TRANSFORMATIONAL LEADERSHIP AND WORK ENGAGEMENT: MEDIATING ROLE OF PSYCHOLOGICAL EMPOWERMENT

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ABSTRACT
Introduction: Work engagement has gained significant attention over the past two decades, particularly within the evolving business environment of the 21st century. This research aims to examine the impact of transformational leadership on work engagement, with psychological empowerment as the mediating factor.

Methods: This research is a quantitative study using primary data obtained through a questionnaire survey of employees in one of the Indonesian private companies active in the field of distribution of biotechnology research laboratory equipment. The measurement is done using the Likert Scale and data analysis is done with the help of the PLS-SEM tool.

Results: The research findings indicate that transformational leadership positively influences work engagement, with psychological empowerment mediating the relationship between transformational leadership and work engagement. These findings suggest that leaders who adopt transformational leadership styles can enhance work engagement through psychological empowerment.

Conclusion and suggestion: This research provides valuable insights for organizations that want to enhance the work engagement of their employees, especially in situations of organizational restructuring. In addition, the study also emphasizes the importance of job resources in helping to create a working environment that supports high work engagement.

INTRODUCTION
The escalating popularity of work engagement in the past two decades is intrinsically linked to the changes in the business environment of the 21st century. Cascio & Montealegre (2016) stated that the internet technology has had a profound impact on the current business environment. The internet has made it easier to access information...
quickly from anywhere, allowing ideas to spread worldwide in an instant. Sweetman & Luthans (2010) explain that the contemporary business environment is marked by technological advancements, organizational streamlining, and rapid innovation. This situation demands corporations to continually adapt, predict changes, and establish partnerships and alliances that often change continuously, thereby forcing employees to adapt to new environments that significantly increase negative emotions. Consequently, positive emotions become highly valuable for safeguarding organizations from excessive fatigue or burnout.

Research findings by Fredrickson (2001), Schaufeli & Bakker (2004), Halbesleben (2010), as well as Sweetman & Luthans (2010) explain that work engagement is negatively related to burnout. Employees with high work engagement indicate that they find their work more enjoyable. This feeling of pleasure is a positive emotion that can motivate employees to work more creatively and overcome the limitations they face. This implies that the higher a person's work engagement level, the lower the level of excessive stress they experience. Leiter & Bakker (2010), in their research, explore how work engagement provides support for employees to develop new knowledge, respond to unique opportunities, and receive guidance and attention from their work environment to adapt to the ever-changing work life. The dimensions of work engagement include the relationship of employees with their work, characterized by vigor, dedication, and absorption (Schaufeli et al., 2002).

The important role that work engagement plays in today's business environment provides a strong reason for the growing popularity of work engagements in the turbulent 21st century, such as organizational restructuring. However, in some cases, work engagement may be weak, as is the case in XYZ (name anonymized) companies that operate in the field of distributing biotechnology research laboratory equipment. The results of a survey conducted by XYZ (2021) showed that more than 60% of its employees belonged to the survival category.

A survival category is an individual who has a negative perception of management and existence. They tend to accomplish their tasks without paying attention to the quality of the work. In bad conditions, they do work with uncomfortable feelings and just try to survive not to be fired. This presupposes that there is a weakness of work engagement within XYZ, and that the phenomenon that occurs in the company is contrary to the dimension of work engagement which is a lack of vigor, dedication, and absorption.

The weakness of work engagement at XYZ Company may be attributed to the inadequacy of job resources. Schaufeli and Bakker (2004) stated in their research that job resources are predictors of work engagement. This research operates through positive motivation processes within job resources that drive work engagement and organizational commitment. These processes leverage job resources to play a role in intrinsic motivation,
fostering employee growth, learning, and development. Additionally, job resources enable the extrinsic motivation processes by providing supportive coworkers and appropriate feedback from supervisors. Such things can increase the chances of success in achieving an individual work goal.

