Professionals' Attitudes towards Using e-Learning Implementation with Children with Disabilities

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***Abstract*—This study explored e-learning attitudes reported by (98) professionals working in the field of children with disabilities, (60) teachers, (18) tutors working in diverse areas, (11) shadow teachers and (9) social workers, current study belongs to the pattern of descriptive analytical studies, a study Applied in ad hoc learning disabilities institution at Fayoum governorate south Egypt, The final results of Friedman technique confirmed that the attitudes of e-learning consists of three components Affective, Behavior and Cognitive components according (A,B,C) MODEL, cognitive Component has achieved the first rank in terms of the importance at (2.29), the next is Affective component at mean rank (2.02), the third and final rank is behavioral or skills component at (1.69). in the other hand result shows that E-learning implementation barriers consisted of five items, the test confirmed that the rank of items (1) to (5), Content-Suitability barriers is the first by mean rank (4.10), the last rank is the Instructional barriers by mean rank (1.66), results enable us to accept the null hypothesis: there is no significance difference in the professionals attitudes towards e-learning courseVary according to (educational level, position), in the other hand result showed accepts the alternative hypothesis: there is a statistically significant association at a level (0.05) between e learning implementation barriers and staff attitudes towards e learning.**

***Index Terms*—Children with disabilities, online learning, web learning, networked based learning, e-learning attitude, e-learning course, affective component, behavioral component, cognitive component.**

I. Introduction

This article provides an overview towards the role of e-learning to promote the education of children with special needs, identify the level of professionals' attitudes towards e-learning courses, and identifies the e-learning implementation barrier Like all other educational sectors, " handicapped learning sector as well has not been able to remain isolated from the ongoing, one of the most critical challenge that most of the educational institution have been confronted with how to best educate children with disabilities for what has been variously called the Knowledge Age, the Information Age, or, more recently the Digital Age" [1].

As one of the important component of handicapped' learning, e-learning is a type of open or flexible learning for special needs, the new method of teaching and learning, and an imperative strategy in the educational reform creates new borderless learning environment and opportunities and bring dramatic changes in the character of students with disabilities. Ref. [2] E Learning with handicapped child depends on electronic communication online using the latest information and communication technologies. Ref. [3] This article tries to identify the levels of attitudes towards e learning by using the (A, B and C) model, this model enables us to measure the components of professionals' attitudes towards e learning courses with children with dishabilles.

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II. Literature Review

The right to education is universal and extends to all children with disabilities. This right is enshrined in the Convention on the Rights of the Child (1989) [4] and the Convention on the Rights of Persons with Disabilities (2008). Ref. [5] It is also addressed in several international declarations, including the World Declaration for Education for All (1990), the UNESCO Salamanca Statement and Framework for Action (1994) [6], and the Dakar Framework for Action (2000) [7].

Due to several factors, including age, disease, accidents and other reasons, the number of people with disabilities increases every year. This increased number of people with disabilities is also reflected in educational fields, Millions of children across the developing counties cannot benefit fully from a traditional educational program because they have a disability that impairs their ability to participate in a typical classroom environment.

According to the results of several studies[8], [9] stated that the role of participation and interaction in learning activities was to valorize equally all students. In the other hand [10]-[13] found that Since learning is a social activity and understanding is socially constructed, e learning should be designed to promote participation, allowing all child to take part in all activities, enhancing cooperative learning and offering powerful opportunities [14].

During the last two decades, e-learning have been developing at an unprecedented and increasingly rapid pace specifically in the handicaps fields. The use of the Internet, the WWW and increasingly, virtual learning environments (VLEs) has revolutionized communications and is causing radical developments in the ways schools enable their staff and learners specifically child with disabilities to find and create knowledge and interact with each other [15].

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III. Hypothesis Development

A number of studies attempt to identify the role of technology towards children with disabilities for example [16]-[21] found that depend on computer and access to internet enable us to improve the learning process for children with disability, in the other hand [22], [23] suggested that children with disabilities need to improve their attitudes towards e learning courses [24]-[26] found that the researchers need to design many studies enable us to identify the level and the components of e learning attitudes [27], [28] ([27]), helps us to identify the link between the personal and organizational variables and the attitudes towards e learning with disabilities, thus the main hypotheses of this study is: there is significant difference at the level of (*P*-Value < 0.05) in affective, cognitive and behavioral components according the organizational variables of professionals.

