

Article

# How transformational leadership enhances employee work productivity: The mediating roles of work passion and psychological well-being

Udin Udin<sup>1,\*</sup>, Mohd Shamsuri Md Saad<sup>2</sup>, Mutiara Ramadhani<sup>1</sup>, Doris Ifeoma Ogueri<sup>3</sup>

<sup>1</sup> Faculty of Economic and Business, Universitas Muhammadiyah Yogyakarta, Indonesia

<sup>2</sup> Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka, Malaysia

<sup>3</sup> Faculty of Management, Shinawatra University, Thailand

\*Corresponding author: Udin Udin, [udin@umy.ac.id](mailto:udin@umy.ac.id)

## CITATION

Udin U, Saad MSM, Ramadhani M, Ogueri DI. How transformational leadership enhances employee work productivity: The mediating roles of work passion and psychological well-being. *Human Resources Management and Services*. 2026;8(2):5871. <https://doi.org/10.18282/hrms5871>

## ARTICLE INFO

Received: 18 May 2026

Accepted: 8 June 2026

Available online: 18 June 2026

## COPYRIGHT



Copyright © 2026 by author(s).

*Human Resources Management and Services* is published by PiscoMed Publishing Pte Ltd. This work is licensed under the Creative Commons Attribution (CC BY) license. <https://creativecommons.org/licenses/by/4.0/>

**Abstract:** In today's increasingly demanding and competitive workplace environment, organizations seek leadership approaches that can enhance employee productivity while simultaneously supporting employees' psychological and motivational resources. Drawing on the Job Demands–Resources (JD-R) model, this study investigates and explores the relationship between transformational leadership and employee work productivity, with work passion and psychological well-being serving as mediating mechanisms. A quantitative cross-sectional research design was employed using survey data collected from 250 full-time employees working in a manufacturing organization in South Sumatra, Indonesia. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software to evaluate the proposed direct and indirect relationships. The findings reveal that transformational leadership does not have a significant direct effect on employee work productivity. However, transformational leadership significantly enhances employees' work passion and psychological well-being. Furthermore, both work passion and psychological well-being are positively associated with employee work productivity. The mediation analysis indicates that work passion significantly mediates the relationship between transformational leadership and employee work productivity, as well as the relationship between transformational leadership and psychological well-being. In contrast, psychological well-being does not significantly mediate the relationship between transformational leadership and employee work productivity. These findings suggest that transformational leadership contributes to employee productivity primarily through motivational rather than direct behavioral mechanisms. The study provides valuable insights for human resource practitioners by highlighting the importance of fostering employees' work passion and psychological well-being to achieve sustainable productivity and organizational effectiveness.

**Keywords:** Employee work productivity; Psychological well-being; Work passion; Transformational leadership; JD-R model; PLS-SEM

## 1. Introduction

In today's highly competitive and dynamic business environment, organizations increasingly rely on effective leadership to maintain employee productivity and achieve sustainable organizational performance. Among various leadership approaches, transformational leadership has emerged as one of the most influential leadership styles in promoting positive employee behaviors, attitudes, and performance outcomes [1, 2]. Transformational leaders inspire employees through vision articulation, individualized consideration, motivational encouragement, and intellectual stimulation, thereby fostering greater commitment and engagement within the workplace [3]. In modern organizations characterized by rapid technological

advancement, high work demands, and increasing psychological pressure, transformational leadership has become particularly important for enhancing employee effectiveness and organizational competitiveness [4, 5].

Employee work productivity represents a critical determinant of organizational success because productive employees contribute significantly to operational efficiency, innovation capability, and long-term organizational sustainability [6]. However, organizations increasingly recognize that productivity is influenced not only by technical competence and organizational systems, but also by psychological and motivational resources that shape employee behavior and performance [7]. Consequently, understanding the mechanisms through which transformational leadership enhances employee work productivity has become an important issue within the fields of Human Resource Management and Organizational Behavior.

The present study draws upon the Job Demands-Resources (JD-R) model to explain how transformational leadership enhances employee work productivity through work passion and psychological well-being. The JD-R model posits that well-being and employee performance are shaped by the interaction between job demands and job resources [8]. Job resources relate to the psychological, physical, social, and organizational aspects of work that foster employees accomplish work goals, reduce work-related stress, and cultivate personal growth and development [9]. Within this framework, transformational leadership can be viewed as a valuable organizational resource that supports employees emotionally, cognitively, and motivationally [10]. By providing inspiration, support, recognition, and developmental opportunities, transformational leaders help employees develop positive psychological states that improve productivity and work outcomes.

According to the JD-R model, job resources not only reduce the negative effects of excessive work demands but also activate a motivational process that enhances employee engagement, psychological well-being, work passion, and performance [11]. In this regard, transformational leadership may foster work passion by creating meaningful work experiences and strengthening employees' emotional attachment to their jobs. Work passion relates to a strong inclination toward work activities that individuals perceive as enjoyable, meaningful, and personally valuable [12]. Employees who experience strong work passion tend to demonstrate greater enthusiasm, persistence, dedication, and proactive behavior in accomplishing their work responsibilities [13]. Such motivational conditions are essential for improving employee productivity in increasingly demanding organizational environments.

Furthermore, the JD-R model suggests that job resources promote significantly to employee psychological well-being by helping individuals cope with workplace stress and maintain positive psychological functioning [14]. Psychological well-being reflects employees' overall psychological health, including purpose in life, self-acceptance, personal growth, and positive interpersonal relationships [15]. Transformational leadership may enhance psychological well-being by fostering supportive relationships, trust, empowerment, and a psychologically safe work environment [16]. Employees with higher levels of psychological well-being are generally more resilient, motivated, creative, and capable of sustaining productive work behaviors under challenging working conditions.

Previous studies have consistently demonstrated that transformational leadership positively influences a wide range of employee outcomes, including organizational commitment, work engagement, job satisfaction, job performance, and innovative behavior [17, 18]. Despite these advances, important gaps remain in understanding how transformational leadership contributes to employee work productivity. Much

of the existing literature has centered on attitudinal and behavioral outcomes [2], while employee productivity has received comparatively less attention as a distinct organizational outcome. Unlike general job performance, employee productivity emphasizes employees' ability to generate efficient, effective, and sustainable work outputs. Consequently, the psychological mechanisms through which transformational leadership enhances employee productivity remain insufficiently understood.

In particular, empirical investigations examining psychological well-being and work passion as dual mediating mechanisms remain relatively limited within transformational leadership research. Most previous studies have examined these variables independently [19, 20] rather than integrating them into a comprehensive framework. The integration of work passion and psychological well-being within the JD-R perspective provides a more holistic explanation of how leadership-generated job resources influence employee productivity. While work passion reflects employees' motivational energy and emotional attachment to their work [12], psychological well-being captures broader dimensions of positive psychological functioning and mental resilience. Examining these mediators simultaneously therefore offers deeper theoretical insights into the motivational and psychological pathways through which transformational leadership improves employee productivity.

Moreover, growing concerns regarding employee mental health, burnout, and workplace sustainability further highlight the importance of investigating psychological well-being in organizational settings [21]. In contemporary workplaces characterized by increasing workloads, technological disruptions, and competitive pressures, employees require strong psychological resources to maintain productivity and sustain long-term performance. Transformational leadership may serve as a strategic organizational resource capable of enhancing both employee work passion and psychological well-being, thereby strengthening sustainable employee productivity.

The present study aims to examine the effect of transformational leadership on employee work productivity through the mediating roles of work passion and psychological well-being within the JD-R framework. Specifically, this study investigates whether transformational leadership acts as an important job resource that enhances employee productivity both directly and indirectly through motivational and psychological mechanisms.

This study contributes to the literature in several ways. First, it extends transformational leadership research by integrating the JD-R model to explain employee productivity enhancement. Second, it develops a dual mediation framework that incorporates work passion and psychological well-being within a single theoretical model. Third, it contributes to the positive organizational behavior literature by highlighting the role of leadership-generated psychological resources in sustaining employee productivity and well-being.

