Validation of Motivational Self-regulatory Strategies Questionnaire and Examination of Its Relation to L2 Reading, L2 Writing and Use of Language Learning Strategies

Behzad Ghonsooly

Ferdowsi University of Mashhad, Iran

ghonsooly@yahoo.com

Majid Elahi Shirvan

Ferdowsi University of Mashhad, Iran

elahimajid58@yahoo.com

Abstract

The effect of motivational self-regulatory strategies on L2 learners' achievement has scarcely been examined within the context of our country, Iran. This study is concerned with examining the relationship between motivational self-regulatory strategies and their L2 reading and L2 writing achievement. It also explores the relationship of motivational self-regulatory strategies and use of language learning strategies among EFL learners. The results of the study indicate that 1. There is a significantly positive relationship of EFL learners' motivational self-regulatory strategies and both their L2reading and L2 writing achievement; 2. There is a significant and positive relationship between motivational self-regulatory strategies and use of language learning strategies among EFL learners. The results of the interviews are also clearly in line with those of the questionnaires. The findings of these study postulate that EFL teachers should enrich their learners' motivational self-regulatory to help them sustain their efforts and motivation while performing L2 reading and writing tasks.

Keywords: Motivational Self-regulatory Strategies, L2 Writing Achievement, L2 Reading Achievement, Use of Language Learning Strategies

1. Introduction

Motivation is said to be the only factor affecting individual differences which has received the highest attention by L2 researchers (Dornyei, 2005).

Earlier studies in the 1970s and 1980s focused on Gardner and Lamberts' (1972) social psychological concept of integrative motivation.

Then, in the 1990s cognitive-situated approaches to motivation replaced the previous social views. Recently, the dynamic nature of motivation has invited the attention of researchers (Dornyei, 2001). One construct found to be at the heart of the dynamic view to motivation is motivational self-regulation.

1.1. Motivational Self-regulatory Strategies

Self-regulation has become one of the most important concepts of scientific psychology in the 21st century (Zeindner et al., 2000). Self-regulation refers to the individuals' abilities to monitor their own learning and make proper changes in the strategies they use (Ellis, 2008). In other words, Self-regulated learners have been described as those with adaptable motivational attitudes and beliefs. Individuals who self-regulate their motivation keep themselves involved in academic tasks (Pintrich, 1999).

The concept of motivational self-regulation emerged out of the new trend in psychology which considers motivation as dynamic and process based.

Williams and burden's (1997) motivational model, Dornyei and Otto's (1998) process based approach to motivation, and Dornyei' task motivation (2002) all were presented in this new trend in motivation.

Williams and Burden (1997, p. 121) maintained that motivation consisted of three phases on a continuum (Figure 1) namely, reasons for doing something, deciding to something, and finally sustaining effort. In this model,

the first two phases are related to the arousal of motivation and the last stage concerns sustaining motivation.

Reasons for doing something ⟶ Deciding to do Something ⟶ Sustaining effort

Figure1. A Three-Stage Model of Motivation (from Williams and Burden, 1997, p.121)

Dornyei and Otto's (1998) model also included three stages. First, in the preactional stage motivation is generated. Second, during the actional stage, motivation is sustained and protected from the distracting factors and third in the postactional stage motivation is aroused to follow other activities as a result of the evaluation of the previous activities.

Dornyei's (2002) task motivation refers to a task processing system consisting of three interrelated mechanisms: 1. Task execution 2. Appraisal and 3. Action control. First, learners engage in a particular task, then, they try to compare, contrast and evaluate the actual performances with the expected ones and finally they use some self-regulatory strategies to sustain or enhance their effort in doing that particular task (Figure 2).
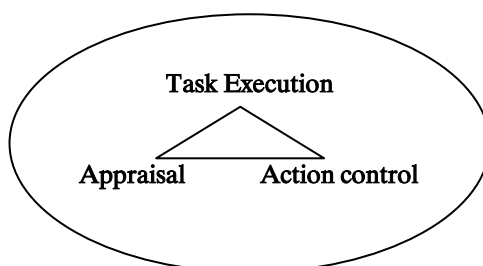

Figure 2. Task Motivation Phases (from Dornyei, 2005, p.82)

Dornyei (2005) asserted that the fundamental assumption underlying motivational self-regulation is that when sustaining their motivation while performing language learning tasks, L2 learners learn the L2 language better than those who fail to sustain their motivation. Ellis (2008) also maintained

that the ability to self-control one's motivational state involves self-critical reflection of one's own actions and belief systems. Wolters (2003) maintained that the ability to sustain motivation is important when individuals face problems interfering with their initial motivational state.

Based on what was mentioned, motivational self-regulatory strategies refer to a variety of tactics and actions individuals use to sustain their effort in specific academic tasks (Wolters, 1999). Prior research has focused on different motivational self-regulatory strategies. One strategy found by Zimmerman and Martinez-Pones (1990) was the learners' providence of some extrinsic consequences like rewards for themselves. That is, learners arouse their desire to complete academic tasks by providing additional results for themselves. For example, learners can encourage themselves to finish their academic task by rewarding themselves a trip to the movies with their friends after the completion of the task. Or they can motivate themselves to finish their unfinished tasks by the image of watching their favorite football match or taking a hot shower in (especially in a cold weather) after the full performance of the task.

Research has shown that learners' high preference to reduce distractions in their environment is one way of sustaining motivation. For example, Wolters (1998) found that some learners prefer to refresh themselves during the task by drinking coffee or changing their place or the time of the task performance to make the task easier by controlling the possible distractions. Zimmerman and Martinez-pones reported that high school students used such a strategy while performing academic tasks. Wolters (1998) also concluded that college student used different kinds of strategies to control their surrounding by when, where, and how to complete particular academic tasks.

Wolters (1998) also found that learners stressed and emphasized their identified reasons to continue the tasks in order to sustain their motivation and boost their effort. In this study, while performing several academic tasks, college students were asked to express how they would keep themselves motivated if they faced obstacles. Some of them referred to their reasons for doing those tasks i.e., having good grades, competing their classmates, or overcoming a challenge. This strategy is similar to Dornyei's L2 self-motivation (2005). This model includes the three dimensions of 1) ideal L2 self 2) ought-to L2 self and 3) L2 learning experience. Ideal L2 self refers to:

> 'The L2 specific-facet of one's ideal self: If the person we would like to become speaks an L2, the Ideal L2 Self is a powerful motivator to learn the L2 because of the desire to reduce the discrepancy between our actual and ideal selves' (p. 105).

