

The role of critical pedagogy in developing self-regulated IELTS candidates: A mixed methods study**Abstract****Article Type:**

Original Research

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This study explored the impact of critical pedagogy training for IELTS teachers on their students' self-regulated learning. It also examined the relationship between students' self-regulation and their IELTS performance, as well as how teachers implemented critical pedagogy principles in their classrooms. A mixed-methods research design was used, combining quantitative and qualitative approaches. 30 IELTS teachers and 150 learners from a language school in Tehran were recruited based on non-random convenience sampling technique. Teachers received training in critical pedagogy, after which learners completed a self-regulation questionnaire both before and after the intervention. Language proficiency was assessed using two official IELTS mock tests. Classroom observations and semi-structured interviews with teachers provided qualitative insights into instructional practices. Results showed that learners whose teachers received the training had significantly higher self-regulation scores post-intervention compared to a control group. A positive correlation was found between self-regulation and IELTS performance. Observations and interviews revealed that trained teachers used more dialogic, student-centered methods that promoted autonomy and reflective learning. The findings suggest that critical pedagogy training can effectively enhance both learner autonomy and exam preparedness. These results have implications for improving teacher education and classroom practices in high-stakes language testing environments.

Key Words: Critical Pedagogy, IELTS Candidates, Learner Autonomy, Self-regulated Learning

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1. Introduction

Learning to regulate one's own study habits and strategies is increasingly recognized as vital for success in language learning, especially when preparing for demanding exams like IELTS. Self-regulated learning (SRL) is about more than just studying hard; it involves setting goals, monitoring progress, and adapting strategies as needed (Zimmerman, 2000). These skills help learners become independent and confident, capable of tackling challenges both inside and outside the classroom (Zimmerman, 2008). Unfortunately, many IELTS courses focus heavily on drilling test-taking techniques and practicing exam formats, often leaving little room for students to develop these essential self-management abilities (Paloş, et al., 2019; Rusakova & Yurchenko, 2022).

On the other hand, critical pedagogy (CP) offers a different perspective—one that sees education as a process of empowerment and reflection. Inspired by Paulo Freire's vision, CP encourages both teachers and learners to think critically about how knowledge is constructed and to challenge traditional, top-down teaching models (Freire, 1970). Rather than passively absorbing information, learners engage actively, questioning assumptions and taking control of their learning journeys (Cowden & Singh, 2015; Giroux, 2001). This approach naturally supports the development of self-regulation because it requires learners to reflect on their goals, decisions, and learning processes (Ares, 2006; Foley, 2007; Montalvo & Torres, 2004; Zimmerman, 2000).

Despite this promising connection, to the best of the researchers' knowledge, little research looks directly at how critical pedagogy might help IELTS learners become more self-regulated. In Iran, IELTS preparation is a huge part of many students' educational experience and a key to future opportunities (British Council, 2022; Hashemnezhad, 2020). Yet, the focus of many preparation courses tends to be narrow, emphasizing memorization and exam strategies over learner autonomy. Teachers often find themselves caught between institutional demands and the desire to adopt more learner-centered methods like CP (Chlapoutaki & Dinas, 2016). This study aimed to investigate the role of critical pedagogy in the context of IELTS instruction, focusing on its impact on students' self-regulated learning. Specifically, the research explored whether training

IELTS teachers in critical pedagogy principles led to significant improvements in their learners' self-regulation. It also examined how these teachers implemented critical pedagogy strategies in their classrooms to foster learner autonomy. Additionally, the study sought to understand teachers' perceptions and attitudes toward the in-service training they received on critical pedagogy. By addressing these dimensions, the research provides insights into both the effectiveness and practical application of critical pedagogy in IELTS preparation contexts. Therefore, the following research questions guided this study:

RQ 1. Does teaching critical pedagogy principles to IELTS teachers have any significant effect on their learners' self-regulation?

RQ 2. How do IELTS teachers employ critical pedagogy principles in enhancing their students' self-regulation?

RQ 3. What are the attitudes of IELTS teachers about the in-service training course of critical pedagogy they received?

Besides, considering the quantitative research question, the following null hypotheses were stated:

H₀₁: Teaching critical pedagogy principles to IELTS teachers has no significant effect on their learners' self-regulation.

2. Review of the Related Literature

2.1. Critical Pedagogy: Foundations and Principles

Critical Pedagogy (CP) is not a single method or fixed strategy. It is better understood as a philosophical orientation toward education that calls for learners and teachers to engage with the world—not just to understand it, but to challenge and reshape it (Freire, 1970; Giroux, 1988). Its foundations lie in Paulo Freire's work, particularly *Pedagogy of the Oppressed* (1970), where he critiqued what he called the "banking model" of education. In that model, knowledge is treated as something deposited by teachers into passive students. Freire proposed an alternative: "problem-posing" education, where learning happens through dialogue, reflection, and action.

This shift from passive to participatory learning carries strong political implications. Freire argued that education is never neutral; it either reinforces existing inequalities or works to transform them. In this sense, CP is grounded in a vision of schooling as a space for social justice. Teachers are not merely transmitters of information, but co-learners and facilitators who support students in developing critical consciousness—or what Freire called *conscientização*—a deep awareness of social, cultural, and political forces shaping their lives.

Later scholars have expanded Freire's vision in various directions. Giroux (2001) emphasized the role of teachers as “transformative intellectuals,” capable of helping students read the world as well as the word. Hooks (1994) brought attention to the emotional and relational dimensions of CP, arguing that learning should be rooted in care, honesty, and mutual respect. Kincheloe (2005) further emphasized the importance of questioning taken-for-granted assumptions, both in curriculum and in institutional structures. These perspectives converge on the idea that students must be seen as capable, thinking individuals—not empty vessels to be filled, but agents who can engage, critique, and act.

