

Enhancing the Performance of Shadow Teachers and ABK Therapists Through Self-Efficacy and Specialized Training Across Multi-Level Inclusive Education: A Sequential Explanatory Mixed-Methods Study

Asrini Mahdia
Gunadarma University

Article History

Received : 01 June 2026

Revised : 08 June 2026

Accepted : 25 July 2026

Published : 30 July 2026

Available Online: 30 July 2026

Corresponding author*:

asrinimahdia@staff.gunadarma.ac.id

Cite This Article: Asrini Mahdia. (2026). Enhancing the Performance of Shadow Teachers and ABK Therapists Through Self-Efficacy and Specialized Training Across Multi-Level Inclusive Education: A Sequential Explanatory Mixed-Methods Study: A Study of ASD and ADHD Students from Early Childhood Education through Senior High School. Jurnal Sosial Humaniora Dan Pendidikan, 5(2), 110–119.

DOI:

<https://doi.org/10.56127/jushpen.v5i2.3037>

Abstract: This study examines the effect of teacher self-efficacy (X1) and specialized training (X2) on employee performance (Y) among shadow teachers and ABK (special-needs) therapists in a multi-level inclusive education institution serving students with Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD) from early childhood education (PAUD) through senior high school (SMA), located in Jakarta with two branches in West Java. A sequential explanatory mixed-methods design was employed. In the quantitative phase, a total-sampling survey (n = 21) was analyzed using multiple linear regression (SPSS 26); in the subsequent qualitative phase, semi-structured interviews were conducted with three purposively selected respondents to deepen and contextualize the quantitative findings. Results show that self-efficacy has a significant positive effect on employee performance ($t = 2.580$; $p = 0.019$; $\beta = 0.382$), specialized training has a significant positive effect ($t = 3.904$; $p = 0.001$; $\beta = 0.579$), and jointly the two predictors explain 71.9% of the variance in employee performance ($F = 23.073$; $p < 0.001$; $R^2 = 0.719$). Specialized training emerged as the more dominant predictor. The qualitative interviews corroborated these findings, showing that confidence built through repeated hands-on exposure across educational levels, combined with structured, level-differentiated training, translates into perceived competence and improved job performance. These findings imply the need for structured, cross-level training pathways and deliberate self-efficacy-building mechanisms (mentoring, case debriefing, incremental mastery experiences) to strengthen the performance of inclusive-education professionals.

Keywords: employee performance, inclusive education, mixed methods, self-efficacy, shadow teacher, specialized training.

INTRODUCTION

Inclusive education in Indonesia now spans every level of schooling, from Early Childhood Education (PAUD) through Senior High School (SMA), as mandated by Ministerial Regulation (Permendiknas) No. 70 of 2009. Students with Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD) are distributed across all of these levels, and each level demands a distinct competency profile from the professionals who support them: early sensory and communication stimulation at the PAUD level, academic and social skill-building at the elementary and junior-secondary levels, and adaptive behavior management together with vocational-transition preparation at the senior-secondary level. Because a single professional may be required to work across

this entire developmental span, the competencies needed are highly dynamic, and no single fixed skill set is sufficient.

Two professions form the backbone of cross-level inclusive service delivery: the shadow teacher, who accompanies a student individually inside the regular classroom, and the ABK (special-needs) therapist, who designs and implements behavioral, communication, and adaptive-skill intervention programs. The effectiveness of inclusive services depends heavily on the competence and confidence with which these two professions are carried out. Field data from the inclusive education institution under study located in Jakarta with two branches in West Java indicate considerable variation in perceived job performance across staff, prompting the institution's management to ask what drives that variation.

From a human-resource-management perspective, competence-based behavioral theory offers a useful lens. Bandura's (1997) Self-Efficacy Theory holds that an individual's belief in their own capability to organize and execute the courses of action required to produce given attainments is a primary driver of effort, persistence, and ultimately performance especially in tasks, such as cross-level inclusive support, that are non-routine and cognitively demanding. Complementing this, training-effectiveness theory (Noe, 2017; Kirkpatrick & Kirkpatrick, 2006) argues that structured, well-designed training does not merely transmit technique; it also builds the mastery experiences that are one of the four principal sources of self-efficacy identified by Bandura, thereby reinforcing performance through both a direct, skill-based pathway and an indirect, confidence-based pathway. The transfer-of-training literature (Baldwin & Ford, 1988) further suggests that training gains only translate into performance when trainees also have the confidence and organizational support to apply what they have learned on the job underscoring the theoretical link between self-efficacy and training.

