Teachers' Performance During the COVID-19 Pandemic in Indonesia: Causality and Comparison

Abstract: The greatest impact of the COVID-19 pandemic on Indonesian education was the decline in teacher performance. In light of this information, this study analyzes the role of supervision, salary and benefits, school climate, training and development, and perceived organizational support in moderating the impact of competence on teacher performance during the COVID-19 pandemic. This study also compares the relationships between employed government and private teachers. Data were collected through questionnaires to teachers with a sample of 166 government teachers and 175 private teachers in primary and secondary schools through a Google form and analyzed using moderated Structural Equation Modeling-Partial Least Square (SEM-PLS), multigroup, and multilevel analysis. The results showed that salary and benefits, training, and development did not affect the performance of public school teachers. In contrast, only salary and benefits did not affect teacher performance for private teachers. Moreover, only supervision significantly moderated the effect of competence on the performance of public school teachers. However, supervision, salary, benefits, school climate, training and development, and perceived organizational support did not affect private teachers' performance. The Ministry of Education or the Foundation needs to review and improve the mechanisms of training and development, supervision, and school organizational climate to promote optimal teacher performance during the pandemic.

Keywords: Competence, moderated factor, teacher performance.


Introduction

The Indonesian Minister of Education instructed schools to implement emergency learning using an online system (Setiawan & Isha, 2020). Social distancing regulations are a government effort to control the spread of Coronavirus Disease (COVID-19). The policy moves learning from school to home. This effort is based on the health and safety of students, educators, staff, and the wider community (Rasmitadila et al., 2020; Wahyuningsih, 2021). The facts show that implementing this policy is difficult because it requires parental supervision and assistance when studying online. Both teachers in public and private schools must struggle to adapt quickly to technology, but unfortunately, this policy makes children unable to optimize and hinders the learning process (Brown et al., 2021). Azizatur et al. (2021) showed that teacher performance during the pandemic was not optimal. The decline in teacher performance during the COVID-19 pandemic can be indicated as a condition of teachers who are not ready to operate digital tools for education and control the educational process (Maican & Cocoradă, 2021).

The COVID-19 pandemic forced teachers to be unprepared for changing situations, even though teachers play an important role in the educational process. Competent and qualified teachers will lead to a less-than-optimal learning process (Tehseen & Hadi, 2015). Research (Atmojo & Nugroho, 2020; Rasmitadila et al., 2020) shows low teacher performance indicates that teachers experience difficulties in developing appropriate learning methods or media when working at home; in addition, teachers are less focused on work because, during the pandemic, economic life experienced...
financial problems, especially for private teachers, where many private schools were almost bankrupt due to tuition fees (Hoang, 2020; Muyassaroh & Syaiful, 2022; Nguyen, 2020).

The issue of teacher performance and the factors that influence it during the pandemic, whether in public or private schools, has not received much attention from researchers. Most researchers focus on teacher performance in terms of the effectiveness of online learning (Abrahamsson & Dávila López, 2021; Almonacid-Fierro et al., 2021; Gopal et al., 2021; Natuna et al., 2021). Therefore, it is essential to further elaborate on teachers’ performance and the factors influencing them, both government-employee teachers and private teachers, during this pandemic. Second, the status of these teachers is often discussed in several studies, as in findings such as from Bedi and Garg (2000) and Ali et al. (2020); they looked at the comparison between public and private schools in Indonesia. An apparent finding was that teachers in public schools receive higher salaries than in private schools. Still, the level of education in private schools is consistently much better than in public schools.

Comparative studies of the performance of government and private teachers are the focus of many studies in developing countries. However, previous studies comparing the performance of government and private teachers have mostly examined issues only related to learning outcomes, absenteeism, etc. (Ali et al., 2020; Bedi & Garg, 2000; Hanushek & Ettema, 2017; Lubienisky & Lubienisky, 2006; Peterson & Llaudet, 2006; Symeonidis, 2015). Boset et al. (2017) and Campbell et al. (1993) suggest that future research on teacher performance needs to elaborate on comparative studies in determining teacher performance between government-employee teachers and private teachers. They suggest elaborating on the antecedent of teacher performance, such as declarative knowledge and procedural (knowledge, skills, and motivation), which are influenced by teacher competence, supervision, salary, benefit, school climate, training, and development. The existence of good school support, a conducive school climate, salaries and benefits, and supervision increase teacher commitment and performance in schools (Khan, 2012; Tariq et al., 2012). At the same time, the urgency of the variables of supervision, salary, and benefit, school climate, training, and development as the main determinants of teacher performance have been studied intensively by researchers (Khan et al., 2011; Oussama & Johari, 2016; Rifma et al., 2019; Rasmi et al., 2020; Yousaf et al., 2018).

Therefore, this research aimed to examine the relationships and roles of supervision, salary and benefits, school climate, training, and development in moderating the effects of competence on teacher performance (government and private teachers) during the pandemic and to compare the relationship model between public and private schools to gain new insights into the problem of teacher performance between government and private teachers in Indonesia at the time of the COVID-19 outbreak.