Within language education, CP has gained traction as a counterweight to standardized, test-driven instruction. Scholars like Pennycook (2001) and Canagarajah (2005) have argued that teaching English—particularly as a global language—cannot be separated from the power dynamics it carries. CP encourages both teachers and learners to interrogate how language, identity, and culture are shaped by broader systems, including colonial legacies and neoliberal market demands (Canagarajah, 2005; Pennycook, 2001). In practice, this might mean creating space in the classroom for students to question texts, relate materials to their lived experiences, or participate in shaping course content (Freire, 1970; Shor, 1992).

In short, CP does not offer a checklist. It offers a stance. It challenges teachers to consider whose knowledge counts, whose voices are heard, and what kind of learning is worth pursuing. This orientation is especially relevant in high-stakes environments like IELTS preparation, where pressure to “teach to the test” can limit opportunities for deeper

reflection. By bringing in CP, educators can begin to reclaim that space—inviting not only performance, but also purpose.

2.2. Self-Regulated Learning: Concepts and Relevance

Self-regulated learning (SRL) refers to learners' ability to consciously manage their own study behaviors, including goal setting, strategic planning, self-monitoring, and self-reflection (Zimmerman, 2008). Self-regulated learning (SRL) is widely associated with empowerment, agency, and democratic participation in the educational psychology literature. It involves the process through which learners actively control their cognitive, motivational, and behavioral engagement with learning tasks. As Vassallo (2013) highlights, researchers have increasingly dedicated attention to developing SRL pedagogy to encourage learner autonomy and persistence. However, drawing from Paulo Freire's critical pedagogy, some scholars question the ideological assumptions underlying SRL as commonly presented. Vassallo (2013) argues that teaching students to self-regulate may risk promoting a form of adaptation to existing educational systems, shaping students to fit predetermined roles rather than supporting genuine self-direction and critical awareness. Recent models such as those proposed by Gordeeva et al. (2020) and Dan, et al. (2025) reconceptualize SRL to incorporate motivation, sociocultural context, and learner identity—elements that align with pedagogical approaches rooted in CP. For example, Gordeeva et al. (2020) adapted and validated the Academic Self-Regulation Questionnaire for Russian high school students, demonstrating that effective instructional design and attention to motivational factors can significantly enhance self-regulation among learners.

Expanding on this critique, Dan, et al (2025) offer a conceptual framework that positions SRL within three paradigms of inquiry: technical, practical, and critical/emancipatory. Drawing on Habermas's (1971) theory of human interests, their review examines how SRL has been defined and studied differently depending on the philosophical stance of the researcher. Within the critical/emancipatory paradigm, SRL is seen not only as a set of strategies but as a practice shaped by learners' sociocultural realities and the power structures surrounding them (Ares, 2006; Dan et al., 2025). This perspective encourages scholars and educators to explore SRL as a transformative

process, one that can be integrated into broader pedagogical efforts to cultivate voice, reflection, and resistance to passive learning models.

Additionally, SRL is recognized in language education literature as a core element of learner autonomy. In second language learning, it is commonly framed through Zimmerman's (2000) cyclical model, which includes the forethought, performance, and self-reflection phases. These stages emphasize how learners plan, monitor, and evaluate their own learning over time. In this view, SRL is not only about individual habits but also about how instructional environments can support learners' development of effective learning strategies and self-awareness. When considered in combination with critical pedagogy, SRL becomes more than a cognitive tool; it emerges as a dialogic and socially situated practice that invites learners to take control of their learning in both technical and meaningful ways (Ares, 2006; Foley, 2007).

2.3. Critical Pedagogy and Self-Regulated Learning

Although Critical Pedagogy (CP) and Self-Regulated Learning (SRL) originate from distinct disciplinary traditions—CP from sociocultural and critical theory, and SRL from cognitive and educational psychology—they intersect meaningfully through the shared emphasis on learner autonomy, agency, and reflective engagement (Foley, 2007; Pintrich, 2004). CP conceptualizes education as a liberatory practice that fosters critical consciousness (Freire, 1970), enabling learners to reflect on their realities and assume responsibility for transforming them. Similarly, SRL is defined as a process where learners actively plan, monitor, and evaluate their learning, drawing on metacognitive, motivational, and behavioral strategies (Pintrich, 2004; Zimmerman, 2002).

The convergence becomes evident when considering that both frameworks reject passive learning. CP promotes dialogical learning, voice, and reflection (Giroux, 2001; Kincheloe, 2005), while SRL emphasizes self-directed goal-setting, self-monitoring, and strategic adaptation (Boekaerts et al., 2000). Scholars have argued that empowerment-oriented pedagogies—such as CP—create the affective and motivational conditions necessary for SRL to emerge (Paris & Paris, 2001; Zimmerman & Schunk, 2011). CP's insistence on learner participation, decision-making, and critical reflection enhances

learners' metacognitive engagement, a central component of SRL (Gordeeva et al., 2020; Schraw & Dennison, 1994).

More recently, Oberman and Sainz (2021) and Vanegas Garzón and Bedoya-Ríos (2024) have shown that applying CP principles in language classrooms fosters learner autonomy, critical reflection, and sustained engagement—key pillars of SRL. These findings suggest that CP may serve as an enabling framework that supports the cognitive, motivational, and contextual dimensions of SRL, especially in high-stakes, exam-oriented environments where autonomy is often undervalued. This conceptual overlap is increasingly reflected in empirical studies that show how CP-based teaching enhances SRL capacities (Oberman & Sainz, 2021; Vanegas Garzón & Bedoya-Ríos, 2024). Similarly, Mohammadi, et al. (2014) found that CP-based instruction led to significant improvements in self-regulation among Iranian EFL learners, further supporting the link between critical pedagogy and enhanced learner autonomy.

