

## **Interpersonal and Intrapersonal Intelligences: Are they related to EFL Teachers' Self-efficacy Beliefs?**

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Received: 09 April 2020; Accepted: 08 June 2020; Published: 08 June 2020

**Abstract:** The teachers' multiple intelligences and self-efficacy beliefs seem to determine their level of effective teaching. The current study was conducted to investigate the possible relationship between Iranian English teachers' interpersonal and intrapersonal intelligences and their self-efficacy beliefs. It further tried to explore if there was a significant difference among their self-efficacy beliefs in terms of their teaching experience. In order to collect the required data to unfold the relationship between the interpersonal and intrapersonal intelligences and self-efficacy beliefs, 140 high school English teachers were asked to complete two questionnaires including the relevant items excerpted from McKenzie's "Multiple Intelligences Inventory" and Tschannen-Moran and Woolfolk Hoy's "Teachers' Sense of Efficacy Scale" and a Pearson product-moment correlation test was conducted. The results of the analysis revealed that the personal intelligences were related to the teachers' self-efficacy. Results of the t-test revealed a significant difference in teachers' efficacy considering their teaching experience. The findings suggested incorporating interpersonal and intrapersonal intelligence types in teacher education programs in order to increase teachers' self-efficacy in the teaching context.

**Keywords:** Interpersonal intelligence, Intrapersonal intelligence, Multiple intelligences, Self-efficacy beliefs.

### **INTRODUCTION**

Teachers play an important role in leading their students to attain their desired educational goals (Anderson, 2004). The types of activities that teachers choose are often determined by their experiences which in turn influence their students' outcomes (Christison, 1996). Nevertheless, viewing teachers merely as a source of knowledge does not, by no means, guarantee the students' success. Their affective domains may also persuade or dissuade them to follow specific sets of techniques and procedures (Moafian & Ghanizadeh, 2009).

Among several affective characteristics, teachers' multiple intelligences have been allocated less attention compared to other variables such as emotional intelligence (Chan, 2004; Moafian & Ghanizadeh, 2009; Rastegar & Memarpour, 2009). Stemming from Gardner's (1983) multidimensional view of intelligence, multiple intelligences seem to have a pivotal role in identifying one's strengths and weaknesses (Christison, 1996; Lin, 2006) and providing a teaching and learning environment for the students and teachers in which they unlock their potentials (Yenice, 2009). Among the intelligence types put forth by Gardner (1983), two personal

intelligences formed the main focus of the current study. In this sense, interpersonal intelligence is defined as “the ability to make distinctions in the moods, intentions, motivations, and feelings of other people” (Armstrong, 2000, p.2) and entails perceiving the messages underlying facial expressions, voice, and gestures. Intrapersonal intelligence, on the other hand, is conceived of as “the capacity for self-discipline, self-understanding, and self-esteem”

On the other hand, teachers' efficacy is a crucial factor in any educational settings (Knoblauch & Woolfolk Hoy, 2008). Since teachers' efficacy has been significantly related to the students' success (Tschannen-Moran & Woolfolk Hoy, 2001), it seems to affect the educational atmosphere (Moafian & Ghanizadeh, 2009). Furthermore, the advent of CLT has recently provoked great interest in the students' needs, and thereby impelled the teachers to promote their knowledge and skills to fulfil the expectations set by the educational administrators and the needs demanded by the students (Khosravi & Saidi, 2014). It seems that enhancing our discernment of the variables which might affect their perception of self-efficacy might be advantageous.

Notwithstanding the existing literature on teachers' multiple intelligences and their self-efficacy beliefs, it seems that teachers' multiple intelligences have received scant attention (Khosravi & Saidi, 2014). In this regard, a study by Khosravi & Saidi (2014) has pointed to the relationship between interpersonal, and intrapersonal intelligences and self-efficacy beliefs among English for Academic Purposes (EAP) instructors. Khosravi and Saidi (2014) found out that high levels of personal intelligences could predict the English instructors' high levels of self-efficacy in EAP classes. This gives rise to the hypothesis that these two traits might be related among ELT teachers. Due to the significance of both multiple intelligences and self-efficacy beliefs in achieving a high level of effective teaching (Tschannen-Moran & Woolfolk Hoy, 2001), some research to explore the possible relationship between these two factors seems to provide promising results for the educational settings.

