



Relationship Between Critical Pedagogy and Reflective Thinking with L2 Teachers' Pedagogical Success

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This study first sought to develop a survey (Teacher Critical Pedagogy, TCP) to evaluate L2 teachers' degree of critical pedagogy. Second, it investigated the relationship between L2 teachers' degree of critical pedagogy and reflective thinking with their pedagogical success. Third, it explored the extent to which teachers' critical pedagogy and reflective thinking contributed to their pedagogical success. To these ends, factor analysis with the data collected from a sample of 397 Iranian EFL teachers was used through AMOS software to confirm the validity of the critical pedagogy questionnaire. Then, validated version of TCP, Kember, Leung, Jones, and Loke's (2000) Reflective Thinking for Teachers, and Moafian and Pishghadam's (2009) Characteristics of Successful Teachers questionnaires were administered to a sample of 53 EFL teachers and 503 EFL students in language institutes in Isfahan, Iran, to assess the teachers' critical pedagogy and reflective thinking as well as their pedagogical success as evaluated by their students. Correlational and multiple regression analysis revealed a significant and positive relationship between the teachers' critical pedagogy and reflective thinking with their pedagogical success. Moreover, critical pedagogy and reflective thinking predicted the teachers' pedagogical success to a considerable extent. Findings provide implications for L2 teachers and teacher educators.

Keywords: critical pedagogy, reflective thinking, pedagogical success, L2 teachers

Introduction

Critical pedagogy (CP) draws on critical theories which call for social and educational reform. CP "seeks to understand and critique the historical and sociopolitical context of schooling and to develop pedagogical practices that aim not only to change the nature of schooling, but also the wider society" (Pennycook, 1990, p. 24). According to McLaren (2003), the aim of CP is to facilitate education by attempting to make students aware of the inherent inequalities in the world. As Freire (1993) vividly states, CP does not consider teachers as the sole authority in classrooms; it tries to change the traditional role of teachers and students. Traditionally, teachers are considered unquestioned authorities whose responsibility is only delivering knowledge to students, and students are just listeners (Izadina, 2009). However, CP tries to share responsibilities and authorities between the teacher and his/her students, to make them all active, responsible partners in the learning process.

In CP, as Freire (1993) states, the teacher is seen as a problem poser, asking questions that stimulate students think analytically about various elements of their lives that they may assume cannot be changed.

Thus, learners become involved in the process of learning by taking their own experiences to the classroom and relating education to their real-life issues. However, the problem is that some of second/foreign language (L2) teachers view themselves as the only source of knowledge; they do not attempt to provide an environment in which L2 learners value their involvement and reflection. In addition, some L2 students might not be able to take responsibility and think critically since, perhaps, their L2 teachers cannot successfully integrate critical thinking into their daily practice (Choy & Cheah, 2009), and encourage them to take a step for having a democratic environment (Giroux, 1998). Thus, it is important to see how L2 teachers' pedagogy relates to their success in the classroom.

Moreover, reflective thinking (RT) can play a role in analyzing situations in the classroom and making an effective relationship between what teachers teach and what students experience in the classroom. Thus, reflective thinking may play a role in education and in teachers' success in the classroom. In fact, reflective thinking is a part of critical thinking, which is the process of analyzing and making judgments about what has taken place (Dewey, 1933). RT is "a way of thinking that searches for the reasons of believing and necessitates asking questions" (Poyraz & Usta, 2013, p. 127). According to Rudd (2007), an important role of RT is to prompt the thinker in problem solving situations since reflectivity provides a suitable opportunity for the person to step back and think of the best strategies to accomplish goals.

It is then important for L2 teachers to prompt RT during L2 teaching and apply new knowledge to the novel situations. Using both CP and RT practices in the classroom may affect teachers' pedagogical success in teaching. Considering the role of RT and CP in the L2 classroom, the relationship between such practices with L2 teachers' pedagogical success finds significance in L2 contexts since L2 students may see a relationship between their own academic success and their teachers' pedagogy and reflectivity in the classroom. Thus, this study was designed to scrutinize the relationship between L2 teachers' degree of CP and RT with their pedagogical success and examine the extent to which teachers' CP and RT could contribute to their pedagogical success in L2 classroom.

Literature Review

Critical Pedagogy

According to Eisner (2002 cited in Breuing, 2011), Karl Marx laid the foundations of CP. Although Marx and his colleagues did not talk much about education, they presented theoretical perspectives on modern societies which have been utilized to highlight the social functions of education and support projects of alternative education (Kellner, 2001). Likewise, the proponents of the Frankfurt School claimed that schools would promote dependency, which could "undermine the kind of social consciousness required to bring about change" (Breuing, 2011, p. 4). Similar to what Marx and the Frankfurt School did, later, outstanding educational philosophers such as John Dewey and modern educational philosophers such as Paulo Freire and Peter McLaren called for change to transform educational practices within a project of social and cultural transformation (McLaren, 2003). In sum, such perspectives on education, which were developed in the Frankfurt School critical theory, Marxian and post-Marxian perspectives, grouped under the label of critical pedagogy (CP), which emerged from the work of Paulo Freire. Freire (1970) advocated CP approach to teaching and stressed the importance of problem posing education in which learners would be empowered by raising awareness about inequities and power relations.

