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## **Some of the Twenty-First Century Skills Practice by Female Teachers and their Relationship with Self-Esteem among Female Students with Learning Disabilities in Primary Schools**

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**Abstract.** This research aims to divulge the relationships between female teachers' practice of some twenty-first century skills and self-esteem amongst female students with learning disabilities at the primary school in Jubail in light of some variables (academic qualification, years of experience, type of disability). The descriptive correlative approach has been used for the nature of the current research. The intentionally chosen sample members were (20) female teachers of learning disabilities in Jubail city. The results indicated that there was no statistically significant relationship between female teachers' practice of twenty-first century skills and self-esteem among female students with learning disabilities in primary schools. Besides, an increase in the level of female teachers' practice of twenty-first century skills. In addition, there were no statistically significant differences between the practice of twenty-first century skills and the academic qualification, years of experience, and type of disability variable. Of the research recommendation, intensifying the efforts of teachers in practicing the skills of the twenty-first century to include the personal aspects, not just the academic aspects, so that they are within their plans, and are based on the principle of supportive services, which supports their self-esteem.

**Keywords.** Female teachers of learning disabilities - twenty-first century skills - self-esteem - female students with learning disabilities

### **Introduction**

Twenty-first century skills are defined as a set of skills needed to succeed and work in the twenty-first century, such as learning and creativity skills, informatics literacy, media literacy, technology literacy, and work skills (Beers, 2011, p. 12). These skills seem to be crucial for the development of many fields currently. For education, it is indispensable to keep pace with everything new and modern, as well as the prompt evolution in Applications Technology and development in the field of information technology essentials for daily life. Thus, they lead to the presence of many types of skills to be practiced by teachers, and their impacts reflected on students such as skills critical learning, problem-solving, communication collaboration, innovation, and creativity, flexibility, and adaptation, leadership, and teamwork, information literacy, IT, etc.

Al-Arfaj et al. (2019) explained that the inclusion of twenty-first century skills in the educational process within the curricula of the most important objectives of the Kingdom 2030

vision. It is needed to rival recent developments in the education field, which, in turn, helps learners on the transition from traditional teaching to interesting and exciting learning that connects them to real life. Moreover, Al-Juhani (2019) suggested the necessity to evaluate female teachers' practices of the twenty-one century skills in the classroom to serve the educational process, revealing that there is no value for teachers to have these skills unless are practiced virtually.

To achieve the previous objectives, the Partnership for Twenty-one Century Skills has prepared programs to develop these skills amongst teachers so that they can acquire them, and they can pass them on to their students. Hassan (2015) added that it also sought to attain a set of goals including:

Empowering teachers with the skills of the twenty-first century, sensing their importance, and employing them in daily teaching models. Intensifying efforts between teachers, school principals, and educational administrations. Employing technology in the process of providing students with twenty-first century skills.

Emphasis the role of the teacher based on facilitating the educational process for the student and without indoctrinating them.

On the other hand, Solanki (2018) indicated the necessity of preparing students for the skills of the twenty-first century as he believed that they must be assisted to anticipate further than what they offered during the learning process. Muhammad and Al-Muqbil (2018) continued especially students with learning disabilities. These students generally suffer from low self-esteem which negatively affects their academic achievement, and makes them less acceptable by their teachers and peers, in turn, reflecting in their behavior to be aggressive sometimes.

Al-Ajami et al. (2016) showed that the presence of wrong behaviors associated with learning disabilities leads to occurrence of a gap between what a student possesses of abilities and his academic achievement. Among these wrong behaviors are the student's sense of mistrust and the feeling that he is unable to succeed and accomplish. In addition, Ismail et al. (2018) specified that students with learning disabilities suffer from a lack of self-esteem, and poor acceptance by themselves and others, which leaves them with many schools, social and psychological problems. The opportunities provided by the teacher to students with learning disabilities while using these skills are flexibility in presenting the educational process in proportion to the characteristics of those students, providing them with the freedom to express their choices, adequate communication, encouraging initiative and teamwork, gaining self-confidence and helping them to develop the psychological and cognitive competencies they need in schools. As well as, developing knowledge of the research subjects, activating collaboration among members of the community, and raising the level of expectations. This is enough to bring them to the uppermost levels of self-esteem desperately needed for them to face the challenges posed by disabilities.

