

# Teacher Performance in the 21st Century: Examining the Roles of Leadership, Self-Efficacy, Compensation, and Job Satisfaction

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## Abstract

*The main purpose of this study is to examine the effect of leadership on teacher performance via self-efficacy and job satisfaction, a mediating variable, as well as compensation. Based upon an Indonesia study, the research engages a meta-analysis of these relationships for illuminating insights on optimizing teacher performance in educational environments. We collected data from a sample of 680 teachers 87% response rate and analyzed them using SmartPLS, the evaluation comparable to complex social science models. The results suggest that both self-efficacy and compensation affect teacher performance directly, respectively, through job satisfaction; principal leadership only has a significant direct effect on the dependent variable without being mediated by job satisfaction. These results may have implications for how intrinsic and extrinsic factors, motivation, rewards, and leadership styles influence faculty outcomes. The practical implications include a call for targeted teacher professional development and compensation policies that are more equitable and effective educational leadership practices to improve teaching performances, which will in turn favorably impact the quality of education generally.*

**Keywords:** *Teacher Performance, Principal Leadership, Self-Efficacy, Compensation, Job Satisfaction.*

## Introduction

Teacher Performance is one of critical issues that we encounter and followed by typical problem, especially in our country (Fawcett et al. 1995; Harris and Sass 2011). These include technological advances, changes in education policy, and a greater desire for better results at the classroom level (An and Reigeluth 2011; Natriello 2005). One emerging focus is on leadership, teacher self-efficacy and compensation structures that drive teacher motivation and performance (Canrinus et al. 2012; Lai, Hsiao, and Hsieh 2018; Orona et al. 2022). Related research pointed out how leadership practices, particularly by school principals affected teachers behaviors and work outcomes (Anna and Jones 2015; Hallinger et al. 2017; Orona et al. 2022). Transformational leadership by principals is one of the ways to enhance or increase teachers' sense of professional efficacy and higher classroom performance (Cansoy and Parlar 2018; Liu and Werblow 2019; Schmitz et al. 2023; Talebizadeh, Hosseingholizadeh, and Bellibaş 2021). The finding of this study is also applicable in countries where education reform is a matter that needs to be considered seriously such as and Indonesia, understanding the influence between those variables leadership self efficacy compensation towards teacher performance will improve well overall teachers whether they are working urban or rural area. (Backfisch et al. 2020; Burić and Moè 2020; Lachner et al. 2021; Shi, Chen, and Zhou 2023; Yin, Huang, and Chen 2019) suggested that more expert teachers who are satisfied with their job mediate the relationship between teacher content knowledge and performance using. Study of this mediating role is an increasingly urgent need to achieve human capital equity and reduce regional disparities in educational outcomes (Ren, Zhu, and Yang 2022).

The declining quality of teachers in Indonesia has also attracted national attention. Even the Ministry of Education is not spare from bad teachers and low job satisfaction impacts all stake holders in a related unhappy manner. Leadership within schools is one of the key problems. In Indonesia, many schools do not have an effective leadership that can provide support and motivation for their teachers (Gozali and Paik 2023; Raihani 2008, 2018). Teachers with weak self-efficacy or poorly paid will show poor performances from their parts, which is reflected in the failure of students (Gaskill and Woolfolk Hoy 2002;

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Morris and Usher 2011; Talsma, Schüz, and Norris 2019). This tripotency of leadership, work compensation and self-efficacy is one other thing that may indirectly contribute to job dissatisfaction (Dorta-Afonso, Romero-Domínguez, and Benítez-Núñez 2023; Hassan and Ibourk 2021; Na-Nan, Kanthong, and Joungrakul 2021; Stamolampros et al. 2019). This is an issue of critical importance for Indonesia, which has been grappling with how to reform its education system that would deliver internationally suited outcomes (Darawong and Widayati 2022; Stamolampros et al. 2019; Walker et al. 2019). Understanding why these factors are important in terms of teacher performance is critically important so we can develop the appropriate policies and programs that will help teachers become better at their profession.

The findings have their roots in different theoretical perspectives (Alshmemri, Shahwan-Akl, and Maude 2017; Bandura 1978; Sanjeev and Surya 2016). Alshmemri et al. (2017) theory of hygiene of motivation, there are some factors that do not lead to less dissatisfaction, but they lead employees to be more motivated and satisfied. This growing realisation is taken quite seriously in the Indonesian context, where the salaries of teachers and principals also sometimes reflect large inequalities both between school locations and within local schools themselves (Kwek, Miller, and Manzon 2019; Rosser and Fahmi 2018). Bandura (1978), considered teachers' confidence as fundamental in terms of their work behaviour under broad self-efficacy theory. The findings have their roots in different theoretical perspectives (Herzberg's two-factor theory of motivation, Bandura (1978), model of self-efficacy. Alshmemri et al. (2017) theory of hygiene of motivation, there are some factors that do not lead to less dissatisfaction, but they lead employees to be more motivated and satisfied. This growing realisation is taken quite seriously in the Indonesian context, where the salaries of teachers and principals also sometimes reflect large inequalities both between school locations and within local schools themselves (Sianturi, Lee, and Cumming 2023; Sumintono, Hariri, and Izzati 2023). Furthermore, Bandura (1986) considered teachers' confidence as fundamental in terms of their work behaviour under broad self-efficacy theory. Confidence in their ability to manage and teach is correlated with better teachers (Perera, Calkins, and Part 2019; Perera and John 2020). These theories provide insight into how leadership is linked to self-efficacy and teacher performance outcomes, supporting a comprehensive understanding of the important interactions between these elements, predicting job satisfaction, and impacting global measures of employee compensation and meeting productivity numbers (Ashraf 2020; Sadick, Kpamma, and Agyefi-Mensah 2020; Schiemann, Seibert, and Blankenship 2018; Yuen et al. 2018).

Research that goes further and unpacks principal leadership, self-efficacy or compensation could be particularly useful in guiding policy implementation at country level, especially in developing nations like Indonesia which suffer the effects of pedagogic inefficiency. Other research has been conflicted (Burić and Moè 2020; Don 2018; Sahito and Vaisanen 2020; Zamjani 2022). Hoque et al discovered that there is a positive relationship between principal leadership and teacher performance as strong leadership has been associated with high job satisfaction leading to increased levels of the same (Daniëls, Hondeghem, and Dochy 2019; Para-González, Jiménez-Jiménez, and Martínez-Lorente 2018; Tai and Abdull Kareem 2019). In contrast, some other studies like the one conducted Bottiani et al. (2019), Bryant et al. (2023), Hennessy et al. (2022), Johnston and Ksoll (2022), Peele and Wolf (2020), found that principal wife has not significant impact on teacher performance at under-resourced schools which may imply, external factors such as funding and infrastructure might lessen the leadership effect. In addition, research providing mixed findings in regards to self-efficacy and compensation (Ismayilova and Klassen 2019; Orona et al. 2022; Zhang, Ardasheva, and Austin 2020). Fackler, Malmberg, and Sammons (2021), Geerlings, Thijs, and Verkuyten (2018), Perera et al. (2022), found that greater teacher self-efficacy was associated with better outcomes especially in urban contexts. Showed that self-efficacy had a negligible impact on teacher performance in rural schools with little or no resource support (Akman 2021; Kingsford-Smith et al. 2023; Outlaw and Grifenhagen 2021). Compensation, a critical issue in Indonesia, is another point of contention. Although previous studies have shown the impact of a superior compensation package on teacher performance Kingsford-Smith et al. (2023), other research argues differently such as those Akman (2021), Liu and Bellibas (2018), Sancar, Atal, and Deryakulu (2021), suggests that compensation alone may not be sufficient to exert a substantial change in performance unless combined with professional development and support from leadership. Because of these discrepancies, we want to fill the gap by analyzing rationally how leadership, self-efficacy and compensation work through job satisfaction mediated in Indonesia (Kaymakçı,

Görener, and Toker 2022; Pham, Brennan, and Furnell 2019; Yang, Luu, and Hoang 2023; Zhou et al. 2023). This study gives a new perspective on how schools can assist teachers to be high performing by including these factors, and that it benefits not only the national education reforms but also adds value to educational research as a whole (Pont 2020).

The purpose of this research is to analyze the influence of principal leadership, on work rewards and teacher performance between self-efficacy with job satisfaction as a mediating variable. We aim to discover how these aspects interact in connection with the performance of teachers as a whole in Indonesia. This study will help education policy makers and school management in understanding relationship between various constructs, on a broader perspective. It will also explore how better job satisfaction can increase the impact of leadership and work rewards equally useful in creating a supportive classroom conducive to promoting learning. These results will contribute to evidence-informed stakeholder actions leading to fostering teacher motivation and improving educational outcomes.

