ON THE RELATIONSHIP BETWEEN SELF-EFFICACY AND ENGLISH ACHIEVEMENT AMONG IRANIAN THIRD GRADE HIGH SCHOOL STUDENTS

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ABSTRACT
The present study is an attempt to investigate the relationship between self-efficacy and English achievement among third grade high school students in Northern Tehran. To measure the level of self-efficacy in participants, Foreign Language Learners’ Self-efficacy scale for Iranian Students (SEQ) contextualized Persian version, was used. In regard to the purpose and context of this study, Self-efficacy scale was translated from English into Persian. The reliability of the questionnaire in the present study was reported .85 by Cronbach’s Alpha Test. The level of participants’ self-efficacy and Pearson correlation revealed that there is a moderately significant relationship between Foreign language Learners’ (EFL) self-efficacy and English achievement ($r = .303$, $p < .01$). It suggested that respondents with higher foreign language self-efficacy were likely to have higher English scores. The findings of the present study have clear and significant implications for mainly teachers and parents who are the best determinants for boosting self-efficacy. In other words, as self-efficacy is equated with self-competence, parents and teachers can exert great influence in enhancing this competence leading to a great achievement; they should be aware of the of the origins and consequences of the notion of self-efficacy.

KEYWORDS: Self-efficacy, English achievement. EFL, Third grade high school students

INTRODUCTION
The prediction of individual differences in academic achievements is the vital key in an educational psychology. Several studies (Rhothstein, Paunonen, Rush, & king, 1994) have investigated the relationship between personality traits and academic outcomes; research in this area has proved the positive association between personality traits and academic achievement. As the number of people willing to learn English as a second/ foreign language has increased, many factors, whether related to language or not, have been investigated during the recent years to explain individual differences (e.g., Brown, 2007). Self-efficacy is one of these important personality constructs. Self-efficacy and foreign language learning as major variables have an outstanding impact on student’s level of achievement in foreign language learning. Self-efficacy
has increasingly gained attention in research related to student achievement, and a diverse body of educational research has reported the importance of improving the beliefs of self-efficacy in students leading to positive influence on learners’ achievement in EFL contexts (e.g. Rahemi, 2007; Rahimi & Abedini, 2009).

Many attempts have been taken to improve foreign language learning in Iran, but still solemn difficulties can be seen among EFL learners (Fahim & Sa’eepour, 2011). The main issue to discuss is that the educational system of Iran has a tendency to teach students “what to think” rather than “how to think” about the subject matters, this kind of learning inhibits students to discover things on their own. Taking the key function of self-efficacy, as an important affective factor, into account, it is important and necessary to pursue the investigation on the value of this factor in EFL context to shed the light on the its efficiency in terms of teaching and learning process. To the best knowledge of the researcher, there have been very few studies in Iran, particularly among third grade high school students, having investigated the role of learner self-efficacy and their English performance. For the purpose of this study, this study aims to answer this research question that “is there a significant relationship between self-efficacy and English achievement among Iranian third grade high school students?” and If yes, to what extent?

LITERATURE REVIEW

Self-efficacy is defined primarily as “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1986, p.391) and considered it to be the central element in the Social Cognitive Theory. Since Bandura introduced the concept of self-efficacy in 1977, many educational researchers (Huang & Chang, 1996; Linnenbrick & Pintrich, 2003; Mills, Pajares, & Herron, 2007) have investigated the role of self-efficacy in learning. These studies revolved around one concept and all emphasized that self-efficacy is an indispensable part of learning and a good predictor for the success of the learner.

Self-efficacy will have impact on students’ aspirations, their level of interest in academic accomplishments, and how well they prepare themselves for future careers Bandura (1997a). He identified two main types of self-efficacy. The first one pertains to achievement in specific subject areas such as language or science. The second one is related to self-regulate learning and refers to the extent to which an individual feels successful on tasks. Self-efficacy, also called perceived ability, refers to the confidence people have in their abilities that they can successfully perform a particular task (Bandura, 1997). Students with low self-efficacy quit more easily in their academic pursuits than students with high self-efficacy.

