

### Ferdowsi University

Validation of Language Learning and Vocabulary

Learning Self-Efficacy Questionnaires for Iranian

High School Students and the Relationship between

Their Self-Efficacy and Passive and Productive

Vocabulary Knowledge

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#### Abstract

The perceived self-efficacy plays an important role in human life especially in learning domain. Because self efficacy is a task -specific construct (Bandura, 2006); developing a variety scales for different task is inevitable. The purpose of this research project was to develop a specific self efficacy measurement scale concerning English vocabulary learning as well as a general self efficacy scale intended to measure students's perception of their capabilities of English language learning. These two scales are designed for high school students. After filling out the questionnaire by 270 high school students, the questionnaires were validated in SPSS with help of exploratory factor analysis in a pilot study. After pilot study some items are omitted. Both questionnaires show a relatively high reliability. In the second phase of the study 90 high school students answered two designed questionnaires as well as two vocabulary level tests passive and active to find any relationship between self efficacy and students' vocabulary knowledge .Unfortunately it is not shown any significant relationship between these constructs. It can be because of very low vocabulary knowledge of students because they could not answer the vocabulary test well. The tests were not suitable for their level of vocabulary. This study at least shows that high school students do not enjoy much knowledge of vocabulary. Further studies are needed to examine the cause of their low level of vocabulary and finding a suitable vocabulary test for them. Both self efficacy questionnaires are useful to examine the impact of self efficacy on English language learning among high school students. But developing a scale suitable for university students can be beneficial.

Key word: specific self efficacy (SSE), general self efficacy (GSE), passive vocabulary knowledge, active vocabulary knowledge

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# List of Abbreviation

**SE**: Self-Efficacy

**GSE**: General Self-Efficacy

**SSE**: Specific Self-Efficacy

**ESL**: English as a second language

**EFL**: English as a foreign language

**KMO**: The Kiaser-Meyer-Olkin measure

# Introduction

#### 1.1. Background

Why are some students so successful in their education, while others are not? There are those who set high goals for themselves and peruse them persistently, whereas others are satisfied with lower grades and consider classroom as a stressful environment. The question of why some are reaching the goals of learning and others not has remained a confusing puzzle for scientists and researchers yet. They try to find pieces of this vague puzzle and discover the secret to success or failure. As Coronado-Aliegro (2006) cited from Bandura, "Another piece of the learning puzzle is how learners' belief structures influence the ways in which students approach the learning tasks, known as *self-efficacy* (SE)." In his opinion, "learners' beliefs have the potential to play a key role in the learning process by helping or hindering the learning process."

Bandura (1998) defines self-efficacy as "people's beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives" (p. 1). As Bandura (1998) says, theory and research have both shown that "self-efficacy makes a difference in how people think, feel and act." Learners who have high self-efficacy welcome challenging tasks, are creative in decision making and succeed in academic achievement. Bandura (1998) maintains that such people set themselves higher goals and stick to them; they can motivate themselves to perform the task. But people with low self-efficacy have doubts about their capabilities; they are pessimistic about their success and cannot motivate themselves, and they think failure is always with them. A low sense of self-efficacy can, then, cause depression, anxiety, helplessness, low self-esteem, and pessimistic thoughts about being successful (Schwarz & Schmitz, 2004).

Pajares and Schunk (2001) explain the relationship between self-efficacy and motivation clearly. They say that self-referent opinions like self-concept and self-efficacy are a major ingredient in the motivation process, so self-efficacy has an influence on preparing action. Self-efficacy levels can enhance or impede motivation. Bandura (1998, Motivational, ¶ 1) asserts that "self-beliefs of efficacy play a key role in the self regulation of motivation." He explains that most humans motivate themselves and guide their actions anticipatorily by the exercise of forethoughts. They form beliefs about what they can do. They set goals for themselves and plan courses of action. So, self-efficacy can be a powerful instrument in creating motivation in students to learn whatever they need.

Self-efficacy can be a determining factor in learning another language, too. Those who are high in self-efficacy are more successful in learning a second language than those with low self-efficacy levels. Therefore, it examining the relationship between self-efficacy and learning English might be worth the effort. It might reveal another piece of the confusing puzzle of learning a second or foreign language. And the task of learning English has many challenges, one of which is learning its vocabulary. Vocabulary is the fundamental building block of language, without which it would not be possible to comprehend or produce texts. There has been no research investigating the role of self-efficacy in vocabulary acquisition; therefore, this is an area of research still open to scrutiny.

