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Development and Validation of a Critical Pedagogy Scale: Teachers' Evaluations of the Turkish Education System*

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ABSTRACT

In this study, it is aimed to develop a scale that enables teachers to evaluate the Turkish education system through the lens of critical pedagogy principles and to use this scale to assess the system accordingly. A secondary objective of the research is to examine whether teachers' evaluations differ based on factors such as educational attainment and years of professional experience. The study employs a descriptive survey design, and data were collected during the 2023–2024 academic year from teachers working in public and private primary, secondary, and high schools located in the central districts of Van province. A non-probability, purposive sampling method was used to select participants. Within the scope of the study, a "Critical Pedagogy Scale" was developed. During the pilot phase, the scale was administered to 215 teachers, while in the final implementation, it was administered to 615 teachers. As part of the validity studies, an exploratory factor analysis was conducted, yielding a three-factor structure. Confirmatory factor analysis confirmed that the three-factor structure demonstrated good model fit indices. For reliability, item analysis was conducted, and Cronbach's alpha as well as test-retest reliability coefficients were calculated. The findings indicated that the scale possesses acceptable levels of reliability and validity. Based on the data obtained from the developed scale, it was found that teachers with postgraduate degrees and those with longer professional experience perceived the Turkish education system as being less aligned with critical pedagogy principles compared to their counterparts with only undergraduate degrees and fewer years of experience. Overall, teachers evaluated the Turkish education system as moderately aligned with the principles of critical pedagogy. Postgraduate and more experienced teachers were more critical of the system's adherence to these pedagogical principles.

Keywords: Critical pedagogy, education policy, curriculum and instruction, scale development

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Introduction

Education is recognized as a central process that shapes individuals' development within social, cultural, and political contexts. Educational theories and practices play a vital role in equipping individuals with knowledge, skills, and values. In this regard, critical pedagogy emerges as an approach that examines the impact of educational practices and policies on the development of individuals' critical thinking abilities. By promoting justice, equality, and democratic values in education, critical pedagogy enables individuals to question and transform social structures (Freire, 1993; Giroux, 2004).

In Paulo Freire's conception of critical pedagogy, education is not merely the transmission of information but a process through which individuals develop critical consciousness that enables them to contribute to social transformation. Freire emphasizes the importance of developing a critical stance against dominant ideologies in education and regards education as a tool for questioning social inequalities (Freire, 2009). However, in current educational systems, it is observed that the principles of critical pedagogy are not effectively implemented and that traditional approaches to education often remain unchallenged (McLaren, 1999). This situation highlights the need to align educational policies and curricula with the fundamental principles of critical pedagogy.

Studies in the literature examine the attitudes and views of teachers and academics regarding critical pedagogy. However, upon reviewing these studies, it is evident that the majority focus primarily on pre-service teachers and aim to determine their attitudes toward critical pedagogy (Altun & Gülay, 2017; Aslan & Kozikoğlu, 2015; Dal, 2018; Kozikoğlu & Çökük, 2017; Köse, 2016; Sarikaya et al., 2017; Taşgın & Küçükoğlu, 2014; Terzi et al., 2015; Topsakal & Duysak, 2017). In addition, there are scale development studies in the literature (Kurt et al., 2023; Yılmaz, 2009); however, these studies also aim to measure individuals' attitudes toward critical pedagogy. On the other hand, international research on critical pedagogy has primarily focused on classroom-based practices implemented in schools (Allen & Rossatto, 2009; Groves Price & Mencke, 2013; Halx, 2014; Osterfeld, 2011). Currently, there is no data collection tool that enables teachers to evaluate national education systems based on the principles of critical pedagogy, identifying their broader educational implications. Therefore, this study has two main objectives: a) to reach in-service teachers and enable them to evaluate the Turkish education system within the framework of critical pedagogy principles; b) to develop a "Critical Pedagogy Scale," as there is no existing scale in the literature specifically designed to assess education systems in alignment with critical pedagogy principles.

Evaluating the education system through the lens of critical pedagogy principles can give decision-makers insights into practices that encourage students to think deeply, question, and develop a critical perspective. Additionally, integrating critical pedagogy into the education system will improve individuals' critical thinking skills and strengthen a commitment to social justice (Giroux, 2018; McLaren, 2002). Recognizing the transformative power of critical pedagogy, it is crucial to assess how educational systems align with its principles and how educators view that alignment. To address this, the present study was designed to develop a Critical Pedagogy Scale and to explore teachers' perspectives on the Turkish education system using this new instrument.

Accordingly, the study seeks to address the following research questions:

1. Is the Critical Pedagogy Scale a valid and reliable measurement tool? Within the context of the principles of critical pedagogy, what are teachers' views on the following:
    - The current education policy,
    - Educational curricula and materials,
    - Teacher roles and instructional practices?
2. Do teachers' responses differ significantly based on their levels of professional experience and educational background?

To address these questions, the study first focused on developing and validating the Critical Pedagogy Scale, and subsequently applied the scale in both pilot and main study phases to examine teachers' perceptions across different educational settings.

Critical Pedagogy as a Teaching Approach

Critical pedagogy is regarded as a comprehensive educational approach that not only questions instructional methods but also interrogates the broader nature and function of education itself. Rather than accepting conventional educational paradigms at face value, critical pedagogy seeks to reframe them through alternative perspectives and approaches. At its core, this approach raises fundamental questions about why particular educational practices are favored and examines the historical, cultural, and ideological foundations upon which such practices are based (Freire, 2009; Giroux, 2007; McLaren, 2015).In doing so, it aims to deconstruct and reinterpret what is often labelled as traditional or classical forms of education and to understand how these are shaped by structures of authority (Spring, 1991). As a philosophical movement, critical pedagogy positions education within a political framework and critically evaluates dominant practices. It examines how power relations are reproduced both within classrooms and in everyday life, thereby exposing the role of education in maintaining existing social structures (McLaren, 2015). According to Kincheloe (2011), critical pedagogy draws upon the dialectical nature of critical theory to conceptualize educational institutions not merely as instruments of socialization or indoctrination but as cultural spaces where students may experience empowerment and transformation. Similarly, Althusser (1994) identifies schools as among the most influential ideological state apparatuses. Through teachers, textbooks, and curricula, schools reproduce dominant ideological structures and instill values aligned with the prevailing sociopolitical order. In this sense, schools serve as mechanisms that sustain and reinforce hegemonic policies and paradigms. Ultimately, critical pedagogy scrutinizes the political dimensions of education while simultaneously challenging entrenched concepts within the field of education. It problematizes the power dynamics at play in classrooms and broader society, seeking to uncover the transformative potential of education in empowering individuals and fostering meaningful social change.

Critical pedagogy seeks to uncover why certain educational methods and approaches are employed and who benefits from them. By posing questions such as "Why do we do what we do?" and "Why are we bound to traditional methods?", it aims to interrogate the power structures embedded within educational systems (Giroux, 2007). In this regard, it highlights potential biases, ideological influences, and inequitable distributions of power inherent in traditional educational frameworks. In classroom practices informed by critical pedagogy, there is a shift away from top-down, passive knowledge transmission toward a liberatory education that fosters active student engagement, self-reflection, critical thinking, and holistic growth. When examining teacher-student relationships and roles, fundamental differences between traditional and critical

pedagogical models become evident. In traditional pedagogy, this relationship is often characterized by an authoritarian dynamic that mirrors broader power structures in society. Students are expected to passively accept information without question within a rigid hierarchy (Yılmaz, 2009). This approach is described by Freire (Freire, 1993) as "banking education," wherein students are viewed as empty vessels to be filled with knowledge by teachers. Success, in this model, is measured by how effectively teachers deposit knowledge into students. Compliance and uncritical acceptance are considered indicators of being a good student.

According to Freire (1993), within this model, education functions as an act of saving or investing: teachers assume the role of investors, while students are positioned as the objects of investment. In such a framework, students play passive roles—they receive instruction, possess limited knowledge compared to the all-knowing teacher, think in line with the predetermined directives, submit to silent listening, discipline themselves by external authority, and comply with choices made by others. Traditional pedagogical approaches, therefore, construct a hierarchical dynamic in which teachers are authoritarian transmitters of knowledge, and students are passive recipients lacking agency and critical capacity. In contrast, critical pedagogy challenges such hierarchical designations as "the teacher's students" and "the students' teacher." Instead, education is re-envisioned as a dynamic, reciprocal process in which teachers and students engage collaboratively in both teaching and learning. This transformative framework recognizes that educators can learn from their students while simultaneously guiding them.

