



# The Relationship Among Iranian EFL Teachers' Attributional Styles, Decision-Making Types, and Teaching Effectiveness: A Structural Equation Modeling Approach

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Received: 16-11-2022, Accepted: 31-01-2023

## ABSTRACT

*The study of attribution and decision-making is a process that involves improving people's beliefs in the causes of their failures and success to promote future motivation for achievement. Nowadays it is widely accepted that decisive teaching and making use of attributional implications is a vital ingredient of a great academic life. Accordingly, the purpose of the present study was to investigate the relationship between different dimensions of decision-making types, attributional styles, and teaching effectiveness among Iranian EFL teachers. Further, this study explored the mediating role of decision-making types between attributional styles and teaching effectiveness. The participants of the study, 146 adult male and female EFL teachers aged between 25 to 40 years old at different language institutes in several cities of Golestan province, Iran, were selected based on a purposive sampling method and were given three questionnaires. To analyze the data, structural equation modeling (SEM) was run by using the SmartPLS software, version 2. The results showed significant relationships between different dimensions of attributional styles, decision-making types, and teaching effectiveness. The results indicated that decision-making types could successfully mediate between the dimensions of attributional styles and teaching effectiveness. Finally, the findings discussed concerning the context of Iran. These findings would hopefully be advantageous for EFL teachers (English as a foreign language), SLTE courses (second language teacher education), and also TTC centers (teacher training courses) to shape and empower different domains of teaching effectiveness by exploring teachers' decision-making types and attributional styles.*

**KEYWORDS:** Attribution Styles; Decision-Making Types; Structural Equation Modeling (SEM); Teaching Effectiveness

## INTRODUCTION

Research on teacher characteristics in applied linguistics has a long tradition. These characteristics traditionally investigated within the context of individual differences (IDs) as psychological factors conceived to be attributes that mark a person as a distinct and unique human being. Psychological effects like attributions and personal ways of decision-making cannot identify accurately without considering the idiosyncratic features of the specific temporal and situational context (Dörnyei & Tseng, 2009). Accordingly, one of the most successful psychological predictors of academic achievement in recent years is an attributional style. Larsen and Allen



(2016) defined attributional styles as how a person explains the permanent reasons why good or bad events usually happen.

In addition, decision-making also regards as one of the psychological factors underlying teaching effectiveness. Since teachers' decisions can have a substantial impact on students' academic achievement, which is the ultimate goal of all educational settings, teachers need to participate in situations where they can reconsider and restructure their teaching practices, which leads to more effective decisions. Teachers' decisions can directly have a constructive or detrimental influence on the path a student undergoes. This high significance of teachers' decisions places decision-making as the fundamental skill of teaching that every single teacher should equip with (Südkamp, Kaiser, & Möller, 2014). Furthermore, since teachers, as the most important members of society, are responsible for having a depository of all the resources that are human intelligence, and they are holding the luck of other individuals and the civilization in their hands, examining their psychological characteristics such as decision-making and attributions is also of particular importance. "Connecting teachers' quality with teaching effectiveness, one of the central aspects of teacher's cognition, could empower them to act more confidently and see themselves as agents of change" (Mendenhall, Cha, Falk, Bergin, & Bowden, 2020, p. 112). Manifesting qualities of effective teachers supported that effectiveness is an intangible term when considering the complicated teaching process.

As students spend much of their time with their teachers in school, teacher attribution and decision can be vital to students' academic development, including not only learning outcomes but also affective or emotional outcomes. Many empirical studies have shown that teacher decision significantly correlated with positive academic emotions. Simply put, they have also discussed the relationship between teaching effectiveness and different environmental and personal factors, however the nature of the relationship between teaching effectiveness and psychological factors is still neglected. Despite the abundance of research, the body of literature does not show conclusive results germane to the importance of the relationship among the attributional styles, decision-making types, and teaching effectiveness (Safari & Pourhashemi, 2015). Research in the teaching effectiveness field was greatly concerned with students and to what they attribute their success and failure in learning, here teachers' attributions, decisions, and success in teaching were of great importance. To the best knowledge of the researcher, no published studies have either explored the statistical model of these two psychological frameworks or examined it concerning the fundamental necessities of teaching, decision-making, or attribution.