#### 1.2. Statement of the Problem

Bandura (1998) introduced the construct of self-efficacy in a theory of behavior change named *social-cognitive theory*. He hypothesizes that self-efficacy can determine whether one special action will be initiated; how much effort will be expanded and how long it will be sustained in the face of barriers and failures. We can say self-efficacy expectations are beliefs about one's ability to perform a given task or behavior successfully (Bandura, 1998).

Some researchers have used a general sense of self-efficacy that refers to a general construct, one's ability across a wide range of challenging situations (Schwarzer & Schmitz, 2004). So for examining self-efficacy in relation to a variety of stressful situations, a general questionnaire can be used. Most work done in the domain of learning English has employed the general sense of self-efficacy.

However, Bandura (2006) put emphasis on the specificity of efficacy scales. Bandura (1998) says that perceived self-efficacy should be conceptualized in a situation –specific manner and says there is no "all- purpose measure" of perceived self efficacy. As he explains, the "one measure fits all" approach has limited explanatory and predictive value because efficacy belief is not a global trait. It is a set of different self-beliefs linked to distinct domains of functioning. According to Zimmerman (1995), "Self-efficacy is a content-specific judgment that is closely tied to the specific domain or situation in question (as cited in Bong & Hocevar, 2002, p. 144).

Bong and Hocevar's (2002) research also verifies this hypothesis. The results of the experiment by Bong and Hocevar (2002) showed that math problem self-efficacy was a better predicator of math problem solving performance than math courses self-efficacy. So, the more specific the measure of self-efficacy, the more valid it will be as a predicator of performance. Therefore, it would be better to develop a specific self-efficacy questionnaire to measure a construct in relation to its self-efficacy effects.

In an interesting study done by Bong and Hocevar (2002), different measures of academic self-efficacy beliefs across varied subject areas and samples were examined. The results confirmed the content specificity of self-efficacy perceptions. Students responded differently depending on what subject matter was being asked by each question. Also students' self-efficacy responses in the same domain assessed by different methods were more highly correlated than self-efficacy scores in different domains assessed by either the same or different methods.

There have also been several studies in the realm of education, or more specifically, language learning to assess students' self-efficacy. Ghorieshi (2003) examined the relationship between EFL learners' oral communication apprehension and general perceived self-efficacy. Ghorieshi used the most general questionnaire, General Self-Efficacy Scale (GSE). But as Zimmerman (1995) emphasizes, self-efficacy is a context specific construct, and it was better if he designed a self-efficacy questionnaire in relation to oral communication. Then he could better examine the effect of self-efficacy on the student's apprehension in oral communication. Surely, it would have yielded more useful results (as cited in Ghorieshi,2003).

Rahemi (n. d.) developed a more specific Questionnaire, a self-efficacy questionnaire in relation to learning English as a foreign language. In her research, she investigated self-efficacy and its relationship to high school students' level of English learning. The construct she selected \_ English Learning \_ is a relatively general construct, but investigating the effect of self-efficacy on English learning needs a questionnaire focusing just on challenges in language learning. Therefore, it would give more precise results than Ghorieshi's research.

In another research, Mikulecky, Lloyd and Haung (1996) developed a still more specific questionnaire. They investigated self-efficacy and its effect on English as second language (ESL) literacy. They designed a specific self-efficacy questionnaire that focused on reading and writing in ESL. However, to the researcher's best knowledge, there is no specific self-efficacy questionnaire designed to measure the students' self-efficacy in learning English vocabulary.

Vocabulary is the building block of language, and learning a second or foreign language vocabulary is one of the most important tasks in front of language learners; no one can deny the importance of learning vocabulary (Sanaoui, 1995). Nevertheless, there is no previous work done in this domain. There has been no specific self-efficacy questionnaires designed to assess the student's self-efficacy in learning vocabulary, and the need for such a questionnaire is ever more highly felt in

the EFL educational domain. There is nothing in the literature to show whether such a measure has any relationship with the actual vocabulary acquisition outcomes or not.

## 1.3. Significance of the Study

Scholars have been trying to explain the complexities of the language learning since years ago. Some of them have suggested cognitive factors to solve this riddle, and others have presented affective factors. But the complex process of second language acquisition cannot be adequately explained solely with either cognitive or affective factors. Both of them might have a say, and so, to solve this puzzle and find the missing pieces, we should examine both domains of cognitive and affective factors.

Self-referent thoughts play an important role among affective factors, and self-efficacy is one of these self-referent thoughts. Designing general and specific self-efficacy questionnaires and validating them will give practitioners useful tools to disclose the reasons for success or failure of the students in learning a second or foreign language, in general and its vocabulary, in particular. Such useful tools may shed light on some dark points in the complexity of language learning. If we find a way to measure the level of self-efficacy of our students, we might be able to strengthen their self-efficacies and motivate them to learn. We may be able to convince them that they can learn whatever they want.

