SELF-EFFICACY AS A PREDICTOR OF ACADEMIC ACHIEVEMENT AMONG MIDDLE SCHOOL STUDENTS

Abstract: The purpose of this study was to investigate the correlation between self-efficacy and academic achievement, and the ability of self-efficacy to serve as a predictor of academic achievement. Convenient sampling method was employed to recruit the participants. The sample of the study consisted of 210 students (110 females, 51.61%, 100 males, 48.39%), representing students from grades one, two, three middle school, aged 13-15 years, with an average of 14.5 years, with a standard deviation of 4.63. The data were analyzed with Pearson correlation and Liner regression. Liner regression was used to explore the relative contributions of self-efficacy to the prediction of academic achievement. Findings showed that there are significant correlations between all the three subscales of Morgan-Jinks Student Efficacy Scale (MJSES): talent, context, and effort, and all the school subjects (Arabic, English, Mathematics, Science, and Social Studies). All these correlations were significant (P <.01). the IV (Self-efficacy) yielded a coefficient of multiple regression (R) of 0.574 and a multiple correlation square of 0.571. This shows that 57.1% of the total variance in academic achievement of those who participated in the study is accounted for by Self-efficacy.

Keywords: self-efficacy, academic achievement, middle school students

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INTRODUCTION

Self-efficacy is regarded as students' beliefs in their ability to master new skills and tasks, often in a specific academic domain (Eissa,2012). In other words, perceived self-efficacy refers to individuals beliefs in their capabilities to achieve specific attainments (Bandura, 2006). It is a "can do"-or "1can-do"– cognition (Amaal, 2014). Bandura explained self-efficacy in the theoretical framework of social cognitive theory by Bandura (Semra & Mehmet ,2013). Human achievement, according to this framework depends on interactions between and among three domains, namely one's behaviours, personal factors and environmental conditions (Hüseyin,2013).

Through obtained information students are able to appraise their self-efficacy from their performances, their indirect experiences, being persuaded by others, and their cues from their body, that is, their physiological reactions. Self-efficacy beliefs may have the ability of influencing students when they various tasks, exert efforts, persist, being resilient, and gain achievement (Bandura,2006). It is believed that students feel efficacious for learning ,compared with students who doubt their learning capabilities, exert their best effort to participate more readily to the development of their academic self-efficacy , work harder, persist longer when encountering difficulties, and hence they are able to achieve their goals at a higher level (Durmuş, Yavuz&Şükrü ,2013).

It can be noted that students with high self-efficacy are better eligible and equipped to successfully complete their educational careers(Bandura, Barbaranelli, Caprara, & Pastorelli, 2001; Lane & Lane, 2001). On the contrary, those with low self-efficacy are likely to face failure in their academics and may tend to perceive learning tasks as more difficult and daunting than they actually are.

Therefore, it is unsurprising that self efficacy ,as indicated by previous research, influence students' academic achievement motivation, learning and academic achievement (Ahamad& Abdullah,2019). In line with these findings, Jahanian and Mahjoubi (2013)found in their study which aimed to investigate the influences of self-efficacy on academic accomplishments at university levels and higher education centers, a strong relationship between self-efficacy and academic accomplishments. Moreover, Schunk and Zimmerman (1994) reported a positive relationship between self-efficacy and academic achievement and explained that if students are trained to have higher self-efficacy beliefs their academic performance also improves. Additionally, Asgharnezhad (2004) found that there was a significant relationship between students' self-efficacy and students' academic achievements.

PURPOSE OF THE STUDY

The purpose of this study was to investigate the correlation between self-efficacy and academic achievement, and the ability of self-efficacy to serve as a predictor of academic achievement.

HYPOTHESES

- Hypothesis 1: There is a positive correlation between self-efficacy and academic achievement .
- Hypothesis 2: Students with high self-efficacy will probably report a higher GPA
- Hypothesis 3: Self-efficacy contributes to academic achievement .

METHOD

PARTICIPANTS

Convenient sampling method was employed to recruit the participants. The sample of the study consisted of 210 students (110 females, 51.61%, 100 males, 48.39%), representing students from grades one, two, three middle school, aged 13-15 years, with an average of 14.5 years, with a standard deviation of 4.63.

DESIGN

For the purpose of this study ,quantitative survey research was employed. the IV is self-efficacy, while the DV is academic achievement.

INSTRUMENTS

Morgan-Jinks Student Efficacy Scale (MJSES) was used to measure students' self-efficacy .It is a 4-Likert, 30 items scale, ranging from really agrees to really disagree (it consists of three subscales: talent, context, and effort). The aim of the instrument was to determine information about the student efficacy beliefs that might relate to school success(Jinks & Morgan, 1999). The reliability of an overall scale in this research was Cronbach's alpha=.786.

