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The Innovation Paradox: Why Does Innovative Teacher Behavior Decrease Performance?

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KEYWORDS

Innovative Work Behavior;
Teachers' Professional Performance;
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Performance Paradox.

ABSTRACT

This study examines the paradoxical relationship between innovative work behavior and teachers' professional performance at Yayasan Al Abidin Surakarta. While innovation is commonly associated with improved performance, the findings reveal a very weak and negative correlation ($r = -0.032$; $p = 0.643$). Using a quantitative approach with Pearson correlation and linear regression, data were collected from 210 teachers through stratified random sampling. The analysis indicates that teachers' innovative efforts do not automatically enhance professional performance, especially when not supported by institutional backing, clear evaluation systems, and organizational readiness for change. In such contexts, innovation may become an additional burden, potentially triggering stress, role conflict, and reduced work effectiveness. These findings suggest that innovation in educational settings must be viewed contextually. The assumption that every innovative action necessarily leads to constructive outcomes requires reconsideration. Instead, schools need to build an ecosystem that fosters new ideas, provides space for experimentation, and ensures alignment between innovation and institutional goals. Only then can innovative behavior make a meaningful contribution to teachers' professional practices. This study contributes to the broader understanding of the complexity of innovation in education and highlights the importance of developing adaptive policies and management strategies. Such an approach can prevent innovation from becoming a source of disruption and instead position it as a driver for enhancing educational quality.

Introduction

Innovative work behaviors are often associated with improved efficiency and performance in many areas, including education. Innovative work behavior is defined as the role of each person in contributing to the advancement of innovation. (Messmann et al., 2022). An employee, for example, can increase the potential for innovation in the work environment through comprehensive training in innovative work behavior. (Anjum & Zhao, 2022). Innovative work behavior is determined by the factors of competence, skills, and specialized knowledge within the workforce. In essence, improving personal employability is achieved through an innovative work culture that fosters effective work behavior. (Stoffers et al., 2019). In the education sector, creating innovative work behaviors is essential because it can spur significant improvements in teaching methodologies, administrative processes, and overall institutional performance. (Kutieshat & Farmanesh, 2022).

Innovative teachers are expected to develop more effective learning approaches by integrating new methods and technologies that enhance student engagement, motivation, and

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learning outcomes. Innovative teaching practices are demonstrated by the integration of new methodologies, technologies, and pedagogical strategies that increase student engagement and learning outcomes. (Vidergor, 2023). Maka mempertahankan kualitas inovasi, menumbuhkan dan meningkatkan praktik inovatif guru menjadi penting (Lambriex-Schmitz et al., 2020a).

In numerous previous studies, teacher innovation has been linked to improved student performance. Teacher innovation encompasses a range of practices, including the adoption of new pedagogical strategies, the integration of technology, and ongoing professional development. (Pozo-Rico et al., 2023). The impact of this practice not only enhances the quality of the teacher's instruction but also creates a more engaging and effective learning environment for students. (O'Dwyer et al., 2023). An innovative approach to each teacher's task can make the resources available in the school more effective, ultimately leading to better educational outcomes. (Graham et al., 2023).

The professional performance of teachers includes pedagogic, social, personality, and professional competencies. These competencies are essential for more effective teaching and learning, as they enable teachers to create a supportive learning environment, engage students more actively, and improve their academic and social development. (Lozano-Peña et al., 2021). Teachers with good pedagogical skills will be able to adapt their teaching methods to suit different learning styles and ensure that all students achieve their learning goals. (Fakhrutdinova et al., 2020). Teachers with high social competence will be able to create a supportive classroom environment, encouraging participation and collaboration from all students. (Ninčević & Vukelić, 2023). Personal competence, also commonly referred to as personality competence, encompasses traits such as self-awareness, emotional regulation, and stress resilience. This kind of behavior will help teachers manage stress and maintain a positive attitude in stressful situations. (Lozano-Peña et al., 2021). Meanwhile, according to Yli-Pietilä et al (2024)Teachers are equipped with strong professional competence and are proactive in seeking opportunities for development, enabling them to integrate new knowledge and skills into their teaching practices.

The relationship between innovative behavior and teacher performance has been inconsistent, often yielding contradictory results. This inconsistency can arise from a variety of causes, including the conceptualization of innovative behaviors that differ, the influence of contextual and psychological factors, and the role of leadership and organizational culture. (Lambriex-Schmitz et al., 2020b). Innovative Work Behavior (IWB) is often translated and measured differently across studies, resulting in inconsistent findings. (Lambriex-Schmitz et al., 2020b). Placing too much importance on innovation without considering the needs and the abilities of each teacher and the capabilities of the educational institution can lead to negative results. As suggested Mooi et al. (2020) There may be "too much" innovation, which can lead to not always leading to improved performance, especially in conditions of high environmental uncertainty. (Mooi et al., 2020).