Also, self-efficacy can be a powerful instrument in predicting human behavior. Bandura (1998) asserts that learner's self-efficacy has proved to be a much more consistent predictor of behavior than other variables (as cited in Rahemi, n. d.). Self-efficacy exerts a critical influence on relatively all aspects of students' learning. According to Bandura (2006), "Multifaceted efficacy scales not only have predictive utility but provide insights into the dynamics of self-management behavior." So, Bandura (2006) considers sound assessment of efficacy beliefs to be crucial to understanding and predicting human behavior. By developing a valid scale for self-

efficacy, therefore, we can help teachers predict as well as understand performance of their students, and so guide their students better toward achieving their goals.

#### 1.4. Purpose of the Study

In view of the above discussions, the present study aimed at designing and validating a more general language learning self-efficacy questionnaire and a specific self-efficacy questionnaire for vocabulary acquisition. Such questionnaires can help reveal how efficacious Iranian high school students are in learning English language and English vocabulary.

In a second phase of the study, the researchers tried to examine if there was any relationship between the students' language learning and vocabulary learning self-efficacies. Some researchers believe that some people are generally more self-efficacious than others, and they have higher self-efficacies no matter what area of life or education they are dealing with. Therefore, a second aim of this study was to look into the difference between language learning and vocabulary learning self-efficacies.

Moreover, this study set to determine the relationship between the students' self-efficacy and their vocabulary level. The aim was to see if those with higher vocabulary acquisition self-efficacy enjoyed a larger vocabulary repertoire, and also if they could better use their vocabulary knowledge productivity in comparison with those with lower self-efficacy for vocabulary learning. Many researches focus on the relationship between self-efficacy and various aspects of language learning. This research set to find the relationship between self-efficacy and vocabulary knowledge, which can be useful to facilitate the challenge of learning words.

Although no cause-and-effect relationship can be established between the two variables, at least the development of such questionnaires will give teachers a tool for predicting and understanding their students' vocabulary learning success or failure,

which might prove helpful in enabling learners to change their negative beliefs and hence reach higher levels of success in acquiring second language words.

#### 1.5. Research Questions

This study, then, set to answer the following questions:

- Q1: Is the Perceived Self-Efficacy Questionnaire for learning English as a foreign language devised by the researcher a reliable and valid tool for assessing the learners' language learning self-efficacy beliefs?
- Q2: Is the Perceived Self-Efficacy Questionnaire for learning English vocabulary devised by the researcher a reliable and valid tool for assessing the learners' vocabulary learning self-efficacy beliefs?
- Q3: a. Is there any significant difference between the learners' language learning and vocabulary learning self-efficacies?
  - b. Is there any relationship between the learners' perceived self-efficacy for English language learning and their perceived self-efficacy for learning English vocabulary?
- Q4: Is there any relationship between the learners' perceived self-efficacy for English language learning and their passive and productive knowledge of words?
- Q5: Is there any relationship between the learners' perceived self-efficacy for learning English vocabulary and their passive and productive knowledge of words?

### 1.6. Research Hypotheses

The following null hypotheses are, then, proposed:

- H01: The Perceived Self-Efficacy Questionnaire for learning English as a foreign language devised by the researcher is a not reliable and valid tool for assessing the learners' language learning self-efficacy beliefs.
- H02: The Perceived Self-Efficacy Questionnaire for learning English vocabulary devised by the researcher is not a reliable and valid tool for assessing the learners' vocabulary learning self-efficacy beliefs.
- H03: a. There is no significant difference between the learners' perceived self-efficacy for language learning and that for vocabulary learning.
  - b. There is no relationship between the learners' perceived self-efficacy for English language learning and their perceived self-efficacy of learning English vocabulary.
- H04: There is no relationship between learners' perceived self-efficacy for English language learning and their passive and productive knowledge of words.
- H05: There is no relationship between the learners' perceived self-efficacy for learning English vocabulary and their passive and productive knowledge of words?

### 1.7. Operational Definitions

Self-Efficacy for English Language Learning: It is the participants' scores on the Language Learning Self-efficacy Questionnaire devised and validated in this study.

Self-Efficacy for Learning English Vocabulary: It is the participants' scores on the Vocabulary Learning Self-efficacy Questionnaire devised and validated in this study.

Passive Vocabulary Level: It is the participants' scores on the Nation's 1990Vocabulary Levels Tests, Passive version.

**Productive Vocabulary Level:** It is the participants' scores on the Laufer and Nation's (1995) Vocabulary Levels Tests, Productive version.

