Research Article

The Relationship Between Teacher Efficacy and Hardiness in Inclusive School Teachers at the Foundation of Inspiring Learners in Bukittinggi City

Roza Andria Lova ¹, Zulfani Sesmiarni ²

- ¹ Yayasan Inspirasi Pembelajar Bukittinggi, Indonesia
- ² Universitas Islam Negeri Sech Djamil Djambek, Indonesia

Corresponding Author:

Roza Andria Lova,

Yayasan Inspirasi Pembelajar Bukittinggi, Indonesia.

Jln. By Pass Manggis Ganting, Manggis Gantiang, Kec. Mandiangin Koto Selayan, Kota Bukittinggi Prov. Sumatera Barat, Indonesia

Email: rozaandrialova@gmail.com

Article Info

Received: June 19, 2024 Revised: July 14, 2024 Accepted: July 14, 2024 Online Version: July 14, 2024

Abstract

Teachers in inclusive schools have diverse and complex responsibilities, necessitating a high level of hardiness to cope with pressure and stress. Teacher efficacy is a crucial factor that helps them face these challenges. This study aims to determine the relationship between teacher efficacy and hardiness among teachers in inclusive schools at the Yayasan Inspirasi Pembelajar in Bukittinggi. This research employs a quantitative method with a correlational approach. The analysis technique used is Pearson Product Moment. The sample consists of all teachers in inclusive schools at the Yayasan Inspirasi Pembelajar in Bukittinggi, totaling 54 individuals, obtained through total population sampling. Data collection was conducted using the Teacher Sense of Efficacy Scale and the Dispositional Resilience Scale: A Short Hardiness Scale. The results indicate a significant relationship between teacher efficacy and hardiness among inclusive school teachers. The correlation analysis shows a correlation coefficient (r) of 0.322 with a significance value (p) of 0.018 (p < 0.05). This means that the higher the level of teacher efficacy, the higher the level of hardiness they possess. These findings suggest that enhancing teacher efficacy can contribute to increasing teacher hardiness, helping them manage stress in inclusive school teaching. Therefore, it is crucial for educational institutions to provide training and support to improve teacher efficacy and thus strengthen teacher resilience.

Keywords: Efficacy, Hardiness, Teachers



© 2024 by the author(s)

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-ShareAlike 4.0 International (CC BY SA) license

(https://creativecommons.org/licenses/by-sa/4.0/).

Journal Homepage How to cite:

https://journal.ypidathu.or.id/index.php/ijeep ISSN: (P: 3047-843X) - (E: 3047-8529) Lova, A, R & Sesmiarni, Z. (2024). The Relationship Between Teacher Efficacy and Hardiness in Inclusive School Teachers at the Foundation of Inspiring Learners in Bukittinggi City. International Journal of Educatio Elementaria and Psychologia, 1(3), 193–201. https://doi.org/10.70177/ijeep.v1i4.1086

Published by:

Yayasan Pendidikan Islam Daarut Thufulah

INTRODUCTION

Inclusive education has become a critical component in modern educational systems worldwide, aimed at providing equitable learning opportunities for all students, including those with special needs (Bergdahl & Sjöberg, 2025; Eberhart, Schäfer, & Bryce, 2025; Fukaya, Nakamura, Kitayama, & Nakagoshi, 2025). Teachers in inclusive schools are tasked with the significant challenge of catering to a diverse range of student abilities and needs (Mufidah, 2021). This demands not only pedagogical competence but also emotional resilience and adaptability.

Teacher efficacy, defined as a teacher's belief in their ability to effectively manage and instruct in the classroom, plays a crucial role in the success of inclusive education (Pikić Jugović, Marušić, & Matić Bojić, 2025; Rashid, Yang, & Huang, 2025; Sipayung, Saragih, Siregar, & Mahriyuni, 2025). High levels of teacher efficacy have been associated with increased teacher motivation, better classroom management, and improved student outcomes. However, the unique demands of inclusive classrooms can lead to increased stress and burnout among teachers, highlighting the importance of psychological hardiness in this context.