The empirical literature describing the potential neutral or even negative impact of teachers' innovative behavior on their professional performance remains minimal. Usually, innovation is generally seen as beneficial, but the issue of complexity affecting teaching performance is not fully understood. (Karimi et al., 2023). Existing research typically focuses only on the positive results of innovation, overlooking the lack of understanding of the surrounding conditions in which innovation may not lead to improved performance, or even have the opposite effect, which can be detrimental. (Krstikj et al., 2022). According to Li et al (2023) The innovation potential that leads to negative or vice versa results in the field of teaching is still not widely explored. (Li et al., 2023).

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The academic exploration of the dynamics of innovation and teacher performance in the Indonesian school context remains inadequate. This gap is particularly evident in the context of the interconnection between educational innovation and teacher performance, as well as the effective measurement and improvement of these elements within the Indonesian education system. (Lim et al., 2020). This includes exploring challenges and opportunities, particularly for schools in Indonesia, such as cultural, environmental, government policies, and resource availability, which can impact teacher innovation and performance. (Lambriex-Schmitz et al., 2020b).

There is a lack of conceptual and empirical clarity on whether innovation truly adds value in the context of work that is burdened with administrative demands and high performance expectations. This gap is significant as organizations strive to balance innovation with operational efficiency (Dinu et al., 2023). Some of the research results offer valuable insights into various aspects of innovation, collectively underscoring the need for more empirical research to understand how innovation can be effectively integrated into work contexts with high administrative demands and performance expectations (Alaskar, 2023).

It is essential to examine specific contexts in which innovation has a negative impact on professional performance. Understanding the specific circumstances under which innovation may not provide performance improvements is critical to developing effective strategies and policies. (Lewis, 2025). Research by Castellano et al (2023) Shows that innovation may not constantly improve performance if labor skills are not aligned with the productive structure of the region. A similar study was conducted by Chang et al. (2023) This shows that innovation may not be able to improve performance if the social dynamics in a company do not support creative and innovative behavior.

The study aims to investigate this relationship in schools affiliated with Islamic-based private foundations.

Method

This study uses a quantitative approach with a correlational design to test the relationship between innovative work behavior and teachers' professional performance. The study subjects were 420 teachers from elementary, junior high, and high school levels, under the auspices of the Al Abidin Foundation in Surakarta. The sample was selected using a stratified random sampling technique based on the proportion of teachers at each level of education. From this population, 210 respondents who met the inclusion criteria were obtained and calculated using the Slovin formula.

The research instrument was prepared in the form of an online questionnaire using Google Forms. The measurement of innovative work behavior is conducted through 15 statement items that have been developed and adjusted to align with relevant theoretical indicators. Teachers' professional performance instruments are prepared based on competency standards that include pedagogic, personality, social, and professional dimensions. All items utilize a five-point Likert scale and have undergone a construct validity and reliability test process, with results that meet statistical criteria.

Data collection is conducted uniformly across all educational units within a specified period. Data analysis was conducted using the Pearson correlation test to determine the direction and strength of the relationship between variables, followed by linear regression analysis to identify significant influences. Statistical prerequisite tests—including normality, linearity, and homocedasticity—are performed to ensure that the data meet the assumptions of the parametric model. The entire analytical procedure was executed using SPSS statistical software version 25 and Smart PLS.

Result

The results of Pearson's correlation analysis showed that the relationship between innovative work behavior (X) and teacher professional performance (Y) was statistically insignificant, with a correlation coefficient of r = –0.032, p = 0.643, and a value of t(210) = –0.464. This figure is statistically insignificant, indicating a very weak relationship with a negative direction. These findings indicate that the higher the level of teachers' innovative behavior, the higher the level of their innovative behavior, is not always directly proportional to their improved professional performance. There are indications that, in certain contexts, innovative behavior can negatively impact work performance. This paradox requires further understanding in terms of the context and process of implementing innovation itself.

Path analysis using SmartPLS yielded a path coefficient of β =- 0.066 for the variable X to Y, which supports the previous correlation results. This value indicates the direction of a weak negative influence. The value of f^2 = 0.017 indicates that the influence of variable X on Y is relatively small in the category of effects. Nevertheless, R^2 Y = 0.741 indicates that the model as a whole can explain 74.1% of the variation in teachers' professional performance, implying that other variables contribute more to performance than innovation.

Furthermore, the validity and reliability indicators of the X construct show stable results. Cronbach's Alpha values = 1, AVE = 1, as well as Outer and Inner VIF values = 1, indicate that there is no multicollinearity and that these constructs are highly internally consistent. The significance value of the Kolmogorov-Smirnov normality test of 0.079 also indicates that the data on innovative work behavior are usually distributed, so that the parametric analysis used has met the basic assumptions.

