

Parental Accompaniment and Its Role in the Efficacy of an ABA Therapy Program for Autism

Dr. SAFA Amina¹

¹Lecturer Class A University of Mostaganem (Algeria). Research laboratory in psychology and education sciences (Algeria).

The E-mail Author: aminamosta@gmail.com

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Abstract:

This study aims to explore the role of parental involvement in enhancing the effectiveness of the Applied Behavior Analysis (ABA) therapy program for children with autism. The central research question posed was: Does parental involvement significantly impact the success of the ABA therapy program? Utilizing a clinical approach, the research was conducted with two case studies at a specialized center for autism and psychological disorders. Data collection methods included semi-structured interviews with both parents and the psychologist overseeing the cases, detailed assessments of the outcomes from the ABA program, and clinical observations.

The findings reveal that parental involvement is instrumental in the success of the ABA therapy program, notably in fostering social skill development and promoting independence in children with autism.

Keywords: Parental accompaniment, Autism, Autistic child, Applied Behavior Analysis (ABA) Program.

Introduction

Autism is a complex neurological disorder that significantly impairs brain functionality, manifesting in profound difficulties in establishing social connections within society, including with family members and peers. This disorder is characterized by a notable deficit in natural language development, leading to limited linguistic communication. Such communication barriers often result in social withdrawal, isolation, and non-typical developmental trajectories, including repetitive and stereotypical behaviors.

Children with autism frequently experience challenges in emotional communication as well. The interaction of autistic children with their surroundings presents a substantial, multifaceted challenge. However, this can be partially alleviated by enhancing their social skills. Early behavioral interventions have been shown to have a positive influence on their social behaviors, thereby facilitating their societal integration.

To this end, various institutions and centers implement therapeutic programs aimed at reducing autism symptoms and fostering skill development in autistic children. The Applied Behavior Analysis (ABA) program is one such initiative, designed to amplify desirable behaviors, reduce undesirable ones, cultivate necessary skills, and instill socially acceptable behaviors. The program's effectiveness is greatly enhanced by active parental involvement, which is critical in achieving the set therapeutic goals.

Problem Statement

Autism remains one of the most perplexing developmental disabilities, posing significant challenges for affected children and their families. Despite extensive research, the precise causative factors of autism remain elusive. The term "autism" itself was coined by pioneers like Kanner and Asperger, drawing from Bleuler's early 20th-century discussions of schizophrenia symptoms such as detachment from reality, difficulties in environmental interaction, and social withdrawal.

Autistic children typically face profound challenges in social interaction, with social skills being notably impaired. Autism is characterized by atypical or disrupted development before the age of three, accompanied by significant deficits in social interaction, communication, and behavior. Addressing these challenges necessitates a variety of therapeutic programs aimed at improving social capabilities.

One of the cornerstone therapies is Applied Behavior Analysis (ABA), pioneered by Lovaas in 1987, which encompasses a suite of intervention models including intensive behavioral intervention, verbal behavior testing, discrete trial training, and natural environment training, all underpinned by positive reinforcement techniques (Zerouali, 2021, p. 155).

Applied Behavior Analysis (ABA) operates on a methodological analysis of a child's behaviors and responses to environmental stimuli, rooted in conditioning theories. This approach involves reinforcing desirable behaviors and controlling stimuli linked to specific actions, with consistent rewards for positive behavior. With rigorous and dedicated

application, ABA enables the integration of autistic children into educational settings (Alberto & Troutman, 2003).

For such therapeutic programs to be effective, family involvement is paramount. The participation of parents in these programs not only aids psychologists but also enhances parents' understanding of their children's needs, equipping them with vital information about support resources. Such involvement is critical for generalizing learned responses and improving the breadth and effectiveness of services provided to the child (Jamal Al-Khatib and Mouna Al-Hadidi, 1998, p. 352).

Furthermore, when parents actively engage in these training programs, they acquire new insights and experiences that help mitigate the impact of past traumatic experiences, thereby improving overall family dynamics. This active participation also enables parents to develop new behavioral skills, boosting their self-confidence and self-esteem. As a result, they are better equipped to manage their lives and those of their children, which in turn reduces parental stress and anxiety (Cohen & Donnellang, 1985, p. 519).

Parental involvement in the therapeutic process not only enhances the efficiency of treatment specialists by saving time but also creates essential opportunities for them to focus on training children in priority areas such as social skills, communication skills, and independence. This involvement facilitates behavioral modifications, as both specialists and parents provide consistent interactions with the child, ensuring uniformity in treatment approaches both at the therapeutic center and at home (Jamal Al-Khatib, Mouna Al-Hadidi, 1998, p. 353).

