

The Relationship between Language Professors' Critical Thinking Ability and Pedagogical Success

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Abstract

Considering the importance of teachers' role, this study intended to explore the relationship between Iranian EFL professors' critical thinking ability and their professional success. To achieve the purpose of the study, 60 university professors were asked to fill out Watson Glaser Critical Thinking Appraisal, and their students that were 100 male and female university students were required to answer the questions of Characteristics of Successful EFL Teachers questionnaire. The results of statistical analysis indicated that there is a significant correlation between Iranian EFL professors' critical thinking ability and their professional success.

Key terms: critical thinking, pedagogical success, successful EFL teachers

1. Introduction

There has been enormous number of studies on the efficacy of teachers at different educational contexts. Numerous attempts have been made in the past to advance teacher adequacy and accomplish ingeniously language learning. Improving teaching methods, materials, environments and teacher training courses were examples of this kind (Pishghadam, Ghorbani Nejad, & Shayesteh, 2012). Educators have set out on a long-life venture, in which they ought to be prepared to learn, teach, and enhance their developmental way consistently. In fact, the instructor's capability and adequacy are the most compelling factors in student success (Nakabugo, 2008).

Rama (2011) pointed out that as teachers educate new generation, their roles are of major importance for improving the future of a society. Rama, furthermore, argued that teachers are one of the most major factors that affect the level of accomplishment in students' learning since they try to motivate students, encourage them, shape their minds, and make them responsible members of the society.

The challenge of education has always been in selecting and protecting competent and skilled teachers. The specialists in teaching profession have also been worried about providing experienced teachers, retaining them, and motivating them to have the best possible utility (Vegas & Umansky, 2005). Teachers as the key elements in the process of teaching and learning have undeniable effects upon the students' attainment. Besides, in a university context, the professors who have the most effective roles lead learners to overall achievement and development (Moafian & Pishghadam, 2008; Sanders & Rievers, 1996).

The present study is an attempt to explore the probable significant relation between teachers' pedagogical success and critical thinking ability at university level. As little attempt has been made to explore the relation at the university

2. Review of Related Literature

2.1. Teacher's pedagogical success

According to Veisi, Azizifar, Gowhary, and Jamalinesari (2015), constant changes and rapid growth of education in the past two decades have led to an increasing workload for teachers since teaching is one of the most important professions in the world. Teachers are regarded as the key elements for students' academic success and development because they play a major role in providing conditions for students to promote.

Education has become one of the most essential activities in the human beings' lives. The rapid growth of science and technology and the sudden increase of knowledge have required people to learn continuously at many time intervals throughout their lives, and teachers are not exception. It is necessary to create an environment to develop collaborative projects and reflection process to solve the problems related to teaching practice because continuing training of teachers is a challenge, and developing their professionalism, updating them, and deepening their knowledge are of essential importance. In fact, teachers' professional improvement and development are sources of professional development in a society. Therefore, management staffs within higher education have to increase the teachers' quality and preparation level and should design innovative programs (Duta, & Rafaila, 2014).

Assigning special significance to teacher development, Trif and Popescu (2013) argued that in the context of ever changing educational needs and wants, initial teacher education alone cannot supply teachers with the essential knowledge and skills for a lifelong teaching career. Therefore, teachers have to acquire new knowledge and skills to be improved continuously. Teacher' educational and professional development have to be structured and resourced in a lifelong task. As a result, it is necessary to improve both the quality of initial teacher education and the process of nonstop professional development. It is worthwhile mentioning that high-quality teaching is a prerequisite for education and training, which can be achieved by high-qualified teachers.

