Self-directed Learning and its Relationship to Motivation for Learning among the Students of Al Aqaba University College/ Al Balqa Applied University

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Abstract

The present study aims to identify the relationship between self-directed learning and motivation to learn among the students of Al Aqaba University College, and to know the differences between gender and specialization.

The study was determined by the descriptive method, and the sample was selected purposefully and consisted of (100) students from the first year students, from the Accounting and administrative information systems specializations for the academic year 2015/2016.

The study relied on two data collection tools, namely the Self-Directed Learning Strategies Scale and academic motivation scale. The instruments were applied after studying their psychometric properties and make sure they are valid for use on the basic sample of the study.

The statistical methods used were limited to the Pearson correlation coefficient to measure the initial general hypothesis, the "T" test to indicate the difference between the two independent samples to measure the second general hypothesis and its partial hypotheses, where the following was reached:

- Confirmation of the initial general hypothesis, which states that there is a statistically significant relationship between self-directed learning and motivation for learning among undergraduate students.
- Confirmation of the second general hypothesis partially, that is, there are statistically significant differences in Self-directed learning and motivation for learning among undergraduate students according to gender variable, and there are no statistically significant differences in self-directed learning and motivation for learning among undergraduate students according to specialization Variable.

Finally, this study was interpreted in the light of some previous studies, based on previous back ground, the study concluded with some recommendations that would open the horizons for new research.

Keywords: Self-directed Learning, Motivation to Learn, Al Aqaba University College
Introduction

Recently, researchers and educational theorists have been building models and theoretical perspectives to measure and study the dimensions and axes of self-directed learning in the field, focusing on how learners are active in their learning process and support them through a range of supporting activities, as well as making appropriate adjustments (Levett-Jones, 2005).

Self-directed learning can be seen as a process in which the learner takes the initiative to identify his educational needs, formulate his learning objectives, identify human and material resources, select and implement appropriate learning strategies, and assessment of learning outcomes (Murray, 2010) so that he is able to accomplish himself, at any time, under any circumstances (Hudson and Ramamoorthy, 2009). Self-directed learning, therefore, gives the learner the opportunity to control the most learning experiences. The shift from teacher-directed learning to self-directed learning is a shift in teacher-to-learner control, from external control to internal control; In achieving some of the goals of learning beyond knowledge, such as: gaining the ability to evaluate and self-organization (Judd & Kennedy, 2007). Self-directed learning, therefore, is an activity that requires self-study and insight from the learner, proactively and independently, with an attempt to identify learning, scheduling, planning and evaluation within the capacity for self-training and self-motivation to learn.

Based on the above, the self-directed learner has several positive features: initiative, independence, perseverance in learning, self-confidence, self-organizing ability to learn, responsibility for his own learning, strong desire for learning and change, dealing with problems as challenges, not obstacles, the ability to use study skills, good time management, the appropriate rate of learning progress, and the development of plans to complete his or her learning tasks in a fun and goal oriented manner(Jossberger et al., 2010).

Therefore, the researcher can define self-directed learning skills as: targeted mental activities, accompanied by a number of supportive behavioral activities that include the identification and search of information and knowledge, all within the framework of self-directed learner responsibility for making decisions related to learning.

Problem of the Study

The educational process is the cornerstone of human life and works to form his personality Soundness that contributes to building society and elevating it towards the highest.

It is known that everyone who learns is facing a problem or a stop in his progress and his movement in the way of learning especially when acquiring new information, or when trying to solve a problem, and in these cases we all face challenges during learning, especially if we know that some teachers do not take into account that for each learner an integrated personality, characterized by a combination of characteristics and abilities, and have a unified learning system, and apply a specific approach to all, without consideration for individual differences.
On this basis, the management of educational learning process, today requires changing the role of the teacher a radical change and enter into the adventure of partnership with the learner, a partnership that extends to the experience of the learner. So the teacher is not only teaching to run this rehabilitation process, but also from each possible source of information allowing the learner to enter into the desired partnership, and that active participation strengthens regardless of the environment (Asha et al, 2012).

It is well known that motivation is the driving force that drives an individual and directs his behavior towards a specific goal, it serves as the engine of the forces of the individual, and individuals vary in their levels of motivation, and this difference is due to several factors, including what is related to the internal differences between the individuals, including what is external referring to the environment in which the individual lives.

It is therefore expected that the application of the concept of self-directed learning will change the course of the Educational learning process, especially that the student is the main focus, the student in self-learning may be more active, because it analyzes the tasks provided by the teacher, and always plans to put the appropriate goals to learn and guide the process of learning, and achieve those goals previously planned, It is in this sense that educational methods that are appropriate to this learning should be considered (Jarrah, 2010).