Academic achievement was measured by GPA in 5 study subjects (Arabic , English ,Mathematics, Science, and Social Studies) by subject grades in the firs term of the school year 2019/2020.

Procedures

Prior to administering the scales, students were informed about purpose of the study and voluntarily indicated that they agreed to participate. To ensure that the respondents responded to the items honestly, they were told not to identify themselves in any way on the scale paper. They were also informed that they should not be concerned with anything regarding their participation in the study and their responses are for research purposes only and would be kept confidential. All data were entered in an SPSS file.

DATA ANALYSIS

The data were analyzed with Pearson correlation and Liner regression. Liner regression was used to explore the relative contributions of self-efficacy to the prediction of academic achievement.

RESULTS

DESCRIPTIVE DATA AND INTER-CORRELATIONS

Table 1. shows the means, descriptive statistics and inter-correlations of self-efficacy and academic achievement. Table 1 shows that there are significant correlations between all the three subscales of Morgan-Jinks Student Efficacy Scale (MJSES): talent, context, and effort , and all the school subjects (Arabic, English, Mathematics, Science, and Social Studies). All these correlations were significant (P <.01).

Table 1 . Descriptive statistics and inter-correlations of self-efficacy and academic achievement

Variables	1	2	3	4	5	6	7	8
talent				0.688**	0.612**	0.524**	0.511**	0.503**
context				0.633**	0.642**	0.508**	0.502**	0.516**
effort				0.605**	0.661**	0.520**	0.531**	0.544**
Arabic								
English								
Mathematics								
Social Studies								
Science								
** P <.01								

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Results presented in table 2 show that the IV (Self-efficacy) yielded a coefficient of multiple regression (R) of 0.574 and a multiple correlation square of 0.571. This shows that 57.1% of the total variance in academic achievement of those who participated in the study is accounted for by Self-efficacy .

As for results displayed in table 3, Self-efficacy made significant contribution to the prediction of academic achievement (b = 0. 370, t = 18.619; P < 0.01).

Table 3. Relative Contribution of the IV to the Prediction of DV (Coefficients)a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1					
(Constant)	33.111	1.015		32.622	.000
SE	.370	.020	.717	18.619	.000

a. Dependent Variable: AA

DISCUSSION AND IMPLICATION AND CONCLUSION

The purpose of this study was to investigate the correlation between self-efficacy and academic achievement, and the ability of self-efficacy to serve as a predictor of academic achievement.

Findings from table 1. there are significant correlations between all the three subscales of Morgan-Jinks Student Efficacy Scale (MJSES): talent, context, and effort ,and all the school subjects (Arabic, English, Mathematics, Science, and Social Studies). All these correlations were significant($P < .01$) . This goes in the same line with Miller & Brickman (2004) who report that strong academic performance may be associated with increased confidence in one's powers and this stimulates students to take greater responsibility for successful completion of tasks and projects. Students who possess higher self-efficacy take greater responsibility for successful completion of tasks and projects (Frey & Determan, 2004).

One critical finding is that students who are more confident and self-assured are more likely to attain higher levels of academic performance, which implies that the beliefs of self-efficacy seem to play an important role in predicting academic achievement.

Providing students with clear examples of passing work, clarifying expectations, and giving ample feedback are all likely to provide scaffolding for students' attempts and help them develop self-efficacy (Judge, Jackson, Shaw, Scott, & Rich, 2007). Self-efficacy had a direct relationship to academic achievement. This is consistent with Yazici, Seyisa and Altuna (2011) who indicated that there had been strong relationships among the academic achievement and self-efficacy positively among students. Thus students who have higher self-efficacy is predicted to have a higher GPA.

In conclusion, the results of this study make an important contribution to the field by investigating the relationship between a predicting variable, Self-efficacy, ascertaining the central role of self-efficacy in predicting academic achievement.

LIMITATIONS AND FUTURE RESEARCH

This study has some limitations. First, convenient sampling method was used to recruit the participants. Therefore, the findings of the study have limited generalizability in other regions and age groups. Second, as cross-sectional study, there has to be caution in making any generalization of the results. future researchers should get more respondents from wider geographical location, that is from different bans, private and public. Furthermore, self-report questionnaires were used to collect data from respondents. It is recommended that future researchers use different method such as personal interview to collect data. This may help get a reliable data after clarifying and removing what may be ambiguous.

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