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The Relationship among EFL Teachers' Critical Thinking, Professional Identity and Teaching Experience

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Abstract

The present study aimed at investigating the relationship among EFL teachers' critical thinking, professional identity and teaching experience. To this end, I20 EFL teachers teaching at different language institutes and public schools in Mashhad took part in the study by completing the Critical Thinking Scale developed by Honey (2000) and the Teacher Professional Identity Questionnaire developed by Liou (2008). The sampling strategy for selection of the participants was convenience sampling and the participants' teaching experience varied from 4-23 years. The results of three separate Pearson correlations revealed that there was a significant positive relationship between EFL teachers': (a) critical thinking and teaching experience, (b) professional identity and teaching experience, and (c) critical thinking and professional identity. Moreover, the results of a multiple regression showed that EFL teachers' teaching experience was a better predictor of their professional identity. In the light of the findings of the study, EFL policy makers and teachers are thus recommended to introduce ways to improve EFL teachers' critical thinking and professional identity. The results of the study are discussed in more details in the paper.

Keywords: Critical Thinking, Professional Identity, Teaching Experience, EFL Teachers

INTRODUCTION

Teachers are believed to have a very significant role in the educational process by facilitating learning via providing different opportunities for learners to explore their own talents and convert them into abilities and skills (SoodmandAfshar & Hamzavi, 2017). Recently, several investigations (e.g., Birjandi & Bagherkazemi, 2010; Jalilzadeh & Dastgoshadeh, 2011; Tschannen-Moran & Johnson, 2011) have explored the impact of different cognitive, affective and personality aspects of teachers on their actual teaching practices along with their professional success. Some scholars in the field (e.g., Calderhead, 1996; Gess-Newsome, 1999) hold the belief that teachers have a particular

set of attitudes and understandings regarding teaching which highly influence their practice in the classroom.

One prominent variable that define success in L2 learning is the notion of critical thinking (Yuksel, & Alcı, 2012). Critical thinking is defined as "the ability to make sound judgments in complex, real-world situations, based on available evidence and a clearly worked out value system" (Kurfiss, 1988, p.6). Likewise, critical thinking is regarded as a "disciplined, self-directed thinking that demonstrates the perfections of thinking which is appropriate to a specific domain or mode of thought" (Paul, 1990, p. 9). As aptly argued by Korthagen (1993), critical thinking as the principal of reflective teaching, demands teachers' systematic thinking and rational, and regular analyzing of the educational setting.

In addition to critical thinking, teachers' identity is of utmost importance. Identity is viewed as a uniting component in the professional lives of teachers, even a "resource that people use to explain, justify and make sense of themselves in relation to others, and to the world at large" (MacLure, 1993, p. 311). The notion of professional identity has attracted attention in various fields, one of which is teaching and instructor training. According to Beijaard, Meijer, and Verloop (2004), professional identity deals with how teachers see themselves as teachers mostly based on their identifications of their continuing communication with their own educational setting. It is worth mentioning that investigations have commonly focused on what have influence on teacher professional identity and its construction and improvement (e.g., Schepens, Aelterman & Vlerick, 2009).

Based on the significance of critical thinking and professional identity in the field of education and their probable potential impacts on teacher's trend to become more successful and professional, this study attempted to examine the possible relationship among EFL teachers' critical thinking, professional identity and teaching experience.

LITERATURE REVIEW

Critical Thinking

There are various interpretations of critical thinking. According to Mason (2007), many theorists have advanced philosophies and theories of critical thinking. For example, Ennis (1996), declare that critical thinking includes specific skills, such as being able to evaluate reasons correctly, or to recognize wrong arguments. Actually, the concept of CT is by no means new since it was Socrates who presented this method of thinking about two thousand years ago (Fisher, 2001). Yet, in spite of the long history of critical thinking tradition, there is no particular and approved-upon explanation for what organizes critical thinking. As stated by Fisher (2001), Dewey (1933) is the father of modern critical thinking, and Dewy describes CT as; "active, persistent, and careful consideration of a belief or supposed form of knowledge in the light of the grounds which support it and the further conclusions to which it tends" (p. 9). As stated by Noddlings (2006), critical thinking can be defined as the using rational and reasoning in a careful and shrewd way on personal behavior, judgement making and belief that are problems of social or moral significance, whereas Cottrell (2005) realizes the concept of critical thinking as a mental and intellectual activity incorporated with mind practice.