**Literature Review**

**Campbell’s Theory of Performance**

Campbell et al.‘s (1993) performance theory is used to determine the relationship and role of supervision, salaries and benefits, school climate, training, and moderate competence development on teacher performance in this study. The theory explains that the individual performance of employees has three main components: declarative knowledge, procedural knowledge and skills, and motivation. The determinants of these variables are (a) Declarative knowledge; this knowledge is a function of ability, personality, interests, education, training, experience, and interaction of treatment of one’s talents; (b) Procedural knowledge and skills with determinants of ability, personality, interest, education, training, experience, supervision, and interaction of talent care and additional practice; (c) Furthermore, motivation which was also developed by Coleman and Borman (2000) is influenced by personal support, organizational support, salary and benefits, and promotions.

In the context of teacher performance, the performance is the individual performance of a teacher. It can be understood as the ability to plan and efficiently manage teaching and learning activities effectively and efficiently (Boset et al., 2017). Along with the mastery of professional teaching methods and techniques, the ability of teachers to apply them has succeeded in increasing performance (Yoo, 2019). In line with Campbell’s theory of job performance, Ertürk and Aydn (2017) and Jang (2019) show in the context of teacher performance that factors such as competence, communication, awards/rewards, salary, personal rights, organizational factors, pre-service and in-service training, and pressure can be considered as external motivational factors that may affect the improvement of job performance and teaching process from time to time.

**Teacher Competence (CMP) and Teacher Performance (TP)**

Poro et al. (2019) state that competence is a duty and responsibility that incorporates the knowledge, skills, and abilities required by someone in a particular position. According to Danim (2011), competence is a set of skills, knowledge, basic values, and attitudes that a person possesses and applies to work according to performance standards reflected in a professional’s habits of action and thought. The research demonstrated the impact of competence on performance (Mahmood et al., 2018; Mukhtar, 2018; Poro et al., 2019; Zhang et al., 2018).

Teachers who have obtained educational competency certificates face major challenges during the COVID-19 pandemic. In a relatively short time, they must be forced to adapt to technology, even though some of them experience obstacles,
especially older teachers (Adewale et al., 2022; Karimata et al., 2022; Wardoyo et al., 2020). These findings confirm that a person’s competence is closely related to success in their job. Therefore, a higher level of competence will lead to better performance (Kolbáčová, 2015; Noel et al., 2017). According to Poron et al. (2019), competent professional teachers know about learning and human behavior, have mastered the subject matter, and have the right attitude toward themselves, their school, their colleagues, and the subject area in which they work. They also have good pedagogical skills. Based on these explanations, the first research hypothesis is as follows.

H1: Competence has a significant effect on teacher performance

Supervision (SPV)

The principal’s supervision practice is conducted to respond to the needs of teachers and improve competencies that impact the learning process (Thakral, 2015; Zepeida, 2007). According to Mulyadi and Fahriana (2018) and Rifma et al. (2019), supervision is not inspection but continuous and ongoing activities. When the principal has programmed and planned supervision, it significantly impacts teachers’ abilities to manage learning activities. Supervision is conducted online as part of the pandemic (Fendi et al., 2021; Loose & Ryan, 2020; Natami et al., 2021; Sanisah et al., 2021). This implementation encountered many obstacles, such as using the Zoom, Gmeet, Webex, or Microsoft Teams platforms. This can be a major obstacle in implementing holistic and authentic supervision. Meanwhile, Awaliyah et al. (2019) emphasized the importance of academic supervision and classroom teaching as two essential activities to improve teachers' teaching competencies. In addition, feedback from the practice can help teachers improve their performance and guide students’ academic performance, professionalism, and professional development in a better direction (Mburu, 2017; Panigrahi, 2012). Through good and appropriate supervision, teachers can develop their ability to perform tasks and solve problems in terms of effective and efficient learning to improve the quality of the learning process especially during the COVID-19 pandemic. The formulation of the hypotheses is as follows.

H2: Supervision has a significant effect on teacher performance

H3: Supervision significantly moderates the impact of competence on teacher performance

Salary and Benefit (SB)

This mechanism is a positive reinforcement (salary and benefit) that provides additional utility to motivate the employees’ effort (Amah et al., 2013; Ojeyeye, 2017). Salary and benefits will motivate teachers to perform their duties competently and act better. Better salaries and benefits affect job satisfaction; teachers are encouraged to use all their abilities and competencies properly to perform at their best (Mugongo et al., 2015; Njanna et al., 2013; Olobusayo et al., 2014). However, unfortunately, everyone’s income has dropped during the pandemic, including teachers. The school closure policy, of course, affects tuition. For government teachers, this may not have a big impact. However, private teachers have a big impact because their incomes have plummeted, and many have financial problems because many private schools were almost bankrupt (Muyassaroh & Syaiful, 2022; Nguyen, 2020; Thanh, 2020; Tran et al., 2020).

The context of this pandemic naturally forces teachers to think about professionalism and finances. In another context, Hameed et al. (2014) and Rasmi et al. (2020) studied that teachers' financial and nonfinancial compensations may also impact performance and job satisfaction. This is because teachers with high job satisfaction will continue to strive to provide optimal performance through their competencies. At the same time, compensation affects teachers’ morale, thus spurring them to perform better in learning activities (Suryantoro et al., 2018; Zikanga et al., 2021). Therefore, the following hypotheses can be proposed.