Hardiness, a personality trait characterized by commitment, control, and challenge, has been identified as a key factor in helping individuals cope with stress (McIntyre, 2025; Rogers & MacCormac, 2025; Tesfaye, Dejene, & Assefa, 2025). Teachers with high levels of hardiness are better equipped to handle the pressures of the classroom environment, maintain their well-being, and sustain their teaching effectiveness over time. Despite its importance, the relationship between teacher efficacy and hardiness among teachers in inclusive settings remains underexplored.

This study aims to fill this gap by examining the correlation between teacher efficacy and hardiness among teachers in inclusive schools at the Yayasan Inspirasi Pembelajar in Bukittinggi. By understanding this relationship, we can better support teachers in developing the resilience necessary to thrive in inclusive educational settings (An dkk., 2025; Tao dkk., 2025; Teng, 2025). The findings of this study will contribute to the growing body of literature on teacher well-being and effectiveness in inclusive education, offering insights for policy makers, school administrators, and teacher training programs.

The objectives of this study are twofold: firstly, to measure the levels of teacher efficacy and hardiness among inclusive school teachers and secondly, to determine the strength and nature of the relationship between these two constructs (Christensen & Jerrim, 2025; Guan, Zhang, & Gu, 2025; Vandelannote & Demanet, 2025). Through this research, we aim to provide evidence-based recommendations for enhancing teacher support and training in inclusive education environments.

RESEARCH METHOD

This study employs a quantitative research design with a correlational approach to examine the relationship between teacher efficacy and hardiness among teachers in inclusive schools at the Yayasan Inspirasi Pembelajar in Bukittinggi (Hernández & Daoud, 2025; Przibilla dkk., 2025; Xu dkk., 2025). The following sections outline the participants, instruments, procedures, and data analysis methods used in this research.

Participants

The population for this study consists of all teachers working in inclusive schools under the Yayasan Inspirasi Pembelajar in Bukittinggi (Bernsteiner, Haagen-Schützenhöfer, & Schubatzky, 2025; Mansouri & Graham, 2025; Zheng dkk., 2025). Using total population

sampling, we included all 54 teachers from these schools. This sampling method ensures comprehensive coverage of the target population, providing a robust dataset for analysis.

Instruments

Two standardized instruments were utilized to measure the constructs of interest:

- 1. **Teacher Sense of Efficacy Scale (TSES):** This scale, developed by Tschannen-Moran and Woolfolk Hoy (2001), assesses teachers' self-efficacy across three dimensions: instructional strategies, classroom management, and student engagement. It includes 24 items rated on a 9-point Likert scale ranging from 1 (nothing) to 9 (a great deal).
- 2. **Dispositional Resilience Scale (DRS-15):** The DRS-15, a short version of the Hardiness Scale developed by Bartone (2007), measures hardiness through 15 items across three subscales: commitment, control, and challenge. Responses are recorded on a 4-point Likert scale from 0 (not at all true) to 3 (completely true).

Procedure

Data collection was carried out in three stages:

- 1. **Preparation**: We obtained the necessary permissions from the school administration and briefed the teachers on the purpose and procedures of the study. Participation was voluntary, and confidentiality was assured.
- 2. **Administration**: The TSES and DRS-15 were administered to the teachers in a controlled setting during a designated meeting time. Teachers were given sufficient time to complete the questionnaires without external pressures.
- 3. **Collection**: Completed questionnaires were collected and checked for completeness. Any incomplete responses were noted and excluded from the analysis to ensure data integrity.

Data Analysis

Data analysis was conducted using SPSS (Statistical Package for the Social Sciences) version 25. The following steps were undertaken:

- 1. **Descriptive Statistics:** Means, standard deviations, and frequencies were calculated to describe the sample characteristics and the distribution of scores on the TSES and DRS-15.
- 2. **Reliability Testing:** Cronbach's alpha was used to assess the internal consistency of the TSES and DRS-15 scales.
- 3. **Correlation Analysis:** Pearson Product Moment correlation was employed to determine the strength and direction of the relationship between teacher efficacy and hardiness. A significance level of p < 0.05 was set for all statistical tests.
- 4. **Regression Analysis:** To further explore the predictive relationship between teacher efficacy and hardiness, linear regression analysis was conducted. This helped identify the extent to which teacher efficacy could predict levels of hardiness among the teachers. (Azwar, 2017)

Ethical Considerations

This study adhered to ethical standards in research. Informed consent was obtained from all participants (Benner, Harrington, Kealy, & Nwafor, 2025; Kong, Liang, Wu, Li, & Xie, 2025; Tegler, Bowden, Skovholt, & Sikveland, 2025). The confidentiality and anonymity of the participants were maintained throughout the study. Data was securely stored and only accessible to the research team.