Ought-to L2 self deals with the attributes that one thinks one *ought to* possess (i.e., various duties, obligations, or responsibilities) in order to avoid possible negative results. Finally the dimension of L2 learning experience refers to situation-specific motives related to immediate learning environment and experience. Therefore, a learners' L2 ideal self, ought-to L2 self, or L2 learning experiences can be good identified reasons to sustain effort during L2 learning tasks. For example, the image of being a fluent L2 speaker may arouse L2 learners' motivation all the time during the process of task performance (Dornyei, 2005).

Another strategy to self-regulate motivation while doing academic tasks is making the tasks more interesting and enjoyable to complete (Sanson, Weir, and Morgan, 1999). Sanson et al. (1999) reported that students regulate their eagerness to perform academic tasks by their manipulation to make them more interesting and exciting.

1.2. Language Learning Strategies

The importance of language learning strategies in second language learning has been highlighted by researchers in the field (Oxford, 2001; Carson and Longhini, 2002; Macaro, 2009, Cohen and Macaro, 2008). Different researchers have presented numerous definitions for language learning strategies. One of the first definitions was presented by Tarone (1983) who defined language learning strategies as "an attempt to develop linguistic and sociolinguistic competence in the target language to incorporate these into one's interlanguage competence". A second broader definition was proposed by Wenstein and Mayer (1986) as "behaviors and thought that a learner engages in during learning that are intended to influence the learner's encoding process" (p. 315). Rubin (1987) came up with his own definition of learning strategies (LS) as "strategies which contribute to the development of the language system which the learner constructs and affect learning directly" (p. 22). Another definition (O'Malley and Chamot, 1990) viewed LS as "the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information" (p. 705).

Studying the mentioned definitions we realize that LS has had a changing nature over time: past research focused on the product of linguistic or sociolinguistic competence (LLS) while today we witness a shift of focus to the process and characteristics of LLS. It is also easy to notice the difference between LLS and learning styles which according to Reid (1995) is defined as a learner's "natural, habitual, and preferred way(s) of absorbing, processing, and retaining new information and skills".

Nevertheless, there seems to be a relationship between one's language learning style and one's preferred language learning strategies (Lessard-Clouston, 1997).

The onset of studies on language learning strategies can be traced back to the 1960s. But, recent developments in cognitive psychology have had their bearings on research in the area (Williams and Burden, 1997).

First studies on language learning strategies were conducted in the 1960s. Since then, advances in cognitive psychology have affected the research on language learning strategies (Williams and Burden, 1997).

Carton (1971) published the first study on learner strategies. Rubin's (1975) study on the strategies of successful learners was the second in this line of research. This study tried to find a way to transfer strategies of successful learners to less successful ones. Strategies used by language learners has provided a very active area for research. Wong-Fillmore (1976), Naiman et al. (1978), Bialystok (1979), Cohen and Aphek (1981), Wenden (1982), Chamot and O'Malley (1987), Politzer and McGroarty (1985) are among researchers who have entered this area of research.

According to Wenden and Rubin (1987), most studies on language learning strategies have tried to identify what good language learners report they do to learn a second or foreign language.

Another study (Ehrman and Oxford, 1990) used a sample of seventy nine foreign language learners to explore the relationship between personality and use of language learning strategies. The study indicated that (1) extroverts utilize social strategies more than introverts; (2) sensing (concrete) learners make use of memory strategies, while intuitive learners favor compensation strategies; (3) thinkers had an inclination toward metacognitive strategies while feelers preferred social strategies; and (4) perceivers opted affective strategies while judgers chose otherwise.

Recently there has been a focus on investigating language learning strategies in light of other variables. Several studies showed a positive

relationship between motivation and use of LLS (Wharton, 2000; Schmidt and Watanabe, 2001). Griffiths' (2003) study indicated that there is no difference in LLS between male and female learners. Another study found that older groups of language learners used social strategies more than younger groups who tended to use more cognitive strategies.

In another study, Graham (2004) found a strong relationship between strategy evaluation, attributions, and self-efficacy. Students may attribute their failure or success to high level of difficulty of language learning tasks and thus show low levels of self-efficacy concerning their language learning tasks.

Therefore, any strategic behavior can improve teachers' self-efficacy including tasks.

Research in second language acquisition (Piage et al., 2004; Rubin et al., 2007) has led to the popularity of strategy based instruction (SBI). Recently, the influence of strategy based instruction on the achievement of different L2 language skills has been explored by several researchers. Some of the studies highlighted the importance of SBI especially metacognitive strategies in improving L2 learners listening achievement Kohler (2002), Graham and Macaro (2008).

Some studies (Macaro and Elder, 2007) revealed that SBI greatly influences L2 learners' speaking achievement. The influence of SBI on L2 writing achievement was investigated and confirmed by Creswell (2000), Conti (2004), Sasaki (2004), Ching (2002) and Sengupta (2000).

Lawes and Santos (2007) stated that second language teachers need to keep themselves informed of studies on language learning strategies and try to implement the results of these studies in their classes.

Therefore, this study tries to investigate the relationship between motivational self-regulatory strategies and L2 reading and L2 writing

achievement and use of language learning strategies. The researchers also aimed to validate a rendered version of motivational self-regulatory strategies in this study. Thus, the following research questions are presented:

1. Is there any relationship between L2 learners' motivational strategies and their L2 reading achievement?
2. Is there any relationship between L2 learners' motivational self-regulatory strategies and their L2 writing achievement?
3. Is there any relationship between L2 learners' motivational self-regulatory strategies and their use of language learning strategies?

2. Methodology

2.1. Participants

One hundred sophomore students of Ferdowsi University of Mashhad and Teacher Training University of Sabzevar majoring in English Literature, both male and female, constituted the participants of the study.

2.2. Instruments

Two instruments were used in this study. Motivational Self-regulatory Strategy Questionnaire was used to measure motivational self-regulatory strategies among EFL learners. Strategy Inventory for Language Learning (SILL) was used as the second instrument to measure the participants' use of language learning strategies. Moreover, the participants' Grand Point Averages (GPA) of their Reading and Writing course exams also served to measure their L2 Reading and L2 Wring achievement. The instrument used in this study was the translated version of motivational self-regulatory strategies scale (MSSS) developed by Wolters (1999). The scale includes 25 items with 5 subscales.

