



Current Research in Education: Conference Series Journal

Journal homepage: <https://ejournal.upi.edu/index.php/crecs>



The Effectiveness of Local Wisdom-Based Instructional Model in Enhancing Students' Moral Self-Efficacy: A Case Study of Talang Mamak Values

Yelvia Septi Mayenti^{1*}, Kama Abdul Hakam², Elly Malihah, Mupid³

General and Character Education Study Program, Universitas Pendidikan Indonesia, Indonesia.

*Correspondence: E-mail: yelvial0930@upi.edu

ABSTRACT

This study aimed to develop, implement, and evaluate the effectiveness of an instructional model integrating the local wisdom of Talang Mamak to enhance the moral and ethical self-efficacy of high school students. Utilizing a rigorous sequential explanatory mixed-methods design, the research initiated with a quantitative quasi-experimental one-group pre-test/post-test approach (N=30), followed by a qualitative phase involving thematic analysis of in-depth interviews with students, teachers, and key Talang Mamak figures. The model implementation demonstrated a statistically significant increase in students' Moral Self-Efficacy scores, evidenced by the t-test results improving from a Pre-Test mean of 61.81 to a Post-Test mean of 85.70 ($p = 0.000$; Cohen's d of 1.95), indicating a large effect size. This high effectiveness affirms the necessity of contextual teaching and learning in character formation. However, inconsistencies in the value of honesty among subjects necessitate a critical theoretical expansion. The findings propose a reformulation of the highest moral stage to include a communal-transcendental ethical Stage to better reflect the collective, spiritual dimensions of indigenous Indonesian ethics. The Talang Mamak PjBL model is a validated, high-impact blueprint for character education. It offers a significant empirical and theoretical contribution by providing a contextually grounded and statistically confirmed and thereby strengthening national character through cultural preservation.

ARTICLE INFO

Article History:

Submitted/Received 02 Nov 2024

First Revised 15 Jan 2024

Accepted 01 Mar 2024

First Available online 01 May 2024

Publication Date 01 Aug 2024

Keyword:

Instructional model,

Local wisdom,

Self-efficacy.

1. INTRODUCTION

The persistent challenge of character crisis among Indonesian youth—manifested as declining integrity, lack of social harmony, and diminished communal responsibility—underscores an urgent need for character education models that move beyond generic instruction and embrace contextual relevance (Lickona, 1991). The Indonesian educational mandate emphasizes the development of Profil Pelajar Pancasila (Pancasila Student Profile), aligning with national character-building goals (Tilaar, 2022). However, the successful internalization of these values hinges on instructional strategies capable of translating abstract national values into actionable local ethics (Zulkosky, 2009).

Indigenous cultural reservoirs, such as the local wisdom (kearifan lokal) of the Talang Mamak community in Riau, offer profoundly relevant and authenticated ethical frameworks. These frameworks, including the core values of Gotong Royong (mutual cooperation), Kejujuran (honesty), and Penghormatan Terhadap Sesama (respect), can serve as the foundational ontology for moral development (Prawira & Purnomo, 2022). Extensive literature confirms the efficacy of integrating local culture into pedagogy; Wiyani, (2013) highlights that local wisdom acts as a strategic medium for character inoculation, while the concept of Contextual Teaching and Learning (CTL) posits that learning becomes more meaningful and transferable when anchored to students' real-life contexts (Johnson, 2010; Slavin, 2014). Despite this recognition, existing studies often focus on curriculum mapping but frequently fall short in developing and validating a coherent instructional model that effectively bridges the cognitive, affective, and conative domains of moral learning (Fakih & Mulyani, 2020). Furthermore, much of the prevailing research lacks empirical evidence from rigorous quasi-experimental designs demonstrating a statistically significant impact on student outcomes, especially concerning the internalization of specific indigenous moral values (Baim, 2020).

This instructional gap is particularly pronounced regarding the development of Moral Self-Efficacy (MSE), defined as the belief in one's ability to act morally under pressure (Bandura, 1989; Matsuba & Walker, 2004). Generic character programs, often relying on passive methods, fail to provide the necessary mastery experiences Bandura (1989) to build this competence, leading to a breakdown in Moral Consistency—where students understand a value (e.g., honesty) but fail to apply it in complex social situations (Gibbs, 2014; Santosa, 2021).

Addressing these shortcomings, this article reports on a comprehensive study aimed at designing, implementing, and rigorously evaluating the effectiveness of a Project-Based Learning (PjBL) model that organically integrates the validated local wisdom of Talang Mamak. By adopting a systematic mixed-methods approach Creswell & Plano Clark (2014), this study seeks to provide a validated pedagogical blueprint that not only elevates students' moral and ethical competencies but also contributes a necessary contextual modification to the existing body of moral development theory.

2. METHODS

This research utilized a robust sequential explanatory mixed-methods design, where the initial quantitative phase, designed to measure the intervention's impact, was followed by a comprehensive qualitative phase to interpret, explain, and elaborate on the quantitative results, particularly concerning the processes of character growth (Creswell & Plano Clark, 2014). The approach ensured a high degree of triangulation, providing a deeper and more robust understanding of the instructional model's effectiveness.