Halbesleben (2010) stated in his research that job resources have a positive relationship with work engagement, especially in autonomy or job control and self-efficacy, which are highly correlated with work engagement. Job resources, according to Baker et al. (2004), refer to the physical, psychological, social, or organizational aspects of work that reduce job demands and associated physiological and psychological costs, facilitate the achievement of work-related goals, and encourage personal growth and development. Organizational job resources include aspects such as salary, career opportunities, and job security, while interpersonal and social resources are found in supervisor and coworker support as well as team climate. Job resources at the job level include role clarity, participation in decision-making, and task-level aspects like performance feedback, skill variety, and task significance.

The results of these studies support that there is an indication of weak employment resources in XYZ. Because, from the results of the survey (2021) carried out by the company found that, the goals and expectations of the leader have not been a common priority, and this should also be owned by the team that supports him. The condition gives attention to communication from top to bottom so there is an equalization of understanding of the purpose that exists. In addition, in the people component found still low level of appreciation perceived by employees towards people, colleagues, or subordinates about how they are empowered in the completion of tasks and concern for efforts to improve the quality of human resources.

Research by Christian and Slaughter (2011) affirms that leadership plays a crucial role in the work context and can influence how individuals perceive their work. Specifically, leaders with transformational leadership styles have a notable impact because they exhibit support, encouragement, and empowerment of their team members to seek innovative and creative solutions to organizational issues, show optimism and enthusiasm, and instill confidence in their team members, which positively influences them (Kinicki & Fugate, 2018). This implies that transformational leadership is linked to job resources, as defined by Hakanen & Roodt (2010), referring to the work conditions that provide resources for employees.

Supported by Amor et al. (2020) research findings, leaders with transformational leadership styles foster work engagement through access to information, opportunities, support, and adequate resources for their followers. A study by Ghadi et al. (2013) also showed the same results that employees who have managers with a transformational
leadership style tend to have more work engagement, characterized by a workplace attitude that is energetic, dedicated, and able to focus on work. This is also supported by Nguyen (2020), who stated that transformational leadership has a positive influence on attitudes and work behavior both individually and in organizations.

Although various research findings have shown that transformational leadership correlates with work engagement, it is important to pay attention to the understanding of the mechanisms and processes through which transformative leadership affects attitudes related to work, as stated by Yukl (1988) in the Mostafa (2019) study, which states that it is possible that there are different processes of influence through which transformational leadership influences its followers. This is also supported by the statement by Amor et al. (2020) that different processes have the possibility of being involved in transformational leadership, but only a few are studying how transformative leadership predicts empowerment, so doing transformational leadership research in predicting empowering, becomes a useful and necessary thing that can bring clarity about understanding empowerments. Hence, this research incorporates empowerment, specifically psychological empowerment in this context, as a mediator to bridge the positive influence of transformational leadership on work engagement at XYZ Company.

Empowerment, as emphasized by Lee & Koh (2001), is the influence of a leader's behavior on their subordinates (members or followers), where subordinates perceive a psychological state with four dimensions: meaning, competence, self-determination, and impact. Avolio et al. (2004) and Nguyen (2020) confirm a positive relationship between transformational leadership and psychological empowerment. Spreitzer (1995) defines psychological empowerment as a motivational construct manifested in four cognitions: meaning, competence, self-determination, and impact. However, in the research by Meyerson & Kline (2008), it is stated that the dimensions of transformational leadership, such as idealized influence, inspirational motivation, intellectual stimulation, and individual consideration, negatively predict psychological empowerment. This indicates that the relationship between psychological empowerment and leadership is still not entirely clear. Therefore, to address the gaps in previous research, this study focuses on exploring the impact of transformational leadership on work engagement with psychological empowerment as a mediator.

**LITERATURE REVIEW**

**Transformational Leadership**

Transformational leadership is when leaders inspire their followers to pursue organizational interests above their own personal interests. The model of transformational leadership originated from the German sociologist Max Weber in the 1940s. During the 1970s and 1980s, this model of leadership was examined and
developed. The more dominant model of transformational leadership is the one developed by Bernard Bass, an expert in organizational behavior (Kinicki & Fugate, 2018).