Thus, while CP and SRL are theoretically distinct, they can be aligned in pedagogical practice. CP provides the philosophical and social foundation for learner empowerment, while SRL offers cognitive tools for operationalizing that empowerment into actionable learning behaviors. This synergy offers a robust framework for fostering deep, reflective, and autonomous learning in language education.

2.4. Critical Pedagogy and IELTS Preparation

IELTS preparation courses tend to focus on exam skills—practicing test formats, memorizing vocabulary, and timing strategies—often at the expense of developing broader learning skills like SRL (Rusakova & Yurchenko, 2022). This narrow focus can limit learners' ability to transfer language skills to real-life situations or independent academic work (Clark & Yu, 2022). In Iran, where IELTS is a major gateway to higher education and migration, this issue is particularly pronounced. Teachers often face institutional constraints that make it difficult to introduce CP-inspired learner-centered methods (Chlapoutaki & Dinas, 2016). Similarly, Sahragard et al. (2014) found that Iranian EFL teachers generally held positive attitudes toward critical pedagogy principles and acknowledged their potential benefits for language teaching, but reported numerous barriers in its implementation, such as centralized educational policies and large class

sizes. Their findings highlight both the potential impact of CP-focused training on teacher perspectives and the contextual challenges of putting CP into practice in Iran. Yet, there is growing recognition that fostering learner autonomy and SRL can lead to more meaningful and sustainable language learning outcomes (Hashemnezhad, 2020).

Empirical studies outside IELTS contexts have shown that integrating CP principles can improve learner motivation, engagement, and autonomy (Kadel, 2020; Vanegas Garzón & Bedoya-Ríos, 2024). However, there is a clear research gap regarding how CP training for IELTS instructors might affect learners' SRL and performance specifically. This study aimed to address this gap by exploring how CP-informed teaching can cultivate self-regulated IELTS learners, offering practical insights for teachers working within high-stakes testing environments. Despite the increasing recognition of critical pedagogy as a transformative approach in language education, there remains limited empirical research examining its specific impact on self-regulated learning within high-stakes test preparation contexts such as IELTS. Understanding how CP principles shape both teacher practices and learner self-regulation is crucial for developing more effective pedagogical frameworks that go beyond mere test preparation to foster autonomous, reflective learners. This study thus attempted to fill this gap by investigating the effects of critical pedagogy (CP) training on IELTS teachers and exploring its consequent influence on their learners' self-regulation. It also examined how these teachers implemented CP strategies in their classrooms to foster learner autonomy and explored their perceptions and attitudes toward the in-service training they had received.

3. Method

3.1. Research Design

This study employed a mixed-methods design, integrating both quantitative and qualitative data to examine the impact of critical pedagogy (CP) training on IELTS teachers' instructional practices and attitudes, as well as on their learners' self-regulation. In the quantitative phase, a self-regulation questionnaire was administered to IELTS candidates before and after their teachers received CP training, allowing for the

assessment of changes in students' ability to manage their own learning. In the qualitative phase, ten IELTS teachers who participated in the CP training were interviewed to explore their perceptions of the training and its perceived effect on learners' self-regulation. Additionally, classroom observations were conducted three times in the classes of volunteer teachers to directly examine how CP principles were applied in practice to foster students' self-regulated learning. These observations offered valuable insights into the translation of pedagogical theory into classroom implementation.

3.2. Participants

The participants included 30 IELTS teachers and 150 IELTS learners from an English Language School in Tehran. Teachers were selected through convenience non-random sampling and ranged in age from 30 to 55 years. Their teaching experience varied between 5 and 15 years. Educational backgrounds were as follows: 7 held or were pursuing PhDs in TEFL, 18 had Master's degrees, and 5 were Master's students.

Learners were randomly selected from these teachers' classes, with 5 students per class chosen. They were preparing for the IELTS exam and took a retired standard IELTS mock test from the Cambridge IELTS series as a pretest to confirm their proficiency level. The learners' ages ranged from 20 to 45 years and all had at least two years of formal English study experience. Table 1 shows detailed demographic information. All the participants were informed of the purpose of the study and signed a written consent to guarantee the ethical considerations of the study. Confidentiality assurance was taken into account in this interview; hence, the participants' responses were kept confidential and used only for research purposes.

Table 1.

Demographic Characteristics of Participants

Participants Group	N	Age Range	Gender (M/F)	Education Level	Teaching Experience (years)
Teachers	30	30-55	18/12	7 PhD, 18 MA, 5 MA students	5-15
Learners	150	20-45	85/65	Language institute students	N/A

3.3. Instruments

3.3.1. IELTS Mock Tests

Two official Cambridge IELTS retired tests were administered to assess learners' language proficiency across listening, reading, writing, and speaking components. The reliability of the tests was established using KR-21 indices, which were 0.79 for the listening section and 0.75 for the reading section. Writing and speaking were scored by two IELTS-trained raters, with inter-rater reliability coefficients of 0.87 and 0.90, respectively, confirming scoring consistency.

3.3.2. Self-Regulation Trait Questionnaire (SRT)

Another instrument used to collect the data in this study was a self-regulation questionnaire famous as Academic Self-Regulation Questionnaire (SRQ-A) (Ryan & Connell, 1989). The self-regulation questionnaire has been revalidated and shortened later (Carey et al., 2004; Gordeeva et al., 2020) and was utilized to measure the self-regulation of IELTS candidates both before and after their teachers were trained in terms of CLP principles to see if teaching critical pedagogy principles to IELTS teachers would have any significant effect on their learners' self-regulation. The scale consists of 32 items using a 5-point Likert scale (See Appendix A). The questionnaire includes various sections as follows: External Regulation (items 2, 6, 9, 14, 20, 24, 25, 28, 32), Interjected Regulation (items 1, 4, 10, 12, 17, 18, 26, 29, 31), Identified Regulation (items 5, 8, 11, 16, 21, 23, 30), and Intrinsic Motivation. (3, 7, 13, 15, 19, 22, 27).

