Does Psychological Capital Mediate the Relationship Between Transformational Leadership and Adaptive Performance of Civil Servant?

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Abstract. The Fourth Industrial Revolution (4.0) and the advent of the Society 5.0 era, have ushered us into a VUCA (volatility, uncertainty, complexity, and ambiguity) environment. The adaptability of employees has become paramount, necessitating organizations to focus on managing and enhancing adaptive performance alongside routine task completion. Consequently, employee adaptive performance has emerged as a critical aspect of human resource management in both private and public sectors. This study aims to explore the relationship between transformational leadership, psychological capital, and adaptive performance, drawing on the Conservation of Resources Theory and Self-Determination Theory. Additionally, the research seeks to address whether psychological capital mediates the connection between transformational leadership and adaptive performance. Utilizing questionnaire data collected from 317 civil servants at the Ministry of Communication and Informatics of the Republic of Indonesia, the results reveal that 1) transformational leadership does not significantly impact adaptive performance, 2) psychological capital significantly and positively influences adaptive performance, 3) transformational leadership significantly and positively affects psychological capital, and 4) psychological capital fully mediates the relationship between transformational leadership and adaptive performance. These findings contribute to the development of a theoretical framework for fostering adaptive performance in public sector organizations and offer a fresh perspective in human resource management.

Keywords. Adaptive performance, transformational leadership, psychological capital

1. Introduction

In today's society, both public sector organizations and private sector companies are required to possess the ability to adapt quickly in order to effectively respond to the constant changes that occur. According to Alasingachar (2019), this is particularly important in the era of society 5.0 and the current industrial revolution 4.0, where we find ourselves in a VUCA (volatility, uncertainty, complexity & ambiguity) environment. While private companies are primarily focused on generating profits, public sector organizations are oriented towards providing exceptional services that can meet the ever-evolving needs of society and adapt to the changing times. As a result, public sector organizations in Indonesia have been undergoing
various changes in recent years through public administration reform, as highlighted by (Darusman & Wijaya, 2020). In their study on dynamic governance, Neo & Chen (2007) emphasized the significance of not only having agility in the change process (agile process), but also the presence of capable individuals who can shape the dynamic capabilities of public organizations. This is crucial in formulating adaptive policies that ultimately contribute to improved organizational governance performance.

In accordance with this, Charbonnier-Voirin & Roussel (2012) also discovered that when the environment becomes more intricate, unstable, and unpredictable, it is crucial for employees to possess adaptive performance. In recent years, researchers have developed an interest in exploring the concept of adaptive performance as a distinct dimension of job performance (separate from task performance and contextual performance). This is because it is seen as a means to better comprehend the dynamic nature of an employee's job performance in a rapidly evolving environment (Ilgen & Pulakos, 1999; Pulakos et al., 2000). According to Hesketh & Neal (1999) and Charbonnier-Voirin & Roussel (2012), adaptive performance refers to an employee's ability to adjust to a swiftly changing work situation. This concept pertains to behaviors that focus on an employee's job performance following changes. Park & Park (2019) revealed that employee adaptive performance should be a significant topic in human resource management across all organizations. This is because the ability of employees to adapt has become so vital that organizations must effectively manage and enhance employee adaptive performance alongside their performance in completing daily tasks.

According to the Conservation of Resources Theory (Hobfoll, 1989), humans are primarily motivated to build, protect, and nurture their resources in order to safeguard themselves and their social connections. These resources encompass objects, circumstances, and other things that hold value for individuals (Hobfoll, 1989). Previous studies have indicated that psychological capital serves as the key resource for individuals to exhibit behavior that supports change (Hobfoll, 2002; Shin et al., 2012). Further research has demonstrated that employees with high psychological capital can effectively tap into their potential and find solutions to navigate uncertainties, crises, pressures, and challenges arising from a dynamic environment. This, in turn, enhances their adaptive performance (Luo et al., 2021, 2022; Rabenu & Tziner, 2016).

