

# TRANSFORMATIONAL LEADERSHIP AS MODERATOR BETWEEN JOB DEMANDS AND WORK ENGAGEMENT (A STUDY IN SERVICE COMPANIES)

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## ABSTRACT

*This research aims to investigate the roles of cognitive and emotional demands on work engagement, with transformational leadership as the moderator. Work engagement is a positive work condition that promotes well-being and is characterized by dedication, vigor, and absorption. Cognitive demand refers to work conditions that require individuals to focus their thoughts on their tasks, while emotional demand involves the requirement to display (or anticipate) specific emotions during social interactions at work. Transformational leadership encompasses leader behaviors that inspire, provide guidance, motivate, and encourage followers to achieve maximum results. The study involved 258 participants who were employees in service companies. The research design used in this study was non-experimental quantitative research. Three measurement instruments were employed: (1) the Utrecht Work Engagement Scale (UWES), (2) the Job Demand-Resource Questionnaire, and (3) the Transformational Leadership Inventory. The results of this research indicate that employees who perceive their leaders as having high levels of transformational behavior experience an increase in work engagement when faced with cognitive demands. For employees who perceive their leaders as having low levels of transformational behavior, cognitive demands still lead to increased work engagement. However, the level of transformational leadership, whether high or low, does not play a role in increasing or decreasing the impact of emotional demands on work engagement.*

**Keywords:** *Work engagement, cognitive demand, emotional demand, transformational leadership*

## 1. INTRODUCTION

The era of the Fourth Industrial Revolution is marked by rapid advancements in information and communication technology. This development has brought significant changes to all aspects of life, including work systems and company strategies. However, as we entered the early years of 2020, the entire world faced the Covid-19 pandemic. The Covid-19 pandemic brought about significant changes, particularly in terms of restricting social activities and physical meetings. It not only limited social interactions but also had an impact on the global economy, education systems, and work systems in all companies. These changes have led to a reduction in job opportunities and an increase in unemployment rates in Indonesia.

Based on data from the Central Statistics Agency (BPS) regarding the Open Unemployment Rate (TPT) due to Covid-19 in Indonesia, as of February 2021, it reached 19.10 million. This means that companies are not only transitioning jobs through technology, but each employee may also have to take on two or more jobs simultaneously. Despite facing these changes and streamlining of work systems, it turns out that employees respond differently to these challenges.

Based on the results of interviews with two employees in the service company, namely D and G, they experienced different conditions when facing these changes. According to D, he currently faces high job pressure, but this has not diminished his enthusiasm and the quality of his work. He feels that he still enjoys his job.

“On a scale of 1-5, it's definitely a 5... even if I have to work until 5 in the morning, I want the results to match my expectations. I have to give my best. Personally, I don't feel tired because I'm doing what I love. So, even if it's tiring, I just enjoy doing it. If I have an idea that I can't let go of, I have to work on what's in my head. I can't just stop at 7, because the next day I'll surely have new ideas. So, I tend to lose track of time... I just enjoy doing it” (D, personal communication, 6 October, 2021).

Unlike D, according to G, facing the current work conditions has made him feel tired, become unfocused, and no longer enjoy his job

“Yeah, first, I have to coordinate with many departments, meet with clients until late at night, especially during shoots, I get scolded by clients... my mood is also heavily impacted by work. So, what sometimes makes me burnout and stressed are various factors related to my job... I get tired very quickly. It's not because of the job description but the pressure from internal and external sources. Working hours in the media industry are unpredictable; you're used to being strict about being on time, but suddenly, when things go wrong at work, I get cranky right away.” (G, personal communication, 7 October, 2021).