## Literature Review

### *Theoretical Research*

This study is based on various theories in which the relationship among leadership, self-efficacy, compensation and job satisfaction leading to teacher's performance. One of the key theoretical constructs comes from Bandura's Social Cognitive Theory Bandura (1986), Schunk and DiBenedetto (2021), Schwarzer and Fuchs (1995), which states that self-efficacy works as a predisposed variable based on how motivated an individual is. When teachers have high self-efficacy, they are more likely to use effective teaching practices that help them when faced with challenging situations and eventually lead to the improved performance of their students. *Two-Factor Theory* Akman (2021), Alshmemri et al. (2017), clarifies the impact of job satisfaction on performance: hygiene factors such as salary and working conditions differ in participation from motivators like achievement or recognition. This theory instead stresses the importance of compensation and intrinsic satisfaction in increasing teacher effort. Additionally, *Transformational Leadership Theory* Bass and Avolio (1994), is directly related to principal leadership and teacher outcomes as transformational leaders inspire teachers and influence them in a way that creates a positive working relationship. Together these theoretical frameworks provide a very thorough explanation of the myriad factors impacting teacher performance, which is aligned with both research hypotheses and objectives (Luo, Wang, and Yu 2022).

### *Teacher Performance*

Teacher performance is a key driver of student outcomes, school improvement and over-all educational quality. Performance pertains broadly to instructional efficacy and non-instructional roles like Student Mentoring, School activities etc. In this context, one key issue is teacher performance and quality which are the main target when policies such as they believe in Indonesia that many educational outcomes still divide by region. Teachers' effectiveness is closely related to their potential to combine theoretical and practical knowledge (Bardach and Klassen 2020; Evens et al. 2018; Kulgemeyer and Riese 2018). So they have the best chance of manipulating unfavourable external conditions to produce a successful community of practice, which includes factors such as; motivation, active learning, leadership, and compensation etc (Huang et al. 2022; Wei et al. 2018). High-quality learning teachers contribute greatly to higher students' achievements, but also provide a climate that is more conducive for development and excellent results of the pupils (Sadrizadeh et al. 2022; M.-T. Wang et al. 2020). After all, it is the teacher who should be trusted as a source to bring education reforms in any policy especially for developing countries that have limited schools like Indonesia (Rosser and Fahmi 2018; Suharno, Pambudi, and Harjanto 2020). Moreover, because teacher effectiveness is multifaceted the use of a variety of methods are necessary to foster improved teaching. By removing dispositional factors as explanations, it illustrates the importance of both professional capital and collaborative teaching practices (*community*) supported by a culture conducive to this way of working in motivating teachers to teach well. Research also indicates that declined demands and better teaching appear to give more engaged, effective teachers which results in measurable gains for

students (Bardach and Klassen 2020). So, we must deal with the difficulties of teacher performance if a more balanced education ecosystem that puts both teachers and students first is to be fostered.

#### *Principal Leadership and Its Influence on Teacher Performance*

This work designated principal leadership as a central influence on teacher performance. Leadership has a direct effect on teacher motivation and work outcomes as it provides directions, inspiration, and support to teachers (Hallinger and Lu 2014; Leithwood, Tomlinson, and Genge 1996). In relation to this type of leadership, style stands out transformational leadership, which in particular develops a positive school climate and it stimulates teachers to deliver their best. (Bass and Avolio 1994), discovered through their studies that transformational leaders who show a good sense of connectedness skills, as well with professional competences are more likely to scarcely motivate teachers towards excellent performance. (Shulhan 2018; Wolomasi, Asaloei, and Werang 2019) suggest that leadership styles of school principals significantly affect teacher job performance through their impact on the morale in, as well as satisfaction with teaching. Principals who lead with knowledge and confidence contribute to inspiring the right attitude among teachers and in the school as a whole by making everyone understand they are important players within every day. It increases teacher retention and teachers a space to share best practices as well while it enhances the teaching strategies. And when principals participate in some of these discussions too, and acknowledge the ways teachers contribute to school purposes they are even more likely to take ownership over those goals—and not just commitment (Akman 2021; Leithwood et al. 1996). Given the varied educational context of Indonesia, it is crucial to understand these different aspects that determine principal leadership in order for such strategies that are aimed at improving teacher practice and thus, student achievement can be successfully implemented.

#### *The Role of Self-efficacy in Enhancing Teacher Performance*

Self-efficacy a person's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments is a key driver of teacher quality. Teachers with high self-efficacy set higher goals, persist longer in the face of obstacles, and select challenging tasks, performing better as a result (Bandura 1978; Ghalavi and Nastiezaie 2020). Lauermaann and ten Hagen (2021), Zakariya (2020) claimed teachers with high levels of self-efficacy are more likely to attempt innovative teaching practices, interact at a higher level with students, and positively contribute to the overall school climate. In an Indonesian setting, research Burić and Kim (2020), found a sub-Saharan Africa where, while teacher self-efficacy is positively correlated with classroom performance at least in schools with good leadership and enough resources, most teachers do not believe the conditions exist to apply it. It suggests that self-efficacy is crucial in improving performance. Practical means of introducing teacher self-efficacy help aid the loop, which will result in overall improved performance and personal learning opportunities among teachers. They are also more likely to pursue professional development and ask for feedback about their practice if teachers feel they know how. This proactive approach leads not only to improvement in their teaching approaches but also benefits the learning experience of students, who are observed as more satisfied (Berg and Smith 2018; Skaalvik and Skaalvik 2017). These results suggest that, in Indonesia, where education challenges can significantly differ across regions, developing and strengthening dedicated teacher self-efficacy training programs and systems might provide a good pre-requisite to improve general teaching quality and consequently student achievement (Suharno et al. 2020). Therefore, it is important to create a culture that supports self-efficacy in order to improve educational performance over the long term..

#### *The Link Between Work Compensation and Teacher Productivity*

Work, in its most controversial instance maybe the belief that teaching your child all you know is something to not be paid for, because educational funding can be scarce in other parts of different countries (Alibakhshi, Nikdel, and Labbafi 2020). And difficulty keeping quality teachers in the classroom and, more importantly, having effective ones depends on pay. The methodological review of several studies found that the evidence generally suggests that higher pay results in greater job satisfaction and effectiveness among teaching staff (Sahito and Vaisanen 2020). Teachers who are paid a fair wage are more likely to be satisfied in their jobs and willing to innovate within them (Van den Borre, Spruyt, and Van Droogenbroeck

2021; Krumbiegel, Maertens, and Wollni 2018). However, compensation alone is unlikely to deliver significant performance improvement without professional development and leadership (Griffith, Baur, and Buckley 2019; Subramony et al. 2018). Debate about teacher salaries has led to reform initiatives designed to raise the status of teaching in Indonesia and have worked with positive performance effects observed as a result, particularly when accompanied by more generous compensation packages (Gustafsson 2019; Powell, Francisco, and Maher 2003). It turns out this influence of work compensation on teacher productivity is not only about the cash they earn or, in most cases, don't. The benefits are not all monetary either, as health insurance retirement plans and job security play a large part in the overall job satisfaction and performance of teachers. Indeed, research has shown that teacher perceptions about the fairness and adequacy of their compensation bundles can motivate a lot regarding instructor commitment to stay in teaching positions longer term or participate in different meanings, making focused individual growth (Nyamubi 2017; Olitsky, Perfetti, and Coughlin 2020). In Indonesia, an integrated approach to both financial and non-financial incentives for teachers can help create a positive context that increases teacher motivation and efficiency. Thus, education policy makers can support improved student outcomes by promoting a holistic view of compensation that will retain and recruit the diverse talent needed to deliver high quality education.

### *Job Satisfaction as a Determinant of Teacher Performance*

It is well known that job satisfaction affects the work performance of teachers. Kuh et al. (2008), Rose (2011) highlights, when teachers are happy, they generally show high levels of engagement and creativity in the classroom and also tend to believe more fervently that their efforts matter for student success. Two-Factor Theory Alshmemri et al. (2017), suggests that job satisfaction relies on both hygiene factors related to compensation and working conditions, for example, as well as motivators that are associated with recognition or career development opportunities. In the educational sector, teachers with a high level of satisfaction on their job tend to manage better and stay in an organization longer, as well as have an impact on the school climate (Grayson and Alvarez 2008). In Indonesia, who found that leadership influences teacher performance with job satisfaction as a mediator (Banjarnahor 2018; Pio 2022; Tanjung et al. 2020). Also, encouraging job satisfaction and teachers will help create a more resilient workforce (Paul, Jena, and Sahoo 2020). Teachers who feel appreciated and supported will have better relationships within their team, share resources more completely, and engage in practices of collaborative innovation that improve student learning (Skaalvik and Skaalvik 2017, 2018). In an Indonesian educational environment facing issues of high student-to-teacher ratio and scarcity in resources, the provision of such job satisfaction initiatives like professional development programs along with mentorship opportunities or recognition for achievements can indeed lead to improved teacher performance. This means not only is it important that teachers are happy in their jobs, but due to the impact on student achievement and a school's budget linked to these outcomes, job satisfaction should be under the microscope for everyone, from principals through government policy (Ghavifekr and Pillai 2016; Kwan 2011).