In this sense, and after what has been discussed previously, the importance of self-directed learning and its role in the educational process, and to improve the academic performance of university students and raise their academic level according to determining the factors influencing their learning motivation, and what has been observed in recent years of a decline in the level of performance of students and their motivation to learn, which reflected negatively on their achievement, the university must reshape what the learner has acquired during his or her academic career and put it into new, more solid forms, so that this will be a coherent basis for what he will learn in the future. Therefore, this study has come to answer the following two general questions:

1. Is there any statistically significant relationship in self-directed learning and motivation to learn among undergraduate students at Al Aqaba University College?
2. Are there any statistically significant differences in self-directed learning and motivation to learn between undergraduate students according to gender variable and specialization?

From the second general question, we can ask the following sub-questions

a. Are there statistically significant differences in the level of self-directed learning among the sample members depending on the gender variable?
b. Are there statistically significant differences in the level of motivation for learning among the sample members according to gender variable?
c. Are there any statistically significant differences in the level of self-directed learning among the sample members depending on the specialization variable (Accounting and Management information systems)?
d. Are there any statistically significant differences in the level of motivation to learning among the sample members according to specialization variable (Accounting and Management information systems)?
The Importance of the Study

The importance of this study is that it is based on two important topics that have a strong correlation with the academic life of the students and their level of achievement. These are self-directed learning and motivation for learning. Knowing these aspects enables teachers and students to adopt certain strategies aimed at increasing the efficiency of students and their motivation towards learning in order to achieve their desired goals. And in general we can say that students' knowledge of the importance of self-directed learning and their level of motivation helps the teacher to design the plan to better suit the student's style and motivation.

The results of this study can help us to clarify the importance of self-directed learning in raising the level of student performance and increased motivation for learning, and contribute to the uniqueness of the learning process and transfer the responsibility of learning to the learner himself and thus reduce the burden on the teacher, which achieves the best investment for both.

The Purpose of the Study

This study aimed at the following:

- Identify the possibility of the existence of a relationship between self-directed learning and motivation to learn among undergraduate student at Al Aqaba University College.

- Identify the possibility of differences in self-directed learning and motivation to learn between undergraduate students according to gender variable and specialization.

- Try to identify the theoretical framework of both self-directed learning and motivation for learning and their return in the framework of education.

- Test the psychometric characteristics of the scales used in the study.

Procedural Definition of Terms

Self-directed Learning:

An active mental process through which learners can direct and monitor their own learning process, and the ability of the student to use the best components of knowledge, beyond Knowledge, and motivation, and depends on the individual who is educated in the first place, the use of strategies in order to improve and develop his learning, and solve academic tasks, as the focus of the educational process, students can be trained by teachers.

Motivation to learn:

Is a distinct state of public motivation, which refers to the internal or external psychological state of the learner, which prompts him to pay attention to the educational situation and the response to it, and is the response of the
learner to learn all that is new and his ability to perform a task or a specific duty directed activity and continue to achieve learning, motivated within the individual himself, and with high efficiency, overcome all the obstacles encountered and his tendency to raise the level of school achievement so that it leads to more effort and spend a lot of time in the achievement.

**Literature Review**

Many researchers conducted studies about the subject of self-directed learning, the researcher reviewed some of these studies as follows:

Stewart (2007) conducted a study aimed at measuring the self-directed learning skills of civil engineering students at Griffith University in Australia. The study sample consisted of (22) students, and the results showed that the average grade of the study sample was the highest in the skill of self-awareness as one of the self-directed learning skills, and the least skilled in using learning strategies. The study also showed a relationship between the cumulative rate and the level of self-directed learning skills.

Al-Masri (2009) conducted a study aimed at identifying the level of acquisition of learning strategies among the students of the Faculty of Educational Sciences at Al-Isra University, as well as knowledge of the differences in the level of these strategies according to the gender variables and the achievement level. The sample of the study consisted of (85) students the self-directed learning strategies questionnaire was applied on them, which was assigned by Arbor and translated by Baabad and Merey, and the results indicated to the average level of learning strategies, and that there are statistically significant differences. The results did not show any gender differences in the level of these strategies. The results showed a significant positive correlation between the motivation strategies dimension and motivation for learning strategies dimension and academic achievement.