With the impacts of theories such as *postmodernism*, *feminism*, *antiracism*, *post-colonialism*, CP has now expanded its scope to include categories such as *race*, *gender*, and *nationality*. Therefore, as Crookes and Lehner (1998) state, CP in L2 is not considered as a merely teaching method, but as a social and educational approach which deals with how L2 learning can result in personal and social change. Education systems are political (Freire, 1970) and politics and power are important in our comprehension of how a school works (McLaren, 1989). L2 teachers come to school to make their students aware of

these crucial issues and ask them for their urgent voice. Thus, according to Degener (2001), in such an approach, students are responsible agents in the learning process and teachers have the great impact on how learning occurs in the classroom.

In the field of education, Degener (2001) has provided a CP framework for adult education programs. This framework has six elements of (1) philosophy, presuppositions, and goals, (2) program structure, (3) curriculum and materials, (4) teacher development, (5) teacher-student relationship, and (6) evaluation. Each element is categorized in terms of the degree of criticalness that a specific program may go through ranging from highly critical to highly noncritical. Regarding the first element, the philosophy is that education is political in nature and necessary for improving students' abilities to promote changes in their lives. Learning is a meaning-based process that takes place within specific contexts. As to the program structure, student input is sought continually; their opinions and decisions are considered important in the planning processes of learning/teaching. Regarding the materials and curriculum, emphasis is put on activities and skills which help students cope with personal needs. As to the teacher development, teachers should learn about the issues important to individual students as well as community outside school. Teachers should be encouraged to prepare their students to live in a democratic society. Concerning the element of teacher-student relationship, both teachers and students should learn from each other in a collaborative environment; sometimes students are seen as teachers and teachers as learners. Finally, regarding evaluation, goals should be set, reflecting one's needs. The emphasis is put on whether students meet the objectives they have set for themselves. All in all, students are active participants in evaluation and evaluate their progress in the program.

Regarding the importance of CP in education, some researchers have investigated CP in relation to different aspects of education including reading skill (Barjesteh, Alipour, & Vaseghi, 2013; Ko, 2013), writing skill (Jorshari & Akbari, 2013), teacher education (Abednia, 2012; Aliakbari & Allahmoradi, 2012), critical thinking (Rafi, 2010), and instructional materials (Kohnke, 2019). For instance, Barjesteh, et al. (2013) investigated the effect of CP strategies on English as a foreign language (EFL) learners' reading comprehension ability. They divided a sample of Iranian university students majoring in English translation into two groups. One of the groups was chosen as the noncritical group and the other as the critical group, which was instructed several CP strategies. The findings provided empirical support for the facilitative effect of CP strategy training on reading comprehension performance of such EFL learners. Also, Jorshari and Akbari (2013), who examined EFL learners' attitude toward CP and its impact on their academic writing achievement among a sample of 80 IELTS (International English Language Testing System) test taker candidates in Iran, reported that after receiving the treatment aligned with CP approach, the test takers showed significant gains on their academic writing. Moreover, Abednia (2012) reported on the contributions of a CP course to EFL teachers' professional identity reconstruction. Also, Jeyaraj and Harland (2014), who brought the voices of several academics who used critical pedagogy in English language teaching, reported that the CP practice could transform teaching and learning; however, they concluded that critical pedagogy requires a balance between critical reflection and action. More recently, Kohnke (2019), who conducted an action research about the introduction of CP in materials development through digital stories in an English-language university in Hong Kong, concluded that incorporating the principles of CP in materials development can help L2 teachers and learners co-construct knowledge and represent what they find personally meaningful, which may lead to social changes in society.

Reflective Thinking

Dewey (1933) described RT as "an active, persistent, and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends" (p. 9). It involves learners in cognitive processes to comprehend conflicting elements in a situation (Atkins & Murphy, 1993). As Song, Koszalka, and Grabowski (2005) claim, this mental engagement helps a person to become a knowledge producer about a situation to be able to develop a strategy to proceed within that situation. According to Hmelo and Ferrari (1997), reflection enhances

students' higher-order thinking skills by provoking them to relate new knowledge to their previous understanding, think in both concrete and abstract terms, know how to deal with novel tasks by applying specific strategies, and be aware of their own thinking and learning strategies.

According to Dewey (1933), there are three attitudes which should be cultivated for enhancing RT: open-mindedness, wholeheartedness, and intellectual responsibility. Open-mindedness means being open to other views, admitting that there are various ways to view a specific situation or event, and showing flexibility in changing your own standpoint (Larrivee & Cooper, 2006); wholeheartedness means looking for every opportunity to learn (Farrell, 2004); intellectual responsibility means a teacher's willingness to check all decision making such as decisions on curriculum, instruction, evaluation, and management from a coherent philosophical framework of teaching/learning (Larrivee & Cooper, 2006). As Farrell (2014) states, teacher reflection involves more than taking several minutes to think of how to keep students on task. It involves a specific reflective disposition, comprising of three essential attitudes of minded, wholeheartedness, and responsibility. Therefore, reflection implies a dynamic way of being inside and outside the classroom.

Prior research on RT has shown a positive role for teachers' reflectivity in students' achievements. For instance, Rezaeyan and Nikoopour (2013), who investigated the relationship between teachers' degree of reflectivity and their students' language achievement in English classes, reported a significant relationship between EFL teachers' degree of reflectivity and students' achievements. In another investigation, Taghilou (2007) reported a meaningful relationship between the reflective teaching practices in the classroom and the learning outcomes of some Iranian EFL students. Furthermore, Hosseini Fatemi, Elahi Shirvan, and Rezvani (2011), who examined the effect of EFL teacher's reflection on their learners' writing achievement in language institutes in Mashhad, reported that teacher's reflection significantly affected their EFL learners' writing achievement.