In addition to having psychological capital as an individual resource, individuals also require social support, such as leaders who possess transformational leadership qualities (Herlina et al., 2021). According to Ryan & Deci (2017), Self-Determination Theory is a comprehensive theory that originated from studies on intrinsic and extrinsic motivation, and later expanded to include research on various aspects of work organizations, including performance and well-being. This theory highlights the importance of social environments, such as supportive workplaces, in fulfilling basic psychological needs, promoting autonomous motivation, enhancing psychological and physical health, and improving overall performance (Ryan & Deci, 2000). Ryan & Deci (2017) further discovered that transformational leadership plays a crucial role in meeting employees' basic psychological needs and fostering autonomous motivation. Transformational leadership involves charismatic individuals who inspire, encourage, stimulate, and empower their followers (Avolio & Bass, 1995). Additionally, Charbonnier-Voirin et al. (2010) conducted a groundbreaking study that expanded the criteria associated with transformational leadership to include adaptive performance. Their research demonstrated a significant positive impact of transformational leadership on adaptive performance.
To investigate the impact of transformational leadership and adaptive performance, as well as the influence of psychological capital on adaptive performance, this study will combine Conservation of Resources Theory and Self-Determination Theory. Additionally, the study will examine the relationship between transformational leadership and psychological capital, while also exploring the mediating role of psychological capital. The Ministry of Communication and Information of the Republic of Indonesia has been selected as the research locus due to its relevance to the study's discussion. Initial observations indicate that the adaptive performance of civil servants in this organization is relatively low, which is further supported by the "BerAkhlak" report on work culture implementation reported by the Ministry of Administrative Reform and Bureaucratic Reform. Enhancing adaptive performance is currently a pressing issue for this organization, and it is hoped that the findings of this study will offer valuable insights on adaptive performance, not only for this particular organization but also for public sector organizations in general.

2. Literature review and hypothesis development
2.1 Adaptive Performance

The idea of adaptive performance in this research originated from the expansion of the job performance concept that had been extensively studied before (Borman et al., 2003; Motowidlo, 2003). According to Charbonnier-Voirin & Roussel (2012), as the environment becomes more complex, turbulent, and unstable, individuals need to possess adaptability not only in terms of setting priorities and handling emergencies, but also in facing new problems and learning to adapt to ongoing changes. These changes in the work environment have rendered the previous studies on job performance incomplete. Therefore, Koopmans et al. (2011) and Motowidlo (2003) introduced adaptive performance as an additional dimension in job performance.

Hesketh & Neal (1999) defined adaptive performance as the ability of employees to adjust to rapidly changing work situations. Allworth & Hesketh (1999) further established that adaptive performance, contextual performance, and task performance are distinct and separate concepts. This led to the recognition of adaptive performance as a unique construct. Pulakos et al. (2000) described adaptive performance as the demonstration of employees adjusting their behaviors to meet the demands of work situations and new events. On the other hand, Charbonnier-Voirin & Roussel (2012) and Park & Park (2019) defined adaptive performance as flexible work behavior that enables employees to excel in problem-solving, handle uncertainty and stress, exhibit control during crises, embrace new learning, and adapt to people, culture, and the environment. According to Pulakos et al. (2000), there are eight dimensions of adaptive performance. However, subsequent research by Charbonnier-Voirin & Roussel (2012) divided adaptive performance into four dimensions. Recent studies by Luo et al. (2021) and Luo et al. (2022) have modified the measurement tool for adaptive performance, incorporating four dimensions: stress and crisis management, creative problem-solving, interpersonal relationships and multicultural adaptability, and new knowledge and technology learning ability.

Park & Park (2019) successfully identified four major types of antecedents of adaptive performance by tracing previous research up to 2019. The first type is individual characteristics and big-five personality (openness to experience, emotional stability, conscientiousness, extraversion, and neuroticism) is one of the most studied variables by previous researchers as antecedents of adaptive performance. Individual motivational factors such as self-efficacy, self-regulation, employee engagement have been studied in relation to adaptive performance.
However, among these motivational factors, self-efficacy is the most studied in relation to adaptive performance. The second type of antecedent is job characteristics. Further, Park & Park (2019) mentioned antecedents for this dimension such as decision-making autonomy, discretion, job uncertainty, social ties, task interdependence and role change. Group characteristics antecedents include support from coworkers and supervisors, a team learning climate, and transformational leadership. While antecedents related to organization characteristics include clear vision, a climate for innovation, organizational support, and learning organization.

2.2 Psychological Capital

Psychological capital, as defined by Luthans et al. (2007), refers to an individual’s psychological state that encompasses various characteristics. These include having a high level of self-confidence and determination to overcome challenging tasks (self-efficacy), being motivated and optimistic in daily activities and future preparations (optimism), having dreams and the ability to find ways to achieve them (hope), and possessing strong mental and physical resilience when faced with problems (resilience). It is believed that psychological capital plays a crucial role in human motivation, cognitive processing, striving for success, and overall performance in the workplace (Peterson et al., 2011).