Raising the teachers' consciousness by considering their strengths and weaknesses in terms of their personal intelligences would lead to better instructional and behavioral decisions in the educational settings. These two intelligence types seem to be linked to the teachers' ability to seize every possible learning opportunity for enhancing their own self-efficacy and their students' achievement. With this in mind, the present study aimed to investigate the possible relationship between Iranian EFL teachers' interpersonal and intrapersonal intelligences and their self-efficacy beliefs. These two intelligences seemed relevant referring to the existing literature (Khosravi & Saidi, 2014). Furthermore, interpersonal and intrapersonal intelligences are adjacent concepts to emotional intelligence which has been linked to self-efficacy among teachers (Chan, 2004; Moafian & Ghanizadeh, 2009; Rastegar & Memarpour, 2009). Hence, the study addressed the following questions:

1) Is there any relationship between EFL teachers' interpersonal and intrapersonal types of intelligence and their self-efficacy beliefs?

Moreover, since the existing literature provides divergent set of findings with regard to the possible moderating role of teachers' experience in their self-efficacy beliefs (Akbari & Moradkhani, 2010), the study further tried to answer the following question:

2) Is there any significant difference among EFL teachers' self-efficacy beliefs in terms of their teaching experience?

## LITERATURE REVIEW

### Multiple Intelligences: Theory and Practice

For decades, this common belief has existed that only those people who were of higher IQ scores could succeed in the learning processes (Armstrong, 2000). This trend continued till the emergence of humanism in the late twentieth century which turned the scholars' heads toward more learner-centered educational planning. Thereafter, giant steps have been taken to develop innovative methods in order to gear to learners' affective factors and individual differences (Po-Ying, 2006). Gardner (1983, p. 21) redefined intelligence as “the ability to find and solve problems, the ability to respond successfully to new situations and the capacity to learn from one’s past experience” and claimed the existence of seven types of intelligence including verbal-linguistic, logical-mathematical, visual-spatial, bodily-kinesthetic, musical, interpersonal, and intrapersonal (Gardner, 1983; Larsen-Freeman, 1986; Richards & Rodgers, 2001) to them naturalistic and existential have been later added (Armstrong, 2000).

Multiple intelligences theory has been formed based on two strong claims; the first claim was the presence of all intelligences in all human beings and secondly, the differences in terms of their multiple intelligences profiles so that no two people- even identical twins possess the same multiple intelligences profiles (Gardner, 1983, 2004).

With Gardner's more comprehensive picture of intelligence, a multitude of researchers have touched upon the possible relationship between multiple intelligences and some other variables. Many studies have pointed to the contribution of implementing MI theory in writing classes (Borek, 2003; Eng & Mustapha, 2010; Grow, 1990; Marefat, 2007). Research has also revealed the predictive role of multiple intelligences in reading achievement (McMahon, Ross, & Parks, 2004). These aim to raise the teachers' consciousness about the diversity which exists among individual learners in the classrooms (Christison, 1996; Veenema & Gardner, 1996).

Likewise, Akbari and Hosseini (2008) investigated the possible relationship between learners' multiple intelligences and their language learning strategies and found metacognitive learning strategies of a close correlation with multiple intelligences. In this study, no correlation was observed between musical intelligence and any strategy use. On the other hand, kinesthetic intelligence was proven to be of significant relationship only with memory strategy use type.

Apart from all of the studies regarding learners' multiple intelligences, Po-Ying (2006) and Christison (1996) elucidated the necessity of examining the teachers' as well as the learners' intelligence profiles. Being cognizant of their own intelligence profiles as the first step to facilitate implementation of MI-inspired teaching in their classroom (Po-Ying, 2006), teachers would be equipped to encounter several students with different characteristics successfully (Christison, 1996). In spite of the teachers' significant role, few studies (Serin, Serin, Yavuza, & Muhammedzade, 2009; Yenice, 2009) have been allocated to unraveling their multiple intelligences.

More recently, Khosravi and Saidi (2014) demonstrated the possible link between EAP instructors' linguistic, interpersonal and intrapersonal intelligences and their self-efficacy beliefs in English for academic purposes classrooms. In a seemingly similar line, interpersonal intelligence as “the ability to perceive and make distinctions in the moods, intentions, motivations, and feelings of other people” and intrapersonal intelligence as “the capacity for self-discipline, self-understanding, and self-esteem” (Armstrong, 2000, p. 2) were considered in the current study,

striving to cast further light on the relationship between EFL teachers' interpersonal and intrapersonal intelligences and their self-efficacy beliefs.

### **Self-efficacy Beliefs**

Since Bandura (1997) defined perceived self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required producing given attainments" (p. 3), teacher efficacy came to the forefront in educational settings. Earlier in 1977, Bandura himself referred to teacher's self-efficacy belief as a judgment of his or her capabilities to reach an optimal level of student engagement and learning regardless of the student-related factors.

