INFLUENCES OF SELF-EFFICACY AS PREDICTORS OF ACADEMIC ACHIEVEMENT. A case study of special education students- University of Jazan

Ahmed Elhassan Hamid Hassan¹, Abdulaziz Alasmari², Eldood Yousif Eldood Ahmed³

¹Department of special education – Faculty of Education - University of Jazan E-mail address: aaboareej@yahoo.com.

²Department of special education – Faculty of Education International Cooperation Department- University of Jazan

E-mail address: <u>am-z11@hotmail.com</u>

³Department of special education – Faculty of Education - University of Jazan E-mail address: <u>ahmedeye12345@gmail.com</u>

Abstract

This study was conducted during 2014-20154 in Jazan University- KSA. The aim of the study is to find out influences of self-efficacy as predictors of academic achievement, and to know the level of self-efficacy among special education students- University of Jazan. The researcher used descriptive statistic methods. Questioner technique is used as method of data collection, Study group was formed from special education students, and 100 students were selected randomly from study group as a sample. The data was analyzed by using SPSS program, the results are following: the level of self-efficacy among special educational students is high, the influences of self-efficacy as predicting academic achievement about (21%), and there are differences' between students whom has high degree and low on self-efficacy in academic achievement for high degree of self-efficacy.

Keyword: Self-efficacy- Academic Achievement- special education

1.0 INTRODUCTION:

Self-efficacy is the extent or strength of one's belief in one's own ability to complete tasks and reach goals (Ormrod, 2006). According to Albert Bandura (1977), self-efficacy is "the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations." In other words, self-efficacy is a person's belief in his or her ability to succeed in a particular situation. Bandura described these beliefs as determinants of how people think, behave, and feel. Based on that, self-efficacy, or your belief in your own abilities to deal with various situations, can play a role in not only how you feel about yourself, but also on whether or not you successfully achieve your goals in life.

This can be seen as the ability to persist and a person's ability to succeed with a task. As an example, self-efficacy directly relates to how long someone will stick to a workout regimen or a diet. High or low self-efficacy will determine whether someone will choose to take on a challenging task or "write it off" as impossible. Self-efficacy affects every area of human endeavor. By determining the beliefs, a person holds regarding his or her power to affect situations, and it strongly influences both the power a person actually has to face challenges competently can push the a person to make decisions. These effects are particularly apparent, and compelling, with regard to behaviors affecting health (Aguayo and others, 2011).

Additionally, people with high self-efficacy tend to take a wider view of a task in order to determine the best plan. Likewise, obstacles often stimulate people with high self-efficacy to greater efforts, where someone with low self-efficacy will tend toward discouragement and giving up. Besides, a person with high self-efficacy will attribute failure to external factors, where a person with low self-efficacy will blame low ability. For example, someone with high self-efficacy in regards to mathematics may attribute a poor test grade to a harder-than-usual test, illness, lack of effort, or insufficient preparation. A person with a low self-efficacy will attribute the result to poor mathematical ability (Adeyinka and others, 2011).

1.1 Factors that can affect self-efficacy:

Bandura identifies four factors affecting self-efficacy:

1- **Experience or "Enactive Attainment**" The experience of mastery is the most important factor determining a person's self-efficacy. To clarify, success raises self-efficacy, while failure lowers it.

2- **Modeling, or "vicarious Experience**" Modeling is experienced as, "If they can do it, I can do it as well." When we see someone succeeding, our own self-efficacy increases. Where we see people failing, our self-efficacy decreases. This process is most effectual when we see

ourselves as similar to the model. Although not as influential as direct experience, modeling is particularly useful for people who are particularly unsure of themselves.

3- Social Persuasion Social persuasion generally manifests as direct encouragement or discouragement from another person. Discouragement is generally more effective at decreasing a person's self-efficacy than encouragement is at increasing it.