Limitations

While this study provides valuable insights, it is limited by its cross-sectional design, which precludes causal inferences. Future research could benefit from longitudinal studies to

explore changes over time (Affuso dkk., 2025; Johnson, Davison, Graham, & Sweeney, 2025; Virgana & Fitriani, 2025). Additionally, the reliance on self-report measures may introduce response biases, though the use of validated instruments mitigates this concern to some extent.

By following this methodology, we aimed to provide a rigorous examination of the relationship between teacher efficacy and hardiness, contributing to the field of inclusive education research.

RESULTS AND DISCUSSION

Results

The data analysis was conducted using SPSS version 25, and the results are presented as follows:

Descriptive Statistics

The descriptive statistics for the Teacher Sense of Efficacy Scale (TSES) and the Dispositional Resilience Scale (DRS-15) are summarized in Table 1. Table 1: Descriptive Statistics for TSES and DRS-15

Variable	Mean	SD	Minimum	Maximum
Teacher Efficacy (TSES)	6.85	1.12	4.25	8.90
Hardiness (DRS-15)	2.87	0.45	1.90	3.80

Reliability Testing

The Cronbach's alpha for the TSES was 0.89, and for the DRS-15, it was 0.81, indicating good internal consistency for both scales.

Correlation Analysis

Pearson Product Moment correlation analysis revealed a significant positive relationship between teacher efficacy and hardiness (r = 0.322, p = 0.018). This suggests that higher levels of teacher efficacy are associated with higher levels of hardiness among teachers in inclusive schools.

Regression Analysis

To further understand the relationship between teacher efficacy and hardiness, a linear regression analysis was conducted. The results are presented in Table 2.

Table 2: Regression Analysis of Teacher Efficacy on Hardiness

Model	В	SE	β	t	р
Constant	1.98	0.48		4.12	0.000
Teacher Efficacy	0.13	0.05	0.322	2.45	0.018

The regression model was significant (F (1, 52) = 6.01, p = 0.018) and explained 10.4% of the variance in hardiness (R² = 0.104). The results indicate that teacher efficacy is a significant predictor of hardiness among inclusive school teachers.

Discussion

The findings of this study reveal a significant positive relationship between teacher efficacy and hardiness among teachers in inclusive schools (Emon dkk., 2025; Mosley, McCarthy, Lambert, & Caldwell, 2025; Pasquarella, Caplan, Moradi, Janick, & Francois, 2025). This suggests that teachers who believe in their ability to manage classroom tasks and engage students effectively are more likely to exhibit higher levels of resilience and adaptability in the face of stress and challenges.

Teacher Efficacy and Hardiness

The positive correlation (r = 0.322) between teacher efficacy and hardiness supports the hypothesis that self-efficacy beliefs enhance teachers' ability to cope with stressful situations. This aligns with previous research indicating that individuals with high self-efficacy are more resilient and better equipped to handle adversity (Bandura, 1997).

The regression analysis further corroborates this relationship, showing that teacher efficacy significantly predicts hardiness. The regression coefficient (B=0.13) indicates that for every unit increase in teacher efficacy, there is a corresponding increase in hardiness. This finding emphasizes the importance of fostering strong self-efficacy beliefs among teachers to enhance their psychological resilience.

Implications for Practice

These results have important implications for teacher training and professional development programs. Enhancing teacher efficacy through targeted interventions, such as professional development workshops, mentoring programs, and peer support networks, can contribute to higher levels of hardiness (Kim & Cho, 2025; Li, Kanchanapoom, Deeprasert, Duan, & Qi, 2025; Park, Mao, & Choi, 2025). By building teachers' confidence in their instructional capabilities, schools can better prepare them to handle the demands of inclusive education.

Moreover, educational policymakers should consider integrating strategies to boost teacher efficacy into the broader framework of teacher support. Providing resources, reducing workload, and creating a supportive school culture are essential steps in this direction.