While answering the test examinees were supposed to select (always, most of the time, sometimes, and never) based on Likert scale. This test normally takes 45 minutes to answer. The short version of the SRQ (SSRQ) enjoys reliability of ($\alpha=.92$) based on Cronbach's alpha, which highly correlates with the original SRQ ($r=.96$) (Carey et al., 2004).

3.3.3. Classroom Observation Checklist

Classes of the 20 volunteer teachers, who were selected based on their own willingness to take part in this phase of the study out of those 30 ones taking part in the in-service training of critical pedagogy, were observed three times after the in-service

training. In so doing, classroom observations were conducted to explore how CP principles were reflected in teaching practices and their potential impact on learners' self-regulation and performance. The researcher used a classroom observation checklist (See Appendix B). The checklist was developed based on a thorough literature review and consulting with five TEFL PhD holders with ten years of experience in teaching IELTS. Hence, observations were done according to a pre-defined checklist validated through expert judgment approach meaning that it was scrutinized in terms of language and content by a panel of five experts mentioned above.

This checklist includes 20 items based on a five-point Likert scale which ranged from one (never) to five (always). Items 1 through 10 focused on critical pedagogy principles manifested in teachers' behaviors serving IELTS students' self-regulation such as helping learners express their ideas freely in the classroom, involving students in the decision-making processes in the classroom, and communicating with students and paying attention to their ideas, problems, and needs.

Items 11 through 20 measured the implementation of critical pedagogy principles as reflected in teachers' classroom practices aimed at enhancing students' performance. These included using challenging reading materials aligned with the dialogical principles of critical pedagogy in IELTS reading instruction, overlooking local errors that did not hinder meaning for later fine-tuning, and adopting a flexible curriculum to teach the various IELTS skill areas.

One of the researchers, who also served as the class observer, monitored various classes following the workshop to ensure that the principles of critical pedagogy were being implemented. Having a single observer allowed for consistency in the observation process across all classes and teachers. After each session, a briefing was conducted with the teachers to coordinate efforts and ensure that all key principles were effectively applied in their classrooms.

3.3.4. *Semi-Structured Interviews*

Interviews with 10 volunteer teachers aimed to explore their perceptions of CP training and its effects on their teaching practices and their ability to foster learner autonomy and self-regulation. The interviews lasted approximately 15 minutes, were

conducted in Persian to facilitate clearer expression of ideas, and were recorded and transcribed for analysis. An interview guide was prepared and piloted to ensure clarity and relevance. To develop the questions, the researcher considered the CP training content and drew upon the literature on critical pedagogy and SRL. A panel of five experts holding PhDs in TEFL reviewed the questions and provided comments, which were incorporated into the final version. After that, the interview questions were pilot with three teachers who did not participate in the study to check their clarity and relevance. The interviews were designed to explore how teachers interpreted and enacted the principles introduced during the CP training, including fostering student voice, promoting dialogic interaction, encouraging shared authority in the classroom, and integrating learners' lived experiences into instruction. These elements reflected the foundational tenets of critical pedagogy as articulated by Freire (1970), Giroux (2001), and Kincheloe (2005).

The rationale for including the interviews was to explore how CP-informed teaching influenced classroom culture and student behavior in ways not fully captured by the quantitative instruments. In particular, the interviews aimed to uncover how CP principles shaped opportunities for learners to self-regulate, make meaningful choices, and participate in shaping the learning process—core dimensions of SRL supported by a critical pedagogical stance. The interview guide was developed in alignment with the CP training content and included prompts related to teacher perceptions of student participation, classroom authority, reflection, goal-setting, and engagement (See Appendix C). Responses were thematically analyzed to identify patterns in how instructors interpreted and implemented critical pedagogy in their IELTS preparation classrooms, and how this, in turn, supported or constrained students' self-regulated learning.

3.4. Data Collection Procedure

The data for this study were collected through multiple instruments to investigate the impact of critical pedagogy (CP) training on IELTS learners' self-regulation (SR). Participants were selected from an English Language Institute in Tehran, Iran. Each of the 30 IELTS instructors taught a class of 8 learners, totaling 240 students. All learners had previously completed the institute's standard written and oral placement tests, which

confirmed that all participants were at an intermediate level of English proficiency based on the institute's placement criteria. From each class, 5 learners were randomly selected, resulting in a final sample of 150 student participants. These students later completed an IELTS pretest to establish a performance baseline prior to the CP-based instruction.

Before the CP training, learners completed a self-regulation questionnaire to establish baseline levels of self-regulatory behaviors. This questionnaire, based on Ryan and Connell's (1989) Academic Self-Regulation Questionnaire (SRQ-A), was administered again after the CP training to measure changes in learners' self-regulation.

To fulfill the goals of the training program and to equip the teachers with the basic principles of critical pedagogy and to help them experience what a CP-based teaching is, a 5-week program was held. The training course consisted of 10 sessions, 2 hours each, held on two consecutive days of each week.

The course started with an introduction to what critical pedagogy and critical literacy were and how this approach could empower learners and encourage a deeper learning process. The second session was devoted to the comparison of the banking model and problem posing education. Then, some techniques and instructional tools in CP-based classes were presented in the following sessions. Using authentic materials, watching movies, selecting critical reading texts, and practicing dialogical teaching were among the tasks introduced to the teachers.

In addition, classroom practices of 20 volunteer IELTS teachers who had undergone CP training were observed three times using a validated classroom observation checklist. The observation process ensured consistent data collection, as the researcher conducted all observations using the same criteria and held briefing sessions with teachers to confirm fidelity to CP principles.