H1; The Effect of Principal Leadership (PL) on Teacher Performance (TP)

H2. The Effect of Self-efficacy (SE) on Teacher Performance (TP)

H3. The Effect of Work Compensation (WC) on Teacher Performance (TP)

H4. The Effect of Job Satisfaction (JS) on Teacher Performance (TP)

### ***Hypothesis Development Observations (Intervening)***

Mediating or intervening factors have been useful in understanding the indirect relationships between independent and dependent variables of a research study. This study determines job satisfaction as a moderator variable for leadership, self-efficacy and salary qualities of teacher performance Baron, Reuben M. Kenny (1986), Ines Kateb (2023), Mediation Theory. This theory is essentially the idea that a mediator variable explains how two other variables are related to each other providing information on what this complex causal relationship looks like. Although principal leadership has a direct effect on teacher

performance, its full effect is only realized when teachers are satisfied in their jobs, as found Akman (2021), Leithwood and Jantzi (1990), with the conclusion that transformational leadership results produce better outcomes for teachers resulting from job satisfaction. The relevance of this mediation mechanism for understanding classroom variance is also highlighted by behavior likely to enhance teacher performance job satisfaction when magnified its beneficial impacts of leadership, self-efficacy and pay within the academic contexts examined in (Akman 2021; Bardach and Klassen 2020; Klassen and Durksen 2014).

#### *How Job Satisfaction Mediates the Impact of Principal Leadership on Teacher Performance*

From a managerial perspective, leading effectively results in better performance through job satisfaction (Joubert & Viedge 2008), and it is this dimension that makes the link between principal leadership and teacher performance. Research by Leithwood et al. (2019) report that principals who can render support in both emotional and professional levels create an atmosphere conducive to high job satisfaction, which will lead towards better teacher performance. In the context of Indonesia, a study by Setiawan et al. (2022), the job satisfaction is able to completely mediate how transformational leadership affects teacher performance. It highlights the fact that leadership practices should lead to high well-being and job satisfaction among teachers, otherwise efforts directed towards improving teacher performance through friendly policies may struggle or have limited impact. This was not only a way for schools to secure high quality faculty stable beyond two years, but research showed that satisfied teachers are more motivated and contented in their work; the outcome of which will lead to better student achievement and educational outcomes.

#### *The Mediating Effect of Job Satisfaction in the Self-efficacy on Teacher Performance Nexus*

Self-efficacy is not enough to ensure a higher focus on getting better at teaching; job satisfaction performs a central mediation position. In a study by Klassen and Chiu (2020), it was found that in comparison to those with high self-efficacy but low job satisfaction, teachers who reported both themselves as more efficacious regarding their teaching skills and were less satisfied within their current role performed significantly poorly. Having a positive impact on self-efficacy strengthens when teachers are satisfied with their job because this means that they can practice the skills and know-how they possess in teaching effectively. One study by Ramadhani et al. was conducted in the Indonesian educational context, where, as we know, teacher morale is considered a problem quite often (Ramadhani et al., 2018). According to (2021), self-efficacy produces performance enhancements only to the degree that a teacher indicates pleasure with his or her job. This result highlights the need for teachers to work in an atmosphere that not only increases their confidence but also deals with issues related to job satisfaction, both of which will positively affect teaching outcomes and student participation.

#### *Exploring the Mediating Role of Job Satisfaction in Work Compensation and Teacher Performance*

While a direct link domain to the work compensation and teaching output is not that simple, job satisfaction will serve as a third mediator in connecting them. (Canrinus et al. 2012; Dwivedi and Joshi 2020; Jawaad et al. 2019; C. Wang et al. 2020), points out, improved compensation results in immediate performance upliftments, but the real progress can be maintained only if this enhanced income is combined with significant job satisfaction (C. Wang et al. 2020). When something as elementary as raising teacher pay did not lead to more meaningful performance gains, it was indicative of the holdup in larger professional satisfaction, and demonstrators were being heard. One study by Siregar et al. conducted in Indonesia included data on dietary intake. However, Berhanu (2023), found that in the context of rural areas with distinctive difficulties, such as financial resources and professional development opportunities, lack of job satisfaction has a mediating role between pay scale systems for teachers and performance. This finding underscores the need for an enabling work environment that should not only provide fair pay but also contribute to job satisfaction and better teacher output with attendant improvements in student learning outcomes..

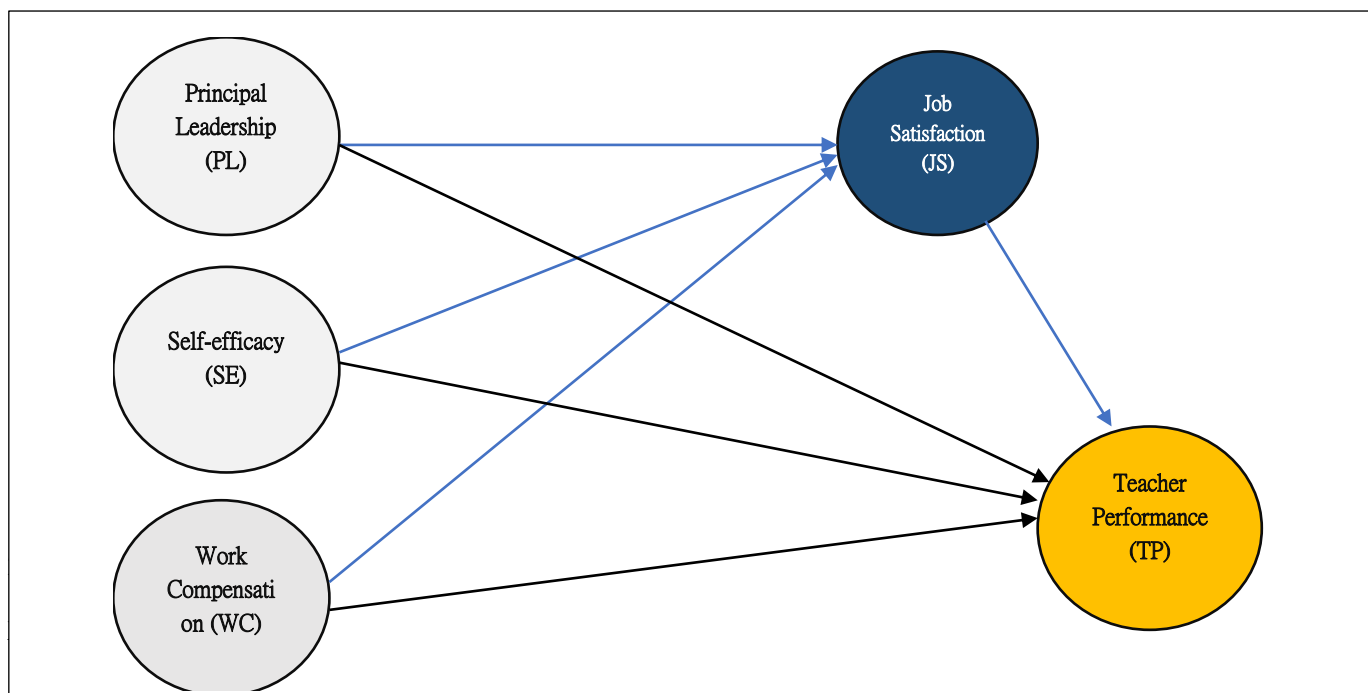
*H5. The role of job satisfaction (JS) in mediating principal leadership (PL) on teacher performance (TP)*

*H6. The role of job satisfaction (JS) in mediating Self-efficacy (SE) on Teacher Performance (TP)*

H7. *The role of job satisfaction (JS) in mediating Work Compensation (WC) on Teacher Performance (TP).*

*Theoretical Framework of Variable Observation*

This study mostly deals with how some independent variables (*Principal Leadership, Self-Efficacy and Work Compensation*) implicated on dependent variable job Satisfactions through mediating task-relevant performance among teachers. Together, each variable is crucial in determining the mechanisms that define the teaching context and impact teacher outcomes. Transformational Leadership Theory, which research suggests correlates with leadership behavior and teacher motivation/engagement (Bass and Avolio 1994). According to Bandura's Social Cognitive Theory self-efficacy (the belief that one can execute the behaviour required), among other factors, exerts an influence over teacher development and their classroom practices. This belief guides the way they persist and approach difficulty in class. Work compensation comprises the financial and non-financial benefits, which influence teacher's satisfaction as well as motivation at work (Akman 2021; Alshmemri et al. 2017; Sanjeev and Surya 2016). Therefore, job satisfaction serves as a mediating variable by which the effects of principal leadership, self-efficacy and work compensation are exerted on teacher performance (Abu Nasra and Arar 2020). As a result of this positive feedback loop, workforce satisfaction increases working together with excellent teaching effectiveness conjunctively at the same time and fostering student learning results (Košir, Aslan, and Lakshminarayanan 2023). Building the flow of resources to an appropriate supply chain for effective teacher performance Figure 1 visually illustrates a key opinion, demonstrating the directed and indirect pathways in which each variable contributes toward shaping beloved culture-building (building supportive working conditions), increasing intrinsic motivation through active learning strategy like Teacher Learning Communities towards positive outcomes such as student achievement sooner than later; state-led interventions using on-the-ground change models that you are passionate about cause serious effects.