Focusing on decision-making types that are more related to teaching effectiveness, would be of benefit to EFL teachers, Second Language Teacher Education (SLTE) courses, and learning material developers. The results of this study could also be to the benefit of language teachers because considering the positive and negative factors contributing to teachers' success and failure could help them to be more alert to their performance both before and during classes. Understanding which one of these two psychological constructs has a stronger relationship with teaching effectiveness also was in line with the purpose of this study. Hence, the objective of the first quantitative phase of this research was to examine the potential relationship among the different aspects of attributions, decision-making, and teaching effectiveness to address components that influence the teaching process among Iranian EFL teachers. Additionally, as an ancillary objective, this study aimed to explore the mediating role of decision-making types in the relationship between attributional styles and the teaching effectiveness of Iranian EFL teachers.

## **LITERATURE REVIEW ATTRIBUTIONAL STYLE**

The most agreed definition of attributional style is provided by Reiland (2020) that mentioned attributional style as a consistent way by which people can explain the reasons for the occurrence of good or bad events. According to this theory, people are naive psychologists trying to make sense of the social world. This theory later reformulated three dimensions of attribution of positive and negative outcomes: (a) internality; (b) stability; and (c) globalism. The internality refers to the internal/external reasons for events, regardless of their positivity or negativity. Stability refers to the existence of the causes in the future, and globalism means the presence of the reasons for the event in a specific situation. This theory examines what information is gathered and how it is combined to form a causal judgment.



### **DECISION-MAKING TYPES**

Decision-making often refers to an individual's thinking practices central to the understanding of decision processes. This problem-solving process which is a learnable, teachable, and acquirable habit ends when a satisfying solution has been reached (Zou, Chen, & Özsu, 2009). According to Kocoglu (2010), the term *Decision-Making Type* has been defined as a process of judging various available options and narrowing choices to one situation. Accordingly, decision-making is a conscious and human process involving both individual and social phenomena based on factual and value premises, which conclude with a choice of one behavioral activity from among one or more alternatives to move towards the desired state of affairs.

### **TEACHING EFFECTIVENESS**

Teaching effectiveness is derived from Bandura's (2000) social cognition theory. It is described as "beliefs in one's capabilities to organize and execute the courses of action necessary to accomplish certain attainments" (p.24). Also, it is considered as a teacher's subjective judgment of their impact on students' learning.

### **PURPOSE OF THE STUDY**

The intent of this two-phase, explanatory sequential mixed-methods study was to delve more deeply into the relationship among attributional styles, decision-making types, and teaching effectiveness in the Iranian EFL context. Understanding which one of these two psychological constructs has a stronger relationship with teaching effectiveness also was in line with the purpose of this study. Hence, the intent of the first quantitative phase of this study was to examine the potential relationship among the different aspects of attributions, decision-making, and teaching effectiveness to address components that influence the teaching process among Iranian EFL teachers. Additionally, as an ancillary objective, this study aimed to explore the mediating role of decision-making types in the relationship between attributional styles and the teaching effectiveness of Iranian EFL teachers.

Besides, the purpose of the second qualitative phase was to inquire about teachers' possible elaborations on responses to certain questionnaire items, to provide additional insight into the quantitative results, and to bring some social and economic factors affecting teachers' decision-making process and the quality of teaching and also to find the most common style of attribution among Iranian EFL teachers. The obtained results help curriculum designers and educational bodies more reasonably and tangibly disengage the problems associated with the EFL programs and remove some barriers to effective teaching.

To this end, the following research questions were formulated:

**RQ1.** Is there any significant relationship between Iranian EFL teachers' attributional styles and decision-making types?

**RQ2.** Is there any significant relationship between Iranian EFL teachers' decision-making types and teaching effectiveness?

**RQ3.** Is there any significant relationship between Iranian EFL teachers' attributional styles and teaching effectiveness?