According to Bandura (1997), there are four main sources of self-efficacy/ perceived ability: enactive mastery experience, vicarious experiences, verbal persuasion, and physiological and affective states. The first way to construct is through enactive mastery experiences. Enactive mastery experience is considered the crucial source of self-efficacy as it the personal experiences of success or failure. Bandura (1997) clarifies it by saying that “successes rebuild a robust belief in one’s personal efficacy” and “failures undermine it, especially if failures occur before a sense of efficacy is firmly established” (p.80). That is, experience of success would trigger to promote
self-efficacy whereas failure lowers it. The second way is through vicarious experiences. Vicarious experience is the social comparability between the self and those enjoying the same capabilities (Bandura, 1997). That is, if a person sees someone near to his/her capabilities succeed, s/he succeeds in similar tasks. Similarly, witnessing the failure of a similar person in spite of the effort, would lead to decrease in their self-efficacy (Brown & Inouye, 1978). The third way of strengthening self-efficacy is verbal persuasion. Individuals verbally encouraged by explaining that they have the ability to make the given task, would do their best to demonstrate themselves and this will promote their self-efficacy (Bandura, 1997). Psychological and affective state of the person is the last source of self-efficacy. Bandura (1997) argues that psychological, affective, and mood states like anxiety, fatigue, and nervousness can influence self-efficacy. Negative thoughts and emotions in one’s would double the stress and lead to inadequate performance and failure (Pajares, 2002). To sum up, it can be said that self-efficacy is the interplay of information taken inactively, vicariously, socially, and physically. After formed, self-efficacy improves the quality of human functioning.

A number of factors, such as goal setting, information processing, models, encouragement, feedback, and rewards, are known to affect self-efficacy and potentially increase it. **Goal setting:** Goal setting is viewed as an important cognitive process that affects achievement outcomes. Students having a goal may feel a sense of efficacy to attain that goal and attempt hard to achieve it (Schunk, 1995). They tend to engage in the activities that lead them get close to their goal, such paying attention to the instruction, making the best use of it outside the classroom. The benefits of goal setting are dependent on three factors: the proximity of the goal, its specificity, and its difficulty (Schunk, 1995). Proximal goals contribute to enhance the performance better than distant goals because learners’ progress can be easily assessed, experience success early, and thus feel efficacious. Following easy goals is particularly effective at the beginning of instruction to build basic skills, but with the progress of instruction, pursuing more goals that are difficult is beneficial because it informs learners about their abilities. **Information processing:** Learners who think figuring out the academic material are likely to be difficult, have low self-efficacy for learning that material, and those who feel capable of understanding the material should have a high sense of efficacy (Schunk, 1995). Accordingly, self-efficacious learners work harder on tasks that they believe produce learning, and in so doing, they get information on how well they are doing. When they know the efficiency of the information processing, their motivation and self-efficacy will enhance. **Models:** Learners may acquire self-efficacy from observing their peers. When they see their similar peers succeed in doing a task, their self-efficacy would raise. On the other hand, watching a peer fail will lower it. Self-modeling raises beliefs of personal efficacy and consequently improves performance (Bandura, 1997a). **Encouragement and feedback:** Teachers and parents can play an important role in that when they encourage, persuade, and compliment the ability of the students for doing a task, they help them increase self-efficacy levels (Schunk, 1996). Offering feedback is equally beneficial to the students. Performance feedback is a kind of feedback given to the students at the time of doing a task.

Self-efficacy in academic settings revolves around two main areas (Pajares, 1996). The first area of which is link between efficacy beliefs and college major and career choices, particularly in the areas of science and mathematics (e.g., Lent & Hackett, 1987; Lent, Brown, & Larkin, 1989;
Farmer, Wardrop, Anderson, & Risinger, 1995, for a review as cited in Pajares, 1996). The second area of it has examined the relationships among efficacy beliefs and related psychological constructs, and academic motivation and achievement. Generally, if students hold a negative attitude about academia and/or do not believe they are capable of their academic performance, they will be less willing to put effort to succeed (Pajares, 2002, 2003). Pajares (1997) made a distinction between self-efficacy for achievement purposes and self-efficacy for learning. The choice of self-regulatory strategies determine these distinctions, in other words, self-regulatory strategies affect the way the students approach to new tasks and skills as opposed to their overall level of confidence in performing tasks and skills. Students’ self-efficacy for learning relies on personal and situational influences (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996).

