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*Ferdowsi University of Mashhad*

# ***Construct and Predictive Validation of the English Language Teacher Competency Test (ELT-CT)***

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## **LIST OF ABBREVIATIONS**

ELT-CT: English Language Teachers Competency Test

EQ: Emotional Quotient

FSA: Face Threatening Acts

NLP: Neuro-Linguistic Programming

TCT: Teacher Competency Test

## ABSTRACT

The major purpose of this study was to examine the construct and predictive validity of English Language Teachers Competency Test (ELT-CT) designed by Pishghadam, Baghaei and Shahriari (2011). This study was conducted in two phases. In the first phase of the study, the author tried to find out the construct validity of ELT-CT by using Exploratory Factor Analysis. The second phase of the study dealt with determining the predictive validity of ELT-CT.

For the first phase of this study, a sample of 120 people participated in this study. All of the participants were English language teachers who were university students or university graduates of 4 different language institutes in Mashhad and two language institutes in Bojnourd who completed the ELT-CT. For the second phase of this study, there were two groups of participants, a sample of 100 teachers who had filled the ELT-CT for the first phase, were randomly chosen and the second group of participants, consisted of 700 English language learners from four different language institutes in Mashhad and two language institutes in Bojnourd. The participants were students of the same teachers who also participated in our study. Moreover, students' final exam scores were gathered at the end of the term and the researcher used them to analyze the data. The Pearson Product moment formula was used to calculate the correlation between these sets of scores. The internal consistency of the whole questionnaire was measured with the Cronbach Alpha reliability estimate. Moreover, using Cronbach Alpha, the reliability of each factor constructing the validated questionnaire was also examined. The results have shown that the underlying factors of the test are what the test-designers claim to be. The results have revealed that ten factors represent the underlying structure of ELT-CT, and the results also have shown that the test has predictive validity with respect to the dependent variables.

**Keywords:** Teacher cognition, Teacher competency tests, Teacher success, Construct validity, Predictive validity

**CHAPTER I**  
**INTRODUCTION**

## **1.0. Introduction**

### **1.1. Background**

An educational system should exhibit multiple factors to be considered successful; these factors may vary from the facilities that the system can provide to having competent teachers. Undoubtedly, competent teachers can guarantee success of any educational system. Swandee (1995) considered teaching as a two-way relationship between students and the teacher, believing that what students learn depends mostly on the teacher and on the teacher's commitment to their job. According to Brown (2001), teachers can be agents of change, change of competition to cooperation, weakness to strength, leading students to more success.

Rice (2003) considered teaching a complicated action which is influenced by teacher's characteristics, in which students' success can be predicted based on the teacher's capabilities. Baydala, Rasmussen and Sherman (2008) also stated that teacher factors can have profound impacts on various outcome measures. Teachers who demonstrate patience and knowledge of intervention techniques can have a positive impact on students' success. In the same vein, Dilmac (2009) claimed that teachers need the possession of certain characteristics if they want to be successful. Hamdan, Ghafar and Li (2010), held that some of these characteristics could be competence and standards that might go quite beyond the standards and principles which are accepted worldwide.

The importance of the role of the teachers makes us be very cautious while selecting teachers so that the most influential and competent teachers are selected. One of the best ways ever to select competent teachers is through using Teacher Competency Tests (TCTs). Mehrens (1987) stated that TCTs are the tests that can help us to separate competent teachers from incompetent ones. These tests also help us to select and employ the most competent and successful teachers. TCTs are used to control the entry of students into teacher training programs, certify successful completion of a teacher training program, control initial certification or licensure of teachers and inform decisions regarding re-certification or promotion of experienced teachers.

The motivating factor behind TCTs is that we do not want incompetent teachers. Therefore, several different teacher competency tests have been designed around the world. Countries like the United States, England and Canada and also India are using TCTs. To name a few of TCTs which are currently in use, the following tests can be mentioned: National Teachers Examinations (NTE), Pre-Professional Skills Test (PPST) and also tests which were developed by Educational Testing Service for each state in the US (Mehrens, 1987).

