

EFL Learners' Deployment of Motivational Self-Regulatory Strategies and their Academic Achievement

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Received: November 18, 2015; **Accepted:** April 10, 2016

Abstract

Self-regulation of learning has been extensively investigated in second language (L2) learning. Many studies have focused on the strategies that language learners employ to regulate their own learning processes. However, motivational self-regulation is considerably less explored. The aim of this study was to investigate the relationship between motivational self-regulatory strategies (MSRSs) and academic achievement. A motivational self-regulation questionnaire was administered to 64 male and female adult Iranian EFL learners to measure their choice of various strategies. The quantitative data was analyzed by applying correlational and multivariate analyses. The results demonstrated that there was a strong relationship between motivational self-regulatory strategy use and academic achievement. However, no difference was found between male and female learners in their use of the strategies. Further examination revealed that higher-achieving students differed from lower-achieving participants in their preference for strategies. The article concludes that while all learners use extrinsic rewards to self-regulate their motivation, more successful learners tend to manipulate learning tasks to make the tasks intrinsically interesting and pleasant. Also, more successful learners set both long-term and short-term goals to motivate themselves. The results underscore the importance of students' personal interests, needs and goals, and suggest that teachers foster learners' command of the strategies through instruction and cooperative activities.

Keywords: motivational self-regulatory strategies, self-regulation, motivation, academic achievement

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INTRODUCTION

Motivation is widely regarded as a key element in language learning. Success and achievement are often attributed to learners' motivation. It is among the essential variables on which good language learning depends (Griffiths, 2008; Ushioda, 2008). It provides the learners with the initial impetus to embark on learning a second language (L2) and the energy to sustain their effort during the long and exhausting learning process. Learners who lack sufficient motivation, fail to fulfill the learning goals even if they possess highly outstanding abilities. Even effective teaching and curricula would not suffice on their own to bring about satisfactory learning outcomes (Guilloteaux & Dörnyei, 2008). High levels of Motivation can effectively compensate for deficiencies in learners' aptitude, learning capacity, or learning context (Dörnyei, 2014; Dörnyei & Ryan, 2015). Motivation explains why people select a particular activity, how long they are willing to persist in it, and what effort they invest in it (Dörnyei, 2001).

However, as Dörnyei and Otto (1998) assert, L2 motivation is not a static state and undergoes a lot of ups and downs. Even during a single classroom session, motivation is not static and displays constant fluctuations. It is a dynamic factor which shows great changeability and temporal variation through the long-running process of learning (Dörnyei & Ryan, 2015). Learning a new language is a lengthy and time-consuming process that may cause a steady decline in levels of motivation. Learning gets tedious and exhausting at times and could even look daunting and frustrating in periods of failure or intense fatigue. Therefore, successful L2 learners need to manage their motivation and control its ebb and flow as much as possible (Williams, 2004). Such learners exhibit more persistence and diligence and are able to keep themselves engaged for a longer time. This is where self-motivation or using motivational self-regulatory strategies (MSRSs) comes in. This concept centers around learners' skills and strategies to keep themselves on track (Ushioda, 2008).

Active management of one's motivation fits within self-regulated learning models (Kormos & Csizer, 2014; Zimmerman, 2000; Zimmerman & Schunk, 2008). In such models, learners are believed to make voluntary and conscious choices to deploy techniques under their own possession in order to sustain or increase their motivation (Sansone, 2008; Zimmerman & Martinez-pons, 1990; Wolters, 1999). Prior studies

have shown associations between students' use of MSRSs and motivational disposition on one hand, and various affective, cognitive and metacognitive aspects of self-regulated learning on the other (Butler, 2005; Dignath & Büttner, 2008; Donker, De Boer, Kostons, Dignath van Ewijk, & Van der Werff, 2014; Pintrich & De Groot, 1990; Pintrich & Garcia, 1991; Smit, Brabander, Boekaerts & Martens, 2017; Ushioda, 2006; Wolters, 2003). Generally, these studies indicate that learners who employ self-regulated learning strategies also tend to use MSRSs and are more motivated. Also, some studies suggest that motivation leads to self-regulated learning behavior (e.g., Lens & Vansteenkiste, 2008; Sansone & Smith, 2000; Wigfield, Hoa, & Klaua, 2008).

