Obstacles of implementing educational techniques in special education centres from autism teachers' perspective

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Abstract

This study aimed at identifying the obstacles of implementing learning technologies from the perspective of the teachers at autism centres in Amman. To achieve the objectives of the study, the researchers adopted a descriptive research method and used the survey as a tool of the study. The sample that was selected randomly consisted of 270 teachers from the autism centres in Amman. The study found that there were significant obstacles facing teachers at the autism centres in Amman in implementing learning technologies, the obstacle fields ranked as follows: learning technology, autism centre, autistic students and teachers, respectively. The study recommended: providing a special laboratory for learning technology resources room in centres, provide a special financial budget for autism centres and that the administrator of the autism centres must encourage the teachers to use learning technologies in teaching.

Keywords: Amman, autism teachers, implementation, learning technology, obstacles1.

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1. Introduction

The contemporary developments that have globally arisen in the educational field have imposed vital changes in the educational systems particularly in the implementation of technology in the educational processes. As it was proven that using technology in the education process attain benefits for both students and teachers as the student can perform many experiments through simulation programs and electronic games that help them to acquire and enhance the knowledge, and teachers also benefited from the implementation of technology in terms of saving effort and time, arousing enthusiasm, facilitating the teaching process, improving understanding and assimilation among students, especially the special education category, including those with autism.

Learning technologies are considered as one of the primary tools that generally provide a good learning environment for learners, and it is a significant part of the educational system and its processes. It contributes to perceive the concepts, experiences and knowledge that is necessary for the students. In general, the more the selection of learning technologies is appropriate, the better promotion of education services offered to students. Thus, special education teachers have gained considerable attention like other teachers. These concerns are associated with the great attention paid to the special needs persons as a lot of educational institutes have embraced such concerns. Several research and studies have effectively tackled the challenges that face special needs persons in both local and universal environments, by providing qualified teachers that can endure the teaching burdens of such students category and who bear the responsibility to utilise the appropriate approaches, techniques and activities that are compatible with their students' levels and conditions (Zahra & Ali, 2019).

Jordan became more eager than ever before to adopt programs and curriculum for the special need persons within the Jordanian economic and social policies. The national strategy has effectively and comprehensively guaranteed the rights of the persons with disability and their needs, and it has considered the national strategy as a national context that all national institutes must comply with in the implementation of their future vision, objectives, actions and programs that should seek to decrease the occurrence of disability. As well as, guarantee disabled persons to gain their rights and meet their needs and ambitions to pursue a quantum and positive shift in their economic and social lives (Al-Sarea, 2014).

The contemporary era has witnessed a shift towards technology; therefore, the abundance of learning sources, learning technologies, and the internet considered as a significant communication tool for many special need persons; it caters to new opportunities to discover the world. Internet became a necessity in their lives because it facilitates accomplishing many tasks assigned to them, which was hard for them to accomplish before. Accordingly, it is necessary to make the internet accessible and usable in favour of this society category (Hussein, 2010).

Fathallah (2012) scrutinises that using technology in the learning process of special education has many benefits to these students either in terms of psychological, or academic or social or economic aspects. Using technology, such as a computer, has a great role in reducing autistic students' stress and emotional behaviour since there are programs that consist of entertainment and games programs that induce pleasures and joys in their selves. Therefore, the anxiety and stress were reduced, so many teachers use this tool as either negative or positive booster to modify autistic students' behaviours.

Autism is one of the complicated developmental disabilities that affect children in their early childhood. It is an impairment that comprehensively affects the child's intellectual, emotional, motor and sensory development aspects. The conduct and social interaction are the more conspicuous deficits of this impairment, in which autistic children incapable to socially interact, and connect relationships with their peers, in addition to attention-deficient, repetitive and stereotyped behaviour and restricted interests (Zreeqat, 2010).

Diverse literature, practical experiences, and competent studies such as Patricia, Lewis, Claire and David (2014) study, conducted in the United State of America, asserted the efficiency of using iPad for enhancing academic achievement in mathematics of sample of seven autistic students. Moreover, Shane et al. (2012) asserted the significance of using modern technologies in the learning process of autistic students according to their positive advantages gained on various aspect explicitly the communication, social interaction, and academic results aspects.