H4: Salary and benefits have a significant effect on teacher performance

H5: Salary and benefits significantly moderate the impact of competence on teacher performance

School Climate (SC)

According to DeConinck (2011), and Pretorius and de Villiers (2009), school climate is a form of work climate in schools. Building a school climate refers to the heart and soul of the school. The socio-psychological conditions of the institution can create a relatively enduring personality that affects all members of the school, influencing their attitudes and behavior (Pretorius & de Villiers, 2009). In the context of a pandemic, school climate is a major challenge because it must be done online so that teachers can spread praise and atmosphere. However, the obstacle is that many schools, teachers, and students do not have this platform, which can affect teacher performance during a pandemic (Hidayati, 2022; Mandapat & Farin, 2021; Wiranto et al., 2021). In this context, the principal can strive for the best for his school.

Principals can encourage the creation of an effective school climate by identifying the needs of teachers (Adetyemii, 2006). Of course, the principal’s ability to encourage is greatly influenced by various aspects of his leadership behavior. This statement is supported by Rooney’s (2003) findings that the principal’s ability to be responsive to teachers’ needs and desires is conducive to creating a conducive school climate and achieving high teacher performance. Hence, the following hypotheses can be stated.
H6: School climate has a significant effect on teacher performance
H7: School climate significantly moderates the impact of competence on teacher performance

Training and Development (TND)

Researchers (Essel et al., 2009; Jahangir et al., 2012; Schunk et al., 2012; Sim, 2011) found that training and development programs can change teacher behavior and performance, increase the effectiveness of the educational system, and plan better strategies on skills, knowledge, abilities, and confidence to help students in various ways to identify their weaknesses that need improvement and to create a stimulating and enjoyable learning environment in the classroom. During the ongoing pandemic, it turns out that training and development are mushrooming, and online platforms that are more flexible are becoming widespread. The need for self-development has been well captured by educators, giving them more room to improve their skills and knowledge, which has an impact on improving their performance (Azizatur et al., 2021; Boyko et al., 2021; Henriques et al., 2021; Londoño-Monroy et al., 2021).

Increasing training and development activities during the pandemic can encourage good teacher performance, even when teachers work from home (Azizatur et al., 2021). Good teacher development practices can help prepare teachers, improve their performance, and increase job satisfaction (Williams, 2010). Based on this explanation, the hypotheses can be stated as follows.

H8: Training and Development have a significant effect on teacher performance
H9: Training and Development significantly moderate the impact of competence on teacher performance.

Perceived Organizational Support (POS)

In educational institutions such as schools, organizational support for educators can be provided through (a) funding for employee career development, (b) creating career opportunities, (c) offering teacher career development allowances, and (d) providing time for study leave or attending seminars, scientific conferences, and workshops. Teachers who perceive a high level of organizational support are very satisfied with their careers; those who are more likely to structure their work and fully engage in the workplace are more satisfied (Oubibi et al., 2022). Satisfied teachers will help schools achieve their organizational goals, and students will be taught effectively. Findings from Solís García et al. (2021) show that the support felt by private school teachers is better than teachers in public schools or civil servant teachers. This finding is because support comes from not only school institutions but also parents of students, so the interaction between parents and schools has become a learning ecosystem that can improve teacher performance. Teachers' perceived organizational support is a direct and indirect predictor of organizational happiness so that teachers feel cared for and valued, leading to increased performance (Ordu & Sari, 2022). Based on this explanation, the hypotheses can be stated as follows.

H10: Perceived organizational support has a significant effect on teacher performance
H11: Perceived organizational support significantly moderates the impact of competence on teacher performance

The following illustrates the development of an empirical model for determining the performance of privately-employed and government-employed teachers involving the variables of supervision, salaries and benefits, school climate, training and development as moderators, and competence as antecedents.
Methodology

This research was conducted with a quantitative approach with the locus of primary and secondary schools in Indonesia through a survey method with cross-sectional data collection. Data were collected from active and full-time government and private teachers who have obtained educator competency certificates from primary and secondary schools in around 250 schools during the COVID-19 pandemic, which spread out into five big islands in Indonesia (Sumatra, Java, Kalimantan, Sulawesi, and Papua). Data analysis used Partial Least Square Structural Equation Modeling techniques to measure the independent and dependent variables with or without a moderator, and multigroup and multilevel analysis was used to analyze and measure the comparative statistical result (Kock, 2021). Data on all variables were collected using a questionnaire distributed online via Google Forms.

Sample and Data Collection

The sample size employed in this study used the inverse root square method presented by Kock and Hadaya (2018), with a power level of 80% and an error rate of 5% above 160 respondents. The data collection was carried out for four months, from May to September 2021. To get a sample size of more than 160, we distributed the survey to 250 government employees’ teachers and 250 privately-employed teachers. Of the 250 distributed, the number returned was only 175 among the private teacher respondents (70%) and 166 among the Government Employee Teacher (GET) respondents (68%).

