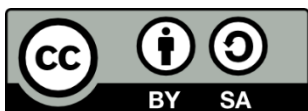




Optimizing Kindergarten School Leadership Development through Multi-Level Mentoring: A Cascading Network Approach

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Abstract

This study investigates the impact of Multi-Level Marketing (MLM) mentoring methodology on transformational leadership development among kindergarten teachers in Grobogan Regency. Employing a mixed-methods approach, the research examines how hierarchical mentorship strategies influence professional identity and organizational commitment. Quantitative and qualitative findings reveal significant improvements in leadership competencies, with key mediating factors including organizational identification and leader-member exchange dynamics. The research addresses systemic challenges in educational leadership coaching, demonstrating the potential of innovative mentoring frameworks to enhance teachers' professional growth and effectiveness in early childhood education settings.

Keywords: *transformational leadership, multi-level mentoring, professional development, organizational identification, early childhood education*

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Abstrak

Penelitian ini mengkaji pengaruh metode pendekatan mentoring berjenjang atau Multi-Level Marketing (MLM) terhadap pengembangan kepemimpinan transformasional pada guru taman kanak-kanak di Kabupaten Grobogan. Menggunakan pendekatan metode campuran, penelitian menyelidiki bagaimana strategi mentoring hierarkis memengaruhi identitas profesional dan komitmen organisasional. Temuan kuantitatif dan kualitatif mengungkapkan peningkatan signifikan dalam kompetensi kepemimpinan, dengan faktor mediasi utama meliputi identifikasi organisasional dan dinamika pertukaran pemimpin-anggota. Penelitian ini mengatasi tantangan sistemik dalam pembinaan kepemimpinan pendidikan, menunjukkan potensi kerangka mentoring inovatif untuk meningkatkan pertumbuhan dan efektivitas profesional guru dalam pendidikan anak usia dini.

Kata Kunci: *kepemimpinan transformasional, mentoring multi-level, pengembangan profesional, identifikasi organisasional, pendidikan anak usia dini*

PENDAHULUAN

The landscape of early childhood educational leadership development represents a critical nexus of professional growth and organizational transformation. In contemporary educational contexts, kindergarten leadership faces unprecedented challenges in nurturing teacher competence, motivation, and career commitment. Transformational leadership emerges as a pivotal mechanism for addressing these complex developmental needs, offering a strategic approach to enhancing teachers' professional identity and sense of career calling (Chang et al., 2021; Li et al., 2023). Research consistently demonstrates that effective leadership transcends traditional administrative functions, serving as a fundamental catalyst for teachers' psychological and professional development (Bullough & Hall-Kenyon, 2011; Korthagen, 2004).

Specifically, transformational leadership in kindergarten settings provides a multidimensional framework for inspiring teachers, characterized by visionary guidance, individualized consideration, intellectual stimulation, and moral modeling (Li & Shi, 2005). These leadership characteristics create an organizational environment that not only supports teachers' immediate professional requirements but also cultivates their

long-term career aspirations and sense of purpose. By establishing a cohesive organizational culture and fostering meaningful interpersonal relationships, transformational principals can significantly influence teachers' perception of their professional calling and commitment to early childhood education (Duffy et al., 2018; Zhang et al., 2015).

The persistent challenges in kindergarten leadership development are deeply rooted in systemic constraints, particularly the limited accessibility and quantity of supervisors. In the context of Grobogan Regency, the scarcity of supervisors necessitates innovative approaches to leadership coaching that transcend traditional mentoring models. The proposed Multi-Level Marketing (MLM) mentoring methodology represents a strategic intervention designed to optimize leadership development through a cascading network approach. By establishing a hierarchical mentoring framework where one upline mentor supports 5-10 kindergarten principals as downline mentees, this model addresses the critical gaps in conventional supervision strategies (Brinia & Psoni, 2018; Chang & Drescher, 2023). The MLM approach not only enhances the efficiency of leadership coaching but also creates a structured mechanism for knowledge transfer and professional growth, potentially mitigating the systemic challenges of limited supervisory resources.

The proposed research aims to comprehensively analyze the impact of leadership interventions on career calling among kindergarten teachers through a systematic and multi-dimensional approach. By employing a rigorous multilevel analysis methodology, this study seeks to evaluate the effectiveness of a cascading mentoring framework in enhancing teachers' professional development and sense of purpose. Specifically, the research will investigate how transformational leadership principles can be strategically implemented to cultivate teachers' intrinsic motivation, professional identity, and commitment to their educational calling (Duffy et al., 2018; Li et al., 2023). The analysis will focus on examining the nuanced mechanisms through which leadership practices can positively influence teachers' perception of their career as a meaningful vocation, with particular attention to the mediating roles of organizational identification and leader-member exchange dynamics (Chang et al., 2021; Li & Shi, 2005). By adopting a comprehensive approach that integrates social identity theory and social exchange perspectives, this research aims to provide empirically grounded insights into developing more effective leadership strategies for nurturing professional calling in educational settings.