Within this approach, students are no longer passive listeners; instead, they become active participants who take responsibility for their learning. They are positioned as co-investigators in a dialogical process alongside the teacher. Rather than delivering content unilaterally, teachers cultivate opportunities for deep thinking and encourage students to articulate their perspectives. This interactive process enables both students and teachers to contribute equally to the co-construction of knowledge, fostering the collective exploration of ideas. The teacher, while facilitating the process and providing resources, also promotes critical thinking and values prior feedback and evaluations from students (Freire, 1993).

The challenges currently facing the Turkish education system can be primarily attributed to a misalignment between the dominant educational paradigm and the evolving demands of a knowledge-based society. The system appears caught between outdated modernist frameworks and the expectations of postmodern educational thought. While some students may access more progressive educational approaches through private institutions or alternative programs, a significant portion continues to be subjected to traditional, banking-style models of education. The limitations of this model highlight an urgent need for pedagogical reform. In this context, re-evaluating teaching models through the lens of critical pedagogy offers a promising direction. By promoting active participation, critical thinking, and dialogue, critical pedagogy can support a shift away from rote memorization and passive learning. Instead, it cultivates student autonomy, reflective engagement, critical analysis, and problem-solving capabilities. As Holec (1979) argues, learners within this model emerge as autonomous individuals who take responsibility for their learning and actively participate in shaping their educational journeys.

Critical Pedagogy and Teacher Roles

Critical pedagogy offers a comprehensive framework for addressing educational issues by promoting a critical examination of the purpose, acquisition, and societal consequences of education. It places a strong emphasis on social justice, respects individual capacities, highlights equity in both social and educational contexts, and aims to challenge oppressive hierarchical

relationships between educators and students. By incorporating ideological, sociological, philosophical, political, and cultural dimensions into educational discourse, critical pedagogy transcends conventional academic knowledge, offering a holistic approach. This paradigm aims to dismantle dominant cultural norms, class-based biases, and ethnocentric perspectives that often perpetuate inequality within educational institutions. Meaningful transformation in education can only be achieved through the implementation of critical pedagogy. It encourages the recognition and validation of diverse voices, perspectives, and identities. In this context, teachers are expected to utilize their expertise collaboratively, fostering an environment where all voices are acknowledged and valued. The traditional power dynamic between teacher and student must evolve into one characterized by mutual respect, cooperation, and shared learning. Such an approach supports an inclusive educational system that prioritizes student empowerment (İnal, 2010). This transformative process requires not only the active engagement of teachers, who play a significant role in shaping educational systems but also the participation of students, who are central to these systems.

Teachers play a vital role in shaping students' consciousness, fostering self-reflection, and contributing to social transformation (Gündüz, 2022). Equipping teachers with the necessary knowledge and skills is crucial for encouraging creativity and critical thinking among students (Parlar, 2012). As practitioners of critical pedagogy, educators can cultivate learners who are socially conscious and committed to justice. The deeper teachers understand and internalize the goals and requirements of critical pedagogy, the more effectively they can apply its principles in both theory and practice. Critical educators must encourage students to question, promote a sense of freedom, and help them develop a critical vocabulary. According to Freire, a truly critical educator is not only one who communicates in a language conducive to critical thought but also someone who possesses a teachable heart infused with love, characterized by a revolutionary form of caring that fosters compassion, empathy, and justice (McLaren, 1999). Freire emphasizes that teachers should guide students in understanding themselves and others around them, prioritizing love alongside justice throughout their educational journey. From a critical pedagogy perspective, teachers are seen as facilitators of education who conduct research grounded in an awareness of both macro-level educational frameworks and micro-level student experiences within their sociocultural contexts (Coffey, 2008). These educators are motivated by transformative ideas that reimagine the world. They believe in the capacity of individuals to transcend current realities and view human destiny as inherently intertwined with the power of such transformative visions.

Critical pedagogy recognizes the importance of cultivating strong, professional teachers who are committed to continuous self-development. Within this framework, the teacher's role extends beyond merely transmitting knowledge; it involves encouraging students to transition from passive recipients to active participants in the learning process. Critical educators understand that curriculum design must consider the social, educational, and societal dynamics shaping students' lives. They strive to integrate new teaching methods and techniques while creating diverse learning environments and activities tailored to their students' needs. Acknowledging the value of experiential learning, critical teachers believe that students can draw meaningful insights from their surroundings, cultures, and lived experiences. According to Freire, knowledge is co-constructed through dialogue and discussion between teachers and students. Learning occurs when educators and learners come together to engage in critical conversations, particularly around issues relevant to the students' own lives (Peterson, 2003). In this collaborative dialogue process, problems are presented either by the teacher or the students, and solutions are sought cooperatively through structured discussion. Open-ended questions posed by the teacher stimulate critical

examination of the current context. This approach helps students become aware of their agency in effecting change and motivates them to work toward creating a more just and equitable society.

Questions concerning democracy inherently involve critical inquiry. Critical educators must address empirical concerns related to the implementation of democratic principles by examining research designs and the criteria used to shape either democratic or non-democratic education (Giroux, 2018). In this context, questions such as "What should a democratic classroom look like?" or "How should a teacher behave in a democratic classroom?" raise practical issues regarding the implementation of democratic education. Conversely, questions like "How can I become a democratic teacher?" or "How does this decision affect my identity as an educator?" delve into the ontological dimensions of democratic teaching. There are no absolute answers to these questions, as critical pedagogy does not seek a single, objective truth. Instead, it values individuality and diversity in knowledge, methodology, and practice, with the overarching aim of fostering future citizens who embrace democracy through democratic education. Democracy necessitates critique; therefore, enhancing students' capacity for critical thinking is seen as essential for realizing democratic ideals. Democracy must be regarded as an indispensable element of education. Learning and teaching practices that deviate from democratic principles introduce challenges that lie at the heart of critical pedagogy. If educators fail to grasp the relationship between critical pedagogy, education, and democracy or politics, they may overlook the importance of promoting democracy and facilitating student agency within the curriculum. Educators are expected to reveal the dominant ideologies shaping student expectations while simultaneously equipping learners with the competencies necessary to examine those ideologies (Freire, 2009) critically. Emancipatory educators strive to empower students with fundamental skills while also dismantling ideological barriers that hinder liberation within educational environments.

Method

Research Model

In this study, a survey research design was employed to evaluate the education system from the perspective of teachers within the framework of critical pedagogy principles. The survey model is commonly used in research to provide a quantitative description of trends, attitudes, or opinions within a population based on data collected from a selected sample (Creswell, 2014). Additionally, to gather data aligned with the study's objectives, a Critical Pedagogy Scale was developed. Although the literature includes several instruments designed to assess attitudes and views toward critical pedagogy, no scale currently exists that specifically evaluates education systems in light of the principles of critical pedagogy. Therefore, in this study, the newly developed Critical Pedagogy Scale was employed to examine teachers' perspectives on the Turkish education system from a critical pedagogical perspective.

Study Group

The population of this research consists of 6,474 teachers working in public and private primary, secondary, and high schools in the central districts of Van province during the 2023–2024 academic year. Teachers from the preschool education level and the field of special education were excluded from the study. This decision was based on the fact that preschool education is predominantly considered "preparatory" within mainstream education. In contrast, special education involves a distinct and specific dynamic that differs significantly from conventional educational practices. During the scale development phase of the study, data were collected from

251 teachers as part of the pilot implementation. An Exploratory Factor Analysis (EFA) was conducted using data from these 251 participants to test the construct validity of the scale. Following the EFA, a structure consisting of 28 items and three factors was identified. This version of the scale was then administered to a sample of 615 teachers, and analyses of validity and reliability were conducted. To further examine the construct validity and psychometric properties of the developed scale, a Confirmatory Factor Analysis (CFA) was performed. A non-random, purposive sampling method was used to select the study sample. In purposive sampling, the researcher selects participants based on their knowledge of the population and the specific aims of the study, choosing a sample that is most likely to provide the required data (Fraenkel & Wallen, 1993). Table 1 presents a comparative overview of the demographic characteristics of both the pilot and main study groups.

