Sangram Kishore Lenka
Scholar, PhD- English
Sunrise University
Rajasthan, India
sangram4sangram@gmail.com

SOURCES OF PERCEIVED BELIEFS AND THEIR CONTRIBUTION TO THE ENGLISH-SPEAKING SELF-EFFICACY

Abstract

The current article deals with the data collected for the PhD project carried out by the same author. The article talks about the sources of self-efficacy of the participants and how these sources contribute to the final strength of self-efficacy. The data was collected from a group of L2 English language learners .The focus of the data analysis in this article was to find out the contribution of the self-efficacy sources to its final strength in L2 English speaking context. Findings indicate that the Mastery Experience is the strongest source of all and contribute maximum to the final strength of self-efficacy in L2 English speaking context.

***Key words**: Contribution, sources of self-efficacy, L2 English Speaking*

1. Introduction:

Language learning in L2 context involves various social and psychomotor factors. Many such factors have been correlated by researchers. Important correlations have been established between learner beliefs and various other aspects of teaching-learning issues. Connections have been found between learner beliefs and learner autonomy (e.g. Cotterall, 1995), beliefs and anxiety (e.g. Horwitz, 1989; Truott, 1995) and between beliefs and strategy use (e.g. Abraham and Vann, 19887; Yang, 1999). But, there has been hardly any study that highlights the contributions of various sources of self-efficacy to its final strength. If at all they contribute, whether the contribution is linear or gets affected, up and down in terms of their statistical strength. This article terms it as the linear contribution of the sources to the final Self-efficacy.

This article deals with the facts and figures endorsed in the PhD research dissertation completed by the current author in which the author has identified the above issue as a gap in the literature.

2. Related Literature

Self-efficacy:

Self-efficacy, first came into highlight decades ago by Albert Bandura. Bandura (1977) stated that people's perceived belief about their capabilities and about the outcomes of their efforts powerfully influence the ways they behave. As stated by Bandura (1986) in his social cognitive theory, these perceived beliefs in capabilities and outcomes help determine the choices people make, the effort they put in some work, the persistence and perseverance they display in the face of difficulties in life.

Woolfolk (in Shaughness,2004) pointed that instructors who plan to guide learners to enhance their academic skills, should first pay immediate attention to the sources of the learners' self-efficacy.

Research in the field of human psychology has confirmed that one has to believe that he/she can perform, to accept the task for performance. In the field of second language (L2) motivation, though hasn't received much attention yet, self-efficacy is being gradually focused. Research suggests that learners' perception of their ability of performance is a deciding factor whether they will accept the task (McIntyre, 1994 & Charos, 1996). Acceptance of the task or rejecting/choice of not accepting/ignoring the task is what describes one's ***attitude***. In other words, an individual's attitude (the choice of accepting/ignoring) is determined by his/her perception of ability for the task. One such competency belief is ***Self-efficacy*** – an individual's belief in his/her capabilities to execute the necessary steps (Plan, Prepare and Perform- 3Ps) leading to the achievement of a given outcome (Bandura, 1997).

It is important to note that few studies have examined the strength of the linear contributions of various sources of the Self-efficacy. The strength of the contributions of the self-efficacy will ensure the motivation for a task. As Lightbrown observes that "little research has directly investigated how pedagogy interacts with motivation in second language classrooms "(p.65), Hall and Verplaeste, 2002) marked, "language learning is not a strictly individual,

cognitive act, equivalent across learners and situations. Rather it is presumed to be a fundamentally social enterprise, jointly constructed and intrinsically linked to learners' repeated and regular participation in their classroom activities" (p.11). Accepting the challenge, planning for it, preparing and executing are what constitutes one's attitude to a task.

Self-efficacy grows through four different experiences (Bandura, 1986).They are Enactive Mastery Experience, Vicarious Experience, Verbal Persuasion and Physiological and Emotional Experience.