2.3 Transformational Leadership

Burns (in Stewart, 2006) discovered that transformational leadership involves leaders and followers working together to elevate each other’s morale and motivation to a higher level. In this type of leadership, leaders establish a connection with their followers, who develop a sense of shared identity based on common ideals and objectives. On the other hand, Bass et al. (1996) asserts that transformational leaders motivate their followers to surpass work targets by emphasizing the significance of goals and prioritizing the organization’s interests over personal ones. The emergence of transformational leadership is influenced by factors such as the external and internal environment, the leader’s personality, and their values. (Bass & Avolio, 2000) further elaborate that transformational leaders possess specific characteristics that inspire their followers to go beyond self-interest and fully commit to achieving organizational goals, resulting in exceptional performance that exceeds established standards. Lastly, Bass & Riggio (2006) describe transformational leadership as an advancement from transactional leadership, focusing on driving change and inspiring followers to embrace a shared vision and goals for the unit or organization. They challenge their followers to solve problems creatively, develop their leadership skills through coaching and mentoring, and provide both support and opportunities for growth.

2.4 Hypothesis Development

2.4.1 Transformational Leadership and Adaptive Performance

Previous studies, such as the ones conducted by Amankwaa et al. (2019) and Wang et al.2017), have confirmed the positive impact of transformational leadership on job performance. Leaders who adopt a transformational leadership style have the ability to inspire their followers to excel in their work and demonstrate a strong commitment to their job responsibilities. This ultimately leads to superior job performance among these employees (Wang et al., 2017). Additionally, Charbonnier-Voirin et al. (2010) have provided evidence that transformational leadership also has a significant positive effect on adaptive performance. Their research revealed that when transformational leadership is implemented at the team or
work group level, it encourages employees to think creatively, adapt to changes, go beyond their targets, and put in extra effort when dealing with complex situations. However, a recent study by Curado & Santos (2022) has presented contradictory findings to those of Charbonnier-Voirin et al. (2010). The results of this study do not support the notion that transformational leadership has a significant impact on an employee's adaptive performance. Despite this discrepancy, considering the existing body of literature that consistently demonstrates the positive influence of transformational leadership on job performance, it is reasonable to hypothesize that transformational leadership also has a positive effect on adaptive performance.

H1. Transformational leadership has a significant and positive effect on adaptive performance.

2.4.2 Psychological Capital and Adaptive Performance

Psychological capital is often described as a source of motivation and energy boost (WU et al., 2013). This energy boost enables individuals with high psychological capital to utilize their skills and resources to adapt to their work environment (Safavi & Bouzari, 2019). Additionally, Rabenu & Tziner (2016) discovered in their research that employees with high psychological capital can maximize their potential and find solutions to overcome challenges and uncertainties in a dynamic environment, ultimately enhancing their performance. Similarly, Chaurasia & Shukla (2014) found that employees with high psychological capital and positive relationships with their leaders experience increased engagement and performance. Furthermore, Luo et al. (2021) conducted a study that confirmed the direct correlation between psychological capital and adaptive performance. They also emphasized that psychological capital is significantly related to adaptive performance. This is because employees with high psychological capital tend to be more engaged in their work. Therefore, organizations that prioritize the development of psychological capital can better equip their employees to handle emergencies and stress. Even in difficult situations, these individuals can effectively solve problems, leading to improved adaptive performance. The higher the level of psychological capital an employee possesses, the more positive their emotions, which in turn enhances their energy and focus at work, ultimately improving their adaptive performance. Building upon the research of Luo et al. (2021), a subsequent study by Luo et al. (2022) further supported the positive influence of psychological capital on adaptive performance. Thus, this study hypothesizes that psychological capital has a positive impact on adaptive performance.

H2. Psychological capital has a significant and positive effect on adaptive performance.

2.4.3 Transformational Leadership and Psychological Capital

Numerous studies conducted in different countries and contexts have explored the relationship between transformational leadership and psychological capital. The outcomes consistently demonstrate that transformational leadership has a significant positive impact on the psychological capital of employees or individuals (Bak et al., 2022; Gooty et al., 2009; Rego et al., 2012). These findings highlight the importance of leaders with transformational leadership qualities in motivating employees to enhance their psychological capital (Breevaart et al., 2014; Ghadi et al., 2013; Kovjanic et al., 2013; Vincent-Höper et al., 2012).

H3. Transformational leadership has a significant and positive effect on psychological capital.
The mediating effect of Psychological Capital

Gooty et al. (2009) successfully demonstrated that psychological capital plays a crucial role in connecting transformational leadership and work behavior, specifically organizational citizenship behavior. On the other hand, Nejjari & Aamoum (2020) conducted previous research and confirmed a direct impact of organizational citizenship behavior on adaptive performance. Additionally, Bak et al. (2022) found that psychological capital acts as a mediator between transformational leadership and innovative work behavior. Furthermore, Javed et al. (2017) discovered that innovation work behavior positively influences adaptive performance. Considering these interconnected findings, researchers hypothesize that psychological capital also mediates the relationship between transformational leadership and adaptive performance.