## Research Object

This study focuses on teachers in Indonesia who work at different schools, of which a particular area taken into consideration is Kabupaten Blora. We chose this area because the region has great variation in its educational landscape with a mix of teaching practices, principal leadership approaches and compensation models that have major influences on teacher effectiveness and job contentment. Blora is an illustration of

the kinds of challenges that are one part and parcel to Indonesia's broader education system, where unequal resource allocation, disparate infrastructures and uneven professional supports produced varying educational outcomes. Outlines the real impact of leadership and compensation policies on teacher effectiveness as seen in the Blora district. This study is conducted to explore these dynamics in Blora whereby proposed solutions that have empirical basis on how teacher performance can be motivated and satisfied needs information at both the macro- level something you also could call a nation-wide viewpoint. In our home countries, interventions that take regional variations into account are crucial to halting and reversing larger educational inequities in childrens' learning outcomes there too (Darling-Hammond and Snyder 2000; Espinoza et al. 2018).

### *Sampling Population Research*

The study is conducted on a population of 780 teachers to have the sample that will representative and above enable making statistical inferences. The objective is to obtain 680 valid questionnaires: at least a good response rate of approximately 87%. Cohens emphasize in their work that it is critically important to have such an exhaustive sampling strategy as this provides the reader with a sense of how they can actually trust and apply your findings. On the other hand, one of them is related to sample size with respect to which Pärn et al. (2015), stressed that minimal clinical differences are detected at larger number of samples since it lessens margin by error consequently enhance accurate statistical management. We will use purposive sampling, strategically selecting participants that can provide the most comprehensive data to respond our research questions. Purposive sampling is ideal for this type of study with targeted areas like teaching experience, leadership exposure and compensation satisfaction as key variables (Lai et al. 2018). The study gains in depth of analysis by targeting those with relevant experiences and makes sure that the data collected is rightly associated with its constitution. This not only helps to consolidate the results, but also leads to a clearer insight of what factors have an impact onto Indonesian teachers' performance and job satisfaction.

### *Data Collection Process*

The data required for the present study will be obtained by distributing an electronic survey through Google Forms, and a structured questionnaire has been designed to collect information on principal leadership if there is any impact of self-efficacy; How work compensation affects job satisfaction or teacher performance. Online areas that are almost related to cost, because this section is part of the face-to-face practice approach conducted by researchers where in 2024, also things that can be used this method is the fact that the least supportive of the survey is (Dubey, Gunasekaran, and Samar Ali 2015). We also propose ThisSide interoperable requirements management model for instantaneous (fractions of a second) real-time data collection by making intermodal trips that can be traversed back and forth by service providers or easily, quickly and substantially rooted in cases of delivery-travel logistics requirements. The questionnaire will be composed basically by closed-ended questions using Likert Scale that permit respondents to express their level of degree or agreement/satisfaction in front of some statements about the study variables (Yang, Becerik-Gerber, and Mino 2013). Likert scales provide an accepted means of collecting the subtleties in people's beliefs and attitudes as it allows researchers to interpret their subjective data objectively (Anjaria 2022). Analyzing the survey data remains easy as well, due to the standardized and structured format of a questionnaire. In addition to real-time data monitoring of the survey processed because it is electronic and that significantly increases its cost-effective nature for research.

### *Instrumentation for Data Questionnaires*

This research part of the structured questionnaire employed as the primary instruments in assessing key variables: principal leadership, self efficacy, work compensation job satisfaction and teacher performance. The items are divided between sections, which correspond to different constructs; the 5 alternatives of response in a Likert scale format range from (1) strongly disagree -to- 5 broadly agree. The Likert scale has become popular as a survey tool in educational research because it can elicit the opinions of respondents at different levels [16], which permit complex data analysis to be performed. The instrument will be tested for internal consistency validity Cronbach's alpha and construct related validity proposed through factor



analysis as a pre-testing phase to ensure the data collected is accurate, reliable (Bryman & Bell, 2015). This is intended to ensure that each item captures the variable of interest and generates high-quality data for subsequent analyses. The study attempts at ensuring that findings are based on a reliable and generalizable instrument by using this validated tool. In this way, the measurement of each variable is consistent with one another according to a well explained theoretical underpinning and makes sense to test these different variables in relationship to leadership, self-efficacy, faculty compensation, satisfaction levels at work among teachers as they are reciprocally related which concomitantly influence teacher performance. This structured nature means it is easy to compare different groups, and ensures that responses are clear and replicable..

**Table 1.** Skala Likert Questionair

Variable	Definition	Measurement Scale
Principal Leadership	Leadership style and practices of school principals	Likert Scale (1-5)
Self-Efficacy	Teachers' beliefs in their teaching abilities	Likert Scale (1-5)
Work Compensation	Financial and non-financial rewards for teachers	Likert Scale (1-5)
Job Satisfaction	Overall contentment with the teaching profession	Likert Scale (1-5)
Teacher Performance	Effectiveness and quality of teaching practices	Likert Scale (1-5)

Source of data; Processed from the results of the author's observations 2024

#### *Sample Data Research*

The data sampling utilized in this research was grounded on established instruments that are commonly applied within the educational world. All items are rated on 5-point Likert scale, which gives respondents enough room to express their attitudes and the questions measure a wide array of factors influencing teacher performance. For example, principal leadership is measured via questions like "My principal backs me up in my teaching" based on the model of transformational theory (the connection between school leaders and teachers) that has been discussed by Leithwood & Jantzi [25]. Self-efficacy (a teacher's belief in success) is conceptualized using questions such as "I can maintain effective classroom control" and grounded in Bandura's social cognitive theory, suggesting self-efficacy plays a significant role within performance outcomes.

Herzberg's two-factor theory Akman (2021), Alshmemri et al. (2017) observes that job compensation is measured by the statements "I think I am adequately compensated for my job" or workload may motivate teachers due to Tikelihood stigma → preemptive responsiveness Similarly, job satisfaction which is fundamentally predicted to affect performance despite global. Finally, teacher performance is captured through statements like "my students perform well on standard tests," which were created based upon the work of Akman (2021), Klassen and Durksen (2014), relating low pre-service preparedness to both student outcomes and classroom effectiveness. An appropriate theoretical base that reflects the system, and therefore also constitute a robust methodological approach ensures consequently tool itself is reliable.

**Table 2.** Instrumentation for Variables Observation

Variable	Definition	Measurement Scale	Sample Items	Reference
Principal Leadership	Leadership style and practices of school principals	Likert Scale (1-5)	"My principal supports my teaching efforts."	Leithwood & Jantzi, 2006

Variable	Definition	Measurement Scale	Sample Items	Reference
Self-Efficacy	Teachers' beliefs in their teaching abilities	Likert Scale (1-5)	"I can effectively manage my classroom."	Bandura, 1997
Work Compensation	Financial and non-financial rewards for teachers	Likert Scale (1-5)	"I feel adequately compensated for my work."	Herzberg et al., 2018
Job Satisfaction	Overall contentment with the teaching profession	Likert Scale (1-5)	"I enjoy my job as a teacher."	Spector, 1997
Teacher Performance	Effectiveness and quality of teaching practices	Likert Scale (1-5)	"My students perform well in assessments."	Klassen & Chiu, 2010

Source of data; Processed from the results of the author's observations 2024

### *Sample Characteristics*

The sample demographic The demographics of the study also provide key insights on who were the teachers that participated in the research. They are equally distributed by gender (47.1% male, 52.9 % female) compared to the Indonesian population of teachers so that is good news too! In terms of age, the largest proportion was 31-40 years old (36.8%) followed by over 41–50 who accounted for nearly one-third at 29.4%, which seemed to imply a mid-career representation in this group with AD  $\leq 30\%$  concentration in primary sites. The largest proportion of the sample was teachers with 1-5 years of experience 36.8%, followed by 6-10 years, which accounted for 29.4% of the total, suggesting the most various experience length of the participants. Almost three-quarters of the sample had a Bachelor's degree 73.5%, with 26.5% having a Master's, which is also indicative of high qualification of the participants. This variety creates a perfectly hybrid sample and is reflective of several levels of education, age groups, and teaching experience, which increases the reliability of the finding.