The passage provided describes the illustration of employee work engagement during the Fourth Industrial Revolution and the COVID-19 pandemic. Schaufeli et al. (cited in Gou et al., 2021) explain that work engagement is a positive organizational condition and behavior that fosters well-being in the workplace. Breevaart and Bakker (2018) elaborate on the notion that work engagement can be predicted by job demands using the Job Demand-Resource (JD-R) model. Job demands are characterized by the expenditure or depletion of physical, psychological, and emotional energy, which can lead to tension and health complaints. Breevaart and Bakker (2018) conducted research on teachers in the Netherlands to examine the portrayal of job demands and work engagement. In their study, Breevaart and Bakker examined the roles of cognitive demand and role conflict in work engagement. The research results indicated a positive relationship between cognitive demand and work engagement, with a coefficient of  $r(271) = 0.18, p < 0.001$ . Conversely, the study revealed a negative relationship between role conflict and work engagement, with a coefficient of  $r(271) = -0.23, p < 0.001$ .

Furthermore, Breevaart and Bakker (2018) explained that the relationship between work engagement and job demands can also be moderated by transformational leadership. Transformational leadership is predicted to enhance work engagement when employees are confronted with job demands. This means that employees who have leaders with high transformational leadership qualities are likely to have higher work engagement even when faced with high job demands, including cognitive demand. Conversely, for employees who have leaders with low transformational leadership qualities, higher job demands, especially cognitive demand, may not necessarily result in higher work engagement. Mulyana et al. (2020) also explained through their research that job demands have a positive relationship with work engagement when moderated by the role of leaders, such as flexible leadership.

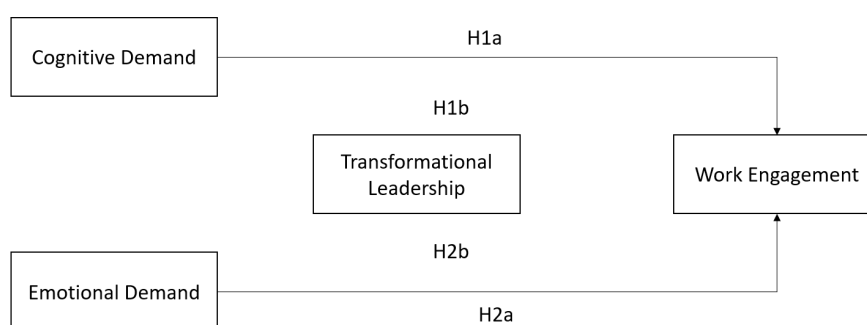
In connection with this, Breevaart and Bakker have effectively explained the role of job demands, such as role conflict and cognitive demand, on work engagement in their research. However, beyond the demands described by Breevaart and Bakker, there is another aspect of hindrance demand, namely, emotional demand, that plays a crucial role in predicting work engagement. Xanthopoulou et al. (2013) defined emotional demand as job situations that have the potential to elicit negative feelings or emotions. Morris and Feldman (cited in Xanthopoulou

et al., 2013) also mentioned that emotional demand requires employees to display positive emotions while working and avoid displaying negative emotions. Karolina and Suyasa (2023) indicate that emotional fatigue has a significant relationship with work engagement. The less enthusiastic, powerless, and bored an individual feels while working, the less engaged they are with their job. In reality, employees cannot always display positive emotions in every situation, particularly when faced with demands from individuals who are not friendly. Such interactions can trigger negative emotions, and if they occur, they can lead to a decline in employee well-being. Given this explanation, emotional demand can be considered a significant hindrance demand that needs to be examined when predicting work engagement.

Based on the background provided, this research aims to examine the role of job demands (cognitive demand and emotional demand) and work engagement, with transformational leadership as the moderator, among employees working in the service industry. This is motivated by the changes in working conditions experienced by employees due to the COVID-19 pandemic. The study is intended to assist employees in maintaining their comfort and well-being while working, as it can impact the psychological state of employees.

