not solely cognitive but also involves affective and emotional components. It is defined by significance, pride, intrinsic motivation, the perception of challenge, and inspiration.
3. Absorption: A psychological state characterized by deep immersion and intrinsic satisfaction in professional tasks, wherein the perception of time is significantly altered, and detachment from work becomes difficult.

Employees exhibiting work engagement should not be classified as workaholics, as they maintain the ability to enjoy life beyond their professional responsibilities. Bakker & Demerouti (2008) Suggests that despite experiencing fatigue after a full day of activities, individuals perceive their exhaustion as fulfilling, this is linked to the positive achievements they have attained. However, low levels of work engagement have been identified as a significant factor contributing to the growing intention to turnover among employees in start-up companies. Many millennial employees working in dynamic and high-pressure environments tend to lose their sense of vigor, dedication, and absorption toward their work. This condition contributes to the high turnover rate within the start-up sector, which in turn may hinder organizational stability and growth. Therefore, enhancing work engagement is a crucial strategy for addressing the turnover problem in Indonesia's start-up industry.

Psychological Empowerment

Psychological empowerment is conceptualized as a motivational framework encompassing four key cognitive components: perceived meaning, self-efficacy (competence), autonomy (self-determination), and the perceived ability to influence outcomes (impact) (Spreitzer, 1995). According to Kinicki & Fugate (2018), the four dimensions are described as follows:

1. Meaning: The concept refers to the alignment between an individual's personal values and career goals with the values and objectives established by their team, manager, or superior within the organizational hierarchy.
2. Competence: see and assess the personal self of the employee regarding his/her ability to do the job.
3. Self-Determination: It denotes the perception or cognitive appraisal of employees regarding their autonomy in managing their work processes and the consequent results of their endeavors.
4. Impact: is the belief that the effort given has an impact and influences change within the organization (To et al., 2015).

This overall understanding reflects a proactive attitude toward the job role. A proactive orientation characterizes an individual's desire and belief to shape the role and context of his/her job (Spreitzer, 1995). According to Spreitzer (1995), psychological empowerment theory attempts to explain the factors that influence the success of efforts to empower individuals, by emphasizing the understanding that empowerment does not only involve delegating tasks but also focuses on how those tasks can provide satisfaction to individual employees. Psychological empowerment enhances recognition of significant workplace values. Thus, each dimension of transformational leadership contributes to the formation of key aspects of psychological empowerment. When transformational leaders successfully foster a sense of meaning, competence, self-determination, and impact in employees, their psychological empowerment

levels will increase. Ultimately, this psychological empowerment acts as a mediating mechanism explaining how transformational leadership can enhance work engagement, particularly in the context of start-up companies dominated by the millennial generation, characterized by autonomous, creative, and meaningful work.

Hypothesis Development

The Influence of Transformational Leadership on Work Engagement

Leadership significantly impacts the workplace dynamics and the way employees perceive their tasks and responsibilities (Christian et al., 2011). In accordance with the transformational leadership framework articulated by Bass and referenced in Yukl (2013), four principal dimensions are identified: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. These dimensions collectively facilitate the development of leaders who exert a constructive impact on their subordinates. Specifically, the idealized influence dimension is instrumental in fostering enhanced performance among team members. Inspirational leadership can stimulate the need for better future growth. Meanwhile, intellectual stimulation can pave the way for new approaches to decision-making (Avolio & Bass, 1995).

Seeing the problem of high turnover rates among millennial generation employees which is in line with the HR problems faced by start-ups in DKI Jakarta, leaders need to have transformational leadership behavior to recognize the differences in the needs of each individual and develop the potential possessed by employees, to improve higher performance. The higher the leader applies a transformational leadership style, the higher the tendency of employees to have high enthusiasm for work and dedication (Amor et.al., 2020, Nguyen, 2020, Nurtjahjaniet.al., 2020, Muslimah & Tjahjono, 2023). Based on previous research and the theoretical basis that has been described above, the following hypothesis is formulated:

H1: *Transformational leadership has a positive influence on the work engagement of millennial generation employees of DKI Jakarta start-ups.*

Psychological Empowerment Mediates the Effect of Transformational Leadership on Work Engagement

Psychological empowerment emphasizes the concept of motivation involving four dimensions, namely meaning, competence, self-determination, and impact in the work environment (Spreitzer, 1995). Halbesleben (2010) emphasized the interconnectedness of meaning, self-efficacy, and work engagement. In particular, self-efficacy corresponds to the competence aspect of psychological empowerment. Employees who possess the necessary skills and confidence in their abilities to execute their tasks are more prone to experiencing positive work outcomes and greater engagement. While occupational tasks may present difficulties, an individual's perceived competence fosters the confidence necessary to effectively address these challenges. Thus, an elevated sense of psychological empowerment among employees correlates with an increased likelihood of heightened work engagement.