Scott and Luke (2010) conducted a study to identify obstacles that hinder the workers with autistic students to use technology to learn them despite the tremendous advantages exploited from technology in favour of autistic students. The study revealed that the lack of time and the lack of teachers' proficiency to use technology in teaching autistic students are the main obstacles of using technologies. Furthermore, the authors provided applied examples of technology intervention and the setting of autistic students' classes. Consequently, it is shown the significance of the applied educational programs offered to autistic children in the educational settings, which improve their future status and aid the surroundings to deal with him, since most of the programs application accomplish positive results.

In 2018 Al-Najjar conducted a study that aimed to elucidate the reality of the implementation of educational techniques in the educational process in the public schools at Alqwismah District. The study aimed to identify the obstacles facing the teacher in implementing technologies in the educational learning process. The researcher selected a random sample consisted of (42 teachers and 58 female teachers). The researcher used a questionnaire as a study tool that consisted of four domains. The first domain dealt with data related to teachers in Alqwismah District. The second domain covered data related to the techniques available in schools, and the third domain addressed the data related to teachers' implementation of the educational technologies where the last domain addressed the obstacles that faced the teachers when implementing technology in education. Although the results indicated that there were no statistically significant differences in the obstacles of implementing technology in educational process attributable to gender, experience, specialisation, number of students or educational stage, the study limits may be the reason for this, so it is advised to expand the spatial and human limits of the study. The study recommendations include: the necessity of providing an appropriate classroom environment for employing educational techniques and the need to train teachers to produce and employ educational technologies by enrolling them in sustainable development programs.

Zahra and Ali (2019) conducted a study that aimed at study aimed at revealing the reality of the use of educational techniques by teachers of children with autism disorder. The analytical descriptive method was applied to (25) teachers of autism children at the Centre for Autism Disorder/Institute of Intellectual Education in East Riyadh. The questionnaire was used as a tool for study It included 17 items. The results indicated that the most commonly obstacles that hinder the use of techniques in the education of autistic children are the scarcity of the presence of halls for the use of educational techniques, and the lack of budget availability for the technologies Scientific, and the need for more than one teacher to use educational technology at the same time with its unavailability, in addition to the fact that its price prevents its acquisition, and the weak possibility of compensating for its damage or loss, where the arithmetic mean for these phrases ranged between (1.80 and 2.00) and percentages between 80 and 100).

Al-Attar (2019) conducted a study entitled 'the effects of music therapy to enhance verbal skills in children with autism spectrum disorder (ASD).' The study aimed to examine the differential effect of three different music interventions, namely, the Interaction music singing ('singing'), Interactive music playing ('music and singing') and Receptive Music Therapy ('listening') studying the varying latency periods in the response time it took three children diagnosed with ASD to vocally elicit the target word, (b) assess the index of happiness of children with autism after the implementation of the three music interventions which can in turn be used to influence their overall quality of life through this specific intervention and (c) measure the social validity in regards to meeting satisfaction with goals,

procedures and outcomes. The three musical approaches to be used consisted of both active and passive methods (Prakash, 2015) including Music Interaction Therapy ('singing'), (Wimpory & Nash, 1999), Interactive music playing ('music and singing'), (Kaplan & Steele, 2005) and Receptive music therapy ('listening'). The basic research questions for this study were: (a) How do the three music interventions compare in their impact on decreasing the latency period preceding a vocal response in three children with ASD? (b) Do children with ASD show different levels of happiness from participation in the three music interventions? and (c) How do teachers and parents measure the social validity regarding meeting outcomes, goals, and procedures of this intervention for verbal expression? The participants included three children ages 6-year old diagnosed with ASD from the Lebanese autism society, a non-governmental organisation, located in Beirut, Lebanon, which educationally caters for children with autism. This study used the multi-element design, also known as the alternating treatment design, to compare the effects of each of the three different music therapy techniques on the child's latency to respond to target words during the playback of a practiced song. The researcher carried out 20-minute music therapy sessions for each of the three children two times a week for 2 months. The intervention sessions were video recorded during implementation of the music therapies. The recorded videos were then used to measure the latency period for each child's response time in a playback after the music sessions were over. Latency data were then collected using pen and paper. Findings from the present study demonstrated that there was a differential effect among the three musical interventions regarding latency periods for all participants. Additionally, the happiness levels of the students varied from neutral to happy, signifying an overall positive experience while they were participating in the music ABA intervention.