Based on the background information presented above, the hypotheses proposed in the research are as follows. H1a: Cognitive Demand (challenge demand) significantly influences work engagement. This means that the higher the cognitive demand, the higher the level of work engagement. Similarly, the opposite is also true. H1b: Transformational leadership moderates the relationship between cognitive demand and work engagement. This means that the relationship between cognitive demand and work engagement will be strong when the level of transformational leadership is high. H2a: Emotional demand (hindrance demand) significantly influences work engagement. H2b: Transformational Leadership moderates the relationship between emotional demand and work engagement. This means that the relationship between emotional demand and work engagement will be low when the level of transformational leadership is high.

**Figure 1**  
*Hypotheses*



## 2. RESEARCH METHOD

The participants in this study consisted of 258 employees actively working in service companies with a minimum of 6 months of work experience. Among the participants, there were 138 females (53.5%) and 120 males (46.5%). In terms of educational background, 169 participants (65.5%) held a bachelor's degree (S1), 37 participants (14.3%) had a diploma (D3), 35 participants (13.6%) held a master's degree (S2), and 17 participants (6.6%) had a high school diploma or equivalent (SMA/SMK).

Regarding marital status, 148 participants (57.4%) were married, and 110 participants (42.6%) were unmarried. The majority of participants in this study had permanent employment status, with 189 participants (73.3%) being permanent employees. Additionally, there were 69 participants with contract employment status (26.7%).

In terms of job positions, 149 participants (57.8%) held positions as staff or officers, 64 participants (24.8%) had positions as supervisors/assistant managers/senior officers, 27 participants (10.5%) held managerial positions, 14 participants (5.4%) were in positions as general managers/division heads, and 2 participants (0.8%) held director-level positions. There were 2 participants (0.8%) with positions at other levels.

Work engagement was measured using the Utrecht Work Engagement Scale (UWES). The UWES is a measurement tool developed by Schaufeli, Bakker, and Salanova (2006). The UWES consists of 17 items that describe three dimensions of work engagement. These 17 items are divided into 7 items for vigor, 4 items for dedication, and 6 items for absorption statements for each dimension.

Examples of statement items for the vigor dimension include: "I am (0: not enthusiastic / 6: very enthusiastic) about going to work every day." For the dedication dimension, an example statement item is: "I feel that the work I do is (0: not meaningful and significant / 6: very meaningful and significant)." For the absorption dimension, an example statement item is: "When I am working, time flies (0: slowly / 6: quickly)."

Reliability testing was conducted using the SPSS version 19.0 for Mac program. Since this questionnaire is multidimensional, reliability testing was performed for each dimension separately. Based on the reliability test results for the vigor dimension, a Cronbach's alpha value of .898 was obtained. Furthermore, the reliability test results for the dedication dimension yielded a Cronbach's alpha value of .863. Additionally, the reliability test results for the absorption dimension showed a Cronbach's alpha value of .715.

Job demand was measured using the Job Demand Resource Questionnaire, developed based on JDR Model (Bakker & Demerouti, 2014). The JDR Questionnaire consists of 40 items, with 23 items measuring job demand and 17 items measuring job resources. In this study, only 4 statement items related to cognitive demand and 6 statement items related to emotional demand were used. The procedure for completing this measurement asks respondents to assess the level of fit or mismatch based on their circumstances. The scale used in this study is a frequency rating scale, with responses ranging from 1 to 5 (1 = Rarely, 2 = Sometimes, 3 = Occasionally, 4 = Quite Often, 5 = Very Often).

In this study, reliability was assessed for cognitive demand and emotional demand. There are 4 statement items measuring cognitive demand. An example item for the cognitive demand

dimension is: "How often does your job require a lot of concentration?" (1: Rarely / 5: Very Often). The internal consistency for these four items was considered acceptable ( $\alpha = 0.558$ ).

For the emotional demand dimension, there are 6 statement items. An example item for the emotional demand dimension is: "How often does your job demand emotional effort (patience, friendliness, etc.)?" (1: Rarely / 5: Very Often). The internal consistency for these six items was considered good ( $\alpha = 0.850$ ).