IV. Research Methodology

The most significant limitation of this study is that it focused solely on educational organization in Fayoum governorate. In order to rectify this limitation, the study is being expanded to include all professions or the teamwork that enhance the educational process for children with disabilities. This measure is based on the three dimensions of professionals' attitude about e learning The questioner consist of (36) items, namely affective, behavior, and cognitive components, (A-B-C), and (6) items namely organizational variables, total items (66), Responses to these items were made on a 5-point Likert format ranged from 1 = strongly disagree to 5 = strongly agree.

The study was applied on (94) of professionals from disabilities fields in Fayoum governorate, the highest percentage (61.2%) represented teachers, followed by the percentage (18.4%), which represents tutors working in diverse areas, and (11.0%), which represents shadow teachers, the percentage of at least (13.3%) included social worker staff working in field of disabilities. The reliability of the questionnaire was tested according to Cronbach Alpha measurements; the reliability coefficient (Alpha) of each element of staff attitude was as follows: affective components (0.72); behavior components (0.80); and the cognitive components (0.82), the reliability coefficients of all the three elements of total e learning attitudes were above (0.79).) [29] (see Table II)

TABLE I: Validity and Reliabilities of the Scale

	Mean[a]	Std. Deviation	A	B	C	E-L-A
Affective component	2.8243	.6054	**(0.721)**			
Behavioral component	2.7830	.7487	**.523	**(0.80)**		
Cognitive component	3.0121	.7137	*.635	**.521	**(0.82)**	
E learning attitudes	2.8731	.6435	**.634	**.654	**.760	**(0.79)**

a. Table.1.2. Mean, St- Deviations, Valaidity and Reliabilities in Full Sample (N = 98)

Results: Data in the table refers to the Rank of the components of professionals attitudes toward e learning with children with disabilities, using the Friedman test showed that the components of (1) to (3),Friedman test revealed a significant difference in responses at a lower level of (0.01), the test demonstrated validity and reliability of the three axes, the data in the table confirms that the cognitive component has the first order (2.29), followed by Emotional component in the order (2.02), in the order in the third and final skills component (1.69).

Is there a statistically significant difference in e learning attitudes according to position?Using Kruskal-Wallis to test the occurrence of significant differences between the all four sub-group (teachers, tutors, shadows and social workers). In three components (ABC) or professional attitudes, the results indicates that there was no significant differences between the four categories on the (ELA), because the significance probability above (0.05) threshold. This Result enables us to reject alternative and accept null hypothesis that there is no significance difference between four subgroups as independent variable (see Table II).

TABLE II: The Ranking of e-Learning Attitude Components

	Component	Mean Rank	Percentiles 25th	50th (Median)	75th
First	Cognitive component	2.29	2.3636	2.8182	3.4773
Second	Affective component	2.02	2.5000	2.7222	3.2361
Third	Behavioral component	1.69	2.2500	2.7333	3.2833

a. Chi-Square= 17.22 Asymp. Sig= .00 df= 2 N=98

V. Summary

This paper has focused on the staff attitudes towards e learning in disabilities fields, and presents an attempt to estimate the current e learning barriers, a Study applied on 98 professionals' responded to the questionnaire. The sample of the main research comprised of (98) of respondent. Out of which (61.2%) teachers, (18.4%) tutors working in diverse areas, (13.3%) shadow teachers and (11.0%) social workers staff working in the field of disabilities, current study belongs to pattern of descriptive analytical studies, a study Applied in ad hoc institution at Fayoum south Egypt. final results confirmed that the attitudes of e-learning consists of three components Affective, Behavior and Cognitive components according (A,B,C) MODEL, cognitive Component has achieved first rank at (2.29), the next is Affective component at (2.02), the third and final rank is behavioral or skills component at (1.69). E-learning implementation barriers consisted of five items, the test confirmed that the rank of items (1) to (5), the mean rank of barriers as follow Content-Suitability at first rank (4.1), Technological barriers at second mean rank (3.73),Organizational barriers at (3.04),Personal barriers at (2.47), and finally Instructional barriers at (1.66), results enable us to accept the null hypothesis: there is no significance difference in the professionals attitudes towards e-learning courseVary according to (educational level, position).

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