Research also supports the significant role of RT in teaching practice. For instance, Jadidi and Keshavarz (2013), who attempted to find out the relationship between Iranian EFL teachers' reflection and strategy-based instruction in a group of 50 EFL teachers in 10 language institutes in Iran, reported a positive correlation between teachers' reflection and their views regarding the incorporation of language learning strategies in instruction. Moreover, Senem (2006), who investigated reflection in preservice teacher education, stressed the role of RT in professional identity. Senem's study was conducted in the form of an action research with 30 preservice teachers in an undergraduate teacher education program of English language at Eastern Mediterranean University in Cyprus. The findings indicated that the reflective process enhanced the teachers' self-awareness towards their teaching, which contributed to their professional identity development. Despite the important role of RT in education, as Choy and Oo (2012) point out, many teachers do not see the relationship between what they do in the classroom and how it can influence student performance. Choy and Oo (2012), who attempted to study the reflective practices of teachers in institutions of higher learning throughout Malaysia, reported that many Malaysian teachers were generally more concerned about their own performance rather than improving their practices. In closing, the related literature supports the important role of RT for language teachers, but more research is required to see how RT impacts EFL practices in the classroom.

Teacher Success

Because of this significant role of teachers in the classroom, teacher success has been emphasized by many researchers and scholars. According to Brown and Marks (1994) state, pedagogically prosperous teachers explore their own teaching and become well informed about the weaknesses and strengths of their teaching performance. Likewise, as Brookfield (1995) states, effective teachers start their career using different instructional strategies, teaching at a suitable fast pace, regularly examining their students' understanding and engagement, concentrating on their instructional goals, and using their sense of humor along with their individual styles. Along the same line, Lowman (1996) points out that impeccable

teachers are the ones who encourage a high level of learning in their students and create a positive reminiscence of learning.

Furthermore, the review of the related literature shows that several characteristics have been proposed for teacher success. Elizabeth, May, and Chee (2007), for instance, proposed a model of successful teacher in the context of Hong Kong. They reported that effective teachers were primarily skillful and effective in making tests and grading, and scoring. In addition, they would entertain their students, promote their critical thinking, and provide them with appropriate feedback. Moreover, the review of the related literature demonstrates that successful teaching depends on the quality of teacher education courses as well as the attributes of the teachers themselves. In this light, many factors, such as teachers' intelligence (Ghanizadeh & Moafian 2010; Pishghadam, Golparvar, & Khajavy, 2013), creativity (Pishghadam, Ghorbani Nejad, & Shayesteh, 2012), characters and behaviors (Bhardwaj, 2009; Medley & Mitzel, 1955), language ability and skill (Çelik, Arıkan, & Caner, 2013; Porter & Brophy, 1988), critical thinking ability (Birjandi & Bagherkazemi, 2010) and working conditions and settings (Johnson & Birkeland, 2003; Korthagen, 2004), have been reported to influence or relate to teacher success.

For instance, Pishghadam, Golparvar, and Khajavy (2013), examined the role of narrative intelligence in the success of English language teachers among Iranian English language teachers. The findings indicated a significant relationship between teachers' pedagogical effectiveness and their narrative intelligence. They considered narrative intelligence, that is, the ability to build and tell stories using genuine, natural language, as an important factor in English teachers' pedagogical effectiveness. Likewise, the results of the study by Ghanizadeh & Moafian (2010) revealed the important role of intelligence, in particular emotional intelligence, in English teachers' pedagogical effectiveness. Moreover, Pishghadam, Ghorbani Nejad, and Shayesteh (2012), who explored the relationship between EFL teachers' creativity and their success in classroom, reported a significant relationship between the two variables in question. Thus, they considered creativity as a key factor in teachers' pedagogical effectiveness. Also, Chien and Hui (2010) combined environmental factors with teachers' perspectives of creativity to predict teacher success in various Chinese societies. However, Çelik, Arıkan, and Caner (2013), who conducted a research on the qualities of successful teachers in Turkey, reported that Turkish students considered teacher effectiveness as the ability to ensure an environment in which positive student-teacher interaction could take place. Their findings also revealed that Turkish students expected their teachers to have a sound knowledge of vocabulary and grammar.

Quite a few studies have been conducted on the area of contribution of CP to teacher success. For instance, interested in the CP principles, Naderi Anari and Zamanian (2014) investigated the relationship between CP attitudes and teachers' effectiveness among 84 high school English teachers in Kerman. They used Critical Pedagogical Attitude Questionnaire (Pishvaei & Kasaian, 2013) and Moafian and Pishgaman's (2009) Characteristics of Successful Teachers' Questionnaire to get information from the EFL high school teachers. Pearson product-moment correlation showed a positive relationship between CP attitudes and teachers' effectiveness. In sum, the review of the above literature justifies the claim that language teachers have the potential to be, in Giroux and McLaren's (1996) terms, transformative intellectuals who can combine reflection and practice for educating students to be thoughtful agents. Thus, it is necessary to know more about the factors which make them more successful in the classroom. In this light, it is worth considering the role of both CP and RT in L2 teachers' pedagogical success. Despite a good amount of descriptive research (e.g., Bercaw & Stooksberry, 2004; Larrivee, 2000; Rashidi & Safari, 2011) pointing to the positive role of CP or RT in education, little empirical research has been carried out to investigate the relationship between L2 teachers' CP and RT with their pedagogical success and examine the extent to which they contribute to their L2 pedagogical success in EFL classrooms. Therefore, the present study sought to address the following research questions:

1. Is there any significant relationship between teachers' CP and their pedagogical success in L2 classrooms?

2. Is there any significant relationship between teachers' RT and their pedagogical success in L2 classrooms?
3. To what extent can teachers' degree of CP and RT contribute to their pedagogical success in L2 classrooms?

