



Summary

Introduction

Autism is a developmental disability resulting from a neurological disorder that affects the normal functioning of the brain. It is characterized by the abnormal development of communication skills, social skills, and reasoning

Behavior change Behavior change refers to any transformation or modification of human behavior. Such changes can occur intentionally, through behavior modification, without intention, or change rapidly in situations of mental illness

The word technology. The term is broadly defined as "the practical application of knowledge" or "the specialized aspects of a particular field of endeavor. This broad definition encompasses virtually any information or object that has been used in application to a field of study

Aims of the study

The present study aimed at:

Assess uses of technology in specialized institutions on autistic child's behavior

Subject and methods

Research Setting:

The study will be carried at Eltarbya Elfekrya Schools and Development Referral Center at Banha City.

Subjects:

The subject comprised of autistic child from 6-10 years old including boys and girls.



Tools of the study:

The data will be collected by using the following tools:-

Tool I: consists of two parts

Part one includes the following:-

A-Socio demographic data include gender, age, and area of specialty.

b- Autism Behavior Checklist (ABC)

The Autism Behavior Checklist (ABC) is a list of questions about a child's behaviors. The ABC is designed to be completed independently by a parent or a teacher familiar with the child who then returns it to a trained professional for scoring and interpretation. The ABC has 57 questions divided into five categories: (1) sensory, (2) relating, (3) body and object use, (4) language, and (5) social and self-help.

TOOL II include the following:

Observational checklist to assess using technology which including the following (clipboard, photo, albums, overhead projector, calculator, timers, video camera, computer and adaptive hardware).

Methods:

- 1-An official approval will be obtained from ministry of education to carry out the study.
- 2-The observational checklist tool tested for their content validity by a group of 5 experts in the psychiatric field.
- 3-A pilot study will be done before embarking in the field of work on children, to ascertain the clarity and applicability of the study tools and to identify obstacles that might be faced during data collection.
- 4-Necessary modifications will be done.



5- Informal consent to participate in the study will be obtained from the parent of children.

6- During the first session, the researcher will try to establish trust and diminish the child's level of anxiety (introductory session)

7- The selected children will undergo pre-test using observational checklist tool.

8- The observational checklist tool will be divided into four stages:

a- Determine number of session is about 40 sessions.

b- Identify type of behavior wanted to be changed. Through the teacher or parent of child

c- Sessions is divided into 2-3 sessions weekly.

d- Assess of behavior will be done at the end of the sessions.

Results:

The findings of the study can be summarized as follows:

- The present study showed that 70% of the sample was from eltarbya elfkrya school and that illiteracy among mothers was 50%. The mean of children's age was 8.2 ± 0.92 while for the mothers 25.7 ± 2.16 .
- As regarding sensory behavior, relating behavior, body and object use, language behavior and social behavior all involved in the studied sample.
- As observed in the present study that, all children at the beginning of the session were no response to modification.
- Regarding socio-demographic data, there is non significant difference ($p > 0, 05$) between sex, type of school, age of children, age of mother and low and high type of technology, while there was statistical significant difference ($p < 0, 05$) between illiterate mothers among low technology than high technology.



- There was non significant difference between low and high technology regarding number of sessions for child attention ($p > 0,05$).
 - There was non significant difference between low and high technology regarding number of sessions for follow command ($p > 0,05$).
 - There was non significant difference between low and high technology regarding number of sessions for self care ($p > 0,05$).
 - that there was non significant difference between low and high technology regarding number of sessions for atonal speech ($p > 0,05$)
 - regarding type of technology, the majority (60%) used photo and album, while (20%) were used timer
 - regarding frequency distribution of attention and response
- , it was found that the highest value were (100%) of children in the beginning of Session were no response with attention while less than one third (20%) of them were Complete response at the end of session .The study also showed that one Hundred of children were no response to follow command at the beginning Of session and about two third (70%) of the children were complete response to follow Command at the end of session. The table also showed that one hundred of children were no response at the beginning of session regarding development of self care and atonal Speech, while at the end of Sessions (90%) of children received simple response for atonal speech.



As the result of this study the following recommendation were formulated:

- 1- Providing written and illustrated instructional guide and brochures for parents of autistic child about concept, symptoms, complications, and available support services.
- 2- Putting students with different category of disabilities in the same class confuses the child and teacher to the behavior.
- 3- Upgrading level of teachers to be able to use high technology in modifying the behavior of autistic children.
- 4- All primary health educating care professionals educating on the early signs is recommended for to facilitate early identification of ASDs.
- 5- The need for continued research to document evidence-based strategy use in public schools for students with ASD.
- 6- Further researches are required involving larger study sample of autistic child to clarify the importance of technology applied to improve his behavior.
- 7- Technology based interventions are often useful for and appealing to children with autism. A growing literature supports the general effectiveness of these tools although additional comparative research is needed.
- 8- Interested researchers and clinicians have a wonderful opportunity for exciting collaborations with other technical disciplines to make technology-based interventions truly useful and accessible for children with autism.
- 9- The sessions should be done by qualified psychologist for better results
- 10- It is recommended that the number of students in each class should decrease for better education and skills accomplishments.



11- An assistant in every class is strongly needed to the improvement in the performance of the children.