4- Physiological Factors In stressful situations, people commonly exhibit signs of distress such as shakes, aches and pains, fatigue, fear, nausea, etc. Perceptions of these responses in oneself can markedly alter self-efficacy. Getting 'butterflies in the stomach' before public speaking will be interpreted by someone with low self-efficacy as a sign of inability, thus decreasing self-efficacy further, where high self-efficacy would lead to interpreting such physiological signs as normal and unrelated to ability. It is one's belief in the implications of physiological response that alters self-efficacy, rather than the physiological response itself (Luszczynska, 2005).

1.2The Role of Self-Efficacy:

Virtually all people can identify goals they want to accomplish, things they would like to change, and things they would like to achieve. However, most people also realize that putting these plans into action is not quite so simple. Bandura and others (1977) have found that an individual's self-efficacy plays a major role in how goals, tasks, and challenges are approached. They talk about people with a strong sense of self-efficacy have some characterize like:

- View challenging problems as tasks to be mastered
- Develop deeper interest in the activities in which they participate
- Form a stronger sense of commitment to their interests and activities
- Recover quickly from setbacks and disappointments.

In addition, the characterize of people with a weak sense of self-efficacy as following:

- Avoid challenging tasks.
- Believe that difficult tasks and situations are beyond their capabilities.
- Focus on personal failings and negative outcomes.
- Quickly lose confidence in personal abilities.

2.0 LITERATURE REVIEW

To have more clarity about the predictions of Self-efficacy on academic accomplishments, we can say that SE can be stronger and more motivational factor than having pressure to complete an academically required task. Zajacova, Lynch, and Espenshade (2005) conducted a research study about the mutual influences of academic self-efficacy and perceived college stress on academic achievement for foreigners and students from different backgrounds. 107 first-semester freshmen students, who enrolled in college in the spring semester of 1997–1998 at one of the City University of New York campuses, participated as a research sample. Researchers used a survey to measure self-efficacy and stress in 27 correspondent roles related to college requirements. This tool assisted researchers to discover more about the consequences of social concepts on students' grades, accumulated credits, and persistence to successfully manage the requirements of the college. Researchers found that their results suggest that academic self-efficacy is more powerful and consistent predictor than stress to successfully manage the academic standards (Zajacova, Lynch, & Espenshade, 2005).

Another point, SE can mutually influence other factors, such as dispositions in respect of research methods and statistics, self-efficacy, effort and academic achievement, in learning and vice versa. Li (2012) performed a study about the relationship between social science students' attitude towards research methods and statistics, self-efficacy, effort and academic achievement. The researcher used Self-administered questionnaire as the main tool to gather

information from the research participants that consisted of 153 students from Department of Applied Social Studies in the City University of Hong Kong. The researcher found that there was affirmative connections among the different variables. In addition, the study showed that both dispositions and self-efficacy could considerably predict effort. Also, they found that effort could not be considered as a direct and primary element to build strong connections between attitude, self-efficacy and academic achievement (Li, 2012)

Similarly, SE can influence the confidence rates and their relationships to academic achievements. Jahanian and Mahjoubi (2013) conducted a research study that aims to explore the influences of self-efficacy on academic accomplishments at university levels and higher education centers, which was built to follow descriptive manner to discover relationships among factors. All participants were chosen randomly from the Islamic Azad University, Karaj branch (30000 participants). Researchers found that there is a strong and substantial relationship between self-efficacy and academic accomplishments with 99% confidence at very high, middle, low and very low levels (Jahanian & Mahjoubi, 2013).

Additionally, there is joint influences of emotional intelligence and self-efficacy as predictors of academic achievement. There a research study conducted by Yazici, Seyisa and Altuna (2011) about influences of emotional intelligence and self-efficacy as influencers of academic achievement. They chose a sample involved 407 students from high school level. In addition, researchers used The Emotional Intelligence Questionnaire, Self-Efficacy Beliefs Scale and a demographic information form as well. They found that different variables like gender, age, awareness of the emotion and persevering to behave clarified academic accomplishment. They found that the strongest predictor was the variable of persevering to the behave while the self-efficacy was considered as minor element. Based on that, researchers indicated that there had been strong relationships among the academic achievement and self-efficacy positively among students (Yazici, Seyisa & Altuna, 2011)