Although prior studies have provided evidence about the multifaceted relationship between MSRSs and aspects of learning behavior, the potential relationship between the use of strategies and academic achievement is not well-established. Students' capacity to regulate their own motivation is an element that may affect students' performance in academic settings. However, the probable link between students' regulation of motivation and their academic achievement is still weak and less evidenced (Smit et al., 2017). Results on this line of enquiry are less conclusive and rather inconsistent. While Wolters (1999) found negligible relation between strategies and grades, Hulleman and Harackiewicz (2009) reported that using some strategies was positively associated with students' performance. Nota, Soresi, and Zimmerman (2004), too, found uncertain results. In their recent study, Smit et al. (2017) failed to link motivational strategies use to achievement. On the contrary, Ghonsooly and Elahi Shirvan (2010) found significant relationship between MSRSs and L2 achievement. Now, it seems that the agenda is calling for more attempts to provide further evidence on the relationship between L2 learners' use of MSRSs and their academic achievement. To this end, the present study endeavors to investigate the relationship between MSRSs and academic achievement in the Iranian context.

LITERATURE REVIEW

Prior to the discussion of motivational self-regulation, a few words about the broader concept of self-regulation seem warranted.

Self-Regulation

There are no absolute definitions for self-regulation and self-regulated learning (Pintrich, 2000). Generally, self-regulation is understood as a process in which learners' exercise control over their thoughts, emotions, learning behaviors, resources, and learning environments (Pintrich & De Groot, 1990; Schunk & Ertmer, 2000; Zimmerman, 2000). Zimmerman and Schunk (2008, p. 1) defined the concept as "the control of one's present conduct based on motives related to a subsequent goal or ideal that an individual has set for him- or herself". Zimmerman (2000) believes that self-regulation is an individual characteristic that everyone possesses, but different learners show different levels of mastery across it. Pintrich (2000) offers a detailed and more comprehensive definition of self-regulation:

It is an active, constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation, and behavior, guided and constrained by their goals and the contextual features in the environment. These self-regulatory activities can mediate the relationships between individuals and the context, and their overall achievement. (p. 453)

Motivational Self-Regulation

It is noteworthy that the regulation of motivation is conceptually distinct from motivation itself. The most outstanding point is that the former is different regarding the awareness and purposefulness of learners' thoughts and actions. Regulation of motivation is concerned with the thoughts and actions through which learners consciously and intentionally attempt to manage their motivation about a specific activity (Wolters, Pintrich & Karabenick, 2005). On the contrary, motivation theories and models do not typically assume learners' awareness of the underlying processes that specify motivation. Such theories do not conceive of individual learners' intentional intervention in these processes.

In educational psychology, self-regulated learners have been characterized as those learners with adaptive motivational beliefs and attitudes who have also a repertoire of cognitive and metacognitive strategies (Schunk, 2012). Bandura (1991) maintains that learners can motivate themselves and guide their actions by exercising forethought. He believes that the capability for self-motivation and purposive action stems from cognitive ability. Boekaerts (1997) provided one of the

earliest models that recognized the significance of motivational self-regulation alongside the cognitive self-regulatory mechanisms. Later, Pintrich (2000) and Zimmerman and Schunk (2004) offered models of self-regulation which are heavily motivation dependent. They insist that motivation underlies other learners' processes such as goal-setting, effort, and persistence.

The interrelationship between motivation and self-regulation was empirically supported in the literature. Some studies (e.g., Wolters, 1999; Wolters, Yu, and Pintrich, 1996) showed how strategies designed to maintain task motivation were connected to self-regulatory strategy use. More recently, in his qualitative study on three language learners, Allen (2013) concluded that successful learners employ strategies for motivation maintenance and goal-setting. The motivational self-regulation strategies were deemed essential in preventing motivation from wearing off. Therefore, as Pintrich (2003) argues, individuals who self-regulate their motivation are expected to possess the ability to keep themselves involved in learning tasks.

Learners' tendency to self-regulate their motivation is also an important predictor of both motivated behavior and important academic outcomes. When students are taught to use self-regulation strategies in the context of academic learning, their performance and motivation for learning will improve (Cleary, Gubi, & Prescott, 2010). Some other empirical studies have shown that employing MSRSs can bring about increased and long-lasting effort (Dignath & Büttner, 2008; Donker et al., 2014). Additionally, Smit et al. (2017) explored the motivational self-regulation of Dutch secondary students and concluded that using MSRSs mediates the relation between the value that students ascribe to the learning goals and their effort and pleasure.