Three experts commented on sequencing format, formulations of questions and the language. Thus, the questionnaire was edited to ensure the content of the questionnaire items and the physical appearance of the questionnaire was appropriate. Cronbach's alpha was used to check the reliability of the translated version and resulted in a coefficient of 0.84. The findings of reliability using item-total statistics and construct validity using a principle component analysis with varimax rotation will be presented in the results section.

2.2.2. Strategy Inventory for Language Learning (SILL)

The strategy inventory for language learning (SILL) developed by Oxford (1990, Appendix 2) was the second instrument used in this study. The instrument was first developed with the purpose of assessing the frequency of use of language learning strategies by students of the Defense Language Institute of Foreign Language Center in Monterey, California. The SILL was revised twice and published in the appendix to Oxford's (1990) "Language Learning Strategies: What every teacher should know". The first revised version was developed for foreign language learners of English as a second or foreign language (ESL/EFL, 50 items) the second version incorporates six different categories of language learning strategies: Memory strategies, cognitive strategies, metacognitive strategies, affective strategies, and social strategies. Reports and articles in the last ten to fifteen years reveal that SILL is probably the only language learning strategy questionnaire whose validity and reliability has been checked in different ways (Oxford, 1996). Oxford and Nyikos (1989) trying to validate the SILL, reported a Cronbach alpha of 0.96. Hsiao and Oxford (2002) ran a confirmatory factor analysis on the SILL and found a good match between the six factors. Tahmasebi (1999) also translated

and validated the questionnaire, achieving a Cronbach alpha of 0.77 for the Persian rendition of SILL.

As mentioned before, there was a classification of strategies in the original English SILL but in Persian version, Tahmasebi (1999) rearranged the strategies in such a way that no two adjacent strategy items appeared under the same category. The reason for this was that the original questionnaire could have affected the responses of the students. Codes were used in collecting the items. Participants were also asked to disclose their age, gender, and years of studying English. The present study uses the Persian rendition of SILL which was presented and validated by Tahmasebi (1999).

2.3. Interview

In order to complement the results derived from the questionnaires, the second researcher had an *unstructured* interview with 20 students, who showed their enthusiasm to be interviewed on how they sustained their motivation while performing L2 reading or L2 writing tasks. 10 of these students had lower scores on motivational self-regulatory strategies and the other 10 had higher scores. Each interview took about half an hour. The unstructured format for interview was used.

2.4. Data Collection

In the first step, after obtaining permissions from the instructors, the second researcher visited two English classes to administer the two questionnaires.

Students were assured that the results would be kept confidential and their teachers would not see the results of the questionnaires. They were told to write the GPA of their L2 reading and L2 Writing courses of the previous term.

The students were introduced to the MSS and SILL. Then they rated the items of the MSSS, using a four point Likert-scale, with possible responses of always, usually, sometimes, and never. Also students responded to the Internal Control Index on a 5 point Likert scale with possible responses of rarely, occasionally, sometimes, frequently, and usually. Meanwhile, they were served with cookies and juice to help them fully concentrate on the questionnaire items. They were also asked to sign the first page of their answer sheets in case they were inclined to participate in the interview.

2.5. Data Analysis

To score the MSS, a 4-point Likert type scale from "always" to "usually" with the following measurement was used.

Always = 4   Usually =3   Sometimes =2   Never =1

Then the inventory was divided into 6 parts, which shows different kinds of strategies. The first part consists of 8 items, the second part includes 5 items, the third, fourth, and the sixth parts each consists of 4 items. The range of scores for MSSS is between 25 and 100 and this range for our participants calculated to be 50 to 87. The higher the score, the more efficient the student is in using motivational self-regulatory strategies.

Lower scores indicate students' lower efficiency in use of motivational self-regulatory strategies, though.

3. Results

To estimate the reliability and construct validity of MSS, it was administered to 86 students in the pilot study. It should be noted that due to the limitations of the study and in order not to include the participants of the final phase of the

study into the pilot one, all the 86 students were sophomore EFL students who studied in Shahid Beheshti University, Esfahan, and, Khayam University. The reliability (Cronbach's alpha) for this scale measured 0.84

3.1. Construct Validity of Translated Version of MSS

A principle component analysis with varimax rotation produced 5 factors with eigenvalues greater than 1.00. The first factor accounted for 9.86 of the total variance. It consisted of items related to individuals' preference to make the tasks interesting, enjoyable, and fun; thus, it was labeled "Interest Arousal".

The second factor, which accounted for 9.70 of the total variance, was related to individuals' self-talk to encourage themselves with some extrinsic influences like good grades. So it was labeled "Extrinsic Motivation Enhancement". The third factor, which accounted for 7.88 of the total variance, included items related to individuals' tendency to self-reward themselves while performing tasks; therefore, it was named "Self-rewarding". The fourth factor, which accounted for 7.34 of the total variance, included items related to individuals' self-talk to enrich their motivation by intrinsic factors like their mastery in learning, so it was labeled "Intrinsic Motivation Enhancement". The fifth factor, accounting for 6.84 of the total variance, involved items concerning individuals' preference for reducing distractions; therefore, it was labeled "Distraction Reducing".

43

Table1. Results of Factor Analysis of Persian Version of ICI

Item	Questionnaire Item	F1	F2	F3	F4	F5
1	با تبدیل مطالعه به نوعی بازی از انجام آن لذت می‌برم.	.84				
4	به ''یادگیری'' و ''انجام تکالیف'' بـه دیده سرگرمی می نگرم.	.81				
23	برای جذابیت بیشتر تمرین راهی می یابم.	.76				
2	برای لذت بخش بودن انجام تمرین تـلاش می کنم.	.72				
8	انجام تکلیـف را بـا تمرکـز بـربخش هـای جذاب آن، لذت‌بخش کنم.	.71				
12	سعی می‌کنم میان ''مطلـب آموزشـی'' و ''علایق‌ام'' ارتباط برقرارکنم.	.68				
15	تلاش می‌کـنم از تجربیـات قبلـی‌ام بـرای یادگیری بهتر مطالب جدید استفاده کنم.	.66				
5	تلاش می کنم تا مطالـب آموزشـی را بـه نوعی با زنـدگی شخـصی خـویش ارتبـاط دهم.	.64				
9	اهمیت گرفتن نمرات خوب را برای خود یادآوری می‌کنم.		.82			
14	برای گرفتن نمرات بهتر، تلاش خود را بیشتر می‌کنم.		.76			
19	اهمیـت نتـایج حاصـل ازعملکردخـوب در آزمون‌هـا و تکـالیف را بـه خـود یـادآوری می‌کنم.		.72			
20	اهمیـت تـلاش زیـاد بـرای موفقیـت در آزمون‌ها را برای خود یاد آوری می کنم.		.69			
6	نتـایج منفـی ''درس نخوانـدن'' و ''عـدم انجام تکالیف مربوط را '' برای خود یادآور می شوم.		.66			
18	به فرصت مطلوبی که پس از انجام تکلیـف برای انجام کار مـورد علاقـه ام بـه دسـت می آورم، می اندیشم.			.86		