King (1995) declares that the distinctive feature of those who are critical thinkers is logical mind; so, good critical thinkers are principally those who scrutinize good studies and investigations. Paul, Elder and Bartell (1997) assert that self- evaluation is a fundamental matter to critical thinking, and just those learners who learn to assess their own thinking are actually considered as critical thinkers. The explanation presented by Scriven and Paul (1987) summarizes most of the features fundamental to critical thinking: Critical thinking is the rationally well-organized procedure of dynamically and proficiently abstracting, applying, evaluating, combining, and/or assessing information collected from, or made by experience, observing, thinking, rational, or communication, as a monitor to belief and action. These descriptions recommend that critical thinking is not just thinking, it involves reflecting upon, inquiring and evaluating.

Some studies have been conducted on critical thinking skills of teachers. For instance, one of the studies related to the investigation of teachers' critical thinking was conducted by Parsi (2017) in which the researcher investigated the relationship between EFL teachers' critical thinking and use of motivational strategies. The results revealed that there was no relationship between critical thinking and motivational strategies. Another study was conducted by Khodabakhshzadeh and Gaemi (2011), to investigate the relationship between IELTS Instructors' critical thinking and their teaching success. The results revealed that there was a significant relationship between IELTS Instructors' critical thinking and their teaching success. Another study carried out by Khodabakhshzadeh, Garmabi and Fayendari (2017) to investigate the relationship between burnout and critical thinking ability. The results showed that emotional exhaustion and depersonalization strongly and negatively related with critical thinking ability. However, a strong and positive relationship was found between personal attainment and critical thinking skills.

Professional Identity

As pointed out by Lundell and Collins (2001), individuals build and put their own social selves within the daily actualities that they live in, to be precise through granting it much critically thinking of ethics, world outlooks, and opinions that individuals themselves or other individuals are primarily exposed to and obtain. Therefore, when this social identity is apt to happen within the career surroundings, and the particular interactive and scientific characteristics of an individual's career appear in it, an individual's professional identity is typically formed.

It is believed that professional identity is considered as how teachers perceive themselves as teachers, based on their understandings of their constant relations with their setting (Beijaard, Meijer &Verloop, 2004). Kogan (2000) argued that the three aspects of personal, professional, and situational, go along hand in hand and are reinforced and improved by the instructors' undertaking the developments of professional instruction and knowledge. It is believed that various professional identities are generally shaped through different ways in which the aforementioned dimensions interact with each other.

Additionally, Day and Kington (2008) also argued that instructor identities are created not only from sentimental and practical aspects of instruction and instructors' private lives, but interactions between personal experiences and the educational, cultural, and institutional situations also important elements that create instructors' identities. Pertaining to professionalism and professional identity, Trede (2012) argues that:

"Contemporary professionalism might need to be underpinned by a professional identity that is about knowing what one stands for and, closely linked to this, is professionalism which is taking responsibility for one's action. Professional identity formation means becoming aware of what matters most in practice, what values and interests shape decision making. Being, thinking and acting as a professional are underpinned by professionalism and a sense of professional identity" (Trede, 2012, p. 163).

In a study, Beijaard, Meijer, and Verloop (2004) dealt with the review of recent research on teachers' professional identity which could be divided into three categories: (1) studies in which the focus was on teachers' professional identity formation, (2) studies in which the focus was on the identification of characteristics of teachers' professional identity, and (3) studies in which professional identity was (re)presented by teachers' stories. In these studies, professional identity was differently defined or not defined at all. Four essential features of teachers' professional identity could be derived from these studies. Many of these studies appeared to focus on teachers' personal practical knowledge. However, a few studies made explicit the relationship between this knowledge and professional identity. It was argued that, in future research on teachers' professional identity, more attention must be paid to the relationship between relevant concepts like 'self' and 'identity', the role of the context in professional identity formation, what counts as 'professional' in professional identity, and research perspectives other than the cognitive one that may also play a role in designing research on teachers' professional identity (Beijaard, Meijer, &Verloop, 2004).