Al-Adwan (2019) study entitled 'The Effect of Computerised Educational Software on the Achievement of the Third Grade Students in Learning Arabic in Jordan' aimed to reveal the impact of computerised educational software on the achievement of third grade students in learning Arabic language in Jordan. To achieve the objective of this study, the researcher built a computerised educational software, and an achievement test that measures reading and writing skills of third grade students. The validity and reliability of the study tools have been verified. The study members consisted of (50) male and female students of the third grade students in the first semester 2018/2019, were distributed into two groups, one of which is an experimental group of (25) male and the other officer is composed of (25) male and female students. He divided the sample into two groups: a control officer studied in the usual way, and an experimental study using computerised educational software. The results showed that there were statistically significant differences at the level of significance (α = 0.05) in the achievement of the third-grade students in the Arabic language (reading and writing) in favour of teaching method using computerised educational software. The study recommended: generalising the experience of the use of computerised educational software that was applied to the students of Arabic language on different subjects, taking advantage of the positive impact of the use of computerised educational software in the achievement of students, conducting new studies with different designs and measurement tools to examine the impact of the use of computerised educational software in materials.

Al-Badu (2020) conducted a study entitled 'The effectiveness of using educational support technology in promoting integration for people with special needs in schools from the teachers' point of view.' This study aimed at identifying the female teachers' view in the schools at the United Arab Emirates (Al-Riffa Secondary School for Girls) towards the effectiveness of using educational support technology in educational integration for those with special needs in schools. The study sample consisted of (70) female teachers and the questionnaire was answered by the study sample. The researcher used the descriptive analytical approach to achieve the study objectives. The researcher built a scientific questionnaire to measure the objectives of the study. The study showed that the opinion of the study sample on the role of teachers in activating the educational integration process was high, and that the availability of requirements for the use of educational support technology in educational integration in schools is of a moderate degree, Where the obstacles to the use of educational technology support in educational integration in schools are: the lack of financial funds,

poor qualification and training of the teacher in the use of computers, limited availability of computers in schools and integration programs, lack of electronic programs that deal with every case and every disability. The obstacles were also the lack of educational programs related to the curriculum, lack of time to obtain teacher training or for training students to use technology and lack of time to prepare and develop new educational strategies that incorporate technology into the curriculum. In addition to lack of reliable tools in some schools and lack of student independence. Finally, the teacher's comfort level and lack of accessibility.

The researchers procedurally defined **Obstacles** in the study as all factors that negatively influence the learning technology implementation, and it faces teachers of autistic students through teaching autistic curriculums, which deficits the exploited of technology competences, where Al-Ghamdi (2008) defined **Implementation** as the ability of usages. The researchers procedurally defined it as grasp the appropriate approaches and techniques for using the learning technologies.

Learning technologies where defined by Al-Heilih (2010) as teaching and learning tools that assist knowledge, thoughts, competences and experience acquiring to accomplished predefined educational objectives. In this study, it is procedurally defined as any complex or simple tools or equipment used by autistic students' teachers to explain and simplify educational content for autistic students. Learning technology implementation procedurally defined in this study as grasp and use the way that autistic students learn, and the way of learning technology exploited and designed by autistic students' teachers to facilitate students' learning process.

Kanner (1943) was the first one who diagnosed ASD based on characteristic and behaviour observation of 11 cases, which encompasses; incapability of developing social relationships with others, delayed speech acquisition, used indirect discourse after developing language acquisition, repetitive and stereotyped activities and weak of the imagination and analysis. Until now, there are various of autism definitions rely on Kanner's descriptions (Zreeqat, 2010), and procedurally it is defined as: Autistic children enrolled in special education centres in Jordan and were diagnosed by specialised and accredited centres.

The Autism teacher describes a special education teacher who teaches and qualifies students with ASD in classes in centres for education and rehabilitation of students with ASD.