Scale and Instrument

The variables in this study are seven; each was measured using a Likert scale from 1-5, agree and disagree. The teacher performance variable was measured using a scale adapted from Amin and Atta’s research (2013). The scale had a reliability value ($\alpha = .80$), with four main dimensions including (a) teaching skill is measured by seven indicators for example: “I use different methods of teaching”; (b) management skills is measured by five indicators for example: “Apart from teaching I fulfill other responsibilities very nicely”; (c) discipline and regularity measured by six indicators, for example: “When present at school I attain my class on time”; (d) interpersonal relations is measured by seven indicators for example “Apart from teaching I try to solve any problem of the student”.

Measurement of teacher competence was measured using a scale adapted from Panggabean and Himawan (2016), which has five main dimensions; this study had a reliability value ($\alpha = .83$), including (a) Professional knowledge with five indicators, for example: “Teacher shows mastery of the teaching materials”; (b) Professional skill was measured using six indicators, for example: “Teacher often asks open-ended questions”; (c) Personal characteristics were measured using eight indicators, for example: “Teacher demonstrates a good behavior to be a role model”; (d) Ethical Standards and Values were measured using seven indicators, for example: “Teacher encourages me to appreciate my friends”; (e) Professional Development and Lifelong Learning was measured using five sample items: “Teacher encourages me to keep improving myself.”
The supervision variable was measured using a scale adapted from Bouchamma et al. (2008) with a reliability value ($\alpha = .76$) with three main dimensions including (a) Before the inspection (preparation) was measured by three items, for example: "meet the teacher in order to establish the evaluation criteria"; (b) During the inspection (realization) was measured using six items, for example: "verify their teaching preparation"; (c) Integration, measured using five items, for example: "ask for a self-evaluation,"

Salary and benefit variables were measured using a scale from Banta and Al Shaikh (2017), which has a reliability value ($\alpha = .74$) with four main dimensions, namely the terms of remuneration has five items, for example: "Salary increase based on high performance affects the teacher performance"; (b) in terms of allowance has five items, for example: "Allowance for hard-working employees affects the teacher performance"; (c) in terms of promotion has five items, for example: "Promotion availed based on performance appraisal affects the teacher performance"; (d) in terms of Incentives has five items, for example: "Incentives given to employees when they reached the target quotas affects the employees' performances.

For the variable of perceived organizational support, we used a scale developed by Parada (2019) that has a reliability value ($\alpha = .87$) with three main dimensions, including (a) the support factor with four items, for example: "I can get good support from my school"; (b) rule acceptance has four items, for example: "I accept the rules and procedures set by my school"; (c) Attachment factor has four items, for example: "I feel good about being in my school."

For the variable of the school climate, we used a scale developed by La Salle and Meyers (2014) with six dimensions, namely: (a) Teaching and Learning, which has three items, for example: “Teachers at my student’s school have high standards for achievement”; (b) School Safety, has five items, for example: “My student's school sets clear rules for behavior”; (c) Interpersonal Relationships has three items, for example: "I feel comfortable talking to teachers at my student's school"; (d) Institutional Environment, has three items, for example: "My student's school building is well maintained"; (e) Parent Involvement, has three items, for example: "I attend parent/teacher conferences at my student’s school." Martinelli and Raykov (2021) studied this scale with a reliability value ($\alpha = .72$).

Training and Development variables were measured using a scale developed by Shakuna et al. (2016) which has a reliability value ($\alpha = .92$) with three dimensions, including (a) Planning Program with five items, for example: “Training programs to benefit me in developing my ability to prepare the annual plan”; (b) Executing a program with four items, for example: “Training programs to benefit me in how to raise learners’ motivation”; (c) Evaluating program with four items, for example: “Training programs to improve my ability to prepare objective tests.”

**Analysing of Data**

The data in this study began with the pilot testing phase, in which validity was tested with correlation analysis of the corrected total items. The reliability of the questionnaire was tested with an analysis of Cronbach’s alpha value. Then, we proceeded to the inferential statistical analysis using the WARP PLS-SEM moderation, namely: (a) describing a path diagram or model conceptualization; (b) testing the outer model; (c) testing the inner model with a linear resampling technique; (d) testing the significance of the moderating structural model with the t statistic test using the orthogonal method (Kock, 2019); and (e) conducting a comparative test with a multigroup analysis and a multilevel analysis using the anchor factorial approach with the diffusion of variation (Kock, 2020) to find out if there are differences in the model and statistically significant differences in the model between the groups of government employee teachers and private teachers.

**Findings / Results**

**Measurement/Outer Model**

After all the variables were confirmed as having met the criteria of validity and reliability of the pilot test, we continued with field testing by testing the measurement model or outer model to measure validity and reliability. This test was carried out in groups, namely the GET teacher and private teacher groups. This test started with the measurement of convergent validity and composite reliability. It was said to have met the criteria of convergent validity when the Average Variance Extracted (AVE) value was above 0.5. At the same time, the reliability measurement uses the composite reliability (CR) limit value above 0.7. The values of AVE and CR on teacher performance, competence, supervision, perceived organizational support, salaries and benefit, school climate, training, and development in groups of government-employee teachers and private teachers are as follows.
Variables had values below 5.5 (Anderson & Gerbing, 1988). These results also showed that all variables, both from the GET teacher group and private teacher group; there was no general bias between the correlations between the latent variables. This result shows that all variables from the GET and private teachers group met the CR value above 0.7. Then, the discriminant validity test was carried out as follows.

