

# The Relationship between Academic Self-efficacy and Academic Achievement in Students of the Department of Special Education

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## Abstract

This study aimed to identify the correlational relationship between academic self-efficacy and academic achievement. To this end, a questionnaire of self-efficacy was adopted, whose validity and reliability were high. Next, the sample group, which included 43 students of the Department of Special Education, was asked to respond to the questionnaire. Furthermore, there was a positive correlation between academic self-efficacy and academic achievement. Considering these results, several recommendations and suggestions have been presented.

**Keywords:** academic self- efficacy, academic achievement

## 1. Introduction

### 1.1 Introduce the Problem

Academic self-efficacy is among the most dominant factors that affect perseverance and academic achievement in a university student. Self-efficacy refers to thoughts and beliefs about the degree of one's efficiency. It is possible, through self-efficiency, to predict whether a student has a high or low level of academic achievement (Kirmash, 2016). The previous studies were performed to identify the relationship between this concept and many educational and psychological variables. These studies were carried out in various environments and among participants from different grades and age groups. For instance, Khalid (2010) investigated the relationship between the beliefs related to self-efficacy and academic achievement. Otherwise, Qatawi (2021) determined the relationship between social skills, self-efficacy, and general academic achievement.

Special Education Department Students have a high level of academic self-efficacy which refers to proof of a proper educational process. Furthermore, self-efficacy is a key that students possess to achieve academic and social coordination, thereby confronting problems and challenges they encounter (Karwowski and Koufman, 2017). A low level of academic self-efficiency implies that students need to improve their skills and experience to be qualified self-efficiency. If we consider the reality of the Department of Special Education, it becomes apparent that there is a significant difference between students' basic skills, especially their academic self-efficiency. Moreover, students have engaged their common practical lessons in schools and special classes rather than academic education (the theoretical aspect). This transfer will consequently affect the academic level. The many studies investigating the academic self-efficacy of university students have generated conflicting results. Some of these studies suggested that students with different genders perceive this concept differently; however, other studies pointed to students' fields of study. Nevertheless, many studies indicated that, the final year of university students possess a high level of perceived academic self-efficiency.

Many special education students are unsure about giving practical education in-field training. They are doubtful for fear of diagnosing and applying treatment interventions to students with disabilities in a way that is not appropriate. Although special education students have exceeded academically, some of them are absent from the field training class. What has been thus far presented made the researchers of this study appreciate the necessity for identifying the level of academic self-efficacy and its relationship with academic achievement among the Department of Special Education students? In this research, an attempt was performed to answer the following question:

1) What is the direction of the correlational relationship between academic self-efficacy and academic achievement among students of the Department of Special Education?

### *1.2 Explore Importance of the Problem*

Nowadays, education aim is to increase individuals' awareness of their surrounding events or supervise individuals in their novel societies. Therefore, education has changed characteristics. Instead, it gives rise to mobility and change and enables individuals to acquire skills that help them develop (Al-Yamani, 2011). Special education is a newcomer to the field of educational sciences. In other words, at the beginning of the second half of the 20<sup>th</sup> century, special education was regarded as a separate specialization, so various areas of this specialization grabbed attention. Moreover, disregarding the experts of this field was considered cultural and civil backwardness and is currently a problem that threatens community safety and gives rise to more waste of human and material capacity. It aims to help these experts develop their capabilities to the highest possible level and actualize themselves. Furthermore, these experts helped to adapt to their societies (Kawafha and Al-Aziz, 2010).

UNESCO has defined special education as a type of education that aims at children with exceptional cases who are present in special classes, groups, and institutions.' Many countries consider special education to be a specialization in the school, and university education. In this specialization, special curricula are adapted to the needs of, children and juveniles suffering from physical, mental, or psychological disabilities. These curricula may rely on special teaching methods. If we contemplate the potential problem that an ordinary teacher encounters, we will perceive the need for special education. In other words, such a teacher is supposed to teach a course to approximately 40 students, among whom one student may be talented while another student may suffer from learning difficulties. In this case, the teacher encounters the problem of adapting the curriculum to suit the needs of all students (Obaid, 2009).

