Introducing Self –Efficacy Beliefs: An Unexploited Construct in the Algerian Academic Setting

Abstract

Self-efficacy is currently one of the most popular belief systems in educational psychology. It is an attribute that should be nurtured and enhanced because it contributes tremendously to positive feelings of accomplishment and well-being.

This paper attempts basically at introducing the reader to the construct of self-efficacy through tackling issues that are closely relevant to it namely, its nature (structure), theoretical background, sources of development and effects, its popularity and assessment.

Investigating both the subtle and complex net of conceptions and judgments students develop about their personal competence in the context of learning English as a foreign language might constitute a promising avenue of research for teachers aiming at getting a clearer understanding about the causes underlying the level of their students' attainment in the language.

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ملخص

تهدف هذه المقالة إلى عرض ووصف لما تقتضيه مختلف المقررات في مجال تعليم / تعليم اللغات من شروط ومعايير مع التركيز أساسا على المقرر المتعدد البرامج الذي يود المدرسون تطبيقهم.

مما لا شك فيه أن أنجع منهج تعليم وأشمل برنامج تدريس هما اللذان يمزجان بين كل العناصر الأساسية من نحو ووظائف لغوية وسياق وموضوع ومهارات لغوية وذالك بطريقة منسجمة ومتكاملة.

Introduction

One of the most interesting directions that researchers are exploring today in the area of academic motivation and achievement concerns the influence that self-efficacy beliefs bear on students' academic performance. Self-efficacy, which belongs to expectancy beliefs i.e., self-perceptions of capabilities (Pajares, 1997) constitute –following Graham and Weiner (1996)– a new 'perspective' in the field and offers significant insights about the critical role that self-beliefs play in academic achievement.

- Definition

Self-efficacy beliefs pertain to the 'opinions' or 'judgments' that people formulate about their abilities to deal with specific challenging life-circumstances.

Albert Bandura (2001)- credited with introducing the concept of self-efficacy in the area of social psychology – has defined self-efficacy in his "Guide for Constructing Self-Efficacy Scales" as a conception that one nurtures about his/her own personal 'power' to achieve a given level of performance.

One has to pinpoint, yet, that self-efficacy is more than a mere 'self–recognition' of being competent in a given domain of functioning; it is rather linked to the persuasion that people hold about their capacity to effectively use cognitive skills in order to attain a specific goal (Pintrich & Schunk, 1996).

- Nature and Structure

As it has been stated in the definition (section 1.1), self-efficacy beliefs relate to the conviction that one holds about his/her 'ability' to produce a certain outcome or achieve a specific target. They are different, then, from other closely related self-constructs found in the literature. Since self-efficacy is often misconstrued with other self-percepts, researchers have often deemed important to clarify the conceptual differences existing between them. (Zimmerman, 1990)

Self efficacy, for instance, is often confused with self-concept, in spite of the fact that they are two distinct belief systems: unlike self-efficacy beliefs which are 'context-specific' self-appraisals of capacities, self-concept is a "global description of one's personal essence" that is, a general conception (or image), consisting of a body of attitudes and values, that one comes to develop about his/her "being" as a result of social transactions. (pajares, 1996)

Besides, while self-concept is closely intertwined with self-evaluative feelings (or what is often known as: self-esteem), self-efficacy focuses on one's potential and does not necessarily involve self-judgments of worthiness. (Pajares, 1997)

For instance, a student who holds a positive self concept in English i.e., one who feels good about himself in English, is likely to derive positive feelings of self -worth when he performs well in English while a student who feels competent (self-efficacious) in a given domain but lacks interest in it is likely to suffer no loss of pride in case he fails in that field. (Example similar to that cited by Pajares, 1997)

Moreover, Zimmerman (1990) has drawn a clear cut between the two constructs in that he relates self concept to 'normative assessment of ability" that is, self concept involves often establishing external comparisons, stimulated by the desire to outperform others whereas he associates self- efficacy with 'mastery criteria' that is, focusing rather on one's own assets and limitations and evaluating one's own personal competence to succeed in a given domain.

One of the major characteristics of self-efficacy is its « context-dependence »: self-efficacy is not « absolute » that is to say, it is not a general sense of personal confidence that one applies to all situations; it is rather « specific » i.e., it is 'a view'

that one cultivates about his/her competence in relevance to a specific activity or context.

The tenets of self-efficacy theory come to reinforce the commonsensical truth that "one cannot be all things" (Bandura, 1997). Everybody would agree that people differ considerably in the type and level self- conceptions of efficacy they foster in relation to various domains of functioning.