Accordingly, this study proposes eight hypotheses: H1: Transformational leadership positively influences employee work productivity; H2: Transformational leadership positively influences work passion; H3: Transformational leadership positively influences psychological well-being; H4: Work passion positively influences employee work productivity; H5: Psychological well-being positively influences employee work productivity; H6: Work passion mediates the relationship between transformational leadership and employee work productivity; H7: Work passion mediates the relationship between transformational leadership and psychological well-being; and H8: Psychological well-being mediates the relationship between transformational leadership and employee work productivity.

## **2. Literature Review and Hypotheses Development**

### **2.1 Transformational leadership and employee work productivity**

Transformational leadership refers to a leadership approach in which leaders inspire and motivate followers to exceed expected performance by encouraging personal development, collective commitment, and organizational vision alignment. Transformational leaders typically demonstrate four core dimensions, namely individualized consideration, idealized influence, intellectual stimulation, and inspirational motivation [22]. Through these leadership behaviors, employees are encouraged to develop stronger confidence, commitment, and enthusiasm toward their work responsibilities [23].

Within the perspective of the JD-R model, transformational leadership can be conceptualized as an important job resource that supports employee motivation and performance. The JD-R model argues that job resources stimulate a motivational process that enhances employee energy, resilience, and productivity while simultaneously reducing the negative effects of job demands [14]. Transformational leaders provide employees with emotional support, recognition, autonomy, and developmental opportunities, thereby strengthening the psychological resources necessary for productive work behavior.

Employee work productivity reflects employees' ability to efficiently and effectively accomplish work-related tasks and organizational objectives [24]. Productive employees tend to demonstrate higher levels of innovation, work quality, task completion, and operational efficiency. Existing literature has consistently indicated that transformational leadership influences various employee outcomes, including job performance, organizational commitment, work engagement, and innovative behavior [2, 25]. Transformational leaders create supportive and motivating work environments that strengthen employees to exert greater effort and maintain high performance standards.

Moreover, transformational leaders foster meaningful work experiences by articulating compelling organizational visions and emphasizing employees' contributions to organizational success [26]. Such leadership practices encourage employees to internalize organizational goals and develop stronger intrinsic motivation toward work activities. Employees who perceive supportive and inspirational leadership are more likely to exhibit persistence, proactive behavior, and higher work productivity [27].

*H1: Transformational leadership positively influences employee work productivity.*

### **2.2 Transformational leadership and work passion**

Work passion has evolved as an important construct in organizational research due to its significant role in shaping employee motivation and workplace behavior. Work passion refers to a strong inclination toward work activities that individuals perceive as meaningful, enjoyable, and personally valuable [12]. Employees with high levels of work passion frequently experience enthusiasm, dedication, and emotional attachment to their jobs, which subsequently encourages persistence and proactive work behavior [28].

According to the JD-R model, job resources play a crucial role in stimulating employees' motivational states and intrinsic work motivation [29]. In this context, transformational leadership operates as an important organizational resource capable of enhancing employees' emotional and motivational attachment to their work.

Transformational leaders encourage employees through inspirational communication, individualized support, and intellectual stimulation, thereby helping them perceive their work as meaningful and personally rewarding [30].

Furthermore, transformational leadership promotes employee autonomy, competence development, and recognition, which are critical antecedents of work passion. Leaders who inspire employees and provide emotional encouragement create positive workplace experiences that strengthen employees' enthusiasm and dedication to their work activities [19]. Previous studies have shown that transformational leadership significantly enhances employee intrinsic motivation, engagement, and affective commitment [17, 20]. Since work passion reflects positive emotional and motivational investment in work, transformational leadership is likely to strengthen employees' work passion.

Employees who perceive transformational leadership behaviors are more likely to feel psychologically empowered and emotionally connected to their work roles [31, 32]. Such positive experiences may stimulate employees' willingness to invest greater cognitive, emotional, and behavioral energy in their work activities.

*H2: Transformational leadership positively influences work passion.*

### **2.3 Transformational leadership and psychological well-being**

Psychological well-being represents individuals' positive psychological functioning and overall mental wellness, including dimensions such as purpose in life, self-acceptance, autonomy, personal growth, environmental mastery, and positive relations with others [15]. In organizational settings, psychological well-being has become increasingly important due to rising concerns regarding employee stress, burnout, and workplace mental health.

The JD-R model highlights that job resources significantly contribute to employee well-being by reducing psychological strain and facilitating positive emotional experiences [14]. Transformational leadership acts as a valuable social and psychological resource that supports employees cope with workplace challenges and maintain positive psychological functioning. Leaders who demonstrate individualized consideration and emotional support can strengthen employees' self-confidence, optimism, and resilience [33].

Transformational leaders also foster psychologically safe work environments characterized by trust, support, empowerment, and open communication. Such supportive leadership behaviors encourage employees to experience greater emotional stability and work-related satisfaction [34]. Prior research has indicated that transformational leadership influences employee mental health, well-being, and the reduction of emotional exhaustion [35]. Additionally, transformational leaders inspire employees to perceive work challenges as opportunities for learning and growth rather than as sources of stress and pressure [36]. This positive cognitive reframing may improve employees' emotional regulation and psychological resilience. Employees who receive consistent support and recognition from transformational leaders are therefore more likely to maintain higher levels of psychological well-being [37].

*H3: Transformational leadership positively influences psychological well-being.*

### **2.4 Work passion and employee work productivity**

Work passion represents a powerful motivational resource that encourages employees to invest substantial emotional, cognitive, and behavioral energy in their work activities. Employees with strong work passion tend to experience enjoyment, meaning, and fulfillment in their jobs, which subsequently improves their persistence

and work effectiveness [12].

Within the JD-R framework, motivational resources generated by positive work experiences contribute directly to improved employee performance and productivity [14]. Employees who are passionate about their work are more likely to exhibit proactive behavior, creativity, adaptability, and sustained effort in completing work tasks. Passionate employees also demonstrate stronger concentration, commitment, and a greater willingness to exceed minimum performance expectations [38].

Previous studies have demonstrated that work passion influences job performance, creativity, organizational commitment, and work engagement [39]. Employees who experience passion for their work generally maintain higher levels of enthusiasm and resilience even under demanding working conditions. Such psychological energy enhances employees' capability to perform tasks efficiently and productively [28]. Moreover, passionate employees tend to develop stronger emotional attachment toward organizational goals, thereby encouraging greater responsibility and work persistence.

*H4: Work passion positively influences employee work productivity.*

## **2.5 Psychological well-being and employee work productivity**

Psychological well-being is an essential psychological resource that enables employees to maintain positive emotional functioning, resilience, and adaptive work behavior. Employees with higher psychological well-being are generally more capable of coping with work-related stress and maintaining productive performance under challenging conditions [40].

According to the JD-R model, employees with strong psychological resources are better able to manage job demands while sustaining motivation and productivity [14]. Psychological well-being enhances employees' cognitive functioning, emotional stability, creativity, and interpersonal relationships, all of which contribute to work productivity. Employees who experience higher psychological well-being are more likely to demonstrate optimism, confidence, and proactive behavior in accomplishing work tasks. In contrast, employees with poor psychological well-being may experience emotional exhaustion, reduced concentration, and lower work efficiency [41]. Previous research has shown that psychological well-being influences work engagement, job performance, and organizational effectiveness [42, 43]. Furthermore, psychologically healthy employees tend to exhibit stronger motivation and persistence when facing workplace difficulties. Positive psychological functioning therefore plays an important role in sustaining employee productivity and long-term organizational performance [44].