H4. Psychological capital serves as a mediator between transformational leadership and adaptive performance.

Based on this hypothesis, the researcher develops a research model, which can be visualized in Figure 1.

3. Methodology
3.1 Research Instrument

This study adopts the positivism paradigm and utilizes a quantitative research approach. The data collection method involves conducting a survey using a questionnaire as the research instrument. The questionnaire consists of three sections. The first section serves as a screening tool to filter out respondents who do not meet the predetermined criteria. The second section gathers demographic information about the respondents, while the last section assesses 38 items related to adaptive performance, transformational leadership, and psychological capital. All items are rated on a 6-level Likert scale, ranging from strongly disagree to strongly agree. The use of this scale aims to prevent respondents from selecting neutral answers. Prior to the official and widespread distribution of the questionnaire, a pre-test stage was conducted. According to (Leland, 1994), a minimum sample size of 30 is required to meet the assumption of normal distribution, ensuring the data's validity and reliability.

The questionnaire that has been finalized consists of 19 items for measuring the adaptive performance variable. These items are based on the research of Luo et al. (2021) and Luo et al. (2022), with some modifications from Pulakos et al. (2000). The adaptive
performance variable in this study is divided into four dimensions: stress and crisis management (5 items), creative problem-solving (4 items), interpersonal relationships and multicultural adaptability (4 items), and new knowledge and technology learning ability (6 items). These dimensions are considered to be compatible with the work culture and the target respondents of this study.

For the psychological capital variable, the researchers used the PCQ-12 measuring scale, which is based on the research of Avey et al. (2011). The PCQ-12 was chosen because it captures the multidimensional nature of psychological capital. Some of the items in the PCQ-12 are taken from the 24-item PCQ measuring scale (Luthans et al., 2007). Previous research has shown that both of these measurement scales for psychological capital are reliable and valid. Therefore, the PCQ-12 was preferred in this study for its time efficiency and convenience for respondents.

As for the transformational leadership variable, the researchers will be using the Global Transformational Leadership (GTL) measuring scale introduced by Carless et al. (2000). This choice was made to ensure efficiency and convenience for respondents, as the number of items in this measuring scale is shorter. Despite being shorter, all the constructs of transformational leadership, such as idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, are represented in this measurement scale.

3.2 Data Collection

The civil servants working at the head office of the Ministry of Communication and Informatics make up the population for this study. Specifically, the study focuses on civil servants who have been in service for at least three years. To determine the sample size, the researchers used the Slovin formula, resulting in 311 samples. These samples were crucial for processing the data in this study.

In order to ensure representation from each unit within the Ministry of Communication and Informatics, researchers employed quota sampling, which is a non-probability sampling technique. This method was chosen because it aligns with the characteristics of the ministry, which consists of seven different work units but shares the same employee characteristics. By using quota sampling, the researchers aimed to obtain a diverse representation of civil servants from each unit, thus reflecting the overall population accurately. To collect data from the target respondents, researchers distributed online questionnaires through Google Form. Within a month, they successfully gathered 327 questionnaire feedback. After the data cleaning process, 317 questionnaire data were deemed eligible for further analysis.