Self-efficacy is one of the important psychological variables that are related to the behavior and contribute to the achievement of the personal goals, of an individual. Judgements and beliefs of an individual about his abilities and capabilities take an important role in controlling the environment and, consequently, achieving success. Academic self-efficacy, given that it is about behavior, has become of paramount importance. This is especially true in studies that involve educational constructions (Al-Ali and Abd Al-Mottalib, 2016). Academic achievement is a scale that measures the ability of a student to comprehend the determined modules. Students performed practical verbal and written levels.

The many differences in academic performance between students are attributed to teachers' expectations of their students' self-efficacy. These expectations will, either negatively or positively, affect student's perseverance and willingness the effort necessary to carry out assignments. Teachers, for example, rarely criticize students that they think have a high level of self-efficacy. Furthermore, teachers care to support, and ignore their mistakes of, such students. They also encourage these students to initiate and to give their opinions. The reverse is true. Individuals had low levels of self-efficacy (Al-Shimmari, 2013). As mentioned before, students having a high level of academic self-efficacy related to performing difficult tasks. Such students are less prone to disorders than their counterparts and can regulate themselves (Bong, 1999).

Shang (2010) emphasizes that self-efficacy affects many skills required for general academic achievement. Therefore, if the individual does not believe in his self-efficacy, he will be less likely to get combined in simple and complex activities. Such a person will also be less likely to perform tasks continuously. On the other hand, if a student assumes that he maintains a high level of self-efficacy to perform tasks, he will motivate himself to study a lot and, in order to face the challenges, he will remain and resist persistently. Hus, Wikland and Cotton (2017) agree with this perspective because they stressed the importance of self-efficacy and the belief that one has about himself. Here, the well-known saying "success varieties success" occurs.

Therefore, teachers should possess characteristics that most people lack. A teacher deals with individuals whom abilities, tendencies, interests, and preferences. In other words, there are differences between persons and the teacher should develop their characteristics. Hence, skill and teacher efficacy play a fundamental role in determining the level of academic achievement. The higher efficacy and abilities of the teacher to deal with his students, the higher the level of academic achievement of students (Nasrallah, 2010). Bandura emphasizes that the beliefs of an individual about the potency of academic achievement represented the cognitive perception. He argues that self-efficacy affects several dimensions of an individual's behavior. Choosing activities is such a dimension. To make it more explicit, the individual choose activities to avoid a failure.

In addition, self-efficacy has a direct impact on behavioral and thinking patterns, on the grounds that the thoughts of an individual can either be positive or negative (Rumaisa, 2017). Therefore, individuals having a positive feeling about their self-efficacy tend to think in such a way as to analyze their problems. By doing so, they attempt to come up with rational solutions, which in turn actively affect their behavior. Individuals who perceive their self-efficacy to be below, however, tend to take a passive role and, by virtue of that, they become anxious when encountering their

tasks, and become doubtful about their behavior. As a result, the personal efficacy of such individuals declines and they will be unable to actively employ their cognitive abilities (Al-Mikhlafi, 2011; Kirmash, 2016).

Mahmoodi, Nardian, Javid, Ahmadi, Chavishi and, Golmohammadi (2019) performed a study that aimed to seek the factors that affect the level of happiness in university students. Results revealed that, of these factors, the academic self-efficacy level has the fourth-highest impact on students' wellbeing. Furthermore, Green (2000) conducted a study in which she investigated the level of academic self-efficacy and internal and external motivation. The sample of this study was composed of African American students at US universities. Findings revealed that, in these students, the self-efficacy is high level of internal and external motivation is moderate (Al-Zigh, 2009: 145). Nevertheless, regarding the academic self-efficacy level in university students, we cannot, of course, generalize the findings of these two studies. Hence, the scarcity of studies in this area was a factor that led us to raise the first question of the present research.