*H5: Psychological well-being positively influences employee work productivity.*

## **2.6 The mediating role of work passion**

The JD-R model posits that job resources enhance employee performance through motivational processes [8]. In the present study, transformational leadership is conceptualized as a job resource that fosters employees' work passion, which in turn contributes to higher work productivity. By creating supportive and inspiring work environments, transformational leaders strengthen employees' enthusiasm and emotional attachment to their work [45]. Employees who are passionate about their work are more likely to invest greater effort, persistence, and dedication, resulting in improved productivity. Accordingly, work passion may serve as a key motivational mechanism through which transformational leadership enhances employee productivity [32, 46]. This argument is consistent with prior research showing that

motivational factors mediate the relationship between transformational leadership and performance outcomes [47].

Beyond productivity, work passion may also explain how transformational leadership promotes employees' psychological well-being. The Dualistic Model of Passion (DMP) suggests that passionate employees experience greater enjoyment, meaning, enthusiasm, and positive emotions in their work, which contribute to enhanced psychological functioning and well-being [12]. Transformational leaders cultivate such passion by communicating an inspiring vision, providing individualized support, and fostering meaningful work experiences. As a result, employees become more emotionally engaged with their work and are more likely to experience fulfillment, vitality, and psychological flourishing [48].

*H6: Work passion mediates the relationship between transformational leadership and employee work productivity.*

*H7: Work passion mediates the relationship between transformational leadership and psychological well-being.*

## 2.7 The mediating role of psychological well-being

The JD-R model proposes that job resources enhance employee performance by promoting psychological well-being and positive psychological functioning [49]. In this study, transformational leadership is viewed as a valuable job resource that fosters employees' psychological well-being through supportive relationships, empowerment, recognition, trust, and meaningful work experiences [50]. Such leadership practices help employees develop positive psychological resources, including emotional stability, self-confidence, purpose, and resilience [15].

Employees with higher psychological well-being are better able to maintain concentration, regulate stress, adapt to workplace challenges, and sustain productive work behaviors. These psychological resources enable them to utilize their cognitive, emotional, and behavioral capacities more effectively, thereby enhancing work productivity [51]. Consistent with this reasoning, prior research has shown that employee well-being mediates the relationship between transformational leadership and various organizational outcomes [52].

*H8: Psychological well-being mediates the relationship between transformational leadership and employee work productivity.*

## 3. Materials and Methods

### 3.1 Research design and sample

This study employed a quantitative research approach using a cross-sectional survey design to examine the relationships among transformational leadership, work passion, psychological well-being, and employee work productivity. The quantitative approach was considered appropriate because the study aimed to test theoretically developed hypotheses and examine the mediating roles of work passion and psychological well-being within the framework of the JD-R model.

The study was conducted among full-time employees working in a manufacturing company in South Sumatra, Indonesia. Employees were selected as the unit of analysis because they directly experience leadership practices and workplace conditions that may influence their psychological well-being and productivity. Data were collected through a structured self-administered questionnaire distributed both online and offline.

The target population consisted of 250 employees. Given the relatively small population size, a census approach was adopted, whereby all employees were invited

to participate in the study. A total of 250 questionnaires were distributed and returned, resulting in a response rate of 100%, with all responses deemed valid for analysis. The census approach was employed to ensure complete population coverage and enhance the representativeness of the findings. Furthermore, the final sample size exceeded the minimum requirements for Partial Least Squares Structural Equation Modeling (PLS-SEM), supporting adequate statistical power and model stability for testing the proposed mediation model [53].

Of the 250 valid responses, the majority of respondents were female, comprising 144 individuals (57.6%), while male respondents accounted for 106 individuals (42.4%). Regarding age distribution, most respondents were between 20 and 29 years old, representing 127 individuals (50.8%), followed by those aged 30–39 years, comprising 96 individuals (38.4%). In contrast, 25 respondents (10.0%) were above 40 years old, whereas only 2 respondents (0.8%) were below 20 years old.

### 3.2 Measures

All constructs were measured using previously validated scales adopted from prior literature. The questionnaire items were measured using a five-point Likert scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). The use of established measurement scales enhanced the reliability and validity of the research instrument.

*Transformational leadership.* Transformational leadership was measured using the 9-item Global Transformational Leadership scale developed by Carless, Wearing [54]. The scale captures the dimensions of transformational leadership, including communicating a clear vision, encouraging staff, treating employees as individuals, and fostering trust and respect. Sample items include: “My supervisor inspires me with a clear vision of the future” and “My supervisor encourages me to think about problems in new ways.”

*Work passion.* Work passion was measured using six items adapted from Vallerand, Blanchard [12] and Houliort, L. Philippe [55]. The scale assesses employees’ enthusiasm, emotional attachment, and enjoyment of their work. Sample items included: “My work is a passion for me” and “I feel emotionally connected to my work.” Although the DMP distinguishes between harmonious and obsessive passion [12], this study focuses on harmonious work passion, as it captures employees’ positive and autonomous engagement with their work. This approach is consistent with prior research that operationalized work passion as a positive work-related construct and demonstrated its validity in organizational settings [56, 57].

*Psychological well-being.* Psychological well-being was measured using 10 items adapted from Ryff [15]. The two dimensions used in this study to represent positive psychological functioning were personal growth (5 items) and purpose in life (5 items). Sample items included: “I feel confident and positive about myself” and “I find meaning and purpose in my work and life.” The validity and reliability of these items have been previously established by Springer and Hauser [58].

*Employee work productivity.* Employee work productivity was measured using 8 items adapted from previous organizational productivity studies [59, 60]. The two dimensions of work productivity used were time management (4 items) and work quantity (4 items), which assess employees’ perceived efficiency, effectiveness, and ability to accomplish work tasks. Sample items included: “I complete my work tasks efficiently” and “I consistently achieve high levels of work performance.”

### 3.3 Data collection procedure

Data were collected over a three-month period from employees of a manufacturing

company in South Sumatra, Indonesia. Before administering the questionnaire, participants were informed of the study's academic purpose and assured that their responses would remain anonymous and confidential. Participation was voluntary, and respondents were free to withdraw at any stage without penalty. As the respondents were Indonesian employees, the questionnaire was translated into Bahasa Indonesia using the back-translation method to ensure linguistic equivalence and content accuracy [61]. Prior to the main survey, a pilot test was conducted with a small group of employees to assess the clarity, readability, and reliability of the instrument.

To reduce the risk of common method bias (CMB), several procedural remedies were implemented in accordance with Kaltsonoudi, Tsigilis [62]. First, respondents were assured of anonymity to minimize social desirability bias. Second, questionnaire items were organized systematically to reduce respondents' tendency to infer relationships among the study variables. Third, clear and concise wording was employed to minimize ambiguity and enhance response accuracy.

### 3.4 Data analysis technique

The collected data were analyzed using PLS-SEM with SmartPLS software. PLS-SEM was selected because it is suitable for analyzing complex predictive models involving multiple mediating relationships and latent constructs [63]. Furthermore, PLS-SEM is appropriate for exploratory and theory-development studies and does not require strict assumptions regarding data normality.

The data analysis procedure consisted of two stages: measurement model evaluation and structural model evaluation. In the first stage, the reliability and validity of the measurement model were assessed using indicator loadings, Cronbach's alpha, composite reliability (CR), and average variance extracted (AVE). Indicator loadings exceeding 0.70, CR values above 0.70, and AVE values above 0.50 were considered acceptable indicators of convergent validity and internal consistency reliability [63].

Discriminant validity was evaluated using the Fornell–Larcker criterion and the heterotrait–monotrait ratio (HTMT). HTMT values below 0.90 indicated satisfactory discriminant validity among constructs [64].

In the second stage, the structural model was evaluated by examining path coefficients, coefficient of determination ( $R^2$ ), predictive relevance ( $Q^2$ ), and effect sizes ( $f^2$ ). Hypotheses testing was conducted using the bootstrapping procedure with 5,000 resamples to determine the significance of direct and indirect effects.

## 4. Results and Discussion

**Table 1** presents the results of the measurement model assessment, including factor loadings, CA, CR, AVE, and variance inflation factor (VIF). The findings demonstrate satisfactory convergent validity, internal consistency reliability, and no multicollinearity issues.