**RQ4.** Do decision-making types play a mediating role in the relationship between attributional styles and the teaching effectiveness of Iranian EFL teachers?

### **METHOD**

#### **CONTEXT AND PARTICIPANTS**

The basis of the current study participants' selection was the volition and accessibility of participants to the researcher. For this aim, 146 out of 201 (65 male and 81 female) EFL teachers from 25 to 40 years old were selected. The method of determining the sample size in this research was based on Cochran's formula. According to this formula, since the population size in this study equaled 201, the minimum sample size for conducting the quantitative part of the study, considering the error level of 5%, equaled 132.18. Therefore, the number of 146 participants was acceptable. These teachers were native Persian speakers teaching English at different English language institutes in different northern cities of Iran, including Gorgan, Gonbad, and Aliabad Katoul. All the teachers majored in the various branches of English, such as literature, teaching, linguistics, and translation at B.A., M.A., or Ph.D. Initially, the participants were given the questionnaires, and then some of



them were invited for a subsequent interview that was entirely voluntary. The respondents to the quantitative phase were 146 EFL teachers, while for the qualitative section, only 30 teachers through the purposive sampling method were selected to answer interview questions. Hence, in this research, through the purposive sampling method, the teachers who had teaching experience between 3-10 years and scored the highest on the teaching effectiveness scale formed the interviewees sitting. Similarly, some face-to-face questions were designed to generate deep insights into teachers' decision-making processes when faced with problematic situations. The researcher used the content of the interview from the other researchers' portfolios to cope with the content validity of the text.

## **INSTRUMENTS**

### **ATTRIBUTIONAL STYLE QUESTIONNAIRE (ASQ)**

The most common questionnaire in the realm of personality traits has been proposed, developed, and validated by Peterson, Maier, and Seligman (1993) to measure the general attributional styles index. This questionnaire is one of the earliest and most commonly utilized assessment tools for adults' attributional style. This self-report questionnaire contains 12 hypothetical situations: six negative and six positive. For each scenario, the participants are asked to imagine the event happening to them and to decide what they believe the leading cause of the situation to be. The respondents then have to rate these causes along internality, stability, and globality. It yields scores for individual differences in the tendencies to attribute the causes of bad and good events to internal (versus external), stable (versus unstable), and global (versus specific) factors (McKay & Fujinaga, 2006).

### **GENERAL DECISION-MAKING STYLES (GDMS)**

The General Decision-Making Style scale (GDMS) by Scott and Bruce (1995) was used to measure decision style. This scale provides a broad perspective on decision styles and is one of the most well-established and well-researched scales for decision-making styles. The total number of items was 24 and includes the following five styles: *Rational* (exhaustive information search, systematic evaluation of alternatives), *Intuitive* (unsystematic information processing and reliance on hunches and feelings), *Dependent* (dependent on advice from others), *Avoidant* (tries to avoid making decisions), and *Spontaneous* (wants to reach a decision quickly). Scott and Bruce concluded that individuals generally have different levels of all five styles, although one style is usually dominant (Scott & Bruce, 1995).

### **TEACHING EFFECTIVENESS SCALE (TES)**

The questionnaire employed to assess teaching effectiveness is the Teaching Effectiveness Scale (TES), which is a self-administered scale prepared by Kumar and Mutha (1995) and includes 69 items. In this questionnaire, the description of different activities and traits of the teacher and teaching is given, and the respondent must to rate every statement only one point out of five; totally agree, agree, uncertain, disagree, and totally disagree. The sum of these values gives the teaching effectiveness score for the subject. The reliability of the test is reported to be ranging between 0.75 to 0.85 (Katoch, 1995).

## **PROCEDURE**

This research was conducted at the English language institutes in three different northern cities of Golestan, Iran. Based on Cochran's formula method, 146 out of 201 English teachers, 81 females, and 65 males, were selected as participants. Due to conducting the research steps in the context of the Covid-19 Pandemic restrictions, there was no need for the researcher to be physically present in the institutes because the researcher was sure that the teachers would not miss any single point of the questionnaire items. So after a brief explanation of the purpose of the research, the teachers received the questionnaires. Moreover, the process of distributing questionnaires was done online.