TCTs can be used to measure teacher's cognition. Borg (2003) believes that teacher's cognition refers to what teachers may know, and reflects how this can influence their behavior and actions. Borg (2003) also mentions that there is an interaction between teacher thinking and practice, the context in which teaching happens and the teacher's own previous learning experiences. Strom and Tymofyeyev (2004) believed that the need for competency testing arises whenever a recruiter interviews a new candidate for a job position, and in general, it can be used to identify the most appropriate people for different jobs. However, to the present researcher's knowledge, only one test has been developed by Pishghadam, Baghaei and Shahriari (2011) in the context of foreign language learning in Iran to measure the competency knowledge of English language teachers. Like any other test, this test must also substantiate its validity and it is more desirable, if we have a test which exhibits all types of validity. Therefore, the purpose of this study is to reexamine the construct validity and determine the predictive validity of this test.

## **1.2. Statement of the Problem**

English Language Teacher Competency Test (ELT-CT) has been designed by Pishghadam et al. (2011), and it has also been validated using Rasch analysis. The importance of this test persuaded the author to validate the test again, but this time with some other procedure to see if the test demonstrates construct validity when some other procedure is used. The value of any good test lies in the exhibition of a great amount of validity. The more we validate a test with different procedures, the more trust we can put in its findings and results (Cronbach, 1949). With that in mind, the author decided to validate the test using Exploratory Factor Analysis



(EFA) to find out the factors that ELT-CT is made of, and in fact to determine the construct validity by using EFA. As no EFA has been used to validate ELT-CT, there might be some problems for analyzing the results of the test. Therefore, the researcher decided to substantiate the construct validation of ELT-CT using EFA, and that is the first problem that the researcher is going to deal with.

This study, also attempted to determine the predictive power of ELT-CT. There have been many TCTs but most of them have been used for certification or licensure purposes, which means that they have a kind of gate keeping role, aiming at just separating competent teachers from incompetent ones. Such tests have not tried to choose the most competent teachers, the reason for this, is that TCTs with gate keeping roles claimed that the predictive validity of TCTs is not such an important issue and they said that content and construct validity are enough. But if we want to have the most competent teachers and not just the ones with minimum competency, we should consider the predictive validity of these tests. According to Schalock (1979) there is no set of teacher competencies that have been empirically validated by research as predictive of success in teaching (as cited in Darling-Hammond, 2000). There have been some studies done to find out the amount of competency among teachers in different countries (Penn-Edwards, 2010; Hamdan, et al. 2010). Thus, no study has been done to date to determine the predictive power of TCT and more specifically ELT-CT. In fact, this study, is designed to find out if there is any relationship between English language teachers' scores on ELT-CT and the scores they get from teacher success questionnaire, which is taken by language learners of each teacher and the final exam scores of the same teachers' language learners

Therefore, the two main problems that have never been addressed before are investigated in this research, i.e. construct validation of ELT-CT by the use of EFA, and the predictive validation of ELT-CT by calculating its correlation with students' final exam scores, along with its correlation with students' evaluation of their teachers.

### **1.3. Significance of the Study**

In this study, the researcher attempted to see whether ELT-CT exhibits acceptable amount of construct and predictive validity.