To establish indicator reliability and convergent validity, this study adopted the recommended factor loading threshold of 0.70 [63]. Accordingly, two indicators of employee work productivity (EWP5 = 0.681; EWP8 = 0.656) and one indicator of work passion (WP5 = 0.655) were removed because their loadings fell below the recommended threshold. After item deletion, all remaining indicator loadings exceeded 0.70. Specifically, factor loadings ranged from 0.702 to 0.827 for transformational leadership, 0.729 to 0.827 for work passion, 0.721 to 0.822 for psychological well-being, and 0.722 to 0.770 for employee work productivity. These

results confirm that the indicators adequately represent their respective constructs. The constructs also demonstrated strong internal consistency reliability. CA values ranged from 0.829 to 0.926, while CR values ranged from 0.880 to 0.938, both exceeding the recommended threshold of 0.70. Furthermore, the AVE values ranged from 0.561 to 0.603, surpassing the recommended minimum value of 0.50. This indicates that each construct explains more than 50% of the variance in its indicators, thereby supporting convergent validity.

Regarding multicollinearity, all VIF values ranged from 1.513 to 3.559, which are below the conservative threshold of 5.00 [65]. Therefore, multicollinearity was not a concern in the measurement model.

**Table 1.** Construct validity and reliability

| Constructs                  | Items | Factor loading | CA    | CR    | AVE   | VIF   |
|-----------------------------|-------|----------------|-------|-------|-------|-------|
| Transformational leadership | TL1   | 0.702          | 0.904 | 0.921 | 0.566 | 1.924 |
|                             | TL2   | 0.707          |       |       |       | 1.775 |
|                             | TL3   | 0.776          |       |       |       | 2.343 |
|                             | TL4   | 0.811          |       |       |       | 2.715 |
|                             | TL5   | 0.703          |       |       |       | 1.977 |
|                             | TL6   | 0.775          |       |       |       | 2.133 |
|                             | TL7   | 0.737          |       |       |       | 1.997 |
|                             | TL8   | 0.763          |       |       |       | 2.132 |
|                             | TL9   | 0.791          |       |       |       | 2.251 |
| Work passion                | WP1   | 0.772          | 0.829 | 0.880 | 0.594 | 1.706 |
|                             | WP2   | 0.748          |       |       |       | 1.600 |
|                             | WP3   | 0.827          |       |       |       | 1.995 |
|                             | WP4   | 0.775          |       |       |       | 1.766 |
|                             | WP6   | 0.729          |       |       |       | 1.526 |
| Psychological well-being    | PWB1  | 0.774          | 0.926 | 0.938 | 0.603 | 2.414 |
|                             | PWB2  | 0.776          |       |       |       | 2.527 |
|                             | PWB3  | 0.721          |       |       |       | 2.471 |
|                             | PWB4  | 0.822          |       |       |       | 3.282 |
|                             | PWB5  | 0.818          |       |       |       | 2.844 |
|                             | PWB6  | 0.756          |       |       |       | 2.328 |
|                             | PWB7  | 0.789          |       |       |       | 2.973 |
|                             | PWB8  | 0.821          |       |       |       | 3.559 |
|                             | PWB9  | 0.745          |       |       |       | 2.282 |
|                             | PWB10 | 0.734          |       |       |       | 2.513 |
| Employee work productivity  | EWP1  | 0.749          | 0.844 | 0.885 | 0.561 | 1.656 |

Continuation Table:

| Constructs | Items | Factor loading | CA | CR | AVE | VIF   |
|------------|-------|----------------|----|----|-----|-------|
|            | EWP2  | 0.764          |    |    |     | 1.766 |
|            | EWP3  | 0.744          |    |    |     | 1.860 |
|            | EWP4  | 0.770          |    |    |     | 1.885 |
|            | EWP6  | 0.744          |    |    |     | 1.590 |
|            | EWP7  | 0.722          |    |    |     | 1.513 |

**Table 2** presents the results of the discriminant validity assessment using the Fornell–Larcker criterion and the Heterotrait–Monotrait ratio (HTMT). The findings confirm that the constructs demonstrate satisfactory discriminant validity, indicating that each construct is empirically distinct from the others.

Based on the Fornell–Larcker criterion, the square root of the AVE for each construct exceeded its correlations with other constructs. The square root of AVE values was 0.749 for employee work productivity, 0.776 for psychological well-being, 0.752 for transformational leadership, and 0.771 for work passion. Since these values were higher than the corresponding inter-construct correlations, the results support adequate discriminant validity. The correlation analysis further showed that employee work productivity was positively associated with psychological well-being ( $r = 0.672$ ), transformational leadership ( $r = 0.458$ ), and work passion ( $r = 0.758$ ). In addition, work passion was moderately correlated with psychological well-being ( $r = 0.691$ ) and transformational leadership ( $r = 0.607$ ). These findings indicate meaningful theoretical relationships among the constructs while maintaining their empirical distinctiveness.

Discriminant validity was further assessed using the HTMT criterion. All HTMT values ranged from 0.509 to 0.895, remaining below the recommended threshold of 0.90 [64]. This confirms that the constructs are sufficiently distinct and that no serious discriminant validity issues exist in the measurement model.

**Table 2.** Discriminant validity

| Constructs                                | Employee work productivity | Psychological well-being | Transformational leadership | Work passion |
|-------------------------------------------|----------------------------|--------------------------|-----------------------------|--------------|
| <i>Fornell-Larcker criterion</i>          |                            |                          |                             |              |
| Employee work productivity                | 0.749                      |                          |                             |              |
| Psychological well-being                  | 0.672                      | 0.776                    |                             |              |
| Transformational leadership               | 0.458                      | 0.514                    | 0.752                       |              |
| Work passion                              | 0.758                      | 0.691                    | 0.607                       | 0.771        |
| <i>Heterotrait-Monotrait Ratio (HTMT)</i> |                            |                          |                             |              |
| Psychological well-being                  | 0.756                      |                          |                             |              |
| Transformational leadership               | 0.509                      | 0.553                    |                             |              |
| Work passion                              | 0.895                      | 0.784                    | 0.698                       |              |