11	به خـودم قـول مـی‌دهـم کـه اگـر بخـش مشخصی از تکلیـف فعلـی‌ام را بـه پایـان رساندم، پس از آن زمـانی را بـرای تفـریح خود اختصاص می‌دهم.			.82		
17	به خود وعده می‌دهـم کـه در صـورت بـه اتمام رساندن تکلیف واگذار شده بـه مـن، به خـود فرصـت پـرداختن بـه کـار مـورد علاقه‌ام را بدهم.			.78		
21	در ازای انجام تکلیفم، بـرای خـود پـاداش در نظر می‌گیرم.			.74		
24	صرفاً برای یادگیری بیشتر، تلاش خـود را بیشتر کنم.				.82	
13	با ترغیب خود به ادامه کار، توان یادگیری خود را محک می‌زنم.				.78	
16	انجام تکلیف و یـادگیری در حـد تـوانم را برای خود چالشی تلقی می‌کنم.				.74	
22	با خود مـی‌گـویم هـدفم از انجـام تکلیـف محول شده به من، صرفاً یـادگیری بیـشتر است.				.68	
3	بـرای تمرکـز بیـشتر بـر روی تکلـیفم، تغییراتـی را در محـیط اطـرافم ایجـاد می‌کنم.					.76
7	سعی می‌کنم زمانی به مطالعه بپردازم کـه بیشترین تمرکز را دارم.					.72
25	سـعی مـی‌کـنم عـواملی را کـه باعـث حواس‌پرتیم می‌شوند از میان بردارم.					.68
10	عواملی را که باعث حواس پرتیم می‌شـوند تا حد ممکن کاهش می‌دهم.					.64
	Eigenvalues	4.05	1.80	1.20	1.05	1.03
	Percentage of Variance	9.862	9.702	7.882	7.344	6.849
	Cumulative Percentage of Total Variance	9.862	19.564	27.446	34.790	41.639

Figure 3. demonstrates the scree plot of the 8 factors obtained which measured greater than 1.
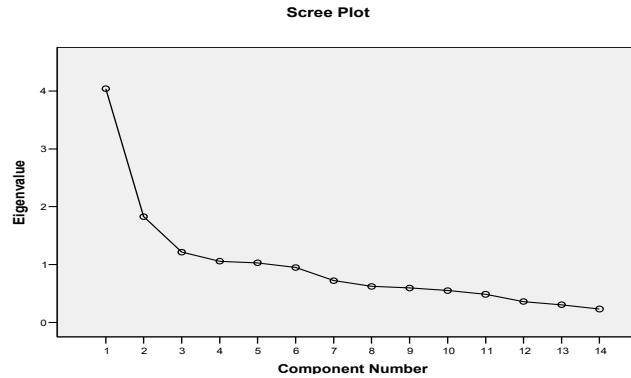
Scree Plot

Figure 3: Scree Plot of Factors Derived from the Principle Component Analysis of Persian Version of MSS

The following table illustrates the bivariate correlations among the 5 components of the MSSS questionnaire. The results demonstrate moderate to strong positive correlations among all the extracted factors.

Table 2. Bivariate Relations among the 5 MSS Factors

	Interest Arousal	Extrinsic Motivation Self-talk	Self-rewarding	Intrinsic Motivation Self-talk	Distraction Reducing
Interest Arousal	1.00	.76	.68	.72	.64
Extrinsic Motivation Self-talk	.76	1.00	.76	.58	.68
Self-rewarding	.68	.76	1.00	.62	.54
Intrinsic Motivation Self-talk	.72	.58	.62	1.00	.64
Distraction Reducing	.64	.68	.54	.64	1.00

In order to save the space the researchers have presented the correlation between the variables of the research questions in the following table.

Table 3. Bivariate Relations among MSS, LLS, L2 Reading and L2 Writing Achievement

	MSS	LLS	L2 Reading	L2 writing
MSS	1.00	.78	.74	.72
LLS	.78	1.00	.78	.75
L2 Reading	.74	.78	1.00	.74
L2 Writing	.72	.75	.74	1.00

As observed, the correlation coefficients between motivational self-regulatory strategies and L2 reading and L2 writing achievement are calculated to be 0.74 and 0.72, which are significant at $P<0.05$. These correlations are moderately high and positive. Therefore, it can be concluded that the more motivational self-regulatory strategies L2 learners use, the higher achiever they are in L2 reading and L2 writing. The correlation coefficients among the five extracted factors of motivational self-regulatory strategies and L2 reading and L2 writing achievement has also been presented in the following table.

Table 4. Bivariate Relationship among MSS 5 Factors and L2 Reading and L2 Writing Achievement

	L2 reading achievement	L2 writing achievement
1. Interest Arousal	.74	.72
2. Extrinsic Motivation Self-talk	.68	.70
3. Self-rewarding	.73.	.66
4. Intrinsic Motivation Self-talk	.74	.68
5. Distraction Reducing	.76	.78

As observed, these factors have moderately high and positive correlation coefficients with the two variables which are significant at $p<0.05$, thus, confirming the high correlation coefficient between motivational self-regulatory and use of language learning strategies.

With regard to the relationship between motivational self-regulatory strategies and use of language learning strategies, table 5 shows that both variables are significantly correlated ($r = .78$, $p<0.05$). Thus, the more strategic L2 learners are in self-regulating their motivation, the more strategic they are in learning L2. Since use of language learning strategies is also correlated significantly with L2 reading ($r=.78$, $p<.05$ and L2 writing achievement ($r=.75$, $p<0.05$) it is noteworthy to see the bivariate correlations among motivational self-regulatory strategy types and language learning strategy types. The following table illustrates such kinds of relationship.