Table 1. Comparison AVE and CR (GET and Private Teachers)

<table>
<thead>
<tr>
<th>Government Employee Teachers</th>
<th>Private Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable (item) AVE AVE* CR CR*</td>
<td>Variable (item) AVE AVE* CR CR*</td>
</tr>
<tr>
<td>TP (15 items) .514 .514 .947 .947</td>
<td>TP (15 items) .518 .518 .948 .948</td>
</tr>
<tr>
<td>CMP (22 items) .348 (.7 items deleted) .507 .898 .908</td>
<td>CMP (22 items) .446 (.2 items deleted) .586 .917 .948</td>
</tr>
<tr>
<td>SPV (15 items) .41 (.3 items deleted) .514 .91 .931</td>
<td>SPV (15 items) .623 (.2 items deleted) .586 .937 .95</td>
</tr>
<tr>
<td>POS (19 items) .585 .585 .964 .964</td>
<td>POS (19 items) .445 (.2 items deleted) .644 .935 .931</td>
</tr>
<tr>
<td>SB (18 items) .302 (.4 items deleted) .576 .88 .901</td>
<td>SB (18 items) .56 (.2 items deleted) .644 .964 .964</td>
</tr>
<tr>
<td>SC (20 items) .356 (.4 items deleted) .575 .866 .924</td>
<td>SC (20 items) .449 (.2 items deleted) .572 .959 .979</td>
</tr>
<tr>
<td>TND (17 items) .603 (.7 items deleted) .603 .952 .954</td>
<td>TND (17 items) .511 (.2 items deleted) .515 .944 .945</td>
</tr>
</tbody>
</table>

Note: AVE* = AVE value after delete item; CR* = AVE value after delete item bold red = not valid

Tests of convergent validity and composite reliability on all variables tested in the two groups resulted in differences in the values of AVE and CR. In the government employee teacher group, four variables did not meet convergent validity: competence, supervision, salary and benefit, and school climate. Meanwhile, there were three invalid variables in the private teacher group: competence, perceived organizational support, and school climate. After eliminating several items on these variables, the AVE value increased and met the criteria for convergent validity. Meanwhile, for the CR test, both the government employee and the private teacher group met the criteria for construct reliability, where all the variables met the CR value above 0.7. Then, the discriminant validity test was carried out as follows.

Table 2. Discriminant Validity GET and Private Teachers

| Correlations among Latent Variable vs. Square Roots of AVEs (Government Employee Teachers) |
|---------------------------------|----------------|-------|-------|-------|-------|
| SPV | SC | SB | POS | TND | CMP | TP |
| SPV | .787 | .564 | .425 | .363 | .321 | .069 |
| SC  | .564 | .738 | .417 | .371 | .329 | .031 |
| SB  | .425 | .417 | .776 | .462 | .423 | .017 |
| POS | .363 | .371 | .462 | .726 | .326 | .025 |
| TND | .321 | .329 | .423 | .326 | .719 | .024 |
| CMP | .069 | .031 | -.17 | .084 | .025 | .589 |
| TP  | .131 | .073 | .09  | .187 | .024 | .122 |

Full Collinearity VIFs Government Employee Teachers

| Correlations among Latent Variable vs. Square Roots of AVEs (Private Teachers) |
|---------------------------------|----------------|-------|-------|-------|-------|
| SPV | SC | SB | POS | TND | CMP | TP |
| SPV | .061 | .043 | -.029 | -.029 | .082 | .034 |
| SC  | .789 | .302 | .371 | .307 | .603 | .038 |
| SB  | .302 | .748 | .38  | .318 | .328 | .024 |
| POS | .371 | .38  | .715 | .55  | .452 | -.098 |
| TND | .307 | .318 | .55  | .766 | .347 | .062 |
| CMP | .038 | .024 | .098 | .062 | .048 | .718 |

Full Collinearity VIFs Private Teachers

According to Table 3, the square root of the AVE diagonally in the teacher group on each variable is greater than the correlation between the latent variables. This result shows that all variables from the GET and private teachers group met the discriminant validity criteria (Fornell & Larcker, 1981). It was also confirmed by the total collinearity value of VIFs for all variables, both from the GET teacher group and private teacher group; there was no general bias between the variables because all variables had values below 5.5 (Anderson & Gerbing, 1988). These results also showed that all
variables met discriminant validity after the standard bias method test. After the measurement model or outer model met the validity and reliability, we tested the inner model or structural model by looking at the model fit and quality indices values using 15 criteria ranging from APC to STDSR. The test results are as follows.