The high desire of DKI Jakarta start-up employees to leave their workplace requires transformational leaders to be able to place each employee as the main focus of every activity. Zhu et al., (2009) argue that the formation of a strong relationship between leaders and employees creates a positive response, such as providing psychological meaning and a feeling of security when the leader shows his support. The purpose of transformational leaders using transformational leadership is to inspire motivation and enthusiasm among followers, thereby promoting optimal performance to achieve common goals (Wagimo & Ancok, 2015). An increased perception of transformational leadership among employees is positively associated with enhanced psychological empowerment, which subsequently fosters higher levels of work engagement (Nguyen, 2020; Muslimah & Tjahjono, 2023; Nurjahjani et al., 2022).

Based on previous research and the theoretical basis that has been described above, the hypothesis is stated as follows:

H2: Psychological empowerment plays a mediating role in the positive effect of transformational leadership on job engagement of millennial employees in DKI start-ups in Jakarta.

The conceptual framework of this thesis is developed based on the synthesis of the literature review and the aforementioned discussion, encompassing three central domains: transformational leadership, work engagement, and the mediating influence of psychological empowerment on the relationship between transformational leadership and work engagement.

Research Methodology

Respondent Profile

This Study used quantitative methods, the data in this study were collected using a survey method through a questionnaire distributed boldly (online) via Google Forms from April 7 to May 8, 2024. Sampling used purposive sampling with the criteria applied in this study as follows:

- 1. Millennial generation, born between 1980 and 1997
- 2. millennial generation employees working at start-ups in DKI Jakarta.
- 3. Millennial generation employees who have a minimum work period of six months.

The start-up has been in operation for more than one year and has a workforce of over 20 employees.

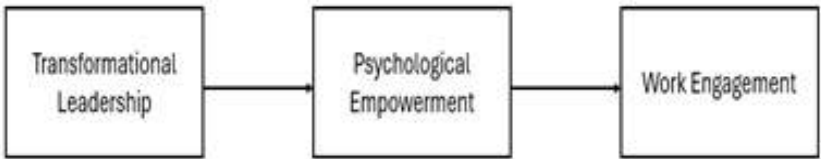


Figure 2
Model Hypothesis

Table 1
Profil Responden

Profil Responden	Category	Total	Persentase (%)
Gender	Laki-Laki	137	67%
	Perempuan	66	33%
	Total	203	100%
Industry sector	E-commerce	119	59%
	Fintech	14	7%
	Fintech	14	7%
	Education	30	15%
	Game Developer	10	5%
	Other	9	4%
	Total	203	100%

The number of respondents collected was 203 consisting of 67% male and 33% female. The majority of respondents in this study (77%) were aged between 28 and 35 years. This age range represents the peak period of productivity and career stability within the millennial generation. The largest Company Field is in the e-commerce category with a total of 59% and the dominance of staff positions is 63%.

Table 2
Descriptive Statistical

Variable	Mean	Category
Transformational Leadership	3.49	High
Work Engagement	3.53	High
Psychological Empowerment	3.59	High

The transformational leadership variable has an average indicator value of 3.49 or is in the high category. The work engagement variable has an average indicator value of 3.53 and is in the high category. Psychological empowerment has an average indicator of 3.59 and is in the high category.

Validity Test

A validity Test is a process to measure the extent to which items in an instrument effectively represent the variables being studied, (Bougie & Sekaran (2020). According to Tjahjono et al. (2021), the results of the validity test can be seen based on the loading estimate value or the convergent validity of the instrument. A variable measure is considered valid if it has a high standard loading, namely 0.50 or more.

The results of SEM AMOS 21 processing for CFA testing can be seen in Table 3. The factor loading values of all question items related to the variables of transformational leadership, job engagement, and psychological empowerment were more than 0.5, indicating that all items were considered valid.

Descriptive Statistical Test

Descriptive statistics are tests that can describe the object being studied through data from questionnaires filled out by the sample as they are (Bougie & Sekaran, 2020). The descriptive statistical test in this study shows the average (mean) value of all indicators. There is a data categorization that refers to the approach popularized by Lind et.al., (2018), which interprets values with an interval of 1.00-1.80 as very low and an interval of 4.21-5.00 as very high.