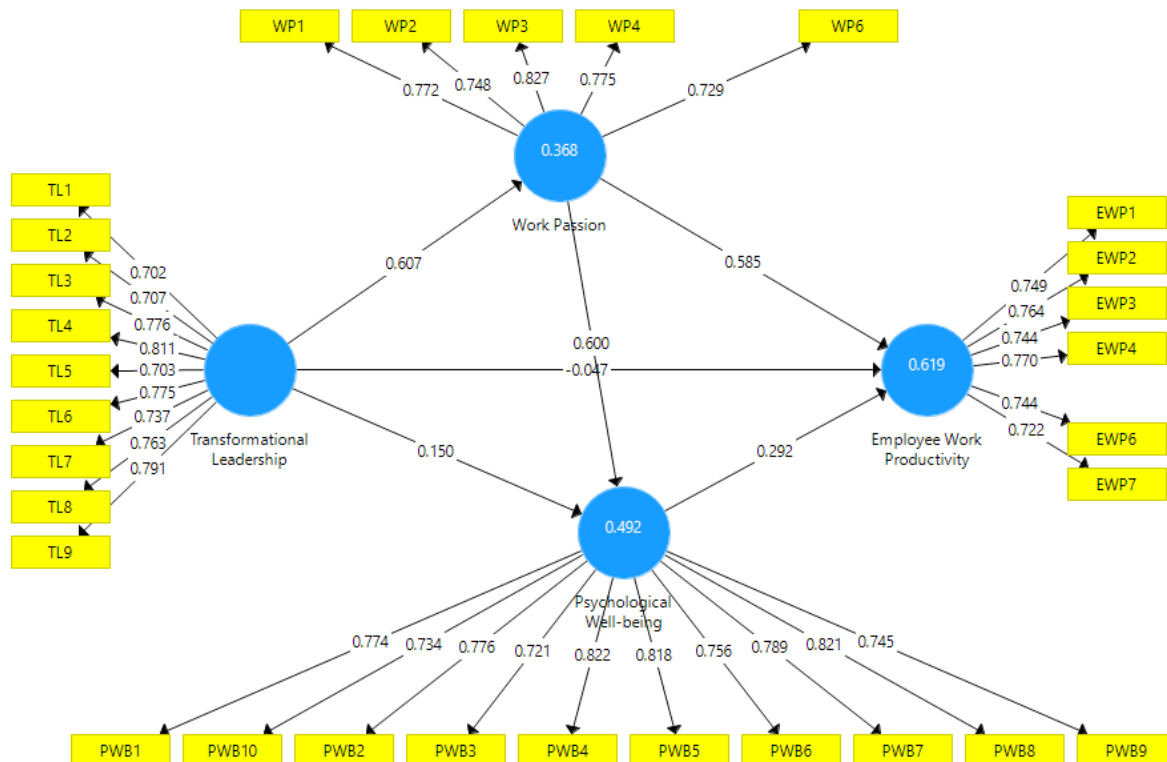


**Figure 1.** The structural model assessment

**Table 3** and **Figure 1** present the results of the structural model assessment, including the direct and indirect relationships among transformational leadership, work passion, psychological well-being, and employee work productivity. As shown in **Table 3**, all hypothesized direct effects except H1 were significant at  $p < 0.05$ . Specifically, transformational leadership significantly influenced work passion ( $\beta = 0.607$ ,  $p < 0.001$ ,  $f^2 = 0.583$ ) and psychological well-being ( $\beta = 0.150$ ,  $p = 0.035$ ,  $f^2 = 0.028$ ), while both work passion ( $\beta = 0.585$ ,  $p < 0.001$ ,  $f^2 = 0.392$ ) and psychological well-being ( $\beta = 0.292$ ,  $p < 0.001$ ,  $f^2 = 0.114$ ) positively affected employee work productivity. Among the predictors, work passion demonstrated the strongest effect on employee work productivity. However, the direct effect of transformational leadership on employee work productivity was not significant ( $\beta = -0.047$ ,  $p = 0.361$ ), leading to the rejection of H1.

Regarding the indirect effects, the findings revealed that work passion significantly mediated the relationship between transformational leadership and employee work productivity ( $\beta = 0.355$ ,  $p < 0.001$ ), supporting H6. In addition, work passion significantly mediated the relationship between transformational leadership and psychological well-being ( $\beta = 0.364$ ,  $p < 0.001$ ), supporting H7. However, psychological well-being did not significantly mediate the relationship between transformational leadership and employee work productivity ( $\beta = 0.044$ ,  $p = 0.056$ ). Therefore, H8 was not supported.

**Table 3.** Path Coefficients

| Hypotheses                                                      | Original Sample | Standard Deviation | T Statistics | P Values | f <sup>2</sup> | Results  |
|-----------------------------------------------------------------|-----------------|--------------------|--------------|----------|----------------|----------|
| <i>Direct effects</i>                                           |                 |                    |              |          |                |          |
| H1: Transformational leadership<br>→ Employee work productivity | -0.047          | 0.052              | 0.915        | 0.361    | 0.004          | Rejected |

Continuation Table:

| Hypotheses                                                                              | Original Sample | Standard Deviation | T Statistics | P Values | f <sup>2</sup> | Results   |
|-----------------------------------------------------------------------------------------|-----------------|--------------------|--------------|----------|----------------|-----------|
| H2: Transformational leadership → Work passion                                          | 0.607           | 0.090              | 6.746        | 0.000    | 0.583          | Supported |
| H3: Transformational leadership → Psychological well-being                              | 0.150           | 0.071              | 2.117        | 0.035    | 0.028          | Supported |
| H4: Work passion → Employee work productivity                                           | 0.585           | 0.060              | 9.830        | 0.000    | 0.392          | Supported |
| H5: Psychological well-being → Employee work productivity                               | 0.292           | 0.060              | 4.871        | 0.000    | 0.114          | Supported |
| <i>Indirect effects</i>                                                                 |                 |                    |              |          |                |           |
| H6: Transformational leadership → Work passion → Employee work productivity             | 0.355           | 0.069              | 5.180        | 0.000    |                | Supported |
| H7: Transformational leadership → Work passion → Psychological well-being               | 0.364           | 0.077              | 4.733        | 0.000    |                | Supported |
| H8: Transformational leadership → Psychological well-being → Employee work productivity | 0.044           | 0.023              | 1.916        | 0.056    |                | Rejected  |

The contrasting mediation results between H7 and H8 provide important theoretical insights into the psychological mechanisms through which transformational leadership influences employee outcomes. The findings indicate that work passion significantly mediates the relationship between transformational leadership and psychological well-being, whereas psychological well-being does not significantly mediate the relationship between transformational leadership and employee work productivity. These results suggest that motivational mechanisms may play a more direct role in translating transformational leadership into productive work behaviors than psychological well-being alone.

The support for H7 suggests that transformational leadership enhances psychological well-being indirectly by strengthening employees' work passion. Employees' enthusiasm, emotional attachment, and intrinsic enjoyment of work appear to function as important psychological pathways linking leadership to positive mental functioning. Transformational leaders motivate employees through vision articulation, intellectual stimulation, individualized consideration, and emotional support, which can strengthen employees' sense of meaning and emotional investment in their work. As employees become more passionate about their jobs, they are more likely to experience optimism, positive emotions, self-confidence, and psychological fulfillment, thereby improving their psychological well-being. Within the JD-R framework, work passion can therefore be viewed as a motivational resource that fosters positive psychological states and emotional resilience.

The significant mediating role of work passion further suggests that psychological well-being may emerge not directly from leadership behaviors, but through employees' internal motivational experiences. Transformational leadership appears to enhance psychological well-being by encouraging employees to perceive their work as meaningful, enjoyable, and personally valuable. Employees with strong

work passion are more likely to develop emotional energy and psychological vitality, which subsequently improve their well-being.

In contrast, the non-significant mediation result for H8 indicates that psychological well-being alone may not be sufficient to translate transformational leadership into higher employee work productivity. Although transformational leadership significantly improved psychological well-being, and psychological well-being significantly influenced employee productivity, the indirect effect through psychological well-being was statistically insignificant. One possible explanation is that psychological well-being primarily functions as a supportive psychological condition rather than a direct driver of productivity. Employees with high psychological well-being may experience emotional stability, lower stress, and better mental health; however, these conditions do not necessarily increase task effort, persistence, or performance intensity.

Another explanation is that productivity in manufacturing settings may depend more heavily on active motivational energy, task engagement, and work-related enthusiasm than on general psychological functioning alone. Work passion reflects a highly activated motivational state characterized by enthusiasm, dedication, and emotional investment in work activities. Such conditions are more directly associated with proactive behavior, persistence, and performance effort, which are essential for productivity. In contrast, psychological well-being represents a broader and relatively stable psychological condition that may contribute more to long-term adaptability and sustainability than to immediate productivity improvement.

**Table 4.** Coefficient of determination, adjusted  $R^2$ , and predictive relevance

| Endogenous Construct       | $R^2$ | Adjusted $R^2$ | $Q^2$ |
|----------------------------|-------|----------------|-------|
| Employee work productivity | 0.619 | 0.614          | 0.400 |
| Psychological well-being   | 0.492 | 0.487          | 0.233 |
| Work passion               | 0.368 | 0.366          | 0.278 |

**Table 4** presents the coefficient of determination ( $R^2$ ), adjusted  $R^2$ , and predictive relevance ( $Q^2$ ) values for the endogenous constructs. Employee work productivity achieved the highest explanatory power ( $R^2 = 0.619$ ; Adjusted  $R^2 = 0.614$ ), indicating that transformational leadership, work passion, and psychological well-being jointly explain 61.9% of its variance. According to Hair, Hult [65], this value reflects moderate to substantial explanatory power.