Generally speaking, using technology in special education contributes in adopting the fundamental principle of 'education for all', guarantees the students' rights in distinguished learning associated with their competences and special needs and providing and adopting new technologies to facilitate technology usage in leaning autistic students in the way of impowering their knowledge and experience acquisitions to signify their competence and qualified them to engaged in community development. Therefore, the current study carries out to answer the following question 'What are the Obstacles of Learning Technologies implementation by Teachers at Autism Centres in Amman?'.

1.1. Study problem

The current era is witnessing a major shift towards the use of technology in all areas of life, and one of these areas is the educational field where it is noticed that there has already emerged an urgent need towards the use of technology in the educational process. Nowadays, the globe is struggling Coronavirus disease (COVID-19), which obliged the educational systems to shift towards the use of e-learning, which is considered as one of the tools of educational techniques. It is noted that interest has increased in the means and techniques of education through the current era, and as a result of the results of educational research and studies on the one hand and the rapid scientific and technical developments that occurred on the other hand, have led Li develops teaching methods using methods and techniques of education in all aspects of the educational process.

The science of educational techniques has become widely known and widespread in general education and everywhere, as its capabilities have gone beyond providing tools and devices to various

computerised programs. However, there have been many educational means of communication and teachers are using multiple names for educational means of communication such as: clarifications, or Assistive means, visual aids, teaching aids, audio-visual aids, educational aids or teaching techniques. In this study, we use the so-called educational techniques. As the education of children with special needs, especially the autistic group did not have the provision of educational techniques that provide them with effective education, as their education plays an effective role in their treatment. The researchers noted through their work in teaching students with autism and their work in the field of training teachers in special education centres that teacher of autistic students face multiple obstacles in the use of educational techniques if they exist and that some centres do not provide educational techniques. Therefore, the researchers conducted this study to identify these obstacles, to address them and to provide appropriate solutions to them.

Despite the acts stated by the higher council for the rights of persons with disabilities (HCD) that asserted the special care rights for those individuals, and the programs' accreditation standards for autism in Jordan particularly the fifth standards embrace the rights of providing appropriate educational environments for autistic persons at autism centres, the researcher noted that the reality of acts application does not comply with these acts as required. Hence, the researchers noticed the problem of the study that there are obstacles preventing teachers from fully utilising special educational techniques in a way benefiting students. There are several studies that dealt with the obstacles of employing educational techniques or one of its components by special education teachers such as the study of (Zahra & Ali, 2019) and others, Despite the efforts made by several studies in the field of special education in Jordan, and the results of the studies we have indicated in this study, some autism centres lack the use of educational supportive techniques in education for this group, and that there were some obstacles that contribute to hinder their use such as lack of interest in employing them and the lack of training on the use of technology in teaching. Therefore, this study came to reveal the extent of the existence of obstacles to the use of educational techniques among teachers in autism centres in Amman. The problem of research lies in answering the following question:

What are the obstacles to implementing educational techniques in special education centres from the point of view of autistic teachers in Amman?

1.2. Study significant

The study gains significant due to:

1. Reveal the obstacles that constrained the implementation of learning technologies and faced by teachers who teach autistic students. Revealing these obstacles contributes to making the decisions that deal with challenges and gain advantages of learning technology in favour of developing the educational process Competent authorities in Autism can exploit the study results.
2. Providing suggestions to overcome the obstacles of using learning technologies in Autism class.

1.3. Study limitation

This study has some limitations as follows:

• Time limitation: the study conducted in the second semester of 2018/2019.
• Spatial limitation: the study conducted only Amman provenance.
• Sample profile limitation: the study only conducted supervisors and teachers who deal with autistic students.

2. Methodology

This section addresses the method, population, sample and research procedures.

2.1. Method of study

In this study, the researchers used the descriptive method by surveying technique.

2.1.1. Population of study

The population of the study contains all of autism spectrum teachers in the primary stage in Amman, which consists of the 240 teachers distributed on 14 Autism centres.