Methodology

Participants

In the first phase of this study (i.e., piloting and validating Teacher Critical Pedagogy questionnaire), 397 EFL teachers from different English language institutes in the province of Isfahan participated in the study. These teachers, who were selected through accessibility sampling procedures, included 177 female and 220 male teachers. They were native speakers of Persian and their ages varied from 20 to 55. In the second phase of this study, 53 EFL teachers, including 21 males and 32 females participated in the main study and answered the Teacher Critical Pedagogy and Reflective Thinking for Teachers questionnaires. These teacher respondents were randomly selected from different language institutes in Esfahan. Majority of the EFL teachers (about 81%) had bachelor's degree, 21 teachers (about 9% of the teachers) held a master's degree and 22 (about 10%) were PhD candidates. To measure these EFL teachers' pedagogical success, the second group of participants, including 503 EFL students/learners (218 males and 285 females), were selected randomly from teachers' classrooms. Initially, 10 EFL students were randomly selected from each teacher's class, making up 530 EFL students, but 27 students did not return the questionnaires or completely answer the items in the questionnaires. Thus, they were excluded from further analysis. The student participants' ages varied from 18 to 31.

Instruments

To answer the research questions, three questionnaires were used. They included (i) the Teacher Critical Pedagogy (TCP) questionnaire developed by the present researchers, (ii) the Reflective Thinking for Teachers (RTT) questionnaire, developed by Kember, Leung, Jones, and Loke (2000), (iii) and the Characteristics of Successful Teachers' Questionnaire (CSTQ) designed by Moafian and Pishghadam (2009) to evaluate the characteristics of successful Iranian EFL teachers.

The TCP questionnaire consisted of 35 items to assess the degree of CP practiced by the teachers (see Appendix A). Each item was designed on a 5-point Likert scale, ranging from 1 (*strongly agree*) to 5 (*strongly disagree*) producing a score between 35 and 175. This questionnaire assessed six themes: Philosophical orientation (9 items), program structure (8 items), curriculum and materials (8 items), teacher development (6 items), teacher-student relationship (7 items), and evaluation (6 items). This questionnaire used evidence in support of content, face, and construct validity. The content validity of the questionnaire was determined through experts' judgments to ensure that the questionnaire was carefully planned to include the CP items. The face validity was determined through EFL teachers' judgments about the components of scoring format, visual appeal, number of sections, page layout, number of items, and length of time needed to complete the questionnaire. The construct validity of questionnaire was determined on the data obtained from 397 EFL Iranian teachers through Analysis of Moment Structure (AMOS) software. To determine the convergent and discriminant validity of the pedagogy scale, the confirmatory factor analysis (CFA) technique was utilized and the parameters were calculated through the maximum likelihood estimation (MLE) technique by running AMOS (version 5). The model goodness-of-fit was checked by using different model fit indices, suggested by Liu, Marchewka, Lu, and Yu, (2004). The values such as the ratio of Chi-square (χ^2) to degrees of freedom (*df*), nonnormalized fit index (NNFI), adjusted goodness of fit (AGFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), and root mean square residual (RMSR) all confirmed the validity of the

questionnaire. The results of measurement model fitness are summarized in Tables B1 and B2 (see Appendix B). Moreover, as illustrated in Table B3, average variance extracted (AVE) and composite reliability (CR) values for all the variables were found to be high.

The RTT questionnaire (Kember et al. 2000) contained 16 questions about the teachers' reflective thinking skills; it assessed how they perceived themselves and their own teaching. All the items in the questionnaire were designed on a 5-point Likert scale, which ranged from 1 (*definitely disagree*) to 5 (*definitely agree*). The score ranged between 16 and 80. Furthermore, this instrument measured four subscales of habitual action (4 items), understanding (4 items), reflection (4 items), and critical reflection (4 items). The reliability for each subscale was estimated through Cronbach's alpha. The alpha coefficient for the questionnaire (0.88) exceeded the minimum required value of 0.70. Also, the alpha coefficients for habitual action (0.90), understanding (0.85), reflection (0.88), and critical reflection (0.85) were acceptable. Finally, the CSTQ, developed by Moafian and Pishghadam (2009), was given to the EFL students to assess their teachers' pedagogical success. This questionnaire included 47 items which were related to 12 main factors. These factors included teaching accountability, teaching boosters, interpersonal relationships, commitment, attention to all, and examination, learning boosters, physical and emotional acceptance, creating a sense of competence, class attendance, empathy, and dynamism. The Likert-type questionnaire included 5 choices ranging from *completely disagree* to *completely agree*, all producing a score between 47 and 235. According to Moafian and Pishghadam (2009), factor analysis was run to determine its construct validity with a sample of 250 Iranian EFL learners. The analysis of their data supported the above-mentioned 12 factors for teacher success as a construct. Moreover, The Cronbach alpha coefficient for this instrument in the present study with the sample of the teacher participants was found to be acceptable (0.94). Besides, the alpha coefficients for the subscales were above the minimum required value of 0.70. Thus, the scale was reliable.