1.1. Mastery Experience (ME)

Mastery Experience (Known as enactive mastery experience) refers to performance attainment through direct experience with the task on target. This is the most powerful and strongest source of self-efficacy (Bandura, 1977, 1986, 1997; Chowdhury et al., 2002; Dawes, Horan, & Hackett, 2000; Wise & Turnell, 2001; Wood & Bandura, 1989; Usher & Pajaraes, 2008). Success in one task enhances the self-efficacy for a similar task afterwards and failure lowers it in the same manner. Schemata plays a major role in influencing the environmental factor that individuals come across prior to, during, and after the task challenge is accepted (Bandura, 1997). If one comes with strong sense of self-efficacy to the task, the success is more likely to happen with relation to the task at hand now. Success is the current task will enhance the level of efficacy for similar future tasks. In other words, "Self-efficacy is both the product and producer of one's direct experiences" (Bandura, 1997, p. 82).

The relative value of the ME depends on the level of task difficulty. If the task is considered easy, the performer doesn't get a good assessment of his/her own ability. Difficult tasks help learner assess more about one's ability and the task (Bandura, 1997).

People also draw inferences from the amount of effort they put in for a given task. Generally, it is perceived that the more effort a task needs, the lower is the self-efficacy indication. The easier the task appears to be, the higher seems to be the efficacy level. Furthermore, when one struggles with a task that he/she considers easier for others, it lowers his/her efficacy level and when one finds at ease with a task that he/she finds others struggling with, it boosts his/her efficacy level (Bandura,1997).

In addition, a high sense of efficacy drawn from mastery experience of a task can generalize to another similar, yet different, task (Bandura, 1997; Zimmerman, 1995). For example, an L2 Arabic learner, who has successful experience in learning Arabic, will feel efficacious in making attempt to learn Chinese.

All these claims are based on strong efficacy antecedents. As discussed earlier, strong mastery experiences are a source of strong self-efficacy while adverse experiences weaken it. Despite this assumption, there has been no empirical evidence, in relation to L2 English speaking skills that strong mastery experiences enhance self-efficacy level. Therefore, question, in this context, arises as follows. Research question -1 : ***Does a strong sense of mastery experience in L2 English speaking skills contribute to strong self-efficacy?***

1.2. Vicarious Experience (VE)

Vicarious experience is known as modeling. Individuals comparatively judge their capabilities parallel to the capabilities of others (Bandura,1977,1986,1997; Wood & Bandura ,1989). Outperforming others or envisioning one's own capabilities being able to outperform others will raise his/her self-efficacy and similarly failing at a task in which others might succeed will lower the self-efficacy level. This is the second most powerful source of self-eficacy (Chowdhury et al.2002 ; Wise & Trunell, 2001) . "Proficient models build self-beliefs of capability by conveying to observers effective strategies for managing different situations " (Wood & Bandura , 1989, p.364).

The concept of Vicarious Experience is based on the observations and learning from experience of others. Unlike Mastery Experience, the Vicarious Experience does not require individual continuous practice and efforts to learn and practice. Instead, the VE can be created by only observing actions of someone's achievements for the related task. As defined by Blonder, Benny, and Jones (2014), "Vicarious experience refers to the observation of actions of someone's attainment in a related task" (p. 4). This concept clearly explains the importance of observing for learning. However, as compared to practice and continuous efforts of the ME, the VE is considered as weaker with less influence on self-efficacy expectancy. As described by Loo

and Choy (2013), the concept of VE is associated with the learning experience in circumstances, where an individual do not get sufficient opportunity to practice or utilize his or her previous experience, under such situation, vicarious experience is an effective approach to learn by seeing and observing others performing the task without any negative consequences. The observation can help in generating efficacy expectation to improve the performance by intensifying and persisting in his efforts (Loo & Choy, 2013).

"If people perceive the models as being very different from themselves, their perceived self-efficacy belief is not appreciably influenced by the model's behavior and actions" (Blonder, Benny, & Jones, 2014, p. 5). Therefore, it is important to seek proficient models, which can better suit the competencies level and help in determining the influence on their behavior and thinking. This approach is also considered affective as it allows transforming knowledge and strategies that are used for "managing environmental demands" (Blonder, Benny, & Jones, 2014, p. 5). According to Bandura (1997), there are four models of vicarious experience. They are (i) Actual Modeling (ii) Symbolic Modelling (iii) Self-modelling (iv) Cognitive Modelling. The modeling after the observation of others in one's immediate social environments is called Actual modeling.