According to Bass in Yukl (2013), four main factors shape transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Further details about these four dimensions are as follows:

1. Idealized Influence: The focus of this dimension is to instill pride, respect, and trust in employees (Kinicki & Fugate, 2018). Leaders achieve this by setting an example of courage, dedication, and self-sacrifice for the well-being of the employees (Yukl, 2013).

2. Inspirational Motivation: It involves a leader's behavior in communicating an appealing vision of the future to employees. This is done through emotional appeal, providing meaning in the lives of employees, and motivating inspiration, thus achieving a perception beyond the capabilities of the employees. This behavior is aimed at bridging the gap between current organizational issues and future goals and aspirations (Kinicki & Fugate, 2018).

3. Intellectual Stimulation: It is a behavior that influences followers to see problems from a broader perspective and seek more creative solutions (Yukl, 2013).

4. Individualized Consideration: It is a leader's behavior that provides support, encouragement, empowerment, and coaching to employees. Leaders do this by taking the time to discuss the interests and talents of employees, identifying opportunities, and finding ways to help them grow and develop (Spreitzer, 1995).

These dimensions of transformational leadership emphasize the importance of empowering leaders to achieve success together with their followers. Through inspiration and the example set by a leader, they can influence and motivate employees (Tjahjono et al. 2018). Research by Avolio & Bass (1995) states that leaders who build an innovative organizational culture are those who can align their vision, encourage and facilitate a culture of change, and creative growth, and empower their followers to take on greater responsibilities in achieving the vision. Assumptions, norms, and values based on transformational leadership do not hinder someone in achieving their own goals and rewards. Transformational leaders and followers transcend their interests if there is alignment with goals and coordination. Transformational leaders transform their followers by creating changes in their goals, values, needs, beliefs, and aspirations by comparing their self-concepts (values and personal) (Palupi, 2020).

In the study by Rafferty & Griffin (2004), they identified more focused sub-dimensions of transformational leadership, which are as follows:

1. Vision: This is defined as the expression of an ideal future based on organizational values.

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2. Inspirational Communication: This involves expressing positive messages that inspire the organization and statements that build motivation and self-confidence.
3. Supportive Leadership: It entails showing care for followers and attending to their individual needs.
4. Intellectual Stimulation: Rafferty & Griffin (2004) defined this similarly to the dimension introduced by Bass, which involves increasing employees' interest and awareness of issues and enhancing their ability to think about problems in new ways.
5. Personal Recognition: This dimension captures aspects of contingent rewards that are conceptually related to transformational leadership. It involves giving recognition such as praise and acknowledgment for goal achievements.

In summary, based on this theoretical foundation, it can be concluded that transformational leaders play an active role in providing positive impressions and messages to their followers. This is done to influence their followers to believe in their abilities, enabling them to do more than they thought possible and to achieve organizational goals.

Work Engagement

Work engagement and employee engagement are often used interchangeably, but they are specifically different concepts. Work engagement, as defined by Schaufeli & Bakker (2010), refers to the relationship between an employee and their job. On the other hand, employee engagement encompasses the relationship between an employee and the organization. According to Schaufeli et al. (2002), work engagement is a positive state of mind, marked by satisfaction and characterized by vigor, dedication, and absorption, which can be explained as follows:

1. Vigor: This pertains to a high level of energy, mental resilience, willingness, and persistence in working and facing difficulties in one's job.
2. Dedication: It refers to engagement that involves not only cognitive aspects but also emotional dimensions. It is characterized by a sense of significance, enthusiasm, inspiration, pride, and challenge.
3. Absorption: This is characterized by full concentration and a sense of being deeply engrossed in one's work, where time seems to pass quickly, and it is difficult to detach oneself from the job.

