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Research Article

The Relationship between Self-efficacy, Autonomy and Learners' English Achievement: A Study of Iranian Students of Medicine

Giti MousapourNegari, Mahdieh Donyadary

Department of English Language and Literature, University of Sistan & Baluchestan, Zahedan, Iran

Abstract
The present study aimed to extend our knowledge by exploring predictive role of self-efficacy and autonomy in Medical learners' (EMP) language performances.Gender was another variable of interest in the study. Set out to explore, self-efficacy and autonomy scales besides English achievement test were administrated and analyzed. Results of statisticalanalysis of Pearson correlation denote that there is a strong relationship between students' self-efficacy beliefs and their language performances (r=.893). In fact, it demonstrates the contributing effect of efficacy beliefs in taking responsibility in learning which lead to learners' significant attainments in learning tasks.Statistical analysis of the data also revealed that there is a significant correlation between learners' autonomous beliefs and their general English performance(r=.845). It is implied that faith in capabilities and directing and controlling learning are necessities to enhance EMP learners' achievements.Furthermore, the results show no significant differences between learners' autonomy with regard to their gender(t=.43). The study has some pedagogical implications which will be discussed in the paper.

Keywords: Self-efficacy, Autonomy, English achievement, Individual differences, Medical students

I. Introduction

Following Ellis (2008), individual differences are contributing in learners' L2 performances.Learners with diverse backgrounds and achievements come to class attempting to be competent enough to learnL2 in terms of several aspects. Learners with individual interests assign goal, direct and control learning process and the result is different performances in the same tasks.According to Pajares (2003), self-beliefs are primary factors in learners' learning,

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facing difficulties, and achievements. Self-efficacy, the most influential self-belief, determines learner's motivation to act (Bandura, 1997).Bandura (1986), the founder of self-efficacy, states that efficacy conception defines one's choice of activities, motivation and anxiety in executing a task. It is "people's judgment of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p. 391). To cite Izadi (2012), believing in capabilities to accomplish a task, self-efficacious learners take risk and adopt challenging tasks. Delcourt and Kinzie (1993) noted that "perceived self-efficacy reflects an individual's confidence in his or her ability to perform the behavior required to produce specific outcomes" (p. 36).Similarly, Dörnyei and Ushioda (2011) argue that individual beliefs in their abilities are central to their actions and attainments. In this regard, Heidari et al (2012) explore the possible relation between learners' efficacy belief and vocabulary learning strategy use. Assessing learners' belief in their vocabulary development, study indicated that learners highly believe that they achieve good results proving significant employment of vocabulary learning strategies.Learners with higher faith in their abilities "show more motivation and engagement in the classroom and better academic performance" (Heidari et al, 2012, p.177).Likewise, Pajares and Valiante (1997), testing writing self-efficacy, reported the contributive role of self-efficacy in predicting writing performances.In another study, Mills, Pajares and Herron (2006)examined self-efficacy and anxiety in relation to learners' reading and listening performances. While reading anxiety was not related to French reading proficiency, learners' efficacy in their reading skill resulted in astonishing reading accomplishments. On the other way around, female self-efficacious listeners revealed significant results in listening performances, whileboth female and male anxious listeners demonstrated similar effects with regard to their listening tasks. Considering listening, Izadi (2012) investigated learners' listening efficacy beliefs concerning their listening strategy use.Their findings indicated that self-efficacious listeners positively, highly and directly employ listening strategies to overcome listening inhibitions and negotiate meaning with the speaker.

Self-efficacious learners,expressing faith in their capabilities, show longer persistence in face of difficulties (Bandura, 1997).Following perseverance, learners need to control and direct their learning. It's vital that learners take the responsibility of their own learning, assign goal and organize learning processes, to name be autonomous. Autonomy roots in Holec's (1981) theorization which denotes "the capacity to take charge of one's learning … to have and to hold the responsibility for all decisions concerning all aspects of this learning, … determining objectives, defining the contents and progressions, selecting methods and techniques to be used, monitoring the procedures of acquisition, and evaluating what has been acquired" (p. 3). According to Lazar (2013), autonomous learners "learn by doing, as they plan and implement aspects of the learning process, and by reflecting upon their progress through peer or self-assessment" (p. 461). Autonomous learners make decision about their learning which entails learning how to learn.It is capacity for critical reflection, decision-making and independent action. Mentioning Little (1999), it assumes but also entails that the learners will advance a particular kind of psychological relation to the process and content of their learning. Autonomous learners intend to uphold effective learning and to promote autonomous learners,

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better prepared to involve actively and responsibly in their communities.To test, Xhaferi and Xhaferi (2011) analyzed learners' diary on their capacity to monitor their own learning. They reported that autonomy is a key factor in learners' participation and achievements. In his review, Lazar (2013) denotes that Romanian students have high autonomy in their abilities to speak in foreign language. Assessing the effect of autonomy in relation to learners' vocabulary size and retention, Dam and Legenhausen (1996) reported that promoting learner autonomy is a key indicator in learning. In an autonomy supportivecontext, Roussy et al (2013) evaluated the music students' persistence in higher education.Study noted that autonomy enhances self-determined internalization of behavior which results in higher persistence in learning.