Table 1. Demographic characteristics of the pilot and main study groups

Variable	**Pilot Study (n = 251)**		**Main Study (n = 615)**	
Educational Level				
Bachelor's Degree	200 (79,7%)		471 (76,6 %)	
Graduate Degree	51 (20,3 %)		144 (23,4 %)	
Professional Experience				
1-4 years	38 (15,1 %)		121 (19,7 %)	
5-10 years	75 (29,9 %)		215 (35 %)	
11-20 years	77 (30,6 %)		176 (28,6 %)	
20 years and above	61 (24,4 %)		103 (16,7 %)	
School Level				
Primary School	115 (45,8 %)		268 (43,6 %)	
Middle School	85 (33,9 %)		189 (30,7 %)	
High School	51 (20,3 %)		158 (25,7 %)	
Gender	**Female**	**Male**	**Female**	**Male**
Primary School	60 (%52.2)	55 (47.8 %)	139 (51.9%)	129 (48.1%)
Middle School	44 (51.8%)	41 (48.2%)	98 (51.9%)	91 (48.1%)
High School	27 (52.9%)	24 (47.1%)	82 (51.9%)	76 (48.1%)

In Table 1, the majority of participants in both the pilot and main study groups held a bachelor's degree (79.7% and 76.6%, respectively). In comparison, the proportion of those with a postgraduate degree is lower, at 20.3% and 23.4%. In terms of professional experience, the percentage of teachers with more than 11 years of teaching experience is higher in the pilot study (55%). Still, this percentage slightly decreases in the main study (45.3%). The majority of participants are employed in primary schools (45.8% and 43.6%), followed by middle schools (33.9% and 30.7%) and high schools (20.3% and 25.7%). Overall, although the primary study group encompasses a broader array of teachers, it preserves a demographic composition akin to that of the pilot group. Furthermore, an analysis of the gender distribution during both the pilot and main study stages of the scale development process reveals that the participant composition exhibits a nearly similar number of male and female teachers across all school levels. Gender parity is crucial in scale development, as it ensures the inclusion of varied viewpoints and reduces the

likelihood of gender-based response bias, thereby improving the generalizability and equity of the instrument (DeVellis, 2021; Worthington & Whittaker, 2006).

Data Collection

The data collection process took place during the 2023–2024 academic year among teachers at public primary, lower secondary, and upper secondary schools in the central districts of Van, Türkiye. The researchers collected the data personally to ensure consistency and reliability throughout the process.

Data Collection Tool

Critical Pedagogy Scale (CPS)

To collect data for this study, a Critical Pedagogy Scale was developed, and the research data were obtained using this instrument. Following a comprehensive review of national and international literature, an initial item pool comprising 76 statements was generated. The scale was designed as a five-point Likert-type scale, ranging from "strongly disagree" to "strongly agree." Items deemed misaligned with the study's purpose were excluded from the item pool, resulting in a 40-item expert review form. The decision to employ a five-point Likert-type scale in this study was based on its widespread acceptance and effectiveness in measuring attitudes, beliefs, and perceptions with clarity and statistical soundness. Five-point scales are known to strike an optimal balance between cognitive simplicity and psychometric reliability, offering respondents a manageable range of options while preserving data quality. This format allows participants to express varying degrees of agreement or disagreement, including a neutral midpoint, thereby reducing response bias and increasing measurement sensitivity (Croasmun & Ostrom, 2011; Jamieson, 2004). Furthermore, the format is widely recognized in educational and social science research for its compatibility with both parametric and non-parametric analyses, its user-friendliness, and its ability to maintain strong internal consistency across diverse adult populations (Yılmaz, 2009). Given these methodological advantages, the five-point Likert scale was considered the most appropriate structure for accurately capturing teachers' evaluations within the framework of this study. In light of these strengths, a five-point Likert format was deemed most appropriate for capturing teachers' evaluations in a reliable and interpretable manner. Two subject-matter experts, two measurement and evaluation specialists, and one language expert evaluated the items in terms of measurement quality, language clarity, content relevance, and formal appropriateness. Based on their feedback, two items were removed from the scale. Following the expert review, a preliminary trial was conducted with five teachers to assess the clarity of the items and the average time required to complete the form. After implementing the necessary revisions, the 38-item scale was finalized for pilot administration.

Data Analyses

After obtaining the necessary legal permissions, the researcher administered the scale to volunteer teachers working in schools located in the central districts. The data were analyzed using SPSS and AMOS software programs. During the scale development phase, expert opinions were sought to assess content validity. Construct validity was examined through Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). The Kaiser-Meyer-Olkin (KMO) coefficient and Bartlett's Test of Sphericity were employed to determine the suitability of the data for factor analysis. Convergent and discriminant validity were evaluated using Average Variance Extracted (AVE) and Composite Reliability (CR) values. Hotelling's T^2 test was conducted to assess response bias. Reliability analyses were performed through split-half reliability, item-total

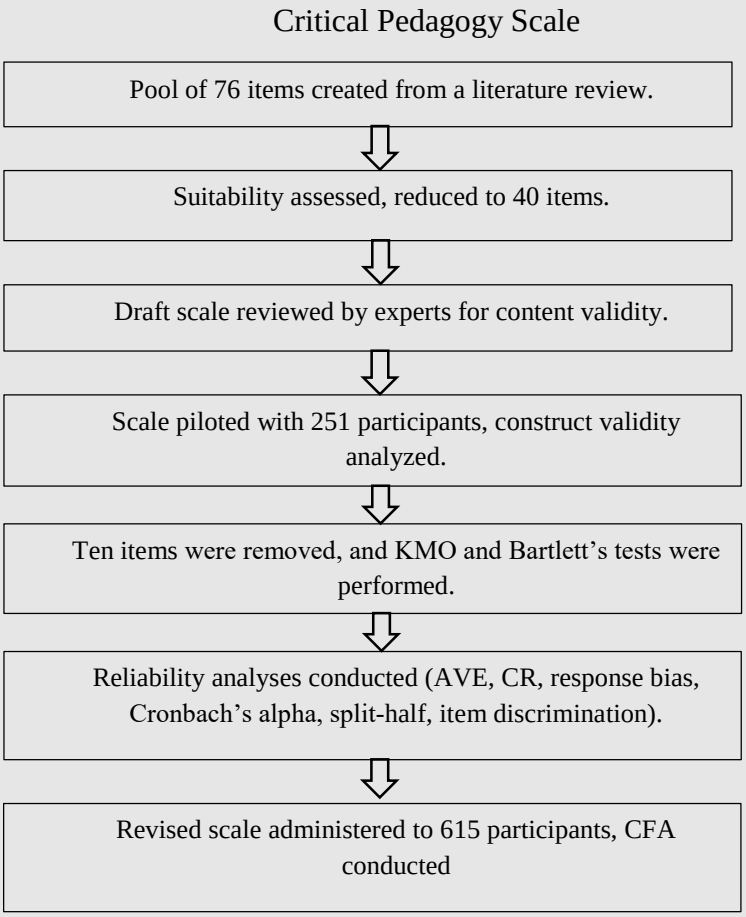
correlations, and item discrimination indices. The normality of the data was assessed with the calculation of skewness and kurtosis values. In addition, histogram graphs were examined. Since the assumptions of normality were met, parametric tests were employed in subsequent analyses. Descriptive statistics, including frequency, percentage, standard deviation, and arithmetic mean, were used in conjunction with inferential analyses, such as analysis of variance (ANOVA) and t-tests. To examine teachers' perspectives on the Turkish education system regarding education policies, curricula, and materials, as well as teacher roles and classroom practices within the framework of critical pedagogy, the arithmetic means and standard deviation values of the scale were analyzed. Furthermore, independent samples t-tests were used to compare responses by educational level, and one-way ANOVA was employed to examine differences based on professional experience. Eta squared (η^2) values were calculated to assess the effect sizes of statistically significant results.

Results

The findings obtained from the analysis of the research data are presented under two main headings: Development of the Critical Pedagogy Scale and Teachers' Perspectives on the Turkish Education System within the Framework of Critical Pedagogy Principles.