As demonstrated by Nepal and Stewart (2010) there is a positive correlation between levels of self-directed learning skills, and academic achievement for undergraduate students. The study of (Lounsbury, Levy, Park, Gibson, and Smith, 2009) aimed to test the construct validity of self-directed learning skills, and its relation to some variables among (398) middle school students, (568) high school students and (1159) university students. The study found that self-directed learning skills are connected positively to: achievement, attention, intelligence, cognitive ability, satisfaction with life, and self-fulfillment.

Jarrah (2010) also conducted a study aimed at revealing the level of Al Yarmouk University students' possession of self-directed learning components, whether these components vary according to the student's gender or level of education, in addition to knowing the predictive ability of self-directed learning components with academic achievement, and whether academic achievement is different among students with a higher level of self-directed learning. The study sample consisted of (331) male and female students of bachelor's degree at Yarmouk University. To achieve the objectives of the study, the Purdie scale was used for systematic learning. The results showed that the students possess the self-directed learning skills on the level of literacy and conservation within a high level and the other dimensions in a medium degree, and that the males surpassed the females on the target and planning component and that the fourth year students excel in statistical terms and the third on the
components of retention of records and monitoring, and the request for social assistance. The results also indicated that there were statistically significant differences in academic achievement among the high self-organized students in school and low- Self-organizing on the components of goal setting, planning, coding and retention for the self-organized students. The components of record keeping, monitoring, goal setting and planning also predict students' academic achievement

Edmundson et al(2012) conducted a study which reviewed the results of (36) previous studies of the relationship between self-directed learning and some variables revealed that self-directed learning in the light of its skills is positively related to: academic achievement, level of ambition, creativity, curiosity, and satisfaction with life. The results of the study of (Chou, 2013) indicate that university students who have are high achievement, they have a high level of self-directed learning skills, and they also have a high level of motivation to learn.

The study of (Ziyaee and Nili- Ahmadabadi, 2014) Which was conducted on a sample of (268) students of the university level students showed that the methods of teaching centered around the student (Student-Centered Teaching Method) Contribute positively to the promotion of students' self-directed learning skills.

### Design and Methodology

#### Population of the Study

The population of the study consisted of all students studying at Al Aqaba university college/Al Balqa Applied university in the academic year 2015/2016.

#### Sample of the Study

The sample of the study consisted of (100) male and female students from Accounting and administrative information systems specializations at Al Aqaba university college/Al Balqa Applied university enrolling in the second semester of the academic year 2015/2016.

#### Study Methodology

The researcher adopted the descriptive approach, which is the appropriate method for this study, which focuses on describing phenomena and analyzing them as they exist in reality. It also takes the statistical approach in studying the correlation between the variables and the significance of the difference as well as the most used in the field of psychological and social studies.
Study Tools

This study used two tools:

1. Self-directed Learning Strategies Scale
2. A motivation to learn scale

The tools of this study were applied at the same time, due to the nature of the study, its main purpose is to look for the relationship between self-directed learning level and motivation for learning in the sample, so we combined the two tools together.

First: Self-directed learning strategies scale

Reliability of the scale:

The reliability coefficient determined in the "Alpha Kronbach" method was (0.89), and the reliability rate of the three dimensions of the Alpha Kronbach coefficient and the reliability coefficient of the dimension (Cognitive strategies 0.73), and the second dimension (meta-knowledge strategies 0.55 to 0.61) and the third dimension (resource management strategies from 0.74 to 0.77).

Validity of the scale

Factor validity:

The factor validity was calculated in the form of the basic components of VARMAX, where the three factors (the cognitive strategy, the cognitive strategies, Resource management strategies (with its underlying root factor 2.5, and explained 82.68% of the total variance for the questionnaire levels, the factor saturation (cognitive strategies) was 0.92, and the second factor saturation (0.90) and third factor (resource management strategies) 0.91.

Criterion related validity

The criterion related validity of the scale was calculated by an external measure, Self-directed learning strategies scale by Lutfi Ibraheem (2001), where the correlation coefficients between the total degree of the questionnaires (0.51), which is statistically significant at (0.01).
Second: A motivation to learn scale

Reliability of the Scale

Split half Reliability:

After dividing the final test scores into two, single and double figures, the partial correlation coefficient was (0.94) then it was modified by the Spearman Baron equation where the total correlation coefficient was estimated at (0.96), i.e., the test enjoys high reliability.

Statistical Methods

And to measure the study hypotheses and test it statistically and based on the statistical package system for the social sciences SPSS, the researcher used the Pearson correlation coefficient, to calculate the coefficient of correlation between scores in order to verify the general hypothesis of the study, and t-test to indicate the differences to verify the second general hypothesis and its partial hypotheses.