Procedure

First, a questionnaire of critical pedagogy with the Likert-type format was designed by the present researchers. The first draft of the questionnaire was constructed, based on the framework provided in the literature (Degener, 2001), related questionnaires designed for non-native speakers (e.g., Yilmaz, 2009), and the other relevant theoretical literature (e.g., Freire, 1970). To build support for its validity, the current study used evidence from content, face, and construct validity. The content validity of the questionnaire was determined through three experts' judgments. A content validation form was given to three experts (one lecturer at a state university in Iran and two lecturers at Islamic Azad University), requiring them to rate each item of the questionnaire based on some criteria such as the clarity and appropriateness of the items in representing the topic. Face validity was assessed based on views from three EFL teachers, requiring them to evaluate the components of page layout, scoring format, visual appeal, format of instructions for respondents, number of items, and length and time needed to complete the questionnaire.

According to the experts' suggestions, the first draft of the questionnaire, including 44 items, was revised and the required changes were made in the second draft, which was given to 429 EFL Iranian teachers. However, 32 questionnaires were discarded from the analysis process because of the major data missing problem and only data from 397 questionnaires were considered for data analysis procedures in the software. To examine the construct validity of the questionnaire, factor analysis was used by using AMOS. During this process, nine items were excluded due to low factor loading (below 0.6). The final version included just 35 items (see Appendix A). The outcomes of measurement model fitness after excluding several items indicated a very good fit.

Moreover, three EFL English teachers, who participated in the pilot study, were interviewed. Following Cohen and Manion (1989), such a procedure can be employed in construct validation to offer an opportunity for the respondents to make comments on the items and themes in the instrument. The results from the interviews showed that they supported the design, structure and content of the questionnaire. In

fact, the items in the questionnaire were understood as intended by the present study. This further supports the validity of the questionnaire.

After the reliability and validity of the 35-item TCP questionnaire were ensured, the TCP and RTT Questionnaires were administered to a sample of 53 EFL teachers within a week during the academic semester in 2016. Within a week interval, the CSTQ was administered to 503 EFL students, selected randomly from the teacher participants' classes, to evaluate their teachers' pedagogical success. The purpose of the questionnaire and the significance of providing honest responses were explained to them. In doing so, the participants were also assured about the confidentiality and anonymity of their answers. The CSTQ scores from the students for each teacher's class were obtained, aggregated, and the mean scores were found as a measure of the teachers' success. Finally, descriptive and inferential statistical analyses were carried out with SPSS (version 21.0) on the scores from the three above-mentioned questionnaires.

Results

Table 1 displays the descriptive statistics of the teachers' CP, RT, and pedagogical success in the sample. As the number of items in three measures was different, to report comparable descriptive statistics, each raw score on the TPC, RTT and CTSQ measures was divided by the total number of the items or the number of the items making up the subscale in the questionnaire, which resulted in a score on a scale of 1-5.

TABLE 1
Descriptive Statistics of the CP, RT, and Pedagogical Success

Measure	Subscale	<i>N</i>	Min	Max	<i>M</i>	<i>SD</i>
CP		53	1.89	5.00	3.68	.54
	Philosophical orientation	53	1.67	5.00	3.67	.59
	Program structure	53	2.33	5.00	3.59	.59
	Curriculum & materials	53	2.00	5.00	3.51	.62
	Teacher development	53	2.00	5.00	3.75	.67
	Teacher-student relationship	53	1.83	5.00	3.62	.64
	Evaluation	53	2.60	5.00	3.85	.60
RT		53	1.94	4.56	3.66	.56
	Habitual action	53	1.75	5.00	3.80	.75
	Understanding	53	1.25	5.00	3.68	.81
	Reflection	53	2.25	5.00	3.68	.59
	Critical reflection	53	1.25	5.00	3.60	.65
Pedagogical Success		53	3.25	3.92	3.63	.19

As Table 1 displays, the mean of the total CP scores was 3.68, which was not very high, but it was above the possible median raw score (2.5) on the 5-point scale. Similarly, the teachers received mean scores between third (i.e., *neutral*) and fourth (*agree*) options on the subscales of the TCP measure, indicating moderate level of CP. Also, the mean of total RT scores was 3.66 which was between third (i.e., *undecided*) and fourth (*agree only with reservation*) options on the 5-point scale. *Habitual action* subscale of RT had the highest scaled mean score on 5-point scale (3.80). In other words, the EFL teacher participants generally did not perceive themselves as very strong reflective thinkers even though they

reported having some qualities and characteristics related to the concept of reflectivity. Moreover, the mean of CTSQ scores was 3.63, which was higher than the possible median raw score, given the possible range of 1-5 scale scores. The above data indicates that the teacher sample of the study generally received moderate to high scores on the success measure, too.

The first research question was intended to examine the possible relationship between the EFL teachers' CP and the pedagogical success. Correlation coefficients between TCP (including TCP subscales) and CSTQ scores were obtained. The correlation coefficients, together with the coefficients of determination (which denotes the strength of the association between the two variables), are presented in Table 2.