Zohrabi (2014) stated that teachers can promote and develop through designing and applying their own particular syllabus since they become more than users of other designers' works and instead become expert in developing their own syllabus and curriculum. In fact, teachers can extend their theory and practice through curriculum development. But, the designing or planning of a syllabus by a teacher depends on various factors such as students' goals and needs, courses' objectives, the institution aims, social expectations, and teacher's ability to adopt and apply special syllabus. Undoubtedly, any syllabus requires some changes to be adopted by both students and teachers. The process of change is challenging and not easy because any change and innovation in the curriculum requires teachers' personal, professional, institutional, social, national, and educational skills. It is suggested that a teacher should integrate several syllabuses to present the most favorable learning environment to motivate students, help them to improve, and promote teaching skills.

2.2. The Significance of Critical Thinking

Alper Ay, Karakaya, Yilmaz (2015) indicated that recently it has become very important for individuals to be able to control themselves. In other words, individuals have to manage themselves. Furthermore, raising individuals who are able to take their own decisions and are able to think at a high level is emphasized by all national governments and institutions. Individuals who are able to think critically use cognitive skills such as recognizing generalizations which are used in scientific processes, analyzing and evaluating opinions, analyzing interdisciplinary regression, rational interpretation, and determining and evaluating the assumptions. They also believed that having the abilities of self-leadership and critical thinking is one of the key factors for present students to be effective in their future organizations. Alper Ay et al (2015) conducted a study in which the general relations between sub-dimensions of university students' self-leadership and critical thinking ability were investigated. To accomplish the purpose of the study, 675 students were asked to fill the Self-Leadership Questionnaire, which is used to determine students' self-leadership. They also responded the Critical Thinking Disposition Inventory (CCTDI). The collected data showed that the students' self-leadership levels are high whereas their critical thinking levels are moderate. Of course, the regression analysis of data demonstrated that there was a positive correlation between self-leadership and critical thinking. The findings also showed that there is a positive and meaningful relationship between constructive thinking pattern strategies and natural reward strategies.

To gain new insight about critical thinking skills, Gojkov, Stojanović, and Rajić (2015) carried out a study to investigate the relation between the level of development of students' critical

thinking and their ability to apply it. The findings showed although the students estimated their levels of critical thinking rather high, this was not manifested in the situations requiring them to apply it. Thus, lack of critical thinking highlights the need for critical thinking teaching, as one of the most significant teaching aim. However, little space is left in educational contexts for achieving this aim.

Kirmizi, Ceren Saygi, and Yurdakal (2015) believed that both critical thinking and problem solving are the skills that ought to be trained from the opening stage of education. Due to the fact that many individuals do not have these skills, they can neither have a critical view on social, personal and cultural issues, nor can they avoid solving problems. While teachers encounter many types of problems in their career, they need to have a critical perspective to solve them and try to find feasible solutions to cope with challenges. Consequently, teachers' critical thinking and problem solving skills should be developed through practices in teacher-training courses by confronting them with actual existing problems.

The study conducted by Kirmizi, Ceren Saygi, and Yurdakal (2015) aimed at determining the relationship between the students' critical thinking and problem solving skills. To do so, they selected 97 university teachers, whose major was music. In order to collect data about the participants' critical thinking and problem solving skills, "The California Critical Thinking Disposition Inventory" and "problem solving skills inventory" were adapted as the instruments of this study. After analyzing the data, it was revealed that there was a positive and significant relationship between teachers' critical thinking and problem solving skills. It was concluded from the results of this study that music teachers who tried to tackle with each personal and social problem through critical thinking perceptions were considered as more qualified teachers.

Though there is a large body of research on critical thinking concept, there is a dearth in exploring the relationship between critical thinking and professional success. So, this study intended to find out the answer to the following question and relevant null hypothesis:

Research Question: Is there any significant relationship between Iranian EFL teachers' critical thinking ability and their professional success?

Research Hypothesis: There is not any significant relationship between Iranian EFL teachers' critical thinking ability and their professional success.

3. Methodology

3.1 Participants

To fulfill the aim of the present study, two groups of participants were chosen. The first group was a total of 60 professors (females=30, males=30) holding MA or PhD degrees, who were selected randomly as the participants of this study. These participants, whose age ranged from 36 to 55, taught English Literature, TEFL, or Translation at Ferdowsi University of Mashhad, Sabzevar Tarbiat Moalem University, Semnan University, and Tabaran University. The universities were chosen based on the accessibility of the participants.