Furthermore, self-efficacy is not a 'trait' that one possesses or does not possess in a fixed quantity from birth ; it is rather a 'generative capability' (Bandura, 1997) that is, a capacity that is developed and shaped through time and experience and could thus be subject to change and enhancement.

In addition to that, self-efficacy is different from talent or aptitude; it is not concerned with the number of skills one has in a given domain but rather with the will and the determination 'to exploit' those skills in front of (sometimes even terrific challenges)
and involves hence the   active use of a number of cognitive, affective and self-regulative skills.

- Sources of self-efficacy

According to self –efficacy theorists (Bandura, 1997), people develop their self-perceptions of efficacy from four major sources of experiences (that are listed in this context, following the theory, on the basis of their order of importance):

- **Mastery experience**: Known also as "performance accomplishments" (Brown, 1999) or "enactive attainment" (Pajares,1997) refers to the way people assess their own personal attainment in a given arena. Following this line of thought, students who judge their own past academic results as being successful often develop a high sense of confidence about their abilities while those who view their academic outcomes as unsuccessful are likely to experience feelings of doubts and uncertainty about their own effectiveness.

- **Vicarious experience** (**observational**):   It relates to the self-evaluation that individuals derive from observing and comparing themselves with a given 'social model' (a classmate, a friend etc...). When students observe a given model- that they view as compatible with them- in terms of traits and skills – succeed at handling a certain situation or solving a given task, they are likely to feel able too to meet a similar challenge. By the same token, watching a similar model fail in accomplishing the task at hand might undermine their self-confidence.

- **Verbal persuasions**: The conceptions that people develop about their capacities in a given field are likely to be influenced by the verbal and 'tacit' output they receive from others. Note, yet, that verbal and non-verbal messages (like a facial expression, for instance) become particularly influential when they are emitted by persons that are regarded as "credible persuaders" in their own environment such as parents, teachers, experts...etc.

- **Physiological states:** self-efficacy estimates might also be affected by "somatic and emotional states" (Bandura, 1999). Yet, it is not always the   negative emotions such as: stress, anxiety, fear per se that negatively affect performance but it is rather the faulty interpretations that students make about the purported causes of those psychological states. For example, students might develop a low opinion about their competence in a given field when they judge (wrongly) the 'normal' states of tension that usually accompany certain important   academic events (such as exams) as an indicant of incompetence and inefficiency.

- Effects of self-efficacy

In line with the theory, self- efficacy beliefs affect students' academic attainment due to the effects they produce through four "psychological processes (Bandura, 1994) namely, the *cognitive*, *motivational*, *and affective* and *selection* processes:

- **At the cognitive level:** the nature of beliefs students hold about their abilities in relation to a given task influences the way they perceive their prospective future academic results. Students who believe in their abilities visualize successful positive outcomes while those who do not trust their capacities are likely to suffer from what Bandura (1997) names 'cognitive negativity' (A state where they become somewhat 'obsessed' by their shortcomings and too skeptic about their capacity to succeed in the face of challenging learning situations)

- **At the motivational level:** a high sense of self –efficacy increases students' readiness to invest efforts in their learning, serves them well to persist when facing difficulties and helps them to recover more quickly after a negative attainment. Conversely, a perceived sense of inefficacy diminishes students' interest in their learning, lessens from their capacity to resist when facing impediments and undermines their commitment to achieving their goals.

- **At the affective level :** a strong perceived sense of competence is likely to reduce the amount of stress students might experience in the course of their learning whereas a low self-estimation of capacity might result in high levels of anxiety and agitation that often lead to in 'irrational' thinking that ultimately impair their cognitive and intellectual effectiveness.

- **At the selection level:** the conceptions that students develop about their academic abilities are likely to influence the type of decisions they take, the environment they opt for and the kind of choices they select. It is often the case that students often engage in activities in which they feel efficacious while they avoid those in which they feel less competent.

- *Theoretical Framework: Social Cognitive Theory*

The construct of self-efficacy was introduced for the first time in 1977 with the eminent publication of Albert Bandura's article « self efficacy: Toward a Unifying Theory of Behavioral change ». In this article, Bandura has expressed his overt

dissatisfaction with the principles of the behaviorist paradigm as they neglect 'inner' experiences and self-constructs and thus fail, accordingly, to account for complex human behavioral patterns.

Nine years Later (1986), Bandura has published a book entitled <u>Social Foundations of Thought an Action: A Social Cognitive Theory</u> in which he situated self-efficacy in a sociocognitive theoretical framework. In this perspective, Bandura has introduced a new conception of cognitivism- a cognitivism that differed from the one that used to prevail before in the literature and that concentrated mainly on the study of the different functions of the mind namely, processing, organization and retrieval of information.