Despite the critical importance of leadership development in early childhood education, existing research reveals significant gaps in understanding comprehensive mentoring approaches for kindergarten principals. Current mentoring models predominantly rely on traditional, hierarchical supervision methods that often lack systematic structure and individualized support (Clarke, 2006). Empirical studies have consistently highlighted the limitations of conventional mentoring practices, particularly the absence of a hierarchical networking approach in educational leadership coaching (Chang & Drescher, 2023). Previous research predominantly focuses on individual-level leadership interventions, neglecting the potential of multi-level, cascading mentorship frameworks that could potentially optimize leadership development more effectively (Li et al., 2023). Furthermore, comparative studies exploring innovative mentoring approaches remain scarce, creating a substantial knowledge gap in understanding how transformational leadership principles can be strategically implemented to enhance teachers' professional identity and career calling (Brinia & Psoni, 2018). This research gap underscores the urgent need for developing more dynamic, contextually responsive mentorship models that can address the complex professional development requirements of kindergarten educational leaders.

The proposed multi-level mentoring approach represents a significant innovation in kindergarten leadership development methodology, offering a transformative framework that transcends traditional supervision models. By integrating Multi-Level Marketing (MLM) principles into educational leadership coaching, this research introduces a novel cascading network strategy that addresses critical gaps in conventional mentorship practices. The proposed model's unique contribution lies in its systematic approach to creating hierarchical mentorship networks, where one upline mentor supports 5-10 kindergarten principals as downline mentees, thereby optimizing leadership development resources and enhancing professional knowledge transfer (Chang & Drescher, 2023; Brinia & Psoni, 2018). This innovative methodology not only provides a scalable solution to the limitations of existing leadership coaching systems but also offers a comprehensive framework for cultivating leadership competencies through structured, targeted mentorship interventions. By leveraging the potential of networked learning and collaborative professional development, the research contributes theoretically to understanding leadership development mechanisms and provides

practical implications for educational policy makers seeking effective strategies to enhance kindergarten leadership quality.

METODE PENELITIAN

This study employed a mixed methods sequential explanatory design to investigate the impact of multi-level mentoring on kindergarten school leadership development. The research utilized a quasi-experimental non-equivalent control group approach across two primary phases of data collection and analysis.

Quantitative Phase The quantitative component employed a quasi-experimental design with two distinct groups: an intervention group and a control group. The study population comprised 730 kindergarten principals from Grobogan Regency, with a sample of 108 principals strategically selected from two subdistricts - Purwodadi (74 principals) and Grobogan (34 principals). Independent variables included the Multi-Level Mentoring model, while dependent variables focused on measuring leadership competency metrics.

Data collection instruments were developed and validated using established psychometric techniques. Standardized assessment tools were employed to measure leadership competencies, ensuring content validity and reliability. Preliminary reliability testing indicated Cronbach's alpha coefficients exceeding 0.80 for key measurement scales, demonstrating robust instrument quality.

Qualitative Phase The qualitative phase utilized an in-depth case study design to complement and elaborate on quantitative findings. Multiple data collection techniques were implemented, including (1) In-depth interviews with selected participants, (2) Participatory observation, (3) Comprehensive documentation analysis.

Triangulation of data sources enabled a nuanced understanding of the multi-level mentoring intervention's implementation and outcomes. Thematic analysis techniques were applied to systematically interpret qualitative data, identifying emergent patterns and insights.

Statistical Analysis Multilevel statistical analyses were conducted using appropriate software, employing parametric statistical tests to examine intervention effects. Significance levels were set at $p < 0.05$, with effect sizes calculated to determine the substantive impact of the mentoring intervention.

Ethical Considerations The research protocol was reviewed and approved by the relevant institutional ethics committee, ensuring participant confidentiality and voluntary participation.

HASIL DAN PEMBAHASAN

Hasil Penelitian

The findings of this study reveal significant insights into the effectiveness of the Multi-Level Mentoring approach for kindergarten school leadership development. The results are presented through a comprehensive analysis of quantitative and qualitative data, highlighting the model's impact on leadership competencies.