Table 5. Bivariate Relationship among MSS Factors and LLSS

	Metacognitve	Cognitve	Memory	Social	Affective	Compensatory
1. Interest Arousal	.82	.68	.57	.72	.75	.71
2. Extrinsic Motivation Self-talk	.80	.64	.62	.68	.71	.67
3. Self-rewarding	.87	.72	.55	.75	.68	.74
4. Intrinsic Motivation Self-talk	.79	.62	.58	.68	.72	.63
5. Distraction Reducing	.76	.68	.62	.74	.73	.75

As the above table shows motivational self-regulatory strategies have the highest correlation with the metacognitive strategies ($.76<r<.87$). On the other hand, they have the lowest correlation coefficient with memory strategies ($.55<r<.62$).

3.8. Interview Results

20 students participated in the interviews. They included 10 students with high scores in L2 reading and L2 writing achievement and 10 with lower scores in L2 reading and L2 writing achievement. 70 percent of the first group had a good self-image of themselves. Some of them wanted to be good journalists and this dream helped them to increase their persistence in having higher scores in L2 reading and L2 writing course. One of them said "I fancy reading English magazines, journals, novels, and short stories, so I try to pay all my attention to what I read in L2 reading course". 80% of them aimed to be successful L2 reader or L2 writer to have good scores on international examinations like TOEFL and IELTS. Some others had their personal desires, for example, One of them said "I am keen on teaching English in the institutes and to fulfill such a desire I should get familiar with different strategies used in reading or writing so that teach them well to my students".

   60% of such students preferred to perform L2 reading texts with their classmates, check their answers with them, and walk in the classroom. 90% of them were eager to have a break to rest, talk to their friends, and even go out of the class to feel refreshed enough to continue their L2 reading and L2 writing tasks. 100% of them preferred to seat face to face and did not like the structure of the university classrooms, they said changing the structures will modify the atmosphere of the classroom and help them to persist in their tasks performance. 90% of these students were dissatisfied with holding their L2 reading or L2 writing classes in the evening. One of them said "I can't stand it when I am supposed to perform such tasks in the afternoon and this really lowers my motivation even if I have good reasons for doing those tasks". 80% agreed to drink a cup of tea in the cold weather or perform reading or writing tasks in the green area of the university campus in the beautiful spring days.

70% of such students quoted that they accelerated their performance in L2 writing or L2 reading tasks to draw their teachers' attentions. 60% of them preferred to draw some graphs in their writing tasks or read L2 texts mingled with pictures or colors. 60% mentioned that they try to finish the L2 reading or L2 writing tasks in the classroom to have the chance to talk with their friends about what they did the previous day or go out of the classroom and drink water or buy something from the buffet.

On the other hand, those 70% of lower L2 reading and L2 writing achievers mentioned that they are motivated before performing L2 reading or L2 writing tasks but as soon as they start, they are not able to sustain their motivation. One of them said "I want to be a good writer but the problem is that when I start writing I can't concentrate on what I write, I prefer to finish it somehow". It is noteworthy that although such students had overall reasons for themselves to start tasks like becoming good L2 writer or reader, they could not sustain their effort or motivation during the process of task performance.

4. Discussion

With regard to the validation of the translated version of motivational self-regulatory strategies, the moderate correlations among the 5 extracted factors indicated that L2 learners reporting one of the motivational self-regulatory strategies also reported to use the other strategies, however, the moderate correlations indicate the discriminate validity of the 5 extracted factors.

The findings of the first two questions showed that there was a significantly high relationship between motivational self-regulatory strategies and L2 reading and writing achievement. In other words, high L2 achievers due to their ability to sustain their motivation may gain higher scores in L2 reading and L2 writing courses. Figure 4 clearly illustrates the relationship between

motivational self-regulatory strategies and both L2 reading and L2 writing achievement.

(Lower L2 reading and L2 writing achievement)   (Higher L2 reading and L2 writing achievement)

Fewer use of MSS   Greater use of MSS

Figure 4. Schematic Representation of MSS and L2 Reading and its Relation to L2 Writing Achievement

The results of the bivariate correlations among the five factors of MSS and the L2 writing and L2 reading achievement also indicated high and positive correlation coefficients among them. It means that L2 learners favoring strategies to self-regulate their motivation can benefit from all these five factors to sustain their motivation while performing L2 reading or L2 writing tasks.

This was also confirmed by the findings of the interviews. High achievers in L2 reading and L2 writing claimed to use different types of strategies to keep themselves motivated while performing related tasks which are closely related to findings of the previous research. Zimmerman and Martinez-Pones (1990) found that students sometimes rewarded themselves a trip to movies or watching their favorite program on TV after completing the tasks. In the interviews of this study 60% of the interviewed L2 learners who used motivational self-regulatory strategies more frequently accelerated their L2 reading or L2 writing performance in the classroom in order to take the chance of talking to their friends inside the class or going out of the class and buying something from the buffet.

Purdie and Hattie (1996) referred to learners' preference to reduce distractions in their environment while doing academic tasks. Almost all of interviewed students with greater use of motivational self-regulatory strategies tried to reduce the distracting factors around them by changing the structure of the classroom, taking a break, or changing the time of the performance of the

L2 reading or writing tasks. Wolters (1998) discovered that learners' identification of their reasons for learning helped them to sustain their motivation while performing academic tasks. In the interviews, For example, 80% of the participants with greater use of motivational self-regulatory strategies had their own extrinsic motivations such as gaining higher scores on international examinations to sustain their effort during the L2 reading or L2 writing tasks. 70% of them had their own intrinsic motivations such as becoming good L2 readers or L2 writers to keep themselves motivated while doing L2 reading or writing tasks.

Sanson et al., (1999) mentioned that one self-regulatory strategy used by students was making tasks more interesting for themselves. 90% of students with high frequency use of motivational self-regulatory strategies tried to make their L2 reading or L2 writing tasks more interesting by talking to their friends, checking their answers with them, or drawing graphs. Some of them even preferred to drink a cup of tea, especially during the cold days of winter, while performing L2 tasks.