Having analyzed 36 studies on the beliefs related to self-efficacy and academic performance, Multon, Brown and, Lentas (1999) found a positive and statistically significant relationship between these two variables. They also found that the beliefs related to self-efficacy explain 14% of the variance in academic performance (Al-Zoghbi, 2016: 1014), which interpretation discussed self-efficacy calls the following questions to mind: Is the concept of self-efficacy clear to students and all educators? Can the self-efficacy level be predicted by the academic achievement? Does this prediction call attention to the necessity of special programs that improve academic self-efficacy in students? Does the knowledge of the correlational relationship between perceived academic efficacy and other variables prevent academic problems happen to students, even if they are in the final year of university? What has been discussed about the correlational relationship between academic self-efficacy and academic achievement in students of the Special Education Department marks the importance of this research?

Self-efficacy is considered one of the most dominant factors that affect the level of academic achievement in students. This study determines the difference between male and female students in the level of perceived academic self-efficacy. Furthermore, an attempt has identified how students notice the development of their efficacy over the years of university studies. During this time, students mature their expertise, acquire many learning skills and strategies, and gain more knowledge of university life and its requirements. Students also learn to perform what they have learned over the past years. The importance of the present study can be summarized as follows:

1. The importance of the concept of academic self-efficacy, because of the dimension importance to human personality.
2. Determine the role of academic self-efficacy since this variable is an offshoot of general self-efficacy.
3. The importance of research population and sample—students of the Department of Special Education.
4. The importance of knowing the correlational relationship between academic self-efficacy and academic achievement in students of the Department of Special Education. Gaining this knowledge helps ameliorate and develop teaching methods and educational, psychological, and professional counseling.

### *1.3 Describe Relevant Scholarship*

#### *1.3.1 Theories that Explained Self-Efficacy*

##### *1) Bandura's Social Learning Theory (1977)*

The concept of "expectation of self-efficacy" coined by scientist Albert Bandura, plays the principal role in social learning theory. This concept is also known as "efficacy beliefs" and includes a large set of beliefs, the paramount of which is the expectation of efficacy. To gain awareness about other beliefs, the expectation of efficacy should first be known. Hence, efficacy expectation is a belief about one's ability to regulate and perform a series of necessary actions, so a certain achievement can be attained. The concept of expectations of self-efficacy has a theoretical framework as mentioned by Bandura (1977) in his book entitled "Social Learning Theory."

##### *2) Victor Vroom's Expectancy Theory (1981)*

The expectancy theory suggests that the individual decides to behave in a certain way. Because the individual maintains a motive that causes him to choose a certain behavior, but not others. The motivation theory holds that the effort made by an individual in performance will yield desirable results. Thus, through their everyday experiences, individuals develop expectancies about the feasibility of reaching various performance levels. Individuals also improve their expectancies about work results. This expectancy theory showed other concepts such as "effect expectancy," "outcome expectancy" and "outcome value expectancy" (Oliver, 1984).

### 3) Nicolls` Achievement Goal Theory

This theory assumes individual attempts to make an achievement, fulfill ambitions, and satisfy desires, then, the primary objective is to illustrate high levels of expectancy. Individuals can achieve various objectives, which develop their efficacy beliefs. Furthermore, the way that resulted in achieving a goal will be reinforced. Therefore, Personal resources as effort and expertise will improve (Mohammad and Razzagh, 2017).

Of the theories presented, the following can be summarized:

- Bandura stresses the importance of three factors—personal, behavioral, and environmental. For determining various activities, these three factors are fundamental.
- Bandura agrees with Vroom, such that when explaining the concept of efficacy expectancy, both focus their attention on the positive side.
- One`s learning and actions rest upon his judgement about himself. This judgement will, either negatively or positively, influence the outcome of one`s behavior.

#### 1.3.2 Academic Achievement

Those concerned give much import to academic achievement. This is because academic achievement plays a major role in students` lives and, because of crucial educational decisions are made. There are organized academic exams that aim to measure the amount of information, in any field of knowledge, that students memorize or remember. These exams also indicate students` ability to understand, apply, analyze, or use this information in various life circumstances. Academic achievement is an indicator of the achieving of educational goals and thus, educational institutions give much import to this concept. Hence, educational institutions, through teaching, aim to attain academic achievement (Aziz, 2019; Hodges, 2018).