Development of the Critical Pedagogy Scale

To develop a measurement tool that allows for the evaluation of the Turkish education system through the lens of critical pedagogy principles, a scale development study was conducted. The process was carried out in the stages outlined below:



Validity Analyses

Content Validity

The Content Validity Ratio (CVR) values for the subdimensions of educational policy, curriculum, instructional materials, and teachers' roles & classroom practices were found to be 1.00. The Content Validity Index (CVI), which represents the average Cronbach's Alpha (α) across the subdimensions, was also calculated to be 1.00, indicating that the scale achieved 100% validity. To assess the construct validity of the scale and examine its psychometric properties, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were conducted.

Exploratory Factor Analysis (EFA)

To evaluate sample adequacy, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's Test of Sphericity were applied. The KMO value was found to be 0.951, indicating an excellent result (Kartal & Bardakçı, 2018). Bartlett's Test of Sphericity was statistically significant ($p < 0.05$), indicating the appropriateness of the data for factor analysis. In other words, a KMO value above 0.90 and a significant Bartlett's test result confirm the suitability of proceeding with factor analysis (Field, 2009). During the EFA, factors were determined based on eigenvalues greater than 1 (Yang & Xia, 2015) and the scree plot. After identifying the number of factors, the Varimax rotation technique was employed to evaluate the item distribution across the factors. Varimax rotation facilitates the precise definition of factors, ensuring that items are concentrated on specific factors (Costello & Osborne, 2005), thereby making the structural relationships between items more distinct (Hair et al., 2010). Within this scope, 10 items that had cross-loadings or factor loadings below 0.40 were removed from the scale. The squared factor loadings of the remaining items ranged from .473 to .746. The first factor accounted for 48.25% of the variance, the second for 10.98%, and the third for 4.1%, with the three factors collectively explaining 63.38% of the total variance. Table 2 presents the factor loadings of the items in the Critical Pedagogy Scale, organized by their associated factors.

Table 2. Factor loadings of the critical pedagogy scale (CPS)

Item No	Factors		
	1	2	3
I23	.613		
I24	.668		
I25	.657		
I28	.710		
I29	.791		
I30	.761		
I31	.660		
I32	.810		
I33	.827		
M34	.788		
M35	.770		
M36	.678		
M37	.809		
M38	.685		
M1		.761	
M2		.795	

M3	.737		
M4	.760		
M5	.769		
M6	.700		
M7	.614		
M8	.706		
M12	.643		
M13	.589		
M15		.650	
M17		.669	
M16		.779	
M20		.540	

As shown in Table 2, the Critical Pedagogy Scale was divided into three subdimensions through exploratory factor analysis and includes 28 items. The first subscale contains items with factor loadings ranging from .613 to .827; the second subscale contains items with factor loadings ranging from .589 to .795; and the third subscale comprises items with loadings between .540 and .779. These results indicate that the scale's structure is consolidated into three distinct factors.

Convergent and Discriminant Validity

Convergent and discriminant validity were assessed by examining inter-factor correlations, as well as the Average Variance Extracted (AVE) and Composite Reliability (CR) values. The resulting values are shown in Table 3 below.

Table 3. Convergent and discriminant validity values

Factors	Factor 1	Factor 2	Factor 3	AVE	$\sqrt{\text{AVE}}$	CR
Factor 1	1	.604*	.591*	.53	.73	.94
Factor 2		1	.720*	.50	.71	.90
Factor 3			1	.44	.67	.75

**AVE: Average Variance Extracted; CR: Composite Reliability*

The obtained correlation coefficients indicate strong, positive relationships. Table 3 also shows the AVE and CR values for each factor in the measurement instrument. For adequate construct validity, composite reliability should exceed .70, and AVE should surpass .50. While the AVE values of .53 and .50 meet the recommended threshold, the slightly lower AVE value of .44 for Factor 3 may still be considered acceptable if other reliability indicators are satisfactory (Chin, 1998). These AVE and CR values support the instrument's convergent and discriminant validity.

Reliability Analyses

To assess the reliability of the 28-item, three-dimensional scale, various tests were conducted, including examination of response bias, Cronbach's alpha internal consistency analysis, split-half reliability, and item discrimination indices. The applied tests are presented sequentially in Table 4.

Table 4. Reliability analyses of the critical pedagogy scale

Analysis Type	Value (s)
Hotelling's T^2 Test	$T^2 = 259.941$; $F = 8.626$; $df_1 = 27$; $df_2 = 224$; $p < .001$
Cronbach's Alpha	Total Scale = .959 F1 (Teacher Role) = .951 F2 (Policy) = .933 F3 (Curriculum) = .816
Split-Half Reliability	Part 1 (14 items) = .831 Part 2 (14 items) = .758 Correlation = .947 Spearman-Brown = .923 Guttman = .973

As shown in Table 4, multiple statistical procedures were employed to evaluate the reliability of the 28-item CPS scale, including response bias assessment, internal consistency estimation, and split-half reliability analysis.

The assessment of response bias through Hotelling's T^2 test yielded statistically significant results ($T^2 = 259.941$, $p < .001$), indicating that participants exhibited systematic response patterns across items (Podsakoff et al., 2003), which may suggest the presence of response bias.

In terms of internal consistency, Cronbach's alpha coefficients revealed robust reliability. The overall scale demonstrated a high internal consistency ($\alpha = .959$), with similarly strong coefficients observed for the sub-dimensions: Teacher Roles ($\alpha = .951$), Education Policy ($\alpha = .933$), and Curriculum & Materials ($\alpha = .816$). These findings exceed commonly accepted thresholds, supporting the internal homogeneity of the scale (Çokluk et al., 2012).

Furthermore, the split-half reliability analysis confirmed the consistency of the scale scores. The division of items into two halves yielded a high correlation between parts ($r = .947$), with Spearman-Brown and Guttman coefficients of .923 and .973, respectively. These values indicate excellent reliability, by psychometric standards (Kline, 2000; George & Mallery, 2024).

The item discrimination index is a statistical measure that determines whether a test or scale item can distinguish individuals based on the characteristic being measured (Crocker & Algina, 1986). It evaluates how well each item differentiates between individuals. The item discrimination analysis revealed that all items demonstrated acceptable levels of discrimination, with item-total correlations ranging from .58 to .81. None of the items fell below the commonly accepted threshold of .30, as recommended by Nunnally and Bernstein (1994), indicating that each item contributes meaningfully to the construct being measured. Furthermore, participants were divided into upper and lower 27% groups based on total scale scores. Independent sample t-tests revealed statistically significant differences between these groups for all items ($p < .05$), suggesting that the scale effectively differentiates between individuals with varying levels of the latent trait. These findings support the internal structure and discriminative validity of the scale.

These findings indicates that the scale measures the intended construct with the desired level of reliability. The scree plot of the scale is presented below in Figure 1.

