

A POP-SDM Study on Bogor's Private Islamic Elementary School Teachers City: Using Collaboration Effectiveness, Transformational Leadership, ICT Literacy, and Knowledge Sharing to Model and Enhance Teacher Creativity

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ABSTRACT

In order to increase teacher creativity, this study examines a modeling and optimization framework that makes use of the POP-HRM technique. The study was conducted in private Islamic primary schools in Bogor City, Indonesia, and involved 248 teachers. To use a quantitative explanatory design, survey data was examined using path analysis and SITOREM. The findings demonstrate that every independent factor significantly influenced teacher creativity, with knowledge sharing being the strongest predictor ($\beta = 0.483$), followed by transformational leadership ($\beta = 0.120$), ICT literacy ($\beta = 0.153$), and collaborative effectiveness ($\beta = 0.202$). Additionally, the impacts of leadership, teamwork, and ICT literacy on creativity are mediated by knowledge sharing. The suggested model offers strategic direction for methodical and long-term teacher development and has a strong explanatory power ($R^2 = 0.857$).

INTRODUCTION

Given the curriculum's growth, the rapid advancement of technology, and the increased demand for innovative, student-centered learning, teacher creativity has become a critical issue in modern education. In view of the Industrial Revolution 4.0 and the emergence of Society 5.0, educators must not only acquire pedagogical competences but also continuously innovate, adapt, and creatively integrate technology into teaching practices. Teachers can encourage students, provide meaningful learning experiences, and adapt to a variety of learning requirements when they are creative. However, empirical data shows that teacher creativity is still unequal and sometimes underdeveloped, particularly in primary school.

Theoretically, most contemporary research focuses on partial relationships, including how teacher creativity is affected by leadership, professional development, or ICT use. There hasn't been much focus on integrating concepts from human resource management that reflect both direct and indirect relationships among organizational elements. Furthermore, little is known about the mediating function of information sharing as a strategic mechanism linking cooperation, leadership, and ICT literacy to teacher creativity, particularly in faith-based primary education environments.

This study proposes a modeling and optimization framework that employs the POP-HRM (Modeling and Optimization of Human Resource Management Strengthening) approach to enhance teacher creativity in order to bridge these gaps. The study's 248 replies constitute a unique and underrepresented sample of Bogor's private Islamic elementary school teachers. In addition to determining the structure and strength of causal relationships between variables, this study employs route analysis and SITOREM to establish priority indicators for strategic intervention.

Three contributions are made by this study. First, it advances theory by fusing creativity research with educational human resource management modeling. Second, it provides empirical evidence of how teacher creativity is stimulated by knowledge sharing. Thirdly, it offers a practical optimization methodology that supports systematic, data-driven, and sustained teacher development. These contributions establish the study as a major advancement in educational management research and practice.

LITERATURE REVIEW

Teacher Creativity Theory

Teacher creativity is the ability to develop novel and appropriate ideas, approaches, and teaching strategies that enhance student engagement and instructional efficacy. Adaptability, ingenuity, problem-solving abilities, and the ability to integrate a range of resources – including technology – into the learning process are all associated with creativity in educational contexts. Innovative teachers are more adept at developing captivating classes, motivating students, and adapting their curricula to suit changing learning requirements. ICT literacy, knowledge sharing, transformational leadership, and collaboration effectiveness

In order to achieve common learning goals, effective cooperation strongly emphasizes teachers' shared commitment, communication, and group engagement. The transformational leadership ideology places a strong emphasis on how leaders may motivate, inspire, and push educators to go above and beyond the call of duty. ICT literacy is the capacity of educators to use digital tools and information technologies to improve learning. The principle of knowledge sharing explains how group learning and creativity are fostered by teachers exchanging ideas, experiences, and knowledge.

Previous Empirical Studies

Previous quantitative studies have shown that collaboration effectiveness has a favorable effect on teacher creativity through increased teamwork and professional engagement. It has been demonstrated that transformational leadership significantly predicts innovative teaching practices by fostering a supportive and empowering school atmosphere. There is a significant correlation between creativity and ICT literacy, particularly when it comes to innovative instructional design. Furthermore, several research confirm that information sharing mediates the effects of leadership, cooperation, and ICT literacy on teacher creativity. However, some research indicates that when knowledge sharing is restricted, the direct effects of leadership are reduced, highlighting the necessity for integrative modeling. These conflicting findings lend credence to the suggested theories and call for additional empirical investigation within a thorough framework.

H1: Collaboration effectiveness has a favorable and considerable impact on teachers' creativity.

H2: Transformational leadership has a favorable and considerable impact on teachers' creativity.