**Table 3.** Demographic Characteristics of the Sample

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	320	47.1
	Female	360	52.9
Age	20-30	150	22.1
	31-40	250	36.8
	41-50	200	29.4
	51 and above	50	7.4
	Years of Experience	01-May	250
	06-Oct	200	29.4
	Nov-15	150	22.1
	16 and above	80	11.8
Educational Background	Bachelor's Degree	500	73.5
	Master's Degree	180	26.5

*Data Analysis Method*

The analysis will be done via SmartPLS which is a Scale modeling software that can also do Partial least squares statistics. It is useful in latent structural equation models where the data are not normally distributed (Wen et al. 2004) and suitable for complex models with more than one dependent variable, such as those used by exploratory research in social sciences including education (Hair et al., 2017). The former comprise descriptive statistics with the latter considering inner and outer models to examine relationships among constructs. The outer model will analyze the measurement instruments of the constructs, respectively [58], for validity and reliability; whereas, an inner model testifies whether or not any relationships have been found among endogenous variables (hypotheses). This reflects CSTL principles that advocate for advanced analytical strategies to effectively derive insights from complex data, an approach long exalted in the broader educational research literature (Chin (1998).

**Result***Description of Variables*

The description of variables in this study uses a scoring technique with a minimum range of 1 and maximum of 5, aimed at measuring the respondents' perception level of each variable. The index of respondents' answers was calculated using the equation:

$$\text{Index value} = (\%F1x1) + (\%F2x2) + (\%F3x3) + (\%F4x4) + (\%F5x5) \dots\dots\dots(1)$$

In this analysis, the higher end of the score range is figured out as  $(\%F*5)/5=(680*5)/5=680$ , and the lower end, from which they can achieve zero penalty points, reads to be  $(\%F *1) / 4 = (660)$ . From this, the entire calculation indicates an index scale of 136–680 equaling a scope difference in standpoint values from one multitude to another. The three box method for the difference was then put in bins giving us a Slug of 181.3 (rounded up) as illustrated by equation above I hope this helps! Therefore, Chart sorts them into low-level respondents scores of 136 to I317, medium-levelscores of 318–499 and high level which have a Formscore for the classes on 555+. This method enables better studying the spread of responses, further examining study variables, and helping interpret more reliable results (Ghozali, 2018). The classification, given its relevance to the generalization of our data within this study itself, will be required for an overall understanding of teachers' circumstances (Guinness 2006).

*Description of the main variables of leadership*

Table 4: Detailed Description of Respondents' Perceptions of the Principal Leadership Variable Principal leadership fell in the middle, with an average among respondents of just 451.9 on our index score. Every positive upgrade starting at PL. 1 to PL. 5; however, it is always categorized as “moderate”, except for PL (0.2). Category "High," Index 442.0, Rank: #4 I infer that this point illustrates, as previously stated, effective leadership behavior of the principal is usually viewed to be neither too much nor way out but neutral and acceptable. These findings suggest that the leadership practices can be pitched up a notch to make them more effective.

**Table 4.** Description of Principal Leadership Variables

Indicator	Responses					Total	Indeks	Category
	STS	TS	N	S	SS			
PL.1	50 (50)	173 (346)	129 (387)	160 (640)	168 (840)	680 (2263)	452,6	Medium
PL.2	42 (42)	183 (366)	113 (339)	171 (684)	171 (855)	680 (2286)	457,2	Medium
PL.3	52 (52)	183 (366)	130 (390)	153 (612)	162 (810)	680 (2230)	446,0	Medium

PL.4	51 (51)	192 (384)	125 (375)	160 (640)	152 (760)	680 (2210)	442,0	High
PL.5	41 (41)	171 (342)	128 (384)	157 (628)	183 (915)	680 (2310)	462,0	Medium
<b>Index Average</b>							<b>451,9</b>	<b>Medium</b>

Source of data; Observation results processed by the author 2024

#### *Description of Self Efficacy Variables*

Table 5 describes the SE variable. A score of about seven or less indicates that very few respondents reported a given indicator to have been present over their schooling. 1 to SE. 5). The index's unweighted average self-efficacy score is 437.6, a "medium" ranking on the scale as well. The index score of every indicator falls between 428.8 to 445.2, and across the board respondents have a stable sense of "medium" self-efficacy in general regard (Table-4). These results demonstrate that the respondents were pretty confident about their ability to perform and reach goals. They suggest a moderate degree of self-efficacy, neither low or exceedingly high in terms of the results, meaning that there likely is an ability to implement change and improve performance.

**Table 5.** Description of Self Efficacy Variable

Indicator	Responses					Total	Indeks	Category
	STS	TS	N	S	SS			
SE.1	69 (69)	203 (406)	118 (354)	135 (540)	155 (775)	680 (2144)	428,8	Medium
SE.2	45 (45)	196 (392)	135 (405)	146 (584)	158 (790)	680 (2216)	443,2	Medium
SE.3	58 (58)	210 (420)	117 (351)	147 (588)	148 (740)	680 (2157)	431,4	Medium
SE.4	49 (49)	199 (398)	125 (375)	159 (636)	148 (740)	680 (2198)	439,6	Medium
SE.5	49 (49)	188 (376)	129 (387)	156 (624)	158 (790)	680 (2226)	445,2	Medium
<b>Index Average</b>							<b>437,6</b>	<b>Medium</b>

Source of data; Observation results processed by the author 2024

#### *Variable Description of Work Compensation*

The Work Compensation variable, outlined in Table 6 displays responses across five indications (WC. 1 to WC. 5). The Work Compensation index stands at 435.4 and is placed in the "medium" category (average). The index scores of POEA indicators were between 427.8 to 444.0 demonstrating "medium" level work compensation perceived by the respondents for each indicator; These findings indicate that while respondents found the compensation to be good, it was not great. Taken together this would seem to suggest that changes in the way organizationally compensation practices are perceived could improve employee satisfaction and motivation, which should at least bode well for organizational outcomes.

**Table 6.** Description of Work Compensation Variables

Indicator	Responses					Total	Indeks	Category
	STS	TS	N	S	SS			
WC.1	43 (43)	186 (372)	145 (435)	160 (640)	146 (730)	680 (2220)	444,0	Medium
WC.2	43	215	118	156	148	680	438,2	Medium

	(43)	(430)	(354)	(624)	(740)	(2191)		
WC.3	50 (50)	209 (418)	132 (396)	159 (636)	130 (650)	680 (2150)	430,0	Medium
WC.4	50 (50)	202 (404)	123 (369)	162 (648)	143 (715)	680 (2186)	437,2	Medium
WC.5	60 (60)	199 (398)	134 (402)	156 (624)	131 (655)	680 (2139)	427,8	Medium
<b>Index Average</b>							<b>435,4</b>	<b>Medium</b>

Source of data; Observation results processed by the author 2024

#### *Description of Job Satisfaction Variable*

In Table 7 the breakdown of Job Satisfaction variable describing respondents perceptions across five indicators (JS. 1 to JS. 5). Job satisfaction: ~ 541.8 ( Medium) Significantly, each indicator falls between 437.8 and 453.8 i.e there is considerable job satisfaction among respondents at a medium level across the board While this indicates a relatively satisfactory level of enjoyment in the work environment among employees, there is certainly room for enhancement. Bettering elements like work circumstances, recognition and rewards would possibly improve job satisfaction which, in flipmay assist to enhance general organizational outputs and worker retention.

**Table 7.** Job Satisfaction Variable Description

Indicator	Responses					Total	Indeks	Category
	STS	TS	N	S	SS			
JS.1	47 (47)	200 (400)	136 (408)	151 (604)	146 (730)	680 (2189)	437,8	Medium
JS.2	49 (49)	185 (370)	129 (387)	165 (660)	152 (760)	680 (2226)	445,2	Medium
JS.3	37 (37)	191 (382)	122 (366)	166 (664)	164 (820)	680 (2268)	453,8	Medium
JS.4	46 (46)	201 (402)	128 (384)	154 (616)	151 (755)	680 (2203)	440,6	Medium
JS.5	39 (39)	206 (412)	122 (366)	153 (612)	160 (800)	680 (2229)	445,6	Medium
<b>Index Average</b>							<b>541,8</b>	<b>Medium</b>

Source of data; Observation results processed by the author 2024

#### *Desripsi Variable Teacher Performance*

Table 8 offers a general description of the range of survey respondent perceptions for all five items on Teacher Performance (TP. 1 to TP. 5). An average index score over all teachers of 446. The index scores for each indicator range from 444.2 to 452.4, arguing a consistent middle performance at the teacher level across all indicators These results suggest that teachers are functioning at an adequate, if not stellar level. There is obviously room to do better, especially in ways that would improve the performance of instruction and student engagement or enhance educational outcomes.