Since the introduction of the concept of self-efficacy, several attempts have been made to reveal the relationship between teacher's sense of efficacy and students' motivation and their achievement (Ross, 1992). Moreover, efficacy has been shown to be of utmost importance in the amount of effort teachers make in teaching (Tschannen-Moran & Woolfolk Hoy, 2001). In this line, Allinder (1994) proved the invaluable aid of strong sense of teachers' efficacy in leading them to higher levels of planning. This group of teachers has also exhibited much more tendency to try out the innovations in their methodology (Guskey, 1988). Besides, a host of studies have demonstrated the predictive role of the teachers' higher sense of efficacy in their willingness to teach (Allinder, 1994), commitment to teaching (Coladarci, 1992), and the probability of staying in the profession (Glickman & Tamashiro, 1982).

Some other studies have also been conducted aiming at finding the possible link between teachers' emotional intelligence (EI) and their self-efficacy beliefs (Chan, 2004; Moafian & Ghanizadeh, 2009; Rastegar & Memarpour, 2009) and revealed a significant relationship between the two concepts. While in Chan's (2004) study, positive regulation was recognized as a significant predictor of general self-efficacy and empathetic sensitivity as an important correlate of self-efficacy toward helping others, Moafian and Ghanizadeh (2009) found the predictive role of emotional self-awareness, interpersonal-relationship, and problem solving in teacher's self-efficacy. Rastegar and Memarpour (2009) have also found out a significantly positive correlation between EFL teachers' perceived emotional intelligence and their self-efficacy beliefs. Akbari and Moradkhani (2010) have also explored the teachers' experience as well as academic degree as two significant correlates of their level of self-efficacy. In another study, the influence of contextual factors on student teachers' efficacy beliefs have been investigated (Knoblauch & Woolfolk Hoy, 2008). The findings revealed the enhanced efficacy beliefs among the student teachers placed in urban settings after the student teacher experience.

Notwithstanding the existing literature and attempting to complement it, the current study adopted a new perspective and aimed to unravel the possible link between EFL teachers' interpersonal and intrapersonal intelligence types and their self-efficacy beliefs.

## **METHOD**

### **Participants**

The study adopted ex-post facto design and a convenient sample of 140 Iranian EFL teachers (70 males and 70 females) aged between 23 and 45 years old participated in this study. They have been

teaching at state high schools for 2 to 15 years. They held BA and MA degrees in various English majors- English Literature (35), English Translation (48), and English Teaching (57).

### **Instruments**

To determine the participants' self-efficacy, Teachers' Sense of Efficacy Scale (Tschannen-Moran and Woolfolk Hoy, 2001) was used. It has two long (24 items) and short (12 items) versions. The researcher used the long form with an overall reliability of 0.94. It included 24 nine-point Likert scale items and contains three constructs of student engagement, instructional strategies and classroom management. This scale elicits the teachers' efficacy beliefs "in a concise manner, without becoming too specific or too general" (Moafian & Ghanizadeh, 2009, p. 712). The reliability coefficients for three subscales were 0.83, 0.92, and 0.88, respectively. In the current study, the overall reliability of the scale was calculated via Cronbach's alpha and was equal to 0.91.

In order to gather the required data on the EFL teachers' interpersonal and intrapersonal intelligences, the relevant items from Multiple Intelligences Questionnaire (McKenzie, 1999) were extracted. It has an overall consistency of 0.85 to 0.90 (Al-Balhan, 2006; Hajhashemi & Wong, 2010; Razmjoo, 2008; Razmjoo, Sahragard, & Sadri, 2009) and includes 10 items measuring interpersonal intelligence and 10 items measuring intrapersonal intelligence. The items were five-point Likert scale ones ranging from 1 (Completely disagreed) to 5 (Completely agreed). As for the current study, the reliability coefficients were calculated via Cronbach's alpha and they were 0.87 and 0.93, respectively.

It is worth mentioning that the two questionnaires were not translated into Persian (the participants' mother tongue) due to the teachers' proficiency level. Moreover, they were asked to provide some demographic information, namely their age, gender, educational degree and years of teaching experience.

### **Procedure and Data Analysis**

The paper versions of the questionnaires were distributed to the 140 English teachers whom were given the opportunity to complete the questionnaires at a convenient time and place. About two weeks later, the questionnaires were collected by the researchers and were prepared for further analysis through SPSS (Version 21).