H3: ICT literacy has a favorable and considerable impact on teachers' creativity.

H4: Knowledge sharing has a favorable and considerable impact on teachers' creativity.

H5: Knowledge sharing acts as a mediator between the effectiveness of cooperation and teacher creativity.

H6: Knowledge sharing acts as a mediator between transformative leadership and teacher creativity.

H7: Knowledge sharing acts as a mediator between ICT literacy and teacher creativity.

If your study is quantitative, please include a contextual framework after the hypothesis section; if it is qualitative, please include your mind map.

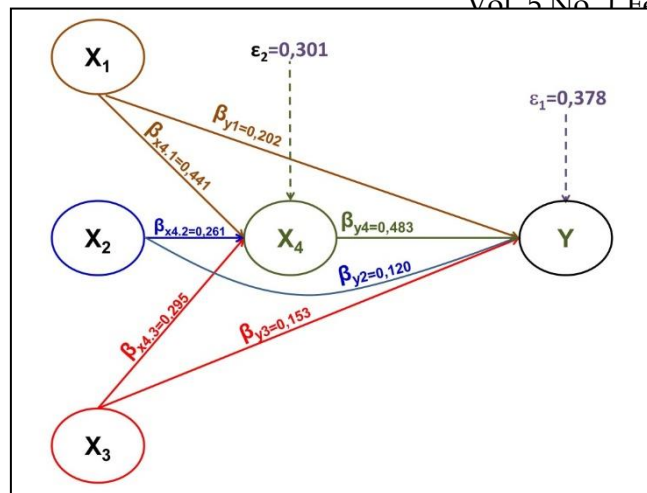


Figure 1. Conceptual Framework

METHODOLOGY

A survey method with a quantitative explanatory design was employed in this investigation. Using proportionate sample, the population consisted of 248 private Islamic elementary school teachers in Bogor City. The data was assessed using path analysis and SITOREM to examine direct, indirect, and optimized impacts.

RESEARCH RESULT

There were multiple phases to the analysis. The validity, reliability, normalcy, and linearity of the data were evaluated. Next, direct and indirect impacts, including mediation testing, were examined using path analysis. Optimization priority indicators were found using SITOREM analysis. Numbered tables and path diagrams with coefficients and significance values are used to summarize the findings.

Table 1. Three Box Method

Rank	Path Relationship	Coefficient (β)	t-value	Sig. (p)	Effect Type
1	Teacher Creativity (Y) → Knowledge Sharing (X4)	0.483	6.409	0.000	Direct
2	Effectiveness of Collaboration (X1) → Exchange of Knowledge (X4)	0.441	8.327	0.000	Direct
3	Effectiveness of Collaboration (X1) → Creativity of Teachers (Y)	0.202	2.681	0.008	Direct
4	Knowledge Sharing (X4) → ICT Literacy (X3)	0.295	7.251	0.000	Direct
5	Teacher Creativity (Y) → ICT Literacy (X3)	0.153	2.722	0.007	Direct
6	Creativity of Teachers (Y) → ICT Proficiency (X3)	0.261	6.013	0.000	Direct
7	Teacher Creativity (Y) → Transformational Leadership (X2)	0.120	2.057	0.041	Direct

Rank	Path Relationship	Coefficient (β)	t-value	Sig. (p)	Effect Type
8	Effectiveness of Collaboration (X1) → Sharing of Knowledge (X4) → Creativity of Teachers (Y)	0.213	Sobel > 1.96	0.000	Indirect
9	Teacher Creativity (Y) → Knowledge Sharing (X4) → ICT Literacy (X3)	0.142	Sobel > 1.96	0.000	Indirect
10	Teacher Creativity (Y) → Knowledge Sharing (X4) → Transformational Leadership (X2)	0.126	Sobel > 1.96	0.000	Indirect

DISCUSSION

The results verify that organizational and administrative factors have a significant impact on teacher creativity. In order to translate teamwork, leadership, and ICT literacy into innovative teaching methods, knowledge exchange is essential. By highlighting the significance of integrated human resource optimization in educational contexts, our findings go beyond earlier research.

CONCLUSIONS AND RECOMMENDATIONS

According to the study's findings, information sharing that is bolstered by productive teamwork, ICT literacy, and transformational leadership best fosters teacher creativity. To promote sustainable and data-driven teacher development, schools are advised to use human resource optimization techniques and institutionalize knowledge-sharing methods.

ADVANCED RESEARCH

By combining the POP-HRM model with route and SITOREM analyses to maximize teacher creativity, this work enriches educational human resource research. It provides empirical evidence that, in faith-based primary education settings, information sharing plays a critical mediating role between ICT literacy, teamwork, and leadership.

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