Furthermore, semi-structured interviews were conducted with 10 IELTS teachers who had participated in the CP training. These interviews aimed to explore teachers' attitudes toward the CP training program and how it influenced their practices in enhancing learners' self-regulation. The interviews were recorded, transcribed verbatim, and analyzed thematically using MAXQDA software to identify key themes regarding the application of CP in promoting self-regulatory behaviors. Ethical considerations were

observed throughout the data collection process, including obtaining informed consent from all participants and ensuring confidentiality. The combination of self-report questionnaires, classroom observations, and teacher interviews provided comprehensive and triangulated data to assess the influence of CP training on learners' self-regulation in the IELTS context.

3.5. Data Analysis

3.5.1. Quantitative Analysis

Data were analyzed using SPSS v25. Descriptive statistics were used to summarize demographic information. Learners' IELTS scores were analyzed using Multivariate Analysis of Covariance (MANCOVA), controlling for pretest scores to detect significant differences in posttest results across IELTS components. One-way ANCOVA was conducted to assess learners' self-regulation posttest scores, controlling for their pretest values. Additionally, Pearson correlation analysis examined the relationships between learners' self-regulation and their IELTS performance scores.

3.5.2 Qualitative Analysis

The qualitative data, including interview transcripts and observation fieldnotes, were analyzed using thematic analysis. The process followed the open, axial, and selective coding procedures described by Strauss and Corbin (1998). The researcher transcribed the interviews, organized them into categories, and then evaluated the data. MAXQDA 24 software was used to analyze, code, and manage the interview transcripts. This method enabled the identification and categorization of general related views (open coding), specific issues (axial coding), and the most frequent and critical points (selective coding), providing a comprehensive understanding of the effectiveness of the instructional approach.

4. Results

4.1. Quantitative Results

4.1.1. Homogeneity Results

To confirm the homogeneity of the participants before the intervention, a MANCOVA was conducted on the pretest scores of IELTS components and self-regulation variables. The results revealed no statistically significant difference between the experimental and control groups, Wilks' Lambda = 0.472, $F(36, 143) = 1.16$, $p = .261$, indicating that the groups were equivalent at baseline.

Before addressing the first research question, it was important to check if the data met the assumption of normality. Skewness and kurtosis values for the self-regulation scores—both before and after the intervention—fell comfortably within the accepted range of ± 2 . This was true for both the experimental and control groups. These results suggest that the distribution of scores was reasonably normal and suitable for further analysis (Bachman, 2005; George & Mallery, 2020). The details are shown in Table 2.

Table 2.

Skewness and Kurtosis of Self-Regulation Scores

Group	Test	Skewness	Std. Error	Kurtosis	Std. Error
Experimental	Pretest	0.353	0.293	0.904	0.578
	Posttest	-0.555	0.293	0.048	0.578
Control	Pretest	0.217	0.264	-0.256	0.523
	Posttest	0.546	0.264	0.211	0.523

4.1.2. Reliability of the Self-Regulation Questionnaire

It was also essential to ensure that the self-regulation questionnaire was reliable for this sample. Cronbach's alpha showed very good reliability index for both pretest and posttest data, with values above 0.90. This means the questionnaire consistently measured self-regulation among learners. The results can be seen in Table 3.

Table 3.*Reliability of Self-Regulation Questionnaire*

Test	Cronbach's Alpha	Number of Items
Pretest	0.92	32
Posttest	0.94	32

4.1.3. Descriptive Statistics of Self-Regulation Scores

Before the intervention, the self-regulation scores of the two groups were relatively similar. The experimental group had a pretest mean of 3.45 (SD = 0.63), while the control group had a mean of 3.37 (SD = 0.55) (see Table 4).

Table 4.*Self-Regulation Pretest Scores in the Experimental and Control Groups*

Group	Test	N	Mean	Std. Deviation	Std. Error Mean
Experimental	Pretest	67	3.45	0.63	0.077
Control	Pretest	83	3.37	0.55	0.060

After the intervention, the experimental group showed a noticeable improvement, with a posttest mean of 4.12 (SD = 0.56), whereas the control group's posttest mean was 3.48 (SD = 0.59). These descriptive statistics are shown in Table 5. Looking at the average scores after the intervention, learners in the experimental group scored noticeably higher on self-regulation compared to those in the control group. Table 5 provides these descriptive statistics, indicating a clear difference between groups.

Table 5.*Self-Regulation Posttest Scores in the Experimental and Control Groups*

Group	N	Mean	Std. Deviation	Std. Error Mean
Experimental	67	4.12	0.56	0.068
Control	83	3.48	0.59	0.065

4.1.4. Impact of Critical Pedagogy Training

To formally test whether critical pedagogy training for teachers made a difference in learners' self-regulation, a one-way ANCOVA was run. This allowed us to control for

pretest scores, ensuring any posttest differences were not simply due to initial group disparities. The homogeneity of regression slopes assumption was met, allowing the ANCOVA to proceed without issue.

The analysis revealed a significant effect of the intervention on posttest self-regulation scores. Learners whose teachers received critical pedagogy training demonstrated higher self-regulation, even after accounting for their starting levels. This effect was strong and meaningful (see Table 6).

Table 6.

ANCOVA Results for Self-Regulation Posttest

Source	Type III Sum of Squares	df	Mean Square	F	p	Partial Squared	Eta
Group	12.31	1	12.31	27.45	<.001	0.16	
Pretest SR	3.67	1	3.67	8.19	.005	0.05	
Error	65.99	148	0.45				

The one-way ANCOVA analysis showed a statistically significant difference in posttest self-regulation scores of learners whose teachers had received CP training. The pretest scores were treated as covariates to ensure that posttest differences were due to the intervention, not initial disparities. The partial eta squared ($\eta^2 = .16$) represents a moderate to large effect size, indicating that teaching critical pedagogy principles to IELTS teachers had a meaningful effect on their learners' self-regulation. This finding shows that CP training significantly influenced learners' ability to monitor and manage their own learning, an essential aspect of SRL. Therefore the null hypothesis is rejected.