Likewise, mutually related factors such as parenting styles and achievement motivation besides SE can influence academic achievement. There is a research study done by Turner, Chandler and Heffer (2009) in which their sample consisted of 264 undergraduate students were studying in psychology classes at a major university in the southwestern United States of America. Researchers found that supportive parenting pattern notably influenced academic performance. As well, the findings of this study showed that supports given by parents to their children to influence their academic performance were so important. In addition, researchers indicated that realistically important motivation notably influenced students' academic performance. Finally, researchers indicated that having higher academic self-efficacy was considerably related to having a higher GPA. (Turner, Chandler & Heffer, 2009)

Significantly, sources of self-efficacy (mastery experience, vicarious experience, social persuasion, emotional arousal) can influence academic performance. A study was done by Loo and Choy (2013) was about sources of self-efficacy influencing academic achievement. They chose their sample randomly, through which they chose different 4 electronics-related diplomas in Republic Polytechnic. They found that all four self-efficacy sources were considerably related to achievements in both of mathematic scores and cumulative GPA of electronics-related engineering diplomas. More importantly, they found that the factor of mastery experience was the prime influencer of academic accomplishments of mathematics and related engineering modules (Loo & Choy, 2013).

Besides, optimism, thinking positively and SE can influence Academic Achievement. Chemers, Hu and Garcia (2001) conducted a research study about the influences of academic self-efficacy and optimism on students' academic attainment, pressure, health, and persevering to continue in school. They found that Self-efficacy immediately and not immediately displayed influential relations to academic accomplishments and individual harmony among first year college students. Optimism and its influences were directly associated with higher academic achievements; self-efficacy and academic expectations and academic performance were mutually, considerably and immediately associated with each other as well. Furthermore, academic expectations and attainments interacted with one another. Students, who achieved higher than those who poorly performed with less confidence, had better case of confidence about their abilities to implement greatly in their studies. Likewise, students who anticipated that they would do greatly for academic attainments presented better accomplishment. Finally, researchers found that major academic ability could put some influences of Self-efficacy, optimism and thinking positively on academic achievement; they found that academic self-efficacy and confidence had a great influence in both achievements and anticipations to accomplishments (Chemers, Hu & Garcia, 2001).

In addition, happiness and SE as related factors can mutually influence the academic achievement. There is a study done by Pordanjani, Yahyanezhad and Moharer (2014) explored the correlations concerning to the effects of self-efficacy, academic achievement, happiness and gender of students. Researchers chose their randomly, and participants were 200 university students of Bojnourd University. Researchers indicated that there was a satisfactory level of happiness and self-efficacy and academic achievement among students. As a conclusion of their research, while the level of happiness was a foreteller of academic attainments only in male students, self-efficacy influenced students' happiness in both genders (Pordanjani, Yahyanezhad & Moharer, 2014)

Correspondingly, SE can influence GPA and persistence rates among different generations among students. For example, there is a study conducted by Vuong, Brown-Welty and Tracz (2010) indicated that there were different academic performances among students in different levels. For example, second-generation students had better GPAs than First-generation students. In addition, students showed different rates of persistence by completing their current semester. Researchers indicated that academic achievements presented by both GPA and persistence rates were functions of self-efficacy for all second-year students. Overall, second-year students showed higher persistence to sustain higher GPAs gave them chances to complete their studies. Lastly, self-efficacy influenced academic achievements as defined by GPA and persistence rates among students (Vuong, Brown-Welty & Tracz, 2010).

So that the study addresses Influences of self-efficacy as predictors of academic achievement. The present study aims to find out the proportional contribution for self-efficacy on predicting to academic achievement and to know the level of self-efficacy among special education students, to achieve the above objectives; the researchers formulate the following questions:

1- What is the level of self-efficacy among special education students?

2- What Influences of self-efficacy as predictors of academic achievement?

3- Are there are differences between students whom has higher degree and lower (on self-efficacy) in academic achievement.

3. METHOD AND TOOLS

3.1 Method Research Approach

In these study the descriptive analytic research technique was used, the technique consists of questioner prepared by the researchers after adopt.