Reliability Testing

Reliability testing can be assessed based on the Construct Reliability (CR) value. If the CR value > 0.70, the construct is said to be reliable. (Schindler, 2022).

The Construct Reliability results obtained for the transformational leadership variable were 0.890, the work engagement variable was 0.849, and the psychological empowerment variable was 0.844. This means that all instruments in this study were declared reliable and can be used for the next analysis process.

Normality Test

The Normality Test in this study is seen from the Critical Ratio of Skewness and its kurtosis. The range of CR values that can be accepted and stated as normally distributed data is -2.58 to 2.58 (Tjahjono et.al., 2021).

Table 3
Validity Test

Indicator	Variable	Loading Factor	Cut-off Value	Validity Status
TL1	TL	0.646	>0.500	Valid
TL2	TL	0.667	>0.500	Valid
TL3	TL	0.610	>0.500	Valid
TL4	TL	0.629	>0.500	Valid
TL5	TL	0.693	>0.500	Valid
TL6	TL	0.718	>0.500	Valid
TL7	TL	0.650	>0.500	Valid
TL8	TL	0.701	>0.500	Valid
TL9	TL	0.604	>0.500	Valid
TL10	TL	0.658	>0.500	Valid
TL11	TL	0.696	>0.500	Valid
TL12	TL	0.784	>0.500	Valid
WE1	WE	0.652	>0.500	Valid
WE2	WE	0.671	>0.500	Valid
WE3	WE	0.691	>0.500	Valid
WE4	WE	0.625	>0.500	Valid
WE5	WE	0.709	>0.500	Valid
WE6	WE	0.670	>0.500	Valid
WE7	WE	0.799	>0.500	Valid
WE8	WE	0.792	>0.500	Valid
PE1	PE	0.581	>0.500	Valid
PE2	PE	0.699	>0.500	Valid
PE3	PE	0.780	>0.500	Valid
PE4	PE	0.716	>0.500	Valid
PE5	PE	0.683	>0.500	Valid
PE6	PE	0.674	>0.500	Valid
PE7	PE	0.632	>0.500	Valid
PE8	PE	0.656	>0.500	Valid

Tabel 4
Reliability Testing

Variable	Construct (CR)	Reliability	Description
Transformational Leadership	0,890		reliabel
Work Engagement	0,849		reliabel
Psychological Empowerment	0,844		reliabel

Table 5
Normality Test

Indicator	skew	kurtosis	c.r.
KK8	.017	-.370	-1.077
PP8	-.437	.201	.584
PP7	.290	-.406	-1.181
PP6	-.367	.017	.049
PP5	.064	-.263	-.766
PP4	-.303	-.069	-.201
PP3	.505	-.314	-.914
PP2	-.265	-.054	-.158
PP1	.189	-.358	-1.041
KK7	.598	-.334	-.971
KK6	-.330	-.028	-.081
KK5	.603	.193	.562
KK4	-.501	-.001	-.001
KK3	.302	-.323	-.941
KK2	-.175	-.150	-.436
KK1	.427	-.305	-.887
KT1	-.343	-.148	-.430
KT2	.261	-.209	-.608
KT3	-.291	-.112	-.325
KT4	.054	-.239	-.695
KT5	-.559	.018	.054
KT6	.201	-.215	-.626
KT7	-.445	-.049	-.141
KT8	.352	-.136	-.395
KT9	-.382	-.584	-1.699
KT10	.284	-.181	-.528
KT11	-.504	.024	.070
KT12	.521	.126	.366
Multivariate		12.182	2.117

The data in this study are declared multivariate normal and meet the assumption of normality because they have a multivariate result of 2,177.

Discussion

Following the completion of the measurement and structural validation processes, including hypothesis testing, the next section of this study will provide an in-depth analysis and interpretation of the results related to each hypothesis. Based on the results of the

hypothesis testing, all research hypotheses were accepted, and the explanation related to each hypothesis in this study will be discussed.

Transformational Leadership Has a Positive Influence on Work Engagement

The findings of the study support the hypothesis, demonstrating that transformational leadership positively influences work engagement. This conclusion is based on the CR value, or t-value, which is 2.044, surpassing the threshold of 1.971, with a coefficient of 0.136 (Tjahjono et al., 2021).

This indicates that when employees perceive their leaders as transformational, it facilitates the cultivation of innovative work behaviors. This is by research conducted by Amor et al., (2020), Nguyen (2020), and Nurtjahjani et al., (2022) where leaders who apply a transformational leadership style can have a positive influence on the emergence of employee work engagement. This study shows that the four dimensions of transformational leadership namely idealized influence, inspirational motivation, intellectual stimulation, and individual consideration play an important role in encouraging employee work engagement, which in turn increases organizational productivity and profitability.