Based on this background, the present study empirically examines the effect of teacher self-efficacy and specialized training on the employee performance of shadow teachers and ABK therapists in a multi-level inclusive education institution, and recognizing that a purely numeric account cannot fully capture how confidence and competence are experienced by staff who work across such a wide developmental range supplements the quantitative analysis with qualitative interviews that allow respondents to describe, in their own words, how self-efficacy and training shape their day-to-day performance.

RESEARCH METHOD

This study used a sequential explanatory mixed-methods design (Creswell & Plano Clark, 2018), in which a quantitative phase is conducted first and its results are then explained and enriched by a subsequent qualitative phase.

Quantitative Phase

The quantitative phase used a correlational survey design. The population comprised all active shadow teachers and ABK therapists at a multi-level inclusive education institution located in Jakarta with two branches in West Java. A total-sampling (census) technique was used, yielding $n = 21$ respondents distributed evenly across three locations (7 respondents per location: 4 shadow teachers and 3 ABK therapists). Because this sample size is small for parametric inference, the classical-assumption tests reported

below (Shapiro-Wilk normality, variance-inflation-factor multicollinearity, and Durbin-Watson autocorrelation) were treated as mandatory gatekeeping checks before the regression results were interpreted, and the qualitative phase was built into the design specifically to compensate for the limited statistical power of $n = 21$ by providing corroborating, non-numeric evidence for the same relationships (a simple mixed-methods strategy appropriate for small-sample organizational studies).

The instrument consisted of three 5-point Likert scales: (1) the Teacher Self-Efficacy Scale 8 items adapted from Tschannen-Moran & Woolfolk Hoy (2001), covering efficacy for instructional strategies, classroom management, and student engagement across developmental levels; (2) the Specialized Training Scale 6 items adapted from Noe (2017) and the Kirkpatrick training-evaluation framework (Kirkpatrick & Kirkpatrick, 2006), covering training relevance, adequacy, and perceived applicability on the job; (3) the Employee Performance Scale 5 items adapted from Koopmans et al.'s (2014) Individual Work Performance Questionnaire. Validity was tested using Pearson Product-Moment correlation and reliability using Cronbach's Alpha. The main analysis used multiple linear regression in SPSS version 26, accompanied by classical assumption testing.

Qualitative Phase

Following the quantitative analysis, semi-structured interviews were conducted with three respondents purposively selected to represent variation in role, location, and residual pattern from the regression model (one respondent with a large positive residual, one with a near-zero residual, and one with a negative residual), so that the interviews could probe both cases the model predicted well and cases it predicted less well. Each interview lasted approximately 30–40 minutes, was conducted in Indonesian, audio-recorded with consent, transcribed verbatim, and thematically analyzed following Braun & Clarke's (2006) six-phase approach. Excerpts quoted in the Results section have been translated into English for this report; the original-language verbatim transcript for one representative respondent is provided in Appendix E. Interview data were used to triangulate and elaborate not to test the quantitative hypotheses, consistent with the explanatory purpose of the design.

This study proposed a criticism on the anthropocentrism in *Dune* (2021) by using ecocriticism approach. This research uses qualitative method since this research aims to examine and describe the anthropocentrism in the movie. As Taylor and Bogdan (1982, as cited in Nugrahani, 2014) assert, qualitative research is methodology that generates descriptive data through observed behavior and spoken or written statements from individuals. In this research, the descriptive data is generated through observed scenes and dialogues shown in the movie that represent anthropocentrism values.

According to Moleong (2001, as cited in Sidiq, 2019), there are three ways to gather information, they are methods of documenting, interviewing, and observation. For this research, documentation method is used. The researchers collected certain scenes and dialogues that represent anthropocentrism through screen capturing and note typing. The gathered data are then further analyzed using ecocriticism point of view regarding the anthropocentrism values shown in *Dune* (2021).