TABLE 2

Correlation Between the Teachers' CP and Its Subscales with their Pedagogical Success

	Philosophical Orientation	Program Structure	Curriculum & Materials	Teacher Development	Teacher- Student Relationship	Evaluation	Overall CP
Teacher success	0.61**	0.52**	0.60**	0.56**	0.57**	0.67**	0.68**
	.000	.002	.000	.001	.001	.000	.001
	($r^2 = .37$)	($r^2 = .27$)	($r^2 = .36$)	($r^2 = .31$)	($r^2 = .32$)	($r^2 = .45$)	($r^2 = .46$)

Note. ** $p < .01$

As Table 2 displays, the teachers' CP scores positively correlated with their pedagogical success scores ($r = 0.48$, ** $p < .01$, $n = 53$). As for the subscales, all correlated moderately with the teachers' pedagogical success. The coefficients of determination indicating the effect size of correlations were generally medium (0.30-0.50), following Cohen's guidelines (Larson-Hall, 2010). The highest correlation was found between teacher-student relationship subscale and pedagogical success ($r = 0.67$, * $p < .01$, $n = 53$).

The second research question was intended to investigate the relationship between the EFL teachers' RT and the pedagogical success. Bivariate Pearson correlation was run between RTT (including RTT subscales) and CSTQ scores.

TABLE 3

Correlations Between the Teachers' RT and Its Subscales with their Pedagogical Success

	Habitual Action	Understanding	Reflection	Critical Reflection	Overall RT
Teacher success	0.63**	0.54**	0.68**	0.78**	.71**
	.000	.002	.000	.000	.000
	($r^2 = .39$)	($r^2 = .29$)	($r^2 = .46$)	($r^2 = .60$)	($r^2 = .50$)

Note. ** $p < .01$

As Table 3 demonstrates, there was a statistically significant and positive correlation between overall RT and the teachers' pedagogical success ($r = .71$, $p < .01$, $n = 53$). The size of this coefficient was found to be relatively large, following Cohen's guidelines (Larson-Hall, 2010). Besides, all the four dimensions of RT correlated positively and significantly with the teachers' pedagogical success with the highest correlation between the critical reflection and the teacher success ($r = 0.78$, ** $p < .01$). The size of the coefficient between the critical reflection and the teacher success was found to be relatively large (.78), indicating a large effect size of critical reflection.

To investigate the extent to which the EFL teachers' CP and RT could predict their pedagogical success, standard multiple regression was conducted. The teacher participants' scores on CP and RT were considered as the independent variables and the CSTQ scores as the dependent variable. (see Tables 4, 5, and 6 for the information related to the regression analysis).

TABLE 4

ANOVA Results for Partial Correlation of CP and RT Scores with Teachers' Success Scores

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	.376	2	.188	6.48	.000
Residual	1.442	50	.029		
Total	1.818	52			

TABLE 5

Model Summary Information for the Regression Analysis

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.871	.737	.725	.164

TABLE 6

Summary of Beta Coefficients for the Multiple Linear Regression

Model	Unstandardized Coefficients		Standardized Coefficient	t	Sig.	Correlation Part
	B	Std. Error	β			
(Constant)	3.002	.161		18.60	.000	
CP	.030	.077	0.480	11.37	.001	.48
RT	.143	.074	0.5	12.81	.000	.50

As Table 4 displays, the model reached statistical significance ($F = 6.48$, $*p < .01$), indicating appropriateness of the model for the indented purpose. The R^2 value was found to be large (about 0.73), demonstrating that the model containing CP and RT variables could predict a significant amount of the variance in the teachers' pedagogical success (see Table 5). As to the contribution of each of the above independent variables to the teachers' pedagogical success, as Table 6 demonstrates, the Beta values for the CP ($\beta = 0.48$, $t = 11.37$, $*p < .01$) and RT ($\beta = 0.50$, $t = 12.81$, $*p < .01$) were large enough to make a statistically significant contribution to the teachers' pedagogical success. Additionally, as shown in Table 5, CP with a part correlation coefficient of 0.48 and the squared value of about 0.23, and CT with a part correlation coefficient of 0.50 and the squared value of about 0.25 explained 23% and 25% of the variance, respectively, in the CSTQ scores. In sum, the β and t values revealed a positive and moderately unique contribution of the teachers' CP and RT in increasing their pedagogical success.

Discussion

The first research question aimed to examine the possible relationship between the EFL teachers' CP and pedagogical success. Pearson correlation statistics revealed that there was a positive and statistically significant relationship between CP and teacher success. The teachers' CP scores moderately correlated with the scores representing their pedagogical success. The Iranian EFL teachers in the present study generally received average scores on their CP, including its subscales, and success measures, but those who reportedly adhered to the CP principles and emphasized them in their methodology in the classroom were viewed as more academically successful teachers by their students. Those EFL teachers who assumed their job was to make their EFL students critical thinkers, empower them by raising awareness of inequities, and power relations, connect teaching/learning to their students' everyday-life experiences, discuss issues related to their students' lives, and promote the sense of dialogic interaction in the classroom were mostly characterized as more competent, confident, committed, friendly, creative, thoughtful, fair-minded and motivated by their EFL students. In contrast, those teacher participants who agreed less with CP views and preferred to hold the authority in the classroom without involving their students in the process of learning and decision-making, perceived their EFL learners as being passive

recipients of knowledge, and ignored their needs, interests, and experiences were majorly viewed as less thoughtful, emphatic, knowledgeable, open-minded and cooperative by their students. These are features which characterize less successful EFL teachers in the classroom. The above results support the claim that critical views and attitudes of teachers towards the program in the classroom can affect their educational decisions about how to increase learner participation, how to divide learners into groups, and how to promote effective teaching/learning. This argument is supported by the results of the study done by Naderi Anari and Zamanian (2014) reporting that there was a positive relationship between CP attitudes and effectiveness of high school English teachers in Iran. As Ghanizadeh and Moafian (2010) point out, there has been a change from traditional teacher-centered classes toward communicative language teaching classes recently in private language institutes where free discussion, cooperation, and pair work are the main focus of attention. When EFL teachers discuss problems such as practices which are considered unfair in the class, such CP views may make their EFL students more willing to participate in classroom activities and have dialogic relationship, which can guarantee more teacher success in the classroom.

