



# The learning environment as a mediating variable between self-directed learning readiness and academic performance of a sample of Saudi nursing and medical emergency students



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## ARTICLE INFO

*Article history:*  
Accepted 2 November 2015

*Keywords:*  
Self-directed learning readiness  
Learning environment  
Academic performance  
Saudi Arabia

## SUMMARY

*Background:* There has been some ground-breaking research on self-directed learning (SDL) in nursing education which reveals the superiority of SDL to traditional learning methods in terms of students' academic performance and the development of positive attitudes toward the learning process on the part of both students and teachers. *Objectives:* The relationship between students' self-directed learning readiness (SDLR) and students' academic performance, and the mediating role of students' perceptions of the learning environment needs further investigation. In this study, it is proposed that students' perceptions of their learning environment could enhance their SDLR and thus boost their academic performance (in terms of their GPA).

*Design:* A descriptive design was used to examine the relationships between the domains of SDLR, which are self-management, desire to learn and self-control and students' perceptions of the learning environment (SPLE) and students' GPA.

*Data source:* A survey involving 142 Saudi students from nursing and emergency medical services undergraduate programs in King Saud University was used for this research.

*Results:* The results showed that SDLR level positively influenced students' academic performance positively, and that students' perceptions of their learning environment played a significant role in determining their level of SDLR and academic performance.

*Conclusion:* It is recommended that nursing and emergency medical services educators provide a supportive learning environment in terms of good teaching, clear goals and standards, appropriate assessment, appropriate workload, and emphasis on independence to encourage students to engage in the process of SDL which can, in turn, enhance their academic performance.

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## Introduction

Today's rapid changes at cultural, political, social, and economical levels create an urgent need for self-directed learning (SDL), which is equally important to both children and adults alike. In the information age, knowledge explosion and the rapid evolution of technology have become major challenges for learners to keep up with the large amount of knowledge and practical applications of technological discoveries. In addition, the difficulty in predicting the potential changes brought about by knowledge explosion makes learners more unprepared to meet their future needs. Consequently, formal education and training no longer help learners face their future learning needs in an effective manner (Brockett, 2006).

From the above-mentioned ideas, it can be inferred that SDL has recently become one of the best ways of adapting to the current changes, including the explosion of knowledge, as it can help learners to respond

in a manner that achieves their individual subjectivity and positivity and enable them to deal with the effects and consequences of such changes effectively. Nowadays, the urgent need to enhance self-directed learning readiness (SDLR) in adult education is widely recognized (Cohen, 2012).

As can be observed, modern learning approaches incorporate more SDL activities and fewer structured learning tasks (Stewart, 2007). However, SDL has become a practical approach that copes with modern educational trends and is consistent with the economics of education and saves time, effort, and money. SDL is more convenient for the nature of the learning process because of the intrinsic nature of learning and its dependence on positive learners' participation in this process, which ultimately helps learners acquire expertise, modify their behavior, and affect their personalities.

Over the past two decades, the strong connection between the learning mode, multiple intelligence, learners' personalities, and self-directed learning (SDL) has received much attention in adult education research (Donaghy, 2005). However, there has recently emerged a trend in this area of research, which mainly focuses on the development of models

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# Psychometric Properties of Creative Self-Efficacy Inventory Among Distinguished Students in Saudi Arabian Universities

Psychological Reports  
2016, Vol. 118(3) 902–917  
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sagepub.com/journalsPermissions.nav  
DOI: 10.1177/0033294116646021  
prx.sagepub.com



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## Abstract

This study examined the psychometric properties of the Arabic version of Abbott's Creative Self-Efficacy inventory. Saudi honors students (157 men vs. 163 women) participated. These students are undergraduates ( $M$  age = 19.5 year,  $SD = 1.9$ ) who complete 30 credit hours with a grade point average of no less than 4.5 out of 5. The results showed that the internal consistency ( $\alpha = .87$ ) and the test–retest reliabilities ( $r = .73$ ) were satisfactory. The study sample was separated into two subsamples. The data from the first subsample ( $n = 60$ ) were used to conduct an exploratory factor analysis, whereas the data from the second subsample ( $n = 260$ ) were used to perform a confirmatory factor analysis. The results of exploratory factor analysis and confirmatory factor analysis indicated that creative self-efficacy was not a unidimensional construct but consisted of two factors labeled “creative thinking self-efficacy” and “creative performance self-efficacy.” As expected, this two-factor model fit the data adequately, supporting prior research that treated creative self-efficacy as multidimensional construct.

## Keywords

creative self-efficacy inventory, psychometric properties, distinguished students, Saudi Arabia

## Introduction

In the light of their role in developing their community and keeping pace with rapid changes and developments in all areas of life, honors students in educational systems around the world have recently been given more attention.

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# The influences of conceptions of mathematics and self-directed learning skills on university students' achievement in mathematics

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## Abstract

This study tested the mediating role of self-directed learning skills (SDL) between students' conceptions of mathematics and their achievement in mathematics using a structural equation model. Data were collected using the "Conceptions of Mathematics Questionnaire" and the "Self-Rating Scale of Self-Directed Learning", together with students' achievement in mathematics. A sample of 440 first year university students at King Saud University participated in the study. The findings confirm the moderating role of students' self-directed learning skills between their conceptions of mathematics and their achievement in mathematics. Students who have a highly fragmented conception of mathematics tended to have low SDL skills, and in turn low mathematics achievement (partial mediation), whereas students who have a highly cohesive conception of mathematics tended to have high self-directed learning skills, and in turn high mathematics achievement (full mediation). Mathematics educators should be aware that students' conceptions of mathematics may be influential, but not sufficient to predict achievement in mathematics. Equipping students with appropriate conceptions of mathematics and self-directed learning skills is key to enhancing their performance in mathematics.