**Table 8.** Description of Teacher Performance Variables

Indicator	Responses					Total	Indeks	Category
	STS	TS	N	S	SS			
TP.1	44 (44)	150 (300)	173 (519)	192 (768)	121 (605)	680 (2236)	447,2	Medium

TP.2	42 (42)	167 (334)	162 (486)	199 (796)	110 (550)	680 (2208)	540,2	Medium
TP.3	44 (44)	154 (308)	152 (456)	212 (848)	118 (590)	680 (2246)	449,2	Medium
TP.4	40 (40)	151 (302)	159 (477)	207 (828)	123 (615)	680 (2262)	452,4	Medium
TP.5	38 (38)	162 (324)	168 (504)	205 (820)	107 (535)	680 (2221)	444,2	Medium
<b>Index Average</b>							<b>446,9</b>	<b>Medium</b>

Source of data; Observation results processed by the author 2024

### *Observation of Data Analysis Results*

The purpose of the data analysis in this study is to analyze model results via multiparadigm Structural Equation Modeling (SEM) path properties and decomposition for second moment effects using Partial Least Squares (PLS), which can be processed as a multivariate outlier resistant variant of redundant multiple regression problems with fewer distributional assumptions than SEM ductility. It is particularly useful for exploratory research or theory development (Hair and Alamer 2022; Sarstedt, Ringle, and Hair 2022). Analysis is subdivided into the outer and inner model. External model Validity We tested the reliability and construct validity of our constructs using composite reliability, Cronbach's alpha and AVE (Average Variance Extracted) to ascertain that measurement instruments were consistent with one another as well as accurate (Chin 1998). Alternatively, the inner model examines structural relationships between latent variables by examining paths coefficients, R-squared values and significance testing of hypothesized causal relationship (Fornell & Larcker 1981). PLS-SEM specifically, with the goal of predicting key target constructs and contributing to model development through theoretical frameworks/backbones is a more lenient technique compared to CFA for preserving good statistical power under conditions such as small sample size or violations in data normality (Hair and Alamer 2022). SmartPLS has been widely known as a tool capable of handling complex models in various realms, such social sciences marketing and business (Ringle et al. Furthermore, PLS-SEM can estimate simultaneously formative and reflective models making this approach more flexible in assessing the latent structures (Dijkstra and Henseler 2015; Götz, Liehr-Gobbers, and Krafft 2010).

Outer Model Test

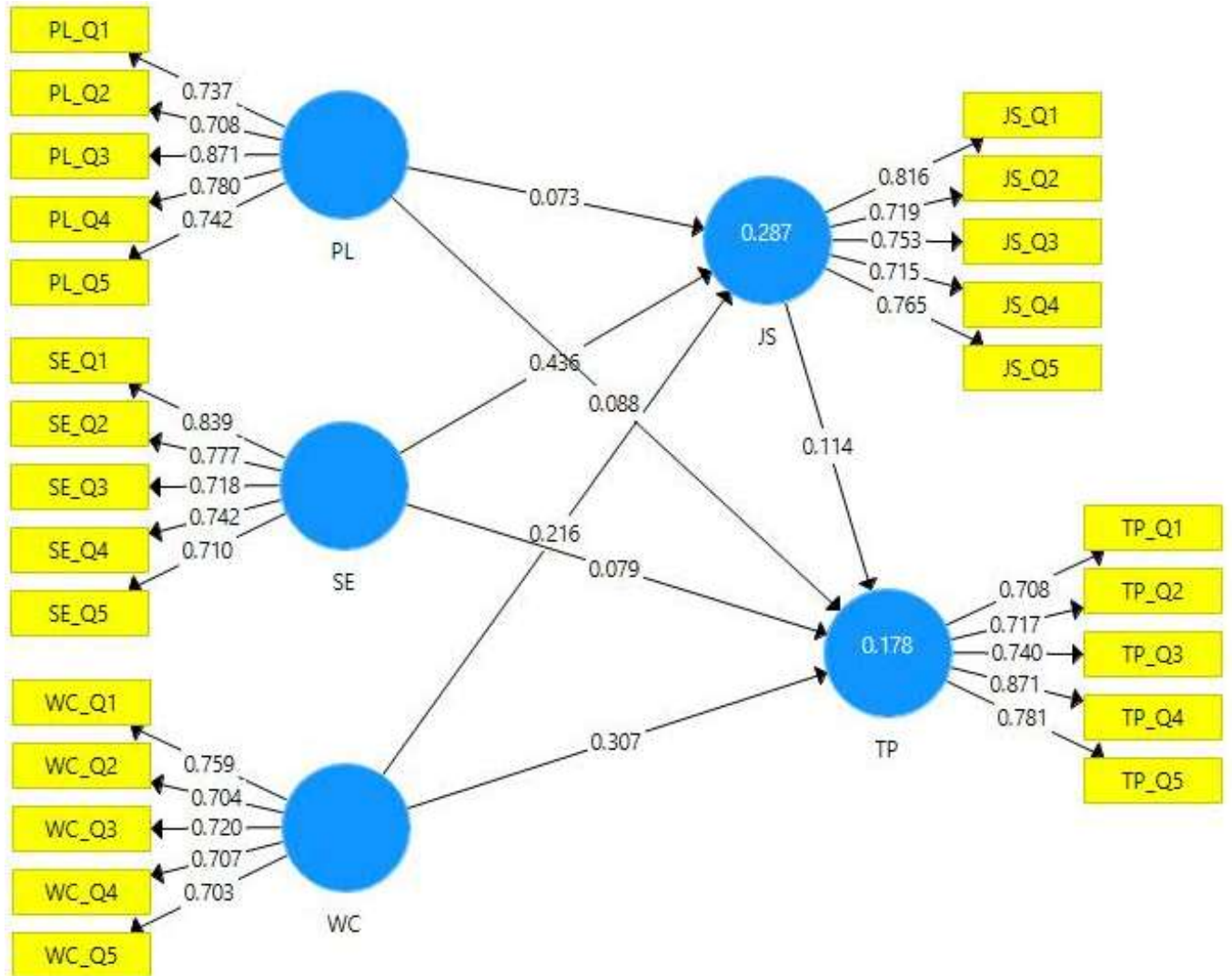


Figure 2. Outer Model Result

Validity Test Data

Table 9. Outer Model Convergent Validity Test Results

VAR	JS	PL	SE	TP	WC
JS_Q1	0,816				
JS_Q2	0,719				
JS_Q3	0,753				
JS_Q4	0,715				
JS_Q5	0,765				
PL_Q1		0,737			
PL_Q2		0,708			
PL_Q3		0,871			

VAR	JS	PL	SE	TP	WC
PL_Q4		<b>0,780</b>			
PL_Q5		<b>0,742</b>			
SE_Q1			<b>0,839</b>		
SE_Q2			<b>0,777</b>		
SE_Q3			<b>0,718</b>		
SE_Q4			<b>0,742</b>		
SE_Q5			<b>0,710</b>		
TP_Q1				<b>0,708</b>	
TP_Q2				<b>0,717</b>	
TP_Q3				<b>0,740</b>	
TP_Q4				<b>0,871</b>	
TP_Q5				<b>0,781</b>	
WC_Q1					<b>0,759</b>
WC_Q2					<b>0,704</b>
WC_Q3					<b>0,720</b>
WC_Q4					<b>0,707</b>
WC_Q5					<b>0,703</b>

Source of data; Observation results processed by the author 2024

#### *Discriminant Validity Test Data*

**Table 9.** Cross Loading Results

VAR	JS	PL	SE	TP	WC
JS_Q1	<b>0,816</b>	0,135	0,362	0,247	0,302
JS_Q2	<b>0,719</b>	0,124	0,415	0,149	0,151
JS_Q3	<b>0,753</b>	0,145	0,400	0,185	0,213
JS_Q4	<b>0,715</b>	0,120	0,331	0,185	0,216
JS_Q5	<b>0,765</b>	0,127	0,293	0,215	0,263
PL_Q1	0,166	<b>0,737</b>	0,070	0,155	0,195
PL_Q2	0,142	<b>0,708</b>	0,104	0,160	0,192
PL_Q3	0,129	<b>0,871</b>	0,092	0,152	0,182
PL_Q4	0,105	<b>0,780</b>	0,064	0,141	0,186
PL_Q5	0,107	<b>0,742</b>	0,069	0,125	0,208
SE_Q1	0,372	0,111	<b>0,839</b>	0,156	0,133
SE_Q2	0,421	0,106	<b>0,777</b>	0,132	0,135
SE_Q3	0,328	0,068	<b>0,718</b>	0,128	0,125
SE_Q4	0,349	0,074	<b>0,742</b>	0,150	0,119
SE_Q5	0,335	0,032	<b>0,710</b>	0,169	0,100
TP_Q1	0,213	0,105	0,188	<b>0,708</b>	0,206
TP_Q2	0,216	0,089	0,130	<b>0,717</b>	0,202
TP_Q3	0,178	0,175	0,121	<b>0,740</b>	0,289
TP_Q4	0,199	0,172	0,164	<b>0,871</b>	0,372