### 1.8. Delimitations of the Study

The main limitation of the study was that the participants taking part in this study were high school students with limited proficiency and vocabulary levels. This might greatly affect the results obtained.

In this chapter, we began with a short introduction to the research followed by the statement of the problem and significance and purpose of the study. Then the research question and hypothesis were introduced and at the end the operational definition and limitation of the study were discussed. The next chapter deals with a review of the literature and research already conducted on the topic of self-efficacy and vocabulary.

# **Review of the Related Literature**

#### 2.0. Introduction

This review starts with the explanation of the social cognitive theory as the underlying principle of self-efficacy. Then, the definition of self-efficacy is presented, and the role of self-efficacy in different domains like health, proficiency, achievement, etc. is explained. Next, it provides details about the relationship between learning and self-efficacy. Introducing the sources of self-efficacy is the next part of this review: What things make self-efficacy stronger and what things decrease its power. The next part deals with the topic of General Self-Efficacy (GSE) and Specific Self-Efficacy (SSE). Then, the power of self-efficacy as a predictive tool is clarified. How to measure self-efficacy is the next part of this review. And at the end, the differences between self-efficacy and other similar constructs are described.

### 2.1. Social Cognitive Theory

For many years, scholars and researchers have been looking for the mechanisms and causes of human behavior and motivation. Human behavior has always been a puzzle for scholars with many missing pieces. Everyone tries to find one piece of this vague puzzle and reveal another face of this riddle. Bandura is one such scholar trying to discover the human being puzzle. He believes that individuals' behavior is determined by the interplay of three factors (Mills, Pajares, & Herron, 2005, p. 419), and he introduces a model of causation between these three factors; he named this model the Social Cognitive Theory. These factors are behavior, personal characteristics and environment, which influence each other bidirectionally (Bandura, 1989, p. 2). It is not a bad idea to learn more about the relationships between these factors to be able to find out the importance of self-efficacy in human behavior.

The first one is the relationship between behavior and personal characteristics. Human's beliefs, expectations, intentions and self perceptions shape behavior. As Bandura (1989) emphasizes, "What people think, believe, and feel affect how they behave." And, in turn, the extrinsic effects of their actions partly determine their thoughts and emotional reactions.

The second is the relationship between environment and personal characteristics. Social influences convey information by modeling and instruction and evoke emotional reactions. They cause developments and changes in beliefs, expectations, and intentions. Bandura (1989) believes that learning not only occurs by active participation of learners but also by observing a model's accomplishments. The social presence of others as models plays a meaningful role in learning and self-efficacy beliefs (as cited in Kim, 2004). Moreover, people's physical characteristics such as their age, size, race and sex can affect the reactions of the society to their characteristics (Bandura, 1989).

The third the relationship is the one between behavior and environment. "People are both producers and products of their environment" (Bandura, 1989). In everyday life, behavior changes environmental conditions, and, in turn, by the very condition it creates, it itself is altered (Bandura, 1989, p. 4).

By attending to these three reciprocal relationships, people are neither governed by their inner forces, nor controlled by the environment. They, in fact, function in a network of reciprocally interplay influences.

#### **Behavior**

#### Environment

#### Personal Characteristics

Bandura's (1989) theory is a reaction to behaviorism. Behavior theory considers all human behavior to be learned; however, Bandura found that behavior theory is unable to explain aggressive behavior in adolescents (Bently, 2002, p. 1). In his opinion, we don't live in the heyday of structuralism to believe in just observable phenomena; there are many unobservable reasons and causes behind human behavior. Based on Bandura's theory, one of the causes is beliefs; beliefs, self perceptions and intentions form one angle of Bandura's (1989) triangular model. Bandura (1989) believes that knowledge of these factors can alter the course of life path and provide guidance for how to achieve a valued future. By controlling each of these factors, human beings can change their lives.

Based on the Social cognitive theory, two factors influence behavior: Personal characteristics and environment. And which one of these factors is more controllable by human beings? Surely it is personal characteristics. Bandura (2001) argues that people function as anticipative, purposive, and practical regulators of their motivation and actions (as cited in Bandura & Locke, 2003, p. 87). He mentions that self-referent thoughts function as the mediation between knowledge and action. As Pajares (1996) states, an individual's beliefs are a "filter through which new phenomena are interpreted and subsequent behavior mediated" (as cited in Lorsbach & Jinks, 1999, p. 161). Through the process of self-reflection, individuals evaluate their thoughts, motivate behavior and change their thinking and subsequent behavior (Mills, Pajares, & Herron, 2006, p. 419). And among these self- referent thoughts, none is more central or pervasive than beliefs of personal efficacy (Bandura, 1989). The theory,