## **STUDY DESIGN AND DATA ANALYSIS**

The data gathered through the questionnaires were analyzed through SEM using the SmartPLS software, version 2, and SPSS, version 26. SEM was used for data analysis for different reasons. The main reason was that it is a powerful, multivariate technique found increasingly in scientific investigations to test and evaluate multiple relationships among latent variables simultaneously with causal relationships (Kline, 2011; Akbari, Miar,

Tavakoli, & Zadehzare, 2012). Since the variables of this study had different interrelated subcategories, and the purpose of the research was to examine the nature of these relationships, SEM was preferred over others.

### RESULTS

To recall the primary purpose of the research and to elucidate the relationship among the research variables; first, the conceptual model of the study is represented in Figure 1.

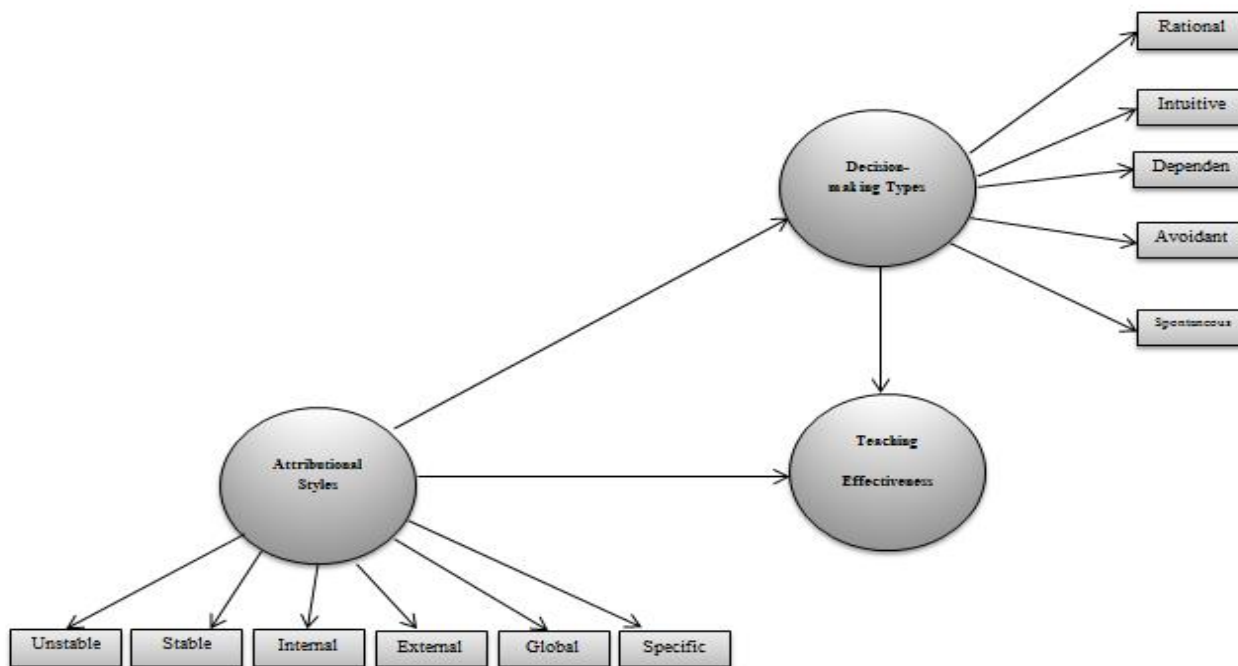


Figure 1. The conceptual model of the study

In this research, the data set had a sample size of 146 without any missing values or outliers. Accordingly, descriptive statistics of all research variables in terms of statistical indicators are presented in the following Table.