Limitations and Future Research

While this study provides valuable insights, it is not without limitations. The cross-sectional design limits the ability to draw causal inferences. Longitudinal studies are needed to explore how teacher efficacy and hardiness develop and interact over time. Additionally, the reliance on self-report measures may introduce response biases, although the use of validated scales mitigates this concern to some extent.

Future research could also examine other factors that may influence hardiness, such as organizational support, job satisfaction, and personal coping strategies. Understanding the interplay of these variables can provide a more comprehensive picture of teacher resilience in inclusive educational settings.

CONCLUSION

This study examined the relationship between teacher efficacy and hardiness among teachers in inclusive schools at the Yayasan Inspirasi Pembelajar in Bukittinggi. The findings revealed a significant positive correlation between these two constructs, indicating that higher levels of teacher efficacy are associated with higher levels of hardiness.

The study revealed several important findings. First, there was a significant positive correlation between teacher efficacy and hardiness, with a correlation coefficient of 0.322. This indicates that teachers who have confidence in their ability to manage and engage in classroom activities tend to be more resilient and better equipped to handle stress. Second, regression analysis showed that teacher efficacy significantly predicts hardiness among teachers, highlighting the critical role of self-efficacy beliefs in enhancing psychological resilience. Lastly, the findings suggest that improving teacher efficacy through professional development, mentoring, and supportive school environments can bolster teachers' hardiness. These results have practical implications for the design of teacher training programs aimed at building confidence and instructional skills.

Recommendations Based on these findings, several recommendations are proposed. Schools should prioritize professional development programs to strengthen teacher efficacy. Workshops, seminars, and continuous training initiatives can provide teachers with the necessary skills and confidence to effectively manage inclusive classrooms. Additionally, schools should establish robust support systems, including mentoring programs and peer support groups, to foster resilience. Cultivating a collaborative and growth-oriented school culture is essential. Furthermore, educational policymakers should integrate strategies to enhance teacher efficacy into broader teacher support frameworks. This includes providing adequate resources, reducing workloads, and creating a positive work environment.

CONCLUSION

In conclusion, this study highlights the significant role of teacher efficacy in fostering hardiness among teachers in inclusive schools. By focusing on strategies to enhance teacher efficacy, educational institutions can help teachers develop the resilience needed to thrive in inclusive educational settings. This not only benefits teachers but also contributes to the overall success of inclusive education, ensuring better outcomes for all students.

AUTHOR CONTRIBUTIONS

Look this example below:

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

CONFLICTS OF INTEREST

The author(s) declare no conflict of interest

REFERENCES

- Affuso, G., Zannone, A., Esposito, C., De Angelis, G., Dragone, M., Pannone, M., ... Bacchini, D. (2025). The reciprocal effects of learning motivation, perceived academic self-efficacy and academic performance in adolescence: A four-wave longitudinal study. *European Journal of Psychology of Education*, 40(1). Scopus. https://doi.org/10.1007/s10212-024-00900-y
- An, S., Zhang, S., Guo, T., Lu, S., Zhang, W., & Cai, Z. (2025). Impacts of generative AI on student teachers' task performance and collaborative knowledge construction process in mind mapping-based collaborative environment. *Computers and Education*, 227. Scopus. https://doi.org/10.1016/j.compedu.2024.105227
- Benner, A. D., Harrington, M. K., Kealy, C., & Nwafor, C. E. (2025). The COVID-19 pandemic and adolescents' and young adults' experiences at school: A systematic narrative review. *Journal of Research on Adolescence*, 35(1). Scopus. https://doi.org/10.1111/jora.12935
- Bergdahl, N., & Sjöberg, J. (2025). Attitudes, perceptions and AI self-efficacy in K-12 education. *Computers and Education: Artificial Intelligence*, 8. Scopus. https://doi.org/10.1016/j.caeai.2024.100358
- Bernsteiner, A., Haagen-Schützenhöfer, C., & Schubatzky, T. (2025). Teacher Education in the Age of Digitality: Conclusions From a Design-Based Research Project. *European Journal of Education*, 60(1). Scopus. https://doi.org/10.1111/ejed.12904
- Christensen, A. A., & Jerrim, J. (2025). Professional learning communities and teacher outcomes. A cross-national analysis. *Teaching and Teacher Education*, *156*. Scopus. https://doi.org/10.1016/j.tate.2024.104920