Table 1. Regression Coefficients

Model		Coefficients		Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	57,282	3,297		17,375	0,000		
	Perilaku Kerja Inovatif (X1)	-0,025	0,054	-0,032	-0,464	0,643	1,000	1,000

a Dependent Variable: Kinerja Profesional Guru (Y)

Discussion

Overall, these findings challenge the conventional view that innovation is always positively correlated with performance. In the context of teachers under the Al Abidin Foundation in Surakarta, these results open up room for reflection: it could be that the innovations carried out are ad-hoc, not integrated with the performance appraisal system, or even increase the workload of teachers without adequate support. Therefore, this research highlights the importance of a supportive work environment, a fair evaluation system, and a shared understanding of the direction of innovation, enabling innovative behavior to have a genuinely positive impact on professional performance.

The assumption that innovation inherently always leads to improved performance has been widely embraced in the management and organizational literature. However, a growing body of research is highlighting that these relationships are not always linear or positive.

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One of the most direct explanations for why innovation does not constantly improve performance is the phenomenon of innovation failure. Chatterjee, Chaudhuri, Mariani, and Wamba (2023) in their article "The consequences of innovation failure: An innovation capabilities and dynamic capabilities perspective" explicitly state that "Innovation failure negatively influences organizational performance." (Chatterjee et al., 2023).

They highlight that most innovation projects—between 40% and 90%—end up with total or partial failures. (Chatterjee et al., 2023). These failures can be attributed to a range of factors, including weak commercial viability and inadequate technological feasibility. While failures can be a valuable source of learning in the long run, their direct impact on organizational performance is often negative. In the context of teachers, this means that efforts to implement new teaching methods, innovative curricula, or untested educational technologies can consume time, resources, and energy without resulting in significant improvements in student learning outcomes or teaching efficiency. In fact, if an innovation disrupts an established routine or lacks support, it can lead to a decline in performance.

Not only project failures, but the literature has also begun to discuss the "dark side of innovation". Coad (2021) in its editorial "Editorial: the dark side of innovation" emphasizes that innovation can have both good and bad effects, and that these positive and negative outcomes are often not evenly distributed. This means that while innovation may benefit some parties or in some aspects, it can be detrimental to others or in different aspects of performance. For example, innovations that focus on efficiency may compromise creativity, while innovations that prioritize technology may overlook important pedagogical aspects. In the context of teachers, this could mean that an excessive focus on specific innovations (e.g., the use of new digital applications) can distract from effective basic teaching practices or personal interactions with students, ultimately negatively impacting overall teaching performance.

Performance Paradox Theory, put forward by Marshall W. Meyer and Vipin Gupta (1994), offers a broader perspective on why performance measurement often does not align with expectations. This theory posits that organizations tend to accumulate an increasing number of performance metrics; however, these new metrics often exhibit a weak or even zero correlation with existing metrics. This creates a situation where organizations may feel they have more control due to the abundance of data, but do not understand exactly what performance is or how different aspects of performance interrelate. (Choi & Park, 2023).

In the context of teachers' innovative behaviors, the performance paradox may explain why negative correlations arise. Suppose teacher performance is measured by traditional metrics (e.g., student test scores, curriculum adherence, classroom discipline) while innovative behavior is measured by different metrics (e.g., number of innovative projects, adoption of new technologies). In that case, it is not surprising that the correlation between the two is weak or even negative.

Innovations that teachers make may not directly contribute to existing performance metrics or may even divert resources and focus away from achieving those metrics. For example, a teacher who innovates with alternative assessment methods may not immediately see an improvement in standardized test scores, even if those innovative methods enhance students' conceptual understanding.

In addition to the above theories, several studies have also shown how mediating factors can change the relationship between innovation and performance to be negative. One of the important factors is burnout and excessive workload. Gkontelos, Vaiopoulou, and Stamovlasis (2023) In their study of innovative work behaviors, teachers

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found that burnout can lead to "reduced performance in teaching, with negative effects on both the classroom...". Although their main focus is burnout, the implications are clear: innovation efforts that are not well supported or that significantly increase teachers' workloads can lead to physical and mental burnout.

When teachers experience burnout, their ability to teach effectively, manage classes, and interact with students can decline, ultimately negatively impacting their professional performance, regardless of how innovative they try. Innovation, without adequate support, can be a source of stress rather than a performance driver. (Felstead et al., 2020).

In summary, the literature suggests that the relationship between innovation and performance is more complex than a simple positive correlation. Innovation failure, the dark side of innovation, performance paradoxes, and mediating factors such as burnout all contribute to the understanding of why innovative behaviors, under certain conditions, can be negatively correlated with performance. This understanding serves as the basis for analyzing the practical causes of negative correlations in a given dataset, which will be discussed in the next section.