Table 1

*Descriptive Statistics of Research Variables*

According to this statistical description, for the attributional style variable (AS), the minimum value of

Variable	Frequency	Minimum	Maximum	Average		standard deviation	Variance
	Statistics	Statistics	Statistics	Statistics	The standard error	Statistics	Statistics
AS	146	1.50	4.67	2.98	.044	.538	.289
DM	146	1.75	5.00	3.13	.047	.575	.331
TE	146	1.00	5.00	3.10	.076	.929	.865

comments is 1.50, and the maximum value of words is 4.67, and the mean and standard deviation of words are



2.98 and 0.53, respectively. For the variable of decision-making types (DM), the minimum value of opinions is 1.75, and the maximum value of ideas is 5.00. The mean and standard deviation of ideas are 3.13 and 0.575, respectively. Also, for the variable of teaching effectiveness (TE), the minimum value of comments is 1.00, and the maximum value of words is 5.00. The mean and standard deviation of words are 3.10 and 0.92, respectively.

### EVALUATION OF MEASUREMENT MODEL

The measurement models concern the relationships between hypothetical constructs or unobservable latent variables and their observable variables- indicators or items (Wang & Hall, 2018). First, the measuring models were checked for the overall fit of the model. To do so, the research made use of the fit of the measurement model, the fit of the structural model, and the overall fit of the model. Then, to check the reliability of the research measurement model, first, factor loading coefficients, Cronbach's alpha coefficients, and composite reliability were checked. The criterion value for the appropriateness of factor loading is 0.4. In the above table, all the questions' coefficients were more outstanding than 0.4, which shows a significant number. As the results of the data analysis algorithm in PLS illustrate, after measuring the factor loading of the questions, it is time to calculate and report Cronbach's alpha coefficients and composite reliability. The significant value for Cronbach's alpha and composite reliability is 0.7 According to the findings of the above table, these criteria have adopted a suitable value for the local variables, and it is possible to confirm the suitability of the reliability of the research. The second criterion for examining the fit of measurement models is estimating the convergent validity, which concerns the degree of correlation of each construct with its questions (indices).

Table 2  
*Convergent Validity of Latent Research Variables*

Average extracted variance (AVE>0.5)	Local variables
0.895	<b>Stable</b>
0.998	<b>Unstable</b>
0.930	<b>Internal</b>
0.804	<b>External</b>
0.757	<b>Global</b>
0.837	<b>Specific</b>
0.751	<b>Rational</b>
0.908	<b>Intuitive</b>
0.826	<b>Dependent</b>
0.668	<b>Avoidant</b>
0.820	<b>Spontaneous</b>
0.876	<b>Teaching Effectiveness</b>

Considering that the appropriate value for AVE is 0.4, and according to the findings of the above table, they have adopted the reasonable value of this criterion for the variables; as a result, the appropriateness of the convergent validity of the research is confirmed.

### EVALUATION OF THE STRUCTURAL MODEL

The structural model deals with the postulated relationship between theoretical constructs (Wang et al., 2021). To assess the fitness of the structural model, the coefficient of determination ( $R^2$ ) and values of significant coefficients (*t-values*) were used.