Thus, academic achievement is the level of cognitive development that a student reaches in one aspect of the academic program. Furthermore, a low level of academic achievement is an educational and psychological problem that causes negative feelings of failure, attenuating motivation towards learning, and adopting negative ways of learning educational materials. Studies have emphasized that there is a functional relationship between a good education and positive viewpoints towards school. Learner`s behavior towards school and education helps social and psychological coordination, thereby directly affecting the development of human resources (Al-Kobaisi and Ameen, 2011).

Therefore, academic achievement is a proper means by which students manifest their intelligence and is also considered one aspect of mental structure. Furthermore, in a study that aimed to investigate the validity of tests, academic achievement was among the most important criteria that the designers used (Al-Ali and Mohammad, 2016). Based on what was presented in the theoretical framework, it can be said that self-efficacy is composed of the beliefs that individuals have about their abilities and the confidence they have about performing certain behaviors. In other words, if a person is confident about his self-efficacy, he tends to attain more achievements and values himself and his self-confidence. Furthermore, to achieve good results, such a person will perform the proper behavior. His focus on his behavior offers him many benefits. In addition, such an individual will gain a high level of academic self-efficacy, thereby causing more success and academic achievement.

#### 1.3.3 Previous Studies

**1- Al-Zagh (2004)** performed a study that aimed to identify the level of perceived academic self-efficacy in students at Jordanian University. The sample of this study was composed of 400 male and female students. Furthermore, a scale regarding academic self-efficacy was developed, the validity of the scale was measured, and, by calculating the internal consistency, the reliability of the scale was measured. The results revealed that the perceived academic self-efficacy level in students at Jordanian University is medium. Findings also showed that there are differences attributed to grades, such that perceived academic self-efficacy is lowest at the beginning of the second academic year. Since that time, this level gradually improves to become highest in the fourth year. The results of this study also suggested that there are no differences attributed to gender; however, there is the interaction between gender and academic level, and between academic level and college.

**2. Alwan (2012)** carried out a study that aimed to identify the level of perceived self-efficacy in university students. The sample consisted of 300 male and female students. To measure perceived academic self-efficacy, the researcher developed a tool based on the previous measures and literature. Results showed that the participants enjoy perceived self-efficacy and that there are statistically significant differences attributed to gender. There are also statistically significant differences in perceived self-efficacy attributed to the field of study, favoring the science field.

**3. Kirmash (2016)** conducted a study in which an attempt was made to identify the level of perceived academic self-efficacy in students of the Department of Primary Education, University of Babylon. 200 participants had been drawn. Considering the study instrument, the researcher developed a scale to measure academic self-efficacy. To ensure the validity of the scale, face validity and construct validity were tested. To conduct the reliability using the test-retest method and Cronbach's alpha coefficient for internal consistency were employed. This research yielded the following results: The participants possess such a high level of perceived academic self-efficacy. Furthermore, there are no statistically significant differences between male and female students in the level of perceived academic self-efficacy; however, in this variable, there are statistically significant differences between second year and fourth-year students, favoring the latter.

**4. Al-Ka'bi and Al-Bo'aigi** carried out research that seeks to identify the correlational relationship between reading self-efficacy and academic achievement in secondary school students. The sample of this study was composed of 400 male and female students. The researchers adopted the scale developed by Alwan and Mahasinah (2011) and the validity and reliability of the test were ensured. The final form of the scale consisted of 30 items. To measure academic achievement in the academic year 2015-2016, the record of students' marks was employed. Findings showed that the participants of this study possess such a high level of reading efficacy, thereby improving their academic achievement. Moreover, results revealed that there is a direct and statistically significant relationship between these two variables.

#### *1.4 State Hypotheses and Their Correspondence to Research Design*

- 1) There were statistical differences between males and females among academic self- efficacy among the Special education department students.
- 2) There were statistical association between Academic self- efficacy and academic achievement among the Special education department students.

## **2. Method**

### *2.1 Conceptual and Operational Definitions of the Variables*

#### *2.1.1 Self-Efficacy*

Zimmerman (2000: 83) denoted as one's perceptions of his abilities to regulate and take actions that are necessary to perform special tasks, and to achieve special goals. Al-Alusi (2001: 25) indicated that one's judgements about the abilities that he has gained from all successes and failures of his life. These outcomes are the result of one's tendency to act out in a certain way. The achieving of this end requires effort and perseverance, yet the person encounters obstacles in his life.