Psychological well-being ( $R^2 = 0.492$ ; Adjusted  $R^2 = 0.487$ ) and work passion ( $R^2 = 0.368$ ; Adjusted  $R^2 = 0.366$ ) also demonstrated moderate explanatory power, indicating that transformational leadership accounts for 49.2% and 36.8% of their variance, respectively. These findings underscore the role of transformational leadership in enhancing employees' positive psychological functioning and passion toward their work.

Regarding predictive relevance, all  $Q^2$  values were greater than zero, confirming that the model possesses predictive relevance. Employee work productivity showed the strongest predictive relevance ( $Q^2 = 0.400$ ), followed by work passion ( $Q^2 = 0.278$ ) and psychological well-being ( $Q^2 = 0.233$ ). Therefore, the structural model demonstrates satisfactory predictive capability for all endogenous constructs.

The findings further suggest that transformational leadership enhances employee productivity primarily by developing employees' work passion rather than

through a direct influence on productivity itself. This indicates that transformational leaders may improve productivity only when they successfully foster positive motivational and psychological conditions among employees. Through vision articulation, individualized consideration, intellectual stimulation, and motivational encouragement, transformational leaders help employees develop stronger emotional attachment and enthusiasm toward their work [26]. As a result, employees become more motivated to invest greater effort, persistence, and dedication in achieving organizational goals, thereby improving productivity outcomes.

From the perspective of the JD-R model, transformational leadership can be viewed as an important job resource that stimulates motivational processes and supports positive work outcomes. According to Xanthopoulou, Bakker [29], job resources such as leadership support, autonomy, feedback, and recognition play an important role in enhancing employee motivation, engagement, and performance. Transformational leaders provide psychological support, inspiration, and developmental opportunities that help employees manage job demands while strengthening their motivational capacity. In line with the JD-R model, the availability of such resources encourages employees to develop greater work passion [45], which subsequently enhances work productivity.

The significant mediating role of work passion also demonstrates that passionate employees are more likely to experience strong emotional involvement, enjoyment, and intrinsic motivation in their work. Employees with high work passion tend to invest substantial cognitive, emotional, and physical energy because they perceive their work as meaningful and personally fulfilling [12]. Consequently, they are more willing to exert extra effort, persist in challenging situations, and perform beyond formal job requirements. This finding supports previous studies showing that transformational leadership positively influences employees' passion and engagement, which subsequently improve performance and productivity [51, 66]. Transformational leaders encourage employees to internalize organizational goals and values, thereby strengthening their enthusiasm to work [67].

The present findings are consistent with recent studies emphasizing the strategic importance of work passion and psychological functioning in organizational sustainability and employee outcomes. Mercader, Herrera [68] argued that work passion represents an essential organizational resource that strengthens resilience and adaptability in contemporary workplaces. In the present study, employees with stronger work passion demonstrated higher levels of productivity, suggesting that emotional enthusiasm and intrinsic attachment to work remain critical drivers of performance in manufacturing organizations. Moreover, the findings support the growing positive organizational behavior literature emphasizing the importance of employees' psychological experiences in sustaining organizational effectiveness. Salazar-Altamirano, Martínez-Arvizu [69] similarly reported that workplace happiness and psychological conditions significantly influence employee attitudes and organizational outcomes in emerging-market contexts.

The findings also highlight the role of psychological well-being as an important psychological mechanism linking transformational leadership and employee productivity. Psychological well-being reflects positive psychological functioning, including a sense of purpose, self-confidence, emotional stability, and happiness [15]. Transformational leaders contribute to employees' well-being by promoting trust, fostering supportive relationships, and recognizing employee contributions. Such leadership behaviors help employees feel valued, respected, and psychologically

secure in the workplace. According to the JD-R model, transformational leadership acts as a valuable job resource that reduces emotional exhaustion and strain while strengthening employees' motivational and psychological capacities [10]. Employees with higher psychological well-being are generally better able to manage work pressures and sustain productive behaviors under demanding conditions.

Furthermore, the indirect effects of transformational leadership through work passion and psychological well-being suggest that employee productivity is shaped largely by employees' internal psychological experiences rather than solely by direct managerial control. This finding aligns with the motivational process proposed in the JD-R model, which explains that job resources influence employee outcomes indirectly through motivational and psychological pathways [29]. In other words, transformational leadership enhances productivity by strengthening employees' emotional and motivational resources. Employees who feel emotionally connected and psychologically supported to their work are more likely to demonstrate higher levels of energy, adaptability, persistence, and productivity.

The relatively weak direct effect of transformational leadership on employee productivity may also indicate that leadership effectiveness depends on the extent to which leaders successfully shape employees' psychological conditions. Productivity improvements may not occur immediately through direct leadership influence, but instead emerge gradually through increased work passion and psychological well-being. This finding reinforces the importance of examining mediating variables in leadership–performance relationships because psychological mechanisms often explain how transformational leadership contributes to employee outcomes [67].

## **5. Conclusion**

This study examined the relationship between transformational leadership and employee work productivity through the mediating roles of work passion and psychological well-being within the framework of the JD-R model. The findings provide important practical and theoretical insights into how transformational leadership contributes to employee productivity in contemporary organizational settings. Although transformational leadership did not demonstrate a significant direct effect on employee work productivity, the study confirmed that transformational leadership indirectly enhances work productivity through the development of employees' work passion. In addition, transformational leadership was found to positively influence employees' psychological well-being, while both work passion and psychological well-being significantly contributed to higher levels of employee work productivity.

The findings reinforce the central assumption of the JD-R model that leadership acts as a critical organizational resource capable of stimulating motivational and psychological processes that improve employee outcomes. Transformational leaders create supportive, inspiring, and empowering work environments that encourage employees to develop stronger emotional attachment, enthusiasm, and dedication to their work. Employees who experience greater work passion are more likely to invest substantial cognitive, emotional, and behavioral energy in their tasks, ultimately leading to enhanced productivity.

This study also highlights the importance of psychological well-being in sustaining productive employee behavior. Transformational leadership contributes positively to employees' psychological functioning by fostering trust, recognition, emotional support, and meaningful workplace relationships. Employees with

stronger psychological well-being are better able to cope with work pressures, maintain emotional stability, and sustain effective performance under demanding organizational conditions. However, the indirect effect of transformational leadership on productivity through psychological well-being was not statistically significant, suggesting that psychological well-being may operate more effectively in conjunction with motivational mechanisms such as work passion rather than as an independent pathway to work productivity enhancement.

The study contributes to the leadership and organizational behavior literature in several important ways. First, it extends transformational leadership research by integrating the JD-R model to explain how leadership-generated job resources influence employee productivity through psychological and motivational processes. Second, the study advances existing knowledge by simultaneously examining work passion and psychological well-being within a comprehensive mediation framework. Third, the findings enrich the growing literature on positive organizational behavior by emphasizing the importance of employees' psychological resources in achieving sustainable work productivity.

From a practical perspective, the findings imply that organizations should not rely solely on direct performance management practices to improve productivity. Instead, organizations should invest in leadership development programs that strengthen transformational leadership capabilities, including inspirational communication, individualized consideration, intellectual stimulation, and emotional support. Leaders who are capable of fostering employees' work passion and psychological well-being may create more sustainable forms of employee productivity and organizational effectiveness. Organizations should also develop supportive work environments that encourage employee engagement, emotional connection to work, and psychological well-being through recognition systems, developmental opportunities, and well-being initiatives.

Despite its contributions, this study has several limitations. First, the cross-sectional design limits the ability to establish causal relationships among transformational leadership, work passion, psychological well-being, and employee work productivity. Although the proposed relationships were theoretically grounded in the JD-R model, the findings should be interpreted with caution because the data were collected at a single point in time. Future studies are therefore encouraged to employ longitudinal or time-lagged research designs to better capture the dynamic and causal relationships among leadership behaviors, psychological states, and productivity outcomes over time.