Communicating in English is one of the necessities to which Medical students has always been faced. Reading original texts and using English terms are indispensible part of Medical studies and career. Fostering English language unquestionably uplifts EMP learners' functioning and performances. Lack of studies concerning EMP learners' language improvement has stimulated this study to delve into the possible association between efficacy beliefs and autonomy with EMP learners' language attainments. Findings will shed light on the significance of incorporating these psychological constructs in learners' learning process. Based on the objectives of the study, the following research questions are pursued:

1. Is there any significant relationship between self-efficacy and learners' English achievement?
2. Is there any significant relationship between autonomy and learners' English achievement?
3. Is there any significant difference between Iranian medical female and male learners with regard to autonomy?

II. Methods

A. Participants

To provide an objective and reliable picture of self-efficacy and autonomy beliefs of learners, the present study adopted a quantitative approach. The study was conducted among students of Nursing, Health, and Paramedical, the population we had access to, at Medical Science University of Zahedan. One hundred female (n=58) and male (n=42) students among students who participated in General English course were randomly selected.They were sophomore and junior learners aged 21 to 24.

B. Instrumentation and procedure

The first instrument which has been used in this study was a self-efficacy questionnaire constructed by Nezami, Schwarzer and Jerusalem (1996). It is a 10 Likert scale items ranging

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from strongly agree to strongly disagree. Its reliability was reported as 0.80 which is satisfactory.Autonomy questionnaire by Macaskill and Taylor (2010) was the second instrument to measure the learners' autonomy. The questionnaire consists of 12 5-Likert scale items (strongly agree=1 to strongly disagree=5). According to Macaskill and Taylor (2010), reliability of the scale is at high level of 0.81.The students' scores in the final examination of the semester were considered as the third instrument totesttheir English achievement. The test consisted of sixty one multiple choice questions. The Cronbach's Alpha of the English Achievement test was calculated as 0.83. The test revealed a high reliability proving its quality as a testing instrument.

III. Results and Analysis

In order to address question 1 of the study, correlation analysis was used to assess the relationship between learners' self-efficacy beliefs and their English performances. Table 1 below displays results of Pearson correlation. According to the findings, there is a strong association between students' self-efficacy beliefs and their language performances (r=.893). The *p* value of the analysis indicted a high significant level (*p*=.000). The correlation coefficient, r, also has a positive sign indicating that the direction of the relationship between the two variables is positive.

TABLE1
PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENT BETWEEN SELF-EFFICACY BELEIFS AND ENGLISH ACHEVEMENTS

		English Achievement	Self-efficacy Belief
English Achievement	Pearson Correlation	1	.893**
	Sig. (2-tailed)		.000
	N	100	100
**. Correlation is significant at the 0.01 level (2-tailed).			

According to table 1, as learners believe they are capable to attain their goals they achieve better results in their language performances. The efficacious feelings follow a linear

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link in association to proficiency achievement. The findings were consistent with previous findings in self-belief studies (Bandura, 1997; Izadi, 2012, Pajares, 2003). As Izadi (2012) reported, learners revealed a positive significant and high correlation between their self-efficacy feelings in listening skill and the types of listening strategies they employ (r=.882 *p*=.00 level).According to Bandura (1997, 1986) efficacious learners believe they are able to set goals, organize them and execute the action to achieve them. Self-efficacy beliefs, Bandura (1997) states, effect on learners' choice of activities and perseverance in that activities. They also impact on how learners think of self-enhancing or self-debilitating ways and how they motivate themselves in face of difficulties (Bandura, 1997).

Set out to explore, the second research study examine the relationship between learners' autonomy and their English achievements.Investigating their correlation, the results of autonomy scale was calculated and was analyzed in accord with results of English achievement test. Similar to the results of the first research question, the result of the statistical analysis of Pearson correlation revealed a strong relationship.Table 2 indicates that as the learners more take the responsibility of their learning, they achieve better results. The correlation between learners' autonomous beliefs and their general English performance is at a high and strong level (r=.845*p*=.00). Moreover, the analysis shows a positive relation between the variables. The present findings prove and confirmHolec (1981) and Dickinson (1987). According to Holec, autonomous students successfully approach the learning tasks and try to plan, organize and monitor learning processes. Similarly, Dickinson (1987) asserts that autonomous learners admit the charge for all the decisions concerned with their learning.