The second group of participants consisted of 100 participants, including BA and MA students majoring at English Literature, TEFL, or Translation. More specifically, 60 BA students were studying at Ferdowsi University of Mashhad, Sabzevar Tarbiat Moalem University, Semnan University, and Tabaran University, and 40 MA students were studying at Ferdowsi University of Mashhad and Sabzevar Tarbiat Moalem University. Out of 100 participants, 55 were females and 45 were males. These participants, whose age ranged from 20 to 32, were studying in the second, third, and fourth year of their study at university. For the second group of participants, no distinction was made between males and females. The choice of participants was done based on the availability of the participants.

3.2. Instrumentation

3.2.1. Characteristics of Successful EFL Teachers

The first questionnaire, employed to investigate teachers' success in this study, was Characteristics of Successful EFL Teachers, designed by Moafian and Pishghadam (2008). It is a 47-item questionnaire for revealing the characteristics of successful EFL teachers by eliciting students' comments and opinions about their teachers. Each item is followed by a 5-point Likert Scale, ranging from 'strongly agree' to 'strongly disagree'. This questionnaire investigates 12 characteristics of a successful teachers namely accountability, interpersonal relationships, attention to all, examination, commitment, learning boosters, creating a sense of competence, teaching boosters, physical and emotional acceptance, empathy, class attendance and dynamism. This questionnaire was administered to the students to gather information about the characteristics of successful EFL teachers. It took only 30 minutes to answer the questions of this questionnaire.

3.2.2. Watson Glaser Critical Thinking Appraisal (WGCTA)

The Watson Glaser Critical Thinking Appraisal (WGCTA) was used as the second instrument of this study. It was applied to explore the university professors' critical thinking abilities. It comprises of 80 items with 5 subscales such as inference, recognition of assumptions, deduction, interpretation, and evaluation of arguments.

3.3. Data Collection and Data Analysis Procedure

The process of data collection started in September (2015) and continued until December (2015). At first, two groups of participants consisted of university professors and their students were selected to meet the objectives of the study. The universities were chosen based on availability and feasibility criteria. To achieve the measures of the professors' critical thinking abilities, 60 male and female professors were required to answer the questions of Watson Glaser Critical Thinking Appraisal separately. Each professor was explained how to complete the questionnaire in brief and was introduced to the objectives of the study. In order not to disturb the participants, the researcher asked them to take the questionnaire home, fill it in, and submit it in a week. Effort was made to take the confidentiality and privacy considerations.

In the next step, the Characteristics of Successful EFL Teachers questionnaire was given to 100 university students, who were required to fill out the questionnaire in their regular class time to

collect the data about their EFL teachers' success. To obtain reliable data, the researcher explained the purpose of the questionnaire to the students and assured them that no one would have access to these questionnaires, and they would be anonymous. After collecting the whole data, the researcher commenced data analysis to answer the research questions as to whether the professors' critical thinking abilities have any relationship with their pedagogical success.

This study employed a quantitative approach to data analysis. The gathered data were analyzed through SPSS 16 software. To answer the questions of this study, firstly, the researcher was to find out whether the participants' scores of critical thinking questionnaire showed a significant correlation with their scores in Characteristics of Successful EFL Teachers. As two continuous variables were involved in the research question, the Pearson product-moment correlation coefficient was used to calculate the correlation between the two sets of scores. After obtaining the significant correlation between critical thinking and teacher success, multiple regression analysis was employed to explore which aspects of critical thinking are strong predictors of teacher success. Furthermore, to determine the equality of variances, One-Sample Kolmogorov-Smirnov test was utilized.

4. Results

In order to describe the strength and direction of the relationship between the two variables, professors' critical thinking and pedagogical success, Pearson Correlation was applied. Table 4.1 shows Pearson correlation between critical thinking and teacher success for males; however Table 4.2 manifests Pearson correlation between critical thinking and teacher success for females.