L2 motivation studies have also accommodated the concept of self-regulation. Kormos and Csizer (2014) emphasize the possibility of motivational self-regulation by noting that "the motivation to learn can also be consciously regulated and monitored" (p. 279). Ushioda (2008, p. 26) maintains that learners should develop certain skills and strategies to retain motivation through the learning process and keep their task engagement: "It seems clear that learners need to keep themselves on track". These strategies might include setting concrete short-term targets, engaging in positive self-talk, self-motivating with incentives and self-rewards, and organizing time effectively to cope with multiple tasks and demands. Such strategies are variously discussed in terms of self-

motivating strategies (Dörnyei, 2001), affective learning strategies (Oxford, 1990), motivational regulation strategies (Wolters, 1999), effective motivational thinking (Ushioda, 1996), anxiety management (Horwitz, 2001), self-regulatory skills (Dörnyei & Otto, 1998), and motivational self-regulation (Ushioda, 2003, 2007).

Dörnyei (2001) stresses the importance of raising learners' awareness of self-motivating strategies through discussion and sharing of experiences. He maintains that successful language learners are those who can take charge of their own motivation by controlling and keeping up their goal commitment and overcome possible distractions. According to McCombs (1994), the capacity for motivational self-regulation is a function of the degree to which learners are aware of themselves as agents in the construction of their thoughts, beliefs, goals, and expectations that shape their motivation. He further adds that without an understanding of their roles as agents in formulating goals, self-perceptions, and motivation, the emergence of self-regulatory processes is not feasible. Learners must recognize their potentials in order to have control over their thoughts and their motivation. As McCombs (1994) argues, this could be achieved through providing positive interpersonal support, structured feedback and encouraging self-evaluation. Teachers can guide learners to reflect on their learning experiences and evaluate their own performance. Also, learners may share their experiences in a constructive manner to receive feedback and identify their capabilities (Dörnyei, 2001; Ushioda, 1996, 2008).

Dörnyei (2005) notes that the fundamental assumption underlying motivational self-regulation is that L2 learners, who can maintain their motivation while performing language learning tasks, learn more successfully than those who fail to do so. This ability to sustain motivation is especially important when individuals face problems interfering with their initial motivational state (Wolters, 2003).

Wolters (1999) identified a variety of tactics and actions as the ingredients of motivational self-regulation. He constructed and validated a questionnaire for measuring motivational self-regulation. In his classification, five major components, or macrostrategies, are identified:

1. Interest enhancement: Learners' tendency to make the task into a game, or more generally, to make it more immediately relevant, enjoyable, or fun to complete.

2. Performance self-talk: Learners' reported use of statements or thoughts designed to increase desire to complete the task by intensifying focus on performance goals, such as getting good grades.
3. Self-consequating: Learners' reported use of self-provided extrinsic rewards for reinforcing desire to finish academic tasks.
4. Mastery self-talk: Learners' tendency to focus or make salient desire to learn or master task materials in order to increase level of motivation.
5. Environmental control: Learners' reported avoidance or reduction of distractions as a means of ensuring completion of learning tasks.

Also, Dörnyei (2001) suggests a taxonomy for self-motivating strategies, consisting of five main classes. Dörnyei's proposed components demonstrate a large overlap with Wolters's categories:

1. Commitment control strategies: Conscious techniques that help to preserve or enhance the learners' original goal commitment. These techniques mostly center on imagining the positive outcomes of doing or negative consequences of abandoning the action or task.
2. Metacognitive control strategies: Conscious techniques used by the learner to monitor and control concentration. They include giving learners various self-reminders, imagining the potential outcomes of a lack of concentration, identifying distracters, etc.
3. Satiation control strategies: Addition of extra attraction or spice to a task to prevent boredom and monotony. They include doing tasks a little differently, breaking routines, and adding an element of fantasy.
4. Emotion control strategies: Management of obtrusive states and generating positive emotions. Some examples of emotion control strategies are useful diversions (taking a break), self-affirmation, self-encouragement, etc.
5. Environmental control strategies: Elimination of negative environmental influences and exploiting positive influences. Eliminating sources of interference and temptation and getting oneself to a point which enforces commitment to the task.