Employees with work engagement are not workaholics because they can still enjoy their lives outside of work. Employees may feel tired after a hard day's work, but they describe their fatigue in a pleasant state because it is associated with the positive things they have accomplished (Bakker & Demerouti, 2008). Therefore, work engagement is not the attitude of work-addicted employees (workaholics), but they feel vigor, dedication, and absorption because they genuinely enjoy their work. What sets employees with work engagement apart from workaholics is that employees with work engagement enjoy life
outside of work, and the positive attitude they experience in their work also extends to things outside of work.

**Psychological Empowerment**

In Spreitzer's (1995) research, psychological empowerment is defined as a motivational construct manifested in four cognitions, namely, meaning, competence, self-determination, and impact. Kinicki & Fugate (2018) define these four dimensions as follows:

1. **Meaning**: It is the belief that the hard work values and goals of employees align with the values and goals of their manager, team, or supervisor.
2. **Competence**: It represents an individual evaluation of one's abilities to perform the job.
3. **Self-Determination**: It is the sense felt by employees that they have control over their work and its outcomes.
4. **Impact**: It is the feeling that one's efforts make a difference and influence the organization (To et al., 2015).

All these cognitions collectively reflect an active orientation towards the work role. Orientation is where an individual desires and feels capable of shaping their role and context in their work (Spreitzer, 1995). Spreitzer (1995) states that the theory of psychological empowerment is an attempt to explain when and why empowerment efforts tend to succeed. This is because empowerment is not just about delegating tasks but how those tasks provide a sense of satisfaction to the employees. Psychological empowerment raises awareness about the value of work.

The organizational environment, such as the organizational climate and culture, has a positive impact on the level of psychological empowerment (Jia-ni et al., 2012). Leaders who actively empower their team members help them avoid feelings of uncertainty and insecurity due to the lack of guidance and support from their leaders (Luciano & Mathieu, 2014). Psychological empowerment benefits by enhancing performance, satisfaction, and positive emotions for the team and the organization (Luciano & Mathieu, 2014).

**Hypothesis Development**

The influence of transformational leadership on work engagement

Leadership is a crucial component that influences the work environment and how employees perceive their jobs. Based on Bass's theory as discussed in Yukl (2013), transformational leadership comprises four components: idealized influence, inspiration, intellectual stimulation, and individual consideration. All of these components can
contribute to the development of leaders that have an impact on their team members. The idealized influence component can play a role in helping members improve their performance.

Specifically, according to the research by Avolio & Bass (1995), transformational leadership behaviors such as intellectual stimulation and individual consideration can create an organizational climate that supports high work engagement. Work engagement is characterized by positive feelings and a state of mind towards work, marked by vigor, dedication, and absorption (Schaufeli et al., 2002). In other words, transformational leadership practices can foster a work environment where employees are more likely to experience work engagement, which is characterized by vigor, dedication, and absorption in their work.

Work engagement within an organization can be positively influenced by transformational leadership. One of the mechanisms is found in the individual consideration dimension of transformational leadership. Leaders' behaviors are based on recognizing individual needs and developing the potential of employees to achieve higher levels of performance. Leaders empower their team members to take on more responsibilities in line with their skills and interests, which, in turn, promotes high work engagement. Even when they feel tired from working hard, they do their jobs in alignment with their skills and interests. Therefore, they associate feelings of fatigue with positive outcomes, aligning with the essence of work engagement.

Thus, the more leaders emphasize the components of transformational leadership perceived by employees, the higher the likelihood that employees will exhibit enthusiasm, dedication, and absorption in their work. Based on previous research and the theoretical foundation outlined above, the hypothesis formulated for this study is as follows:

H1: Transformational leadership has a positive influence on work engagement.