Unfortunately, parents of autistic children often face exclusion from participating in the therapy sessions of their children, without valid justification. This exclusion occurs despite parents being critical to the diagnostic process, where they initially report unusual behaviors observed in their children. Inclusion of parents in therapy is vital as they are essential partners in reinforcing the desired behaviors and completing the tasks assigned by the treating specialists when the child is at home (Zerouali, 2021, p. 233).

From this understanding, we formulate the primary research question: Does parental accompaniment significantly impact the success of the ABA therapy program for autistic children? Subsequently, we consider several sub-questions:

- Does parental accompaniment enhance the development of social skills in autistic children?

- _ Does parental accompaniment foster the development of independence skills in autistic children?

Hypotheses

- **Main Hypothesis:**

- Parental accompaniment is crucial for skill development in autistic children through active participation in the ABA therapy program.

- **Sub-Hypotheses:**

- _ Parental accompaniment significantly enhances social skills in autistic children.
- _ Parental accompaniment significantly fosters independence skills in autistic children.

Motivations for Choosing the Topic

- A scientific curiosity to deepen understanding of autism and its various aspects, including therapeutic interventions.
- A desire to examine the effectiveness of the Applied Behavior Analysis (ABA) program and its operational dynamics with autistic children.
- An interest in exploring the role of family involvement in the success of therapeutic programs for autistic children.

Research Importance

- _ This study contributes new insights into the critical role of parental accompaniment in the success of therapeutic interventions for autistic children.
- _ It addresses a significant neurodevelopmental disorder that has been increasingly prevalent.
- _ The study highlights the benefits of the ABA program, particularly in developing social skills that greatly benefit autistic children and their caregivers, aiding in achieving optimal outcomes.

Research Goals

- _ To enhance family awareness of their pivotal role in the therapeutic partnership for autistic children.
- _ To determine the effectiveness of the ABA program in developing social skills among children with autism.

1. Theoretical Aspect

1.1 Definition of Autism

- **Linguistic Definition:**

According to Oussama Farouk Mustafa (2011, p. 26), the term "autism" originates from the Greek word "aut" (self) and "ism" (a state or condition), translating to "self-enclosure." This implies a tendency for these individuals to be absorbed within themselves, showing limited interest in the external world.

- **Technical Definition:**

The World Health Organization (WHO, 1982) characterizes autism as a neurodevelopmental disorder stemming from anomalies in brain development and function that manifest before the age of three. This condition results in significant challenges in language use, play, communication, and social interaction (Al-Shami, 2004, p. 48).

1.2 Diagnosis of Autism:

Diagnosing autism, along with other pervasive developmental disorders, is complex due to the reliance on behavioral indications that manifest primarily in early childhood and vary widely among individuals (Kawthar Asaliya, 2006, p. 62). The diagnostic process typically begins between 24 months and six years of age, incorporating interviews with parents and direct observation of the child. The fifth edition of the Diagnostic and Statistical Manual (DSM-5) employs new criteria for diagnosing autism, structured around two standards:

- A. **Social Communication and Interaction Standard** - This involves significant deficits in communication and social interaction across various contexts, observable in the present diagnostic period or during earlier developmental stages.

B. Restricted Activities and Repetitive Behaviors Standard - This standard is characterized by repetitive behavior patterns, restricted interests and activities, resistance to change, strict adherence to routines, and ritualistic behaviors.

The diagnostic criteria require the presence of three symptoms from the first standard and two from the four symptoms of the second standard. Additionally, the conditions for diagnosis stipulate that these symptoms must have manifested during the early developmental stages and must significantly affect the individual's social, academic, or professional performance, or other vital areas of life. Intellectual disabilities and other developmental disorders that may accompany autism are also considered in the diagnosis.

1.3 The Autistic Child:

In this study, the autistic child refers to individuals aged between 5 to 6 years, attending a center specializing in autism and psychological disorders. These children have a comprehensive medical profile, diagnosed and compiled by the psychological specialist and the director of the center, detailing all relevant information about their condition.

1.4 Parental Accompaniment:

Parental accompaniment has been the focus of numerous researchers in the fields of sociology and psychology, highlighting it as an indicator of parental engagement, especially for children suffering from disorders such as autism. Despite the challenges faced, parental accompaniment signifies a commitment to supporting their children's development.

A. Etymological Definition:

Etymologically, the term "accompaniment" derives from the verb 'to accompany', meaning to go along with or to walk with another. The root of the word traces back to the Latin term "CUMPANIS," which means to share experience with another.

B. Terminological Definition:

Defined by UNESCO in 1986, accompaniment refers to a collaborative endeavor that encompasses a range of activities, from exchanging information about a child's health to deep parental involvement in their upbringing and contribution to various therapeutic programs aimed at supporting and enhancing their child's skills.