Table 1 presents the demographic profile of the respondents. It is interesting to note that the gender composition is quite balanced, with 53% female respondents and 47% male respondents. In terms of age, civil servants aged 36-40 years make up the majority with 114 respondents, followed by those aged 31-35 years with 82 respondents. When considering educational background, the highest number of respondents are Masters (S2) graduates, accounting for 46.06%. Looking at the work units, the Balitbang SDM unit has the highest representation (27.44%) among those below Echelon I. This indicates that the respondents in this study are representative of each work unit in the Ministry of Communication and Informatics. Furthermore, the table reveals that respondents with a tenure of 11-15 years constitute the largest group at 38.17%, while those with a tenure of 20-25 years have the smallest representation at 2.21%.
### Table 1. Sample demographic information (N=317)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency(N)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>&lt; 25 years</td>
<td>3</td>
<td>0.95%</td>
</tr>
<tr>
<td></td>
<td>&gt; 45 years</td>
<td>34</td>
<td>10.73%</td>
</tr>
<tr>
<td></td>
<td>25-30 years</td>
<td>42</td>
<td>13.25%</td>
</tr>
<tr>
<td></td>
<td>31-35 years</td>
<td>82</td>
<td>25.87%</td>
</tr>
<tr>
<td></td>
<td>36-40 years</td>
<td>114</td>
<td>35.96%</td>
</tr>
<tr>
<td></td>
<td>41-45 years</td>
<td>42</td>
<td>13.25%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>317</td>
<td>100%</td>
</tr>
<tr>
<td>Gender</td>
<td>Man</td>
<td>150</td>
<td>47.32%</td>
</tr>
<tr>
<td></td>
<td>Woman</td>
<td>167</td>
<td>52.68%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>317</td>
<td>100%</td>
</tr>
<tr>
<td>Education level</td>
<td>D-1/ D-2/ D-3</td>
<td>20</td>
<td>6.31%</td>
</tr>
<tr>
<td></td>
<td>Bachelor (S-1/ D-4)</td>
<td>136</td>
<td>42.90%</td>
</tr>
<tr>
<td></td>
<td>Master (S-2)</td>
<td>146</td>
<td>46.06%</td>
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<tr>
<td></td>
<td>Doctor (S-3)</td>
<td>4</td>
<td>1.26%</td>
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<tr>
<td></td>
<td>High school/equivalent</td>
<td>11</td>
<td>3.47%</td>
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<tr>
<td></td>
<td>Total</td>
<td>317</td>
<td>100%</td>
</tr>
<tr>
<td>Position</td>
<td>JFT</td>
<td>148</td>
<td>46.69%</td>
</tr>
<tr>
<td></td>
<td>JFU</td>
<td>151</td>
<td>47.63%</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>18</td>
<td>5.68%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>317</td>
<td>100.00%</td>
</tr>
<tr>
<td>Work unit</td>
<td>Balitbang SDM</td>
<td>87</td>
<td>27.44%</td>
</tr>
<tr>
<td></td>
<td>Ditjen Aptika</td>
<td>45</td>
<td>14.20%</td>
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<tr>
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<td>Ditjen IKP</td>
<td>33</td>
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<td>Ditjen PPI</td>
<td>29</td>
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<td></td>
<td>Ditjen SDPPI</td>
<td>79</td>
<td>24.92%</td>
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<td>15</td>
<td>4.73%</td>
</tr>
<tr>
<td></td>
<td>Sekretariat Jenderal</td>
<td>29</td>
<td>9.15%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>317</td>
<td>100%</td>
</tr>
</tbody>
</table>

### 4. Result of analysis

4.1 Analysis of reliability and validity

The research data in this study is processed using SmartPLS Ver. 4. The constructs of adaptive performance and psychological capital are measured using reflective indicators, while the transformational leadership variable is measured using formative indicators. The validity and reliability of the model are assessed through the analysis of the reflective measurement model for adaptive performance and psychological capital constructs. This validity test includes convergent validity and discriminant validity. To assess convergent validity, the loading factor value for each construct indicator and the Average Variance Extracted (AVE) value for each latent variable are considered.
To ensure convergent validity, the researchers refer to Chin (1998), who suggests a loading factor value of >0.6. Based on the test results, two items (AP8 and PC8) were removed as they had loading factors <0.6. However, the AVE value for both reflective variables met the requirements for convergent validity, with values greater than 0.5 (Table 2). According to Hair (2009), the minimum value for composite reliability (CR) is 0.70. For exploratory studies, a CR value ranging from 0.60 to 0.70 is still considered acceptable (Hair, 2009). In this study, the acceptable CR value is set at least 0.70 (CR>0.7). Table 2 demonstrates that all variables in the research model are reliable, as they have a composite reliability (CR) value greater than 0.7 and a Cronbach's alpha (CA) value greater than 0.7.

To assess discriminant validity, researchers often examine the Fornell-Lacker Criterion and HTMT (Heterotrait Monotrait Ratio) values. According to (Hair et al., 2019), the HTMT value is a more reliable indicator than the Fornell and Lacker criterion methods for detecting discriminant validity. Based on the evaluation results, there are no concerns regarding discriminant validity as each measured variable or construct is proven to represent distinct concepts, with an HTMT value of 0.854 < 0.9 (which is considered valid).