Huang and Chang (1998) conducted a study on the relationship between reading and writing self-efficacy and achievement with four ESL students from highest-level reading and writing classes. After the interviews, class observations, examination of writing assignments and two questionnaires, it was seen that students’ self-efficacy is higher than their learning achievements and the participants’ interest and the teacher’s support influence their self-efficacy.

In 2005, Ho conducted a study to investigate the relationships between self-efficacy, collective efficacy, and English and mathematics performance of middle school students in Taiwan. The result driven from the study showed that self-efficacy was considered as an important factor for performance of English and mathematics. Those students holding higher levels of self-efficacy got good grades and were more confident in their capabilities.

Mills, et al., (2007) have conducted a study focusing on specific skills in language learning. In this research, the relationship between self-efficacy efficacy, anxiety, and gender on the listening and reading proficiency of 95 college students enrolled in a French course in United States was investigated. The results of the study indicated that there is a significant relationship between reading self-efficacy and reading proficiency for all students and there is a relationship between listening self-efficacy and listening proficiency only for female students. The finding showed that self-efficacy for self-regulation is a strong predictor of the achievement and female students revealed greater self-efficacy for self-regulation.

Around the same time, Rahemi did a study in 2007; the researcher examined English self-efficacy and EFL achievements among students with low proficiency levels majoring in humanities at the senior high school. The study included a structured questionnaire and a measure of EFL achievements and an interview with the English teachers. The analysis of the result showed that students of humanities had no tendency toward English and did not enjoy positive English self-efficacy. Besides, EFL achievements were greatly affected by English self-efficacy.

Another study was done by Rahimi and Abedini (2009) with the aim of examining the relationship between EFL learners’ self-efficacy beliefs concerning listening comprehension and listening proficiency. The sample of this study included 61 freshmen undergraduate learners of English and the means of gathering the data were author-designed self-efficacy questionnaire and a listening pre-test adopted from paper-based Longman TOEFL. The analysis of the data
gathered showed that listening comprehension self-efficacy is significantly related to listening proficiency.

Li and Wang (2010) explored the relationships between reading self-efficacy and the use of reading strategies in an EFL context. The participants included second year of English students in China University answered two questionnaires. The findings revealed that reading self-efficacy was in a positive and significant way related to the use of reading strategies. Accordingly, individuals with high self-efficacy in reading applied more reading strategies compared to those with low self-efficacy.

Wang, Schwab, Fenn, and Change (2013) surveyed a study to examine the relationship between self-efficacy and self-regulated learning strategies that learned English and Germany. They did the study with the purpose of comparing between Chinese and German participants. English language test was the means of checking the participants’ English proficiency. Self-efficacy showed similar results between both Chinese and Germans. However, the case was different with self-regulated learning strategies as Chinese showed a lower level of self-efficacy in spite the fact that their English was not extremely different from the other group (German). The results also imply that female students in both group got low level in English test but they showed higher levels of self-efficacy.

**RESEARCH QUESTION**
1) Is there any significant relationship between self-efficacy and English achievement among Iranian third grade high school students? To what extent?

**METHODOLOGY**

**Participants**
The participants of the present study were female third grade high schools students (N=400) studying at 6 high schools in Northern Tehran, Iran. Among all the 800 participants investigated, 400 students who provided complete responses to the questionnaires were selected randomly. Regarding the academic majors of the participants, 80(20%) studied humanities while 217 (54.25%) studied science, and 103 (25.75%) studied mathematics.