#### *2.1.2 Academic Self-Efficacy*

Defined by Bandura (1997) as 'one's beliefs about his abilities to regulate and take actions necessary to achieve certain results' (Bandura, 1997: 70). Then, Pajares (1999) defined as one's belief about his capabilities, and his trust in his ability and knowledge. The person, because of possessing some elements, can reach a level that is satisfactory or that can achieve balance for him. Furthermore, this level determines the required effort and energy' (Pajares, 1999: 220). Finally, Bawghifa (2013) referred as 'judgements of the person about possessing or lacking the skills and abilities required to perform a task' (Bawghifa, 2013: 30).

Academic self-efficacy is theoretically defined as one's expectations of his ability to perform various tasks successfully. A person with a high level of academic self-efficacy is confident that he can control and solve the difficult problems he encounters. Otherwise, Academic self-efficacy is operationally measured by the score that a student achieves after responding to the items of the academic self-efficacy scale that has been used in the present research.

#### *2.1.3 Academic Achievement*

Abu Allam (2000: 305) denoted as 'the score that an individual achieves or the achievement level that he reaches in a certain academic subject or a certain area.' then, Al-Qamish (2000: 18) defined as 'knowledge and skills that students acquire immediately after they learn. Academic achievement is measured by the mark that students get in educational exams.

#### *2.1.4 The Theoretical Framework*

By their current beliefs about self-efficacy, individuals actively guide their future behaviors. Therefore, some psychologists considered self-efficacy to be among the most important factors that lead to individual behavior. In this

regard, Bandura (2011) published a paper entitled 'The Self: Towards A Theory to Amend Behavior.' In this paper, he stressed the importance of perceived self-efficacy because it is a mediator that corrects behavior. Furthermore, perceived self-efficacy is indicator expectations of his ability to plan for successful performance, various tasks. Self-efficacy is represented in one's perception about his abilities to perform a behavior.

Human behavior, according to Bandura's theory, is determined by three reciprocal factors—personal, behavioral, and environmental factors. This relationship is referred to as the "reciprocal determinism model." For a learner to learn something, based on this theory, three interactive factors must be present—personal, behavioral, and environmental:

- A) **Personal factors:** One's beliefs about his abilities and tendencies.
- B) **Behavioral factors:** A set of responses from the individual in a certain circumstance.
- C) **Environmental factors:** The roles played by people, such as parents, teachers and peers, who interact with the individual (Bu Qusarah and Ziad, 2015: 29).

The researchers of this study believe that, to improve learning at universities, it is necessary to train and give attention to faculty members. To this end, labor efficiency, such as manpower, should be considered. Efficiency refers to the ability to perform tasks effectively. There is a relationship between efficiency and performing a task. In other words, performance of a task rests on skill, cognitive and informational ability and, therefore, one can infer the strength of the relationship between professional efficacy and task performance (Hassan and AL-Ajmi, 2010). Thus, it is necessary to introduce various forms of self-efficacy.

#### 2.1.5 Various Forms of Self-Efficacy

- 1) **Social efficacy:** It means that individuals are not socially separated and, when they encounter problems and difficulties, to make any effective changes, collective effort and support are required.
- 2) **General self-efficacy:** It refers to the ability to perform a behavior that yields positive and desired results at a certain time. It also refers to the ability to have control over life pressures that affect human behavior.
- 3) **Specific self-efficacy:** It refers to one's specific judgements about his ability to perform a specific task in a specific activity, such as math and geometric shapes.
- 4) **Academic self-efficacy:** This type of self-efficacy refers to one's expectation of his ability to perform academic tasks acceptably. In other words, academic self-efficacy refers to one's actual ability in various academic topics of a specialization. Academic self-efficacy is influenced by various variables such as the number of individuals in an academic department, ages of students, and level of academic willingness for academic achievement (Dabi, 2017; Al-Jihuriah and Al-Zufairi, 2019; Karwowski and Koufman, 2017).