Table 3. Inner Model GET Teacher and Private Teacher Groups

<table>
<thead>
<tr>
<th>Criteria</th>
<th>GET</th>
<th>Remark</th>
<th>Private Teachers</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>.178, p = .002</td>
<td>Fit</td>
<td></td>
<td>.111, p = .028</td>
<td>Fit</td>
</tr>
<tr>
<td>.131, p = .015</td>
<td>Fit</td>
<td></td>
<td>.163, p = .005</td>
<td>Fit</td>
</tr>
<tr>
<td>.080, p = .063</td>
<td>Fit</td>
<td></td>
<td>.114, p = .025</td>
<td>Fit</td>
</tr>
<tr>
<td>2.628</td>
<td>Acceptable</td>
<td></td>
<td>1.588</td>
<td>Acceptable</td>
</tr>
<tr>
<td>2.530</td>
<td>Acceptable</td>
<td></td>
<td>2.004</td>
<td>Acceptable</td>
</tr>
<tr>
<td>.288</td>
<td>Medium</td>
<td></td>
<td>.340</td>
<td>Medium</td>
</tr>
<tr>
<td>.818</td>
<td>Acceptable</td>
<td></td>
<td>.818</td>
<td>Acceptable</td>
</tr>
<tr>
<td>.931</td>
<td>Acceptable</td>
<td></td>
<td>.987</td>
<td>Acceptable</td>
</tr>
<tr>
<td>.818</td>
<td>Acceptable</td>
<td></td>
<td>.909</td>
<td>Acceptable</td>
</tr>
<tr>
<td>.955</td>
<td>Acceptable</td>
<td></td>
<td>.773</td>
<td>Acceptable</td>
</tr>
<tr>
<td>.088</td>
<td>Acceptable</td>
<td></td>
<td>.115</td>
<td>Acceptable</td>
</tr>
<tr>
<td>.070</td>
<td>Acceptable</td>
<td></td>
<td>.090</td>
<td>Acceptable</td>
</tr>
<tr>
<td>50.709, p &lt; .001 (3915 degrees of freedom)</td>
<td>Fit</td>
<td></td>
<td>124.567, p &lt; .001 (5252 degrees of freedom)</td>
<td>Fit</td>
</tr>
<tr>
<td>.980</td>
<td>Acceptable</td>
<td></td>
<td>.914</td>
<td>Acceptable</td>
</tr>
<tr>
<td>.932</td>
<td>Acceptable</td>
<td></td>
<td>.755</td>
<td>Acceptable</td>
</tr>
</tbody>
</table>

Note: APC: Average path coefficient; ARS: Average R-squared; AARS: Average adjusted R-squared; AVIF: Average block VIF; AFVIF: Average full collinearity VIF; SPR: Sympson’s paradox ratio; RSCR: R-squared contribution ratio; SSR: Standardized root mean squared residual; SMAR: Standardized mean absolute residual; SChS: Standardized chi-squared with degrees of freedom; STDCR: Standardized threshold difference count ratio.

The results of the inner model test in Table 3 show that both the determinant model of teacher performance in the GET group and private teacher group met the fit criteria. It can be seen from all criteria, from APC to STDSR. The table shows that all criteria have been declared fit and acceptable for the inner model. Furthermore, hypothesis testing and Multigroup Analysis are shown in the following table.

Table 4. Hypothesis Test Multigroup

<table>
<thead>
<tr>
<th>Regression Path</th>
<th>Government Employee Teachers</th>
<th>Private Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE β</td>
<td>p value</td>
<td>Remark</td>
</tr>
<tr>
<td>H₁</td>
<td>CMP → TP</td>
<td>.169</td>
</tr>
<tr>
<td>H₂</td>
<td>SPV → TP</td>
<td>.138</td>
</tr>
<tr>
<td>H₃</td>
<td>SB → TP</td>
<td>.014</td>
</tr>
<tr>
<td>H₄</td>
<td>SC → TP</td>
<td>.199</td>
</tr>
<tr>
<td>H₅</td>
<td>TD → TP</td>
<td>.057</td>
</tr>
<tr>
<td>H₆</td>
<td>POS → TP</td>
<td>.251</td>
</tr>
<tr>
<td>Moderated Regression</td>
<td>SE β</td>
<td>p value</td>
</tr>
<tr>
<td>H₇</td>
<td>CMP*SPV → TP</td>
<td>.17</td>
</tr>
<tr>
<td>H₈</td>
<td>CMP*SB → TP</td>
<td>.004</td>
</tr>
<tr>
<td>H₉</td>
<td>CMP*SC → TP</td>
<td>.337</td>
</tr>
<tr>
<td>H₁₀</td>
<td>CMP* TD → TP</td>
<td>.048</td>
</tr>
<tr>
<td>H₁₁</td>
<td>CMP* POS → TP</td>
<td>.104</td>
</tr>
</tbody>
</table>

The hypothesis test results of the determinant model of government employee teacher performance showed that five were not statistically supported by the 11 hypotheses formulated. This was because the p-value was above .05; the hypotheses were H₄, H₆, H₇, H₉, H₁₀. Meanwhile, the statistically supported hypotheses were H₁, H₂, H₃, H₅, H₆, H₁₀. In testing the hypothesis of the determinant model of private teacher performance, it showed that five of the 11 hypotheses are not statistically supported, and these are H₃, H₄, H₅, H₇, H₁₁. Meanwhile, there were six statistically supported hypotheses, namely H₁, H₂, H₃, H₄, H₆, H₁₀. The final results of the hypothesis testing in the government employee teacher group can be illustrated in the following figure.
Then, the final results of the hypothesis test on the private teacher group can be illustrated in Figure 3 below.