Transformational leadership was measured using the Transformational Leadership Inventory (TLI). TLI is a measurement tool developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990), consisting of 21 positive items and 7 negative items. This inventory encompasses six dimensions, namely: (1) articulating vision, (2) providing an appropriate model, (3) fostering acceptance of group goals, (4) high performance expectations, (5) individualized support, (6) intellectual stimulation, and (7) contingent reward.

An example item from the articulating vision dimension is: "My supervisor (does not provide/provides) an appealing picture of the future plans for me." An example item from providing an appropriate model is: "My supervisor leads by telling, (0: without / 6: with) giving an example (how to do it)." An example item from fostering acceptance of group goals is: "My supervisor (is not very good at / is good at) encouraging employees to be a cohesive and mutually supportive team." An example item from high performance expectations is: "My supervisor (does not express / expresses) expectations for team members to achieve targets." An example item from individualized support is: "My supervisor acts (without / with) considering my feelings." An example item from intellectual stimulation is: "My supervisor (rarely / often) challenges (to solve problems, come up with new ideas, etc.)." An example item from contingent reward is: "My supervisor (rarely / often) gives me positive feedback when I perform well."

Reliability testing was conducted using the SPSS program version 19.0 for Mac. Since this questionnaire is multidimensional, reliability testing was conducted for each dimension. Based on the reliability test results, the articulating vision dimension obtained a Cronbach's alpha value of .889. The providing an appropriate model dimension obtained a Cronbach's alpha value of .931. The fostering acceptance of group goals dimension obtained a Cronbach's alpha value of .873. The high performance expectations dimension obtained a Cronbach's alpha value of .683. The individualized support dimension obtained a Cronbach's alpha value of .891. The intellectual stimulation dimension obtained a Cronbach's alpha value of .815. The fostering acceptance of group goals dimension obtained a Cronbach's alpha value of .873. Finally, the contingent reward dimension obtained a Cronbach's alpha value of .917.

The data collection process was assisted by four master's program psychology students. Data collection took place at the participants' workplaces. The researcher distributed the questionnaire in the form of a survey link to eligible participants. Additionally, the researcher also shared the survey link with colleagues in other service companies to request their willingness to fill out this research questionnaire.

The questionnaire consists of informed consent, participant biodata, and items or statements to assess the job demands experienced by employees, the role of transformational leadership, and the level of work engagement of employees in their work.

### 3. RESULT AND DISCUSSION

Before conducting hypothesis testing, the researcher conducted tests on the assumptions of linear regression. This was done to avoid bias in data analysis and to avoid specific errors in the regression model used. The testing of regression assumptions, often referred to as classical assumption testing, includes the normality test. The complete results of the classical assumption testing can be seen in the appendix.

The normality test is a test conducted to determine whether the error or residual variables have a normal distribution. The normality test for the data was conducted on all four research variables using the One-Sample Kolmogorov-Smirnov test. If the significance value ( $p$ ) > 0.05, then the data distribution is considered normal.

**Table 1**

*The Result of The Normality Test for Work Engagement, Cognitive Demand, Emotional Demand, and Transformational Leadership*

Variable	Signification (p)	Description
<i>Work Engagement</i>	0.000	Not Normal
<i>Cognitive Demand</i>	0.000	Not Normal
<i>Emotional Demand</i>	0.033	Not Normal
<i>Transformational Leadership</i>	0.091	Normal

Based on the normality test conducted on the four variables, it is known that the majority of the variables do not have a normal distribution, with only one variable having a normal distribution. Therefore, in this study, data processing was performed by conducting correlation and moderation tests manually using the Spearman Correlation method.