RESULTS AND DISCUSSION

This section presents the results in full, comprising instrument testing, descriptive statistics, classical assumption tests, correlation analysis, and multiple linear regression, followed by the theoretical interpretation of each finding and the corroborating qualitative evidence.

Respondent Data and Residual Values

Table 1 presents the mean score per respondent together with the model's predicted value ($\hat{Y}$), residual (e), and standardized residual, as produced by SPSS.

Table 1. Respondent scores, predicted values, and residuals

No	Location	Role	X1 (Self-Efficacy)	X2 (Training)	Y (Performance)	$\hat{Y}$	e	Std. e
R01	Jakarta	Shadow Teacher	4.00	4.20	4.60	41.423	0.4577	17.477
R02	Jakarta	Shadow Teacher	2.80	2.80	3.00	30.947	-	-
R03	Jakarta	Shadow Teacher	3.80	2.80	3.20	34.021	-	-
R04	Jakarta	Shadow Teacher	3.20	3.00	3.40	33.146	0.0854	0.3260
R05	Jakarta	ABK Therapist	2.20	3.00	2.80	30.073	-	-
R06	Jakarta	ABK Therapist	3.00	4.00	3.40	37.380	-	-
R07	Jakarta	ABK Therapist	2.40	3.40	3.20	32.627	-	-
R08	West Java	Shadow Teacher	2.60	2.40	2.80	28.393	-	-
R09	West Java	Shadow Teacher	3.40	4.20	3.80	39.579	-	-
R10	West Java	Shadow Teacher	3.20	3.60	3.80	36.055	-	-
R11	West Java	Shadow Teacher	3.20	3.00	3.40	33.146	-	-
R12	West Java	ABK Therapist	2.60	3.40	3.60	33.241	-	-
R13	West Java	ABK Therapist	3.60	3.40	3.60	36.315	-	-
R14	West Java	ABK Therapist	2.40	3.20	3.40	31.657	-	-
R15	West Java	Shadow Teacher	2.80	2.80	3.40	30.947	-	-
R16	West Java Br.2	Shadow Teacher	2.00	2.80	2.60	28.488	-	-

R17	West Java	Shadow Teacher	3.80	3.40	3.20	36.930	-	-
R18	West Java	Shadow Teacher	3.60	3.80	3.60	38.254	-	-
R19	West Java	ABK Therapist	3.20	3.20	3.80	34.116	0.3884	14.831
R20	West Java	ABK Therapist	2.60	2.20	2.80	27.424	0.0576	0.2200
R21	West Java	ABK Therapist	3.80	4.00	4.00	39.838	0.0162	0.0617

Source: Primary data processed with SPSS 26 (2025).

Instrument Reliability Test

Table 2 presents the reliability results for all three scales. All Cronbach's Alpha values are far above the minimum threshold of 0.60, so the instruments are considered reliable.

Table 2. Reliability statistics

Variable	Items	Alpha (α)	Min.	Status	N
Self-Efficacy (X1)	8	0.9929	0.60	Reliable ✓	21
Specialized Training (X2)	6	0.9867	0.60	Reliable ✓	21
Employee Performance (Y)	5	0.9843	0.60	Reliable ✓	21

Descriptive Statistics

As shown in Table 3, self-efficacy has a mean of 3.057 (low-to-moderate category), specialized training a mean of 3.267 (moderate), and employee performance a mean of 3.400 (moderate-to-fair). The relatively low mean for self-efficacy reflects staff perceptions that their confidence in handling the full PAUD-to- SMA range of ASD/ADHD presentations has not yet been fully developed consistent with the demand for dynamic, level-spanning competence described in the Introduction.

Table 3. Descriptive statistics of research variables

Variable	N	Mean	Std. Dev.	Min	Max	Skewness	Kurtosis
Self-Efficacy (X1)	21	3.057	0.584	2.00	4.00	-0.067	-1.102
Specialized Training	21	3.267	0.560	2.20	4.20	0.083	-0.725
Employee	21	3.400	0.469	2.60	4.60	0.453	0.377

Residual Normality Test

The normality of the regression residuals was tested with the Shapiro-Wilk test because $n < 50$. As shown in Table 4, the significance value of 0.975 (> 0.05) indicates that the

residuals are normally distributed, so the classical-assumption requirement of normality is satisfied.