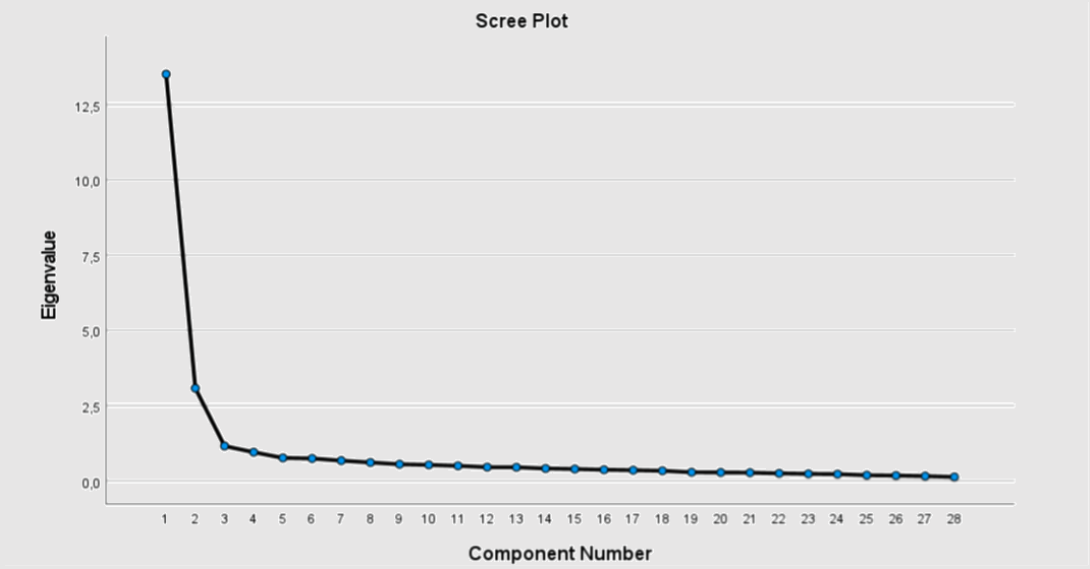


Figure 1. Scree plot of eigenvalues

Although the scree plot revealed the possibility of more than three factors, the choice to stick with a three-factor solution was based on a combination of theoretical alignment, factor interpretability, and item distribution. The three maintained dimensions aligned with the conceptual framework developed from critical pedagogy literature, ensuring content validity. Furthermore, components other than the third had marginal eigenvalues and contained either too few or cross-loaded items, thereby compromising the integrity of the construct. As a result, based on the Kaiser criterion (eigenvalue > 1) and theoretical coherence, the three-factor structure was chosen as the most parsimonious and interpretable model for further confirmatory factor analysis. To evaluate the adequacy of the data for conducting Confirmatory Factor Analysis (CFA) following Exploratory Factor Analysis (EFA) and reliability analyses, the 28-item version of the scale was examined. The Kaiser-Meyer-Olkin (KMO) value was found to be .966, and Bartlett's Test of Sphericity was statistically significant ($p < .05$). A KMO value of .90 or above is considered to indicate an "excellent" level of sampling adequacy (Büyüköztürk, 2018). The standard deviation was calculated to be 378, and the chi-square value was 13,652.466. These results indicate that the dataset is suitable for conducting confirmatory factor analysis.

Confirmatory Factor Analysis (CFA)

Following the exploratory factor analysis, confirmatory factor analysis (CFA) was conducted to test the fit of the 28-item, three-factor structure to the data (Sümer, 2000). The model fit indices for the Critical Pedagogy Scale (CPS) were as follows: $\chi^2/df = 3.505$, GFI = .868, AGFI = .850, RMSEA = .064, CFI = .936, NFI = .913, PGFI = .736, and TLI = .930. These fit indices indicate an acceptable model fit. The acceptable and excellent threshold values for each index, along with the observed CFA results and their interpretations, are presented in Table 5.

Table 5. Fit Indices and values from confirmatory factor analysis (CFA)

Fit Index	Excellent Fit Criteria	Acceptable Fit Criteria	PRE-Obtained Value	POST-Obtained Value	Result
χ 2 /sd	$0 \leq \chi$ 2 /sd ≤ 2	$0 \leq \chi$ 2 /sd≤ 5	4.45	3.505	Acceptable Fit
AGFI	.90 ≤ AGFI ≤ 1.00	.85 ≤ AGFI ≤ .90	.805	.850	Acceptable Fit
GFI	.95 ≤ GFI ≤ 1.00	.85 ≤ GFI ≤ 95	.834	.868	Acceptable Fit
RMSEA	.00 ≤ RMSEA ≤ .05	.05 ≤ RMSEA ≤ .08	.075	.064	Acceptable Fit
CFI	.95 ≤ CFI ≤ 1.00	.90 ≤ CFI ≤ .95	.911	.936	Acceptable Fit
NFI	.95 ≤ NFI ≤ 1.00	.90 ≤ NFI ≤ .95	.889	.913	Acceptable Fit
PNFI	.95 ≤ PNFI ≤ 1.00	.50 ≤ PNFI ≤ .95	.713	.736	Acceptable Fit
TLI	.95 ≤ TLI ≤ 1.00	.90 ≤ TLI ≤ .95	.903	.930	Acceptable Fit

(Jöreskog & Sörbom, 1993;; Marsh, Balla & McDonald, 1988; Sümer, 2000; Schermelleh-Engel & Moosbrugger, 2003; Thompson, 2004; Brown, 2006; Tabachnick & Fidell, 2019; Hooper, Coughlan & Mullen, 2008; Kline, 1999). PRE: Pre-covariance; POST: Post-covariance.

According to Table 8, the model fit indices of the scale fall within the acceptable and excellent criteria. The results of the confirmatory factor analysis (CFA) are presented below in Figure 2.

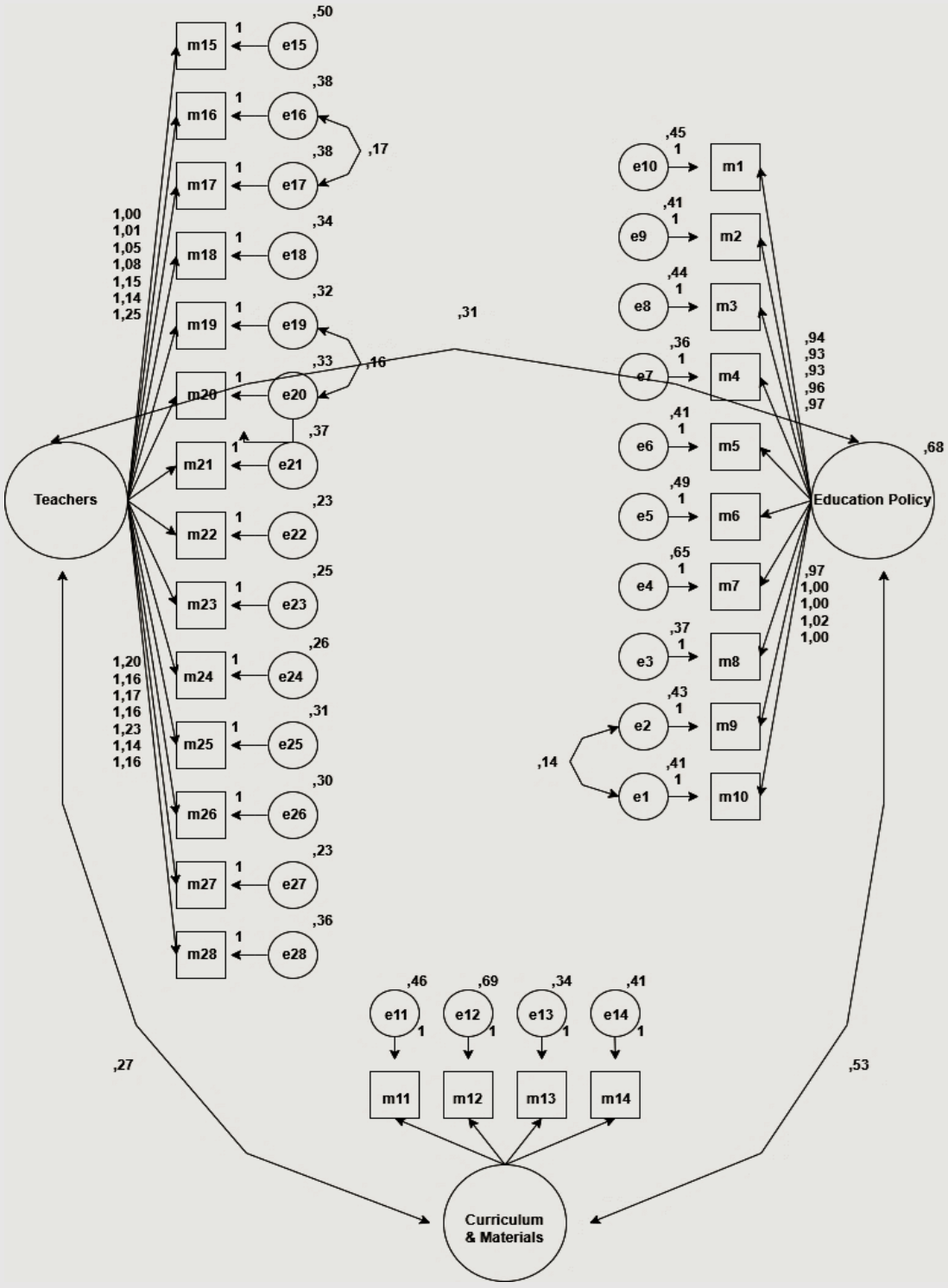


Figure 2. Confirmatory factor analysis path diagram

Upon examining Figure 2, it can be concluded that if the factor loading values exceed 0.30, the items are suitable for the construct. Both standardized and unstandardized factor loadings, standard errors of the items, critical ratio (CR) values, and their significance levels are presented in Table 6 below.