When examining the measurement model for constructs with formative indicators, the testing process differs from the reflective measurement model. By utilizing the bootstrapping method in the SmartPLS version 4.0 software, we can obtain the outer weight value. Upon analyzing the results, it becomes evident that the TL1, TL2, TL4, TL6, and TL7 indicator items are not statistically significant, as their p-values exceed 0.05. To determine their significance, we assess the loading factor values of these indicators. Interestingly, all five indicators have loading factor values ≥ 0.6, indicating that they should be retained in the model. However, when considering the outer VIF (Variance Inflation Factor) test for the transformational leadership items, TL4 fails to meet the requirements due to its VIF value exceeding 5 (VIF requirement < 5). Consequently, TL4 must be eliminated from the model. Subsequently, the research model is utilized for further analysis in SmartPLS version 4.0, as depicted in Figure 2.
4.2 Hypothesis Testing

Hypothesis Testing is a method used to evaluate the significance and importance of the relationship within a structural model and to gain an understanding of the impact between variables. The bootstrapping process involves sampling and resampling p times (typically subsample = 5000) to generate standard errors and parameter estimates. These standard errors are then utilized to calculate t-values for the path coefficient or confidence level (Hair et al., 2019). If the t-statistic parameter exceeds 1.96 (at a 95% confidence level) or the alpha (p-values) is less than 0.05, it can be concluded that there is a significant effect (Hair et al., 2019).

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Hypothesis Statement</th>
<th>Path Coefficient</th>
<th>t-statistic</th>
<th>p-value</th>
<th>95% Path Coefficient Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychological Capital → Adaptive Performance</td>
<td>0.784</td>
<td>23.273</td>
<td>0.000</td>
<td>0.714 - 0.847</td>
</tr>
<tr>
<td>H1</td>
<td>Transformational Leadership → Adaptive Performance</td>
<td>0.036</td>
<td>0.781</td>
<td>0.435</td>
<td>-0.054 - 0.130</td>
</tr>
</tbody>
</table>
Table 3 presents the findings from the hypothesis testing. It is established that the impact of transformational leadership on adaptive performance has a path coefficient of 0.036 (positive coefficient), a t-statistic of 0.78 (t-statistic < 1.96), and a p-value of 0.435 (p-value > 0.05). Consequently, h1 is rejected, and h0 is accepted. Therefore, it can be inferred that transformational leadership does not have a significant effect on adaptive performance. On the other hand, the influence of psychological capital on adaptive performance has a path coefficient of 0.784 (positive coefficient), a t-statistic of 23.27 (t-statistic > 1.96), and a p-value of 0.000 (p-value < 0.05). As a result, the hypothesis h2 is accepted, leading to the conclusion that psychological capital has a positive and significant impact on adaptive performance. Regarding the effect of transformational leadership on psychological capital, it exhibits a positive path coefficient of 0.498, a t-statistic of 9.809 (t-statistic > 1.96), and a p-value of 0.000 (p-value < 0.05). Consequently, h3 is accepted, indicating that transformational leadership has a positive and significant effect on psychological capital. Furthermore, the effect of transformational leadership on adaptive performance through psychological capital mediation demonstrates a positive path coefficient of 0.391, with a t-statistic of 8.640 (t-statistic > 1.96) and a p-value of 0.000 (p-value < 0.05). Therefore, the hypothesis h4 is accepted, leading to the conclusion that transformational leadership has a positive and significant effect on adaptive performance.

Table 4 presents the F Square values for direct effects. It is evident that the psychological capital variable significantly influences adaptive performance, with an F Square value of 1.297. On the other hand, the transformational leadership variable has a moderate impact, leaning towards being strong, on psychological capital, with an F Square value of 0.33. However, when it comes to adaptive performance, transformational leadership has a minimal influence, with an F Square value of 0.003.

In the analysis, it was found that the psychological capital variable plays a significant role in mediating the relationship between transformational leadership and adaptive performance. The effect size upsilon υ of 0.15 indicates a medium to high influence. Furthermore, the researchers assessed the goodness and fit of the proposed model using the PLS predict procedure in SmartPLS version 4.0. The results indicate that the model has moderate predictive power. To evaluate the model fit, the Standardized Root Mean Square Residual (SRMR) value was considered. According to Yamin (2022), an SRMR value below 0.08
indicates a good fit. In this study, the SRMR value was calculated as 0.061, meeting the fit criteria. This suggests that the empirical data effectively explains the relationship between the variables in the model. The Goodness of Fit Index (GoF Index) provides an overall evaluation of the model, considering both the measurement and structural models. The calculated GoF model value is 0.4844, indicating a high level of goodness of fit.

5. Discussion, Implications, and Conclusions

The importance of an employee’s performance lies in their ability to adapt to dynamic, uncertain, and complex internal and external environments while exhibiting flexible work behavior. This is especially crucial for both private sector companies and public sector organizations, such as the Ministry of Communication and Information in Indonesia. The aim of this research is to investigate the factors that can impact the adaptive performance of civil servants within this public sector organization.