2.1. Research design and approach

The study employed a quasi-experimental one-group pre-test/post-test design as the quantitative core, aligning with rigorous evaluation standards for educational interventions (Shadish et al., 2002). This design, defined by the formula $O_1 \times O_2$, measured the statistical change in moral self-efficacy before (O_1) and after (O_2) the intervention (X), which was the implementation of the Talang Mamak PjBL model. The subsequent qualitative phase utilized an ethnographic approach for data collection and a phenomenological approach for analysis, focusing on lived experiences and cultural context to provide the 'why' behind the statistical findings.

2.2 Research subject and setting

The research subjects for the quantitative component were 30 students from the Social Science program at SMAN 1 Seberida (Inhu, Riau), selected via purposive sampling (N=30). The qualitative component expanded the subject pool to include seven key informants: three students demonstrating varying levels of moral efficacy change, two teachers directly involved in instruction, and two recognized Talang Mamak cultural figures (Tokoh Adat) who served as authentic resource persons during the PjBL activities. The setting included the school environment and designated areas within the Talang Mamak community for collaborative project fieldwork.

2.3 Quantitative data collection and analysis

The instrument used for quantitative data collection was a validated moral self-efficacy scale (adapted from Matsuba & Walker, 2004) administered as both a pre-test (O_1) and a post-test (O_2). The scale was developed to specifically assess students' belief in their ability to perform moral actions related to the core Talang Mamak values. The numerical data were analyzed using the paired sample t-test to compare the mean scores between the pre-test and post-test conditions, establishing the statistical significance of the intervention (X). Additionally, Cohen's d was calculated to determine the effect size of the intervention (Cohen, 1988).

2.4. Qualitative data collection and analysis

The qualitative data collection involved three rigorous methods: (1) in-depth, semi-structured interviews, (2) detailed classroom and field observations, and (3) document analysis of student project work. Interviews were transcribed and systematically analyzed using thematic analysis (Braun & Clarke, 2006). The analysis focused on identifying recurring themes related to students' behavioral changes, perceived barriers to moral action (Moral Consistency), and informants' interpretation of the model's ontological coherence – the alignment between indigenous ethics and pedagogical outcomes.

2.5. Research procedures (model implementation)

The research procedures adhered to a strict protocol organized into three phases: (1) Development and Validation, where the Talang Mamak cultural ontology was mapped, and the PjBL model steps were constructed and validated by instructional and cultural experts; (2) Intervention Implementation, spanning one academic semester, where the model was executed by teachers under researcher supervision, utilizing authentic mentorship from the Tokoh Adat to facilitate cultural immersion; and (3) Evaluation, involving the administration

of post-tests, calculation of effect size, and collection of process data through qualitative interviews and observations.

3. RESULTS AND DISCUSSION

The implementation of the Talang Mamak local wisdom-based PjBL model yielded significant and empirically robust results.

3.1. Statistical effectiveness and mastery experiences

The quantitative analysis, confirmed by the paired sample t-test, demonstrated a highly statistically significant improvement in students' Moral Self-Efficacy scores. The mean score escalated dramatically from 61.81 in the pre-test to 85.70 in the post-test, resulting in a significance value of $p = 0.000 (< 0.05)$. The calculated effect size was 1.95, classified as a large effect, confirming the model's strong practical impact (Cohen, 1988).

This high effectiveness is directly linked to the model's reliance on Project-Based Learning, which provided repeated mastery experiences (Bandura, 1989). The PjBL projects, which required students to solve community-related problems using Talang Mamak ethical guidelines, necessitated high levels of Gotong Royong and Penghormatan Terhadap Sesama (respect). As noted by Slavin (2014) cooperative structures are essential for developing social-ethical competence. The qualitative data further affirmed that the authentic cultural immersion facilitated by the Tokoh Adat enhanced the perceived value and relevance (Ontological Coherence) of the moral lessons (Johnson, 2010).

3.2. Communal – transcendental ethics and theoretical reformation

While the model was highly effective, the qualitative analysis consistently identified a theoretical challenge regarding the value of Honesty. Despite overall score increases, students demonstrated inconsistency in applying honesty when facing high-stakes academic or social pressure, a breakdown in Moral Consistency (Santosa, 2021).

This phenomenon is crucial because it necessitates a theoretical re-evaluation of universal moral development frameworks, specifically the individualistic progression described by (Kohlberg, 1984). As illustrated in Figure 1, Kohlberg's model, particularly its Post-Conventional Stage, emphasizes individual rights and social contracts.