The higher L2 achievement of those students with the ability to self-regulate their motivation can also be interpreted through the eyes of Williams and Burden's motivational model, Dornyei's process oriented approach to motivation, Dornyei's task motivation model, and Finally Dornyei's L2 self-motivation which were mentioned in the literature. In line with Williams and Burden's (1997) motivation model, higher L2 achievers may outperform those who lack the ability to maintain their initially aroused motivation. As it was mentioned in the interview findings, lower achievers in L2 reading and L2 writing had good reasons for themselves before starting tasks like having a good knowledge of L2 but were not able to sustain such motivation during the process of performing L2 tasks. Also, in line with Task motivation (Dornyei,

2005), higher L2 reading or writing achievers are assumed to perform well in task execution, appraisal, and especially action control where self-regulatory mechanisms are used to enhance learning (Dornyei, 2005, p. 81).

Also in line with Dornyei's (2005) process oriented approach to motivation, what distinguishes higher and lower achievers in L2 reading and L2 writing tasks are not the existence of motivation in the first group and its lack in the second group but the quality of motivation. Higher L2 achievers may perform better than the other L2 learners in such skills such as reading and writing because they can use some effective strategies in the actional and post-actional stages of task performance to self-regulate their motivation.

Also as was observed in the interview section, most L2 learners who were able to use motivational self-regulatory strategies referred to their L2 ideal selves as the strong sustaining factor of their motivation. For example, one of them wanted to be a good journalist and this self-image helped him to keep himself motivated all the time. Maybe lack of such L2 ideal self would cause failure in some L2 learners to lose their initially aroused motivation during task performance.

With regard to the third question, first, it was revealed that language learning strategies correlated positively and strongly with L2 reading and writing achievement. Moreover, motivational self-regulatory strategies among L2 learners correlated strongly with their use of language learning strategies.

Therefore, it can be hypothesized that L2 learners who are able to self-regulate their motivation also use effective strategies to achieve higher scores in L2 language skills like reading and writing. The following figure illustrates such a relationship.
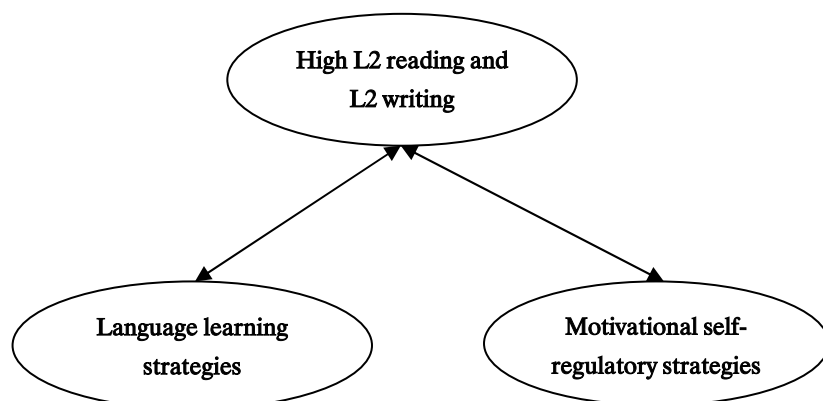
Figure 5. Hypothetical relationship among the three variables

Also the table related to the correlations among the MSS and LSS factors indicated that almost all motivational self-regulatory strategies correlated strongly with the use of metacognitive strategies than the other language learning strategies. Winne and Perry (2000) mentioned that metacognition is at the heart of self-regulatory strategies. They noted that self-regulatory learning includes two dimensions: 1. Metacognitive knowledge and 2. Metacognitive monitoring. Metacognitive knowledge refers to procedural knowledge to do tasks, knowledge of task parameters and self-parameters. Metacognitive monitoring is associated with monitoring task difficulty and attributing achievements to standards and confidence about one's accuracy of monitoring.

Therefore, it can be presumed that metacognitive strategies ties language learning strategies with motivational self-regulatory strategies which in turn will lead to higher L2 reading and L2 writing achievement.

It is also noteworthy to mention that the five motivational self-regulatory strategies had the least correlation coefficients with memory learning strategies ($.55<r<.62$). In other words, L2 learners with high tendency to use motivational self-regulatory strategies were less inclined to use memory learning strategies. It can be interpreted that L2 learners favoring more

frequently use of motivational self-regulatory strategies due to their sustained motivation during the performance of L2 tasks prefer not to use the easiest ways to complete them like memorization of L2 materials more frequently, which seems to be used by those with lower levels of motivation, but are inclined to use other memory strategies such as metacognitive ones more frequently.

5. Conclusion

Besides validating the Persian version of the motivational self-regulatory strategy questionnaire, the results of this study demonstrated a positive relationship between the strategies used by L2 learners to self-regulate their motivation and both L2 reading and L2 writing achievement. It also showed a positive relationship between L2 learners' motivational self-regulatory strategies and their use of language learning strategies. Therefore, these findings can draw the attention of L2 teachers to the important role of such strategies for sustaining learners' reading and writing motivation. Since motivation is not a fixed or static character but a dynamic one, L2 teachers can assist their learners to use such strategies while performing L2 reading or L2 writing tasks. Introducing L2 learners to such strategies can help them maintain their possible initially aroused motivation. They can make their L2 reading or L2 writing tasks more interesting, exciting, and enjoyable for themselves, they can reward themselves by drinking a coffee or watching their favorite match after the completion of the tasks, or they can benefit from their self-image as an L2 teacher in the future.

References

Bialystok, E. (1979). "a theoritical model of second language learning", *Language Learning*, 28, pp.69-83.

Carson, J. G. and Longhini, A. (2002). "Focusing on learning styles and strategies: Adiary study in an immersion setting", *Language Learning,* 52 (2), pp. 401-438.

Carton, A. S. (1971). *The Method of Inference in Foreign Language Study,* Newyork City: University of Newyork.

Chamot, A., and O'Malley, M. (1987). "The cognitive academic language learning approach: A bridge to the mainstream", *TESOL Quarterly*, 21, pp. 227-249.

Ching, L. C. (2002). "Strategy and self-regulations instruction as contributors to improving students' cognitive model in an ESL program", *English for Specific Purposes,* 21 (3), pp. 261-289.

Cohen, A. D., and Aphek, E. (1981). "Easifying second language learning", *Studies in Second Language Acquisition*, 3, pp. 221-236.