**Table 2**

*The Relationship Between Research Variables*

No	Variables	Mean	SD	1	2	3	4
1	<i>Work Engagement</i>	4.63	0.848	1			
2	<i>Cognitive Demand</i>	4.00	0.574	0.166**	1		
3	<i>Emotional Demand</i>	3.08	0.911	- 0.88	0.328**	1	
4	<i>Transformational Leadership</i>	5.14	1.137	0.510**	- 0.105	- 0.164**	1

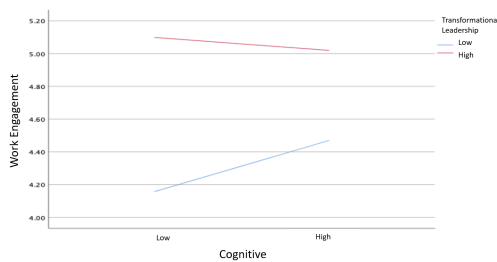
Based on the data obtained, a correlation test was conducted between the variables cognitive demand and work engagement. Based on the results of the normality test, it is known that the variables do not follow a normal distribution. Therefore, the correlation test technique used is Spearman Correlation (due to non-normal data), and the result is  $r_s = 0.166$ ,  $p < 0.01$ . Thus, there is a significant relationship between cognitive demand and work engagement.

The data for the transformational leadership variable is grouped into two categories, namely high and low. Furthermore, the data in this study are non-parametric, so the correlation test used is the Spearman Correlation. Based on the results of the correlation test, it was found that in the category of high transformational leadership, the correlation between cognitive demand and work engagement have non-significant results,  $r_s = 0.000$ ,  $p > 0.05$  in the group of participants with high transformational leadership.

On the other hand, based on the results of the correlation test in the low transformational leadership category, The relationship between cognitive demand and work engagement is significant,  $r_s = 0.207$ ,  $p < 0.05$ . This means that when participants are in the group with low transformational leadership, the higher the cognitive demand, the higher the work engagement. Thus,  $H_0$  in hypothesis 1b is rejected because transformational leadership is proven to act as a moderator between cognitive demand and work engagement.

**Figure 2**

*The Role of Transformational Leadership as a Moderator between Cognitive Demand and Work Engagement*



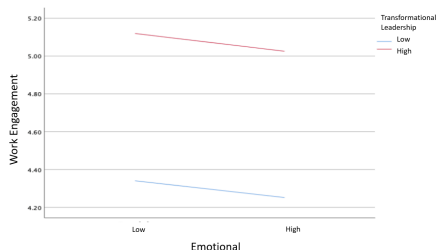
Based on the data obtained, a correlation test was conducted between the variables emotional demand and work engagement. Based on the results of the normality test, it is known that the variables do not follow a normal distribution. Therefore, the correlation test technique used is Spearman Correlation (due to non-normal data), and the result is  $r_s = 0.158$ ,  $p > 0.05$ . Thus, there is no significant relationship between emotional demand and work engagement.

Based on the results of the correlation test, it was found that in the category of high transformational leadership, The correlation between emotional demand and work engagement is  $r_s = 0.019$ ,  $p > 0.05$ . Thus, emotional demand and work engagement have non-significant results in the group of participants with high transformational leadership.

Furthermore, based on the results of the correlation test in the low transformational leadership category, the result is  $r_s = -0.082$ ,  $p > 0.05$ . Therefore, emotional demand and work engagement have non-significant results in the group of participants with low transformational leadership. This means that when participants are in the group with low transformational leadership, higher emotional demand does not necessarily lead to higher work engagement. Thus,  $H_0$  in hypothesis 2b is cannot be rejected because transformational leadership is proven not to act as a moderator between emotional demand and work engagement.

**Figure 3**

*The Role of Transformational Leadership as a Moderator between Emotional Demand and Work Engagement*



#### 4. CONCLUSIONS AND RECOMMENDATIONS

This study aims to examine the role of cognitive demand (challenge demand) and emotional demand (hindrance demand) on work engagement with transformational leadership as a moderator through the JD-R model approach. This aligns with research conducted by Breevaart and Bakker in 2018. Breevaart and Bakker (2018) integrated the framework of challenge stressors, hindrance stressors, and leadership to understand the relationship between daily transformational leadership and work engagement.