Table 6. Confirmatory factor analysis factor loadings (first-order, without covariance)

Item	Standardized Factor Loading	Unstandardized Factor Loading	**S.E.**	**C.R.**	***p-value***
I-1	1.000			1.000	*p*<.001
I-2	.994	.051	19.586	.994	*p*<.001
I-3	.993	.052	19.188	.993	*p*<.001
I-4	1.028	.050	20.401	1.028	*p*<.001
I-5	1.041	.052	19.928	1.041	*p*<.001
I-6	1.048	.055	19.232	1.048	*p*<.001
I-7	1.078	.059	18.131	1.078	*p*<.001
I-8	1.074	.052	20.711	1.074	*p*<.001
I-9	1.119	.054	20.869	1.119	*p*<.001
I-10	1.102	.053	20.931	1.102	*p*<.001
I-11	1.000			1.000	*p*<.001
I-12	.919	.061	15.066	.919	*p*<.001
I-13	1.216	.060	20.159	1.216	*p*<.001
I-14	1.195	.061	19.489	1.195	*p*<.001
I-15	1.000			1.000	*p*<.001
I-16	1.025	.059	17.273	1.025	*p*<.001
I-17	1.064	.061	17.524	1.064	*p*<.001
I-18	1.076	.060	17.841	1.076	*p*<.001
I-19	1.165	.062	18.772	1.165	*p*<.001
I-20	1.153	.062	18.561	1.153	*p*<.001
I-21	1.228	.067	18.296	1.228	*p*<.001
I-22	1.180	.061	19.339	1.180	*p*<.001
I-23	1.135	.060	18.951	1.135	*p*<.001
I-24	1.147	.061	18.893	1.147	*p*<.001
I-25	1.148	.063	18.355	1.148	*p*<.001
I-26	1.252	.066	18.882	1.252	*p*<.001
I-27	1.114	.058	19.039	1.114	*p*<.001
I-28	1.133	.063	17.851	1.133	*p*<.001

CR*=Critical Ratio, the test statistic used to assess the significance of item loadings;* ***S.E.*** *= Standard Error.*

The CR statistics indicate whether the items are statistically significant. Factor loadings greater than 0.30 typically indicate that the items are strongly associated with their underlying construct and represent it effectively (Tabachnick & Fidell, 2019). Table 9 shows that all CR values are statistically significant, and all item factor loadings exceed the threshold of 0.30. This indicates that the items are appropriate for the construct. Specifically, the factor loadings of all

items were found to range between .50 and .67, confirming their suitability in representing the measured structure.

Teachers' Perspectives on the Turkish Education System within the Framework of Critical Pedagogy Principles.

The Critical Pedagogy Scale, which consists of 28 items and three sub-dimensions, includes 14 items in the "Teacher Roles and Classroom Practices" sub-dimension, 10 items in the "Education Policy" sub-dimension, and four items in the "Curricula and Instructional Materials" sub-dimension. When examining the mean scores on the Critical Pedagogy Scale, the following interpretation ranges were used: 1.00–1.79 = Very Low, 1.80–2.59 = Low, 2.60–3.39 = Moderate, 3.40–4.19 = High, 4.20–5.00 = Very High (Çelik, 2022).

Normality Tests and Selection of Analysis Methods

In order to determine whether the dataset conformed to the assumption of normality, skewness and kurtosis values for the overall scale and its subdimensions were examined. According to Field (2024), values falling within the ±2 range are considered acceptable indicators of normality. The results revealed that all skewness and kurtosis values were within this threshold, suggesting that the data approximate a normal distribution and are suitable for parametric analyses.

For the Critical Pedagogy Scale, the skewness was 0.088 and the kurtosis was 0.365; for all subdimensions, the values ranged between –0.13 and 0.297.

Teachers' Views on Education Policy

The values and factor loadings related to teachers' views on current education policies in the context of critical pedagogy principles are presented in Table 7.

Table 7. Descriptive statistics related to teachers' views on education policy

Items	N	$\bar{X}$	Sd	Factor 2
1. Current education policies promote democratic learning environments.	615	2.94	1.021	.761
2. The education system is undergoing a transformation process.	615	2.71	0.995	.795
3. The system includes emancipatory educational practices.	615	2.79	1.012	.737
4. Current education policies are inclusive.	615	2.92	0.993	.760
5. The system promotes a sense of social belonging.	615	2.93	1.027	.769
6. The system raises social awareness of issues such as poverty, justice, and inequality.	615	2.88	1.067	.700
7. It ensures fair access to educational resources and opportunities.	615	2.66	1.157	.614
8. The system encourages social transformation.	615	2.88	1.024	.706
9. The system supports the development of students' critical literacy skills.	615	2.73	1.06	.643
10. Students are raised as active citizens capable of intervening in their surroundings.	615	2.63	1.041	.589
Overall Mean	**615**	**2.80**	**1.02**	

Teachers reported a moderate level of agreement with the idea that current education policies align with the principles of critical pedagogy, achieving a mean score of 2.80. The item that received the lowest level of agreement was: "Students within the education system are raised as active citizens who can intervene in social issues" (M = 2.63). This finding suggests that teachers perceive the education system as relatively inadequate in cultivating students as critical thinkers and active citizens who can engage with societal matters. Consequently, one of the core goals of critical pedagogy—educating students to become active and critically minded individuals—does not seem to be fully realized in the current education system. These results indicate that teachers believe education policies do not sufficiently support the principles of critical pedagogy.

Teachers' Views on Curriculum and Materials

Teachers' views and corresponding factor loadings regarding the current educational programs and materials within the framework of critical pedagogy principles are presented in Table 8.

Table 8. Descriptive statistics related to teachers' views on curriculum and materials

Items	N	$\bar{X}$	Sd	Factor 3
11. Curricula are appropriate for diverse student groups (e.g., disadvantaged, refugee, immigrant, special education needs).	615	2.77	0.999	.650
12. Educational materials are accessible to all students.	615	2.72	1.071	.669
13. Curricula and materials reflect cultural diversity.	615	2.72	1.068	.779
14. Curricula are sensitive to local dynamics (e.g., language, history, culture).	615	2.79	1.085	.540
Overall Mean	**615**	**2.75**	**1.05**	

As shown in Table 8, teachers expressed the highest level of agreement with the item "Curricula are sensitive to local dynamics (language, history, culture, etc.)" (M = 2.79). This suggests that while programs exhibit a certain level of sensitivity to local elements, this sensitivity does not yet meet ideal standards, underscoring the need for greater alignment with regional and cultural characteristics. Conversely, the lowest agreement was observed for the items "Educational materials are accessible to all students" and "Curricula and materials reflect cultural diversity" (both M = 2.72). These results suggest perceived shortcomings in the inclusivity and cultural responsiveness of the materials used in the education system. From a critical pedagogy perspective, educational materials should be accessible to all learners and inclusive of diverse cultural narratives. These findings imply that current materials do not fully meet these expectations and may require revision and enhancement. Overall, the moderate level of agreement (M = 2.75) reported by teachers regarding this sub-dimension suggests that the curricula and materials within the Turkish education system need to be redesigned to become more inclusive, accessible, and reflective of cultural diversity—core elements of critical pedagogy.

Teachers' Views on Teachers' Roles & Classroom Practices

The values and factor loadings related to teachers' views on teachers' roles and classroom practices within the framework of critical pedagogy principles are presented in Table 9**.**

Table 9. Descriptive statistics related to teachers' roles & classroom practice

Items	N	$\bar{X}$	Sd	Factor 1
15. Teachers help students gain learning autonomy.	615	3.37	0.953	.613
16. Teachers involve students in decision-making processes.	615	3.42	0.892	.668
17. Teachers share their classroom roles with students.	615	3.49	0.911	.657
18. Teachers respond to the differentiated needs of students.	615	3.37	0.904	.710
19. Teachers promote critical thinking in the classroom.	615	3.44	0.925	.791
20. Teachers actively use critical dialogue.	615	3.35	0.927	.761
21. Teachers play an active role in the process of social transformation.	615	3.45	1.004	.660
22. Teachers support the development of students' initiative-taking skills.	615	3.40	0.906	.810
23. Teachers encourage interdisciplinary learning.	615	3.45	0.892	.827
24. Teachers help students understand human rights and social justice issues.	615	3.51	0.904	.788
25. Teachers enhance students' perspectives on global issues.	615	3.38	0.935	.770
26. Teachers plan activities to develop students' intercultural competencies.	615	3.17	0.988	.678
27. Teachers ensure that students are aware of their social responsibilities.	615	3.53	0.87	.809
28. Teachers develop students' understanding of economic systems.	615	3.24	0.951	.685
Overall Mean	**615**	**3.40**	**0.9**	

Upon examining Table 9, it is observed that the highest level of agreement was with the item "Teachers ensure that students are aware of their social responsibilities" (M = 3.53). This suggests that teachers consciously make an effort to foster students' sense of social responsibility. Social responsibility is critical for helping students develop sensitivity to societal issues and equipping them with the skills to contribute to solutions. Conversely, the lowest level of agreement was observed for the item "Teachers plan activities to develop students' intercultural competencies" (M = 3.17), indicating potential shortcomings in this area.