Cohen, A. D., and Macaro, E. (eds.). (2008). *Language Learning Strategies: Thirty Years of Research and Practice,* Oxford: Oxford University Press.

Conti, G. (2004). *Metacognitive Enhancement and Error Correction: An Investigation in the Impact of Self-monitoring Strategies on L2 Italian Student Writing,* Unpublished Doctoral Dissertation: University of Reading, United Kingdom.

Creswell, A. (2000). "Self-monitorring in student writing: Developing learner responsibility", *ELT Journal,* 58 (3), pp. 235-244.

Dornyei, Z. (2001). *Motivational Strategies in the Language Classroom,* Cambridge: Cambridge University Press.

Dornyei, Z. (2002). "The motivational basis of language learning tasks", in P. Robinson (ed.), *Individual Differences in Language Acquisition*, Amsterdam: John Benjamins, pp. 137-158.

Dornyei, Z. (2005). *The Psychology of the Language Learner: Individual Differences in Second Language Acquisiton,* Mahwah, N.J.:Lawrence Earlbaum.

Dornyei. (2007). *Research Methods in Applied Linguistics,* Oxford: Oxford University Press.

Dornyei, Z., and Otto, I. (1998). "Motivation in action: A process model of L2 motivation", *Working Papers in Applied Linguistics,* 4, pp. 43-69.

Ehrman, M. E., and Oxford, R. (1990). "Adult language learning styles and strategies in an intensive training setting", *Modern Language Journal*, 74, pp. 311-327.

Ellis, R. (2008). *The Study of Second Language Acquisition* (2nd ed.)*,* Oxford: Oxford University Press.

Gardner, R. C., and Lambert, W. E. (1972). *Attitudes and Motivation in Second Language Learning,* Rowly, MA: Newburry House.

Graham, S. (2004). "Giving up on modern foreighn languages? Students' perceptions of learning French", *Modern Language Journal,* 88 (2), pp. 171-191.

Graham, S. and Macaro, E. (2008). "Strategy instruction in listening for lower-intermidate learners of French", *Language Learning,* 58 (4), pp. 747-783.

Griffiths, C. (2003). "Patterns of language learning strategy use", *System, 31*, pp. 367-383.

Hsiao, T. Y., and Oxford, R. L. (2002). "Comparing theories of language learning Strategies: A comfirmatory factor analysis", *Modern Language Journal,* 86 (3), pp. 368-383.

Kohler, D. B. (2002). *The Effect of Metacognitive Language Learning Strategy Training on Lower Achieving Second Language Learners,* Ph.D.disseratation, Brighan Young University, Provo, UT.

Lawes, S. and Santos, D. (2007). "Taching learning strategies: What do teachers learn?", *Language Learning Journal,* 35 (2), pp. 221-237.

Lessard-Cluston, M. (1997). "Language learning strategies: An overview for L2 teachers", *The Internal TESOL Journal*, 3, pp. 50-62.

Macaro, E. (2009). "Developments in language leaning strategies", in V. Cook and L. Wei (eds.), *Contemporary Applied Linguistics*, London: Continuum International Publishing Group, pp. 10-37.

Macaro, E., and Elder, L. (2007). "Raising the achievement of Young-beginner readers of French through strategy instruction", *Applied Linguistics, 29,* pp. 90-119.

Naiman, N., Frolich, M., Stern, H. and Todesko, A. (1978). *The Language Learner,* Toronto: Ontario Institute for Studies in Education.

O'Malley, J. M. (1990). *Learning Strategies in Second Language Acquistion,* New York: Cambridge University Press.

O'Malley, J. M. and Chamot, A. (1990). *Learning Strategies in Second Language Acquistion,* New York: Cambridge University Press.

Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know,* New York: Newburry House.

Oxford, R. L. (1996). "Afterword: What have we learned about language learning strategies around the world?" in R. L. Oxford (ed.), *Language Learning Strategies around the World: Cross-cultural Perspectives* (pp. ix-xv). Honolulu: University of Hawaii Press.

Oxford, R. L., and Nyikos. (1989). "Variables affecting choice of language learning strategies by university students", *The Modern Language Journal,* 71, pp. 291-300.

Oxford, R. L. (2001). "The bleached bones of story: Learners construction of language teachers" in M. P. Breen (ed.), *Learner Contributions to Language Learning: New Direction in Research*, Harlow, England: Longman, pp. 86-111.

Piage, R. M., Cohen, A. D., and Shively, R. L. (2004). "Assesing the impact of Strategies-based Curriculum on language and culture learning abroad", *Frontiers: The Interdisciplinary Journal of Study Abroad,* 10, pp. 253-276.

Pintrich, P. R. (1999). "Taking control of research on volitional control: Challenges for future theory and research", *Learning and Individual Differences,* 11(3), pp. 335-354.

Politzer, R. L. and McGroarty, M. (1985). *An Exploratory Study of Learning Behaviors and Their Relationship to Gains in Linguistics and Communicative Competence,* Unpublished manuscript, Stanford University.

Purdie, N. and Hattie, J. (1996). "Cultural differences in the use of strategies for self-regulated learning", in *American Educational Research Journal,* 4, pp. 845-871.

Reid, J. (. (1995). *Learning Styles in ESL/EFL Classroom,* Boston, MA: Heinle and Heinle Publishers.

Rubin, J. (1975). "What the good language teachers can teach us", *TESOL Quarterly*, 9, pp. 4-51.

Rubin, J. (1987). "Learners strategies: Theoritical assumptions, reseach history and typology", in A. Wenden and J. Rubin (eds.), in *Learners Strategies and Language Learning,* Englewood Cliffs, NJ: Prentice Hall, pp.15-29.

Rubin, J., Chamot, A. U., Harris, V. and Anderson, N. J. (2007). "Intervening in the use of strategies", in A. D. Cohen and E. Macaro (eds.), *Language Learners Strategies: Thirty Years of Research and Practice*, Oxford: Oxford University Press, pp.141-160.

Sanson, C.,Weir, C., Harpster, L., and Morgan, C. (1999). "Once a boring task always a boring task? Internet as a self-regulatory mechanism", *Journal of Personality and Social Psychology,* 63, pp. 379-390.

Sasaki, M. (2004). "A multiple data-analysis of the 3.5-year development of EFL students writers", *Language Learning,* 3, pp. 525-582.