**Instrument**
Two instruments were administered in the present study. They were as follows:
1) Foreign Language Learners’ Self-efficacy scale for Iranian Students (SEQ): was used to assess the levels of participants’ English self-efficacy beliefs. The original developers of this instrument were Sadighi, Alavi, and Samani (2004). They designed the questionnaire primarily based on Bachman (1990, as cited in Sadighi et al, 2004). It comprises 40 items and includes two components: grammatical competence (22 items) and Textual competence (18 items). Total scores for the entire instrument range from 40 to 160, for the subscales range from 22 to 88 for grammatical competence and 18 to 72 for textual competence. Higher scores on the subscales indicate higher levels of English self-efficacy.
In regard to the purpose and context of this study, Self-efficacy scale was translated from English into Persian in a three-step process (Hambleton, 1994) with the permission of Sadighi et al, 2004, the original developers of the foreign language learners' self-efficacy for Iranian students. The reliability of the translated and tested questionnaire was .85, which indicates the internal consistency of the questionnaire. The original developers of the questionnaire, Sadighi et al. (2004), reported the reliability of .97 of the scale. Coefficient alphas for the two subscales of Foreign Language learners’ Self-efficacy, i.e. Grammatical competence, Textual competence were reported as .83, and .84, respectively. In addition, the reliability of the total scale was computed as .90.

2) English Language Achievement Test: The third-grade English language final exam was prepared by Iran Ministry of Education (Assessment and Evaluation Center) and was held throughout the country on academic year, 2012-2013. The test is developed based on contents being taught through the third year of high school, and designed to measure students' overall achievement in English, more particularly this test shows students’ achievement in mastering the content of English Book 3. This test includes subtests of spelling, vocabulary, structure, reading comprehension, and some others related to the materials covered in the course. By definition, this test can be considered as a general achievement test (Farhady, Ja'farpur, & Birjandi, 2006).

Procedure
In this section, the procedures for administering are addressed in detail. The first step was to translate the questionnaires from English to Persian since no Persian version of EFL learner self-efficacy was available. After asking for permission from Sadighi et al., the researcher performed a three-step process of translation, back-translation, and review. Finally, the data were collected at six high schools in Northern Tehran in academic year of 2013. Before the administration of questionnaires, the students were given a brief oral overview of the research project, the purpose of the study and a brief explanation or definition of the variable (self-efficacy) by the researcher herself. The participants were requested to answer the questionnaires by selecting a choice. All students complete the questionnaires in 30 minutes.

RESULTS AND DISCUSSION
In order to explore the relationship between self-efficacy and English achievement, it is utilized Pearson product - moment correlation coefficients to determine significant relationship existed between language learners’ self-efficacy and English achievement.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
<th>Skew</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>49.00</td>
<td>146.00</td>
<td>103.98</td>
<td>16.929</td>
<td>.084</td>
</tr>
<tr>
<td>Grammatical competence</td>
<td>24</td>
<td>81</td>
<td>57.82</td>
<td>9.2750</td>
<td>.009</td>
</tr>
<tr>
<td>Textual competence</td>
<td>21</td>
<td>68</td>
<td>46.147</td>
<td>8.7814</td>
<td>.068</td>
</tr>
<tr>
<td>English achievement</td>
<td>1</td>
<td>20</td>
<td>16.01</td>
<td>3.5160</td>
<td>-1.458</td>
</tr>
</tbody>
</table>
Total self-efficacy, indicates that the scores ranged from 49 to 146 (as it was mentioned in the instrument section that total scores for the entire SEQ range from 40 to 160). Comparing the mean score of grammatical competence (57.82) and textual competence (46.14) shows that participants had better performance in grammatical competence. Concerning the value of the mean, the sample had 103.98. The resulted descriptive statistics for the participants’ English achievement show that final grades range from a minimum of 1 to a maximum of 20 with a mean of 16.01 and a standard deviation of 3.51 and skewness of -1.458.