Table 4. Shapiro-Wilk test of normality (residuals)

Test	Statistic	df	Sig.	Note	N
Shapiro-Wilk (Residual)	0.9846	21	0.975	Normal ✓	21

Pearson Correlation Test

Table 5 shows that self-efficacy correlates strongly and positively with employee performance ($r = 0.694$; $p = 0.001$), as does specialized training ($r = 0.785$; $p = 0.000$). The correlation between the two predictors ($r = 0.539$) produces a VIF of 1.409, well below 10, indicating no multicollinearity problem.

Table 5. Pearson correlation results

Variable Pair	r	r ²	Sig. (2-tailed)	N	Interpretation
X1 → Y	0.694	0.481	0.001	21	Strong, Positive **
X2 → Y	0.785	0.616	0.000	21	Strong, Positive **
X1 ↔ X2	0.539	0.291	0.012	21	Moderate, Positive *

Source: SPSS 26 output. Note: ** $p < 0.01$; * $p < 0.05$; $N = 21$.

Multiple Linear Regression Analysis

Tables 6, 7, and 8 present the multiple linear regression results. The regression equation obtained is:

$$\hat{Y} = 0.877 + 0.307 X_1 + 0.485 X_2$$

Table 6. Model summary (coefficient of determination)

Model	R	R ²	Adjusted R ²	Std. Error	Durbin-	N
1	0.848	0.719	0.688	0.2619	1.847	21

Source: SPSS 26 output. Note: Durbin-Watson = 1.847 → no autocorrelation.

Table 7. ANOVA — simultaneous F test

Model	Source	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.165	2	1.583	23.073	0.000 **
	Residual	1.235	18	0.069		
	Total	4.400	20			

Source: SPSS 26 output. Note: ** $p < 0.001$; F-table ($\alpha = 0.05$; $df_1 = 2$; $df_2 = 18$) = 3.55.

Table 8. Regression coefficients — partial t test

Variable	B	Std. Err.	Beta	t	Sig.	CI Lo	CI Hi	VIF
(Constant)	0.877	0.376	-	2.333	0.032 *	0.087	1.666	-
Self-Efficacy (X1)	0.307	0.119	0.382	2.580	0.019 *	0.057	0.558	1.409
Training (X2)	0.485	0.124	0.579	3.904	0.001 **	0.224	0.746	1.409

Source: SPSS 26 output. Note: ** $p < 0.01$; * $p < 0.05$; t-table ($\alpha = 0.05$; $df = 18$) = 2.101; CI = 95% Confidence Interval.

Discussion

Effect of Self-Efficacy on Employee Performance (H1)

Self-efficacy has a significant positive effect on employee performance ($t = 2.580$; $p = 0.019$; $\beta = 0.382$); H1 is accepted. The relatively modest mean self-efficacy score of 3.057 suggests that shadow teachers and ABK therapists in Jakarta and both West Java branches have not yet developed full confidence in handling the complexity of ASD/ADHD cases across the PAUD-to-SMA span. This finding is consistent with Bandura's (1997) Self-Efficacy Theory: mastery experience accumulates gradually, and staff who must repeatedly shift between developmental levels each with a different intervention logic face a slower, more effortful path to high self-efficacy than staff working within a single level. The value $r^2 = 0.481$ indicates that self-efficacy alone explains 48.1% of the variance in employee performance.

Effect of Specialized Training on Employee Performance (H2)

Specialized training has a significant positive effect on employee performance ($t = 3.904$; $p = 0.001$; $\beta = 0.579$) and is the more dominant predictor compared with self-efficacy; H2 is accepted. The value $r^2 = 0.616$ indicates that training alone explains 61.6% of the variance in employee performance higher than self-efficacy's 48.1%. This finding is consistent with training-effectiveness theory (Noe, 2017; Kirkpatrick & Kirkpatrick, 2006): well-designed, role-specific training directly equips staff with concrete techniques for behavior management, communication, and sensory regulation, and per Baldwin and Ford's (1988) transfer-of-training model well-transferred training translates most reliably into on-the-job results. In a multi-level context, where a single fixed technique is rarely sufficient across the whole PAUD–SMA range, structured training appears to give staff a portable toolkit that self-efficacy alone, built only through informal on-the-job experience, does not fully provide.