RESEARCH QUESTIONS AND HYPOTHESES

In this study, attempts were made to answer the following research questions:

RQ₁: Is there any significant relationship between EFL teachers' critical thinking and teaching experience?

RQ₂: Is there any significant relationship between EFL teachers' professional identity and teaching experience?

RQ₃: Is there any significant relationship between EFL teachers' critical thinking and professional identity?

RQ4: Is there any significant difference between EFL teachers' critical thinking and teaching experience in predicting their professional identity?

Based on the above-mentioned research questions, the following null hypotheses were formulated:

H₀₁: There is no significant relationship between EFL teachers' critical thinking and teaching experience.

H₀₂: There is no significant relationship between EFL teachers' professional identity and teaching experience.

H₀₃: There is no significant relationship between EFL teachers' critical thinking and professional identity.

H₀₄: There is no significant difference between EFL teachers' critical thinking and teaching experience in predicting their professional identity.

METHOD

Participants

A total of 120 teachers took part in the study from accredited private language institutes and public schools in Mashhad. Their age ranged from 25 to 45. The EFL teachers were ELT experts who had taught for at least 4 years and at most 23 years. The participants were selected based on convenience sampling.

Instruments

To accomplish the purposes of the study, following instruments were employed.

The Critical Thinking Scale

In relation to assess the participants' critical thinking level, the Critical Thinking Scale developed by Honey (2000) was administered. This questionnaire includes 30 five-point Likert type questions that basically evaluate the skills of analysis, inference, evaluation, and reasoning. It takes about 18 minutes to be completed. To calculate the total score, the values of all the items are added up. Each participants' score thus can range from 30 to 150. The reliability of Critical Thinking Scale in the present study was calculated to be 0.80 (using Cronbach Alpha).

Teacher Professional Identity Questionnaire

In relation to assess the participants' professional identity, the Teacher Professional Identity Questionnaire developed by Liou (2008) was used. This questionnaire has two main sections. Section A consists of 8 five-point likert scale items measuring English teachers' professional identity, and their evaluation and commitment to their profession while Section B consists of 18 five-point likert scale items regarding respondents' attitude towards language proficiency of different users in different contexts. In this study, Section A was administered. It takes about 10 minutes to be completed. The reliability of Teacher Professional Identity Questionnaire in the present study was calculated to be 0.78 (using Cronbach Alpha).

Procedure

This study intended to identify the possible relationship among EFL teachers' critical thinking, professional identity and teaching experience. The participates were selected based on convenience sampling, and after ensuring their anonymity, the two questionnaires were administered to English teachers teaching in different accredited private language institutes and public schools in Mashhad. The completion of both questionnaires took about 28 minutes. Having collected the required data, the researcher

made us of the Statistical Package for Social Sciences (SPSS, version 20) to analyze the data.

Data Analysis

After collecting the data, SPSS version 20 was used for analyzing the data. Three Pearson product moment correlations were run in order to answer the aforementioned three research questions of the study. Concerning the fourth research question of the study, a multiple regression was run.

RESULTS

In order to make decision on the type of test to use (i.e. Parametric or non-parametric ones), test of normality was used first and the results indicated that the collected data were normally distributed.

4.1. First Hypothesis: There is no significant relationship between EFL teachers' critical thinking and teaching experience.

In order to test the first research hypothesis, a Pearson Correlation was run, which its results are shown in Tables 1 and 2.

Table 1. Descriptive Statistics for EFL Teachers' Critical Thinking and Teaching

	Experience		
	Mean	Std. Deviation	N
Teaching Experience	12.4167	3.63129	120
Critical Thinking	112.5167	12.41643	120

As indicated in Table 1, the mean and standard deviation of the EFL teachers' critical thinking were 112.41 and 12.41, respectively while the mean and standard deviation of their teaching experience were 12.41 and 3.63, respectively.