The results of this study indicate that cognitive demand has a significant relationship with work engagement. These findings are consistent with the results of the research conducted by Breevaart and Bakker in (2018). Breevaart and Bakker found that employees become more engaged in their work when faced with high cognitive demand (challenge demand). This means that employees are more likely to have high work engagement when they are confronted with high cognitive demand (challenge demand). This is because cognitive demand serves as a job requirement that positively affects the learning and competency development process and provides a boosting effect on work engagement.

Furthermore, this study also investigates the role of transformational leadership in moderating the interaction between cognitive demand and work engagement. The analysis in this study shows that transformational leadership behavior can moderate the relationship between cognitive demand and work engagement. This supports previous research conducted by Breevaart and Bakker, although this study reveals different interactions based on the high or low level of transformational leadership. The results of this study show that when employees perceive their leaders as having low transformational leadership behavior, high cognitive demand leads to higher work engagement. In contrast, when employees perceive their leaders as having high transformational leadership, high cognitive demand results in high work engagement. Conversely, when transformational leadership is low, high cognitive demand does not necessarily affect the level of work engagement.

The differences between these findings may be attributed to variations in the average cognitive demand values in this study compared to the study by Breevaart and Bakker. This suggests that the participants in this study had lower cognitive demand compared to the participants in Breevaart and Bakker's study. This difference is assumed to be due to the different job types of the participants, which included employees and teachers.

Next, this study also examines the role of emotional demand (hindrance demand) in relation to work engagement. The analysis in this study shows that there is no significant relationship between emotional demand and work engagement. This means that when employees in service industries face high emotional demand, it does not significantly affect their work engagement. These results are supported by research conducted by Xanthopoulou et al. (2013), which found that emotional demand is not significantly related to work engagement.

Regarding this, the researcher also looked at the role of transformational leadership in moderating the interaction between emotional demand and work engagement. The analysis indicates that transformational leadership does not moderate the interaction between emotional demand. In other words, transformational leadership does not serve as a buffer against the negative impact of emotional demand on work engagement.



Some assumptions that can explain these results include the possibility of other resources coming into play when employees face emotional demand. One potential resource that could explain these results is personal resources, such as self-efficacy and social support. This is supported by research by Xanthopoulou et al. (2013), which explains that self-efficacy can buffer the relationship between emotional demand and work engagement. In other words, when employees face high emotional demand, self-efficacy plays a fundamental role in maintaining their work engagement levels. Additionally, social support allows employees to provide positive energy and support when facing negative demands in the workplace, stemming from the interaction of emotional demand.

Furthermore, the hypothesis testing results in this study indicate that transformational leadership can only moderate the relationship between cognitive demand and work engagement but not the relationship between emotional demand and work engagement. One possible explanation for this is that cognitive demand is more likely to involve interactions between employees and their leaders. This is because cognitive demand consists of job tasks that require direct guidance from leaders due to the need for knowledge and accuracy in execution. In contrast, emotional demand likely results from social interactions experienced by employees, and its resolution often involves the employee's immediate work environment, such as coworkers.

Based on the data analysis in this study, it can be concluded that cognitive demand (challenge demand) has been proven to play a role in work engagement with transformational leadership behavior moderating the relationship. This means that when employees have leaders with high transformational leadership, high cognitive demand can increase work engagement. Conversely, when employees have leaders with low transformational leadership, high cognitive demand can still increase work engagement.

Furthermore, emotional demand (hindrance demand) has not been shown to play a role in work engagement with transformational leadership behavior as a moderator. This means that when service employees are faced with emotional demand, it does not affect work engagement. Transformational leadership has also not been proven to moderate the interaction between emotional demand and work engagement.

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