Within the realm of research on L2 learning and teaching, a large number of studies have focused on the learning dimension of self-regulation and marginalized the motivational aspect (e.g., Andrade & Bunker, 2009; Andrade & Evans, 2013; Gunning & Oxford, 2014; Seker, 2016). As a result, empirical studies that specifically concentrate on motivational self-regulation are very hard to find. An exception is Ghonsooly and Elahi Shirvan's (2010) research project within the Iranian

context whereby they validated a Persian translation of Wolters's (1999) questionnaire and then, found significant relationship between MSRSs and L2 reading and writing achievement.

PURPOSE OF THE STUDY

According to what has been reviewed, research on motivational self-regulation and its potential relationship with academic achievement in second language learning studies is scarce and inconclusive. Although the MSRSs have gained theoretical ground, more empirical evidence is required for further substantiation of the concept. Besides, it is necessary to inspect the potential relationships between MSRSs and learner characteristics, L2 motivation, academic achievement. Also, it is not clearly known whether L2 learners' preferences for the employment of certain types of MSRSs are connected to their learning outcomes and academic performance.

Regarding the existing gaps in research and based on the previous studies and findings, the following research questions were formulated to explore the possible relationship between the characteristics of language learners, their learning behavior, achievement, and their use of MSRSs:

1. Is there any statistically significant relationship between motivational self-regulatory strategy use of L2 learners and their academic achievement?
2. Is there any statistically significant difference between male and female L2 learners' motivational self-regulatory strategy use?
3. Is there any statistically significant difference between high achievers and low achievers in their choice of MSRSs?

METHOD

This ex post facto study did not involve manipulation of variables and purported to investigate the relationship between MSRSs and academic achievement among EFL learners with a focus on learners' gender and their tendencies to choose various classes of strategies.

Participants

The subjects of this study were drawn from Iranian TEFL students. They possessed the required proficiency to deal with an English questionnaire and their scores could provide appropriate indexes of academic achievement. However, due to limited access to members of the

population, this study used non-probability convenience sampling technique and involved the subjects who were available within the geographical area of the research.

The participants of the study were 64 junior and senior students of TEFL and English translation who were studying at three branches of Islamic Azad University in Mazandaran Province, Iran. The sample consisted of both male and female students, 25 male and 39 female. Their age range stretched from 20 to 53; the average age range of the participants was 24.37. None of them had any exposure to natural input, by for example living in an English-speaking community or having constant contact with native or highly proficient English speakers.

Instrumentation

In order to investigate the research questions, a questionnaire was used as the major instrument (see the Appendix). The questionnaire was designed and validated by Wolters (1999). It consisted of 25 five-point Likert-type scale items, including never, seldom, sometimes, often, always. The items represented the five components or macrostrategies in Wolters's taxonomy (i.e., interest enhancement, performance self-talk, self-consequating, mastery self-talk, and environmental control). The original questionnaire had undergone exploratory factor analysis and a five-factor solution gained optimal factor loading indexes. As Wolters (1999, p. 289) reported, the five factors accounted for about 67% of the variance among items and produced high individual item loadings that ranged from .49 (item 25) to .81 (item 1).

In the current research, a section which dealt with the respondents' personal information, such as age, gender, and academic scores was added to the end of the questionnaire to create a less threatening atmosphere as suggested by Dörnyei and Csizer (2012). In order to judge the learners' degree of academic achievement, their Grade Point Averages (GPAs) on the previous semesters were used. Their GPAs were used as the criterion for ranking the learners and judging their degree of academic achievement.

Data Collection Procedure

The first author of the present study administered the questionnaire in the participants' classrooms. In order to maintain anonymity and confidentiality, the respondents were notified that they need not write

their names on the paper. In addition, they were informed that the collected information would be solely used for the research project and not for any other purposes. Before the respondents began to read and respond to the items, the researcher clarified the procedure by using the example item at the beginning of the questionnaire. During the administration session, assistance and guidance were provided when necessary. The completion of the questionnaire took less than 30 minutes for every respondent.