The role of psychological empowerment as a mediator in the influence of transformational leadership on work engagement

While there is limited research on how psychological empowerment positively affects work engagement and acts as a mediating factor in the positive impact of transformational leadership on work engagement, Halbesleben (2010) study suggests that meaning and self-efficacy are linked to work engagement. Self-efficacy shares similarities with the dimension of psychological empowerment, namely competence. When employees have the skills and abilities for their jobs and have confidence in them, they tend to enjoy their work. Even though their work presents its challenges, competence gives them the self-assurance to tackle their tasks. Therefore, the higher the level of psychological empowerment experienced by employees, the higher their work engagement tends to be (Fadhilaini et al., 2021).
Through transformational leadership, a prominent characteristic is their emphasis on intrinsic motivation in employees. This intrinsic motivation aims to increase employees' trust, recognize the company's high dependence on employees, and acknowledge the importance of employees' job values, which, in turn, encourages their extra efforts through psychological empowerment (Jia-ni et al. 2012). Wagimo & Ancok (2015) state that the leadership style displayed by a transformative leader is expected to enhance subordinate’s motivation to achieve optimal work results.

According to the findings of Nguyen (2020), transformational leadership has a positive influence on psychological empowerment. This research suggests that, in an economy where external factors can change at any time, one way to ensure a company's sustained competitiveness and improve its success rate is by focusing on employees. Leaders are often advised to place trust in their employees or empower them to help make their own decisions. This mechanism can be seen in the dimension of transformational leadership by Rafferty & Griffin (2004), particularly in supportive leadership, which considers the feelings, needs, and interests of employees. When leaders behave by taking into account the interests of employees, employees have autonomy in determining the work they do.

Transformational leaders they have a role to always put people at the center of every activity. When the relationship between the leader and the employee is formed, certain reciprocities are generated, such as psychological meaning and security when leaders demonstrate their support (Zhu et al, 2009). Employees are likely to be rewarded with a high level of work engagement when the organization provides a work environment and job resources that are supportive, informative, and offer feedback (Breevart et al., 2014). Empowered employees face challenges with the belief in the abilities by their leaders, and they exhibit autonomy and self-determination in their work as a result (Nguyen, 2020). Therefore, the higher the perceived transformational leadership by employees, the higher the perceived psychological empowerment, and this, in turn, increases work engagement. Based on theoretical analysis and previous research findings, the following hypothesis is formulated:

H2: Psychological empowerment mediates the positive influence of transformational leadership on work engagement.
RESEARCH METHODS

This research was conducted at XYZ (name anonymized), a private company located in Jakarta, Indonesia. The company operates in the distribution of biotechnology research laboratory equipment and has an interesting phenomenon related to the research concept. The phenomenon is that the company has undergone organizational restructuring, which had a positive impact on the organization's finances. However, a subsequent survey they conducted indicated that employees fall into the category of "survival," where they continue to work solely to earn a salary and avoid being terminated. This suggests a potential weakness in work engagement among employees, particularly in terms of vigor and dedication.

The population used in this study was the entire XYZ staff who served as staff, team leader, and manager of 36 people. According to Schinder (2019), if the research target population is small in size then census (data obtained from each member of the population) is more necessary than using samples. Through such consideration and assuming that the target population has the ability to understand and answer questions in the survey, then the researchers decided to use census in the design of sampling.

This research involves primary data with the unit of analysis being at the individual level. Data collection was conducted using a survey questionnaire method. Respondents completed the survey questionnaire independently through an online platform, specifically Google Forms, which was distributed by the researcher. The survey questionnaire is closed-ended, meaning respondents could only select answers from the provided choices. To analyze the statements of the construct indicators, a Likert scale ranging from 1 to 5 was used (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree) (Tjahjono, 2015).