In addition, self-efficacy influences the subjects that students choose to study, the tasks and activities they wish to perform, and the amount of effort they put into the actual activities. Self-efficacy also influences how a given activity is performed, the amount of perseverance gained once the results are known, and the amount of effort which put in the future. Therefore, self-efficacy helps perform tasks (Omar, 2011; Bowels and Pearman, 2017; Pajares, 2002).

#### 2.2 Design

Descriptive correlational approach used to verify the association of study variables Academic Self-efficacy and Academic Achievement in Students of the Department of Special Education.

#### 2.3 Participant Characteristics

Population is referred to the fourth-year students were selected to identify the level of self-efficacy in them. The reason why these students were chosen is that they were in the final year of their undergraduate studies and were also about to serve the applied (practical) aspect. This segment was composed of 43 students, of whom 27 individuals were male, and 16 persons were female. These individuals made up all fourth-year students in the Special Education Department. Furthermore, this segment made up 19% of the 229 students studying in this department.

#### 2.4 Sampling Procedures

A 229 of the Special Education Department students, College of Primary Education, academic year 2018-2019. the participants divided by gender 163 (71.8%) males and 66 (28.2%) females as shown in Table 1.

Table 1. The Frequency of Research Population

Sample	First Year	Second Year	Third Year	Fourth Year	Total
Male	103	25	8	27	<b>163</b>
Female	32	13	5	16	<b>66</b>
Total	135	38	13	43	<b>229</b>

Inform students of the objectives of the research and what they are required to conduct. The procedures were applied to the students voluntarily after obtaining their consent. All students know that the application of the research does not affect their grades in the courses.

## 2.5 Measures

### 2.5.1 Academic Self-Efficacy Scale

Academic self-efficacy scale developed by Dabi (2017) was used to measure this dimension in students of the Department of Special Education, College of Primary Education. In developing this scale, the theoretical framework was considered, and previous studies were surveyed. Previous scales measuring efficacy in foreign environments were also surveyed. For example, Wheelroladd (1997) developed such a scale that consists of 34 items with four alternative responses (i.e., always, often, sometimes, rarely). Abdul Al-Salam (1998), to adapt this scale to many cultures, translated it into Arabic, and validated and amended it. Consequently, participants of a study sample in Egypt responded to this scale. At a late time, Dabi (2017) applied and validated this scale in Algeria.

**Validity:** According to Al-Sayyed (2006: 400), ‘in developing psychological tests, validity is of paramount importance. Validity can be known through identifying the contents of tests.’ Face validity is about how valid a test outwardly is. After glancing through the title, instructions, the measured variable, and the suitability of items for the objectives, one can to some extent infer whether the test is suitable for the desired goal (Samarah et. al., 1989: 110). The scale of this research was presented to several experts and arbiters (Note 1) who are experienced in, and knowledgeable about, this area. Having taken their comments into account, and given that they did not reach a consensus, some items were eliminated, and an alternative was replaced with another one. This scale, therefore, became with 27 items, for each of which there were three alternative responses—always, sometimes, rarely. If 80 percent or a higher percentage of the arbiters’ viewpoints were the same, the face validity of the scale would be considered significant.

**Reliability:** The reliability of the test was calculated through performing the test again on a sample consisting of 20 male and female students. The second test was performed 15 days after the first test, namely the first test was performed in 2/19/2019 while the second test was performed in 3/5/2019. The Pearson correlation coefficient was high (0.75), implying that the scale is ready to be ultimately performed.

### 2.5.2 Academic Achievement Grades

Data archive had been used to estimate academic achievement, by GPA of students among curriculum were studied. These scores were stored in the final scores record of the first and second semesters, academic year 2018-2019. The highest possible average that a student can achieve in these tests is 100 % and, to pass an exam, the lowest average is 50%.

## 3. Results

### 3.1 Statistics and Data Analysis

In 3/12/2019, tools were performed among a research sample divided into 43 male and female students (appendix 1). The scale was distributed to the sample group and the participants, by marking the appropriate alternative, were asked to make their responses on the questionnaire. The researchers, while distributing the scale to the participants, informed them of the research objective, and that the research was conducted exclusively for the sake of science. Furthermore, the researchers instructed the subjects on how to respond to the items and emphasized that all items should be answered. An emphasis was also placed on giving true responses that reflect students’ identities. Students, moreover, were told that responding to these items is voluntary and they can quite the test at any time, yet their decision will not give rise to any negative results.