In an academic setup, for a student, observing peers and co-participants sets actual modeling. Symbolic modeling happens through media-audio & video of others. Individuals have their own thoughts about the extent of capability- own and others. They verbalize this thought process time to time. Some individual also like to record and playback their own audio and video. This levels their self-efficacy through self-modeling. Some individuals visualize their own performance or sets of continuous progress in some more complex tasks. This what Bandura describes as cognitive self-modeling or imaginary experience (Maddux, 2005).

Earlier studies have confirmed that vicarious experience helps enhance the level of self-efficacy in an individual. But this has not yet been studied in relation to any language learning skills which ought to support studies with reference to other skills of language learning. Therefore, a question arises in the context of the current research. Research question-2: **Does a**

strong sense of Vicarious Experience in L2 English speaking skills contribute to strong English Speaking Self-efficacy?

1.3. Verbal Persuasion (VP) :

Another important concept associated with the self-efficacy is the concept of Verbal Persuasion, also known as social persuasion, which plays an important role in the process of promoting learning. According to Loo and Choy (2013), Verbal Persuasion can be described as "feedback, judgments and appraisals from significant others about engaging in related task" (p. 87). On the other hand, Blonder, Benny, and Jones, (2014) discussed the concept as "If people can be convinced verbally by others that they possess the capabilities needed to master a given task, they are likely to invest greater effort and sustain it when problems arise" (Bandura cited in Blonder, Benny, and Jones, 2014, p. 5).

Some individuals make good significant efforts to accomplish tasks when they are persuaded by others. Then, if they succeed, their self-efficacy level goes up. On the other hand, if they fail, their efficacy level goes down. Verbal persuasion is considered the third most powerful source of self-efficacy (Chowdhury et al.2002; Wise & Turnell,2001). If people receive realistic encouragement, they will like to exert greater effort and become successful than being troubled by self-doubts" (Wood & Bandura, 1989, p.365). Bandura (1997) pointed that persuasion in all contexts will not produce the same result. According to him, evaluative feedback, in the initial stage, will bring out good results. Feedback from people who are considered by the performer as unfamiliar/less capable will not help increase Self-efficacy. Bandura notes that unrealistic praise will soon be disconfirmed by experience. Eden and Kinner (1991) note that Israeli soldiers' Self-efficacy for assignment to special-forces was increased through verbal persuasion. In another study by Hagen et al. (1998), it is found that Verbal Persuasion, along with Vicarious Experience, increased self-efficacy of pre-service teachers. In another study, it is found that social persuasion predicts educational and occupational Self-efficacy in Inner city, Hispanic-American adolescents (Chin & Kameoka, 2002). In another study (Jackson, 2002; Schunk & Swartz, 1993) it is noted that an increase in Self-efficacy due to Verbal Persuasion has been marked increase academic achievement.

Influence, response, feedback, and guidance from the social environment and other people can play an important role in increasing self-efficacy and promoting the ability to perform a task. For example, in the process of learning, feedback provided by teacher can play an important role in overcoming weaknesses of students and it enhances their overall performance. Teachers' positive and encouraging responses in the language learning can play as a motivational factor to stimulate the learning process. Therefore, Verbal Persuasion also requires right framing of performance feedback to ensure that the feedback and judgment result in positive influence. This influence can be enhanced when Verbal Persuasion is combined with mastery and vicarious experience. This combination can result in enhancing the overall impact on the individual capacity. As defined by Bandura, "it is easier to sustain a sense of efficacy, especially when struggling with difficulties, if significant others express faith in one's capabilities than if they convey doubts" (Bandura quoted by Loo & Choy, 2013, p. 88).