Furthermore, the above results revealed a positive and significant relationship between the EFL teachers' RT and pedagogical success. Even though some of the EFL teachers did not receive very high scores in RTT measure and its subscales, those EFL teachers who received higher scores in RT, including critical reflection subscale, were considered as more successful EFL teachers by their students and were mostly characterized as having teaching accountability, good sense of competence, discipline and commitment, high level of empathy and dynamism and good emotional acceptance and interpersonal relationships with their students. There are several possible reasons for the positive relationship between RT and the teachers' success. First, those EFL teachers with a high level of RT reported that they were more responsible to manage the classroom and take a control of their teaching. It is very likely that they tried harder in the classroom and were viewed as more committed individuals in the classroom, compared with those teachers with lower levels of reflection. Second, reportedly, the EFL teachers with a high level of RT spent more time to reflect on their actions and preferred to receive feedback from their learners in the classroom; they attempted more to discover faults in what they were doing and re-appraise their experiences so that they could learn from them and improve for their next performance. Thus, they were perceived to be more careful, active, persistent, and empathetic to their students' needs and interests, which all are the characteristics of successful teachers. Third, the teachers with a high level of RT preferred more to challenge some of their firmly held ideas and change their normal way of doing things. This judgmental practice could positively influence the understanding of what was going on in their L2 classroom. As Akbari (2007) states, effective reflection in teaching takes EFL students out of educational routines and motivate them more towards language learning. Reflective EFL teachers can examine their teaching to make sensible decisions on vital changes to enhance teaching practices, which can lead to better student performance and achievement in the classroom. The above finding on RT is also compatible with previous studies conducted by several researchers (e.g., Hosseini Fatemi et al., 2011; Rezaeyan & Nikoopour, 2013; Taghilou, 2007) who either reported a positive effect for reflective teaching or found a positive relationship between reflective thinking and success in various aspects of teaching/learning.

The third research question was intended to see the extent to which the teachers' degree of CP and RT contributed to their pedagogical success in L2 classrooms. The results of regression analysis revealed that CP and RT contributed, to a considerable extent, to the EFL teachers' pedagogical success. Although their contribution was not quite large, they made a significantly unique contribution to predicting the participants' L2 pedagogical success. This result sounds logical given the average sizes of correlation coefficients between the degree of CP and RT with L2 teachers' pedagogical success. Thus, the above finding on the moderate, but unique, contribution of CP and RT to the teachers' success supports the aforementioned results obtained from Pearson product moment correlations and, further, serves to highlight the substantial role of CP and RT in predicting EFL learners' pedagogical success. This can be justified as both CP and RT practices tend to make language teachers accept their responsibilities in the

classroom, be more flexible, and appreciate criticisms made by their students to modify their behavior or style of their teaching. Moreover, as Giroux (1997) states, CP curriculum is based on EFL students' needs and interests. When students realize that the materials they are learning are useful in their real life, they consider their language teachers successful in meeting their needs. This further justifies the significant contribution of CP to the prediction of the EFL teachers' pedagogical success. The aforementioned positive contribution can also be explained by the fact that both CP principles and RT practices do not advocate language teachers as the only authority in the class who orders rules; rather they advocate teachers as facilitators and problem solvers in a more cooperative classroom atmosphere. As Norton and Toohey (2004) point out, both critical and reflective teachers empower their language learners to create changes, understand themselves better, and become more aware of their contribution to the community. Thus, such students tend to appreciate their teachers and consider them as more successful teachers.

Conclusion

Schools need to have successful language teachers to prepare their students well for living in the society; hence, finding variables which help language teachers be pedagogically successful is important. This study put CP and RT under spotlight and explored the associations between Iranian teachers' CP and RT with their pedagogical success in the context of Iran. It also examined the possible contribution of CP and RT to the EFL teachers' pedagogical success. The results showed a positive and statistically significant relationship between Iranian EFL teachers' pedagogical principles and pedagogical success. In other words, the more EFL teachers are inclined to the principles of CP, the more successful they are viewed by the EFL students in their classes. The teachers with CP views in the present study were mostly characterized as more competent, fair-minded, confident, committed and emphatic by their EFL students.

In addition, the aforementioned results demonstrated a significant and positive relationship of the EFL teachers' RT with their pedagogical success in the classroom. The teachers with higher levels of RT were perceived to be more responsible, attentive, thoughtful and problem solvers. Also, further data analysis revealed that CP and RT contributed significantly and positively to the teachers' L2 pedagogical success. More likely, academic success takes place when an L2 teacher is responsible, thoughtful, confident, disciplined, motivated, and committed. Such a teacher has a quest for equality and interpersonal connection to his or her students. According to the above findings, these qualities are more characteristic of EFL teachers with a higher level of CP and RT than teachers with a lower degree of CP and RT.