The measurement of transformational leadership adopted the research instrument from Rafferty & Griffin (2004). The questionnaire consists of 15 items assessing
dimensions such as vision, inspirational communication, intellectual stimulation, supportive leadership, and personal recognition as follows:

<table>
<thead>
<tr>
<th>Table 1. Indicators of Transformational Leadership</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vision</strong></td>
</tr>
<tr>
<td>Has a clear understanding of where we are going</td>
</tr>
<tr>
<td>Has a clear sense of where he/she wants our unit to be in 5 years</td>
</tr>
<tr>
<td>Has no idea where the organization is going*</td>
</tr>
<tr>
<td><strong>Inspirational communication</strong></td>
</tr>
<tr>
<td>Says things that make employees proud to be a part of this organization</td>
</tr>
<tr>
<td>Says positive things about the work unit</td>
</tr>
<tr>
<td>Encourages people to see changing environments as situations full of opportunities</td>
</tr>
<tr>
<td><strong>Intellectual stimulation</strong></td>
</tr>
<tr>
<td>Challenges me to think about old problems in new ways</td>
</tr>
<tr>
<td>Has ideas that have forced me to rethink some things that I have never questioned before</td>
</tr>
<tr>
<td>Has challenged me to rethink some of my basic assumptions about my work</td>
</tr>
<tr>
<td><strong>Supportive leadership</strong></td>
</tr>
<tr>
<td>Consider my personal feelings before acting</td>
</tr>
<tr>
<td>Behaves in a manner that is thoughtful of my personal needs</td>
</tr>
<tr>
<td>Sees that the interest of employees are given due consideration</td>
</tr>
<tr>
<td><strong>Personal Recognition</strong></td>
</tr>
<tr>
<td>Commends me when I do a better-than-average job</td>
</tr>
<tr>
<td>Acknowledges improvement in my quality work</td>
</tr>
<tr>
<td>Personally, compliments me when I do outstanding work</td>
</tr>
</tbody>
</table>

Work engagement was measured using an adaptation of the scale developed by Schaufeli et al. (2002). The measurement comprises nine questionnaire items, divided into three dimensions: vigor, dedication, and absorption, as follows:

<table>
<thead>
<tr>
<th>Table 2. Indicators of Work Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vigor</strong></td>
</tr>
<tr>
<td>At my work, I feel bursting with energy</td>
</tr>
<tr>
<td>At my job, I feel strong and vigorous</td>
</tr>
<tr>
<td>When I get up in the morning, I feel like going to work</td>
</tr>
<tr>
<td><strong>Dedication</strong></td>
</tr>
<tr>
<td>I am enthusiastic about my job</td>
</tr>
<tr>
<td>My job inspires me</td>
</tr>
<tr>
<td>I am proud of the work that I do</td>
</tr>
<tr>
<td><strong>Absorption</strong></td>
</tr>
<tr>
<td>I feel happy when I am working intensely</td>
</tr>
<tr>
<td>I am immersed in my work</td>
</tr>
<tr>
<td>I get carried away when I’m working</td>
</tr>
</tbody>
</table>
In Spreitzer (1995) research, psychological empowerment is defined as a motivational construct manifested in four cognitions, namely, meaning, competence, self-determination, and impact. The measurement instrument used is adapted from Spreitzer (1995) and consists of 12 questionnaire items, as follows:

**Table 3. Indicators of Psychological Empowerment**

<table>
<thead>
<tr>
<th>Meaning</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The work I do is very important to me</td>
<td></td>
<td></td>
</tr>
<tr>
<td>My job activities are personally meaningful to me</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The work I do is meaningful to me</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Competence</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I am confident about my ability to do my job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am self-assured about my capabilities to perform my work activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have mastered the skills necessary for my job</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-determination</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I have significant autonomy in determining how I do my job</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I can decide on my own how to go about doing my work</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have considerable opportunity for independence and freedom in how I do my job</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Impact</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>My impact on what happens in my departments is large</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have a great deal of control over what happens in my department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I have significant influence over what happens in my department</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The data analysis technique used in this study is partial least squares structural equation modeling (PLS-SEM). PLS-SEM has advantages over CB-SEM (covariance-based SEM), particularly in its applicability to research with small samples (less than 100), making it more relevant for this study. The analysis tool used in this research is the SmartPLS 3 application. The data analysis process through PLS-SEM in this study follows two stages, referring to the methodology described by Joseph et al. (2017). The first stage involves testing validity and reliability, and the second stage examines the structural model (inner model), which includes testing hypotheses. This is followed by the testing of mediation hypotheses using the concepts outlined by Baron & Kenny (1986) and Zhao et al. (2010).