Data Analysis

The participants' responses were entered into SPSS version 16 for analysis. First, Cronbach's alpha was calculated to estimate the reliability of the multi-item scales of the questionnaire. Then, to answer the first research question, Pearson Product-Moment Correlation was employed to see whether any relationship exists between using MSR_Ss and academic achievement. Next, an independent-samples t-test was run to compare male and female students on their strategy use and find the answer to the second research question. Finally, in order to answer the third research question, a multivariate analysis of covariance (MANOVA) was performed to compare high-achievers and low-achievers in terms of their deployment of various MSR_Ss.

RESULTS

The quantitative research data was subjected to SPSS for statistical analysis. Table 1 presents the descriptive statistics of the data and the reliability of the multi-item scales as estimated through applying Cronbach alpha. As far as the internal consistency of the questionnaire is concerned, all the five scales demonstrated high measures of reliability, the lowest belonging to self-consequating (Cronbach's $\alpha = 0.70$) and the highest related to interest enhancement (Cronbach's $\alpha = 0.91$). The full details of the reliability analysis estimates are shown in Table 1.

As far as macrostrategies are concerned, performance self-talk, which is about reminding oneself of the necessity of accomplishing goals, obtained the highest frequency ($M = 3.72$, $SD = 0.71$). The next in line were mastery self-talk ($M = 3.60$, $SD = 0.70$), environmental control ($M = 3.46$, $SD = 0.46$), self-consequating ($M = 3.42$, $SD = 0.72$). Interest enhancement ($M = 3.17$, $SD = 0.84$) reported the lowest frequency among all. Therefore, students were more likely to report that they heighten their

motivation level by relying on a desire to get good grades, and less likely to report that they do so by making the task more enjoyable.

Regarding the individual items (representing individual strategies), item 11 (I remind myself how important it is to do well on the tests and assignments in school.) received the highest marks ($M= 4.06$, $SD= 0.85$). The lowest item mean is related to item 1 (I make studying more enjoyable by turning it into a game.) ($M=2.77$, $SD= 0.84$).

Table 1: Descriptive statistics of the macrostrategies

	Mean	SD	Cronbach's α
Interest enhancement	3.17	0.84	0.91
Performance self-talk	3.72	0.71	0.81
Self-consequating	3.42	0.72	0.70
Mastery self-talk	3.60	0.70	0.78
Environmental control	3.46	0.46	0.79

MSRSs and Academic Achievement

Regarding the relationship between the MSRSs and academic achievement, a correlational analysis was carried out. Pearson Product Moment yielded a strong positive correlation between the two variables ($r = 0.53$, $n = 64$, $p < 0.01$). It showed that using MSRSs was closely associated with academic achievement. The summarized results can be observed in Table 2.

Table 2: Correlation of MSRSs use and students' GPAs

		MSRSs	GPA
MSRSs	Pearson Correlation	1	.532**
	Sig. (2-tailed)		.000
	N	64	64
GPA	Pearson Correlation	.532**	1
	Sig. (2-tailed)	.000	
	N	64	64

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

Gender Differences

In order to determine whether there were any differences between male and female learners' use of the strategies, an independent t-test was administered to the data to examine the effect of gender on learners' use of strategies. The results are shown in Table 3.

Table 3: Independent Samples Test for gender differences in MSRSs use

	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper	
MSRSs Equal variances assumed	.002	.968	-.27	62	.78	-.03	.11	-.27	.20
Equal variances not assumed			-.27	51.79	.78	-.03	.11	-.27	.20

Since the t value did not exceed the 0.05 level of significance ($t(62) = -0.273$, $p = 0.78$, two-tailed), the results indicate that there was no statistically significant difference in the use of strategies in male learners ($M = 3.44$, $SD = 0.46$) and female learners ($M = 3.48$, $SD = 0.46$).

Comparing High-Achievers with Low-Achievers

In order to find an answer to the third research question, a multivariate analysis of variance or MANOVA was used. A one-way between-groups multivariate analysis of variance was performed to investigate the differences between high-achievers and low-achievers in terms of their choice of motivational macrostrategies. Five dependent variables were used: interest enhancement, performance self-talk, self-consequating, mastery self-talk, and environmental control, while the independent variable was achievement. The participants were ranked in accordance with their GPAs and then divided into two groups of high achievers