Therefore, the importance of the current research comes in revealing the relationship between female teachers' practice of some of the twenty-first century skills and the self-esteem of students with learning disabilities in the primary school in Jubail in light of some variables. Thus, this work provides experts and specialists with results and recommendations that may help them clarify the importance of practicing twenty-first century skills in schools to raise the level of self-esteem among students with learning disabilities. In addition, encourage researchers to expand the research on twenty-first century skills so that provide experts and researchers with a tool that may help them determine the level of practice of twenty-first skills by female teachers of learning disabilities. In addition, enriching libraries due to the paucity of

studies on this topic. The educational field should give extra concern to educating teachers of learning disabilities with the skills that must be possessed to reach a level that enables them to converse the education process with ease and simplicity (Al-Anwar, 2006). As well as, it provides them with what has been observed in the field application phase of the weakness in the practice of twenty-first century skills by female teachers of learning disabilities when teaching students with learning disabilities, and the use of traditional methods of education. The current research deals with some twenty-first century skills such as the skill of flexibility and adaptation, the skill of communication and collaboration, the skill of leadership, and taking responsibility. Because of its relevance to the characteristics of people with learning disabilities, and the consequences of providing them with benefits at all levels, including self-esteem, the research problem is represented in the following main question: *Is there a relationship between female teachers' practice of some twenty-first century skills and the self-esteem of female students' learning disabilities in primary schools?*

Branched from it the following questions:

What is the level of learning disabilities female teachers' practice of some twenty-first century skills with female students with learning disabilities in primary schools? Are there differences in learning disabilities female teachers' practice of some twenty-first century skills in the primary schools according to the educational qualification variable? Are there differences in learning disabilities female teachers' practice for some twenty-first century skills in primary schools according to the years of experience variable? Are there differences in self-esteem among female students with learning disabilities according to the type of disability variable?

#### **Objectives:**

Revealing the relationship between female teachers' practice of some twenty-first century skills and self-esteem among female students with learning disabilities in primary schools. Revealing the practice level of learning disabilities female teachers for some twenty-first century skills with female students with learning disabilities in the primary schools. Detecting the differences in the practice of learning disabilities female teachers for some twenty-first century learning skills according to the educational qualification variable. Detecting of the differences in the practice of learning disabilities female teachers for some skills of the twenty-first century learning disabilities according to the years of experience variable. Detecting the differences in the self-esteem of female students with learning disabilities according to the type of disability variable.

#### **Methodology and Procedures:**

The descriptive approach was followed showing whether there are relationships among two or more variables while clarifying the degree and strength of this relationship (Al-Khalili, 2012). The research sample consisted of (20) female teachers of learning disabilities in the primary school in Jubail city who were chosen by the intentional method. The research tools consisted of two tools. The first: A questionnaire to measure the reality of female teachers' practice of twenty-first century skills, consisting of 36 items distributed on three dimensions: flexibility and adaptation skills (10) items, and communication and collaboration skills (16) items, skills leadership and responsibility included (10) items. The other tool is a self-esteem scale consisting of 33 items distributed on three dimensions, which are: Psychological (11) items, social (12) items, and emotional (10) items. Therefore, to ensure the reliability and validity of the tools, the Cronbach's Alpha correlation coefficient and the Split-Half where the results indicated that the tools have high stability. Finally, various statistical methods were used to reach the results and consequences of this research. For example, arithmetic means,

correlation coefficients, and stability estimates, as well as T-test and one-way variance test were used.

**Results:**

To detect whether there is a statistically significant relationship between female teachers' practice of some twenty-first century skills and self-esteem among female students with learning disabilities in primary schools, the Pearson correlation coefficient was used between the responses of the teachers and the self-esteem of the students with learning disabilities, as shown in the following table:

**Table.1: the relationship between the responses of the female teachers to practice some skills**

Variables	The sample (N)	Average Mean	Correlation coefficient R	Level of Significance	Explanation of the correlation
Female teachers' practicing of the skills.	20	4.555	0.164	0.490	NA Associative Statistically significant between the two variables
Self-esteem of the female students.	20	3.471			

Table.1 shows the relationship between the responses of the female teachers to practice some skills of the twenty-first century and the self-esteem of female students with learning disabilities in primary schools. The statistics tell that the value of the correlation coefficient between the two variables is (0.164) at the level of significance (0.490), which is a low correlation value and not statistically significant. It is clear that the significance value (0.490) is higher than the significance level (0.05) and based on the results, the hypothesis is rejected.