The Results of the Study

The results of the study were as follows:

1. Analyzing the results of the initial general hypothesis:

To validate the general hypothesis which states that: **Is there any statistically significant relationship in self-directed learning and motivation to learn among undergraduate students at Al Aqaba University College?**

The Pearson correlation coefficient was used and is illustrated by the following table:

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Correlation value</th>
<th>Sig</th>
<th>Correlation sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-directed learning</td>
<td>100</td>
<td><strong>0.41</strong></td>
<td>0.01</td>
<td>Significant</td>
</tr>
<tr>
<td>Motivation to learn</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results shown in the table above show that the coefficient of correlation coefficient is estimated at (1.40) is a significant value at the level of significance (0.01), which allows us to say that there is a related statistical significance relationship between self-directed learning and motivation for learning, which is confirmed by the general hypothesis.
2. Analyzing the results of the second general hypothesis:

To validate the general hypothesis which states that "there are statistical significant differences in self-directed learning and motivation for learning among university students by gender variable and specialization", "T" test was used to detect the significance of the difference, and the results shown in tables (2), (3), (4) and (5) which were reached are shown in a presentation and analyzing of the results of the partial hypotheses of the second general hypothesis is as follows:

2.1 View and analyze the results of the first partial hypothesis

To validate the first partial hypothesis which state that "there are statistical significance differences in the self-directed learning among the sample according to gender variable, "T" Test was used to detect the significance of the difference, and reached the results shown in the following table:

Table (2): Results of differences between females and males in self - directed learning

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Df</th>
<th>Sig</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-directed learning</td>
<td>Male</td>
<td>25</td>
<td>161.12</td>
<td>14.87</td>
<td>-2.42</td>
<td>198</td>
<td>0.016</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>75</td>
<td>167.53</td>
<td>16.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results shown in the table above show that there are differences between the two genders in self-directed learning at a significance level of (0.05), by reference to the "T" value which is a statistically significant, indicating that the hypothesis has been achieved.

2.2 View and analyze the results of the second partial hypothesis

To validate the second partial hypothesis which states that "there are statistical significance differences in the motivation for learning among the sample members according to gender variable "T" was used to detect the difference, and the results are shown in the following table:

Table (3): Results of differences between females and males in motivation to learn

<table>
<thead>
<tr>
<th>Variable</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Df</th>
<th>Sig</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation to learning</td>
<td>Male</td>
<td>25</td>
<td>121.14</td>
<td>14.53</td>
<td>-2.13</td>
<td>198</td>
<td>0.034</td>
<td>Significant</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>75</td>
<td>126.61</td>
<td>16.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Through the results shown in the table above, there are differences between the two genders in Motivation to learn at a level of significance (0.05), by reference to the value of "T" which is a statistically significant, indicating that the hypothesis may be achieved.

### 2.3 View and analyze the results of the third partial hypothesis:

To validate the third partial hypothesis which states that "there are statistical significant differences in self-directed learning among the sample members according to the specialization variable "T: test was used to detect the difference, and the results are shown in the following table:

**Table (4): Results of differences between Accounting and Administrative information systems specializations in self-directed learning**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Specialization</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Df</th>
<th>Sig</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-directed learning</td>
<td>Accounting</td>
<td>50</td>
<td>165.71</td>
<td>17.769</td>
<td>-0.18</td>
<td>198</td>
<td>0.85</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Administrative information systems</td>
<td>50</td>
<td>166.15</td>
<td>15.051</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results indicated in the table above show that there are no differences between the two majors in self-directed learning at the level of significance (0.05), by reference to the value of "T" which is considered statistically insignificant, indicating that the hypothesis has not been achieved.

### 2.4 View and analyze the results of the fourth partial hypothesis

To validate the fourth partial hypothesis which states that "there are statistical significant differences in the motivation for learning in the sample members according to the specialization variable "T" test was used to detect the significance of the difference, and reached the results shown in the following table:

**Table (5): Results of differences between Accounting and Administrative information systems specializations in motivation to learning**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Specialization</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Df</th>
<th>Sig</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivation to learning</td>
<td>Accounting</td>
<td>50</td>
<td>126.03</td>
<td>15.316</td>
<td>0.70</td>
<td>198</td>
<td>0.485</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>Administrative information systems</td>
<td>50</td>
<td>124.46</td>
<td>16.406</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The results indicated in the table above show that there are no differences between the two majors in the motivation to learn at the level of significance (0.05), by reference to the value of "T" which is not statistically significant, indicating that the hypothesis has not been achieved.
Discussion of the results of the study

1. Discuss and explain the first general hypothesis

The general hypothesis states that "there is a statistically significant relationship between Self-directed learning and motivation to learn at Al Aqaba university college student, the results of the study through the statistical methods used to confirm the existence of a statistically significance correlation between self-directed learning and motivation to learning.