($n=32$) and low achievers ($n=32$) to see if the two groups demonstrate any difference as to their choice of specific macrostrategies. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violations noted. There was a statistically significant difference between high-achievers and low-achievers on the combined dependent variables: $F(5, 58) = 5.54$, $p = 0.00$; Wilks' Lambda = 0.68; partial eta squared = 0.32. When the results of the dependent variables were considered separately, the only differences to reach statistical significance, using a Bonferroni adjusted alpha level of .01 (because there were five analyses, the alpha level 0.05 was divided by 5), were interest enhancement: $F(1, 62) = 9.86$, $p = 0.003$, partial eta squared = 0.14, and self-consequating: $F(1,62) = 8.65$, $p = 0.005$, partial eta squared = 0.13. An inspection of the mean scores indicated that high-achievers reported more frequent use of interest enhancement strategies ($M = 3.48$, $SD = 0.90$) than did low-achievers ($M = 2.86$, $SD = 0.65$). Also, high-achievers tended to use self-consequating strategies ($M = 3.89$, $SD = 0.69$) more than low-achievers ($M = 3.37$, $SD = 0.70$). The effect size indexes (partial eta squared) for interest enhancement was 0.14 and for the self-consequating was 0.13, both of which are considered large effect size indexes. They indicate that high-achievers tend to utilize the two macrostrategies significantly more often than low-achievers.

DISCUSSION

The results of the study indicate that Iranian learners employ the MSRSs quite regularly and are well familiar with at least a few basic ways to motivate themselves. It is obvious from the correlational analysis that there is a positive correlation between academic achievement and using MSRSs. This result goes against Smit et al.'s (2017) findings, but corroborates some other previous studies (e.g., Ghonsooly & Elahi Shirvan, 2010; Sansone, Wiebe, & Morgan, 1999; Wolters, 1999) that successful language learners are those who employ MSRSs to sustain their motivation and act accordingly. They do not rely on external motivating factors to happen but try to adapt the learning context and modify the situation to suit their learning goals. They remove distractions, set short-term and long-term goals, and plan for success.

According to the findings, the learners on the whole demonstrated a tendency to employ performance self-talk strategies and mastery self-talk

more frequently than others. It can indicate that learners tend to rely on extrinsic rewards, such as getting good grades, as a way to encourage themselves to continue working on tasks and assignments. This is quite in line with explanations of goal orientation as proposed by Pintrich (1999). He suggests that goal orientation, as an essential element of motivational beliefs, is a determining factor in self-regulation. He goes on to add that an extrinsic orientation incorporates a focus on getting good grades and pleasing others as the main criterion for judging success. Therefore, in order for learners to self-regulate, they need to have some goals or standards which let them assess their own progress. It can explain why the participants in this research, regardless of their level of academic achievement, resorted to the most salient and observable external stimulus (getting good grades) to self-regulate their motivation. Thus, helping learners to set short-term and long-term goals and to self-check is a potentially fruitful way of fostering goal-oriented L2 learners who opt to self-regulate their own learning behavior.

The macrostrategy that learners reported to use least was interest enhancement. It is concerned with how learners make their learning tasks more fun or more interesting. A similar justification, as was offered for the most frequent strategies, may explain the low occurrence of interest enhancement strategies. Extrinsically-oriented students are less likely to learn for the sake of learning or to enjoy the materials being learned. What keeps them on track is the anticipation of the final achievement and reward. As a result, they remind themselves of the significance of getting learning tasks done (as apparent in their use of performance self-talk), while they find little reason to make the task more pleasant.

One interesting fact, stemming from the findings, is that learners' heavy reliance on extrinsic motivation and their emphasis on performance goals and rewards to enhance motivation can be an outcome of their familiarity with this sort of motivation. Many teachers use extrinsic rewards as their primary method for motivating learners; traditional classroom management often emphasizes product rather than process (Meece, Anderman & Anderman, 2006). Hence, learners might be using performance-focused strategies (e.g. performance self-talk) because such strategies are more effective and more consistent with the common evaluation procedures.

Gender differences proved insignificant in learners' general use of the strategies. Both males and females showed similar tendencies in using MSRSs. Even further comparisons of male/female mean scores on

each of the five macrostrategies did not reveal any significant difference. However, it must be noted that there might be more delicate differences in specific microstrategies. Left untouched in this paper, they can be explored in future research. Investigating larger samples or different language proficiency levels may yield different results.