Thus, L2 teachers interested in pedagogical success should pay attention to their critical and reflective practice in the classroom. By implication, the application of CP and practice of RT by L2 teachers in language institutes can positively contribute to the process of L2 teaching/learning in such a way both L2 teachers and learners better understand themselves, their social context and their possibility for better performance. Language policy makers, L2 educators, directors of language institutions should then pay close attention to CP and teacher reflectivity in teacher training programs, including in-service programs, and familiarize them with CP tenets and reflective teaching. This way, L2 teachers become more prepared to deal with the problems encountered in L2 teaching in the classroom. Needless to say, stronger generalizations about the contribution of CP and RT to L2 teachers' pedagogical success can be made when some other variables, including affective and demographic variables, such as personality, age and teaching experience are taken into account.

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Appendix A

Teacher Critical Pedagogy (TCP) Questionnaire

Dear Teacher,

Please read the items and show your level of agreement with each item by choosing one of the five choices given below. All responses will be confidential and used only for research purposes. Thank you very much for your cooperation.

		SD	D	N	A	SA
No.	Statements					
1	I think teachers should not address any political and ideological issues whatsoever in the classroom with the hope of changing individuals or society.					
2	I think teachers should encourage students to have a critical look at the school.					
3	I think teachers should be the only authority in the classroom.					
4	I often try to motivate my students to think critically about their own culture or previous experiences in life.					
5	I believe I should involve all students in my class to promote equality and justice.					
6	I believe the main goal in my class is to convey information.					
7	I am against injustice whether in the classroom or society.					
8	I think I am the knower in my class.					
9	I believe in dialogism (dialogue) to solve the problems in the classroom.					
10	In planning what to do in the classroom, I consider my students' expectations and immediate needs.					
11	The students' future needs and interests are considered for organizing my class agendas.					
12	For teaching language skills, I try to relate topics in the syllabus to my students' social and cultural experiences.					
13	In my class, I just follow the goals and objectives set in the program/course.					
14	My course/program tends to make my students effective decision makers.					
15	In course/program planning, my students are also involved.					
16	Needs analysis is an essential part of my program.					
17	I think my students are not knowledgeable enough to be involved in course/program planning.					
18	I sometimes adapt the teaching materials to suit my students in the class.					
19	As an activity, I often request my students to express their viewpoints about teaching materials and topics in the classroom.					
20	I often try to follow the pre-set curriculum and instructional textbooks in my teaching.					
21	My curriculum is strictly formal, principled, and instructional, paying little attention to ethics, values, and social issues.					
22	My instruction and teaching materials seek to make students become critiques (i.e. critical thinkers, critical readers, critical writers, etc.)					
23	In my class, there is no room for learning about students' hopes, needs and interests.					
24	I often try to connect my instruction to the real lives of my students.					
25	I often try to learn new things from my students and share the responsibilities in the class.					
26	In my class, I transmit knowledge and students receive knowledge.					
27	In the process of language teaching and learning in the class, my students and I collaborate with each other to come to a conclusion when facing a problem.					
28	In my class, I often do not allow all students to express their opinions					

	on the topics, materials, methods, etc.
29	In my class, whenever possible, I let my students take the teacher's role.
30	I think my students should obediently follow what I ask them to do in the classroom.
31	In my class, there is no interaction between teacher and students.
32	To evaluate my students' abilities, I use questioning a lot (e.g., I raise questions that require the students to answer by using the skills they have acquired).
33	I try to continuously evaluate my students.
34	I often evaluate my students only at the end of the term.
35	In my class, students are allowed to evaluate themselves.

Appendix B

Measures/Indices used in the Validation of TCP

TABLE B1

Model Fitness for the Measurement Model of TCP

Fit indices	χ^2	df	p	χ^2/df	NNFI	CFI	RMSEA	RMSR	AGFI
Values	1125.07	533	.000	2.111	0.919	0.927	0.053	0.30	0.833

TABLE B2

The Loadings of the TCP Subdimension Items

Items	Corresponding variables	Estimate	Items	Corresponding Variables	Estimate
Q1	Philosophical Orientation	0.72	Q21	Teacher Development	0.77
Q2	Philosophical Orientation	0.69	Q22	Teacher Development	0.77
Q3	Philosophical Orientation	0.72	Q23	Teacher Development	0.82
Q4	Philosophical Orientation	0.63	Q24	Teacher Development	0.75
Q5	Philosophical Orientation	0.70	Q25	Teacher-Student Relationship	0.73
Q6	Philosophical Orientation	0.72	Q26	Teacher-Student Relationship	0.78
Q7	Philosophical Orientation	0.77	Q27	Teacher-Student Relationship	0.74
Q8	Philosophical Orientation	0.76	Q28	Teacher-Student Relationship	0.82
Q9	Philosophical Orientation	0.74	Q29	Teacher-Student Relationship	0.81
Q10	Program Structure	0.72	Q30	Teacher-Student Relationship	0.73
Q11	Program Structure	0.76	Q31	Evaluation	0.63
Q12	Program Structure	0.64	Q32	Evaluation	0.67
Q13	Program Structure	0.74	Q33	Evaluation	0.63
Q14	Program Structure	0.78	Q34	Evaluation	0.79
Q15	Program Structure	0.69	Q35	Evaluation	0.74
Q16	Curriculum and Materials	0.64			
Q17	Curriculum and Materials	0.69			
Q18	Curriculum and Materials	0.73			
Q19	Curriculum and Materials	0.65			
Q20	Curriculum and Materials	0.62			

TABLE B3

The CR and AVE Values for TCP

Variable	AVE	CR
Philosophical orientation	0.51	0.90
Program structure	0.52	0.86
Curriculum and materials	0.51	0.79
Teacher development	0.59	0.93
Evaluation	0.82	0.82
Teacher-student relationship	0.60	0.90