As compared to Loo and Choy (2013), Blonder, Benny, and Jones, (2014) also explained the negative impact of Verbal Persuasion and how it can result in negative influence on learning process. According to Blonder, Benny, and Jones, (2014), it is the responsibility of teacher to understand and identify where they need encouragement, motivation, and persuasion because "Unrealistic praise or success can lead to disappointing results, and subsequently lead to lowered self-efficacy beliefs" (Bandura cited in Blonder, Benny, and Jones, 2014, p. 5).

In various cases, it is important that teacher must develop effective skills to promote the learning process that can enhance the overall output of the student by developing the necessary skills that can help the student in accomplishing a given task. This practice can strengthen the self-efficacy beliefs of the students. However, it is more difficult to develop high self-efficacy beliefs through social persuasion. Unreal or false persuasion can result in negative impact on individuals, as "people who are convinced that they lack the necessary capabilities tend to avoid challenging tasks and give up quickly in the face of difficulties" (Blonder, Benny, and Jones, 2014, p. 5). Therefore, it is important that teacher or mentor must be careful about appreciating and praising the learners. "Effective mentors (successful self-efficacy builders) can promote a positive sense of efficacy by structuring situations that bring about success and enabling people to avoid situations in which they are likely to fail. Good mentors measure success in terms of

self-improvement rather than by triumphs over others" (Bandura cited in Blonder, Benny, and Jones, 2014, p. 5).

Despite the studies above, no author has attempted any study to investigate how or why not the Verbal Persuasion increases Self-efficacy in language learning. Therefore, a question arises in the context of the current research. Research question-3 : **Does realistic verbal persuasion in L2 English speaking skills contribute to strong English-Speaking self-efficacy?**

1.4. Physiological and Emotional Experience (P &EE) :

The fourth source of self-efficacy is physiological states, also called the affective arousal (Smith, 2002) and emotional arousal (Conger & Kanungo, 1988, Hagen et al., 1998). Bandura states that individuals determine, via physiological and affective states, whether he/she is capable of a given task at hand. As discussed by Loo and Choy (2013) emotional and psychological experience as a physical or emotional sensation that an individual experiences during performance of a task. Various emotions and psychological experiences affect the performance or task of an individual such as anxiety, fatigue and composure (Loo & Choy, 2013). Therefore, not only social or external environment affects the self-efficacy of an individual, instead, internal environment or the psychological condition also affects the performance of individuals. As stated by Loo and Choy (2013), "It is worth noting that high emotional arousal can debilitate performance because people often read their physiological activation in stressful or taxing situations as signs of vulnerability to dysfunction" (Loo and Choy, 2013, p. 88).

One more important concept in the psychological self-efficacy is that the strong influence of external environment and situations as well as the interpretation or meaning given to the specific situation. Blonder, Benny, and Jones (2014), also explained the negative impact of the psychological factors and the way these factors affect the capabilities of an individual. Therefore, physiological arousal acts as an indicator to reflect their personal competence. For example, stress, anxiety, tension, depression, and many other such psychological states can result in negative impact on the individuals. The mental status is the primary factor for affecting the performance and self-efficacy of an individual. However, the major problem is associated with

the way; these problems are interpreted and perceived. As defined by Bandura, increase in the "physical and emotional well-being and reducing negative emotional states strengthen self-efficacy beliefs" (Blonder, Benny, & Jones, 2014, p. 5).

Bandura (1997) posits that individuals differ in their attention they pay to somatic information. If an individual interprets his/her increased heart rate and sweat as the cause of having run upstairs, then his sense of efficacy will not be affected. But if he/she interprets the same heart rate and sweat as the cause of giving a speech which he is not prepared for, then, his/her efficacy will be adversely affected. Those who consider emotional arousal as a sign of inadequacy experience a fall in efficacy level. Fatigue is attributed to incapability (Wood, Bandura, 1989). Conger and Kanungo (1988) describe this as follows:

> "Emotional arousal states that result from stress, fear, anxiety, depression and so forth, both on and off the job, can lower self-efficacy expectations. Individuals are more likely to feel competent when they are not experiencing strong aversive arousal. Empowerment techniques and strategies that provide emotional support for subordinates and that create supportive and trusting group atmosphere can be more effective in strengthening self-efficacy beliefs" (p.479).