The following analysis was to test the differences in the model of the determinants of the performance of government employee teachers, which differed from the models of the determinants of the performance of private teachers with multilevel analysis. The results of the multilevel and inner model tests are as follows.
The multilevel analysis results showed that the determinant model of teacher performance with the teacher status control variable is fit because all the criteria from the model test are fit and acceptable. Meanwhile, the multilevel regression analysis results showed that the teacher status category, namely Government Employee and private teachers, was significant because the p-value < .05. Therefore, it can be concluded that there are differences in the model of determining teacher performance in the groups of government employee teachers and private teachers.

### Discussion

CMP significantly affected TP during the pandemic in both the PNS and private teacher groups. This finding indicates that both teachers maintained their competence well during the pandemic. This finding is consistent with Campbell et al.'s (1993) work performance theory, which states that competent teachers understand what needs to be taught and how to do it so that it will encourage them to display high performance. These competent teachers always do their best to do their work in the learning process and behavior. They also think and act like professionals (Danin, 2011; Kolibačová, 2015; Noel et al., 2017). This finding is consistent with several researchers (Adewale et al., 2022; Karimata et al., 2022; Wardoyo et al., 2020) who have shown that teacher competence during a pandemic presents many challenges, primarily related to the use of technology in learning. However, competent teachers perform well despite the limitations of technology.

Supervision by principals has been shown to affect government-employee or private teachers. However, for private teachers, principal supervision does not significantly mitigate the influence of competence on teacher performance. This finding is because implementing supervision in private schools is often less collaborative because it only aims to control and check teachers' activities to make teachers unhappy. Of course, such a supervision model may pressure teachers during a pandemic because the economic life of private teachers was problematic during the pandemic. After all, many private schools were almost bankrupt (Muyassaroh & Syaiful, 2022; Nguyen, 2020; Thanh, 2020; Tran et al., 2020). This finding is consistent with the research (Awaliyah et al., 2019; Ayandoja et al., 2017; De Rijdt et al., 2013; Rifma et al., 2019; Zepeda, 2007), which shows that educational supervision should be conducted to address teachers' needs and improve teachers' competence, not just to find faults so that it can promote the improvement of teacher performance.

The salaries and benefits of the PNS and private teacher groups were found to have no significant effect on teacher performance. Moreover, salary and allowances as moderators of the influence of competence on teacher performance are also not significant for the PNS and private teacher groups. This result is inconsistent with studies (Amah et al., 2013; Ojeyele, 2017; Subroto, 2013) that show that salary and benefits must provide additional benefits to motivate greater effort. On the other hand, research from Muguongo et al. (2015) and Zikanga et al. (2021) show that salaries and allowances play an important role in attracting, motivating, and retaining teachers to perform at their best to achieve organizational goals. However, the evidence shows that teachers faced serious financial problems during COVID-19, especially private teachers, whose situation was very worrying, as many private schools were almost bankrupt.

School climate was found to have a statistically significant effect on government-employee and private teachers. However, the school climate is only effective for PNS teachers, but not for private teachers. These results suggest that both groups of teachers view school climate as a driver of better achievement, although public schools are more likely to be encouraged to create a conducive school climate than private schools. This result is in line with the research findings of Hidayati (2022), Wiranto et al. (2021), and Mandapat and Farin (2021), which showed that school climate was practically implemented during the pandemic despite many obstacles because there are still many principals and teachers who are not proficient in technology, but efforts to promote school climate are always well followed. In line with the opinion of Pretorius and de Villiers (2009), school climate greatly affects the psychology and personality of teachers and, thus, the perceptions that can shape school behavior. Therefore, in line with research (Adeyemi, 2006; Rooney, 2003), it is necessary to encourage a positive school climate because it can strengthen the relationship between teachers and school members, making it easier to overcome communication barriers that lead to poor performance.

Teacher training and development has no significant effect on performance and fails to moderate the effect of training and development on the performance of government-employee teachers. On the other hand, training and development significantly affect teacher performance and significantly moderate the effect of training and development on the
performance of private teachers. The evidence shows that government teachers were not enthusiastic about in-service training and coaching during the pandemic. Consistent with the research of Azizatur et al. (2021), private teachers are very enthusiastic about participating in training and professional development because the demands of their jobs must be measured, including participation in training and professional development programs. In-line research (Abogesha & Kaushik, 2017; Akhtar et al., 2011; Williams, 2010) shows that in-service training and development of teachers employed in the public sector is perceived as less than optimal because (a) training is not carried out on an ongoing basis, (b) training is a mandatory task imposed by supervisors and not based on teachers’ needs, (c) training is monotonous and uninteresting, and (d) policy support for in-service training and development.