This relationship between self-directed learning and motivation to learn, can be explained by the effective role that learning strategies play that enable students to organize and coordinate information processing and acquisition in a better way as well as enabling it to control the learning process which helps to save time and protect him dispersion and the resulting pressures on the various learning situations, good output for getting an use of pupil learning strategies that give him high confidence in his success at the completion of his academic duties and thus largely avoided the anxiety and tension caused by exams, and fear of performing it (Zulakhh Ashour et al., 2009).

2. Discussion and interpretation of the second general hypothesis:

2.1 Discussion and interpretation of the results of the first partial hypothesis

The first partial hypothesis states that there are statistically significant differences in level of the self-directed learning among the sample members according to the gender variable has resulted in the hypothesis being accepted the search hypothesis is achieved.

This can be explained by what we observe from the contemporary educational reality in Jordan, where we find that the interest of females in learning and ways of acquiring it, and improve their level of education through self-directed learning strategies, and convince them of the importance of education and their scientific superiority more than males, as well as the beliefs held by the gender itself, the differences between males and females are outputs of family and cultural education, community education, and the media, which motivates them to use better self-directed learning strategies for success (Khawla Dabbas,2010)

2.2 Discussion and interpretation of the results of the second partial hypothesis

The second partial hypothesis states that there are statistically significant differences in level of the motivation for learning among the sample members according to gender variable and the resulted of the hypothesis is acceptance of the search hypothesis so that it is achieved.

2.3 Discussion and interpretation of the results of the third partial hypothesis:

The third partial hypothesis states that there are statistically significant differences in the level of self-directed learning in the sample according to the specialization variable. The result of the hypothesis led to rejection of the hypothesis of the research so that it did not achieved, and acceptance of the null hypothesis that recognizes that
there were statistically significant differences in the level of self-directed learning in the sample according to the specialization variable.

The reason why there is no difference between the two disciplines can be explained by the similarity of the use of these strategies to understand academic content among students, more precisely we can say that students are preparing information in the same way, regardless of their differences in the type of study specialization. The use of learners for multiple strategies in the learning process, mastering their use in educational situations, can adapt the content, and develop mental skills according to these strategies thus improving learning. It is known to us that academic success depends largely on the ability of learners to employ self-directed learning mechanisms.

2.4 Discussion and interpretation of the results of the fourth partial hypothesis

The fourth partial hypothesis states that there are statistically significant differences in level of Motivation for learning among the sample members according to the specialization variable, the result reached the rejection of the hypothesis of research so that it was not achieved, and accept the null hypothesis that recognizes that there are no statistically significant differences in the level of motivation for learning in the sample according to the specialization variable.

Accordingly, based on the findings of the partial hypotheses (1), (2), (3) and (4) through statistical methods used, we conclude that the second general hypothesis, which states that "there are statistically significant differences in self-directed learning and motivation to learning among university students by gender variable and specialization", has been partially achieved were the next result was reached:

- There are statistically significant differences in self-directed learning among university students due to gender variable.
- There were no statistically significant differences in self-directed learning among university students due to specialization variable.
- There are statistically significant differences in motivation to learning among university students due to gender variable.
- There were no statistically significant differences in motivation to learning among university students due to specialization variable.

Summary and Recommendations

And finally after the completion of this study, and after the knowledge of the importance that self-directed learning acquires in the educational environment, especially its relationship to improving students' motivation and to elevate them to better educational classes.

Based on the results obtained through the study, a number of proposals can be included we turn especially to researchers in the field of psychology and education sciences in order to provide an educated environment encourages learning and education.
Since the current study has found a relationship between self-directed learning and motivation for learning, it also found differences in self-directed learning and motivation for learning by gender, and rejected the differences attributed to the specialization, the study suggests the following:

- Conduct further research and studies to investigate the impact of self-directed learning at the different academic levels.
- Knowledge of the relationship between self-directed learning and other variables.
- Develop mentoring programs based on self-managed learning strategies to increase motivation for learning.
- Changing the traditional teaching method, and using modern methods based on self-directed learning.
- Conduct similar studies under different variables from the variables of this study, to detect other factors may affect motivation for learning among learners.
- To provide the appropriate school climate to raise the level of motivation for learning by the university student, in order to achieve educational goals.

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