3.2 Study Group

It formed from special education students in faculty of education – University of Jazan about (400) in five levels (fourth- fifth -sixth- seventh- eighth).

3.3 Sampling:

In these research random sampling methods was used. The individuals who participate in random sampling are chosen randomly. The study was conducted with (100) students. (20) From fourth level, (20) from fifth level, (20) from sixth level, (20) from seventh level, (20) from eighth level.

3.4 Questionnaire Technique

The questionnaire was prepared by the researchers, is formed from two categories: a) personal self-efficacy it includes (15) items, b) social self-efficacy it includes (15) items. In order to ensure the validity and reliability of the questionnaire form, it distributed to four instructors who had completed their doctorates and this form developed in accordance with the opinions of the instructors, then a pilot study were conducted and the value of reliability was found. It was about (0.79) and after that, the questionnaire forms became ready for application.

3.5 Practical Procedures

The principle of voluntarism was the pre-condition of participating in questionnaire. For the questionnaire, an explanation was prepared. The aims of the study and how the study would be carried out were clearly stated in it. In addition, it was emphasized that the identities of the participants would remain confidential. During the questionnaire, written forms were used. Questionnaire took place between 1-21 days.

3.6 Data Analysis

After gathering data, the researchers used one sample T test, regression coefficient and the correlation coefficient to examine the questions.

4. RESULTS:

After analyzing the data, the results are as follows:

4.1 What is the level of self-efficacy among special education students?

For answer, this question the researchers used one sample T test and table (1) shows the level of self-efficacy among special education students. When we compare the average premise with the average arithmetic, we found that average arithmetic greater than average premise as phrases as in table (1), and this difference is significant at the level (0.05), because the level of significant greater than SIG, and this means that the level of self-efficacy among special education students is high.

4.2 What is Influences of Self-efficacy as Predictors of Academic Achievement?

For answer, this question the researchers used Regression method, when the data we found the standardized coefficients value is (0.21) as in table (2), the value of correlation coefficients is (0.45), these values are significant at level (0.01), because the level of significant greater than SIG, and this means that the Influences of Self-efficacy as Predictors of Academic Achievement about (21%) and this number is high and we can say very important to take care on self-efficacy if we need to improve the academic achievement.

4.3 Are there are differences between students whom has higher degree and lower (on self-efficacy) in academic achievement, for answer this question the researchers used in depended sample T test, when we compare the mean of academic achievement between higher and low self-efficacy we found the mean of higher self-efficacy greater than the mean of low self-efficacy, and this difference is significant at the level (0.05), because the level of significant greater than SIG, and this means there are differences between students whom has higher degree and lower (on self-efficacy) in academic achievement for higher degree on self-efficacy.

4.4 Tables shows the results

Table (1) shows the level of self-efficacy among special education students

S.N.	Variable	Mean	S.D	Т	SIG	Result
1	self-efficacy	126.2	16.53	74.4	.001	significant

Table (2) show the proportional contribution for self-efficacy on predicting to academic achievement

Predictors Variable	Dependent Variable	F	R	В	B. Constant	D.F	Standardized Coefficients
achievement	Self-efficacy	12.4	0.45	0.603	128.415	0.01	0.20

Table (3) show the differences between students whom has higher degree and lower (on self-efficacy) in academic achievement.

Group	Ν	Mean	ST.D	T Value	D.F	SIG	significant
Higher self-efficacy	39	3.75	0.553	3.12	98	0.04	significantly
Lower self-efficacy	61	3.70	0.595				

5. Discussion:

The discussion part of this study included three themes that are: 1) the level of self-efficacy among special education students, 2) the proportional contribution for self-efficacy on predicting to academic achievement, 3) the differences between students whom has higher degree and lower (on self-efficacy) in academic achievement.

5.1 The level of self-efficacy among special education students, When the responses were analyzed it was determined that the level of self-efficacy among special education students is high. This result agreed with study of Pordanjani, Yahyanezhad & Moharer, (2014), they indicated that there was a satisfactory level of self-efficacy and academic achievement among students. This result agreed with the research shows that the optimum level of self-efficacy is slightly above ability. In this situation, people are most encouraged to face challenging tasks and gain different experiences.