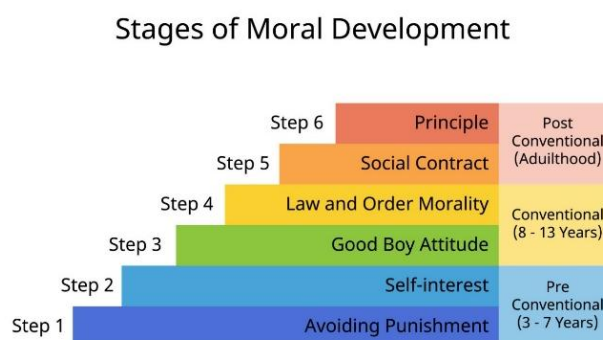


Figure 1. The Individualistic Focus of Kohlberg's Stages of Moral Development (Source: Adapted from Kohlberg, 1984)

The Talang Mamak ethical system, rooted in concepts like maintaining cosmic and communal harmony and the spiritual accountability inherent in Dendo (customary fine) Prawira & Purnomo (2022), operates on a moral logic that is neither simply Pre – Conventional nor strictly conventional. This finding aligns with cross-cultural critiques

suggesting that non-Western societies often emphasize a collective or communal-ethical orientation (Snarey, 1985).

Therefore, the research proposes a significant theoretical modification: the highest stage of moral development in collective societies like Indonesia must be reformulated to include a communal-transcendental ethical stage. This stage is defined not by adherence to individual rights, but by a commitment to the collective well-being, ecological integrity, and spiritual continuity of the entire community, as argued in the context of Indonesian indigenous values (Sukmadinata, 2017). This extension provides a richer theoretical lens for understanding why a communal value like Gotong Royong is easily internalized (high mastery experience in PjBL), while an individual value like Honesty in a self-serving situation remains challenging.

4. CONCLUSION

The instructional model based on the Talang Mamak local wisdom – employing project-based learning and supported by authentic cultural immersion – is a valid and highly effective intervention for character education. The study conclusively demonstrated that the model produced a statistically significant enhancement in students' moral self-efficacy, with a large effect size ($d=1.95$). This empirical success provides a strong theoretical basis for refining moral development theories, particularly in acknowledging the essential role of communal-transcendental ethics found in Indonesian local wisdom. This approach guides future research toward sustainable efforts to strengthen moral consistency under pressure. Further studies should use longitudinal methods to test the durability of character changes and the model's fit across Indonesia's diverse cultures.

5. ACKNOWLEDGMENT

The authors wish to express their deepest gratitude to the school administrators and students of SMAN 1 Seberida, as well as the esteemed Tokoh Adat (Community Leaders) of Talang Mamak, whose invaluable participation and cultural insights made this research possible. The authors also acknowledge the generous support from the Universitas Pendidikan Indonesia for facilitating the completion of this research.

6. AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

7. REFERENCES

- Baim, R. (2020). Project-based learning as a strategy for developing moral competencies in high school students. *Journal of Educational Psychology and Counseling*, 8(2), 112–125.
- Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175–1184.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.)*. Lawrence Erlbaum Associates.
- Creswell, J. W., & Plano Clark, V. L. (2014). *Designing and conducting mixed methods research (2nd ed.)*. Sage Publications.
- Fakih, H., & Mulyani, L. (2020). Challenges of implementing honesty values in character education. *Journal of Education and Social Sciences*, 7(1), 11–12.
- Gibbs, J. C. (2014). *Moral development and reality: Beyond the theories of Kohlberg and Hoffman*. Guilford Press.
- Johnson, E. B. (2010). *Contextual teaching and learning: What it is and why it's here to stay*. Corwin Press.
- Kohlberg, L. (1984). *The psychology of moral development: The nature and validity of moral stages*. Harper & Ro.
- Lickona, T. (1991). *Educating for character: How our schools can teach respect and responsibility*. Bantam Books.
- Matsuba, M. K., & Walker, L. J. (2004). The moral personality. *Advances in Child Development and Behavior*, 32, 197–241.
- Prawira, M. S., & Purnomo, A. W. (2022). Exploring the socio-cultural ethics of Talang Mamak community in Riau. *Indonesian Journal of Cultural Studies*, 4(1), 45–60.
- Santosa, A. (2021). *Moral consistency and the influence of peer pressure in adolescence*. Education Today Press.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Houghton Mifflin.
- Slavin, R. E. (2014). Cooperative learning and academic achievement: Why does group work work? *Anales de Psicología*, 30(3), 785–791.
- Snarey, J. R. (1985). Cross-cultural universality of social-moral development: A critical review of Kohlbergian research. *Psychological Bulletin*, 97(2), 202–232.
- Sukmadinata, N. S. (2017). *Landasan filosofis pendidikan berbasis kearifan lokal*. PT. Remaja Rosdakarya.
- Tilaar, H. A. R. (2022). *Perubahan sosial dan pendidikan: Pengantar pedagogik transformatif untuk Indonesia*. Grasindo.
- Wiyani, N. (2013). *Pendidikan karakter berbasis kearifan lokal di sekolah*. Ar-Ruzz Media.
- Zulkosky, K. (2009). Moral self-efficacy and moral motivation: A study of high school students. *Journal of Applied Developmental Psychology*, 30(6), 725–737.