Bandura has rather proposed a cognitivism with "a socio-structural dimension" that depicts people as active agents, intentional doers and effective decision- makers in their own socio-cultural milieu rather than just passive, receptive organisms controlled by some biological internal dispositions, as claimed by "mentalism" or environmental stimuli as reported by behaviorism. (Bandura, 1999)

In keeping with this thread of thought, Bandura views people as both 'products' and 'producers 'of their environment and considers human behavior to be « reciprocally-

determined » that is to say, not created by one-sided environmental influences but rather molded and shaped by reciprocal and bi-directional interactions taking place between the person (with all her internal cognitive, affective and biological influences) on the one hand and her specific socio-cultural environment on the other hand. (Bandura, 86, 97, 99; Pajares, 96, 97)

Bandura (86,97,99) advanced the idea that people 'possess' a set of self-beliefs- including self-efficacy beliefs- that help them keep control over their cognitive and affective functioning and self-direct their behavioral reactions. Accordingly, people play a pivotal role in "constructing" their own environments and in influencing their behavior through their capacity to self-regulate their actions, to self –organize their thoughts and to self- evaluate their experiences.

- Popularity in Varied Disciplines and Settings

Self–efficacy has gained, in these last twenty years, an important popularity across various academic and non –academic fields of study. Research evidence piles up supporting Bandura's contentions regarding the relationship between self –efficacy beliefs and people's overall physical and psychological well –being.

It has been suggested, for instance, that a high perceived sense of self-efficacy is linked to: a lower vulnerability to stress (Jerusalem & Mittag, 1995) and depression (Davis & Yates, 1982), a higher level of pain control (Manning & Wright, 1983), to a better control of phobic behaviors (Bandura, 1983) and to a more successful athletic performance. (Barling & Abel, 1983; Lee, 1982) (See Pajares, 1997)

Self-efficacy has been the focus of several studies on academic motivation and self-regulation. Research on those fields has been centered on three major areas:

❑ Some self –efficacy researchers (like Lent Hackett, 1987) have suggested that there exists a close relationship between students' self- efficacy beliefs and college major and career choices. It has been proposed, for instance, that students -often driven by a sense of perceived inefficacy in a given field (in mathematics or science, for example) - avoid engaging in mathematics or science –related courses and prefer those in which they feel more competent (Pajares, 1997).

❑ Besides, other researchers (Ashton & Webb, 1986) have suggested that there exists a strong link between teachers' self efficacy beliefs, their instructional strategies and student's level of academic attainment. They have reported that teachers who trust their own personal teaching efficacy hold a more optimistic view about their students' motivation, opt for a more flexible control of 'classroom behavior' and are more influential of their students' level of academic attainment (Pajares,1997)

❑ Moreover, other researchers (like Zimmerman, 1990) have suggested that there exists a correlation between students' perceived self –efficacy, other motivational variables like: self-regulation, goal–setting and their academic attainment.

It has been suggested, for instance, that students who feel confident of their academic ability in a given field are more ready to self –direct their own learning through the use of self – regulatory strategies and are likely to be thus more successful in their academic performance.

A great number of expectancy theorists have agreed on the substantial role that self-beliefs play on students' academic attainment. An increasingly growing number of research findings on academic motivation and achievement converge on the fact that self- efficacy beliefs, when properly assessed, is often a more accurate predictor of academic attainment than other measures of ability or even other expectancy variables (Pajares, 1997).

Many researchers seem to be supportive of the idea that skill alone is a poor predictor of the level of accomplishment students finally attain in a given academic field. Thus, a better understanding of the reasons underlying the quality of student's performance requires an in-depth analysis of students' "cognitions" that is, the set of beliefs, ideas and opinions they develop about their academic capacities and their own personal and social value. This might be of a great significance since cognitions influence considerably the way students interpret their various learning experiences and the manner in which they react to their learning outcomes.

In this vein, Peirce (1878) observed that beliefs are influential in nature and considered them to be "rules of actions" that direct and guide people's behavior (Pajares, 97) (cited in James, 1885/1975, p.28). Besides, Jinks and Morgan (n.d.) claimed that self-efficacy is an important 'antecedent, amongst other antecedents (aptitude, personality traits, past academic attainment and so forth) that either facilitate or impede future academic achievement. Moreover, Pajares (1996) asserted, in a lecture delivered at Emory University that the type of beliefs students nurture about themselves might prove to be "vital forces" in determining their actual level of academic attainment.