Teachers' Views Based on Educational Background and Professional Seniority

The skewness and kurtosis values were examined to assess the data's normality. It was found that the skewness and kurtosis values of the items ranged from –1 to +1. Skewness and kurtosis coefficients falling within the ±1 interval indicate that the data follow a normal distribution (Büyüköztürk, 2018). The results of the t-test analysis, conducted to compare teachers' views based on their educational background**,** are presented in Table 10**.**

Table 10. T-Test analysis results showing teachers' views based on educational background

Level of education	**Undergraduate**		**Graduate**				
Factors	**$\bar{X}$**	**Ss**	**$\bar{X}$**	**Sd**	**t(613)**	**p**	**η2**
Education Policy	28.49	8.50	26.73	7.37	2.417	.01	0.02
Curriculum & Materials	11.07	3.50	10.75	3.28	1.020	.30	0.01
Teachers' Roles & Classroom Practices	48.43	10.61	44.78	9.43	3.941	.00	0.04
Total	**88.00**	**19.79**	**82.27**	**16.71**	**3.443**	**.00**	**0.03**

Upon examining Table 10, it was found that teachers' views on the Turkish education system within the framework of critical pedagogy principles significantly differ between those with a bachelor's degree and those with a graduate degree in the sub-dimensions of education policy [$t(613) = 2.417$, $p < .05$] and teacher roles and classroom practices [$t(613) = 3.941$, $p < .05$]. When considering the mean scores, graduate degree holders tended to perceive the Turkish education system as less aligned with the principles of critical pedagogy compared to bachelor's degree holders. However, based on Cohen's (1988) criteria for interpreting effect sizes, the effect sizes for the education policy dimension and teacher roles and classroom practices were 0.02 and 0.04, respectively. These values indicate that the magnitude of difference between the groups is small in both dimensions. No statistically significant difference was found between the two groups in the dimension of curricula and materials. The small effect size observed in the teacher roles and classroom practices dimension may be interpreted as a result of graduate teachers possessing greater critical awareness, thus responding with a more reflective and analytical perspective.

Table 11 presents the ANOVA results examining whether teachers' views on critical pedagogy differ based on their years of professional experience.

Table 11. One-Way ANOVA results showing teachers' views based on professional seniority

	1-4 years		**5-10 years**		**11-20 years**		**20 + years**					
	$\bar{X}$	**Ss**	**$\bar{X}$**	**Ss**	**$\bar{X}$**	**Ss**	**$\bar{X}$**	**Ss**	**F (3, 611)**	**η2**	**P**	**Post-Hoc**
Education Policy	30.94	8.58	27.44	8.38	27.79	7.62	26.55	8.10	6.65*	.03	.00	1>2; 1>3; 1>4
Curriculum & Materials	11.87	3.42	10.93	3.46	10.80	3.33	10.44	3.53	3.74*	.01	.01	1>3; 1>4
Teachers' Roles & Classroom Practices	50.47	11.39	48.72	9.57	45.88	10.28	44.68	10.27	8.41*	.03	.00	1>3; 1>4; 2>3; 2>4
Total	**93.29**	**20.68**	**87.09**	**17.80**	**84.47**	**18.63**	**81.68**	**19.55**	**8.14***	**.03**	**.00**	**1>2; 1>3; 1>4**

Note: In the table, "1" = 1–4 years, "2" = 5–10 years, "3" = 11–20 years, "4" = 20+ years.

Upon examining Table 11, it is observed that the views of early-career teachers differ significantly from those of more experienced teachers in the sub-dimensions of education policy [F(3, 611) = 6.65], curricula and instructional materials [F(3, 611) = 3.74], and teacher roles and classroom practices [F(3, 611) = 8.41]. However, when interpreting these differences in terms of effect size based on Cohen's (1988) criteria, the differences are considered small in magnitude. Similar to the findings regarding educational background, the data in Table 8 show that as years of professional experience increase, teachers tend to believe that the education system and its sub-dimensions are less aligned with the principles of critical pedagogy. This suggests that teaching experience plays a significant role in shaping teachers' perceptions and perspectives about the functions of education and schools. As years of service increase, teachers may undergo a shift in their perceptions of the education system. In particular, teachers with 10 or more years of experience tend to approach structural issues in the system more critically and express a stronger need for educational reform.

Discussion and Conclusion

The results of this study demonstrate that the Critical Pedagogy Scale (CPS) is a valid and reliable tool for evaluating teachers' perceptions of the Turkish education system in accordance with critical pedagogy principles. In the content validity phase, expert opinions yielded a CVR value of 1.00 for all items, exceeding the minimum criterion of 0.99 suggested by Veneziano and Hooper (2008), thus confirming the content adequacy of the items. Regarding construct validity, the Kaiser-Meyer-Olkin value surpassed .95, which, according to Çokluk et al. (2012), indicates an "excellent" level of sampling adequacy. Bartlett's Test of Sphericity was also statistically significant, confirming that the dataset was suitable for factor analysis. The factor loadings obtained through exploratory factor analysis ranged between .47 and .75, aligning with Crocker and Algina's (1986) recommendation that acceptable factor loadings should exceed .30. These results were supported by Dede and Yaman (2008), who also suggest that factor loadings above .30 are sufficient for structural validity.

The internal structure of the scale was further examined through confirmatory factor analysis, which produced acceptable model fit indices based on criteria established by Jöreskog and Sörbom (1993), Schumacher and Lomax (1996), and Hooper, Coughlan, and Mullen (2008). The scale's three sub-dimensions—Teachers' Roles and Classroom Practices, Curricula and Instructional Materials, and Education Policy—showed moderate to strong correlations with one another, with Pearson coefficients ranging from approximately .59 to .72. This supports Tavşancıl's (2010) argument that sub-dimensional correlations within a theoretical construct should be statistically significant and meaningful.

Regarding reliability, Cronbach's Alpha values exceeded .83 for each sub-dimension and .96 for the entire scale. These results indicate a high level of internal consistency, aligned with Özdamar's (2017) reliability classification, which considers alpha values between .90 and 1.00 as excellent. Unlike previous instruments that measure teachers' alignment with critical pedagogy, the CPS is designed to evaluate educational systems through a critical lens. The development and validation procedures implemented in this study suggest that the scale is psychometrically robust, theoretically grounded, and capable of capturing nuanced evaluations of educational structures within the framework of critical pedagogy.

The fit index values for the Critical Pedagogy Scale (CPS) were found as follows: χ^2/df = 3.505, GFI = .868, AGFI = .850, RMSEA = .064, CFI = .936, NFI = .913, PGFI = .736, and TLI = .930. These values indicate that the model has an acceptable level of fit (Brown, 2006; Hooper, Coughlan & Mullen, 2008; Jöreskog & Sörbom, 1993; Kline, 2023; Marsh, Balla & McDonald, 1988; Schermelleh-Engel & Moosbrugger, 2003; Schumacher & Lomax, 1996; Sümer, 2000; Tabachnick & Fidell, 2019; Thompson, 2004). The Cronbach's Alpha reliability coefficients for the sub-dimensions of the scale were calculated as .959 for Teachers' Roles and Classroom Practices, .936 for Education Policy, and .836 for "Curricula and Instructional Materials." The overall reliability coefficient for the entire scale was found to be .961. According to Özdamar (2017), values between .90 and 1.00 indicate a high level of reliability. Unlike other scales, the Critical Pedagogy Scale (CPS) aims not to assess teachers' general perceptions of critical pedagogy but rather to evaluate education systems based on principles derived from critical pedagogy. Based on the overall evaluation of the data, it can be concluded that the CPS is a valid and reliable measurement tool for determining teachers' views on critical pedagogy.