The outcomes of this study can be contributory to the field in a number of ways. First, ELT-CT which is a novel test in the field is revalidated by EFA. EFA helps us to pinpoint the underlying constructs the test consists of. This makes the analysis of the results considerably easier because by knowing those factors, we can easily determine where the problem is. Substantiating the construct validity with the help of EFA can be quite helpful, because it can assure us of the validity of the test that the test designers claimed. This is also in line with the Cronbach's claim (1949) that it is better for a test to be validated with different procedures and from different aspects. Second, according to the results obtained via ELT-CT, we can determine the problematic areas of teaching more objectively, providing them with the required help. Third, ELT-CT can act as a map of teaching for prospective teachers. By taking the test and analyzing the items, teachers can use the guidelines provided by the test in their teaching. Fourth, the results of this study can help us to see whether an English teacher who gets a high score on ELT-CT, is also successful in practice or he/she is only successful in theory. Fifth, this study can also help English language institutes ensure the future success of their teachers, and the future success of their language learners in becoming proficient English users. It can be used as pre-service tests and entrance requirement for becoming an English teacher in English language institutes. This test can also be employed at the end of the Teacher Training Courses (TTC) of each institute to ensure recruitment of the most competent and successful English teachers. Sixth, the results can also inform decisions regarding re-certification or promotion of teachers.

#### **1.4. Purpose of the Study**

As mentioned previously, a good test should have some characteristics to be called a valuable and trustful measure and to allow the test givers trust the results of that test. One of these characteristics is the concept of validity i.e. a test should measure what it is supposed to measure, and there are different validity types, which are going to be defined in the following chapters. If a test demonstrates all

the necessary characteristics but does not demonstrate validity, we cannot trust that test. It is the best when a test shows all three validity types together and not just one or two of them.

Therefore, the first purpose of this study was to substantiate the construct validity of ELT-CT by using EFA. As I have mentioned, the test had been validated by the use of Rasch Analysis at the time of construction, but the researcher decided to use factor analysis and validate ELT-CT once again in order to divide the items into different factors rather than only one factor. The second purpose of this study was to determine the predictive validity of ELT-CT and to find out if a teacher who is good in theory, will also be good in practice.

### ***1.4.1. Research Questions***

Therefore, this study intends to answer the following questions:

1. Is ELT-CT reliable?
2. Is the teacher success questionnaire reliable?
3. Does ELT-CT show construct validity?
4. Is there any significant relationship between the English teachers' scores on this test (ELT-CT) and their scores on the teacher success questionnaire?
5. Is there any significant relationship between the scores that English teachers get on ELT-CT and their students' final exam scores?
6. Is there a significant difference between the means of high and low ELT-CT groups, regarding performance of English language teachers on the teacher success questionnaire and their students' final exam scores?
7. Is there a significant difference between the means of high, mid and low ELT-CT groups, regarding performance of English language teachers on the teacher success questionnaire and their students' final exam scores?

### ***1.4.2. Research Hypotheses***

Based on these questions, the following hypotheses and sub hypotheses were proposed:

H<sub>0</sub>-1: ELT-CT is not reliable.

H<sub>0</sub>-2: The teacher success questionnaire is not reliable.

H<sub>0</sub>-3: ELT-CT does not show construct validity.

H<sub>0</sub>-4: There is no significant relationship between the teachers' scores on ELT-CT and their students' scores on the teacher success questionnaire.

H<sub>0</sub>-5: There is no significant relationship between the teachers' scores on ELT-CT and their students' final exam scores.

H<sub>0</sub>-6: There is no significant difference between the means of high and low ELT-CT groups.

H<sub>0</sub>-a: There is no significant difference between the means of high and low ELT-CT groups regarding performance of English language teachers on the teacher success questionnaire.

H<sub>0</sub>-b: There is no significant difference between the means of high and low ELT-CT groups regarding performance of their students' final exam scores.

H<sub>0</sub>-7: There is no significant difference between the means of high, mid and low ELT-CT groups.

H<sub>0</sub>-c: There is no significant difference between the means of high, mid and low ELT-CT groups regarding performance of English language teachers on the teacher success questionnaire.

H<sub>0</sub>-d: There is no significant difference between the means of high, mid and low ELT-CT groups regarding performance of their students' final exam scores.

## 1.5. Definitions of Key Terms

**Construct validity:** It determines if there is any such trait the test is going to measure. It actually questions the reality of the traits being tested (Birjandi, Farhady & Ja'farpour, 2006, p. 154).

**Predictive validity:** It determines the correlation between the scores obtained from one new test and those obtained from another established one, but the