The researchers see that High self-efficacy can affect motivation in both positive and negative ways. In general, people with high self-efficacy are more likely to make efforts to complete a task and to persist longer in those efforts than those with low self-efficacy. In addition, they see that the people generally try to avoid tasks where self-efficacy is low, for they may seek to experience tasks where self-efficacy is higher. When self-efficacy is significantly beyond actual ability, it can assist to develop the ability of the person to complete tasks. On the other hand, when self-efficacy is significantly lower than actual ability, it can discourage growth and skill development of the person to complete tasks. In addition, they see that they is difference in self-efficacy correlates to fundamentally different worldviews. People with high self-efficacy generally believe that they are in control of their own lives, that their own actions and decisions shape their lives, while people with low self-efficacy may see their lives as outside their control.

5.2 The Influences of Self-efficacy as Predictors of Academic Achievement. When the responses were analyzed it was determined that the influences for self-efficacy on predicting to academic achievement about (21%). This result agree with study of Zajacova, Lynch, and Espenshade (2005), they found that the academic self-efficacy is more powerful and consistent predictor than stress to successfully manage the academic standards, and, also agreed with study of Jahanian and Mahjoubi (2013) they found that there is a strong and substantial relationship between self-efficacy and academic accomplishments, In addition this result is agree with study of Yazici, Seyisa and Altuna (2011) indicated that there had been strong relationships among the academic achievement and self-efficacy positively among students, also this result is agreed with study of Chemers, Hu and Garcia (2001) They found that Self-efficacy immediately and not immediately displayed influential relations to academic accomplishments and individual harmony among first year college students. Optimism and its influences were directly associated with higher academic achievements, self-efficacy and academic expectations and academic performance were mutually, considerably and immediately associated with each other as well, and they found that major academic ability could put some influences of Self-efficacy, optimism and thinking positively on academic achievement; they found that academic self-efficacy and confidence had a great influence in both achievements and anticipations to accomplishments. This result is disagree with study of li (2012), they found that effort could not be considered as a direct and primary element to build strong connections between attitude, self-efficacy and academic achievement. The researcher's point that self-efficacy sources were significantly interrelated and these sources were correlated with academic achievements hierarchical regression analysis suggested that mastery experience was the strongest predictor over the other three sources when predicting the academic achievements. This implies that when student has strong and positive judgment about his prior knowledge, he may achieve good grades in the subject and more importantly, he may score well in all subjects. Moreover, further analysis from the students' responses unveiled that students' were framed mainly based on actual experience they had while solving problems and not so much on how they "feel" about their ability. This supported Bandura's theory that the ability to accomplish mathematics tasks was a significant and important source of information for students to achieve better grades

5.3 The differences between students whom has higher degree and lower (on selfefficacy) in academic achievement, When the responses were analyzed it was determined that there are differences between students whom has higher degree and lower (on selfefficacy) in academic achievement for higher degree on self-efficacy. This result agree with study of Li (2012) this study showed that both dispositions and self-efficacy could considerably predict effort, also agreed with study of Jahanian and Mahjoubi (2013) that found that there is a strong and substantial relationship between self-efficacy and academic accomplishments, In addition this result is agree with study of Yazici, Sevisa and Altuna (2011) indicated that there had been strong relationships among the academic achievement and self-efficacy positively among students, also this result is agreed with the study of Turner, Chandler & Heffer, (2009), researchers indicated that having higher academic self-efficacy was considerably related to having a higher GPA, also this result agreed with study of Loo & Choy (2013) the They found that all four self-efficacy sources were considerably related to achievements in both of mathematic scores and cumulative GPA of electronics-related engineering diplomas. More importantly, they found that the factor of mastery experience was the prime influencer of academic accomplishments of mathematics and related engineering modules. Also agree with study of Vuong, Brown-Welty and Tracz (2010), they indicated that academic achievements presented by both GPA and persistence rates were functions of selfefficacy for all second-year students.