VAR	JS	PL	SE	TP	WC
TP_Q5	0,209	0,176	0,143	<b>0,781</b>	0,329
WC_Q1	0,248	0,226	0,176	0,329	<b>0,759</b>
WC_Q2	0,195	0,174	0,118	0,262	<b>0,704</b>
WC_Q3	0,166	0,188	0,048	0,267	<b>0,720</b>
WC_Q4	0,185	0,167	0,065	0,261	<b>0,707</b>
WC_Q5	0,288	0,139	0,153	0,227	<b>0,703</b>

Source of data; Observation results processed by the author 2024

#### *Discriminant validity test*

**Table 10.** Discriminant Validity Results (AVE)

Var	Average Variance Extracted (AVE)
JS	0,569
PL	0,592
SE	0,575
TP	0,586
WC	0,517

Source of data; Observation results processed by the author 2024

#### *Testing discriminant validity Fornell Larcker criteria*

**Table 11.** Results of Fornell Larcker Criteria

Var	JS	PL	SE	TP	WC
JS	<b>0,755</b>				
PL	0,173	<b>0,770</b>			
SE	0,479	0,105	<b>0,759</b>		
TP	0,261	0,193	0,193	<b>0,765</b>	
WC	0,305	0,251	0,162	0,377	<b>0,719</b>

Source of data; Observation results processed by the author 2024

#### *Composite Reliability Test*

**Table 12.** Results of Composite Reliability

Var	Composite Reliability
JS	0,868
PL	0,878
SE	0,871
TP	0,875
WC	0,842

Source of data; Observation results processed by the author 2024

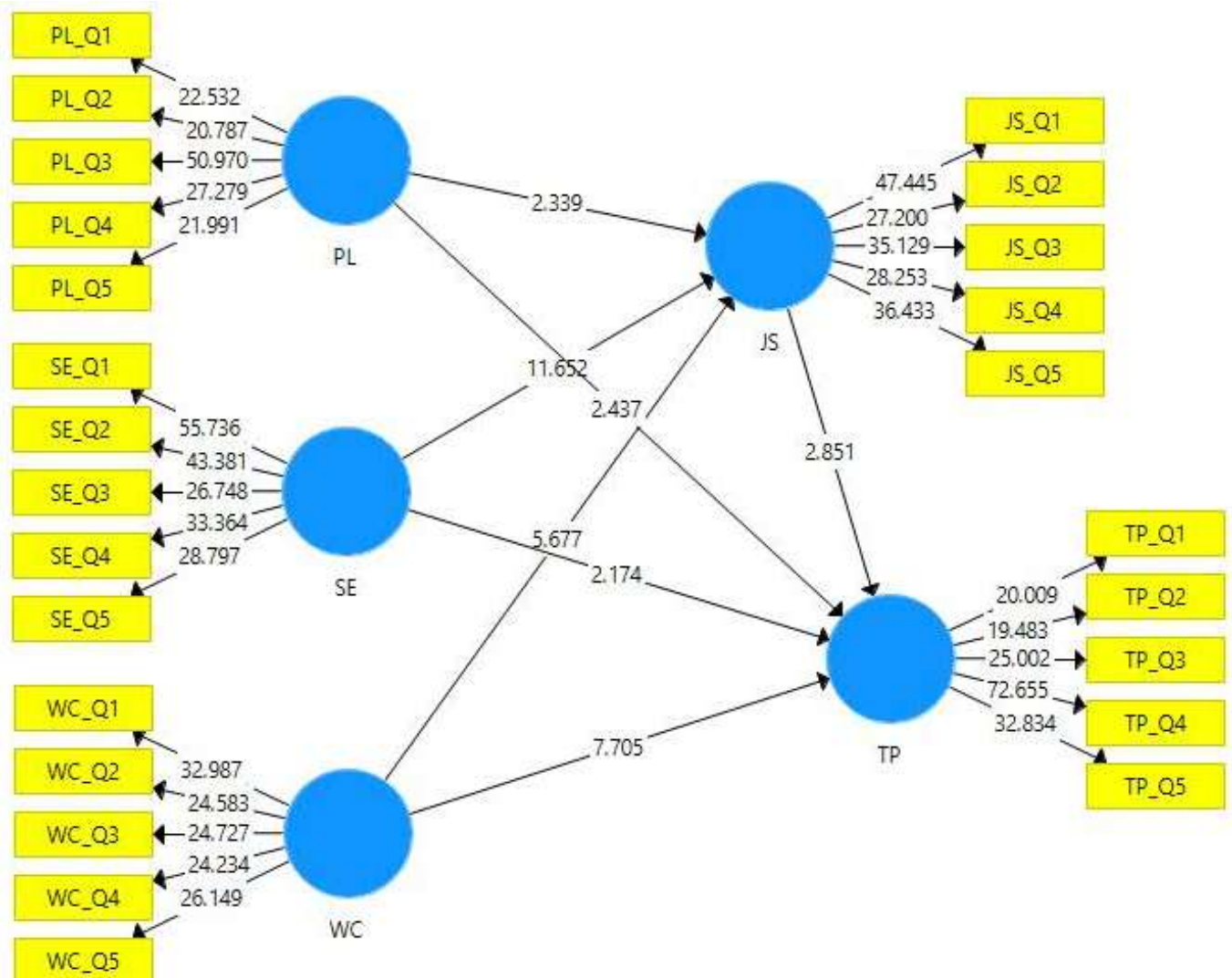
*The Result of Cronbach Alpha*

**Table 13.** Cronbach Alpha Results

Var	Cronbach's Alpha
JS	0,810
PL	0,827
SE	0,814
TP	0,823
WC	0,767

Source of data; Observation results processed by the author 2024

*Observation Data Inner Model Measurement*



**Figure 3.** Inner Model

*Results of the Coefficient of Determination (R-square)*

The test results in the first model obtained an R-square value of 0.287 which indicates that the constructs of principal leadership, self efficacy and work compensation are able to explain job satisfaction, amounting to 28.7% and the remaining 71.3% is explained by other constructs. While the test results in the second model obtained an R-square value of 0.178 which indicates that the constructs of principal leadership, self efficacy, work compensation and job satisfaction are able to explain teacher performance and by 17.8% and the remaining 82.2% is explained by other constructs.

Table 14. Results of the Coefficient of Determination (R-square)

Var	R Square
JS	0,287
TP	0,178

Source of data; Observation results processed by the author 2024

*Path Coefficient Data Result*

The path coefficient analysis explains the relationships between variables tested in this study. As shown in Table 15, the results display significant relationships among many variables and teacher performance (TP). The influence of Servant Leadership (PL) on Teacher Performance was confirmed in the first hypothesis test with a t-statistic value of 2.437 and p-value =0,015 that indicates the positive significant effect to support H1 [11]. Such findings are congruent with current research and advocate for a model of servant leadership to improve teacher effects on educational outcomes (Van Dierendonck, 2011). Secondly, Self Efficacy (SE) demonstrated a significant effect on Teacher Performance with t-values of 2.174 and p-value as equal to or less than 0.030 confirming H2. This might mean that teachers having higher self-efficacy beliefs which in turn facilitate a better performance Incidentally correlate with Bandura (1997); focusing the influence of self efficacy to motivate oneself toward their goals. Secondly, Work Compensation (WC) has strong association with TP where t-statistic and p.value are 7.705 & 0.000 for WC which accepted that the null hypothesis is proven wrong by third explanatory variable Hypothesis H3 saying as it states here: It could be an indicator that generous pay helps get talented teachers, though which will jibe with existing studies find links between employee compensation and job satisfaction/performance (Gerhart & Milkovich 90). The relationship between Job Satisfaction (JS) and Teacher Performance appears to be statistically significant with a t-statistics value of 2851 and p-value at level of significance <0.05 supporting H4 Similarly, the last hypothesis: This is aligned with the notion that fulfilled teachers may be more productive in terms of their job characteristics, as described by Herzberg's Motivation-Hygiene Theory (Herzberg 1966). Together, these results illustrate the criticality of servant leadership in combination with self-efficacy and work compensation as well as job satisfaction for fostering teacher performance that indicates implications for educational management and policy.