Empirically, POS significantly affects teacher performance in both the PNS and private teacher groups. Nevertheless, POS is not significant as a moderator of the effect of competence on teacher performance in both groups. This result is in line with Solís García et al. (2021), who shows that private schools provided more support to their teachers than public schools during the pandemic. This result may be because principal support is perceived to be less than optimal in public schools. This is because many teachers have heavier workloads, the administrative burden of learning, or managing school finances that must be handled by teachers whose main task is teaching. In addition, research by Noblet and Rodwell (2009) and Francis and Schaffer (2014) show that good school support can make teachers feel that their contributions are valued and also as a form of concern for their well-being and satisfaction with teachers so that teachers are more diligent and committed to the school’s goals.

The comparison test results with the multilevel model SEM show that the empirical model significantly determines teachers’ performance in PNS and private teachers. These results indicate that the preceding variables tend to show different results. This difference illustrates that all variables that determine good teacher performance, such as competence, supervision, salary and benefits, school climate, and the training and development experienced by private teachers or government teachers, have different treatment or characteristics. Consistent with Campbell et al.’s (1993) Work Performance Theory, these findings fill a research gap regarding the antecedents of teacher performance for the unit analysis of private and public teachers by revealing a contextual elaboration related to the context of private and government education organizations. In addition, the research findings provide further corroboration for Boset et al. (2017) regarding comparing public and private teacher performance.

**Conclusion**

This study provides new insights into research gaps in using Campbell et al.’s (1993) job performance theory to measure the determinants of teacher performance. When the model was tested to determine teacher performance in two groups of teachers (public and private employees), very different results were obtained. This difference is because teachers' workplace and work status influence their perceptions of supervision, organizational support, school climate, training, and development, especially during a pandemic. In addition, many private teachers faced economic and financial difficulties during the pandemic, but they tended to maintain their performance well. Although not easy, they are more active in training and development than salaried government teachers. This study refers to previous research findings, especially in developing countries, that government-employee and private teachers have different motivations to show their professional performance.

**Recommendations**

In practice, the policies that need to be implemented: (a) the education office or schools for government employee teachers and foundations for private teachers must implement a performance-based incentive system, otherwise this will lead to an income effect (the higher the salary and benefits, the lower the performance); (b) government employee teacher training and development should be based on needs and proposed by teachers, since training and development is an assignment by the leadership alone; (c) foundations need to properly understand the implementation of educational supervision, because according to the results, the implementation of supervision in private schools tends to focus on the financial management of the school rather than academic supervision; (d) the organizational climate in private schools needs to be improved, because foundations often demand that private schools generate financial profits rather than quality education; (e) both the education office and foundations need to make policies that do not overlap, because teachers’ tasks, which should be focused on learning, are still too often occupied with school administration. This is what causes less than-optimal teacher performance.

Future studies adopting this research can consider the limitations related to Campbell et al.’s (1993) theory of employee performance, which they apply in the context of a government employee teacher. Especially in developing countries, civil servant teachers must adhere to constitutional rules, which may ultimately affect public service organizations such as public schools. Therefore, future research needs to pay more attention to each of the indicators proposed by Amin and Atta (2013) so that these indicators are more appropriate and contextual to the conditions of government-employee teachers in developing countries. In addition, it is interesting in the future to extend this research model to the higher education level, as the performance conditions of teachers in higher education in the context of developing countries tend to differ from those in primary and secondary schools.
Limitations

This study has several limitations. First, although the sample of this study consisted of civil servant teachers and private teachers, this study focused only on elementary and junior high school teachers and did not include high school teachers. Second, this study is only concerned with the supervision, salary, benefits, school climate, training, and development with a moderator role, without including mediating variables.

Authorship Contribution Statement

Ngabiyanto: Concept and design, data analysis / interpretation, drafting manuscript, securing funding, and final approval. Ahmad Nurkhin: Drafting manuscript, critical revision, and technical or material support. Kemal Budi Mulyono: Admin and data analysis / interpretation. Iwan Hardi Saputro: Data acquisition, statistical analysis, and technical or material support. Didi Pramono: Drafting manuscript, statistical analysis, and critical revision of manuscript. Asep Purwo Yudi Utomo: proofreading, and critical revision of manuscript.

References


Danis, S. (2011). *Pengembangan profesi guru: Dari pra jabatan, induksi, ke profesional madani* [Teacher professional development: From pre-service, induction, to civil professional]. Kencana Prenada Media Group


Muyassaroh, A., & Syaiful. (2022). *Makna pendapatan bagi profesi guru honorer saat pandemi COVID-19* [The meaning of income for the honorary teaching profession during the COVID-19 pandemic]. *Prosid Ing Seminar Nasional Ekonomi Dan Bisnis, 1*, 134–160. [https://sid.id/1w1IA](https://sid.id/1w1IA)


Nguyen, T. (2020). *150 private educational institutions ask for help because of the closure due to COVID-19*. Youth Newspaper. [https://sid.id/1w1Xb](https://sid.id/1w1Xb) [In Vietnamese]


Thanh, B. (2020, March 25). Nearly 42,000 teachers are affected financially due to COVID-19. Youth Newspaper. [In Vietnamese]


Williams, M. L. (2010). Teacher collaboration as professional development in a large, suburban high school [Doctoral dissertation, University of Nebraska-Lincoln]. DigitalCommons@University of Nebraska - Lincoln. https://s.id/1wJ79