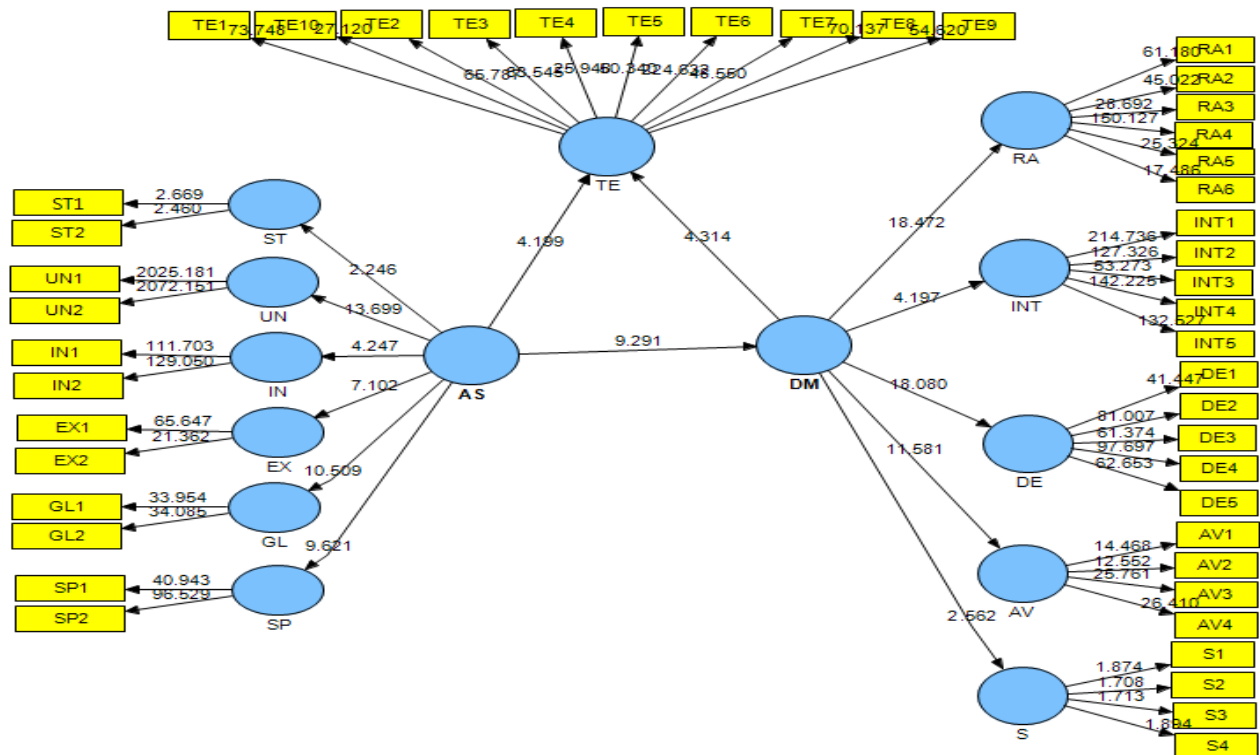


Figure 2. The structural model of the research hypothesis with significant coefficients

As the results of Figure 2 depict, since the *t* coefficients for the research hypotheses were more than 1.96, it is confirmed that they are significant at the 95% confidence level. Like any other structural model, the second criterion for checking the fit of the structural model in research is the  $R^2$  coefficients related to the endogenous (dependent) latent variables of the model.  $R^2$  is a measure that shows the influence of an exogenous variable on an endogenous variable. Three values of 0.19, 0.33, and 0.67 are considered the criteria for weak, medium, and strong values of  $R^2$ . Accordingly, the value of  $R^2$  has been calculated for the endogenous structures of the research, which can confirm the appropriateness of the fit of the structural model according to the three criterion values.

Table 3  
Coefficient Results of  $R^2$  for Endogenous Factors

R2	Local variables
0.081	Stable
0.452	Unstable
0.212	Internal
0.345	External
0.415	Global
0.396	Specific
0.543	Rational
0.251	Intuitive
0.544	Dependent
0.331	Avoidant
0.225	Spontaneous
0.272	Teaching Effectiveness

After inspecting the fit of the measurement and structural models, the general model of the structural equations of the study was examined using the goodness of fit criterion (GOF). This index considers both measurement and structural models and is applied as a measure for evaluating the whole performance of the model. This index



is equal to the average geometric mean of the shared values and the mean of the coefficient of determination R2 of the endogenous latent variables. Hence, to check the fit of the overall model, the GOF criterion is used, where three values of 0.01, 0.25, and 0.36 are introduced as weak, medium, and strong values for GOF.

Table 4  
*Results of Overall Fit of Model*

GOF	R <sup>2</sup>	Communality
0.53	0.33	0.83

According to the value obtained for GOF, which is 0.53, the perfect fit of the overall model is confirmed.

Table 5  
*Results of Significant Coefficients of Sub-hypotheses of the Research Model*

Hypothesis	Causal relationships between research variables	Symbol	path coefficient (β)	meaningfulness (T-Value)	Test result
First	Attributional Styles making	Decision- AS-- DM	0.56	9.29	Confirmation of the first hypothesis
Second	Decision-making Effectiveness	Teaching DM--TE	0.33	4.31	Confirmation of the second hypothesis
Third	Attributional Styles Effectiveness	Teaching AS --TE	0.25	4.19	Confirmation of the third hypothesis

Here, before reporting the hypotheses testing, the four macro null hypotheses of the study based on the conceptual model are restated in the following section.