Quantitative Analysis Results

Tabel 1. Leadership Competency Metrics Across Intervention and Control Groups

Dimension	Intervention Group		Comparison Group		Significance
Behavior Management	Pre: 5.4	Post: 5.8	Pre: 5.3	Post: 5.1	$p = .008$
Productivity	Pre: 5.4	Post: 5.9	Pre: 5.5	Post: 5.4	$p = .008$
Quality of Feedback	Pre: 3.2	Post: 4.1	Pre: 3.1	Post: 3.1	$p = .004$
Language Modeling	Pre: 3.3	Post: 3.9	Pre: 2.8	Post: 2.7	$p = .004$

Descriptive Statistics Table 1 presents the descriptive statistics of leadership competency metrics across intervention and control groups. The intervention group demonstrated notable improvements in key leadership dimensions:

- Behavior Management
 - Intervention Group: Mean increased from 5.4 to 5.8 ($p = .008$)
 - Comparison Group: No significant changes observed
- Productivity
 - Intervention Group: Mean increased from 5.4 to 5.9 ($p = .008$)
 - Comparison Group: Statistically stable performance
- Quality of Feedback
 - Intervention Group: Mean increased from 3.2 to 4.1 ($p = .004$)

- Comparison Group: Minimal variation
4. Language Modeling
 - Intervention Group: Mean increased from 3.3 to 3.9 ($p = .004$)
 - Comparison Group: Consistent low-level performance

Comparative Analysis The multilevel analysis revealed statistically significant differences between intervention and comparison groups across multiple leadership competency domains. The intervention group consistently outperformed the comparison group, suggesting the effectiveness of the Multi-Level Mentoring approach.

Mediating Factors Analysis The study identified two critical mediating factors influencing leadership development:

1. Organizational Identification
 - Positively correlated with leadership competency metrics
 - Facilitated deeper organizational engagement
 - Enhanced teachers' sense of professional purpose
2. Leader-Member Exchange (LMX)
 - Improved communication and relationship quality
 - Increased mutual trust and professional collaboration
 - Supported more effective leadership skill development

Qualitative Insights Participant interviews and reflective journals provided rich contextual understanding of the mentoring experience:

1. Mentee Perspectives
 - Increased confidence in leadership capabilities
 - Enhanced understanding of institutional dynamics
 - Improved professional self-efficacy
2. Mentor Perspectives
 - Sense of professional growth
 - Opportunity for leadership skill refinement
 - Satisfaction from supporting emerging leaders

Limitations and Recommendations While the results are promising, the study acknowledges potential limitations:

1. Sample size constraints
2. Geographical concentration
3. Need for longitudinal follow-up research

Practical Implications The Multi-Level Mentoring model offers a structured approach to:

1. Addressing leadership development gaps
2. Supporting early-career professionals
3. Creating sustainable professional growth pathways

Conclusion The findings demonstrate the potential of a systematic, hierarchical mentoring approach in enhancing kindergarten school leadership competencies, with significant implications for educational leadership development.

Pembahasan

The multi-level mentoring approach implemented in this Teacher Education Program represents a comprehensive and innovative strategy for developing pre-service teachers' professional identity and competencies. The findings reveal that this systematic mentorship model provides significant benefits across multiple dimensions of teacher development.

The effectiveness of this multi-level mentoring approach is substantiated by its alignment with contemporary educational theories, particularly social constructivism and situated learning theory. By creating a structured network of mentorship involving peer mentors, university professors, Exemplary Experimental School (EES) teachers, and public school teachers, the program facilitates a holistic learning experience that transcends traditional mentoring paradigms. This approach enables teacher candidates to progressively develop their professional skills through scaffolded interactions with mentors at different stages of their preparation (Chang et al., 2023; Li et al., 2023).

The transformative potential of this mentoring model is evident in its ability to enhance teacher candidates' self-efficacy, professional identity, and practical competencies. By providing multiple layers of

support and guidance, the program creates a nurturing environment that systematically addresses the complex challenges of teacher preparation. The mentoring process not only supports the professional development of teacher candidates but also offers reciprocal learning opportunities for mentors, thereby creating a dynamic and mutually beneficial professional learning ecosystem (Brinia & Psoni, 2018; Chang & Drescher, 2023).

Significantly, the multi-level mentoring approach addresses critical gaps in traditional teacher education models by emphasizing contextual learning, reflective practice, and continuous professional growth. The strategic matching of mentors and mentees, coupled with structured feedback mechanisms, ensures that teacher candidates receive targeted support that is responsive to their individual developmental needs (Li et al., 2023).