Students’ responds had been analyzed using IBM SPSS 23. One Sample T-Test was used to perform the level of academic self-efficacy across participants. Then, Two Sample T-Test obtained the differences across genders in the

level of academic self-efficacy. Finally, the Pearson correlation coefficient was estimated. This was done by performing the test once again.

### 3.2 Descriptive Statistics Indices

To achieve the first objective of this research, the respective scale was performed on the study sample—43 male and female students. One Sample T-Test revealed that the arithmetic mean of scores is 65.11, the standard deviation is 6.74, and the assumed mean is 54. Hence, the calculated T-Value is 10.79 whereas the table value, at significance level 0.05, is 1.68 and the degree of freedom is 42. This indicates that the calculated T-Value is greater than the table value and, therefore, there are significant differences, implying that the participants enjoy a high level of perceived self-efficacy. Table 2 shows this information:

Table 2. The one sample T-Value of the academic self-efficacy scale

	N	average	Assumed average	Standard Deviation	T-Value	P-value
<b>Academic Self-efficacy</b>	43	65.11	54	6.74	10.79	0.001

The participants of this study, according to the results, possess a high level of perceived academic self-efficacy. They continuously develop and gain experiences and are now entirely confident of themselves. As a result, they acquire many skills that enable them to make decisions and gain more experiences. These experiences, in turn, help individuals to directly and indirectly get information that enables them to use their abilities and capabilities in positive ways, in their lives in general and in the university environment. Consequently, these experiences enable individuals to confront and take a stance against challenges. The results of the present study are in line with the studies performed by Al-Zagh (2004), Alwan (2012) and Kirmash (2016).

### 3.3 The Association between Academic Self-efficacy and Academic

To achieve the second objective of this research (i.e., identifying the correlational relationship between the aforesaid two variables), the Pearson correlation coefficient of students' academic self-efficacy scores and academic scores was calculated. Pearson correlation coefficient of this relationship was 0.59. To identify the significance of these differences, a comparison was made between this level and Pearson correlation coefficient. Hence, at degree of freedom 41 and significance level 0.05, the level of correlation coefficient was 0.30, which is statistically significant. In other words, there is a relationship between academic self-efficacy and academic achievement. Table 3 shows this.

Table 3. the correlational relationship between academic self-efficacy and academic achievement in students

	Academic self- efficacy		
	sample size	r	P-value
<b>Academic achievement</b>	43	0.59	0.005

As indicated in the table above, there is a positive and statistically significant relationship between academic self-efficacy and academic achievement. This means that the higher academic self-efficacy in a student is the higher the academic achievement will be. The researchers of this study ascribe this finding to the fact that students focus their attention on performative skills and on methods and strategies they learn from educational materials. Furthermore, students learn from their observation, and from the comments, experiences, and expertise of the faculty members at university. This finding is in line with that of Kirmash (2016), and Al-Ka'bi and Al-Bo'aigi.

### 3.4 Differences in Academic Self-Efficacy across Gender

Regarding the variable of gender, results revealed that the arithmetic mean of male students is 65.74 and the standard deviation is 6.16. The average score of female students, on the other hand, is 64.06 and the standard deviation is 7.72. Using the Two Sample T-Test, a comparison was made between the two mean scores. Results showed that the calculated T-Value is 0.68, which is lower than the table value (i.e., 1.68) and, therefore, it is not significant at significance level 0.05 and degree of freedom 41. Table 4 indicates this.