The differences between high-achievers and low-achievers revealed further information about the data. High-achievers tended to use interest enhancement and self-consequating strategies more often than low-achievers did. This finding can bear significant implications. In this study, more successful students were quite similar to less successful learners in depending on performance self-talk to motivate themselves. However, high-achievers deployed their other strategic resources and made a clear difference. In fact, in addition to setting long-term performance goals and emphasizing extrinsic rewards, successful learners try to create more pleasant learning situations (interest enhancement) and set challenging short-term goals (self-consequating).

Employing interest enhancement strategies can render the learning task more relevant, enjoyable and fun. That is to say, high-achievers discover the inherent attractions of the learning task, and if they do not find one, they try to create one. This finding is in line with those of some prior studies (e.g., Donker et al., 2014; Hulleman & Harackiewicz, 2009; Sansone et al., 1999) who showed that high-achievers tend to use interest enhancement strategies more frequently and try to liven up the learning situation by turning the potentially tiresome learning tasks into games or any enjoyable activities. Similarly, Smit et al. (2017) suggested that when students attach value and pleasure to schoolwork, they will expend more effort to accomplish the learning goals.

As far as self-consequating is concerned, setting short-term goal which are rewarded immediately can contribute further to make an exciting personalized activity out of the academic task (Dörnyei, Ibrahim & Muir, 2015; Egbert, 2003; Williams & Burden, 1997). In that case, the obtained reward does not originate from outside (teachers or parents), but from the learners' active manipulation of the learning tasks. This piece of finding is substantiated by Nota et al.'s (2004) empirical study that revealed a strong link between self-consequating and achievement. Besides, learners' self-determined goals that provide intrinsic motivation can be effective in higher levels of task engagement. Several studies have asserted that intrinsic goals (those set by the learner him/herself) are

more powerful than extrinsic goals which are set by other people (e.g., Brophy, 2005; Meece et al., 2006; Pintrich, 1999). According to them, intrinsic orientation is more likely to make learners engage in various cognitive and metacognitive activities. Externally-oriented learners might attain the goals without in-depth cognition or self-regulation. In contrast, learners who utilize self-consequating and set personalized short-term goals can experience deeper levels of engagement and achieve better results.

These explanations are reminiscent of Pintrich and De Groot's (1990) standpoint on the importance of both goal-setting and task interest. They suggested that learners with a motivational orientation which incorporates goals of learning and challenge, and personal beliefs that the task is interesting and important, "will engage in more metacognitive activity, more cognitive strategy use, and more effective effort management" (p. 34).

The arguments made so far can be substantiated on two strong theoretical grounds: the expectancy-value theory and self-determination theory. Expectancy-value model of motivation hypothesizes three motivational components that may be linked to self-regulated learning: an expectancy component, including learners' self-efficacy beliefs, a value component, including learners' goals and their beliefs about the importance and interest of the task, and an affective component, including learners' emotional reactions to the task (Wigfield & Eccles, 2000). The value component is particularly significant for explaining successful learners' application of certain self-motivational strategies. It involves learners' goals for the task and their beliefs about the importance and interest of the activity. It is concerned with learners' reasons for accomplishing learning tasks. According to Wigfield and Eccles (2002), intrinsic goals and interesting tasks generate stronger value beliefs and would consequently beget higher level cognitive engagement and academic achievement.

The power of intrinsic goals and interest can be further supported by another major theory of motivation, namely the self-determination theory. The self-determination theory expanded the traditional distinction between intrinsic and extrinsic motivation to a more complicated continuum ranging from externally-determined motivation, to internal or self-determined motivation. The levels include external (most extrinsic), introjected, identified, and integrated (most intrinsic) types of motivation. Research from this perspective has found a positive

relationship between the more internalized styles of motivation on the one hand, and more engagement in learning activities and better performance on the other. Moreover, intrinsically-motivated learners experience high levels of interest. Intrinsic motivation has been positively linked to cognitive and motivational gains in academic settings (Ryan & Deci, 2000).

CONCLUSION AND IMPLICATIONS

The findings of the current study provide some evidence confirming the importance of MSRSs by disclosing the links between learners' use of such strategies and their academic performance. Hence, students who actively strive to maintain their motivation in performing academic tasks are likely to have improved academic outcomes compared to learners who pay less attention to self-regulating their motivation. In addition, the results indicate some significant differences among specific strategies that more successful students may use for motivational self-regulation. The findings suggest that, apart from supporting self-regulated learning, motivational self-regulation contributes to students' learning and achievement in academic settings.