**H01.** There is no significant relationship between attribution style and decision-making types.

The results of Figure 2 illustrated that the standardized coefficient (path coefficient) between attribution style and decision-making types is  $\beta=0.56$  and the significance coefficient (t-statistic) between these two variables is  $t=9.29$  (more than the absolute value of 1.96) that is significant. Therefore, it can be concluded that there is a substantial relationship between attribution style and decision-making types, and consequently this first hypothesis is confirmed.

**H02.** There is no significant relationship between decision-making types and teaching effectiveness.

The results showed that the standardized coefficient (path coefficient) between two variables (decision-making types and teaching effectiveness) is  $\beta=0.33$ , and the significance coefficient (t-statistic) between these two variables is  $t=4.31$  (more than the absolute value of 1.96), that is significant. Therefore, it can be concluded that there is a substantial relationship between decision-making types and the effectiveness of teaching, and consequently this second hypothesis is confirmed.

**H03.** There is no significant relationship between attributional style and teaching effectiveness.

The results of Figure 2 showed that the standardized coefficient (path coefficient) between two variables (attributional style and teaching effectiveness) is  $\beta=0.25$  and the significance coefficient (t-statistic) between these two variables is also  $t=4.19$  (more than the absolute value of 1.96) that is significant. Therefore, it can be concluded that there is a substantial relationship between the attributional style and teaching effectiveness, and therefore this third hypothesis is confirmed.

**H04.** Decision-making types play no mediating role in the relationship between attributional styles and the teaching effectiveness of Iranian EFL teachers.





Since, in this research, the decision-making type is a mediating variable; therefore, it is necessary to check this mediating role in the relationship between attributional styles and teaching effectiveness. Hence, the *Sobel test* was used to check the significance of the mediation effect in this research. In this test, the non-standard coefficient of the route and the standard error of that test is used.

$$Z-Value = \frac{a*b}{\sqrt{(b^2 * s_a^2) + (a^2 * s_b^2) + (s_a^2 * s_b^2)}} = \frac{(0.564)*(0.331)}{\sqrt{((0.331)^2 * (0.064)^2) + ((0.564)^2 * (0.075)^2) + (0.064^2 * 0.075^2)}} = 3.946$$

The findings indicated that the Z-value of the Sobel test was equal to 3.946 and greater than 1.96, which is significant and showed that the decision-making type play mediating role in the relationship between attributional style and teaching effectiveness.

## DISCUSSION

The results of the first research question and correlation tests revealed a significant relationship between attribution style and decision-making types. The findings of this research question were in line with those of several research studies. Juliusson et al. (2014) concluded that past experiences and attributions impact on teachers' future decision-making. Similarly, this fact is supported by the findings of Bruin et al. (2007) maintained that people in lower social groups have far less access to resources and knowledge, experience more bitter events, and are therefore more prone to failure in their decisions than others.

The results of the second research question showed that there was also a significant relationship between decision-making types and the effectiveness of teaching. The findings of this section were consistent with the findings of Goe, Bell, and Little (2008) and also Davis and McPartland (2012). They reported that effective teachers have high expectations for all students and contribute to positive academic, attitudinal, and social outcomes, such as regular attendance, on-time promotion to the next grade, on-time graduation, self-efficacy, and cooperative behavior.

The results of the third research question showed that there was a significant relationship between the attributional style and teaching effectiveness. Besides theoretical contentions, the finding mentioned above is in line with previous studies. The importance of teachers' attribution, years of teaching, and experience in teaching effectiveness was in line with Kosgei, Mise, Odera, and Ayugi (2013). They believed that a teacher's years of experience have a considerable effect on the student's performance. Accordingly, the teachers with more than three years of experience recorded higher student academic performance. Also, the findings of the attributional style section were in contrast to Weiner's expectancy principle. According to Weiner's expectancy principle, changes in the expectancy of success following an outcome are influenced by the perceived cause of an event (Weiner, 2008). In other words, a successful event would considerably contribute to the anticipation of future success, and a failure would induce the idea that subsequent failures would occur.