The very weak negative correlation between innovative work behavior and teacher professional performance found in this data, although not statistically significant, indicates a dissonance between innovation efforts and measurable performance outcomes. Based on previous theoretical reviews and journal articles, as well as practical considerations in the educational context, several factors can explain this phenomenon..

Conclusion

The study presents a surprising yet important finding: teachers' innovative work behaviors do not necessarily correlate positively with their professional performance. With weak and negative correlation values, accompanied by statistical insignificance, these results challenge the common assumption that the more innovative a teacher is, the higher his or her performance. On the other hand, in specific contexts, innovation can become an additional burden that interferes with daily work achievements.

These findings underscore the importance of considering the contextual factors that surround teachers' innovative work. Inadequate institutional support, a lack of innovation implementation training, and high administrative pressure can turn innovation into a psychological burden rather than a source of performance improvement. In other words, when teachers are expected to innovate in an unprepared system, what emerges is not an increase in performance, but the potential for fatigue and work dissonance.

This result opens up a vast space for reflection for policymakers and managers of educational institutions. Innovation is not just the result of individual creativity, but the fruit of a supportive ecosystem: organizational culture, transformational leadership, functional incentives, and a fair and adaptive evaluation system. Therefore, internal policy interventions need to be designed not only to encourage innovation but also to ensure that the system as a whole is ready to support and facilitate its implementation.

This study has examined the paradoxical phenomenon of innovation in the context of teachers' professional performance, where innovative work behaviors show a very weak negative correlation with performance. Although this correlation is not statistically significant, its existence challenges the common assumption that innovation is always positively correlated with improved performance. Through data analysis and literature review,

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we have identified several key factors that may explain this paradox, both theoretically and practically.

Theoretically, this paradox can be explained by concepts such as innovation failure. (Chatterjee et al., 2023) The Dark Side of Innovation (Coad et al., 2021), and the paradox of performance (Fayezi, 2022). Innovation does not always work, and even when it does, the impact can be uneven or have unintended consequences. Additionally, misalignments between innovation metrics and performance metrics can lead to weak or negative relationships. Negative mediating factors, such as excessive workload and burnout, also play a crucial role, where unsupported innovative efforts can lead to burnout and decreased performance.

Practically, some of the causes of this negative correlation include Innovation Implementation Failure, Where Innovation may fail due to a lack of resources, inadequate skills, or incompatibility with the local context. Excessive Workload and Burnout, Innovative efforts that are not balanced with support can increase teacher workload, leading to burnout and decreased performance. Misalignment of Performance Metrics and Innovation Goals. Performance metrics that are narrow or short-term oriented may not capture the broader or long-term benefits of innovation. Resistance to Change and an Unsupportive Environment. A school environment that is not supportive or resistant to innovation can hinder teachers' efforts and lead to frustration. Quality of Innovation Not Guaranteed, Innovations carried out without a strong theoretical basis or adequate evaluation may be ineffective or even detrimental.

The findings of this study have important implications for education policymakers, school administrators, and teachers through A Holistic Approach to Innovation. Innovation should not be seen as the end goal, but rather as a tool to achieve the larger educational goals. Policies should encourage innovation that is planned, integrated, and aligned with students' learning and development goals. To ensure successful innovation, teachers must be provided with adequate resources, including sufficient time, training, technology, and administrative support. This will help reduce the workload and risk of burnout. Development of Comprehensive Performance Metrics, teacher performance evaluation systems need to be expanded to include more comprehensive metrics that can capture the impact of innovation, including qualitative and long-term outcomes. This will help align innovation goals with performance assessments. Building a Supportive Innovation Culture, school leadership must actively create an environment that encourages innovation, experimentation, and provides space for teachers to learn from failure. This includes overcoming resistance to change and promoting collaboration. Focusing on Innovation Quality, it is important to ensure that the innovations implemented have a strong pedagogical basis and are supported by evidence. Teachers need to be encouraged to do critical reflection and evaluation of their innovative practices. Workload Management and Teacher Wellbeing, policies should consider the impact of innovation on teachers' workload and take steps to prevent burnout. This can include a reduction in non-teaching tasks, the provision of psychological support, or recognition of innovative efforts.

By understanding this paradox of innovation, we can develop more effective strategies to harness the potential of innovation in education, ensuring that teachers' innovative efforts contribute to improving the overall performance and quality of education.

Finally, this research makes an initial contribution to understanding the complex relationship between innovation and performance in the education sector. There are still many aspects that need to be explored further, such as the dimension of innovation quality, teachers' perception of the meaning of innovation, and the interaction between personal competence and organizational policies. With a more in-depth and comprehensive approach,

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future research can provide a more complete understanding of how to bridge the goodwill of innovation with meaningful work achievements..

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