**RESULT AND ANALYSIS**

**Validity and Reliability Test**

Schinder (2019) states that validity testing is an instrument test conducted to determine the extent to which the chosen or developed scale (questionnaire items) truly measures what is intended to be measured (research questions). Validity testing through the evaluation of AVE criteria in this study has met the required criteria, which is greater than 0.5. The test results show that transformational leadership has a value of 0.646, work engagement has a value of 0.804, and psychological empowerment has a value of 0.777.
Reliability testing is carried out to ensure the accuracy of the measures used. Reliability evaluation is done by examining the values of Cronbach's alpha and composite reliability. Both values should be greater than 0.7 to consider the measures used as reliable. The values of Cronbach's alpha and composite reliability for the variables of transformational leadership, work engagement, and psychological empowerment are all greater than 0.7. This means that all three variables used in the study are considered reliable.

Table 4. Validity and Reliability

<table>
<thead>
<tr>
<th></th>
<th>Cronbach's Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>X (Transformational Leadership)</td>
<td>0.861</td>
<td>0.900</td>
<td>0.646</td>
</tr>
<tr>
<td>Y (Work Engagement)</td>
<td>0.919</td>
<td>0.943</td>
<td>0.804</td>
</tr>
<tr>
<td>Z (Psychological Empowerment)</td>
<td>0.928</td>
<td>0.946</td>
<td>0.777</td>
</tr>
</tbody>
</table>

Source: smart data processing results-PLS (2021)

Data Analysis Results

The next test is to look at the path coefficient (β), t-statistics, and p values to help in making conclusions from the test of the proposed hypothesis. Through the path coefficient (β), the expected value is in the range of -1 to 1. The positive and negative signs produced in the path factor value (β) indicate the direction of the type of variable influence between the variables. The expected t-statistics value with a 95% confidence rate is greater than or equal to 1.96 (≥1.96).

Table 5. Hypothesis Test Results

<table>
<thead>
<tr>
<th></th>
<th>(β)</th>
<th>t-statistics</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>KT -&gt; KK</td>
<td>0.183</td>
<td>1,545</td>
<td>0.123</td>
</tr>
<tr>
<td>KT-&gt; PP</td>
<td>0.646</td>
<td>5,960</td>
<td>0.000</td>
</tr>
<tr>
<td>PP -&gt; KK</td>
<td>0.747</td>
<td>6,849</td>
<td>0.000</td>
</tr>
<tr>
<td>KT*PP -&gt; KK</td>
<td>0.483</td>
<td>4,949</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Source: smart data processing results-PLS (2021)

Table 5 presents the values of the structural model testing results for hypothesis testing, which are interpreted as follows:

Hypothesis 1 (H1): Transformational Leadership has a positive influence on Work Engagement.

The path coefficient test value for transformational leadership on work engagement is 0.183. This value is positive, which means that transformational leadership
has a positive impact on work engagement, indicating that when transformational leadership increases, work engagement also increases. The significance of a coefficient depends on the standard error obtained through bootstrap testing, which tests whether the path coefficient is significantly different from zero. In this study, this is done by calculating the t-value and p-value. The t-value obtained is 1.545 at a 95% confidence level. This value is less than the expected value, which is greater than or equal to 1.96 (1.545 < 1.96). Additionally, the significance of the coefficient, based on the p-value, indicates that the generated p-value is greater than the expected value, i.e., 0.123 > 0.05. This means that the estimated path coefficient is not significantly different from zero, or in other words, the influence of transformational leadership on work engagement is not statistically significant. Therefore, H1 is rejected.