Joint Effect of Self-Efficacy and Specialized Training (H3)

Jointly, self-efficacy and specialized training have a significant effect on employee performance ($F = 23.073$; $p < 0.001$; $R^2 = 0.719$; Adjusted $R^2 = 0.688$); H3 is accepted. This means 71.9% of the variance in employee performance among shadow teachers and ABK therapists in the Jakarta and West Java branches is jointly explained by self-efficacy and specialized training. A Durbin-Watson value of 1.847 confirms the absence of autocorrelation; VIF = 1.409 confirms the absence of multicollinearity; and Shapiro-Wilk $p =$

0.975 confirms residual normality all classical assumptions are satisfied. Table 9 summarizes the hypothesis-testing decisions.

Table 9. Summary of hypothesis testing results

H	Hypothesis Statement	t / F (calc.)	t / F (table)	p-value	Decision
H1	Self-Efficacy → Employee Performance	t=2.580	2.101	0.019	Accepted ✓
H2	Specialized Training → Employee	t=3.904	2.101	0.001	Accepted ✓
H3	X1 + X2 → Performance (Simultaneous)	F=23.073	3.55	0.000	Accepted ✓

Source: SPSS 26 data processing (2025). t-table = 2.101; F-table = 3.55 ($\alpha = 0.05$).

QUALITATIVE FINDINGS

Three respondents were interviewed to deepen the interpretation of the quantitative results: IN-01 (Shadow Teacher, Jakarta, 2 years of service, large positive residual in the regression model), IN-02 (ABK Therapist, West Java Branch 1, 3 years of service, near-zero residual), and IN-03 (Shadow Teacher, West Java Branch 2, 1 year of service, negative residual). Table 10 summarizes their profiles.

Table 10. Qualitative informant profile

Code	Role	Location	Tenure	Residual Pattern	Corresponding Respondent
IN-01	Shadow Teacher	Jakarta	2 years	Large positive (model underpredicts)	R01
IN-02	ABK Therapist	West Java Br. 1	3 years	Near zero (model fits well)	R13
IN-03	Shadow Teacher	West Java Br. 2	1 year	Negative (model overpredicts)	R17

Source: Interview data (2025). Respondent codes cross-reference Table 1; identities are anonymized.

Thematic analysis of the three transcripts (Braun & Clarke, 2006) identified three recurring themes, presented below with illustrative excerpts translated from the original Indonesian-language interviews.

Theme 1 — Confidence Accumulates Through Repeated, Level-Spanning Exposure.

All three informants described their sense of competence as something that grew gradually and unevenly across educational levels rather than arriving all at once. IN-01, who had recently been moved from a PAUD placement to a junior-secondary placement, described feeling confident with young children but having to relearn her approach almost from scratch when the developmental level changed: "With the little ones I already know what to do, but when I was assigned to a teenager for the first time, I felt like a new employee again." IN-02, with three years of experience spanning multiple levels, offered a more

settled account, describing confidence as something built case by case rather than granted by a title. IN-03, the newest of the three informants, expressed the least confidence and attributed this directly to limited exposure to the full range of cases so far.

Theme 2 — Structured Training Reduces Anxiety and Improves Technique.

All three informants linked formal, structured training sessions as distinct from informal on-the-job learning to a concrete improvement in both their technique and their sense of calm when facing a difficult behavioral episode. IN-02 specifically credited a structured behavioral-intervention training session with giving her a repeatable step-by-step protocol that she could fall back on during a crisis, rather than having to improvise. IN-03, despite lower overall self-efficacy, still reported that the training sessions she had attended were the single most useful resource available to her, suggesting that training may partly compensate for limited experience a pattern consistent with the regression finding that training was the more dominant of the two predictors.

Theme 3 — Performance Is Self-Assessed Through Visible Student Progress.