2.1.2. Study sample

The study sample consisted of (70) teachers that were selected randomly from autism spectrum teachers. The sample represented the population of the study by a 29% percentage from it. Table 1 shows the distribution of the sample among various variables

Table 1. Distribution of the sample among various variables

Variable	Variable	Number	Percentage
Educational qualification	Bachelor (B.A)	50	71%
	Diploma	20	28%
Practical experience	Less than 5 years	45	64%
	5–10 years	35	50%
Total		70	100%

2.1.3. Study tool

The researchers used the questionnaire as the study tool to determine the degree of the learning technology implementation obstacles by teachers at Autism centres in Amman that related to teachers, autistic students, autism centres and Learning Technology. The final version of the questionnaire was distributed on the study sample after the verification of tool's Validity and reliability. This questionnaire consists of two sections:

The first section: Demographic Information (Educational qualification, practical experience and training courses)

The second section: that contains 38 statements were distributed on four dimensions, as the following:

- First dimension: the obstacles that related to autism spectrum teachers that contain 11 statements.
- Second dimension: the obstacles that related to autism centres that contains 13 statements.
- Third dimension: the obstacles that related to autistic student that contains 6 statements.
- Fourth dimension: the obstacles that related to learning Technology that contains 8 statements.

The responses of the questionnaire were based on Likert scales (5 = vary high degree, 4 = high degree, 3 = moderate degree, 2 = low degree and 1 = very low degree). This scale can judge the degree of education technology implementation obstacles. Range = largest value (vary high degree) − smallest value (very low degree) = 5−1 = 4

Class Length = Range ÷ number of classes = 4/5 = 0.8

Interval	Degree
1–1.8	Very low
1.81–2.6	Low
2.61–3.4	Moderate
3.41–4.20	High
4.21–5	Very high

2.1.4. Validity and reliability

2.1.4.1. Content validity

The first version of the questionnaire has been offered to the panel of faculty members in the University of Jordan who specialist expertise in this area, the panel members were 10; in order to ensure the degree of the statements' relevance, clarity, belonging to the correct section and language purity of the questionnaire. Based on their opinions and suggestions, the tool was improved and manded.

2.1.4.2. Tool validity

The internal consistency was used to ensure the tool validity by the calculated correlation coefficient. The correlation's coefficient was calculated between statements and the overall degree of the section to which it belongs. The results were as following: The correlation coefficients ranged from 0.66 to 0.75, and all the correlation coefficients were positive, high and statistically significant at (0.05) which indicates to the internal consistency between statements and overall degree of the section to which it belongs.

2.1.4.3. Reliability of the tool

To ensure the tool validity the internal consistency reliability was calculated using the Cronbach's alpha test. The reliability coefficient was 0.93 that is means a suitable and height value of reliability.

2.1.4.4. Research procedures

The procedures that were followed by researchers in this study:

• Review the theoretical framework of the research to prepare and design the study tool.
• Identify the population and sample of the study.
• Designing the study tool and check its validity and reliability.
• Arrange with autism centres to apply study tools.
• Distributed the study tool on the sample in autism centres.
• Insert the data that collected into SPSS V.22.
• This study conducted at second semester in 2019.

2.1.4.5. Data analysis

To answer on the study questions, the researchers used these Statistical techniques as in the following:

• Frequencies and percentages to describe the characteristics of the sample in term of the personal information.
• Means and standard deviation to calculate the value for each statement.
• The internal consistency.
• The Cronbach's alpha test for reliability.

3. Discussion and results

In this section, the researcher's discussed the result of the study question: What are the obstacles of Learning technologies implementation by teachers at autism centres in Amman?

Means and standard deviation was calculated to answer this question. Table 2 shows the sample responses on each section.

Table 2. The sample responses on each sections and total response degree

No.	Obstacles' dimension	Mean (*M*)	Standard deviation (SD)	Level
1	Learning Technology	4.2	0.75	High
2	Autism canters	4.19	0.72	High
3	Autistic Students	3.87	0.75	High
4	Teachers	3.81	0.61	High
	Average	4.01	0.75	High

Table 2 shows that the overall mean of the responses is (4.01), while the highest mean of the obstacles were referred to the learning obstacles (4.2), followed by , respectively, autism centre obstacles (4.19), autistic students obstacles (3.87) and in the last was the obstacles referred to teacher (3.81). According to results shown, the learning technologies were not available in autism canters and there were obstacles in applying it to teach autistic students. This result was consistent with the results of the studies of Al-Adwan (2019), Al-Attar (2019), Al-Najjar (2019) and Zahra and Ali (2019).