The researchers pointed that the stronger the self-efficacy or mastery expectations, the efforts are more active. However, many of people with low self-efficacy sometimes experience incentive to learn more about an unfamiliar subject, where some of people with a high self-efficacy may not prepare as well for a task. Additionally, Self-efficacy has several effects on thought patterns and responses. For example, low self-efficacy can lead people to believe tasks to be harder than they actually are. This often results in poor task planning, as well as increased stress. So that people become erratic and unpredictable when engaging in a task in which they have low self-efficacy and this is influence on academic achievements. In the other hand, people with high self-efficacy tend to take a wider view of a task in order to determine the best plan. Likewise, obstacles often stimulate people with high self-efficacy to greater efforts, where someone with low self-efficacy will tend toward discouragement and giving up. Besides, a person with high self-efficacy will attribute failure to external factors, where a person with low self-efficacy will blame low ability.

Also the researchers point that those students with high self-efficacy showed better in Confident individuals typically took control over their own learning experiences, were more likely to participate in class, and preferred hands-on learning experiences. Those with low self-efficacy typically shied away from academic interactions.

References:

- 1- Adeyinka, T., Adedeji, T., & Olufemi, A. (2011). Locus of Control, Interest in Schooling and Self-Efficacy as Predictors of Academic Achievement among Junior Secondary School Students in Osun State, Nigeria. New Horizons in Education, 59 (1), 25-37.
- 2- Aguayo, D., Herman, K., Ojeda, L., & Flores, L. (2011). Culture Predicts Mexican Americans' College Self-Efficacy and College Performance. *National Association of Diversity Officers in Higher Education*, 4 (2), 79-89.
- 3- Bandura, A. 1977", Self-efficacy: Toward a Unifying Theory of Behavioral Change, Psychological Review 1977, Vol. 84, No. 2, 191-215
- 4- Chemers, M., Hu, L., & Garcia, B. (2001). Academic Self-Efficacy and First-Year College Student Performance and Adjustment. *Journal of Educational Psychology*, 93 (1), 55-64.
- 5- Jahanian, R., & Mahjoubi, S. (2013) A Study on the Rate of Self-efficacy's Effect of University Students' Academic Achievement. *Middle East Journal of Scientific Research*, 15 (7), 1021- 1027.
- 6- Li, L., K. (2012). A Study of the Attitude, Self-efficacy, Effort and Academic Achievement of City U Students towards Research Methods and Statistics. *Discovery – SS Student E-Journal*, 1, 154-183.
- 7- Loo, C., & Choy, J. (2013). Sources of Self-Efficacy Influencing Academic Performance of Engineering Students. *American Journal of Educational Research*, 1 (3), 86-92.
- 8- Luszczynska, A., & Schwarzer, R. (2005). Social cognitive theory. In M. Conner & P. Norman (Eds.), Predicting health behaviour (2nd ed. rev., pp. 127–169). Buckingham, England: Open University Press.
- 9- Ormrod, J. E. (2006). Educational psychology: Developing learners (5th Ed.). Upper Saddle River, N.J.: Pearson/Merrill Prentice Hall.
- 10- Pordanjani, T., Yahyanezhad, F., & Moharer, A. (2014). Self –efficacy, academic achievement and happiness. *International Journal of Education and Applied Sciences*, 1 (4), 181-188.
- 11- Turner, E., Chandler, M., & Heffer, R. (2009). The Influence of Parenting Styles, Achievement Motivation, and Self-Efficacy on Academic Performance in College Students. Journal of College Student Development, 50 (3), 337-346.

- 12- Vuong, M., Brown-Welty, S., & Tracz, S. (2010). The Effects of Self-Efficacy on Academic Success of First-Generation College Sophomore Students. *Journal of College Student Development*, 51 (1), 50-64.
- 13- Yazici, H., Seyis, S., & Altun, F. (2011). Emotional intelligence and self-efficacy beliefs as predictors of academic achievement among high school students. *Procedia Social* and Behavioral Sciences, 15, 2319–2323.
- 14- Zajacova, A., Lynch, S. M., & Espenshade, T, J. (2005). Self-Efficacy, Stress, and Academic Success in College. Springer Science and Business Media Inc, 46 (6) 677-706.