The results of the fourth research question indicated that the decision-making type play mediating role in the relationship between attributional style and teaching effectiveness. The results are supported by what Palardy and Rumberger (2008) examined about three dimensions of teacher effectiveness, including instructional practices, teacher decisions, and teacher background characteristics (certification, advanced degrees, and years of experience) concerning language learning. Concerning teacher decisions, it may infer that instructional practices had the most negligible impact on student achievement, followed by the direct effects of teacher decisions.

## CONCLUSION AND IMPLICATIONS

Based on the results mentioned above regarding the relationship between Iranian EFL teachers' attribution style and decision-making types, their decision-making types and teaching effectiveness, and also the relationship between their attributional style and teaching effectiveness concerning the mediating role of decision-making types on the other variables, if we pin the teacher's psychological factors into the teaching process, the teaching quality will significantly increase. Moreover, attributional styles greatly affect education and all other human-to-human interactions. In other words, when people attribute some characteristic of a person to their actions - correct or incorrect - they will treat them differently based on those assumptions. Besides, it concluded that



decision-making types would be beneficial if they could generally distinguish between excellent and poor quality decision-makers. Errors in judgment associated with poor decision-making processes contribute to adverse outcomes and are, therefore, costly to individuals. Since teachers' decisions can have a substantial impact on students' academic achievement and student achievement is the ultimate goal of all educational settings, teachers need to participate in situations where they can reconsider and restructure their teaching practice, which leads to more convincing decisions. Therefore, organizations such as language institutes and school administrators are necessarily required to take action towards eliminating potential impediments that block teachers' new and innovative choices and improving language teaching and learning. As a result, the findings of this study implied that teachers' ability in effective teaching and education is closely related to teachers' qualities.

Based on these results, several practical implications can be drawn. First and foremost, a meaningful improvement from applying psychological elements lends strong support to the effectiveness and importance of motivating aspects of teaching methodology for instructors. So, it is highly recommended that teachers be provided with sufficient motivating support to make proper decisions. Also, the awakening of the teachers' attributional styles and their teaching effectiveness to use their whole soul in teaching and education should be among the top plans of every government.

In addition, it is essential to focus on teaching effectiveness which ensures the quality of teachers. It can be said that teachers play a vital role in making the future citizens of a nation. The effectiveness of teachers will standard students thereby, the standard of education will be developed. Qualitative teaching largely depends upon the commitment and dedication of the teachers. Educational institutions also should strive the improving teacher's effectiveness by encouraging teachers to participate in training programs, to go for inter-college teacher exchange programs, etc. Besides, the teachers should strive continuously to boost their morale and motivate themselves to result in effective teaching.

Moreover, within the theoretical eyes, the findings simply advocate the application of attributional styles and teaching effectiveness and teachers' decision-making in the Iranian context. Therefore, there is a transformation from traditional models to recent attributional styles and teaching effectiveness. On the other hand, it is essential to know that the teachers' high decision-making promotes their language teaching process.

Next, curriculum developers and teacher educators are suggested to design courses on attributional styles and their teaching effectiveness for Iranian pre-service and in-service EFL teachers to enhance their teaching profession. It means ELT administrators should provide freedom to teachers in terms of choosing teaching materials, designing curriculum, and managing classrooms, to meet teachers' needs for decision-making.

To summarize, as the findings of this study implied, future research on the connection among the constructs of attributional styles, decision-making types, and teaching effectiveness may be directed to exploring the other possible mediators. The results of this research were obtained when the constructs were analyzed together in the proposed model of the study. It should be noted that some of these constructs had significant associations before being assessed in the structural model. In summary, it may be suggested that future research can concentrate on investigating such relations in other structural models. Perhaps more novel and still unanswered questions involve the developmental origins of attributional styles and decision-making types, which represent an exciting area for future research.

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