Table 2. Pearson Correlation between EFL Teachers' Critical Thinking and Teaching Experience

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		Teaching Experience	
	Pearson Correlation	.400**	
Critical Thinking	Sig. (2-tailed)	.000	
	N	120	

^{**.} Correlation is significant at the 0.01 level (2-tailed).

As demonstrated by Table 2 above, the correlation came out to be significant at the 0.01 level (r = 0.400, p = 0.000 < 0.05). Consequently, it can be claimed that the two variables were significantly and positively related to each other and the first null hypothesis was rejected.

4.2. Second Hypothesis: There is no significant relationship between EFL teachers' professional identity and teaching experience.

In order to test the second research hypothesis, a Pearson Correlation was run, which its results are shown in Tables 3 and 4.

Table 3. Descriptive Statistics for EFL Teachers' Professional Identity and Teaching Experience

	Mean	Std. Deviation	N
Teaching Experience	12.4167	3.63129	120
Professional Identity	29.5333	4.40956	120

As shown in Table 3, the mean and standard deviation of the EFL teachers' professional identity were 29.53 and 4.40, respectively whereas the mean and standard deviation of their teaching experience were 12.41 and 3.63, respectively.

Table 4. Pearson Correlation between EFL Teachers' Professional Identity and Teaching Experience

		Teaching Experience
Professional Identity	Pearson Correlation	.419**
	Sig. (2-tailed)	.000
	N	120

^{**.} Correlation is significant at the 0.01 level (2-tailed).

As indicated by Table 4, the correlation came out to be significant at the 0.01 level (r = 0.419, p = 0.000 < 0.05). Therefore, it can be concluded that the two variables were significantly and positively related to each other and the second null hypothesis was rejected.

4.3. Third Hypothesis: There is no significant relationship between EFL teachers' critical thinking and professional identity.

In order to test the third research hypothesis, a Pearson Correlation was run, which its results are shown in Tables 5 and 6 below.

Table 5. Descriptive Statistics for EFL Teachers' Critical Thinking and Professional

	identity		
	Mean	Std. Deviation	N
Professional Identity	29.5333	4.40956	120
Critical Thinking	112.5167	12.41643	120

As displayed in Table 5, the mean and standard deviation of the EFL teachers' professional identity were 29.53 and 4.40, respectively while the mean and standard deviation of their critical thinking were 112.51 and 12.41, respectively.

Table 6. Pearson Correlation between EFL Teachers' Critical Thinking and Professional Identity

		Professional Identity
Critical Thinking	Pearson Correlation	.249**
	Sig. (2-tailed)	.006
	N	120

^{**.} Correlation is significant at the 0.01 level (2-tailed).

As demonstrated by Table 6, the correlation came out to be significant at the 0.01 level (r = 0.249, p = 0.006 < 0.05). Thus, it can be stated that the two variables were significantly and positively related to each other and the third null hypothesis was rejected.

4.4. Fourth Hypothesis: There is no significant difference between EFL teachers' critical thinking and teaching experience in predicting their professional identity.

A multiple regression was run to investigate the fourth research hypothesis and its results are presented in Tables 7, 8 and 9.

Table 7. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.428a	.183	.170	4.01844

a. Predictors: (Constant), Teaching Experience, Critical Thinking

According to the figures presented in Table 7, the amount of R was calculated to be 0.428 and R square 0.183. In order to further analyze the issue, the results of the ANOVA are presented in Table 8.

Table 8. Regression Output: ANOVA Table

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	424.563	2	212.281	13.146	.000 ^b
Residual	1889.304	117	16.148		
Total	2313.867	119			
	Regression Residual	Regression 424.563 Residual 1889.304	Regression 424.563 2 Residual 1889.304 117	Regression 424.563 2 212.281 Residual 1889.304 117 16.148	Regression 424.563 2 212.281 13.146 Residual 1889.304 117 16.148

a. Dependent Variable: Professional Identity

Table 8 reported the results of the ANOVA ($F_{2,117} = 13.146$, p = 0.000 < 0.05) which proved significant.