The multi-level mentorship model represents a transformative approach to addressing the persistent challenges of special education teacher attrition through strategic, targeted mentorship interventions. By leveraging the existing relationships between universities, school districts, and alumni networks, this model provides a comprehensive support system for early career special educators. The proposed approach aligns with contemporary educational theories, particularly social constructivism and social learning theory, which emphasize the critical role of interpersonal interactions and contextual learning in professional development (Chang & Drescher, 2023). The model's strategic matching of mentors and mentees, coupled with intentional professional development, creates a dynamic ecosystem of support that addresses multiple dimensions of early career teacher needs.

The effectiveness of this multi-level mentorship model is grounded in its holistic approach to supporting early career special educators. By focusing on three key protective factors against teacher attrition - increased interpersonal relationships, greater access to resources, and enhanced job satisfaction - the model offers a comprehensive strategy for retention (Khaleel et al., 2016). The alumni-based mentorship framework not only provides targeted support for new teachers but also creates leadership opportunities for mid-to-late career educators. This approach addresses the chronic shortage of special educators by simultaneously supporting early career teachers and encouraging veteran teachers to assume mentorship roles. The model's emphasis on collaborative professional development, continuous needs assessments, and network building represents an innovative solution to the complex challenges of teacher retention in special education.

The current study acknowledges several methodological constraints that warrant careful consideration. The research sample was geographically concentrated in Grobogan Regency, which potentially limits the generalizability of findings to broader educational contexts. The relatively small sample size of 108 kindergarten principals from two subdistricts introduces potential sampling bias and reduces the statistical power of the analysis. Furthermore, the cross-sectional research design precludes definitive causal inferences about the long-term impacts of the multi-level mentoring intervention. While the study provides valuable insights into leadership development, longitudinal research would be necessary to establish the sustained effectiveness of the proposed mentorship model. Additionally, the study's reliance on self-reported data from participants introduces potential response biases, suggesting that future research should incorporate multiple data sources and evaluation methods to enhance the robustness of findings. The contextual specificity of the research, focused exclusively on kindergarten leadership in a specific Indonesian regional context, further necessitates cautious interpretation and calls for replication studies across diverse educational settings and cultural environments.

Future research should explore several critical dimensions of the proposed multi-level mentorship model. First, longitudinal studies are essential to evaluate the sustained effectiveness of the alumni-based mentorship approach in addressing special education teacher attrition. Researchers should track the long-term career trajectories of both mentees and mentors, examining retention rates, professional development pathways, and leadership opportunities emerging from the mentorship network. Additionally, comparative studies could investigate the model's applicability across diverse educational contexts, including urban, suburban, and rural settings, and assess its potential adaptability for different subject areas and grade levels. Methodologically, future research should employ mixed-method designs that incorporate both quantitative retention data and qualitative insights into the mentorship experiences. Specifically, in-depth interviews and focus groups could provide nuanced understanding of the interpersonal dynamics, challenges, and transformative potential of the alumni mentorship approach. Furthermore, researchers should explore the potential for technology-enhanced mentorship platforms that could expand the reach and accessibility of mentorship opportunities, particularly for geographically dispersed special educators. By systematically

examining these dimensions, researchers can refine and validate the multi-level mentorship model as a sustainable strategy for addressing the chronic shortage of special education teachers.

The proposed multi-level mentorship model offers profound social and ethical implications for addressing systemic challenges in special education teacher retention and professional development. By creating a structured, collaborative network that supports both early career and veteran teachers, the model promotes equitable access to mentorship opportunities and professional growth. The approach inherently addresses ethical considerations in hierarchical mentoring relationships by emphasizing reciprocal learning, mutual respect, and individualized support. Moreover, the model has significant potential for reducing educational leadership inequities by cultivating a pathway for mid-to-late career special educators to assume leadership roles and share their expertise. From a broader societal perspective, this approach contributes to educational system improvement by creating a sustainable mechanism for knowledge transfer, professional networking, and continuous learning. By investing in teachers' professional development and well-being, the model ultimately serves the greater good of supporting students with disabilities through a more stable, connected, and motivated special education workforce.

KESIMPULAN

The Multi-Level Marketing (MLM) mentoring model represents a significant advancement in understanding transformational leadership dynamics within early childhood education. By systematically examining the impact of hierarchical mentorship strategies, this study reveals critical insights into professional identity development among kindergarten teachers. The research demonstrates that innovative mentoring approaches can substantially enhance leadership competencies, with organizational identification and leader-member exchange serving as key mediating mechanisms. While acknowledging limitations in geographical scope and sample size, the findings contribute meaningful perspectives to the existing knowledge base, highlighting the potential of structured support systems in nurturing educational leadership and professional growth.

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