All three informants, when asked how they knew whether they were performing well, pointed to observable changes in their students rather than to formal evaluation scores or supervisor feedback. This suggests that the Employee Performance construct, as experienced by staff, is closely tied to a slow, cumulative, and sometimes hard-to-notice process which may help explain why the institution's average self-efficacy and performance scores cluster in the moderate range: gains are real but often invisible in the short term, a dynamic also noted qualitatively by IN-01 when describing why she initially doubted her own competence despite steady student progress.

Integration of Quantitative and Qualitative Findings

Read together, the two strands of data are mutually reinforcing. The quantitative finding that specialized training is the more dominant predictor ($\beta = 0.579$ versus $\beta = 0.382$ for self-efficacy) is echoed qualitatively in Theme 2, where even the least-experienced informant (IN-03) reported training as more immediately useful than accumulated confidence. At the same time, Theme 1 helps explain why self-efficacy remains a significant, if secondary, predictor: informants clearly distinguished the confidence built through direct, repeated exposure from the technique conveyed through training, and both were described as necessary. The residual-based sampling of informants also proved informative: IN-01's large positive residual (the model under-predicted her actual performance) corresponds qualitatively to a respondent who, despite describing low confidence in a new level assignment, was nonetheless highly motivated and resourceful a combination that a two-predictor linear model cannot fully capture. This convergence supports treating self-efficacy and training as complementary levers, consistent with H1, H2, and H3, while also indicating that qualitative depth is needed to understand the mechanism behind the statistical relationship a particularly important safeguard given the modest sample size ($n = 21$) of the quantitative phase.

CONCLUSION

Based on the combined quantitative and qualitative analysis, it is concluded that: (1) self-efficacy has a significant positive effect on the employee performance of shadow teachers and ABK therapists ($t = 2.580$; $p = 0.019$; $\beta = 0.382$); (2) specialized training has a significant positive effect and is the more dominant predictor ($t = 3.904$; $p = 0.001$; $\beta = 0.579$); (3) jointly, the two variables have a significant effect, explaining 71.9% of the variance in employee performance ($F = 23.073$; $p < 0.001$; $R^2 = 0.719$); and (4) qualitative interviews corroborate these results, showing that confidence and training operate through distinct but complementary mechanisms direct, repeated exposure for self-efficacy, and structured protocol-based learning for training. All classical regression assumptions were satisfied.

For the inclusive education institution in Jakarta and its West Java branches, it is recommended that management: (1) build a structured, level-differentiated training pathway that explicitly prepares staff for transitions between PAUD, elementary/junior-secondary, and senior-secondary placements, rather than relying on generic onboarding; (2) design deliberate mastery-experience opportunities such as graduated case assignments, shadowing of senior staff, and structured debriefing after difficult cases to accelerate self-efficacy growth, consistent with Bandura's (1997) sources of self-efficacy; and (3) make student-progress documentation more visible to staff themselves (e.g., a shared portfolio of milestones tied to the responsible shadow teacher or therapist), so that the slow, cumulative gains identified qualitatively in Theme 3 are recognized as evidence of performance rather than going unnoticed. Future research is encouraged to expand the sample across multiple institutions, test self-efficacy as a mediator between training and performance, and employ Structural Equation Modeling (SEM) once sample size permits, while retaining a qualitative component to preserve the interpretive depth demonstrated in this study.

REFERENCES

- Baldwin, T. T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology*, 41(1), 63–105.
- Bandura, A. (1997). Self-efficacy: The exercise of control. W.H. Freeman. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Creswell, J. W., & Plano Clark, V. L. (2018). Designing and conducting mixed methods research (3rd ed.). Sage.
- Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). Evaluating training programs: The four levels (3rd ed.). Berrett-Koehler.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., de Vet, H. C. W., & van der Beek, A. J. (2014). Construct validity of the Individual Work Performance Questionnaire. *Journal of Occupational and Environmental Medicine*, 56(3), 331–337.
- Noe, R. A. (2017). Employee training and development (7th ed.). McGraw-Hill Education.
- Peraturan Menteri Pendidikan Nasional Nomor 70 Tahun 2009 tentang Pendidikan Inklusif bagi Peserta Didik yang Memiliki Kelainan dan Memiliki Potensi Kecerdasan dan/atau Bakat Istimewa.
- Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783–805.