Second, this study relied primarily on self-reported data collected from a single source, which may increase the potential risk of CMB. Although several procedural remedies were implemented, including anonymity assurance, questionnaire refinement, and systematic item arrangement, the possibility of residual common method variance cannot be fully eliminated. Respondents may still have provided socially desirable responses or evaluated predictor and outcome variables consistently due to common perceptual tendencies. Future research is therefore encouraged to reduce this limitation by using multi-source data collection approaches, such as combining employee-rated leadership perceptions with supervisor-rated employee productivity or objective organizational performance indicators.

Third, the study focused exclusively on employees working in manufacturing organization in South Sumatra, Indonesia, which may limit the generalizability of the findings across different organizational and cultural contexts. Organizational climate,

industry characteristics, and national culture may influence how transformational leadership affects employee psychological states and productivity. Future studies are encouraged to replicate the proposed model in different industries, countries, and occupational settings to enhance the external validity and cross-cultural applicability of the findings.

**Author contributions:** Conceptualization, UU and DIO; methodology, UU and MSMS; software, UU and MR; validation, UU, DIO and MSMS; formal analysis, MR; investigation, MR; resources, MR and DIO; data curation, MR; writing—original draft preparation, UU and MR; writing—review and editing, UU; visualization and DIO, MR and UU; supervision, DIO and MSMS; project administration, UU and DIO; funding acquisition, DIO. All authors have read and agreed to the published version of the manuscript.

**Funding:** None.

**Ethical approval:** This study received ethical approval from the Faculty of Economics and Business, Universitas Muhammadiyah Yogyakarta, Indonesia (Approval No. 347/A.1-II/FEB/VI/2025).

**Informed consent statement:** Not applicable.

**Data availability statement:** The datasets generated and analyzed during the current study are available from the corresponding author upon reasonable request.

**Conflict of interest:** The authors declare no conflict of interest.

## References

1. Bass, B.M. and R.M. Stogdill, *Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications*. 1990: Simon and Schuster.
2. Aldossari, F. and S. Alanizan, *The impact of transformational leadership on employee performance: The mediating role of job satisfaction and organizational commitment*. Edelweiss Applied Science and Technology, 2025. 9(6): p. 609-625.
3. Lagura, G.A.L., et al., *Exploring the transformational leadership capacities of nurse supervisors in Saudi Arabia*. International Journal of Advanced and Applied Sciences, 2024. 11(12): p. 100-107.
4. Udin, U., *Leadership styles and their associated outcomes: A bibliometric review using VOSviewer*. International Journal of Human Capital in Urban Management, 2023. 8(4): p. 443-456.
5. Iskandar, H.K. Tjahjono, and M.K.P. Rahayu, *Overview of transformational leadership development: a bibliometric analysis*. Multidisciplinary Reviews, 2024. 7(2).
6. Lee, C.L., W.T. Lin, and D. Ahlstrom, *Can Employee-Friendly Workplace Practices Improve Innovation Productivity? An Organizational Identification Perspective*. Human Resource Management, 2025. 64(4): p. 1099-1118.
7. Spytska, L. and S. Pak, *Investigation of psychological factors of motivation and productivity in the workplace*. Clio. Revista de Historia, Ciencias Humanas y Pensamiento Critico., 2026. 2026(11): p. 2686-2723.
8. Kaiser, S., et al., *Using the Job Demands–Resources Model to Evaluate Work-Related Outcomes Among Norwegian Health Care Workers*. SAGE Open, 2020. 10(3).
9. Zeshan, M., et al., *Empowering sustainable workplaces: A perspective on employee well-being in the light of the job demand resource model*. Sustainable Development, 2025. 33(2): p. 1861-1878.
10. Katou, A.A., M. Koupkas, and E. Triantafillidou, *Job demands-resources model, transformational leadership and organizational performance: a multilevel study*. International Journal of Productivity and Performance Management, 2022. 71(7): p. 2704-2722.
11. Udin, U., et al., *Work-life balance, psychological empowerment, and work engagement: Insights from the job demands-resources model*. International Journal of Advanced and Applied Sciences, 2026. 13(4): p. 122-129.
12. Vallerand, R.J., et al., *Les passions de l'âme: On obsessive and harmonious passion*. Journal of Personality and Social Psychology, 2003. 85(4): p. 756-767.

13. Udin, U., *Transformational leadership, knowledge-based work passion and organizational citizenship behavior: A survey dataset from public university*. International Journal of Human Capital in Urban Management, 2023. 8(3): p. 391-402.
14. Bakker, A.B. and E. Demerouti, *Multiple levels in job demands-resources theory: Implications for employee well-being and performance*, in *Handbook of well-being*. 2018, Noba Scholar.
15. Ryff, C.D., *Happiness Is Everything, or Is It? Explorations on the Meaning of Psychological Well-Being*. Journal of Personality and Social Psychology, 1989. 57(6): p. 1069-1081.
16. Wang, H.F., et al., *Relationship between transformational leadership and nurses' job performance: The mediating effect of psychological safety*. Social Behavior and Personality, 2021. 49(5).
17. Jiatong, W., et al., *The Impact of Transformational Leadership on Affective Organizational Commitment and Job Performance: The Mediating Role of Employee Engagement*. Frontiers in Psychology, 2022. 13.
18. Sun, H., H.W.V. Tang, and X. Zhu, *The relationship between transformational leadership, teachers' organizational commitment, and job satisfaction: An integrated investigation using meta-analysis and structural equation modeling*. Kasetsart Journal of Social Sciences, 2025. 46(4).
19. Ho, Y.H., C.H. Nguyen, and T.T. Giang, *Cultivating faculty well-being and engagement through transformational leadership in emerging country*. International Journal of Educational Management, 2025. 39(1): p. 36-54.
20. Udin, U., et al., *The Role of Transformational Leadership on Employee Performance Through Organizational Learning Culture and Intrinsic Work Motivation*. International Journal of Sustainable Development and Planning, 2023. 18(1): p. 237-246.
21. Rochman, F., et al., *Emotional Intelligence, Optimism, and Peer Support as Predictors of Students' Psychological Well-Being: A Case Study to Enhance Educational Management Quality*. Kharisma, 2026. 5(1): p. 81-94.
22. Bass, B.M. and B.J. Avolio, *Transformational Leadership And Organizational Culture*. International Journal of Public Administration, 1994. 17(3-4): p. 541-554.
23. Amrullah, N.I.H., S. Haryono, and S.H. Wahyuningsih, *The Effect of Transformational Leadership and Organizational Culture on Village Government Offices Performance*. Quality - Access to Success, 2022. 23(189): p. 8-17.
24. Almaamari, Q.A. and H.I. Alaswad, *Factors Influencing Employees' Productivity: Literature Review*. Academy of Entrepreneurship Journal, 2021. 27(3): p. 1-7.
25. Garad, A., et al., *The Relationship Between Transformational Leadership, Improving Employee's Performance and the Raising Efficiency of Organizations*. Management and Production Engineering Review, 2022. 13(2): p. 15-30.
26. Pitichat, T. and R.E. Riggio, *Transformational Leadership Theory*, in *Leadership Theories, Frameworks, and Approaches in Practice*. 2025. p. 133-144.
27. Astuty, I. and U. Udin, *The Effect of Perceived Organizational Support and Transformational Leadership on Affective Commitment and Employee Performance*. Journal of Asian Finance, Economics and Business, 2020. 7(10): p. 401-411.
28. Tang, Y., et al., *Passion ignites: Effect of expert worker passion on employee performance in knowledge worker teams*. Journal of Business Research, 2025. 188.
29. Xanthopoulou, D., et al., *The role of personal resources in the job demands-resources model*. International Journal of Stress Management, 2007. 14(2): p. 121-141.
30. Nordin, W.N.A.W.M., N.L.M. Kamil, and V.G.R.C. Govindaraju, *Multilevel study of transformational leadership and work behavior: job autonomy matters in public service*. Management Research Review, 2024. 47(10): p. 1684-1701.
31. Dukhaykh, S., B. Bukhari, and M. Alotaibi, *The impact of transformational leadership on work engagement: The mediating role of job crafting*. Environment and Social Psychology, 2024. 9(2).
32. Jia, J., et al., *The Continuous Mediating Effects of GHRM on Employees' Green Passion via Transformational Leadership and Green Creativity*. Sustainability, 2018. 10(9): p. 3237.
33. Wang, T.L., *Leadership behaviour and its impact on task performance from the employees' perspective: A case study of Taiwan*. International Journal of Human Resources Development and Management, 2023. 23(3): p. 207-224.
34. Ezcurra-Zavaleta, G.A., et al., *Transformational leadership to improve the intrinsic satisfaction of public workers in northern Peru*. Humanities and Social Sciences Letters, 2025. 13(4): p. 1331-1343.
35. Raza, S.A. and S.Q. Yousufi, *Transformational leadership and employee's career satisfaction: Role of psychological empowerment, organisational commitment, and emotional exhaustion*. Asian Academy of Management Journal, 2023. 28(2): p. 207-238.