However, this study did not find any evidence to support the notion that civil servants' perception of Echelon I leaders' transformational leadership style significantly influences their adaptive performance in the Ministry of Communication and Information Technology. On the other hand, the analysis of the data revealed that psychological capital has a significant and positive impact on the adaptive performance of civil servants in this ministry. Additionally, this study also confirmed that psychological capital fully mediates the relationship between transformational leadership and adaptive performance.

5.1 Theoretical Contributions

The findings of this research do not support the idea that transformational leadership directly impacts the adaptive performance of civil servants in the Ministry of Communication and Information Technology. This means that even though civil servants perceive transformational leadership behavior from Echelon I leaders, it does not lead to a significant increase in their adaptive performance. However, it is important to note that there is still a positive relationship between transformational leadership and adaptive performance, despite the lack of a significant effect.

This study's results contradict the previous research conducted by Charbonnier-Voirin et al. (2010). The findings of this study demonstrate that leaders who exhibit a transformational leadership style provide a clear vision, consider the individual needs of their followers, and encourage them to think critically, innovatively, and creatively. These actions serve as a foundation for adaptive performance, as they enable followers to maintain a positive and optimistic mindset in the face of a changing and challenging work environment.

The disparity between this study's results and the research conducted by Charbonnier-Voirin et al. (2010) may be attributed to various factors, including differences in research settings and work contexts. This study focuses on a non-profit public sector organization, specifically civil servants as respondents. On the other hand, Charbonnier-Voirin et al. (2010) conducted their research in a private sector airline company, where profit-making is the primary orientation. Additionally, in this study, the assessment of transformational leadership is based on the perception of civil servants towards Echelon I leaders in their respective work units. However, it is worth noting that in the Ministry of Communication and Information, staff-level activities tend to involve more interaction and collaboration with Echelon II leaders and leaders at lower levels.

In contrast to the research conducted by Charbonnier-Voirin et al. (2010), the results of this study are contradictory. However, the findings of the current study align with the
research conducted by Curado & Santos (2022). According to Curado & Santos (2022), transformational leadership does not have a significant impact on the direct relationship with adaptive performance. Instead, employees in Portugal who work in health and nursing tend to prioritize factors such as job satisfaction over transformational leadership when considering their adaptive performance.

The findings of this study suggest that the perception of transformational leadership practices among Echelon I leaders in the civil service does not directly influence adaptive performance. Therefore, there must be other factors at play in promoting increased adaptive performance among civil servants at the Ministry of Communication and Information Technology. One such factor is psychological capital. The study's results demonstrate that psychological capital fully mediates the relationship between transformational leadership and adaptive performance. These findings support the research conducted by Gooty et al. (2009). In this study, adaptive performance is viewed as work behavior, which is consistent with the findings of Bak et al. (2022). Bak et al. (2022) state that the relationship between transformational leadership and innovative work behavior is fully mediated by psychological capital.

This research proves the significant influence of psychological capital on adaptive performance. Researchers observed that civil servants who possess a strong positive psychological state, characterized by self-efficacy, optimism, hope, and resilience, are more likely to exhibit adaptive performance. These findings align with the research conducted by Luo et al. (2021), which affirms that psychological capital positively and significantly influences the adaptive performance of hotel employees in six Chinese provinces. According to Luo et al. (2021), an increase in psychological capital enhances the potential of hotel employees, enabling them to effectively manage stress, problem-solve, acquire knowledge and skills, adapt to diverse contexts and cultures, ultimately leading to improved adaptive performance. Similarly, Luo et al. (2022) also emphasized that employees with high psychological capital experience more positive emotions, enhancing their vitality and focus at work, thereby further enhancing their adaptive performance.

There is another discovery that needs to be shared. This research has contributed to the empirical investigation of the connection between transformational leadership and psychological capital. Consistent with the studies conducted by Agrawal & Halder (2020) and Bak et al. (2022), the findings of this study revealed that in public sector organizations, the way civil servants perceive transformational leadership has a significant impact on their psychological capital. Psychological capital consists of four dimensions: self-efficacy, resilience, optimism, and hope (Luthans et al., 2007). When a transformational leader sets positive expectations for achieving goals, displays high self-confidence, and possesses a mindset focused on change, their followers' self-efficacy will be elevated. Additionally, when transformational leaders exhibit confident behaviors, they can effectively reduce feelings of anxiety and helplessness that arise from uncertainty, failure, difficulty, and stressful situations, thereby fostering resilience in their followers. Moreover, when leaders can convey the positive aspects of their vision and maintain an optimistic attitude, it will enhance the confidence, self-belief, and optimism of their followers. Furthermore, leaders who can clearly articulate their vision and goals are more likely to inspire positive expectations from their followers (hope).