Additionally, to find out the decline in the practice of female teachers of learning disabilities for some skills of the twenty-first century with the female students with learning disabilities in the primary schools, the arithmetic mean, the relative mean, standard error, and the t-test value for the responses to each of the dimensions were calculated, as well as for the total score of the tool. Then, the arithmetic mean was compared with the hypothetical mean (=3), and the results were as follows:

**Table. 2: arithmetic mean, relative mean, standard error, and t-test value for the dimensions**

General axes of the questionnaire	No. N	Arithmetic mean	Relative average %	Standard error	Value T-test	Statistical significance	The general trend of the responses
First dimension: Flexibility and adaptability skills.	20	4.575	91.50	0.083	18.90	0.000	Strongly Agree
Second dimension: Communication and collaboration skills.	20	4.549	90.97	0.089	17.42	0.000	Strongly Agree
Third dimension: Leadership and responsibility skills	20	4.545	90.90	0.112	13.85	0.000	Strongly Agree

<b>The general direction of all the axes of the questionnaire</b>	20	4.555	91.10	0.091	17.12	0.000	Strongly Agree
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It is clear from table.2 that the level for female teachers’ practice of some twenty-first century skills results for the first dimension “*Flexibility and adaptation skills*” came with arithmetic mean (4.575) and a relative average (91.50); for the second dimension: “*Communication and collaboration skills*” came with arithmetic mean (4.549) and a relative average (90.97); for the third dimension “*Leadership skills and taking responsibility*” came with arithmetic mean (4.545) and a relative average (90.90); and for all the axes of the tool came with arithmetic mean (4.555) and a relative average (91.10) respectively.

When comparing the arithmetic mean with the hypothetical mean (=3), it was found that the calculated t-value is much higher than the tabular t-value at a significance level less than (0.05), showing that there are statistically significant differences between the mean female teachers' responses and hypothetical mean; which indicates a higher practice by female teachers of some twenty-first century skills with female students with learning disabilities in the primary schools than the average, and based on the results of the analysis, the hypothesis is rejected.

To reveal the presence of statistically significant differences in the averages of practicing degrees of female teachers of learning disabilities for some skills of the twenty-first century according to the academic qualification variable, the difference between the two groups’ responses was calculated for female teachers according to the academic qualification (Bachelor - Master) in each dimension and in the tool as a whole (see the table.3).

**Table.3: T-test for the degree of practicing some skills**

Academic level and axes		The sample N	Average Mean	Standard error Std. Error	T value	Statistical significance	Conclusion
<b>First dimension</b>	Bachelor's	16	4.600	0.08	0.590	0.563	There are no statistically significant differences
	Master's	4	4.475	0.28			
<b>Second dimension</b>	Bachelor's	16	4.553	0.09	0.088	0.931	There are no statistically significant differences
	Master's	4	4.533	0.31			
<b>Third dimension</b>	Bachelor's	16	4.581	0.10	0.640	0.530	There are no statistically significant differences
	Master's	4	4.400	0.41			
<b>Total score of the tool</b>	Bachelor's	16	4.577	0.09	0.472	0.643	There are no statistically significant differences
	Master's	4	4.468	0.33			

Table.3 shows that there are no significant statistically significant differences between the averages of female teachers’ practice of some twenty-first century skills according to the academic qualification variable, where the calculated (T) value is less than the tabular (T) for the first dimension whose results came (0.590), the second dimension whose results came (0.088), the third dimension whose results came (0.640), and for the tool as a whole whose results were (0.472). The statistical significance values are (0.563) for the first dimension,

(0.931) for the second dimension, (0.530) for the third dimension, and (0.643) for the tool as a whole respectively. Their combined values are higher than the level of statistical significance (0.05), and thus, the hypothesis was rejected.