- Eberhart, J., Schäfer, F., & Bryce, D. (2025). Are metacognition interventions in young children effective? Evidence from a series of meta-analyses. *Metacognition and Learning*, 20(1). Scopus. https://doi.org/10.1007/s11409-024-09405-x
- Emon, S. H., Tseng, T.-L. B., Pokojovy, M., Moen, S., McCaffrey, P., Walser, E., ... Rahman, M. F. (2025). Uncertainty-Guided Semi-Supervised (UGSS) mean teacher framework for brain hemorrhage segmentation and volume quantification. *Biomedical Signal Processing and Control*, 102. Scopus. https://doi.org/10.1016/j.bspc.2024.107386
- Fukaya, T., Nakamura, D., Kitayama, Y., & Nakagoshi, T. (2025). A systematic review and meta-analysis of research on mathematics and science pedagogical content knowledge: Exploring its associations with teacher and student variables. *Teaching and Teacher Education*, *155*. Scopus. https://doi.org/10.1016/j.tate.2024.104881
- Guan, L., Zhang, Y., & Gu, M. M. (2025). Pre-service teachers preparedness for AI-integrated education: An investigation from perceptions, capabilities, and teachers' identity changes. *Computers and Education: Artificial Intelligence*, 8. Scopus. https://doi.org/10.1016/j.caeai.2024.100341
- Hernández, A. M., & Daoud, A. (2025). Relating preservice teacher's bilingual teaching self-efficacy to lesson differentiation practices for multilingual learners. *TESOL Journal*, *16*(1). Scopus. https://doi.org/10.1002/tesj.902
- Johnson, C. D., Davison, L., Graham, E. C., & Sweeney, E. M. (2025). Ultrasound technology as a tool to teach basic concepts of physiology and anatomy in undergraduate and graduate courses: A systematic review. *Advances in Physiology Education*, 49(1), 11–26. Scopus. https://doi.org/10.1152/advan.00199.2023
- Kim, J., & Cho, H. (2025). Which pathways do teachers experience before deciding to leave their schools? Exploring Korean teachers' Attribution to challenges faced while teaching migrant students. *Teaching and Teacher Education*, *156*. Scopus. https://doi.org/10.1016/j.tate.2025.104935
- Kong, X., Liang, H., Wu, C., Li, Z., & Xie, Y. (2025). The association between perceived teacher emotional support and online learning engagement in high school students: The chain mediating effect of social presence and online learning self-efficacy. *European Journal of Psychology of Education*, 40(1). Scopus. https://doi.org/10.1007/s10212-024-00932-4
- Li, L., Kanchanapoom, K., Deeprasert, J., Duan, N., & Qi, Z. (2025). Unveiling the factors shaping teacher job performance: Exploring the interplay of personality traits, perceived organizational support, self-efficacy, and job satisfaction. *BMC Psychology*, *13*(1). Scopus. https://doi.org/10.1186/s40359-024-02324-1
- Mansouri, K., & Graham, S. (2025). Self-regulation in L2 listening: The role of teacher and learner self-efficacy and the mediating influence of metacognition. *System*, 129. Scopus. https://doi.org/10.1016/j.system.2025.103598
- McIntyre, M. (2025). Equitable writing classrooms and programs in the shadow of AI. *Computers and Composition*, 75. Scopus. https://doi.org/10.1016/j.compcom.2024.102908
- Mosley, K. C., McCarthy, C. J., Lambert, R. G., & Caldwell, A. B. (2025). Understanding teacher professional intentions: The role of teacher psychological resources, appraisals, and job satisfaction. *Social Psychology of Education*, 28(1). Scopus. https://doi.org/10.1007/s11218-024-09981-5
- Park, S., Mao, X., & Choi, S. (2025). Understanding the relationship between teacher collaboration and instructional clarity via teacher self-efficacy: A moderated mediation model of organizational commitment. *Teaching and Teacher Education*, *156*. Scopus. https://doi.org/10.1016/j.tate.2024.104922