The relationship between interpersonal and intrapersonal intelligences and self-efficacy beliefs of EFL teachers were examined via conducting a Pearson product-moment correlation test. Moreover, to see if the EFL teachers' experience would influence their self-efficacy beliefs, a t-test was run.

## **FINDINGS AND DISCUSSION**

Table 1 displays the descriptive statistics for EFL teachers' interpersonal and intrapersonal intelligences and their self-efficacy beliefs.

*Table 1: Descriptive statistics of MIs and self-efficacy beliefs*

Variables	N	Minimum	Maximum	Mean	SD
Interpersonal intelligence	140	12	49	9.85	4.18
Intrapersonal intelligence	140	11	48	11.13	4.16
Self-efficacy beliefs	140	149	207	180.52	29.37

To find the possible correlation between EFL teachers' interpersonal and intrapersonal intelligences and their self-efficacy beliefs, a Pearson product-moment correlation was run. The results demonstrated a significant positive correlation between self-efficacy beliefs and interpersonal ( $r= 0.53$ ,  $p\leq 0.01$ ) and intrapersonal ( $r= 0.54$ ,  $p\leq 0.01$ ) intelligences among EFL teachers.

*Table 2: Results of t-test analysis for EFL teachers' self-efficacy beliefs in terms of their teaching experience*

Groups	N	Mean	SD	T	df	P
Less than 3 years	70	180.52	28.30	-0.82	138	S <sup>a</sup>
More than 3 years	70	203.84	30.51			

<sup>a</sup> Significant

Moreover, the results of an independent sample t-test (table 2) indicated that there was a significant difference among EFL teachers' self-efficacy beliefs in terms of their teaching experience (Sig= 0.035,  $p\leq 0.05$ ).

The findings of the statistical analyses demonstrated that two personal intelligences and self-efficacy beliefs are linked among EFL teachers. In this regard, the results were in line with those of Chan (2008), Moafian and Ghanizadeh (2009) and Rastegar and Memarpour (2009) which have shown that teachers' emotional intelligence would affect their self-efficacy since two personal intelligences are akin to the concept of EI. Moreover, it seems possible to say that the two intelligence types and self-efficacy belong to a general ability, i.e. taking advantage of ones' capabilities and their awareness of their strengths and weaknesses to reach their desired goals.

Furthermore, the findings might imply that the concept of self-efficacy could be attributed to one's personal intelligences. Indeed, the results might imply that teachers' perception of their own potentials and their ability to establish a good rapport with the students would lead to their higher sense of efficacy. In practice, those teachers who succeed in forging a strong bond with their students and among the students seem to await more effective and promising outcomes in their classes (Anderson, 2004).

On the other hand, a significant effect of teaching experience on EFL teachers' self-efficacy might suggest that as teachers get more and more experienced, their consciousness is raised regarding their strengths and weaknesses in teaching and in turn, this would enable them to enhance their capacity to reach their desired goals. One other interpretation of this finding would be more exposure to the ideas, experiences, and reflections on the part of the EFL teachers' colleagues which could lead them to higher awareness considering their abilities and shortcomings.

## CONCLUSION AND RECOMMENDATION

The current study examined the interface between Iranian EFL teachers' interpersonal and intrapersonal intelligences and their self-efficacy. The results of the present study revealed a positive correlation between Iranian EFL teachers' interpersonal and intrapersonal intelligences and their self-efficacy beliefs. Furthermore, a significant difference was found between the novice and experienced teachers in terms of their self-efficacy beliefs.

In addition to enriching the existing literature on EFL teachers' multiple intelligences and self-efficacy beliefs, the findings of the current research would help decision makers to incorporate these intelligence types in teacher education programs in order to increase teachers' self-efficacy in the teaching context. In this regard, different workshops can be held to provide both pre-service and in-service teachers with ample opportunities to develop and mobilize their multiple intelligences. These activities would empower them to enhance the quality of learning through perceiving their capabilities and thereby, promote the learners' motivation and achievement (Caprara, Barbaranelli, Steca, & Malone, 2006; Ross, 1992).

This study might be replicated to find out whether similar results can be obtained in various educational contexts, i.e. schools, universities. In addition, the teachers' gender and age were not taken into account in this study. Hence, further studies can be conducted taking into account these variables. It is also possible to investigate the possible effect of the EFL teachers' social backgrounds on their MI and self-efficacy beliefs. Moreover, the teachers' intelligence profiles might contribute to a host of other factors involved in the teaching and learning process. Hence, future studies might aim to shed further light on the possible influence of various types of intelligences on the teacher education issues.

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