Table 9. Regression Output: Coefficients

	Model	Unstandardized Coefficients Standardized Coefficients			t	Sig.
		В	Std. Error	Beta		
1	(Constant)	19.915	3.359		5.92	8.000
	Critical Thinking	.035	.032	.097	1.06	7.288
	Teaching Experience	.462	.111	.380	4.17	0.000

a. Dependent Variable: Professional Identity

As indicated by Table 9 above, teaching experience was a significant predictor of EFL teachers' professional identity. Thus, the fourth null hypothesis was also rejected.

DISCUSSION

The main purpose of this study was to scrutinize the relationship among EFL learners' critical thinking, professional identity and teaching experience. First, this study explored whether there existed any significant relationship between EFL teachers' critical thinking and teaching experience. The results of a Pearson correlation showed that there was a significant positive relationship between EFL teachers' critical thinking and teaching experience. The positive relationship between two constructs indicates that when EFL teachers' teaching experience increases, their critical thinking increases as well. In other words, those teachers who have higher levels of teaching experience have better critical thinkers.

The results of the first research questions seem to be in proportion to other research, which showed that repeated experience can enhance the acquaintance with the practice of critical thinking (Willingham, 2008). In other words, teachers' practice of critical

b. Predictors: (Constant), Teaching Experience, Critical Thinking

thinking was reflected by their own teaching experiences. Thus, teaching experience might cause modifications toward the educators' thinking about their own teaching strategies. Based on the findings of the present study, it can be implied that teachers in their early years of teaching are confronted with different or unanticipated teaching circumstances and consequently throughout time as their teaching experience increases, their level of critical thinking is improved as well. However, it is worth noting that doing further research in this regard could shed more light on this issue.

Second, this study explored whether there existed any significant relationship between EFL teachers' professional identity and teaching experience. The results of a Pearson correlation showed that there was a significant positive relationship between EFL teachers' professional identity and teaching experience. The positive relationship between two variables indicates that when EFL teachers' teaching experience, their professional identity increases as well. In other words, the higher EFL teachers' teaching experience levels, the higher their professional identity will be. As pointed out by Namaghi (2009), lack of reflection hinders the improvement of the self as an educator, due to the fact that self-reflection makes link between teachers' teaching experiences and their identity and feelings.

Third, this study inspected whether there existed any significant relationship between EFL teachers' critical thinking and professional identity. The results of a Pearson correlation showed that there was a significant positive relationship between EFL teachers' critical thinking and professional identity. The positive relationship between two variables specifies that when EFL teachers' critical thinking increases, their professional identity increases as well. Consequently, not paying sufficient attention to EFL teachers' critical thinking, in turn, might lead to their incompetence to gain greatness in professional identity. The findings in this regard highlight the significant role of teachers' critical thinking in forming their professional identity in an educational setting. The findings of this study are in line with those of Abednia (2012) and Sheybani, and Miri (2019) who found there existed a significant and positive relationship between EFL teachers' critical thinking and professional identity.

Fourth, this study examined whether there existed a significant difference between EFL teachers' critical thinking and teaching experience in predicting their professional identity. The results of a multiple regression revealed that teaching experience was a significant predictor of EFL teachers' professional identity.

CONCLUSION

This study attempted to inspect the relationship among EFL teachers' critical thinking, professional identity and teaching experience. Moreover, this study tried to explore between EFL teachers' critical thinking, and teaching experience, which one was a better predictor of their professional identity. The results showed that there was a significant positive relationship between EFL teachers' critical thinking and teaching experience. Furthermore, the results showed that there was a significant positive relationship between EFL teachers' professional identity and teaching experience. Additionally, the results showed that there was a significant positive relationship between EFL teachers'

critical thinking and professional identity. Finally, the results of a multiple regression revealed that teaching experience was a significant predictor of EFL teachers' professional identity.

In the light of the findings of the study, foreign language education policy makers in general and EFL teachers in particular are thus recommended to introduce ways to improve EFL students' critical thinking and professional development. Moreover, this result may help teacher trainers to bear in mind the beneficial characteristics of critical thinking and professional identity when dealing with teacher training courses or teacher in-service courses. Like all other studies, this study had some limitations. The most important limitation was the fact that this study included only EFL teachers from private language institutes in Mashhad. Thus, the generalizability of the findings must be treated with utmost caution.

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