- Measurement

One of the thorniest problems that face researchers working on self--efficacy relate to inappropriate measurement of self-efficacy. In this respect, Bandura (1997) has observed that self-efficacy researchers often fail to account for the construct which is not a global personality trait' but rather 'a context specific set of beliefs. This often culminates, accordingly, in self-efficacy assessments that reflect general de-contextualized attitudes rather than specific situational self- efficacy appraisals.

Besides, Bandura (1997) has advised researchers, aiming at predicting students' level of attainment from their self-efficacy judgments, to opt for 'a task- specific approach' to measuring self-efficacy. It should be noted that this kind of approach is particularly used in the field of Mathematics by researchers aiming at assessing student's self-efficacy percepts in relation to a specific task at hand (solving an algebra problem, for instance).

Moreover, he has underlined the importance of accounting for two major criteria when trying to measure self-efficacy beliefs namely, "specificity" and "correspondence" in an attempt to ensure accuracy of assessment, to increase the "predictive potential" of self-efficacy beliefs and thus optimize their contribution to students' academic performance.

While consistency is linked to the measurement of self- efficacy at 'an optimal' level of precision, correspondence refers to consistency between self- efficacy judgments and the particular 'criterial task' to be assessed that is, the variable to which self-efficacy judgments are to be compared such as semester grades or achievement test results.

However, Lent and Hackett (1987) have been dissatisfied with extremely specific self-efficacy measurements that reduce self-efficacy to 'microscopical' self-ratings of competence and have offered, alternatively another type of approach that favors "external validity and practical relevance" at the expense of specificity and correspondence. (Pajares, 1996)

They have argued that the nature of many 'criterial' tasks in the field of motivation and education such as semester grades do not lend themselves easily to specific type of self-efficacy assessments, as it is case, with equations in physics or Algebra problems in mathematics and might thus call for domain-specific measurement of self-efficacy estimates.

This might imply that the type of self-efficacy assessment to be used and the level of specificity to be chosen is contingent on the researcher's question of interest and on the nature of variables involved in the study. Besides, the predictiveness of a given type of assessment depends on the researcher's ability to adapt the self-efficacy tool of measurement to the various situations that might impinge in the field under investigation.

It is noteworthy that the domain–specific assessment to self-efficacy has been adopted in this investigation as it has been found to be the most appropriate in relation

to the aim of study and to the nature of the 'criterial variable' that is to say, students' overall year average scores obtained in English.

Conclusion

This article has shed some light on the main aspects of self-efficacy and has accounted for its major theoretical underpinnings with reference to many scholars and researchers in the self-efficacy literature. It seems both warranted and interesting, given the impressive popularity of the construct, to investigate the potential impact of 'can-do' cognition on students' academic achievement in English as a foreign language.

References
- Bandura, A. (1986). Social foundations of thought and action: Selected passages. Retrieved   January   26.2000,   from   http://www.emory.edu /EDUCATION/mfp/guide.html
- Bandura, A. (1997). The nature and structure of self-efficacy. In self-efficacy: The exercise of control (PP .36-78). New York: Freeman
- Bandura, A. (1999). Social Cognitive theory of personality. In Pervin, L & John, O. (Eds.), Handbook of personality (2nd ed.) (pp.154-194). New York : Guilford.
- Bandura, A. (2001). Guide for constructing self-efficacy scales. Retrieved April 15, 2002, from http://www.emory.edu /EDUCATION/mfp/guide.
- Brown, B.L. Self-efficacy beliefs and career development. ERIC Digest. Columbus :
- ERIC Clearinghouse on Adult, Career, and Vocational Education, Center on Education and Training for Employment, the Ohio Stat University , 1999.
- Jinks, J. L., & Morgan, V.L. (1999). Children's perceived academic self-efficacy: An inventory scale. Retrieved March 15, 2001 from
   http:// www.coe.ilstu.edu/scienceed/jinks/efficacypub97.htm
- Pajares, F. (1996). Self-efficacy beliefs in academic settings. Review of Educational Research ,66 (4), 543-578.
- Pajares, F. (1997). Current directions in self-efficacy research. In M.L. Maehr & P.R.Pintrich (Eds.), Advances in motivation and achievement (vol. 10, pp. 1-49). Greenwich, CT : JAI Press.
- Pintrich, P. & Schunk, D. (1996). The role of expectancy and self-efficacy beliefs. Motivation in education. Englewood Cliffs, NJ : Prentice –Hall.
- Zimmerman, B.J. (1990). Self-regulating academic learning and achievement: The emergence of a social cognitive perspective. Educational Psychology Review, 2 (2), pp.173-201.