Table 15. Hypothesis Test Results Based on Path Coefficient

Var	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
JS -> TP	0,114	0,114	0,040	2,851	0,005
PL -> JS	0,073	0,075	0,031	2,339	0,020
PL -> TP	0,088	0,088	0,036	2,437	0,015
SE -> JS	0,436	0,438	0,037	11,652	0,000

SE -> TP	0,079	0,078	0,037	2,174	0,030
WC -> JS	0,216	0,217	0,038	5,677	0,000
WC -> TP	0,307	0,311	0,040	7,705	0,000

Source of data; Observation results processed by the author 2024

#### *Observation of Intervening or Mediation Test results*

Table 16 shows the results for mediation tests, which provide insight into the indirect effects of principal leadership as well as self-efficacy and work compensation on teacher performance by means of mediating variable job satisfaction. Principal Leadership (PL) and Teacher Performance (TP) through JS The t-statistic of 1.659 with a p-value of 0.098 ( $>.05$ ) suggests that job satisfaction does not mediate the relationship between PL and TP. Accordingly, Hypothesis 5 is not supported. This result shows that the impact of principal leadership on performance is direct (H1A) regardless from its indirect effect through job satisfaction, which insinuates a possible full mediation. Influence of (SE) on TP through JS: The between mediation results reveals that the relationship self-efficacy with teachers performance is significant at a t-value of 2.835 and  $p <.005$  ( $<0.05$ ). Hypothesis 6 is accepted. This piece of evidence indicates that, self-efficacy reflects on job satisfaction and in-turn motivates the teachers to work harder which is inline with [39] who posits that believing in oneself influences how much outcome would be obtained from a task. Work Compensation (WC) -> Job Satisfaction (JS)  $t = 2.367$ ,  $p < 0.05$  → Teacher Performance (TP): The path Work compensation → JS mediated the relationship between work compensation and teacher performance with a significant value of standardised indirect effect at  $\alpha = 0$ . Hypothesis 7 is therefore accepted. Compensation encourages more teachers to engage in teacher performance for the future, and fair compensation does have a major impact on job satisfaction which positively influence all aspects of Teacher Performance confirming that; Adequate Compensation : A Favorable Teacher Job Satisfaction Mediator can be applied in educational setting. Mediation analyses further suggested that job satisfaction was a significant mediator through which teacher efficacy is associated with compensation. This study did not support its mediating role on principal leadership.

**Table 16.** Observation of Mediation Test Results

VAR	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
PL -> JS -> TP	0,008	0,009	0,005	1,659	0,098
SE -> JS -> TP	0,050	0,050	0,018	2,835	0,005
WC -> JS -> TP	0,025	0,025	0,010	2,367	0,018

Source of data; Observation results processed by the author 2024

## Discussion

Given the findings above, a discussion of how principal leadership, self-efficacy compensation and job satisfaction influence teacher performance offers useful insights that are consistent with extant literature in educational practice and management.

First, the large positive correlation between principal leadership (PL) and teacher performance (TP), which is confirms with from leadership theories who proposed that correct quantity of effective will improve

motivation as well as TP. Van Dierendonck (2011) explains how a servant leadership approach contributes directly in terms of teachers performance results. The results were consistent with those expectations, showing that principals who demonstrate effective leadership contribute positively to teacher effectiveness. But given that the mediator of job satisfaction was not significant in this relationship, direct effect on performance may imply leadership's influence over teacher their (rather than indirectly) into Job Satisfaction. Direct area-level leadership is relevant in the educational context which highlights that job satisfaction could work as a mediating variable. According to research by Bush & Glover (2014) such leadership increases teacher engagement, with or without friendliness: agreeableness may facilitate immediate gains in higher levels of teacher concernment but this is not effective strategy for reduce parochialism.

Secondly, the impact of SE on TP was also found to be significant, consistent with Bandura's (1997) self-efficacy theory proposing that someone who possess high level in this variable would have a higher tendency to set challenging goals and sustained through difficulties. Teachers with higher efficacy beliefs are simply more likely to rise above circumstances or take action in their pedagogical practices or invest extra effort for student success, which results in enhanced teacher performance. Empirical research repeatedly asserts that teacher self-efficacy is a core driver of educational outcomes as it impacts classroom management, quality of instruction and student engagement (Klassen et al., 2011). Furthermore, the study also indicated that self efficacy mediates the relationship between job satisfaction and teacher performance which means that teachers who believe in their capabilities tend to get more satisfied from his/her work thus subsequently increasing level of her/his performance. This finding strengthens the concept that self-efficacy is not only a predictive aspect of functioning but also an essential indicator of job satisfaction (Tschannen-Moran & Hoy, 2001).

Similarly work compensation (WC) is directly affecting teacher performance, it has positive and significant relation with TP. This is consistent with much of the prevailing wisdom in organizational behavior research arguing that compensation fairness and competitiveness are among the basic levers available to motivate employees (Gerhart & Milkovich, 1990; for a review of this literature see DeCelles et al.,2018). This is consistent with Herzberg's Motivator-Hygiene Theory, that compensation as a hygiene factor should be paid enough to prevent dissatisfaction and create the space for other motivators. In addition, the mediation effect of job satisfaction between compensation and teacher performance indicated that compensation acts as a critical motivator in which raises can urge teachers to strive for greater effectiveness in their classrooms through enhanced self-satisfaction. We believe this implies that, as Lavy (2007) has suggested, fair payment is crucial not only to current material welfare but also for sustained satisfaction with the job in which a teacher must engage and improve upon over decade-long career.

Nonetheless, mediated the effect of Job Satisfaction (JS) between PL & TP was not supported where it is contradict with prior literature postulate that job satisfaction would mediate in leadership outcomes (Judge et al., 2001). This outcome may suggest that the leadership situation in educational environments is complicated, such as other factors including organizational culture or external policy pressure which might impact on mediating effect of job satisfaction. It indicates that leadership strategies in schools might have a more direct impact on teacher performance than satisfaction. This requires a more nuanced view of leadership styles that is different ways in which leaders behave can lead to improvements on aspects of teacher performance depending, in part at least, by the context and circumstances within each school.

Lastly, in the mediation model analysis of self-efficacy and work compensation as predictors to JS that related directly or indirectly perceived on teacher performance proved this study could not be separated between intrinsic factors versus extrinsic influenced of those teachers are elites. In case of work compensation, it is crucial that job satisfaction mediates the expected relationship with professional development (providing evidence for the need to create differentiated forms of payment not only to capture skilled teachers but also able to manage their retention through increasing your level of job satisfaction). This result highlights that meeting both economic and psychological needs of teachers is vital for an active, high performing work environment to be developed (Dinham & Scott 2000).

## Conclusion

This study explored the extent to which principal leadership, self-efficacy, compensation and job satisfaction contribute to teacher performance in Indonesia. According to the research, this study also finds that different aspects may have a significant impact on teacher performance through job satisfaction as the mediating variable. Confirmation of the model suggests that self-efficacy and work compensation have effect significant for teacher performance, through job satisfaction as an intervening variable. While principal leadership had a direct effect on performance, it did not show any mediation through job satisfaction. These findings provide further insight into the dynamics that affect teachers' work outcomes and corroborate extant motivational, leadership, and compensation theories with empirical evidence.

In light of these results, suggestions are made for future studies:

- **Strengthen Teacher Self Efficacy:** These institutions must be focusing on professional development programs that serve to strengthen the self efficacy of teachers because higher confidence and belief in oneself leads towards improved job performance. Goal-setting, skills development and feedback programs are critical.
- **Reset Rewards:** Create these stable and inspiring compensation designs that will not only call out for performance, but also provide job pride. As an example, institutions could tie compensation to milestones of professional development/mastery and teaching outcomes.
- **Models of Supportive School Leadership:** Principals and administrators should follow leadership styles that affect teacher performance directly, utilizing servant-leadership approaches to support collaboration, motivation and personal development.
- **Concentrate on Job Satisfaction Initiatives:** Besides compensation and leadership, investment in job satisfaction initiatives. Key steps are promoting that teachers feel valued, providing a way to advance their career and creating a good environment.

Educational headlines are screaming that alongside instructional materials, district administrators and school level managers should take immediate steps for improving teacher efficacy followed by unique strategies focusing on its core components like self-efficacy with leaderships in this delving juncture of education. By working to improve these, the result will be a more productive and safer learning environment that improves student outcomes. There would be inescapable need for synergy and cooperation between education stakeholders government bodies, school management, teachers to spur the reforms needed both in compensation, leadership (how schools are administered) and job satisfaction. This research has prompted politicians to engage in evidence-based interventions that can be directed towards improving teacher motivation and increasing the overall effectiveness of teachers, as well as pushing Indonesia's improvement further into the educational realm.

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## Author Contribution

Jerry Puspitasari: Conceptualization, methodology, data collection, writing—original draft.

Joko Sutarto: Data analysis, interpretation of results, writing—review & editing.

Suwito Eko Pramono: Supervision, project administration, review editing.

## Yeri Sutopo: Software Application (Smartpls), Validation, Data Curation

All authors have read and agreed to the published version of the manuscript.

### Conflict of Interest

The authors declare no conflict of interest regarding the research, authorship, and publication of this article.

### Data Availability Statement

The data supporting the findings of this study are available upon reasonable request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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