5.2 Managerial Implications

The results of this study indicate that individual traits like psychological capital and group characteristics such as transformational leadership are important factors that contribute
to adaptive performance. It is crucial to enhance the adaptive performance of employees, particularly civil servants, in public sector organizations. This is also applicable to the Ministry of Communication and Informatics. Therefore, the leaders of this organization should develop human resource policies that focus on improving the ability to adapt to rapidly changing work situations. Currently, the Ministry of Communication and Informatics is working on the Human Capital Development Planning (HCDP) for the internal organization, which aims to bridge the competency gap based on the assessment results of all employees.

The perception of Echelon I leaders in implementing transformational leadership can encourage civil servants to enhance their adaptive performance by first focusing on psychological capital. Moreover, psychological capital directly influences the adaptive performance of civil servants. This means that the psychological capital of employees plays a crucial role in improving their adaptive performance within the Ministry of Communication and Information Technology. Therefore, organizations should provide various workshops and training programs to enhance positive psychology and develop high psychological capital among civil servants. Additionally, it is important to improve mental health services within the organization, particularly in terms of socialization and service mechanisms. This will ensure that civil servants are aware of these services and can easily access them, considering the Ministry of Communication and Information Technology's central office is located in different places.

This study highlights the importance of training and developing transformational leadership skills in leaders. It is crucial for organizations to provide leadership training programs that can help shape and enhance transformational leadership behaviors, ultimately benefiting the organization as a whole. However, when selecting leaders, it is advisable to choose individuals who already possess transformational traits, as this can have a positive impact on the psychology of their followers. Therefore, during the open selection process for Echelon I and Echelon II leaders in public sector organizations, it is essential to carefully evaluate the characteristics of prospective leaders.

To ensure the well-being of civil servants, organizations should periodically assess their psychological state by conducting surveys among all employees. This will provide an overview of the current condition of civil servants and enable the Bureau of Personnel and Organization at the Ministry of Communication and Informatics to inform Echelon I leaders in the ministry about the survey results. This communication can foster a stronger relationship between Echelon I leaders and civil servants, promoting a culture of sharing and caring within the organization.

5.3 Limitations and Future Research

This research has some limitations that need to be acknowledged. Firstly, it only examines the relationship between transformational leadership, psychological capital, and adaptive performance. Other factors that could potentially moderate this relationship have not been considered. Secondly, the results of this study may vary if different measurement scales are used. For instance, the PCQ-12 (Avey et al., 2011) was used to measure psychological capital in this study. It is important to note that the measurement scales used were chosen based on the research objectives, work context, and research locus. Lastly, our research focuses on employees' perceptions of transformational leadership demonstrated by Echelon I leaders. However, this perspective has limitations as it may restrict the generalizability of our findings, suggesting that employees must perceive their leaders as transformational.
The researchers in this study discussed several suggestions for future research, despite the limitations. Park & Park (2019) categorized antecedents of adaptive performance into four types: individual, job, group, and organizational characteristics. In this study, psychological capital falls under individual characteristics, while transformational leadership falls under group characteristics. However, research on adaptive performance in Indonesia, particularly in public sector organizations, is still scarce. Therefore, it is recommended for future research to explore other antecedents of adaptive performance. For example, organizational support (Chiaburu et al., 2013) and learning organization (Kanten et al., 2015) can be considered as antecedents of organizational characteristics. Similarly, team climate (Han & Williams, 2008), can be explored as a type of group characteristic, and job resources and job demands (Ghitulescu, 2013) can be examined as job characteristics. Additionally, self-leadership (Hauschildt & Konradt, 2012) can be studied as an individual characteristic. Future research can also investigate potential mediating variables of adaptive performance, such as the role of change readiness as studied by Luo et al. (2022). Furthermore, the mediating role of social capital, as explored by Luo et al. (2021), can also be investigated. It is important for future studies to explore factors that can potentially serve as moderating variables of adaptive performance in order to enhance our understanding of this concept. Moreover, careful consideration should be given to the measurement scale of variables used in future research. Previous studies can serve as a reference, but it is crucial to adapt the measurement scale to the specific work context and research setting. Additionally, future research can benefit from combining quantitative and qualitative approaches (mix method) to gain a more comprehensive understanding of the topic.

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