Table 4. T-Test that aims to identify the level of self-efficacy as a function of gender in students

Variable	N	Mean	Standard Deviation	T-Value	Level of Significance
Male	27	65.74	6.16	0.68	<b>0.05</b>
Female	16	64.06	7.72		

Based on table 4, it can be argued that the academic and social circumstances that form and improve self-efficacy are the same for both genders, and this is especially true of the final year students. Although there exists a difference between genders, individuals with either gender make use of external resources that contribute to the formation and perception of self-efficacy in general and academic self-efficacy. In other words, males tend to get evaluations by peers and friends, whereas females get evaluations by their families. In the final analysis, we can find that males and females possess resources that improve their academic self-efficacy. This finding contradicts that of Alwan (2012) but approves that of Al-Zagh (2004) and Kirmash (2016).

#### 4. Discussion

There were some differences between the relevant study and the previous studies as the following:

- 1) **Research objective:** Some studies (e.g., Kirmash, 2016; Al-Zagh, 2009; and Alwan, 2010) investigated the relationship between perceived self-efficacy and other variables (e.g., gender, college, academic year, and field of study). A study performed by Al-Ka`bi and Al-Bo`aigi (2016), however, aimed to identify the relationship between reading self-efficacy and academic achievement. Meanwhile, the present study seeks to identify the relationship between academic self-efficacy and academic achievement in students of the Department of Special Education.
- 2) **Sample:** Each study had a different sample from the others. This difference is attributed to the contradictory nature of objectives and variables of these studies. To make it more explicit, in studies performed by Al-Ka`bi and Al-Bo`aigi (2016), Kirmash (2016), Alwan (2012), and Al-Zagh (2009) 200 to 400 male and female students participated. The sample of the present study, however, is composed of 43 male and female students.
- 3) **Instrument:** In most of the previous studies that dealt with academic self-efficacy, the researchers made changes to ready measures and used them (e.g., Kirmash, 2016; Alwan, 2012; and Al-Zagh, 2009). This is while Al-Ka`bi and Al-Bo`aigi (2016) employed a ready scale. Also, in the present research, a ready scale (i.e., Dabi, 2017) was used.

The study suffers from some limitations, including 1) Social approval in expressing students' academic self-efficacy. 2) The results cannot be generalized to university students from faculties of education in the Qatari or Iraqi environment, as they were limited to students of the Special Education Division. 3) The males and females are not close together; this may lead to bias in the interpretation of the results because of the error of the first type. 4) The study sample is not large, which facilitates the researchers to results generalizations.

The study recommends the following: 1) The university environment should be given import. This can be done by fulfilling students' needs, so their academic self-efficacy improves. 2) Producing enrichment programs that encourage students to develop their scientific skills. 3) When performing scientific research, academic self-efficacy scales should be used. 4) Emphasis should be placed on running workshops for faculty members, so they appreciate the importance of academic self-efficacy to university students.

The Implications of the study are: 1) Performing a study that investigates the relationship between academic self-efficacy and other variables (e.g., student leadership, presentation skill, emotional intelligence, self-confidence, academic skills, and social skills). 2) Creating a training program to improve the level of academic self-efficacy in students. 3) Conducting a survey by means of the scale of the present research. In this survey, all of the university students participate. A comparison should also be made between the academic performances of students, and the relationship between performance and college should be investigated.

The study suggests study future perspectives as:

1. A study of causal modeling of the relationships between academic self-efficacy, achievement, motivation, and emotion
2. Meta- analysis of the relationships between academic self-efficacy and academic achievement among special education students before and after employment in educational professions.

## Note

Note 1. The members of this committee:

1. Dr. Fadhil Khalil Ibrahim / General teaching methods / College of Basic Education / Kindergarten Department
2. Dr. Khalid Khairi Al-Din / Educational Psychology / College of Education / Department of Educational and Psychological Sciences.
3. Dr. Khashman Hassan Ali / Educational Psychology / College of Basic Education / Kindergarten Department
4. Dr. Jajan Jom`a Mohammad / Educational Psychology / College of Basic Education / Special Education Department
5. Dr. Zhikra Yusuf Jamil / Educational Psychology / College of Basic Education / Special Education Department
6. Dr. Anwar Ghasim Yahya / Measurement and Assessment / College of Basic Education / Special Education Department
7. Dr. Yasser Mahfooz / Educational Psychology / College of Education / Educational and Psychological sciences
8. Dr. Sabir Taha / Educational Psychology / College of Basic Education / Special Education Department

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