As for detecting whether there are statistically significant differences in the average degrees of teachers of learning disabilities practice degrees for some twenty-first century skills according to the years of experience variable, one-way analysis of variance was used to determine the difference in the average responses of the female teachers to practice some twenty-first century skills for each dimension of the tool, as well as, for the tool as a whole. Then, the difference between the two groups according to years of experience, namely: (less than 3 years, from 3-5 years, more than 5 years) was calculated as shown in the table.4:

**Table.4: One-way analysis of variance and difference between the two groups**

Years of experience and axes		The sample	Average Mean	Std. Error	Degree of freedom	F value	Statistical significance	Conclusion
<b>First dimension</b>	Less than 3 years	5	4.520	0.24	2	0.174	0.842	There are no statistically significant differences
	3-5 years	3	4.500	0.10	17			
	More than 5 years	12	4.617	0.10				
<b>Second dimension</b>	Less than 3 years	5	4.440	0.24	2	0.471	0.632	There are no statistically significant differences
	3-5 years	3	4.730	0.02	17			
	More than 5 years	12	4.548	0.11				
<b>Third dimension</b>	Less than 3 years	5	4.380	0.39	2	0.372	0.695	There are no statistically significant differences
	3-5 years	3	4.667	0.03	17			
	More than 5 years	12	4.583	0.11				
<b>Total score</b>	Less than 3 years	5	4.446	0.29	2	0.236	0.792	There are no statistically significant differences

Table.4 reveals that there are no significant differences between the groups' averages of practices for some twenty-first century skills according to years of experience where the calculated F-values were less than the tabular (F). For the first dimension, the F value is (0.174), for the second dimension, it is (0.471), for the third dimension, it is (0.372), and for the tool as a whole, the result is (0.236). Besides, the value of the statistical significance was (0.842) for the first dimension, (0.632) for the second dimension, (0.695) for the third dimension, and (0.792) for the tool as a whole respectively. Moreover, their combined values are much higher than the level of statistical significance (0.05); thus, based on the results of the analysis, the hypothesis is rejected.

To detect whether there are statistically significant differences in self-esteem among female students with learning disabilities depending on the type of disability variable, a one-way analysis of variance was used to determine the differences in the average responses of the dimensions of the self-esteem tool for female students with learning difficulties and the average responses to the tool as a whole. Then, the differences between the average responses of the

groups according to the type of disability were calculated. All statistical numbers appear in table.5.

**Table.5: one-way analysis of variance for self-esteem among female**

Academic level and axes		N The sample	Average Mean	Standard error	degree of freedom	F value	Statistical significance	Conclusion
<b>First dimension</b>	Reading	8	3.353	0.153	3	0.476	0.703	There are no statistically significant differences
	Arithmetic	4	3.658	0.245	16			
	Reading and writing	5	3.364	0.484				
	Reading and Arithmetic	3	3.030	0.389				
<b>Second dimension</b>	Reading	8	3.800	0.169	3	0.359	0.784	There are no statistically significant differences
	Arithmetic	4	3.875	0.291	16			
	Reading and writing	5	3.700	0.387				
	Reading and Arithmetic	3	3.390	0.492				
<b>Third dimension</b>	Reading	8	3.325	0.100	3	0.085	0.967	There are no statistically significant differences
	Arithmetic	4	3.475	0.464	16			
	Reading and writing	5	3.240	0.486				
	Reading and Arithmetic	3	3.233	0.517				
<b>Total score of the tool</b>	Reading	8	3.491	0.111	3	0.284	0.836	There are no statistically significant differences
	Arithmetic	4	3.670	0.305	16			
	Reading and writing	5	3.432	0.441				
	Reading and Arithmetic	3	3.217	0.429				

It is clear from table.5 that there are no significant differences among the average responses of the groups according to the type of disability variable between the groups. The calculated value (F) was less than the tabular (F). The results show (0.476) for the first dimension, (0.359) for the second dimension, (0.085) for the third dimension, and (0.284) for the tool as a whole. The values of the statistical significance were (0.703) for the first dimension, (0.784) for the second dimension, (0.967) for the third dimension, and (0.836) for the tool as a whole, respectively. Further, their combined values are higher than the level of statistical significance (0.05), thus, the hypothesis is rejected.