Psychological Empowerment Mediates Positive Transformational Leadership on Work Engagement

The outcomes of this research substantiate the acceptance of the hypothesis, wherein transformational leadership is found to have a beneficial effect on work engagement, mediated by psychological empowerment. This implies that the first model equation reflects a positive relationship, with a coefficient value of 0.307. The second equation has a positive effect as indicated by the CR value or t-count value of 2.044 and a coefficient value of 0.136. The third equation is said to have a positive effect as indicated by the CR value or t-count of 4.253 and a coefficient value of 0.500.

This study shows that when a leader has a transformational leadership style with psychological empowerment as a mediator, it affects work engagement in employees. This is consistent with the results reported by Amor et al. (2020), Nurtjahjani et al. (2022), Nguyen (2020), and Muslimah & Tjahjono (2023), who assert that an increased perception of transformational leadership among employees correlates with elevated psychological empowerment, which, in turn, contributes to heightened work engagement..

Conclusion

This study aims to analyze the relationship between transformational leadership and work engagement with psychological empowerment as a mediating variable in millennial generation employees working in start-up companies in the DKI Jakarta area. Based on the results of the analysis of 203 respondents from various entities and job levels with a minimum of six months of service, this study shows that transformational leadership has a positive effect on work engagement, meaning that the higher the transformational leadership behavior demonstrated by the leader, the higher the level of work engagement of millennial generation employees in start-up companies.

In addition, psychological empowerment is proven to significantly mediate the effect of transformational leadership on work engagement, indicating that transformational leadership not only directly influences work engagement, but also through increasing the sense of meaning, competence, autonomy, and work impact perceived by employees. Thus, this study confirms that an effective transformational leadership style has a significant role in strengthening the work engagement of millennial generation employees in the start-up industry through increasing psychological empowerment, which ultimately contributes to the sustainability and performance of organizations amidst the dynamic competition of the digital industry.

Academically, the results of this study are expected to make an important contribution to the development of human resource management science, particularly as an academic reference for strengthening the understanding of the mechanisms underlying the relationship between transformational leadership, psychological empowerment, and work engagement. This study supports previous findings from Amor et al. (2020), Muslimah & Tjahjono (2023), Nguyen (2020), and Nurtjahjani et al. (2022), which showed that the higher the level of transformational

leadership perceived by employees, the higher the level of work engagement, reflected in their enthusiasm and dedication to the company. This study also confirms that positive perceptions of transformational leadership can increase employee psychological empowerment, which ultimately impacts work engagement and company profitability. Furthermore, this study expands the empirical context of previous research by highlighting the dynamic and digital characteristics of the start-up sector in Indonesia, and it can serve as a basis for further studies to examine similar relationships across generations and industries.

Practically, the results of this study are expected to provide input for start-up company leaders in DKI Jakarta in addressing the challenges of high turnover and low job positions among millennial employees. The research findings confirm that the implementation of an effective transformational leadership style through inspiring a meaningful work vision, personal support, and encouragement of creative thinking can increase employees' sense of meaning, competence, autonomy, and work impact as a form of psychological empowerment.

Therefore, start-up leaders need to create a work culture that encourages employee participation in decision-making, provides initiative in completing tasks, and develops a system of recognition and training based on performance and self-development. Furthermore, the use of technology and data in analyzing employee engagement levels can help leaders respond more quickly to potential declines in work motivation. By implementing these leadership practices, start-ups in Jakarta can increase employee engagement, reduce turnover rates, and strengthen organizational competitiveness amidst the dynamic digital industry.

This study has several limitations that need to be considered. Data collection was conducted through a self-administered questionnaire using Google Forms, where respondents

completed the questionnaire independently without researcher supervision. This situation has the potential to introduce bias due to the possibility of respondents misunderstanding statements or providing inaccurate answers. Therefore, the researchers attempted to minimize this by designing engaging and easy-to-understand questions. Furthermore, this study was cross-sectional in nature, thus unable to describe the long-term dynamics of start-up business processes. Therefore, further research is recommended to use a longitudinal design to assess work changes over time.

Another limitation lies in the relatively small sample size of 203 respondents, dominated by the e-commerce and education sectors. Therefore, future research is expected to involve a more proportional number of respondents and cover a variety of start-up industry sectors for more representative results.

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