4.2. Qualitative Insights

Qualitative data added depth to the numbers. Through classroom observations and interviews, teachers shared how they applied critical pedagogy principles to nurture learners' self-regulation and offered reflections on the training they received.

4.2.1. Classroom Observations

To assess how teachers implemented critical pedagogy (CP) principles that supported learners' self-regulation, classroom observations were conducted using a

validated observation checklist designed for this study (Appendix B). The checklist contained 10 items measuring classroom practices aligned with CP values, including promoting learner voice, autonomy, and active participation. Each item was rated on a 5-point Likert scale ranging from 1 (Never) to 5 (Always).

Observation data were collected from 20 IELTS teachers who had completed CP training. Observation checklists revealed that teachers often encouraged learners to freely express their ideas, involved them in decisions about learning activities, and used authentic materials to broaden their perspectives. These practices appeared regularly and consistently, with high average scores (Table 7).

Table 7.

Classroom Observation: Teachers' Practices Related to Self-Regulation

Practice Description	Mean	SD
Encouraging learners to express ideas freely	4.30	0.56
Involving students in classroom decision-making	4.00	0.65
Using authentic/complementary materials	4.10	0.60
Allowing students to choose learning methods	4.05	0.62
Paying attention to students' ideas and needs	4.15	0.58

According to the checklist data, there was a noticeable improvement in teachers' behavior to implement CP principles. The items like encouraging learners to express their ideas freely, involving learners in decision-making processes, and using authentic materials received high scores, which show teachers' attempt to provide learners with more agency and voice in the classroom after the CP training. For example, in "Encouraging learners to express ideas freely" ($M = 4.30$), observers frequently noted teachers prompting students with open-ended questions like "What do you think about this issue?" or "Can anyone suggest an alternative solution?" These questions allowed students to share opinions without fear of correction, creating a dialogic and inclusive learning space. The practice "Using authentic/complementary materials" ($M = 4.10$) was observed when teachers brought in news articles, video interviews, or infographics related to current social themes, encouraging learners to engage with meaningful content beyond the textbook. Allowing students to choose learning methods" ($M = 4.05$) included offering choices between group work, pair discussions, or individual tasks depending on

student preferences. “Paying attention to students’ ideas and needs” ($M = 4.15$) was demonstrated when teachers adapted lesson pacing or incorporated student feedback into planning. These suggest a shift in classroom culture toward learner-centeredness, reflecting a practical alignment with CP values like dialogic instruction and shared authority.

4.2.2. Teachers’ Perspectives

To better understand how CP-informed instruction influenced classroom practice, semi-structured interviews were conducted with ten IELTS teachers who had completed the CP training. The interviews were recorded, transcribed verbatim, translated, and analyzed thematically using MAXQDA software, following a coding procedure grounded in inductive content analysis. Codes were developed directly from teacher responses, then grouped into broader themes through iterative comparison and refinement. Three prominent themes emerged from the data.

Learner Empowerment through Choice. Teachers observed that giving students more control over their learning boosted motivation and responsibility.

When I started letting students pick their own writing topics, the change was clear—they were more committed and took the task seriously because it felt like their work, not just an assignment (Teacher 4).

One of my students asked to use a vocabulary app instead of the usual worksheet. I agreed, and soon others began suggesting their own learning tools. It quickly evolved into a collaborative space where students took ownership of their learning process (Teacher 7).

Dialogue and Reflection. Regular discussions encouraged learners to think about their own learning strategies and goals.

Our classroom became more interactive and less teacher-centered, which helped students reflect more on their own progress (Teacher 10).

Instead of simply pointing out what was wrong, I began asking, 'What do you think led to that answer?' This small change encouraged students to think more deeply about their problem-solving approach. (Teacher 2).

At first, they found it strange to talk about how they learned, but over time, they started making comments like 'I realized I study better in the mornings'—small realizations that helped them plan better (Teacher 9).

Creating Supportive Atmosphere. Teachers aimed to build inclusive environments where learners felt comfortable taking risks and self-assessing.

I asked students to evaluate their own work before I provided feedback, and I was amazed by their honesty. It revealed that they simply needed the space to reflect and think critically about their own work (Teacher 1).

One quiet student rarely participated, but after I made a point to acknowledge a small contribution they made, they began to open up. Sometimes, small gestures of trust can make a big difference (Teacher 6).

After incorporating my trainings in my class, I noticed that my students became more self-directed. They began setting their own goals and reflecting on their progress, which significantly boosted their focus and motivation (Teacher 3).

These perceptions were also supported by classroom observation data, where high scores were recorded for encouraging learners to express ideas freely, involving them in classroom decision-making, and using authentic materials. Thus, the interview data directly supported the findings of teachers' classroom practices—such as fostering learner autonomy, encouraging dialogue and reflection, and using authentic materials—contributed to the development of students' self-regulation.

However, putting a lot of pressure on the participants and providing a lot of materials in a relatively short period of time were highlighted as negative points of the program experienced by the teacher participants. These points could be due to lack of familiarity of the participants with learner-centeredness in CP teaching and learning approach.

Taken together, the qualitative findings from both observations and interviews indicated that CP training had a meaningful impact on teaching behavior and classroom atmosphere. Teachers created more democratic learning environments, and learners

responded with increased autonomy and reflective habits—two core dimensions of self-regulated learning.