Based on the research findings, the domain that teachers deemed most aligned with the principles of critical pedagogy in the Turkish education system was the sub-dimension of "teacher roles and classroom practices." This was followed by the sub-dimensions of "educational policy" and "curriculum and instructional materials." This result suggests that teachers tend to incorporate critical pedagogy principles more actively into their classroom practices; however, macro-level educational policies and curricula do not adequately reflect these principles. Critical pedagogy encourages learners to develop a liberatory consciousness, foster awareness of authoritarian structures, and critically question the relationship between power and knowledge (Giroux, 2004). In this respect, critical pedagogy represents an educational philosophy aimed not only at individual transformation but also at broader social change. The finding that teachers perceive the Turkish education system as partially compatible with critical pedagogy, particularly about their classroom roles and practices, suggests that they internalize and implement these principles at the classroom level. Teachers' adoption of such principles promotes the conceptualization of students not merely as passive recipients of knowledge but as active participants in their learning processes. Giroux (2020) posits that critical pedagogy should embody a democratizing approach to education, challenging hierarchical relationships between students and teachers. When teachers adopt this philosophy, students are empowered to evaluate societal structures and take action toward transformation critically.

A central tenet of critical pedagogy is that education should not be confined to the transmission of knowledge but must interrogate how knowledge is produced and utilized within social contexts. McLaren (2002) describes this as a roadmap for how educators and learners can collaboratively strive toward social justice and equality. Such an educational setting supports both individual empowerment and social consciousness. Consequently, learners are equipped not only with academic competencies but also with the ability to confront and resolve societal challenges. However, it is insufficient for critical pedagogy to be adopted solely at the level of individual teachers; systemic integration of its principles is also essential. Apple (2004) warns that current educational policies and curricula have the potential to reproduce social inequalities. Therefore, restructuring education systems in line with the principles of critical pedagogy is a vital step toward mitigating these inequalities. Embedding critical pedagogy holistically into the education system would not only enhance teachers' pedagogical autonomy but also foster a more participatory, democratic, and transformative culture of learning (McLaren, 2002).

A review of the literature reveals that teachers' attitudes toward critical pedagogy are generally moderate (Büyükgöze, 2018; Kesik & Bayram, 2015; Şahin et al., 2016; Taşgın & Küçükoğlu, 2017; Terzi et al., 2015; Yılmaz, 2009; Yılmaz & Altınkurt, 2009). Similarly, Kozikoğlu and Aslan (2015) identified moderate attitudes among teacher candidates participating in pedagogical formation programs. Conversely, Aliakbari and Allahmoradi (2012) found high levels of adherence to critical pedagogy principles among in-service teachers in Iran. The relatively moderate attitudes in the Turkish context may stem from the novelty of the critical pedagogy discourse in national scholarship and its limited representation in academic and policy frameworks. Findings from this study indicate that teachers perceive the sub-dimensions of "educational policy" and "curriculum and instructional materials" as insufficiently aligned with critical pedagogy. There is a prevailing perception that existing policies fall short of fostering democratic and inclusive structures, and fail to represent cultural diversity and social justice adequately. These results underscore an urgent need for comprehensive policy reform.

By contrast, higher levels of alignment were reported within the "teacher roles and classroom practices" dimension. This suggests that, although teachers individually embrace critical pedagogical approaches, the systemic framework offers limited space for such practices. This observation suggests that the current system often confines teachers to mechanical roles, thereby limiting their pedagogical autonomy. The study also found that teachers with postgraduate degrees perceived the Turkish education system as less aligned with critical pedagogy than their undergraduate counterparts. Darling-Hammond (2010) argues that postgraduate education enhances teachers' critical thinking skills, enabling them to scrutinize educational policies more deeply and assess their impact on students. Accordingly, these teachers are more inclined to adopt a critical stance not only toward classroom practices but also toward the system as a whole (Zeichner & Liston, 2013; Day & Sachs, 2004). This pattern is also reflected in other studies, which report higher levels of alignment with critical pedagogy among postgraduate teachers (Büyükgöze & Fındık, 2018; Yılmaz, 2009). Similarly, differences were observed based on teachers' years of professional experience. The findings indicate that as teachers gain more experience, they tend to view the education system as less compatible with critical pedagogy. Huberman (1993) suggests that experienced teachers often experience a decline in job satisfaction, which may catalyze more critical perspectives toward the system. Klassen and Chiu (2010) found that increased experience corresponds with lowered expectations of the system but heightened criticality. Hence, senior teachers may possess a clearer understanding of structural deficiencies, albeit coupled with diminished optimism regarding the potential for change. The observation that attitudes toward critical pedagogy significantly vary based on educational attainment and professional tenure is particularly noteworthy. This highlights the dynamic and context-dependent nature of teacher attitudes, which are shaped by evolving individual and systemic factors (Doyle, 2003; Haralambos & Holborn, 2009). Studies by Büyükgöze and Fındık (2018) and Farr (1997) similarly report a decline in alignment with critical pedagogy as professional seniority increases. In contrast, Özaydınlık (2021) found no statistically significant relationship between seniority and attitudes toward critical pedagogy. This discrepancy suggests that such attitudes are influenced not only by years of service but also by individual awareness, academic development, and institutional contexts.

The findings of this study indicate a significant correlation between "teacher roles and classroom practices" and the tenets of critical pedagogy, suggesting that educators are actively implementing dialogic and student-centered tactics in their classrooms. The lower average scores in the areas of “curriculum and instructional materials” and “educational policy” indicate the presence of systemic difficulties that hinder the comprehensive implementation of critical pedagogy. These disparities suggest the need for restructuring educational systems to reflect democratic values, inclusion, and student agency more accurately. The trend indicating that teachers with postgraduate degrees and extensive experience tend to evaluate the education system more critically implies that these individuals should be more engaged in policy-making, as they possess significant insights from both theoretical and practical perspectives. Participants also observed that the existing teaching materials insufficiently reflect local variety and crucial topics, highlighting the necessity to revise the curriculum to promote social justice, critical thinking, and cultural awareness. Considering that postgraduate education improves teachers' critical awareness, pre-service teacher education programs, particularly at the undergraduate level, should include more comprehensive instruction in both the theoretical and practical dimensions of critical pedagogy. Moreover, discrepancies in perceptions based on professional level underscore the necessity for tailored professional growth. In-service training must be customised to meet the changing requirements of educators throughout their careers, with a specific focus on maintaining the involvement of experienced teachers through reflective and critically orientated programs. These particular programs would foster professional development and enable teachers to significantly participate in systemic change consistent with the tenets of critical pedagogy.

Considering these findings, future studies may investigate the progression of teachers' attitudes towards critical pedagogy over time and the contextual elements that affect their development. Longitudinal and comparative research designs may clarify the relationship between professional experience, academic training, and critical pedagogical engagement.

Limitations

This study acknowledges the inherent limitations of attempting to quantify a deeply philosophical and multifaceted field, such as critical pedagogy, through a single measurement instrument. Critical pedagogy, by its very nature, draws upon diverse disciplines including philosophy, sociology, political theory, and education, which makes it resistant to full representation through standardized scales. The scale developed in this study does not aim to exhaustively capture the entire epistemological and ontological scope of critical pedagogy. Rather, its purpose is to offer a practical tool for evaluating how selected principles of critical pedagogy are reflected in teaching practices and educational systems. The scale items were designed to operationalize core dimensions relevant to educational applications, such as teacher roles, curricula, and policy implications, based on conceptual inferences from the critical pedagogy literature. Therefore, the findings should be interpreted within the context of this applied and practice-oriented focus, not as a comprehensive evaluation of the broader theoretical framework of critical pedagogy.

The measurement tool developed within the scope of this study has provided a systematic means to assess teachers’ evaluations of the education system within the framework of critical pedagogical principles. However, due to the multi-layered and interdisciplinary nature of critical pedagogy, it cannot be fully captured through a single measurement instrument. In this regard, the study offers a limited evaluation based on inferences related to instructional practices, thereby making a unique contribution to the existing body of literature.

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Conflicts of Interest

All sections in the article were prepared with equal contributions from both authors.

Ethics

Ethics committee permission for this study was obtained with the decision of Van Yüzüncü Yıl University Ethics Committee dated 05.12.2023 and numbered E-85157263-604.01.02-452887

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