**Hypothesis 2: Psychological Empowerment Mediating the Positive Impact of Transformational Leadership on Work Engagement.**

Based on the structural analysis results, hypothesis 1 was rejected, meaning that transformational leadership does not have a direct influence on work engagement. The path coefficient value for transformational leadership on work engagement through psychological empowerment as a mediator is 0.483. This value is positive, indicating that an increase in psychological empowerment will enhance the positive impact of transformational leadership on work engagement. The significance value calculated through the t-value is 4.944, which is greater than 1.96 (4.944 > 1.96), and the p-value obtained is 0.000, which is less than 0.05 (0.000 < 0.05), indicating a significant influence. This means that psychological empowerment plays a mediating role in the positive influence of transformational leadership on work engagement. Therefore, H2 is accepted (indirect only/full mediation).

**DISCUSSION**

Following the measurement and structural testing processes, along with hypothesis testing, the discussion will focus on the explanation of each hypothesis in this study.

**Transformational Leadership Has a Positive Effect on Work Engagement**

Based on the hypothesis testing results, it is evident that the influence of transformational leadership is not significantly related to work engagement, with a t-statistic value of 1.545 (1.545 > 1.96) and a p-value of 0.123 (0.123 > 0.05) at a 95% confidence level. This indicates that when employees perceive their leaders as having a transformational leadership style, it does not significantly affect their work engagement. This finding differs from previous studies conducted by Amor et al, (2020), Ghadi et al, (2013), and Nguyen (2020), which indicated that transformational leadership has a positive impact on work engagement. Transformational leadership is often considered...
one of the most effective leadership styles in positively influencing work engagement (Knippenberg & Sitkin, 2013), and it has received substantial attention in research compared to other leadership styles (Chuang et al., 2012). However, in the context of this study, transformational leadership does not have a direct impact on employee work engagement. It is possible that there are other job-related factors within XYZ that indirectly influence the relationship between transformational leadership and work engagement. This aligns with the statements of Amor et al. (2020) and Yukl (1998) in Mostafa (2019) research, emphasizing the importance of investigating the various potential pathways through which transformational leadership affects followers or employees.

**Psychological Empowerment Mediating the Positive Impact of Transformational Leadership on Work Engagement**

Based on the hypothesis testing results, the mediating role of psychological empowerment significantly and positively influences the relationship between transformational leadership and work engagement. The statistical results, with a value of 4.944 greater than 1.96 (4.944 > 1.96) and a p-value of 0.000 (0.000 < 0.05), indicate that psychological empowerment indirectly mediates the relationship between transformational leadership and work engagement. Following Baron and Kenny's (1986) model, enhanced by Zhao et al. (2010), the results support the concept of indirect-only or full mediation. This study's findings imply that a higher level of perceived transformational leadership by employees allows them to access higher job-related resources, particularly psychological empowerment, which, in turn, leads to higher levels of work engagement among employees.

**CONCLUSION**

This study aimed to examine and analyze hypotheses to answer the research question: the influence of transformational leadership on work engagement with psychological empowerment as a mediator. The research was conducted at XYZ, a private company engaged in distributing biotechnology research laboratory equipment. A total of 35 respondents, consisting of staff, team leaders, and managers, participated in this study. The results of this research indicate that transformational leadership does not directly influence work engagement. Instead, psychological empowerment mediates the positive effect of transformational leadership on work engagement. This suggests that when employees perceive higher levels of transformational leadership, they have greater access to job-related resources, such as psychological empowerment, which subsequently enhances their work engagement.

From a theoretical perspective, this research underscores the importance of understanding the mechanisms of job-related resources that affect work engagement.
Transformational leadership does not have a direct impact, but with psychological empowerment as a mediator, a positive influence on work engagement can be achieved. This study also brings innovation by testing the mediating effect of psychological empowerment in a different context from previous research. However, this study has some limitations, including not testing causality or the direction of the relationship and using a limited sample within a specific industry. It is recommended that future research includes testing with different samples and industries, as well as involving longitudinal designs to understand variable changes over time and to delve deeper into causal relationships.

REFERENCES