5. Discussion

The findings of this study suggested that critical pedagogy training positively influenced IELTS learners' self-regulation. The quantitative results demonstrated a significant increase in self-regulatory behaviors among learners whose teachers received the CP intervention. This improvement aligns with the qualitative data showing that teachers applied critical pedagogy principles to foster learner autonomy, reflection, and motivation—core components of self-regulated learning. This pattern is consistent with the findings from Mohammadi, et al. (2014) who demonstrated that CP-based instruction led to enhanced self-regulation among Iranian EFL learners, and with Gordeeva et al. (2020), who emphasized the role of instructional design in fostering effective SRL. Critical pedagogy, grounded in Paulo Freire's (1970) concept of "praxis" and critical awareness, aims to empower both teachers and students as agents in the classroom, challenging traditional power structures and fostering autonomy, reflective thinking, and self-regulation (Oberman & Sainz, 2021). The present study's findings support this theoretical foundation, demonstrating that CP-based instruction can meaningfully enhance learner autonomy and motivation in EFL contexts.

Observation checklists revealed that teachers often encouraged learners to freely express their ideas, involved them in decisions about learning activities, and used authentic materials to broaden their perspectives. These practices appeared regularly and consistently, with high average scores (Table 6). As these actions align closely with principles of learner-centered instruction, they suggest that CP training helped teachers create conditions conducive to developing learner autonomy and reflective engagement—both foundational to self-regulated learning.

The positive attitudes of IELTS teachers toward the in-service critical pedagogy training program also play an important role. By analyzing the interview data, it became evident that the teacher participants found the CP training to be a welcoming and user-friendly experience, with effective content that prioritized their views throughout the

process. This positive perception likely contributed to their ability to implement CP principles more systematically and confidently in their classrooms. For example, teachers reported incorporating freedom of speech, peer and self-evaluation, and innovative learning techniques such as using films and challenging texts. These activities provided a structured yet flexible environment that encouraged learners to develop greater autonomy and self-regulation. The encouraging findings regarding teachers' attitudes and classroom practices align with previous research showing that exposure to CP principles in training can significantly influence educators' teaching perspectives and practices (Sahragard et al., 2014). It is reasonable to infer that teachers' growing familiarity with CP principles, coupled with supportive training environments, enhanced their readiness to create classrooms that promote self-regulation among learners.

Moreover, teachers emphasized the motivational effects of the CP training on learners' analytical reading and critical evaluation skills. As described in the interview findings and observation data, teachers specifically noted these changes, reporting increased motivation for analytical reading and critical evaluation, more opportunities for students to express ideas freely, participate in decision-making, and use authentic materials, all of which contributed to self-regulated learning. These aspects resonate with research emphasizing the role of psychological safety and active participation in fostering self-regulation, as empowerment-oriented pedagogies have been shown to create the motivational and affective conditions necessary for SRL to emerge (Paris & Paris, 2001; Zimmerman & Schunk, 2011). Furthermore, studies by Oberman and Sainz (2021) and Vanegas Garzón and Bedoya-Ríos (2024) demonstrated that integrating CP principles in language classrooms can improve learner engagement, autonomy, and self-regulatory skills—findings that closely align with the results of the current study.

However, teachers' attitudes about the challenges of implementing CP teaching, reflect broader educational trends in Iran, where traditional schooling often focuses on memorization and lower-order cognitive skills (Farrokhi & Parvin, 2023), whereas CP emphasizes higher-order thinking like analyzing and creating (Heidari, 2020). Despite these challenges, the teachers found the program motivating and appreciated the atmosphere that encouraged sharing feelings and involving learners' voices in classroom activities.

These findings support the theoretical understanding that learner autonomy, dialogue, and reflection are critical for developing self-regulatory skills (Zimmerman, 2002). Interview data showed that learners enjoyed the freedom to express their ideas and engage in critical analysis facilitated by CP methods. This freedom helped learners move beyond surface-level learning and fostered deeper engagement with materials, which is vital for developing strong self-regulation in language learning.

Importantly, the study suggests that critical pedagogy goes beyond academic skill development to empower learners as agents of their own learning. This is supported by the quantitative findings showing a significant improvement in learners' self-regulation (Table 5), and by qualitative observations of increased student agency and classroom dialogue (see Section 4.3.2). By fostering autonomy and reflective thinking, CP prepares learners to navigate not only language learning challenges but also social realities with greater awareness and agency.

In sum, the integration of CP principles into teacher training shows promise as a practical approach to enhance learners' self-regulation in IELTS contexts. While the intervention faced challenges rooted in traditional educational norms—such as an emphasis on memorization and limited familiarity with learner-centered, higher-order thinking—, its overall positive impact on both teachers' attitudes and learners' self-regulatory behaviors underscores its potential for meaningful change.

6. Conclusion

The present study demonstrated that teachers' knowledge of critical pedagogy (CP) principles could positively influence EFL learners' IELTS self-regulation enhancement. The analysis of checklist data revealed the positive role of teachers' classroom practices, based on CP principles, in enhancing EFL learners' self-regulation. These results underscored the changes in teachers' practices after they experienced a course in CP. In addition to the success of the in-service training program, teachers' real classroom conduct proved that learners were influenced by their teachers' perspectives; the changes in teachers' beliefs and educational approaches were witnessed in their

classroom management, teaching strategies, and attempts to bring about changes in learners (Li, 2023; Salimi & Khazaee Kouhpar, 2023).

The interview data analysis revealed a relatively comprehensive understanding of the effectiveness of the in-service training course of critical pedagogy in general and on IELTS classroom practices in particular. IELTS teachers taking part in the study considered the in-service CP training course as a welcoming and user-friendly experience, presenting effective content while prioritizing participants' views. Moreover, the findings revealed that teacher participants could use CP principles in their daily teaching through fostering student autonomy, developing positive behavioral change in the classroom, and supporting problem-solving and reflective learning.

The present study findings suggest that EFL teachers need to gain relative mastery over CP principles such as embracing alternative pedagogies to challenge oppressive traditional education paradigms, democratization, and critical reflection. The themes emerging from interviews underscore the positive impact of teachers' CP knowledge on student learning, with increased focus, better understanding, and constant engagement cited as key benefits. Therefore, enhancing EFL learners' self-regulation through CP-based teacher training can be considered a practical and effective strategy in EFL contexts.

