

RESEARCH KNOWLEDGE, SELF-EFFICACY, AND PRODUCTIVITY OF ELEMENTARY TEACHERS IN THE DIVISION OF COTABATO: A CONVERGENT ANALYSIS

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ABSTRACT

This study examined the relationship between research knowledge, research self-efficacy, and research productivity among elementary teachers in the Division of Cotabato. Using a convergent mixed-methods design, quantitative and qualitative data were collected simultaneously to provide a comprehensive understanding of how knowledge and confidence influence research output. A total of 377 teachers participated in the survey, while 25 were selected for in-depth interviews. Findings revealed that teachers demonstrated very high levels of research knowledge across theoretical, methodological, literacy, and application domains. Similarly, research self-efficacy in instructional strategies, classroom management, student engagement, and collaboration was found to be very high. Research productivity in terms of output, engagement, and utilization was also rated very high. Statistical analyses showed strong and significant relationships between research knowledge and self-efficacy, as well as between self-efficacy and research productivity. Regression results indicated that research application was the strongest predictor of self-efficacy. Qualitative findings supported these results, highlighting teachers' experiences of confidence, collaboration, and practical use of research in teaching. The study concludes that research self-efficacy mediates the relationship between knowledge and productivity and recommends strengthening applied research training and institutional support systems.

Keyword: *research productivity, self efficacy, research knowledge*

1. INTRODUCTION

Research productivity among teachers plays a critical role in improving classroom instruction and overall school performance. In contemporary education, teachers are expected not only to deliver instruction but also to engage in research activities that inform evidence-based practices. However, despite the recognized importance of teacher-led research, many educators encounter challenges in translating research knowledge into actual productivity due to limited confidence and support systems.

Research knowledge provides the foundational understanding necessary for conducting scholarly inquiry, including theoretical frameworks, methodological approaches, and research literacy. Teachers who possess strong research knowledge are more capable of designing, implementing, and evaluating studies relevant to their instructional context. However, knowledge alone does not guarantee productivity. Self-efficacy, defined as an

individual's belief in their capability to perform specific tasks, plays a crucial role in determining whether teachers will engage in and sustain research activities.

Existing literature suggests that teachers with high research self-efficacy are more motivated, persistent, and productive in scholarly work. Nevertheless, most studies have focused on higher education contexts, leaving a gap in understanding how these variables interact among elementary teachers, particularly in the Philippine setting. This study addresses this gap by examining how research self-efficacy mediates the relationship between research knowledge and research productivity in the Division of Cotabato.

2. METHODS

This study utilized a convergent mixed-methods research design, combining quantitative and qualitative approaches to provide a comprehensive analysis of the research problem. The quantitative phase employed a descriptive-

correlational design to determine the levels of research knowledge, self-efficacy, and productivity, as well as the relationships among these variables. The qualitative phase used a phenomenological approach to explore teachers' lived experiences related to research engagement.

The participants consisted of 377 elementary teachers selected through stratified sampling from a population of 6,557 teachers across three congressional districts in the Division of Cotabato. For the qualitative phase, 25 teachers were purposively selected to provide in-depth insights. Data were collected using a structured questionnaire adapted from validated instruments and measured using a five-point Likert scale.

Quantitative data were analyzed using descriptive statistics, Pearson correlation, and multiple regression analysis to determine relationships and predictive influences. Qualitative data were analyzed using thematic analysis to identify recurring patterns and themes in teachers' experiences. Ethical considerations, including informed consent, confidentiality, and voluntary participation, were strictly observed throughout the study.

3. RESULTS

The findings revealed that teachers demonstrated very high levels of research knowledge across all dimensions. Theoretical knowledge had a weighted mean of 4.60, methodological knowledge 4.55, research literacy 4.55, and research application 4.57, all interpreted as very knowledgeable. These results indicate that teachers possess strong conceptual and procedural understanding of research processes.

Research self-efficacy was also found to be very high, with instructional strategies (4.54), classroom management (4.58), student engagement (4.55), and collaboration and support (4.58) all rated as very confident. These findings suggest that teachers have strong confidence in applying research-based practices in their professional roles.

Similarly, research productivity was rated very high across all dimensions, including research output (4.27), research engagement (4.37), and research utilization (4.46). This indicates that teachers are actively involved in producing, participating in, and applying research in their instructional practices.

Correlation analysis revealed strong and significant relationships between research knowledge and research self-efficacy, with coefficients reaching as high as $r = 0.918$. Likewise, research self-efficacy showed strong correlations with research productivity, particularly in research utilization. Regression analysis further revealed that research knowledge significantly predicts research self-efficacy, accounting for 86.3% of its variance, with research application emerging as the strongest predictor.

Qualitative findings supported these results by highlighting themes such as confidence in applying research, collaboration among teachers, practical use of research in classrooms, and the importance of institutional support. Teachers emphasized that hands-on experience and supportive environments enhance both their confidence and productivity.

4. DISCUSSION

The results of the study confirm that research knowledge and self-efficacy are critical determinants of teacher research productivity. While teachers demonstrated strong knowledge of research concepts, it is their confidence in applying this knowledge that ultimately drives productivity. This finding aligns with Social Cognitive Theory, which emphasizes the role of self-efficacy in translating knowledge into action.

The strong influence of research application on self-efficacy suggests that experiential learning plays a key role in building confidence. Teachers who actively engage in applying research findings are more likely to develop a stronger sense of capability, which in turn enhances their productivity. Conversely, methodological knowledge alone was not a significant predictor, indicating that procedural knowledge without application may not be sufficient to build confidence.

The significant relationship between self-efficacy and research productivity further highlights the importance of psychological factors in professional performance. Teachers who believe in their ability to conduct research are more likely to produce outputs, engage in scholarly activities, and utilize research findings in practice.

The qualitative findings reinforce the importance of institutional support, collaboration, and professional development in fostering a research-

oriented culture. Schools that provide mentoring, training, and collaborative opportunities enable teachers to translate knowledge into meaningful research outputs.

5. CONCLUSION

This study concludes that research knowledge and research self-efficacy significantly influence research productivity among elementary teachers. Research self-efficacy serves as a mediating factor that bridges knowledge and output, highlighting the importance of both cognitive and psychological components in teacher research engagement.

It is recommended that educational institutions strengthen professional development programs focusing on applied research, mentorship, and collaborative learning. Providing opportunities for hands-on research experiences and fostering supportive school environments can enhance teachers' confidence and productivity. Future research may explore additional variables that influence teacher research engagement to further improve educational practices.