**Discussion:**

The results of the research indicated that there is no statistically significant relationship between female teachers’ practice of some twenty-first century skills and self-esteem among students with learning disabilities in primary schools. That is to say, the teacher's practice of twenty-first century skills does not play a role in the high or low level of their self-esteem. This result may be because learning disabilities last for life. So that, no matter how hard people with learning disabilities try to solve their problems, they will face other problems make their self-esteem in a stable state that is not affected by other variables. Thus, this result differs from Humphrey's study (Humphrey, 2020) that results showed that reading disability has a negative impact on the self-esteem of people with learning disabilities. Moreover, in Badr El-Din’s study (2014), the results of which discovered the effectiveness of a program based on a positive education strategy in developing self-esteem for kindergarten children with learning disabilities.

Moreover, the results indicate that there is no decrease in the practice of some twenty-first century skills by learning disabilities female teachers of female students with learning

disabilities in primary schools. This may be attributed to the inclusion of strategies that involve some twenty-first century skills mainly in the individual educational plan for female students with learning disabilities and the programs for educational preparation for teachers. Therefore, this result is in support of the Al-Harthy (2020) study, which indicated that all twenty-first century skills are very important and that they are available in education teacher preparation programs. As well, the study of Finica et al. (2019) specified that teachers of religious education students considered the skill of interaction to be one of the basic skills for teaching students besides dialogue, which is considered as one of the twenty-first century skills. However, the current result differs from the study of Abualrob (2019). It concluded that the role of teachers in developing and improving students' twenty-first century skills was low.

Continually, the results indicate that there are no statistically significant differences in the average degrees of female teachers' practice of learning disabilities for some skills of the twenty-first century according to the variable of academic qualification. This is attributed to the Ministry of Education's interest in training and qualifying all teachers, regardless of their academic qualifications. This hypothesis results are in agreement with the study of Al-Harthy (2020) on the importance of academic qualification for teachers by including the twenty-first century skills in teacher preparation programs.

Moreover, the results indicated that there were no statistically significant differences in the average degrees of practicing learning disabilities female teachers for some twenty-first century skills according to the variable of years of experience. The result agrees with Shidiq and Yamtina's study (2019) which emphasizes the need to have experience when applying the skills of the twenty-first century by teachers. It also agrees with Rebecca's study (2019) which emphasized the importance of professional development for school teachers allowing them to acquire specific, implementable, and applicable strategies and increase teachers' knowledge and abilities.

In addition, the results specify that there were no statistically significant differences in self-esteem among female students with learning disabilities according to the variable of the type of disability. The results of this hypothesis maybe because most of the students' learning disabilities, with their various disabilities, suffer from problems with self-esteem, and it is one of the distinguishing features of this category, and from this, it becomes clear that no matter how different the type of disability, it will not affect self-esteem. The result is in agreement with the study of Lusif (2018) showing that students with writing learning disabilities often have a medium level of self-esteem. Moreover, that study Humphrey (2020) confirmed that students with reading disability have an average score. Conversely, it differed from the study of Saidi and Warqani (2019), which reached results confirming that there is a statistically significant relationship between self-esteem and academic learning disabilities.

### **Results Summary:**

- The lack of a statistically significant relationship between female teachers' practice of twenty-first century skills and self-esteem among students with learning disabilities in primary schools.
- There is an increase in the level of female teachers' practice of twenty-first century skills.
- There are no statistically significant differences between the practice of twenty-first century skills and the academic variable.

- There are no statistically significant differences between the practice of twenty-first century skills and the years of experience variable.
- There are no statistically significant differences between the practice of the twenty-first century skills and the type of disability variable.

### **Recommendations:**

Intensifying the efforts of teachers in practicing the skills of the twenty-first century to include the personal aspects of people with learning disabilities, and based on the principle of supportive services, which, in turn, supports their self-esteem.

Enriching teachers of learning disabilities with strategies based on twenty-first century skills to practice it with their students. Encouraging teachers of learning disabilities to enroll in postgraduate programs in order to reach higher academic qualifications.

Encouraging teachers of learning disabilities to research and learn the latest strategies and modern teaching methods so that they increase their experiences. Working to increase the organizing of teaching practices with students with learning disabilities to consider the learner's personality and improve his self-esteem.

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