Schmidt, R., and Watanabe, Y. (2001). "Motivation, strategy use, and pedegogical preferences in foreign language", *Motivation and Second Language Acquisition.*

Sengupta, S. (2000). "An investigation into the effects of revision strategy instrcution on L2 secondary school learners", *System,* 28 (1), pp. 97-113.

Tahmasebi, A. (1999). *Vocabulary Learning Strategies and Language Proficiency,* Tehran: Tarbiat Modares University.

Tarone, E. (1983). "Some thoughts on the notion of communication strategy" in C. Faerch and G. Kasper (eds.), *Strategies in International Communication,* London: Longman, pp.61-75.

Wenden, A. L. (1982). "Learning strategies", *TESOL News Letter*, 19, pp.1-7.

Wenden, A. L., and Rubin. J. (1987). *Learning Strategies in Language Learning,* New Jersy: Prentice Hall.

Wenstein, C., and Mayor, R. (1986). "The teaching of learning strategies", in M.C. Wittrock (ed.)., *Handbook of Research on Teaching* (3rded*),* New York: Macmillan, pp. 315-327.

Wharton, G. (2000). "Language learning strategy use of bilingual foreign language learners in Singapore", *Language Learning ,* 50 (2), pp. 203-243.

Williams, M., and Burden, R. (1997). *Psychology for Language Teachers,* Cambridge: Cambridge University Press.

Winne, P. H., and Perry, N. E. (2000). "Measuring self-regulated learning", in M. Boekaerts, P. R. Pintrich and M. Zeidner (eds.), *Handbook of Self-regulation ,* San Diego, CA: Academic Press, pp. 531-566.

Wolters, C. A. (1998). "Self-regulated learning and college students' regulation of motivation", *Journal of Educational Psychology,* 90, pp. 224-235.

Wolters, C. A. (1999). "The relation between high school students' motivational regulation and their use of learning strategies", *Learning and Individual Differences,* 11(3), pp. 281-299.

Wolters, C. A. (2003). "Regulation of motivation: Evaluating an underemphasized aspect of self-regulated learning", *Educational Psychologist,* 38 (4), pp. 189-205.

Wong-Fillmore, L. (1976). *The Second Time Around: Cognitive and Social Strategies in Second Language Acquisition,* Unpublished doctoral dissertation, Standford University, Palo Alto, CA.

Zeidner, M., Boekaerts, M., and Pintrich, P. R. (2000). "Self-regulation: Directions and Challenges for future research", in M. Boekaerts P. R. Pintrich and M. Zeidner (eds.), *Handbook of Self-regulation*, San Diego: Academic Press, pp.749-768.

Zimmerman, B., and Martinez-Pones, M. (1990). "Student differences in self-regulted learning: Relating grade, sex, and giftedness to self-efficacy and strategy use", *Journal of Educational Psychology*, 82, pp. 51-59.

Appendix

The Persian Translation of Motivational Self-regulatory Strategies

جنسیت :	سطح آموزشی :	سن:	سابقه یادگیری زبان:

پرسشنامه ذیل جهت بررسی استراتژی‌های زبان‌آموزان برای کنترل انگیزه‌شان در هنگام یادگیری طراحی شده است. لطفاً پاسخ مورد نظر خود را از میان گزینه های زیر انتخاب کنید.

الف) همیشه   ب) معمولاً   ج) گاهی اوقات   د) هرگز

۱. با تبدیل مطالعه به نوعی بازی ازانجام آن لذت می‌برم.

۲. برای لذت بخش بودن انجام تمرین تلاش می کنم.

۳. برای تمرکز بیشتر بر روی تکلیفم، تغییراتی را در محیط اطرافم ایجاد می‌کنم.

۴. به"یادگیری" و" انجام تکالیف" به دیده سرگرمی می نگرم.

۵. تلاش می کنم تا مطالب آموزشی را به نوعی با زندگی شخصی خویش ارتباط دهم.

۶. نتایج منفی "درس نخواندن" و "عدم انجام تکالیف مربوط" را برای خود یادآور می شوم.

۷. سعی می‌کنم زمانی به مطالعه بپردازم که بیشترین تمرکز را دارم.

۸. انجام تکلیف را با تمرکز بربخش های جذاب آن، لذت‌بخش کنم.

۹. اهمیت گرفتن نمرات خوب را برای خود یادآوری می‌کنم.

۱۰. عواملی را که باعث حواس پرتیم می‌شوند تا حد ممکن کاهش می‌دهم.

۱۱. به خودم قول می‌دهم که اگر بخش مشخصی از تکلیف فعلی‌ام را به پایان رساندم، پس از آن زمانی را برای تفریح خود اختصاص می‌دهم.

۱۲. سعی می‌کنم میان "مطلب آموزشی" و "علایق ام" ارتباط برقرارکنم.

۱۳. با ترغیب خود به ادامه کار، توان یادگیری خود را محک می‌زنم.

۱۴. برای گرفتن نمرات بهتر، تلاش خود را بیشتر می‌کنم.

۱۵. تلاش می کنم از تجربیات قبلی ام برای یادگیری بهتر مطالب جدید استفاده کنم.

۱۶. انجام تکلیف و یادگیری در حد توانم را برای خود چالشی تلقی می‌کنم.

۱۷. به خود وعده می‌دهم که در صورت به اتمام رساندن تکلیف واگذار شده به من، به خود فرصت پرداختن بـه کار مورد علاقه‌ام را بدهم.

۱۸. به فرصت مطلوبی که پس از انجام تکلیف برای انجام کار مورد علاقه ام به دست می آورم، می اندیشم.

۱۹. اهمیت نتایج حاصل ازعملکردخوب درآزمون‌ها و تکالیف را به خود یادآوری می‌کنم.

۲۰. اهمیت تلاش زیاد برای موفقیت در آزمون ها را به خود یاد آوری می کنم.

۲۱. در ازای انجام تکلیفم، برای خود پاداش در نظر می‌گیرم.

۲۲. با خود می‌گویم هدفم از انجام تکلیف محول شده به من، صرفاً یادگیری بیشتر است.

۲۳. برای جذابیت بیشتر تمرین راهی می یابم.

۲۴. صرفاً برای یادگیری بیشتر، تلاش خود را بیشتر کنم.

۲۵. سعی می‌کنم عواملی را که باعث حواس‌پرتیم می‌شوند از میان بردارم.