While the findings support the usefulness of CP in fostering self-regulated learning and improving IELTS performance, they should be interpreted in light of certain methodological constraints. The present study faced some limitations. The individual characteristics of the IELTS teachers, such as their educational background, teaching philosophies, gender, and age, could not be fully controlled. These factors may have influenced their responses to the integration of critical pedagogy. Teachers' prior experience and familiarity with reflective methods might also have shaped their perception of the training. Delimitations set by the researcher included the reliance on a limited set of tools: IELTS test, observations, questionnaires, and interviews. Also, the study was geographically limited to one English language school in Tehran, and only teachers with at least five years of experience were included.

Considering these limitations, further research is needed for investigations. Future studies can focus on the direct impact of CP on EFL learners' L2 development and self-regulation skills and consider examining the residual effects of CP-based teaching and learning methods on EFL learners' language proficiency and self-regulation development to explore whether and how long-term these effects actually could be. Moreover, future research is recommended to explore the role of CP-based teaching and learning in developing second language cultural familiarity, cooperative learning, and other components of the second language and their probable effects on learner autonomy, self-regulatory factors, and learner motivation.

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Appendix A

Self-regulation Scale

Definitely Agree=5; Agree with Reservation=4; A Definite Answer Is Not Possible=3; Disagree with Reservation=2; Definitely Disagree=1						
1	I don't notice the effects of my actions until it's too late.	5	4	3	2	1
2	I put off making decisions.					
3	It's hard for me to notice when I've "had enough" (alcohol, food, sweets).					
4	I have trouble following through with things once I've made up my mind to do something.					
5	I don't seem to learn from my mistakes.					
6	I usually only have to make a mistake one time in order to learn from it.					
7	I can usually find several different possibilities when I want to change something.					
8	Often, I don't notice what I'm doing until someone calls it to my attention.					
9	I usually think before I act.					
10	I learn from my mistakes.					
11	I give up quickly.					
12	I usually keep track of my progress toward my goals.					
13	I am able to accomplish goals I set for myself.					
14	I have personal standards, and try to live up to them.					
15	As soon as I see a problem or challenge, I start looking for possible solutions.					
16	I have a hard time setting goals for myself.					
17	When I'm trying to change something, I pay a lot of attention to how I'm doing.					
18	I have trouble making plans to help me reach my goals.					
19	I set goals for myself and keep track of my progress.					
20	If I make a resolution to change something, I pay a lot of attention to how I'm doing.					
21	I know how I want to be.					
22	I have trouble making up my mind about things.					
23	I get easily distracted from my plans.					
24	When it comes to deciding about a change, I feel overwhelmed by the choices.					
25	Most of the time I don't pay attention to what I'm doing.					
26	I tend to keep doing the same thing, even when it doesn't work.					
27	Once I have a goal, I can usually plan how to reach it.					
28	If I wanted to change, I am confident that I could do it.					
29	I can stick to a plan that's working well.					
30	I have a lot of willpower.					

Appendix B
Classroom Observation Checklist

		Always=5	Often=4	Sometimes=3	Rarely=2	Never=1					
No.	Item	1	2	3	4	5					
1.	The teacher helps learners express their ideas freely in the classroom.										
2.	The teacher makes a better chance for accepting students' ideas and critiques.										
3.	The teacher refers the students to complementary materials to expand their world views and perspectives on learning.										
4.	The teacher involves students in the decision-making processes in the classroom.										
5.	The teacher allows students to select their own learning methods and encourages them to do so.										
6.	The teacher poses problems in the class to help learner think more critically.										
7.	The teacher gives room to self-creative activity of the learner and lets them speak about their own life.										
8.	The teacher communicates with students and pays attention to their ideas, problems, and needs.										
9.	The teacher tries to help marginalized students get involved in the classroom discussions and have their own voice heard.										
10.	The teacher helps learners improve their problem posing techniques and increases critical consciousness of students.										
11.	The teacher employs (dialoguing; dialogical principle of CP) in the classroom while teaching IELTS productive skills.										
12.	The teacher uses authentic materials like movies and newspapers in teaching to foster topic development in IELTS skills like writing and speaking.										
13.	The teacher uses listening materials presenting challenging negotiations and conversations in the classroom while teaching IELTS listening.										
14.	The teacher uses challenging reading materials following dialogical principle of CP in the classroom while teaching IELTS reading.										
15.	The teacher neglects learners' local errors to be fine-tuned (the errors which do not impede the conveying of meaning).										
16.	The teacher follows a flexible program in the classroom to teach different skills of IELTS.										
17.	The teacher asks students to read challenging texts such as the discussion of articles, newspapers, and book chapters to enhance their language abilities.										
18.	The teacher encourages students to assess their peers' performance in the class.										
19.	The teacher encourages students to assess their own performance in the class.										
20.	The teacher engages almost all students in the classroom discussions and uses Q & A sessions to make this more effective.										
Critical pedagogy principles serving IELTS students' self-regulation (Items 1 through 10).											
Critical pedagogy principles promoting students' performance (items 11 through 20).											

Appendix C

Interview Prompts

A. Views about Workshop Program

1. What were the benefits of your critical pedagogy in-service training program?
2. What were the disadvantageous of your CP in-service training program?
3. What did you like the most of the critical pedagogy in-service training program ?
4. What did you like the least of the critical pedagogy in-service training program?

B. Views about the Effect of CP Enhancement on Teachers' Ability to Foster Self-Regulation

5. What do you think about the effect of CP enhancement on your ability to support your students' self-regulation in their learning?
6. How do you evaluate your own ability to promote self-regulated learning in your classroom after the in-service instruction you have had?
7. How do you use CP principles to encourage self-regulation among your students during teaching?