**Table 2: Correlation between Self-efficacy and English Achievement (N=400)**

<table>
<thead>
<tr>
<th></th>
<th>English Score</th>
<th>Self-efficacy</th>
<th>Grammatical Competence</th>
<th>Textual Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Score</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>.303 **</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grammatical Competence</td>
<td>.328 **</td>
<td>.940 **</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Textual Competence</td>
<td>.237 **</td>
<td>.933 **</td>
<td>.754 **</td>
<td>1</td>
</tr>
</tbody>
</table>

**.correlation is significant as .01 level (2-Tailed)

The total SEQ scores had a significantly positive correlation (r = .303, n=400 p < .01) with the total English scores. It meant that the respondents with higher foreign language self-efficacy were likely to have higher English scores. In addition, significantly positive relationship was also found among the total English score and the two-subscale SEQ scores. Among them, the correlation coefficients of the English score had much higher correlations with the subscale of grammatical competence (r = .328, p < .01) than with the subscale of textual competence (r = .237, p < .01). It suggested that students with higher English scores tended to have higher self-efficacy concerning grammatical competence than textual competence.

**Discussion**

The finding of the study in relation to the posed question is in line with the reports given by these studies mentioned in previous paragraphs. Huang and Chang (1998), Ho(2005), Mills et al. (2007), Rahemi (2007), Rahimi and Abedini (2009), Li and Wang (2010), Hashemi and Ghanizadeh (2011), Wang et al. (2013) in which they all confirm and refer to the positive relationship between language learner self-efficacy and English achievement.

An investigation into the relationship between EFL students' emotional intelligence and their sense of self-efficacy beliefs was done by Hashemi and Ghanizadeh (2011). The researcher based this study on the assumption that one of the several factors that self-efficacy associates with is the individual's emotional states. 97 EFL university students participated in this research, they were chosen by convenience sampling from different universities in Iran. The participants were asked to complete the Bar-On EI test as well as the Learners’ Self- Efficacy Survey. The result driven
from this study was that there is a significant relationship between EFL learners' emotional intelligence and their self-efficacy beliefs. And more specifically, self-actualization and stress tolerance (two components of emotional intelligence) are assumed to be positive predictors of the learners' self-efficacy.

The other study focused on the exploring the relationship between EFL learners’ self-efficacy Beliefs and their Language learning strategy use by Bonyadi, Nikou, & Shahbaz (2012). A group of 130 first year university (Urmia) students participated in their study. The findings of the researchers confirmed that there was no relationship between self-efficacy and language learning strategy use. Besides, gender did not play any important role in both self-efficacy and strategy use.

CONCLUSION
This study shed the light on the relationship between self-efficacy and English achievement among third grade students at Iranian high schools. The data were collected through the participants' responses to the questionnaires and their scores on final English exam. 400 third grade high school students in Northern Tehran participated in the survey. The affective extent of the participants was measured by Foreign Language Learning’ Self-efficacy (SEQ) questionnaire, and the participants were also asked to complete the individual’s background information. This study found a statistically significant positive relationship between foreign language learners’ self-efficacy and English achievement among the study participants. Self-efficacy beliefs turned out to be so significant in the present study. Reviewing the literature proved that the findings in the present study were consistent with the previous studies. Bandura (1986) pointed out that compliments are the best determinant for boosting self-efficacy. According to Krashen (1994), learners can succeed in EFL learning if they are equipped with greater self-efficacy. Moreover, some of the studies (Chen, 2007; Duman, 2007) displayed that students who have high self-efficacy are more successful in English.

The limitations of the Study
This study used a survey where students were supposed to answer to the questionnaire designed to measure their levels of second language self-efficacy. Surveys were taken at a time remote from the language task, a fact that may raise some skepticism as to their claim to truth. The second problem was that Self-efficacy and perfectionism being an internal attribute, is difficult to isolate and study exhaustively by means of some objective instruments. Some participants may inflate or underestimate their self-efficacy/perfectionism levels. A structured interview would be a better instrument to avoid the subjective perception of the subject in answering the self-report questionnaire, but it would be also more time consuming for the researcher. The final limitation is that only third-grade high school students constitute the sample of the study. Therefore, the findings can hardly be generalized to the students of other grades in high schools. However, the researcher believes that, high school teachers can still benefit from the findings of this research as there is not much difference between the third-grade students and those at the other grades regarding the textbook and the English language learning environment.
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