The results of this study can suggest a few pedagogical implications. As Zimmerman (2000) maintains, various learning strategies are teachable. So, it might be beneficial to train students and raise their awareness on MSRSs through explicit teaching. Teacher can provide their students with sufficient direct instruction, practical examples, and relevant tasks to practice and master using strategies. The performance of successful students indicates that particular attention must be paid to two issues: the interest of the learning activities, and self-determined short-term learning goals. Therefore, learning must be driven by personal needs, goals and interests of the students. From time to time, learners must be encouraged to exercise autonomy and make choices about their own goals and preferences. Instead of imposing seemingly irrelevant tasks and activities, teachers can assign students to pairs and groups where they can share values, make informed decisions and set the pace to achieve common goals.

Bio-data

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Appendix

Motivational Self-Regulation Questionnaire

We would like to ask you to help us by participating in this survey, to better understand the thoughts and beliefs of learners of English in Iran. This questionnaire is not a test so there are no “right” or “wrong” answers and you do not even have to write your name on it. We are interested in your personal opinion. The results of this survey will be used only for research purposes so please give your answers sincerely to ensure the success of this project. Thank you very much for your help!

Part I

We would like you to tell us how often you do the following activities by simply circling a number from 1 to 5. Please do not leave out any items.

Never	Seldom	sometimes	often	always
1	2	3	4	5

Example: if you strongly agree with the following statement, circle 5.

I walk when I am thinking.	1	2	3	4	5
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<i>interest enhancement</i>					
1. I make studying more enjoyable by turning it into a game.	1	2	3	4	5
2. I try to make a game out of learning the material or completing the assignment.	1	2	3	4	5
3. I think of a way to make the work seem interesting.	1	2	3	4	5
4. I try to get myself to see how doing the work can be fun.	1	2	3	4	5
5. I make doing schoolwork enjoyable by focusing on something about it that is fun.	1	2	3	4	5
6. I try to connect the material with something I like doing or find interesting.	1	2	3	4	5

7. I make an effort to connect what I'm learning to my own experiences.	1	2	3	4	5
8. I try to find ways that the material relates to my life.	1	2	3	4	5
<i>performance self-talk</i>	1	2	3	4	5
9. I remind myself about how important it is to get good grades.	1	2	3	4	5
10. I try to make myself work harder by thinking about getting good grades.	1	2	3	4	5
11. I remind myself how important it is to do well on the tests and assignments in school.	1	2	3	4	5
12. I tell myself that I need to keep studying to do well in school.	1	2	3	4	5
13. I think about how my grade will be affected if I don't do the assignment or reading.	1	2	3	4	5
<i>self-consequating</i>	1	2	3	4	5
14. I tell myself I can do something I like later if right now I do the work I have to get done.	1	2	3	4	5
15. I make a deal with myself that if I get a certain amount of the work done I can do something fun afterwards.	1	2	3	4	5
16. I promise myself that I can do something I want later if I finish the assigned work now.	1	2	3	4	5
17. I promise myself some kind of a reward if I get the assignment done.	1	2	3	4	5
<i>mastery self-talk</i>	1	2	3	4	5
18. I persuade myself to work hard just for the sake of learning.	1	2	3	4	5
19. I persuade myself to keep studying, just to see how much I can learn.	1	2	3	4	5
20. I challenge myself to complete the work and learn as much as possible.	1	2	3	4	5
21. I tell myself that I should keep working just to learn as much as I can.	1	2	3	4	5
<i>environmental control</i>	1	2	3	4	5
22. I change my surroundings so that it is easy to concentrate on the work.	1	2	3	4	5
23. I try to study at a time when I can be more focused.	1	2	3	4	5
24. I try to get rid of any distractions that are around me.	1	2	3	4	5

25. I make sure I have as few distractions as possible.	1	2	3	4	5
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Part II

Please provide the following information by ticking (✓) in the box or writing your response in the space so that we can interpret your previous answers better.

1. Your age (in years):
2. Your sex: male female
3. Your Grade Point Average (GPA) is:
4. Have you ever been to an English-speaking country? If yes, how long?

By submitting this questionnaire, I agree that my answers, which I have given voluntarily, can be used anonymously for research purposes.
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Thank you again!