TABLE2
PEARSON PRODUCT-MOMENT CORREALTION COEFFICIENT BETWEEN AUTONOMY AND ENGLISH ACHEIVEMETS

		English Achievement	Autonomy
English Achievement	Pearson Correlation	1	.845**
	Sig. (2-tailed)		.000
	N	100	100
**. Correlation is significant at the 0.01 level (2-tailed).			

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To further examine the effects of autonomy, the study assessed its relation to learners' gender.T-test was administered to assess the differences between female and male learnersconcerning their responsibility in taking charge of their learning.In accord with table 3, there were no significant differences between learners' autonomy with regard to their gender. The significant level of t-test analysis of learners' autonomy (p=.66) exceeds the accepted level of significance (p=.05) denoting that the differences between female and male students' means are not noteworthy to be considered. The study supports findings of Varola and Yilmaz's (2010) research. They claimed that there are interesting similarities between the female and male learners' autonomous behaviors in relation to questionnaire items. They asserted that " the frequency of the related responses showed that 60 % of the male and 55 % of the female learners chose the "always-often" option, which seemed to indicate that more than half of the learners paid attention to English notices, like signs, pamphlets, TV or radio broadcasts, internet notices around them" (p. 239). What is worth mentioning is that Iranian female and male Medical students demonstrate no meaningful differences in taking charge of their learning. In fact, all Medical learners attempt to plan, select materials and monitor their performances.

TABLE3
INDEPENDENT SAMPLE T-TEST BETWEEN FEMALE AND MALE LEARNERS AND THEIR AUTHONOMY

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Autonomy	Equal variances assumed	5.938	.017	-.433	98	.666	-.40066	.92627
	Equal variances not assumed			-.452	97.821	.652	-.40066	.88589

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IV. Conclusion and Implications

Upon the necessity to upgrade EMP learners' knowledge and skill in English language, it goes without saying that individual differences share a significant part. To further explore it, the researchers attempted to assess two key psychological concepts, self-efficacy and autonomy, in relation to English achievements of Medical students in order to evaluate to what extent EMP learners believe in their capabilities and deal with learning processes.According to the findings, there is a positive strong correlation between Iranian EMP learners' efficacy beliefs and their performances in English language. Findings are in accord with social cognitive theorists' assertions. Mentioning Bandura (1997, 1986), self-efficacy is a chief psychological factor in learners' functioning. Self-efficacious learners believe they are capable to approach and perform tasks successfully. Izadi (2012) argue that students with low self-efficacy face difficult tasks as personal threats; they attribute their insufficiencies to their capacities rather than focusing on how to accomplish the task productively. On the other way around, high self-efficacy augments learners' achievement behavior by helping them to deal with demanding situations with confidence to sustain a task to intensify effort in the face of failure.Generally speaking, it can be implied that successes in language learning might be indorsed to learners' beliefs about their capabilities to execute tasks. Accordingly, students who are uncertain about their capabilities to perform better in different skills would tend to be hindered, and thus would less likely to score better in exams and tests.

Following Holec (1981), the researchers attempted to evaluate the role autonomy plays in language learning.The Pearson correlation analysis of autonomy scale and English achievement test indicated that there is a direct and positive correlation between learners' capacity of independent learning and their accomplishment in English language performance.It is worth mentioning that participants' autonomy in language learning reflects the promotion of self-learning and independent learning. According to Nucamendi (2009), such a positive attitude and self-learning is crucial to the success of the development of learners and needs to be an essential, long term aim of any language learning program. Finally, by taking into account their gender, Medical Iranian students showed no meaningful differences in their commitment in language process and learning. All learners strive to self-instruct their learning, concentrate on their effort and decide about aspects of their learning.

The present study suggests that in order to promote learners' attainment in English language tasks and exams, learners' sense of efficacy should be nurtured so that the confidences students accumulate will likely stimulate their actions and choices and in that way grow their self-efficacy. Accordingly, learners will likely endeavor for better effect to master their skills and ensure better accomplishment. This belief of accomplishment needs to continue. It is also implied that learners with sense of autonomy have perceptions about their learning styles and strategies and strive to actively approach learning tasks. What is worth mentioning is that

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autonomous students will take risks, attend to accuracy and appropriateness of intended meaning and revise and reject hypotheses and rules that do not put on.As such training at various skills and topics in the field of autonomy in language learning is exceedingly commended.The further studies need to aim at investigating self-efficacy and autonomy in association with skills and sub-skills in order to shorten the distance between learners' real performance and the expected achievement level in the language.Generally speaking, it would be beneficial for more research to be conducted regarding EFL/ESL/ESP learners and self-efficacy and autonomy. It is significant to address the needs of all learners and the growing number of ESP learners demands that instructors seek for ways to promote their educational experiences. Building self-efficacy and autonomy in all academic areas is fundamental for the success of all learners.

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