In another study that examined the social conventions of tennis, the adverse impact of negative mood was found to be greater among low-efficacy players than high-efficacy players (Ryska, 2002).

In teaching and learning process, or in English language speaking and learning, the major factor that affects the performance is the way teacher understand, interpret, or integrate the information (Blonder, Benny, & Jones, 2014). In case if the teacher is facing psychological disturbance, anxiety, and any other issue, it is not possible to communicate the message effectively. Thus, in many cases, mood of teacher can affect the performance of the student such as a pessimistic and low mood result in different interpretation and can result in negative impact on learners. Therefore, it is the responsibility of teachers to decide how well they can perform in a certain situation.

However, the studies above have established the fact that physiological and emotional arousal has an impact on the efficacy level. But no study has been found addressing the same with relation to English language speaking skills. Therefore, in the context of this research, a question arises as follows. Research question-4 : **Does the affective arousal in L2 English speaking skills contribute to English speaking Self-efficacy?**

3. Methods

The data discussed in this article were drawn from the main data collected for the purpose of the PhD study carried out by the current author. A simple average percentage of various factors were calculated to draw the conclusion for this article. However, the main data for the PhD was computed and analyzed, following a mixed method approach.

3.1. Procedure

A questionnaire was served carrying 44 items that included 32 items of Self-efficacy. These 32 items included eight items for each of the four sources of the self-efficacy. Data for this article mainly comes from these 32 items. Furthermore, the data discussed herein represent the data collected only from the focus group of the PhD study (N=9). No qualitative data has been incorporated to the current analysis (for this article).

Each source of self-efficacy for the focus group participants were taken out on excel sheet. The score that the participants achieved were out of 40 for each source. The total score 40 for each source was converted to 100 % and the scores achieved by the participants were computed to a percentage accordingly (score achieved, divided by total score and multiplied by 100). The final score of self-efficacy against each participants name was also computed in the similar way. Then, a linear comparison was done to observe the increase and decrease on a linear movement.

3.2. Data Analysis

	1st Participant	2nd Participant	3rd Participant	4th Participant	5th Participant	6th Participant	7th Participant	8th Participant	9th Participant

ME	**55 %**	**48.75 %**	**66.25 %**	**52.25 %**	**47.5%**	**51.25 %**	**65%**	**55%**	**63.75 %**
Total SE	**41%**	**37.81 %**	**42.18 %**	**41.25 %**	**36.56 %**	**39.06 %**	**45.93 %**	**45.31 %**	**45.62 %**

Table-1

In table-1, data shows the linear distribution of the contribution made by the ME to the final Self-efficacy of the participants in the L2 English speaking context. Except only one participant, in whose case the contribution isn't linear, the rest of the participants amounting to 88.8% in number are found with higher contribution to their self-efficacy by the beliefs developed through the Mastery Experience. Therefore, the distribution claims that the ME is a rich source of the Self-efficacy and positively contributes to it.

	1st Participant	**2nd Participant**	**3rd Participant**	**4th Participant**	**5th Participant**	**6th Participant**	**7th Participant**	**8th Participant**	**9th Participant**
VE	**45%**	**36.25 %**	**43.75 %**	**41.25 %**	**35%**	**35%**	**41.25 %**	**46.25 %**	**45.62 %**
Total SE	**41%**	**37.81 %**	**42.18 %**	**41.25 %**	**36.56 %**	**39.06 %**	**45.93 %**	**45.31 %**	**45.62 %**

Table-2

In table-2, data shows the linear distribution of the contribution made by the VE to the final Self-efficacy of the participants in the L2 English speaking context. More than sixty six per cent (66.6 %) participants are found with higher and linear contribution to their self-efficacy by the beliefs developed through the Vicarious Experience. This figure may not be strong evidence so as to prove that the contribution is completely linear. But, there is enough linearity in the data distribution since the deviation is half of the linearity. Therefore, this article doesn't claim the linear contribution of the VE to the final SE. However, it claims that the VE is a rich source of the Self-efficacy and positively contributes to it.

	1st	**2nd**	**3rd**	**4th**	**5th**	**6th**	**7th**	**8th**	**9th**

	Participant	Participant	Participant	Participant	Participant	Participant	Participant	Participant	Participant
VP	**41.25%**	**37.5%**	**36.25 %**	**40%**	**42.5**	**37.5%**	**45%**	**48.75 %**	**46.25 %**
Total SE	**41%**	**37.81 %**	**42.18 %**	**41.25 %**	**36.56 %**	**39.06 %**	**45.93 %**	**45.31 %**	**45.62 %**

Table-3

Almost similar to the VE, data in table-3 shows that 66.6 % participants are found with higher and linear contribution to their self-efficacy by the beliefs developed through the Verbal Persuasion. This figure, though not higher enough, is strong enough to mark that there is enough linearity in the data distribution since the deviation is half of the linearity. Therefore, this article doesn't claim the linear contribution of the VP to the final SE. However, it claims that the VP is a rich source of the Self-efficacy and positively contributes to it.

	1st Participant	2nd Participant	3rd Participant	4th Participant	5th Participant	6th Participant	7th Participant	8th Participant	9th Participant
P&EE	**23.75 %**	**28.75 %**	**28.75 %**	**30%**	**21.25 %**	**32.5%**	**31.5%**	**31.5%**	**25%**
Total SE	**41%**	**37.81 %**	**42.18 %**	**41.25 %**	**36.56 %**	**39.06 %**	**45.93 %**	**45.31 %**	**45.62 %**

Table-4

Yet again, similar to the VP and the VE, data in table-4 shows that 66.6 % participants are found with linear contribution to their final self-efficacy by the beliefs developed through the Physiological and Emotional Experience. This figure, too is not higher enough, but is strong enough to mark that there is enough linearity in the data distribution since the deviation is half (33.3%) of the linearity. Therefore, this article doesn't claim the linear contribution of the P & EE to the final SE. However, P&EE statistically proves to be contributory to the final Self-efficacy of the participants.

The extent to which all these sources contribute to the Self-efficacy hasn't been experimented in the study, which this article relates to. Therefore, this article has no absolute claim over the strength of the sources discussed herein.

4. Findings

This article aimed at answering four basic questions. They are given with answers as follows:

Question-1: Does a strong sense of mastery experience in L2 English speaking skills contribute to strong self-efficacy?

Answer: Mastery experiences are the strongest source of self-efficacy because they are the most authentic indicators of one's capabilities (e.g., Bandura, 1997). This article has found the participants' mastery experience largely contributing to their overall self-efficacy.

Question-2: Does a strong sense of Vicarious Experience in L2 English speaking skills contribute to strong English Speaking Self-efficacy?

Answer: As Bandura has been cited(by Franziska,2016), Vicarious experiences provide information about modeled attainments of others, which influence one's self-efficacy beliefs by demonstrating and transferring competencies (model learning) and by providing a point of reference for social comparison. The current article also found that most of the participants respond positively to and utilize the influences of the good modelling (Vicarious Experiences) that eventually contributes a lot to their final Self-efficacy in L2 contexts.

Question-3: Does realistic verbal persuasion in L2 English speaking skills contribute to strong English-Speaking self-efficacy?

Answer: Verbal persuasion is a significant source of self-efficacy. "Significant others" can convince people of their capabilities, especially if this persuasion comes from a credible source (Bandura, 1997; p. 101).The data analyzed for this article, combined with Bandura's statement, can be evidenced as confirming that Verbal Persuasion is the second powerful source of the Self-efficacy and a realistic Verbal Persuasion in L2 English speaking skills contributes to strong English-Speaking Self-efficacy.

Question-4: Does the affective arousal in L2 English speaking skills contribute to English speaking Self-efficacy?

Answer: The physical and emotional states that occur when someone contemplates doing something provide clues as to the likelihood of success or failure. Stress, anxiety, worry and fear all negatively affect self-efficacy and can lead to a self-fulfilling prophecy of failure or inability to perform the feared tasks (Pajares,2002).Stressful situations create emotional arousal, which in turn affects a person's perceived self-efficacy in coping with the situation (Bandura & Adams, 1977). All these statements have been found true in the qualitative data of the said PhD carried out by the current author. But the results of the statistical data analysis confirmed that the physiological and emotional experiences do contribute to the final self-efficacy. However, the study didn't focus to find out the extent to which the contribution is negative or positive. But the study concluded that the affective arousal (physiological and emotional experiences) in the L2 English speaking skills do contribute to English speaking Self-efficacy.

5. Conclusion

The current article focused on the four basic questions about whether the afore-mentioned sources of self-efficacy in L2 English speaking skills contribute to the overall English-speaking Self-efficacy. It was found that all the four sources of the self-efficacy do very much contribute to the overall English speaking self-efficacy, though, the extent is not confirmed. This article used the data collected by the same author for his PhD study for analysis. The focus of this article hasn't been cited in the said PhD because the data were analyzed with a different focus. Further analysis can be done or experiments can be done to see the extent of negativity or positivity of the contribution with reference to the physiological and emotional experiences.

References

Bandura, A. (1989). Perceived Self-efficacy in the Exercise of Personal Agency.*The Psychologist: Bulletin of the British Psychological Society,2 , 411-424.*

Bandura, A. (1997). Self-efficacy: The exercise of Control. *New York : W.H. Freeman and Company*

Blonder, R.; Benny,N. & Jones, M.G.,(2014).Teaching Self-efficacy of Science Teachers. The Role of Science Teachers' Beliefs in International Classrooms: From Teacher Actions to Students Learning, *p.3.*

Chowdhury, S., Endres, M., & Lanis, T.W.(2002).Preparing Students for Success in Team work environments: The importance of Building Confidence. *Journal of Managerial Issues, 14(3), (346-359).*

Dawes, M.E., Horan, J.J., & Hackett, G. (2000). Experimental Evaluation of Self-efficacy Treatment on Technical. Scientific Career Outcomes. *British Journal of Guidance and Counselling, 28 ,87-99.*

Eden,D. & Kinnar, J. (1991). Modelling Galata : Boosting Self-efficacy to increase volunteering. *Journal of Applied Psychology, 76 (6) , 770-780.*

Eden, F. P. (2016). Why Do I Feel More Confident? Bandura's Sources Predict Pre-service Teachers' Latent Changes in Teacher Self-Efficacy. *Frontiers in Psychology*.

Lightbown, P.L., & Spada, N.(1995). How Languages are Learned. *Oxford University Press.*

Loo, C.W. & Choy, J.L.F. (2013). Sources of Self-efficacy Influencing Academic Performance of Engineering Students. *American Journal of Educational Research. 1, (3),86-92.*

MacIntyre ,P.D. , & Gardner R.C.(1994).The Subtle effects of language anxiety on Cognitive Processing in Second language. *Language Learning , 44(2), 283-305.*

Maddux, J.E., & Lewis, J.(1995). Self-efficacy and Adjustment: Basic Principles and Issues . In J.M. Maddux (Ed.), Self-efficacy, Adaptation and Adjustment: Theory, Research,and Application (p.37-68).*New York : Plenum Press.*

Truitt, S.N. (1995). Beliefs about Language Learning : A Study of Korea University Students Learning English . Texas Papers in Foreign Language Education, 2 (1) , 1-14 .

Wood, R. & Bandura, A. (1989) . Social Cognitive Theory or Organizational Management. *Academy of Management Review, 14 (3), 361-384.*

Zimmerman, B.J., Bonner, S., & Kovack, R(1996).Developing Self-regulated Learners: Beyond Achievement to Self-efficacy. Washington, D.C.: *American Psychological Association.*