36. Mack, C., I. Ike, and B.G. Mujtaba, *Workplace spirituality and transformational leadership: An assessment of their relationship and fry's causal spiritual model*, in *Social Issues in the Workplace: Breakthroughs in Research and Practice*. 2017. p. 339-354.
37. Gilbert, S.L. and E.K. Kelloway, *Leadership, Recognition and Well-Being: A Moderated Mediation Model*. Canadian Journal of Administrative Sciences, 2018. 35(4): p. 523-534.
38. Tolentino, L.R., et al., *The bright side of loving your work: Optimism as a mediating mechanism between work passion and employee outcomes*. Personality and Individual Differences, 2022. 194: p. 111664.
39. Men, L.R., et al., *A mixed-method approach to understanding employee passion at work: Definitions, outcomes, and public relations implications*. Public Relations Review, 2026. 52(2).
40. Kim, H.K., *In the COVID-19 Era, Effects of Job Stress, Coping Strategies, Meaning in Life and Resilience on Psychological Well-Being of Women Workers in the Service Sector*. International Journal of Environmental Research and Public Health, 2022. 19(16).
41. Divyakala, C. and A. Vasumathi, *Cultivating productivity among women employees: the dynamic role of psychological well-being, emotional exhaustion, and conflict management*. International Journal of Services and Operations Management, 2025. 52(4): p. 437-456.
42. Malaga, R.S. and D.E. Olenski, *Perceived organizational support, psychological empowerment, and job satisfaction as key predictors of public school teacher performance*. International Journal of Advanced and Applied Sciences, 2026. 13(1): p. 201-210.
43. Lee, D.Y. and Y. Jo, *The job demands-resource model and performance: the mediating role of employee engagement*. Frontiers in Psychology, 2023. 14.
44. Kour, J., J. El-Den, and N. Sriratanaviriyakul, *The role of positive psychology in improving employees' performance and organizational productivity: An experimental study*. Procedia Computer Science, 2019. 161: p. 226-232.
45. Nguyen, P.T., P.Q.T. Nguyen, and M.T. Nguyen, *Artificial Intelligence, Transformational Leadership, and Job Performance: Mediating Role of Job Engagement and Moderating Role of Work Passion*. Journal of Applied Data Sciences, 2026. 7(2): p. 1281-1298.
46. Lestariningsih, M., S. Suhermin, and E.A. Kusuma, *The role of transformational leadership and motivation in enhancing meaningful employee performance*. International Journal of Management and Sustainability, 2025. 14(4): p. 1024-1043.
47. Milhem, M., et al., *The impact of transformational leadership on the job performance of ICT employees in Palestine: The role of psychological empowerment as a mediating factor*. International Journal of Innovative Research and Scientific Studies, 2024. 7(4): p. 1662-1670.
48. Aziz, A.N., A.S. Rahmatullah, and A. Khilmiyah, *Effects of Self-Compassion and Self-Disclosure on Mental Health through Spirituality: A Study on Adolescents in Orphanages*. Islamic Guidance and Counseling Journal, 2023. 6(2): p. 1-19.
49. Naveed, M. and M. Qamar Zia, *Exploring the interplay between job resources, employee engagement, and adaptive job performance with a focus on psychological contract fulfillment*. Journal of Asia Business Studies, 2024. 18(3): p. 767-783.
50. Vintilă, F., et al., *Looking into the new normal after COVID-19 pandemic: leadership styles and job-related affective well-being*. Kybernetes, 2024.
51. Czura, K., et al., *Employee Performance and Mental Well-Being: The Mitigating Effects of Transformational Leadership During Crisis*. Management Science, 2026. 72(4): p. 2788-2806.
52. Nielsen, K., et al., *The importance of transformational leadership style for the well-being of employees working with older people*. Journal of Advanced Nursing, 2008. 63(5): p. 465-475.
53. Byon, K.K. and W.W. Jang, *Partial least squares sem*, in *Encyclopedia of Sport Management, Second Edition*. 2024. p. 702-704.
54. Carless, S.A., A.J. Wearing, and L. Mann, *A Short Measure of Transformational Leadership*. Journal of Business and Psychology, 2000. 14(3): p. 389-405.
55. Houliort, N., et al., *On passion and heavy work investment: personal and organizational outcomes*. Journal of Managerial Psychology, 2013. 29(1): p. 25-45.
56. Landay, K., J.A. DeSimone, and P.D. Harms, *A psychometric investigation of harmonious and obsessive work passion*. Journal of Organizational Behavior, 2022. 43(9): p. 1535-1561.
57. Marsh, H.W., et al., *Passion: Does one scale fit all? Construct validity of two-factor passion scale and psychometric*

- invariance over different activities and languages*. Psychological assessment, 2013. 25(3): p. 796-809.
58. Springer, K.W. and R.M. Hauser, *An assessment of the construct validity of Ryff's Scales of Psychological Well-Being: Method, mode, and measurement effects*. Social Science Research, 2006. 35(4): p. 1080-1102.
59. Bernardin, H.J. and J.E.A. Russell, *Human resource management: An experiential approach (6th ed.)*. 2013, New York: McGraw-Hill.
60. Na-Nan, K., K. Chaiprasit, and P. Pukkeeree, *Factor analysis-validated comprehensive employee job performance scale*. International Journal of Quality & Reliability Management, 2018. 35(10): p. 2436-2449.
61. Brislin, R.W., *Translation and content analysis of oral and written materials*. Methodology, 1980: p. 389-444.
62. Kaltsonoudi, K., N. Tsigilis, and K. Karteroliotis, *Common method bias in research designs using self-report tools: literature overview and recommended remedies*. Psychology, 2022. 27(1): p. 210-231.
63. Hair, J. and A. Alamer, *Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example*. Research Methods in Applied Linguistics, 2022. 1(3).
64. Henseler, J., C.M. Ringle, and M. Sarstedt, *A new criterion for assessing discriminant validity in variance-based structural equation modeling*. Journal of the Academy of Marketing Science, 2015. 43(1): p. 115-135.
65. Hair, J.F., et al., *A primer on partial least squares structural equation modeling (PLS-SEM) (3rd Ed.)*, ed. T. Edition. 2021, United States of America: SAGE Publications.
66. Al-Qartooqi, K. *The Impact of Transformational Leadership on Employee Engagement, Productivity, and Motivation: The Case of Oman*. in *Proceedings of International Conference on Research in Education and Science*. 2024.
67. Bin Saeed, B., et al., *Does transformational leadership foster innovative work behavior? The roles of psychological empowerment, intrinsic motivation, and creative process engagement*. Economic Research-Ekonomska Istrazivanja, 2019. 32(1): p. 254-281.
68. Mercader, V., et al., *Decoding the link between work passion and organizational resilience in the Society 5.0 era*. Estudios Gerenciales, 2025. 41(175): p. 221-235.
69. Salazar-Altamirano, M.A., et al., *Workplace happiness, hopelessness, and turnover intention: a gender-based multigroup analysis in an emerging market*. Corporate Governance, 2025. 25(8): p. 240-259.