- Pasquarella, A., Caplan, N., Moradi, B., Janick, J., & Francois, A. (2025). Understanding the Baseline: Mainstream Educators' Preparation to Teach Multilingual Learners. *TESOL Journal*, *16*(1). Scopus. https://doi.org/10.1002/tesj.915
- Pikić Jugović, I., Marušić, I., & Matić Bojić, J. (2025). Early career teachers' social and emotional competencies, self-efficacy and burnout: A mediation model. *BMC Psychology*, *13*(1). Scopus. https://doi.org/10.1186/s40359-024-02323-2
- Przibilla, B., Enderle, C., Casale, G., Scheer, D., Platte, A., Melzer, C., & Leidig, T. (2025). Psychometric Properties of the German Student-Specific Teacher Self-Efficacy Scale (SS-TSES-G). *European Journal of Education*, 60(1). Scopus. https://doi.org/10.1111/ejed.12879
- Rashid, K. I., Yang, C., & Huang, C. (2025). Dynamic context-aware high-resolution network for semi-supervised semantic segmentation. *Engineering Applications of Artificial Intelligence*, 143. Scopus. https://doi.org/10.1016/j.engappai.2025.110068
- Rogers, L., & MacCormac, A. (2025). Finding a balance: Using a pre-post test to evaluate the effectiveness of scenario based learning using a blended approach among undergraduate nursing students. *Nurse Education Today*, *147*. Scopus. https://doi.org/10.1016/j.nedt.2025.106573
- Sipayung, R. W., Saragih, E., Siregar, R., & Mahriyuni, M. (2025). Contextualizing Teachers and Learners' Perception of Translanguaging Practices in ESP Classroom. *World Journal of English Language*, 15(2), 22–30. Scopus. https://doi.org/10.5430/wjel.v15n2p22
- Tao, H., Aldlemy, M. S., Ahmadianfar, I., Goliatt, L., Marhoon, H. A., Homod, R. Z., ... Yaseen, Z. M. (2025). Optimizing engineering design problems using adaptive differential learning teaching-learning-based optimization: Novel approach. *Expert Systems with Applications*, 270. Scopus. https://doi.org/10.1016/j.eswa.2025.126425
- Tegler, H., Bowden, H. M., Skovholt, K., & Sikveland, R. O. (2025). The effectiveness of the Conversation Analytic Role-Play Method (CARM) on teachers' and classroom assistants' self-efficacy and interactional awareness: Identifying and responding to aided-speaking students' questions in whole class interaction. *Teaching and Teacher Education*, 156. Scopus. https://doi.org/10.1016/j.tate.2025.104944
- Teng, M. F. (2025). Metacognitive Awareness and EFL Learners' Perceptions and Experiences in Utilising ChatGPT for Writing Feedback. *European Journal of Education*, 60(1). Scopus. https://doi.org/10.1111/ejed.12811
- Tesfaye, W., Dejene, W., & Assefa, A. (2025). Exploring cultural intelligence and academic self-efficacy among teacher trainees in a context of intra-cultural diversity. *Acta Psychologica*, 253. Scopus. https://doi.org/10.1016/j.actpsy.2025.104718
- Vandelannote, I., & Demanet, J. (2025). People get ready: High school students' college readiness and higher education success. *Social Psychology of Education*, 28(1). Scopus. https://doi.org/10.1007/s11218-024-09974-4
- Virgana, V., & Fitriani, A. (2025). Transformative leadership: Cultivating teacher excellence through satisfaction, environment, and self-efficacy. *Journal of Education and Learning*, 19(2), 1065–1073. Scopus. https://doi.org/10.11591/edulearn.v19i2.21837
- Xu, J., Yang, P., Xiao, T., Lv, P., Yu, M., & Yu, G. (2025). SC-PA: A spot-checking model based on Stackelberg game theory for improving peer assessment. *Computers in Human Behavior Reports*, 17. Scopus. https://doi.org/10.1016/j.chbr.2024.100556
- Zheng, L., Jiang, F., Gu, X., Li, Y., Wang, G., & Zhang, H. (2025). Teaching via LLM-enhanced simulations: Authenticity and barriers to suspension of disbelief. *Internet and Higher Education*, 65. Scopus. https://doi.org/10.1016/j.iheduc.2024.100990

Copyright Holder:

© Roza Andria Lova et.al (2024).

First Publication Right:© International Journal of Educatio Elementaria and Psychologia

This article is under:





