

Relationship between Iranian Intermediate EFL Learners' Foreign Language Causal Attributions, Meta-Cognitive Self-Regulation and Their L2 Speaking Performance

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Abstract

This study aimed to investigate the relationship between foreign language causal attributions, metacognitive self-regulation and speaking performance of Iranian EFL learners. To this end, 202 intermediate EFL students, studying English at private language teaching institutes in three provinces of Hamedan, Golestan, and Khuzestan were selected based on the convenience sampling procedure. To collect data, Causal Dimension Scale II (CDS II) (McAuley, Duncan, & Russell, 1992) and Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich, Smith, Garcia & McKeachie, 1991) were employed. Moreover, the interview section of IELTS Exam was also used to measure speaking ability of the learners. The results of the study showed that there was a significant positive correlation between the participants' L2 speaking ability and the locus of causality and the internal control dimensions of attribution theory. But, there was significant negative correlation between L2 speaking ability and the external control and the stability dimensions. There was also positive significant correlation between L2 speaking ability and metacognitive self-regulation. Moreover, it was found out that successful and unsuccessful EFL learners attributed their success and failure in L2 speaking performance mainly to internal factors. It was also found that among the independent variables of the study, meta-cognitive self-regulation was the stronger predictor of the participants' L2 speaking performance. The findings of this study are hoped to suggest a number of implications for EFL teachers, learners, syllabus designers, and parents.

Keywords: Causal Attributions, EFL Learners, Metacognitive Self-Regulation, Speaking

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1. Introduction

Attribution theory is closely related to motivation (Haynes Stewart, et al, 2011). Attributions come from self-perceptions of students and can affect their values, expectancy, and beliefs about their competence, and in turn affect their motivation and performance (Weiner, 1977, 2000). According to attributional perspective, students most likely conclude that the main factors for their success in school are their ability and effort. For most students, the process of identifying how much effort is needed to achieve an educational outcome is an ongoing process (Tollefson, 2000). Attributions or perceived causes of success and failure affect achievement beliefs and behaviors (Weiner, 1985).

Similarly, understanding the notion of self-regulation and its significance in the process of educational development is important for both teachers and students. Self-regulated learning (SRL) refers to the combination of knowledge, motivation, and autonomy to achieve goals (Paris & Paris, 2001). Students cannot be self-regulators unless they have choices available for learning and can control crucial dimensions of learning (Schunk & Ertmer, 2000). Therefore, teachers should be aware of the factors that affect ability of learners to self-regulate and the strategies they use to identify and improve SRL in their classrooms (Zimmerman, 2008).

An important aspect of attribution theory for self-regulation is that particular kinds of attributions for success and failure result in positive motivation for the activities that follow, whereas others do not (Weiner, 1979). In the same vein, attribution theory is very important in language teaching and learning; it is closely linked to motivation models that examine factors that lead to effective language learning. On the other hand, students' beliefs on their ability to control the outcome of a given task seem to have an important role on their motivation, actions, and achievement (Schunk, 1991). Conversely, attributing negative outcomes to internal, unstable, and controllable causes (i.e., low effort) is related to the maintenance of motivation and shorter time to recover from the influences of the negative outcomes (Bulman, 1979).

This study tried to investigate the relationship between foreign language causal attributions, meta-cognitive self-regulation and speaking performance of Iranian intermediate EFL learners. To do so, it aimed to answer the following questions:

1. What factors do successful and unsuccessful Iranian intermediate EFL learners attribute their success and failure to in the L2 speaking test?
2. Is there any statistically significant relationship between dimensions of attribution theory and L2 speaking performance of Iranian intermediate EFL learners?

3. Is there any statistically significant relationship between meta-cognitive self-regulation and L2 speaking performance of Iranian intermediate EFL learners?
4. Among dimensions of attribution theory, and meta-cognitive self-regulation which one is the stronger predictor of L2 speaking performance of Iranian intermediate EFL learners?

2. Literature Review

2.1. Attribution Theory

Educational Attribution theory was initiated by Heider (1958), developed by Rotter (1966), and further expanded in the works of Weiner (1985; 1986). Based on this theory, people try to specify why people perform what they perform (Weiner, 1972). Attributions are explanations individuals give for their success or failure in a specific performance (Weiner, 1985). Attributions result from a person's self-perceptions, which affect their expectancy, emotions, values, and beliefs about their competence, and, in turn, their motivation (Weiner, 2000)

Attribution theory has three dimensions: *locus of causality*, *stability*, and *controllability* (Weiner, 1985). Locus of Causality refers to the degree to which individuals attribute the causes of their performance to internal factors (e.g. luck and task difficulty) or external ones (e.g. effort and ability). Stability refers to the extent to which the causes of performance are stable (ability and task difficulty) or unstable (effort and luck). Controllability refers to the degree to which people have control over a cause. For instance, ability, luck and task difficulty are uncontrollable factors but effort is a controllable attribution (Weiner, 2006).

The effects of these underlying dimensions might vary in cases of success and failure. For example, attributing failure to internal/unstable/controllable rather than internal/stable/uncontrollable causes will promise better results for future performance (Weiner, 1985). Certain kinds of emotions (anger, shame, pity, pride, guilt) are dependent on the kinds of attributions people make for their outcomes (success and failure) (Weiner, 1986). In general, an analysis of motivation and emotion in terms of attribution has been revealed repeatedly to be useful in comprehension achievement dynamics (Weiner, 1986).

Table 1 shows how Weiner's attributional factors can be integrated in terms of the dimensions of locus of causality, stability and control.

Table 1

Weiner's Attribution Framework (Adapted from Weiner, 1985)

	Locus of Causality			
	Internal		External	
	Stable	Unstable	Stable	Unstable
Uncontrollable	Aptitude ability	Mood	Task characteristics	Luck
Controllable	Motivation	Effort	Teacher characteristics	Assistance

2.2. Self-regulated learning

Self-regulated learning requires activating and sustaining of cognitions and behaviors of individuals to achieve learning goals. Self-regulated learning process involves goal-directed activities that students modify, verify, and amplify (Zimmerman, 1989). These activities consist of rehearsing information, attending to instruction, processing and incorporating knowledge, and making and maintaining positive attitude about learning abilities and anticipated results of actions (Schunk, 1989).

Self-regulated learning has been defined differently by different scholars in the field, but three themes seem especially important for classroom. The first important theme is metacognitive strategies of students to plan, monitor, and modify their own cognition (Corno, 1986; Oxford, 2017; Zimmerman & Martinez-Pons, 1988). The second theme is management and control of students' effort by themselves on classroom academic tasks (Corno, 1986) and the third one is the true cognitive strategies that students apply to learn, comprehend, and remember the material (Corno & Mandinach, 1983; Zimmerman & Martinez-Pons, 1988).

Self-regulated learning strategies are classified in two subcategories: cognitive strategies and metacognitive strategies. Cognitive strategies are those strategies that address information processing such as rehearsal, elaboration, and organization. Metacognitive strategies focus on the behaviors that the learner shows while engaged in the learning situation. (Weinstein & Mayer, 1986). Some definitions of self-regulatory learning highlight the metacognitive aspect of self-regulated learning (Winne, 1996). In general, Meta-cognitive knowledge is divided into three categories: planning, monitoring and regulation, and evaluation (Ozturk, 2016). Language learners should evaluate and modify their metacognitive knowledge continually (Veenman, 2016).

In the field of education, most studies have investigated the connection between attributions and performance of students on tests (Lei, 2010). For instance, attribution theory has been studied in relation to

language learning because firstly, failure is a common experience among language learners, so how individuals perceive their failure has very strong influence on their future performance. Secondly, a familiar term for many people is language aptitude, which makes it easy for them to come up with negative perceptions (Dornyei, 2001). And, thirdly, results of the previous studies, such as Mahmoodi and Doosti (2018), showed that it is possible to train L2 learners to reattribute the perceived causes for their success or failure and hence increase the likelihood of future success.

In a study done by Bouchaib, Ahmadou, and Abdelkader (2018), attributions of success in English language learning of 113 high school students were investigated. To this end, a Likert Scale Questionnaire based on Vispoel and Austin (1995) and a follow-up interview were used. Findings indicated that the students attributed their success in foreign language learning mainly to external factors such as class atmosphere and teaching method.

Farahian and Avarzamani (2018) also examined the relationship between metacognitive awareness and EFL writing success of 538 EFL learners, 59 of whom voluntarily participated in the interview. A validated questionnaire (MAWQ) was used to investigate the writers' metacognitive awareness. It was found that metacognitive awareness positively correlated with writing proficiency.

Moiinvaziri (2018) examined the use of self-regulated learning strategies in vocabulary learning of 100 Iranian EFL learners. Data were collected by 'Self-regulating Capacity in Vocabulary Learning' scale (SRCvoc). Results showed that the environmental regulation was the most influential factor, while emotional regulation was the least influential one.

An exploratory study by Nakamura (2018) investigated attributions and emotions in L2 learning of 42 Japanese adult EFL learners in a 10-week program. It was revealed that the beginner learners attributed their success to emotional (unstable) aspects of their learning experience while the intermediate and advanced learners attributed their success to cognitive (stable) factors.

Mahadi (2017) explored the relationship between meta-cognitive self-regulated learning strategies and achievement in English language learning of 170 undergraduate students majoring in different Engineering courses. Motivated Strategies for Learning Questionnaire (MSLQ) developed by Pintrich, Smith, Garcia, and McKeachie (1991) was used in this study. The results of the study showed a positive relationship between the students' use of meta-cognitive self-regulated learning strategies and their level of English language proficiency.

HakkıErten and Burden (2014) explored the relationship between academic self-concept, classroom test performance, and causal attributions for achievement among 267 Turkish students. Myself-As-a-Learner Scale (MALS) and a specifically designed attribution questionnaire were used to measure academic self-concept and elicit attribution. Course achievement tests were used to measure achievement. The result of the study revealed that the most frequent attribution for test scores were teacher characteristics, ability, interest, and long term effort.

In another study conducted by Cascio, Botta, and Anzaldi (2013), the relationship between self-efficacy and internal locus of control in online learning was investigated. To this end 118 health care professionals participated in the research. Two instruments, the Italian version of Perceived Self-Efficacy Test (Schwarzer, 1993) and the Italian version of the Mini Locus of Control scale (Perussia & Viano, 2008), were used to investigate Self-efficacy and locus of control, respectively. The results of the study revealed that individuals with internal locus of control were more successful in learning processes than the individuals with external locus of control, because they believed that the achievement of goals depended on their effort.

Pishghadam and Zabihi (2011) studied the relationship between foreign language attributions and English language achievement. Causal Dimension Scale (CDS-II) and the Language Achievement Attribution Scale (LAAS) were administered to 209 EFL learners studying at private language institutes. The results of the study revealed that effort attribution was the best predictor for English language achievement. It was also found that only stable and personal attributions significantly predicted students' foreign language achievement.

In a similar vein, Lee and Choi (2011) investigated differences between the persistent students group and dropout students group enrolled in an online course. Online surveys that consisted of 27 items adopted from the literature were used to measure the level of five factors that students perceived. This instrument was administrated to 169 adult students. It was found that the most significant factors influencing students' persistence in an online course were the academic locus of control and metacognitive self-regulation skills.

Law (2009) examined the relationship between students' attribution beliefs, motivation, metacognitive awareness of reading strategies and reading comprehension. The participants consisted of 120 Chinese students. The Implicit Theory of Intelligence Measure Questionnaire, Motivation for Reading and Metacognitive Awareness Reading Strategies Inventory (MARS), were used. Two reading comprehension tests also measured students' higher-order reading proficiency. The findings showed that students

who considered intelligence and ability as controllable factors, were more motivated to learn to read, leading to better performance.

Lei and Qin (2009) investigated the relationship between attributions and English learning achievement of Chinese EFL learners. To this end, 949 EFL learners took part in the study by completing Success and Failure Attribution Scales for Tertiary-Level EFL learners. The results showed that the participants attributed English learning success to effort, teacher, confidence and practical use, and failure to lack of confidence, lack of effort, test-oriented learning, lack of practical use and lack of external help.

Gobel and Mori (2007) explored perceived causes for success and failure on language learning tasks in both speaking and reading classes. A questionnaire was created by the researchers and administered to 233 Japanese freshman students. It was found that there was a significant relationship between exam scores and the attributions of ability, task difficulty and luck. The results of the study revealed that learners attributed their failure in speaking to internal factors such as lack of ability and attributed their success in speaking to their classes and external factors.

Anderson and Hamilton (2005) investigated the relationship between locus of control, motivation and academic achievement. Participants were 215 students selected from three secondary schools. English Version of FKK scale (Fragebogen zu Kompetenz- und Kontrollüberzeugungen), developed by Krampen (1991) was used to assess locus of control. Three different measures, including a self-report measure, a teacher rating, and a quantitative measure of task-completion, were also used to measure motivation. Examination-based measure of achievement at the end of the year in students' school was used to measure academic achievement. The results proved that students who have an internal locus of control are more motivated and perform better academically than those with an external locus of control.

In another study conducted by Eshel and Kohavi (2003), relationship between perceived classroom control, self-regulation strategies and academic achievement were investigated. The participants included a sample of 302 sixth grade students. The Motivated Strategies for Learning Questionnaire (MSLQ) was utilized to examine self-regulation strategies. Four distinct perceived classroom control styles were determined. The results of the study revealed that the students who used more learning strategies, including metacognitive self-regulation strategies, achieved better grades.

3. Method

3.1. Participants

The participants of the study were 202 intermediate EFL learners studying English at private institutes in Hamedan, Khuzestan, and Golestan provinces. The participants were both female (N=124) and male (N=78), ranging from 16 to 26 years old. The participants were selected based on convenience sampling procedure.

3.2. Materials and Instruments

3.2.1. Causal Dimension Scale II (CDS II)

In order to investigate the participants' attributions of success and failure, Causal Dimension Scale II (CDS II), developed by McAuley, Duncan, and Russell (1992) was used. It includes 12 items and uses a Likert-scale ranging from 1 to 9. The reliability of the questionnaire for locus of causality, stability, personal control, and external control has been estimated by the developers and found to be .67, .67, .79, and .82 respectively. The validity of the questionnaire has also been established via factor analysis (McAuley, Duncan, & Russell, 1992).

3.2.2. Motivated Strategies for Learning Questionnaire (MSLQ)

To measure students' metacognitive self-regulation, a sub-scale from Motivated Strategies for Learning (MSLQ) developed by Pintrich, Smith, Garcia, and McKeachie (1991) was used. The sub-scale used in this study contains a total of 12 items and uses a Likert-scale ranging from 1, 'not at all true of me' to 7, 'very true of me'. The scores for the individual scales were computed by taking the mean of the items. Within the MSLQ, items number 1 and 8 were negatively worded and had to be reversed before a student's score was computed. Finally, the overall score for a given scale represents the positive wording of all items within that scale (Duncan & McKeachie, 2005). The reliability ($r = .79$) and validity of the instrument were estimated to be reasonable by Pintrich et al (1993).

3.2.3. The IELTS interview

The interview section of IELTS exam was used to measure the participants' English speaking performance. This test includes three parts (general information questions, topic description, and topic discussion). Two trained and experienced testers assigned a score from 1 to 9 to the participants.

3.3. Procedure

First of all, the purpose and the procedure of the study were explained to the participants and they were assured that their responses to the questionnaires and the test would be kept confidential. Then, CDS II and MSLQ questionnaires were distributed among the participants of the study. It took about 45 minutes for the learners to fill out the questionnaires. The participants' speaking performance was also assessed through the IELTS interview. Their performance on the interview was audio-recorded and scored by two examiners based on The IELTS Speaking Band Descriptor (available at [http://: britishcouncil.org](http://britishcouncil.org)).

3.4. Data Analysis

To answer the first research question, frequency analysis was used to figure out the frequency and percentage of different factors to which successful EFL learners attribute their success/failure based on their priorities. Concerning the second and the third research questions, Pearson Product Moment correlation was used. Finally, to answer the last research question, which was about the predictive power of the dimensions of attribution theory and meta-cognitive self-regulation about Iranian intermediate EFL learners' L2 speaking performance, multiple regression was used.

4. Results and Discussion

4.1. Results

To answer the first research question, frequency analysis was applied to figure out the frequency and percentage of different factors to which successful EFL learners attribute their perceived success based on their priorities (Table 2).

As table 2 indicates, 'effort' was the most frequently cited factor by successful EFL learners (N = 63, 40.1%), indicating that successful EFL learners attributed their success to an internal, unstable, and controllable factor. 'Motivation', which is an internal, stable and controllable factor, was the second most frequently mentioned ascription by 54 (34.4%) successful learners. The third most frequently cited success factor was 'aptitude/ability', mentioned by 22 (14%) of the successful EFL learners, indicating that 29.9% of successful EFL learners attributed their success to an internal, stable, and uncontrollable factor.

Table 2

Frequency and Percentage of Different Factors to which Successful EFL Learners Attribute their Success in L2 Speaking

N	Factors	
157	Aptitude/ability	22 (14%)
157	Motivation	54 (34.4%)
157	Mood	5 (3.2%)
157	Effort	63 (40.1%)
157	Task characteristics	1 (0.6%)
157	Teacher characteristics	3 (1.9%)
157	Luck	6 (3.8%)
157	Assistance	4 (2.5%)

Table 3 shows the frequency and percentage of different factors to which unsuccessful EFL learners attribute their perceived failure.

Table 3

Frequency and Percentage of Different Factors to which Unsuccessful EFL Learners Attribute their Failure in L2 Speaking

N	Factor	
45	Lack of Aptitude/ability	11 (24.4%)
45	Lack of Motivation	6 (13.3%)
45	Mood	1 (2.2%)
45	Lack of Effort	18 (40%)
45	Task characteristics	1 (2.2%)
45	Teacher characteristics	3 (6.7%)
45	Luck	5 (11.1%)
45	Assistance	1 (2.2%)

As table 3 indicates, lack of effort, was the most frequently cited factor mentioned by unsuccessful EFL learners (N = 18, 40%). The other factor to which 11 (24.4%) unsuccessful participants ascribed their poor performance in speaking was 'lack of aptitude/ability', which was the second most frequently cited factor mentioned by unsuccessful EFL learners. The third most frequently cited factor was 'lack of motivation' chosen by 6 (13.3%) unsuccessful EFL learners.

Concerning the second research question, which was about possible relationship between dimensions of attribution theory and L2 speaking performance of Iranian EFL learners, Pearson Product Moment correlation was used (Tables 4 and 5).

Table 4

Descriptive Statistics of the Participants' Scores on the L2 Speaking Test and the Dimensions of Attribution Theory

Dimension	Mean	Std. Deviation	N
L2 Speaking Performance	5.90	1.36	202
Locus of Casualty	19.42	6.45	202
External Controllability	11.83	6.36	202
Stability	9.66	3.62	202
Internal Controllability	18.96	6.16	202

Table 4 shows the mean and standard deviation of the EFL learners' scores on the dimensions of attribution theory and L2 speaking performance.

Table 5

Pearson Correlation between L2 Speaking Performance and Dimensions of Attribution Theory

		Locus of Casualty	External Cont.	Stability	Internal Cont.
L2 Speaking	Pearson Correlation	.60**	-.47**	-.35**	.59**
	Sig. (2-tailed)	.00	.00	.00	.00
	N	202	202	202	202

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

As can be seen in Table 5, there is significant positive relationship between EFL learners' L2 speaking scores, on the one hand, and their scores on *locus of casualty* dimension ($r=0.60$, $P=0.00<0.05$) and *internal controllability* dimension ($r=0.59$, $P=0.00<0.05$), on the other. However, there is significant negative relationship between EFL learners' L2 speaking performance and *external controllability* dimension ($r=-0.47$, $P=0.00<0.05$) and *stability* dimension ($r=-0.35$, $P=0.00<0.05$).

Regarding the third research question, which was about possible relationship between meta-cognitive self-regulation and L2 speaking performance of Iranian EFL learners, Pearson correlation was run (Tables 6 and 7).

Table 6

Descriptive Statistics for Speaking Performance and Meta-Cognitive Self-Regulation

	Mean	Std. Deviation	N
Meta-Cognitive Self-Regulation	59.09	14.06	202
L2 Speaking Performance	5.90	1.36	202

As is evident in Table 6, the mean and standard deviation of the EFL learners' L2 speaking performance were 5.90 and 1.36, respectively, whereas, the mean and standard deviation of the EFL learners' meta-cognitive self-regulation were 59.09 and 14.06, respectively.

Table 7

Pearson Correlation between L2 Speaking Performance and Meta-Cognitive Self-Regulation

		L2 Speaking Performance
Meta-Cognitive Self-Regulation	Pearson Correlation	.62**
	Sig. (2-tailed)	.00
	N	202

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

Table 7 shows that there is a significant positive relationship ($r=0.62$, $P=0.000 < 0.05$) between meta-cognitive self-regulation and L2 speaking performance of Iranian intermediate EFL learners, indicating that students who benefit from higher levels of meta-cognitive self-regulation have better L2 speaking performance.

The last research question was about the predictive power of the dimensions of attribution theory and meta-cognitive self-regulation about Iranian EFL learners' L2 speaking performance. To answer this question, multiple regression was used, the results of which are presented in Tables 8, 9 and 10.

Table 8

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df	Sig. F Change
1	.66 ^a	.44	.43	1.02	.44	31.15	5	.00

a. Predictors: (Constant), Internal Controllability, Stability, External Control, Locus of Casualty, Meta-Cognitive Self-Regulation

According to Table 8, the adjusted R square is 0.43, indicating that about 43% of the variance in the participants' speaking performance can be predicted from dimensions of attribution theory and meta-cognitive self-regulation. In order to further analyze the issue, the results of the ANOVA are presented in Table 9.

Table 9

Regression Output, ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	164.83	5	32.97	31.15	.00 ^b
	Residual	206.38	195	1.06		
	Total	371.20	200			

a. Dependent Variable: L2 Speaking Performance

b. Predictors: (Constant), Internal Controllability, Stability, External Control, Locus of Casualty, Meta-Cognitive Self-Regulation

According to the results given in table 9, the results of the ANOVA ($F_{5, 195} = 31.15, p = 0.00 < 0.05$) proved that the combination of dimensions of attribution theory and meta-cognitive self-regulation significantly predict L2 speaking performance.

Finally, Table 10 presents the results of the coefficient correlation results.

Table 10

The Results of the Coefficient Correlation

Model	Unstandardized		Standardized		Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	
(Constant)	3.184	.620		5.135	.000
Meta-Cognitive Self-Regulation	.027	.010	.272	2.695	.008
Locus of Casualty	.037	.021	.173	1.728	.086
External Control	-.010	.016	-.049	-.657	.512
Stability	-.029	.023	-.077	-1.283	.201
Internal Controllability	.044	.020	.199	2.214	.028

a. Dependent Variable: L2 Speaking Performance

As indicated in Table 10, the EFL learners' meta-cognitive self-regulation with Beta= 0.272 and t= 2.695 is a stronger ($p= 0.008 < 0.05$) predictor of L2 speaking performance.

4.2. Discussion

The result of the study showed that effort was the most frequently cited factor by successful EFL learners, indicating that successful EFL learners attribute their success to an internal, unstable, and controllable factor. Therefore, if they have more effort, their performance might be improved in the future. Attribution theory proposes that the causal attributions to which people ascribe their success or failure intercede future behaviors (Weiner, 1985). Students who attribute their success and failure to internal and controllable factors, such as effort, are more likely to maintain their motivation and use success and failure as feedback to put forth more effort and higher motivation for future tasks (Bulman, 1979; Weiner, 1985). Similar findings were reported by Lei and Qin (2009) and Pishghadam and Zabihi (2011), who found that 'effort' was the most frequent factor to which successful learners attributed their success. However, this result is contrary to the finding of some recent researches, such as Bouchaib et al. (2018), who found students attribute their success in foreign language learning mainly to external factors.

Motivation, which is an internal, stable and controllable factor, was the second most frequently mentioned ascription by the successful learners. This finding can be explained from two points of view. One possibility is that high motivation might result in better speaking performance. Another possibility is that better performance in L2 speaking might result in higher levels of motivation. When learners are more motivated, they can have a

better performance, which is confirmed by Dornyei et al (2006), who believed that motivation is a key factor in determining learning achievement. According to Weiner (1985), attributing success and failure to internal and controllable factors rather than internal, stable, and uncontrollable factors will promise better outcomes for future behaviors. Therefore, attributing success to 'motivation' is promising for the learners' future performances. In many studies, e.g. HakkıErten and Burden (2014); Law (2009); Lei and Qin (2009), motivation was stated among the main reasons for success.

The third most frequently cited success factor was aptitude/ability mentioned by the successful EFL learners, indicating that nearly 30% of successful EFL learners attributed their success to an internal, stable, and uncontrollable factor. Therefore, students' beliefs in their ability to control the outcome of a given task seem to have an important role in their motivation, actions, and achievement (Schunk, 1991).

The most frequently cited factor mentioned by unsuccessful EFL learners was lack of effort. This result indicated that unsuccessful students attributed their failure to an internal, unstable, and controllable factor. This means they attributed their failure to themselves and took the responsibility of outcomes of their performance. Hence, they can change their performance in future. Weiner (1972) claimed that learners who tend to explain failure by lack of effort maintain a positive attitude of themselves as capable students because the amount of effort that they put into the task is entirely in their own control. Among the causal attributions, effort is presumed to be the most productive ascription for learning because effort, unlike ability or luck, is perceived to be controllable. Therefore, if learners ascribe their past failure to low effort, they will have motivation for success in the future and will put forth more effort (Brophy, 2004). The result of the study is in line with the findings of Gobel and Mori (2007) and Lei and Qin (2009), who found that lack of effort is the most important attribution for failure.

The second factor to which unsuccessful participants ascribed their poor performance in speaking was lack of aptitude/ability. In other words, the unsuccessful students attributed their failure to an internal, stable, and uncontrollable factor. This is not a helpful ascription because when a learner thinks that the locus of the causality for a perceived failure is inside the person and it is fixed and also the learner does not have any control on it, then, he will, most probably, come to this conclusion that making more effort would not be helpful. In general, students who attribute their failure to low ability are likely to expect that failure will reoccur (Perry, Stupnisky, Daniels, & Haynes, 2008).

The third most frequently cited factor was lack of motivation chosen by the unsuccessful EFL learners. This finding showed that the students

attributed their failure to an internal, stable, and controllable factor. The students who failed in speaking performance might have a low motivation for learning speaking performance. Individuals who have low motivation may decline their goal strivings if they anticipate continued failure which is followed by non-attainment of their goal (Weiner, 1972). Motivation can influence language learning outcomes independently from language aptitude (Gardner & Lambert, 1972).

Based on the findings of the first research question, we can conclude the main reason of success and failure for both successful and unsuccessful learners was an internal, unstable and controllable factor, i.e. effort/lack of effort. The learners might have believed that they themselves were the main reason for that success and failure. However, the second and the third reasons for the success of the successful learners were motivation and ability respectively, while those for the failure of the unsuccessful learners were ability and motivation, respectively. In other words, since motivation is an internal and controllable factor, the successful learners believed that they had more control over their performance in contrast to the unsuccessful learners, who chose ability, which is uncontrollable, as the second reason for their test results. This result can be justified by an important assumption of attribution theory that people usually explain their success or failure in such a way that it allows them to protect their self-esteem (Williams & Burden, 1997). When learners succeed they ascribe their success to their own efforts; whereas, when they fail they are likely to ascribe their failure to causal factors over which they have no control (Vockell, 2001). This finding is in line with the findings of Nakamura (2018), who revealed that the beginner learners attributed their success to unstable aspects of their learning experience.

The results concerning the second research question showed that there was a significant positive relationship between EFL learners' L2 speaking scores, on the one hand, and their scores on locus of casualty dimension and internal controllability dimension, on the other. However, there was a significant negative relationship between EFL learners' L2 speaking performance and external controllability dimension and stability dimension. It means, the less the participants ascribed their performance to externally controllable and stable factors, the better they performed in speaking. The consideration of the ascribed cause of these dimensions is very important, because how a cause is perceived impacts the response to the observed performance (Weiner 1985). If one can change attributions of people for poor performance to an unstable cause, such as low effort, one can increase their expectations about future performance (Mahmoodi & Doosti, 2018; Weiner, 1986). When individuals believe the cause of their poor performance is unstable rather than stable, they devote more time to improving their performance (Weiner, 1986). Individuals who have internal locus of control

believe their success and failure result from their efforts and abilities (Saricam, 2014). Moreover, those who attribute their success or failure to controllable ascriptions, such as motivation and effort, are more sensitive to their environment and are more responsible to regulate it (Rotter, 1990). Thus, ascribing success/failure to internal locus of control is a positive personal characteristic (Darshani, 2014) and is usually associated with greater academic achievement (Lefcourt, 1992). These findings are similar to the results of studies such as Anderson and Hamilton (2005) and Cascio, Botta, and Anzaldi (2013), who found that students are more likely to be more motivated, and hence successful, if they have an internal locus of control and perform better academically than those with an external locus of control.

The results about the third research question revealed that there was a significant positive relationship between meta-cognitive self-regulation and L2 speaking performance of Iranian intermediate EFL learners, indicating that students who benefit from higher levels of meta-cognitive self-regulation have better L2 speaking performance. Some scholars in the field believe that metacognitive self-regulation is associated with success in language learning and is an essential characteristic of "good" learners (Brown, 1987; Gan, 2004). The findings of this study in this respect confirm these claims and are in line with studies conducted by Eshel and Kohavi (2003), Farahian and Avarzamani (2018), Lee et al (2012), Mahadi (2017), Moinivaziri (2018) and Shores and Shannon (2007), who revealed that metacognitive self-regulation strategy use has a significant association with the students' achievement.

Finally, the findings indicated that EFL learners' meta-cognitive self-regulation, compared with the dimensions of attribution theory, is a stronger predictor of L2 speaking performance. By using self-regulated learning strategies, students are capable of increasing personal control over their environments and may describe their connection to motivation and achievement (Zimmerman, 1989). Self-regulated learners set standards or goals and monitor their progress toward these goals, and then adjust and regulate their cognition, motivation, and behavior to reach their goals (Pintrich, 2004). Therefore, self-regulated learning processes predict outstanding academic achievement (Zimmerman & Kitsantas, 2005).

5. Conclusion and Implications

Based on the result of the study, the main factor to which successful and unsuccessful learners attributed their success and failure was effort/lack of effort, which is an internal, unstable, and controllable factor. Students who attribute their success and failure to internal and controllable factors, such as effort, are more likely to maintain their motivation and use success and failure as feedback to try harder and have higher motivation on future tasks.

The EFL learners with higher levels of L2 speaking performance attributed their performance to the personal control and unstable ascriptions. This means that they believe that they can control their future performance in L2 speaking, which is a positive point educationally. Moreover, the students who benefit from higher levels of meta-cognitive self-regulation had better L2 speaking performance. Finally, among the independent variables of the study, meta-cognitive self-regulation of Iranian intermediate EFL learners seems to be the strongest predictor of their performance in L2 speaking.

The findings of the present study seem to have a number of theoretical and pedagogic implications for EFL teachers, students, syllabus designers, and parents. EFL teachers should be aware of students' causal attributions in L2 speaking performance, which would guide them in their future teaching. For example, teachers can do action research in their classes to identify the causes to which their students attribute their success/failure and train their unsuccessful students to reattribute their perceived causes of failure from external and uncontrollable factors to internal and controllable ones and thereby increase the likelihood of their success in future. Moreover, teachers can help and train their students to become self-regulated, e.g. how to set goals and use learning strategies appropriately to accomplish a task successfully. Providing students with opportunities of success by giving them an activity at which they will be successful also can help EFL learners to improve metacognitive self-regulation on L2 speaking which would increase their speaking performance in future.

This study can help EFL learners to improve their performance in speaking. Because students are more likely to seek for the perceived causes of failure than for the causes of success (Weiner, 1985), exploring the causes of a negative outcome and then acting to change those causes allows students to overcome failure (Weiner, 1985). Moreover, individuals can reinforce their own motivation by engaging in a number of self-regulatory strategies, such as setting appropriate and achievable goals, applying learning strategies, and monitoring and evaluating progress toward goals (Schunk & Zimmerman, 2007).

This study may also encourage course book writers to give more credit to EFL learners' casual attributions and change the syllabus based on capabilities and needs of EFL learners. For example, they may produce course books with guideline sections to help learners get familiar with attribution theory and metacognitive self-regulation skills and provide them with opportunities to practice these skills to become better L2 learners.

This study may inform parents about importance of attribution theory and metacognitive self-regulation in their children's educational success and encourage them to identify their children's causal attributions and

motivations by asking questions about their interests and disinterests. Therefore, they can assist their children to control outcomes of their behaviors and change their attributions and guide them to attribute their failure to productive causes. Parents should also be aware of the effects of the language they use to describe the causes to which they attribute their children's poor performance. For example, if their child receives a low score on an L2 speaking exam, they should not ascribe this poor performance to the child's lack of ability in learning a foreign language but rather, they should attribute this failure to an internal, controllable and unstable factor, i.e. lack of effort. This will save the face of the child and will increase the likelihood of the success in future.

In summary, these findings can increase our understanding of the relationship between metacognitive self-regulation and causal attributions, as two concepts related to motivation, and help pave the road for answering important questions in L2 teaching and learning process; questions such as:

Why are some L2 learners highly motivated while others are not?

Or, why do some L2 learners lose their motivation in the course of L2 learning process?

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Appendices

Appendix 1: Causal Dimension Scale II (CDS II) (McAuley, Duncan, & Russell, 1992).

Do you perceive your grade as success or failure?

The grade . . .		
1. Reflects an aspect of yourself	9 8 7 6 5 4 3 2 1	reflects an aspect of the situation
2. Is manageable by you	9 8 7 6 5 4 3 2 1	is not manageable by you
3. Is permanent	9 8 7 6 5 4 3 2 1	is temporary
4. Can be regulated by you	9 8 7 6 5 4 3 2 1	cannot be regulated by you
Is something over which	9 8 7 6 5 4 3 2 1	is not something over which
6. Is inside of you	9 8 7 6 5 4 3 2 1	is outside of you
7. Is stable over time	9 8 7 6 5 4 3 2 1	is variable over time
8. Is under the power of	9 8 7 6 5 4 3 2 1	is not under the power of
9. Is something about you	9 8 7 6 5 4 3 2 1	is something about others
10. Is something over which	9 8 7 6 5 4 3 2 1	is not something over which
11. Is not changeable	9 8 7 6 5 4 3 2 1	is changeable
12. Is regulated by other people	9 8 7 6 5 4 3 2 1	is not regulated by other

Appendix 2: Meta-cognitive Self-Regulation Questionnaire (Motivated Strategies for Learning Questionnaire (MSLQ)), (Pintrich et al, 1993).

During class time I often miss important points because I'm thinking of other things. (reverse coded)							
When reading for this course, I make up questions to help focus my reading.							
When I become confused about something I'm reading for this class, I go back and try figure it out.							
If course materials are difficult to understand, I change the way I read the material.							
Before I study new course material thoroughly, I often skim it to see how it is organized							
I ask myself questions to make sure I understand the material I have been studying in this class.							
I try to change the way I study in order to fit the course requirements and the instructor's teacher style.							
I often find that I have been reading for this class but don't know what it was all about. (reverse coded)							
I try to think through a topic and decide what I am supposed to learn from it rather than just reading it over when studying for this course.							
When studying for this course I try to determine which concepts I don't understand well.							
When I study for this class, I set goals for myself in order to direct my activities in each study period.							
If I get confused taking notes in class, I make sure I sort it out afterwards.							

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