Table 1. *Summary of Pearson correlation between male professors' critical thinking and their pedagogical success*

Variables	Pearson correlation	Sig
critical thinking	0.81	0.047
pedagogical success		

It can be inferred from this table that there is a positive correlation between male EFL professors' critical thinking and their pedagogical success ($r= 0.81, p \leq .05$).

Table 2. *Summary of Pearson correlation between female professors' critical thinking and their pedagogical success*

Variables	Pearson correlation	Sig
critical thinking	0.83	0.025
pedagogical success		

Table 4.2 also shows that there is a positive correlation between female EFL professors' critical thinking and their pedagogical success ($r= 0.83, p \leq .05$). More specifically, for determining the strength and direction of the relationship between five dimensions of critical thinking and five dimensions of pedagogical success, Pearson Correlation was applied. Table 4.3 shows the summary

of Pearson correlation between different aspects of critical thinking and different aspects of teacher success.

Table 3. Summary of Pearson correlation between different aspects of critical thinking and different aspects of teacher success

Aspects of critical thinking						Aspects of teacher success
Evaluation of Argument	Deduction	Interpretation	Recognition assumption	inference		
.85	.81	.74	.83	.77		Accountability
+	+	+	+	+		Sig
.83	.82	.65	.80	.79		Interpersonal relationships
+	+	-	+	+		Sig
.81	.82	.81	.84	.74		Attention to all
+	+	+	+	-		Sig
.77	.79	.78	.74	.79		Examination
-	+	+	+	+		Sig
.76	.74	.75	.75	.71		Commitment
+	+	+	++	-		sig

Sig<0.00 (++); Sig < 0.05(+) ; Sig > 0.05 (-)

Although there is a positive correlation between EFL professors' critical thinking and their pedagogical success (as shown in Tables 4.1 and 4.2), Table 4.3 shows that there is a positive correlation between all subscales of critical thinking and teacher success, but only for some of them the correlation is weak or not significant.

5. Discussion and Conclusion

As Vanicheva, Kah, and Ponidelko (2015) believed, these days it is widely accepted that education is more than just teaching and learning knowledge, but it involves learner's emotions, perceptions, and critical thinking skills, which are fundamental to daily life. Besides, Ijaiya, Alabi, and Fasasi (2011) highlighted that there is a need for conscious teaching of critical thinking skills in teacher education. He noted that in the society that teachers remain poorly skilled, educational reforms cannot succeed, promotion and growth would be intangible, and educational system cannot contribute to the modern development of science and technology. Thus, he recommended that critical thinking skills should be intentionally included in all teacher education programs (Ijaiya, Alabi, & Fasasi, 2011).

Due to the importance of teachers' success in educational context, this study explored the relationship between teachers' critical thinking and their pedagogical success. From the information obtained from the thesis questionnaire and statistical analysis, it can be concluded that there is a

significant correlation between Iranian EFL teachers' critical thinking ability and their professional success. In other words, the first hypothesis of this study that is there is no significant relationship between Iranian EFL teachers' critical thinking ability and their professional success is strongly rejected. Therefore, the findings indicated that there is a significant relationship between teachers' critical thinking and their pedagogical success.

Our findings confirmed the results obtained by Ghaemi and Taherian (2011), who asserted that there is a positive significant relationship between EFL teachers' critical thinking and their teaching success. These findings are also in line with the results gained by Birjandi and Bagherkazemi (2010) mentioning that critical thinking and teacher pedagogical success are significantly correlated with each other. Furthermore the findings revealed that some components of critical thinking are not significantly correlated with different subscales of teacher success. The results nearly reflect the results gained by Birjandi and Bagherkazemi (2010), who affirmed only three out of five components of critical thinking, namely interpreting, inferences, and evaluating of arguments correlated significantly with teacher success, yet the other two components, namely deduction and recognition of assumption did not significantly correlate with teacher success.

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