In this section, researchers explained the sample responses on each field of obstacles, as following:

• The obstacles related to the teachers:

Table 3. Means and standard deviation of the sample responses on the obstacles related to the teacher of autism students

No.	Items	Means	SD	Level
1	The lack of in-service training courses in the field of using educational technology in teaching	4.20	0.75	High
2	Lack of courses in learning technologies for autism in teacher-training programs	4.19	0.97	High
3	Lack of teachers' knowledge of modern learning technologies.	4.09	0.71	High
4	Lack of material and moral incentives for teachers that encourage the use of learning technologies	3.97	0.94	High
5	The limited availability of modern educational software	3.94	0.90	High
6	Lack of communication between me and the learning resource specialist for using learning technologies	3.90	1.17	High
7	Weak of professional formation for using learning technologies	3.86	1.41	High
8	Available learning technologies for individual programs are inappropriate	3.60	1.13	High
9	Poor the knowledge of learning technologies rules reduce using of it	3.50	1.17	High
10	The teachers are not convinced of the learning technologies importance in teaching	3.40	1.35	Moderate
11	Using learning technologies prevents the completion of the curriculum on time	3.30	1.12	Moderate
	Total	3.81	1.05	High

Table 3 indicates that 3.81 is the total mean of the responses on the first dimension (the obstacles related to the teacher of autism students), which indicates there is a very high level of obstacles in the autism centre related to the teacher of autism students in Amman. In addition, the overall standard deviations were 1.05, which was a low value and indicated to the harmonies of sample responses on the obstacles related to the teacher of autism students.

Furthermore, the Table 3 indicates that the teacher's obstacles of using learning techniques at autism centres in Amman for the teacher was measured through 11 paragraphs, and a response was found (moderate) for 2 paragraphs, and (high) degree on the rest of the paragraphs. The values of the arithmetic mean for the degrees of obstacles to implementing educational techniques for autism teachers in Amman's special education centres for the teacher ranged from 3.30 paragraph 11 which is (Using learning technologies prevents the completion of the curriculum on time) to 4.40 in paragraph 1 (the lack of in-service training courses in the field of using educational technology in teaching) and these arithmetic averages fall within the rank (high) and (moderate). This result was consistent with the results of the studies of Al-Adwan (2019), Al-Attar (2019), Al-Najjar (2019), and Zahra and Ali (2019).

- The obstacles related to the autism canters:

Table 4. Means and standard deviation of the sample responses on the obstacles related to the autism centres

No	Items	Means	SD	level
1	Lack of guidelines indicating what is available from the centre's educational devices and technical means and how to use them	4.39	0.89	Very high
2	Difficult of moving technical equipment to the classrooms	4.27	0.90	Very high
3	Classrooms are far away from the Centre's Learning Resources in the Centre.	4.14	1.25	High
4	The lack of suitable learning resources in the centre.	4.07	1.09	High
5	There are not enough learning technologies and tools for all students in the centre.	4.07	1.24	High
6	The low number of teachers who able to use Learning technologies	4.04	0.96	High
7	The class time is insufficient to use Learning technologies.	3.9	1.24	High
8	The classrooms are not equipped for using learning techniques (area - electrical wiring).	3.87	1.14	High
9	Weak coordination between teachers for using available technical devices.	3.8	1.03	High
10	Some of the learning techniques are not suitable for autism students.	4.07	1.09	High
11	Many of the available educational equipment is not good or unusable.	3.80	1.04	High
12	The Weak infrastructure of learning resources in the centre.	3.70	1.28	High
13	Lack of encouragement of the centre director for teachers to employ teaching techniques in teaching	3.60	1.38	High
	Total	4.19	1.09	High

This Table 4 shows that the total mean of the responses on the second dimension (the obstacles related to the autism canters) is (4.19) which indicates a high level of obstacles in the autism centre related to the autism canters in Amman.

The mean for the degrees of obstacles implementing educational techniques for autism teachers in Amman's special education centres for 'management' ranged from 3.6 paragraph 13, which is 'lack of encouragement of the centre director for teachers to employ teaching techniques in teaching.' to 4.39 paragraph 1 'lack of guidelines indicating what is available from the centre's educational devices and technical means and how to use them. These arithmetic averages fall within the levels (high) and (very high). This result was consistent with the results of the studies of Al-Adwan (2019), Al-Attar (2019), Al-Badu (2020), Al-Najjar (2019), and Zahra and Ali (2019).

• The obstacles related to the autism students:

Table 5. Means and standard deviation of the sample responses on the obstacles related to the autism students

No	Items	Means	SD	Level
1	Students have problems that limit their ability to use learning technology.	4.20	0.90	High
2	The low overall achievement level of autism students	4.25	0.90	High
3	Technical devices are damaged due to misuse	3.93	0.80	High
4	Students have difficulty using learning techniques.	3.91	1.11	High
5	Students forget what they have learned by technical devices quickly	3.51	1.45	High
6	Students are unwillingly using learning techniques.	3.46	1.30	High
	Total	3.87	1.08	High

Table 5 indicates that the total mean of the responses of the study sample on the items of the third field, which relate to the obstacles that concern students with autism, is 3.87, and it indicates a (high) response on the obstacles of implementing educational techniques for autism teachers in Amman's special education centres, for students with autism. The values of the arithmetic mean for the degrees of obstacles hiring educational techniques for autistic teachers in Amman's special education centres for students with autism disorder ranged from an arithmetic average of 3.46 to paragraph 6 which is 'Students are unwillingly using learning techniques' to an arithmetic average of 4.20 paragraph 1 which indicates that 'Students have problems that limit their ability to use learning technology' and these arithmetic averages fall within the fourth category (large) and the fifth category (large).

This result is consistent with the results of the studies of Al-Adwan (2019), Al-Attar (2019), Al-Najjar (2019), and Zahra and Ali (2019).

• The obstacles related to the Learning Technology:

Table 6. Means and standard deviation of the sample responses on the obstacles related to the learning technology

No	Items	Means	SD	Level
1	The difficulty of providing programmers to convert the autism curriculum into the software.	4.43	0.73	High
2	The scarcity of autism curriculum software.	4.34	0.72	High
3	Inadequate autistic ready software whether Arabic or English	4.3	0.84	High
4	The equipment's learning techniques in the centre are old	4.17	0.80	High
5	The prices of educational available software are high that can help the autistic spectrum curriculum.	4.17	0.83	High
6	Most of the available software in English that makes difficult learning by it	4.1	0.94	High
7	Lack of maintenance technicians of educational equipment.	4.09	0.79	High
	Total	3.87	1.08	High

Table 6 shows that the total field average for the responses of the study sample on the fourth field paragraphs (obstacles related to educational techniques) has reached 3.87, and it indicates a (high) response on the obstacles of implementing educational techniques for autism teachers in Amman's special education centres, on educational technologies. The mean for the degrees of obstacles of implementing educational techniques for autism teachers in Amman's special education centres ranged from 4.43 paragraph 1 which is (The difficulty of providing programmers to convert the autism

curriculum into the software.) to (4.09) paragraph (7) which is (Lack of maintenance technicians of educational equipment) and all these means came with a (high) degree. This result was consistent with the results of the studies of Al-Adwan (2019), Al-Attar (2019), Al-Badu (2020), Al-Najjar (2019), and Zahra and Ali (2019).

4. Conclusion

This study aimed at identifying the obstacles of implementing educational techniques in special education centres from the point of view of autism teachers in Amman. The problem of the study was limited to the presence of obstacles among teachers in employing educational techniques in autism centres in Amman. To achieve the objectives of the study, the researchers used the descriptive approach of the survey, where the researchers selected a random cluster sample consisted of 270 teachers from the Autistic canters in Amman. The results of the study indicated that there were significant obstacles in the implementation of educational techniques by Autism teachers in the special education centres in the city of Amman, and most areas that have obstacles came at a high degree as in this descending order:

Obstacles related to educational technologies, the centre, students with autism and the teachers.

5. Recommendation

Based on the result, the study recommended that:

- Special laboratory or technology class must be provided for learning resources in the centre.
- Enough budget must be provided for learning techniques in autism centres.
- The centre's administrator must encourage the teachers to use learning techniques at the curriculum.
- Technicians must be provided for the maintenance of educational equipment in the centre.
- Modern software must be provided for the education of autism students.
- Teachers must be trained on how to design electronic educational programs for autism students.

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