Currently, there are many data points that facilitate the partnership between parents and therapists, potentially alleviating many of the hardships and psychological burdens on families. Parents are ideally positioned to assist specialists by providing precise descriptions of behavioral symptoms. In this regard, numerous studies have highlighted the necessity for family members to gain knowledge about autism and to train in educational strategies for effective therapeutic and educational care, ensuring tailored management (Zerouali, 2021, p. 233).

This study specifically addresses parental participation, whether one or both parents, in the Applied Behavior Analysis (ABA) therapeutic program for their child. This involves attending therapeutic sessions and observing various activities conducted by their child, attempting to replicate these activities at home following the guidance and recommendations of the psychological specialist.

The presence or absence of parental accompaniment was determined using a semi-structured clinical interview with the specialist and the parents. This refined academic description underscores the critical role of parental involvement in the therapeutic process, particularly in the context of autism treatment.

2. Field Aspect

2.1 Preliminary Study:

2.1.1 Geographical and Temporal Boundaries

- **Geographical Boundaries:** The research focuses on autism and the ABA program, necessitating visits to a relevant treatment center. The study was conducted at a center specialized in autism and psychological disorders, located in the Salamandre neighborhood of Mostaganem city. This center is recognized as one of the foremost specialized private centers for autism treatment in the area.
- **Temporal Boundaries:** The preliminary study was conducted from the beginning of October to the 5th of February 2023.

2.1.2 Results of the Preliminary Study

The preliminary study involved conducting interviews with specialists at the center to gain deeper insights into the ABA program and its implementation. All cases of autism currently

at the center were identified for the purpose of selecting two cases that regularly receive ABA treatment for inclusion in a comparative study.

The first case involved a mother who agreed to participate and attend the interviews. However, there were challenges with the second case, where the mother refused to come to the center and participate in the interviews. Research tools for the study were also identified and selected based on these interactions.

2.1.3 Research Methodology:

The clinical method was utilized due to its appropriateness for clinical studies, employing the case study technique to amass comprehensive information about the individuals involved.

2.2 Main Study

2.2.1 Geographical and Temporal Boundaries

A. Geographical Boundaries:

The primary research was conducted at a specialized center for psychological treatments and autism disorders located in the Salamandre neighborhood of Mostaganem city. Established in January 2013, it is the inaugural private center in Mostaganem province and a national pioneer in implementing the Applied Behavior Analysis (ABA) program.

The facility comprises four training rooms, including three dedicated to autistic children and one for psychological consultations, staffed by four psychologists. The center accommodates 22 children, organized into two groups receiving treatments in shifts from 9 am to 12 pm and from 1:30 pm to 4:30 pm, totaling 15 hours of treatment weekly. Each psychologist conducts individual sessions with each child, rotating every 10 minutes.

B. Temporal Boundaries:

The field study at this specialized center spanned from February 5th to the beginning of May 2023.

2.2.2 Research Cases

The study focuses on two male children diagnosed with autism at an early age, who are regular participants in the ABA program at the center. The selection of these cases was purposeful, with one case involving active parental participation in the treatment process.

2.2.3 Criteria for Selecting Research Cases:

- Children should be aged between 3 to 5 years.
- Children should have no disabilities other than autism.
- Children must be receiving ongoing ABA treatment at the center.
- They should have been under the center's and specialists' care for more than a year.
- The children must be living with both parents, who are together and not separated.

2.2.4 Research Tools

The tools utilized in this study included:

- Applied Behavior Analysis (ABA) Program
- Semi-structured Clinical Interview
- Clinical Observation

A. Applied Behavior Analysis (ABA) Program:

This program is crucial for teaching various skills such as social, motor, verbal, and cognitive abilities to autistic children. It operates on a structured learning methodology that involves multiple attempts, each potentially repeated over several days until the child masters the intended skill. Each learning attempt encompasses four phases plus an additional phase.

The program employs positive reinforcement, neutral corrections of inappropriate behaviors, and the reinforcement of desirable behaviors through rewards (Zerouali, 2021, p. 157). Training under this program is intensive, with children receiving 40 hours of instruction weekly, split into sessions of 6-8 hours across five consecutive days.

Each session is structured around short, intensive educational exercises coupled with behavioral techniques that include presenting a specific stimulus, observing the child's

response, and documenting the outcome. These attempts are repeated to reinforce the targeted behavior.

B. Semi-Structured Clinical Interview:

The semi-structured clinical interview was selected for its relevance and efficacy in addressing the research topic. This type of interview facilitates a structured yet flexible dialogue where subjects can express themselves freely within a guided framework. The interview protocol was meticulously designed with a set of axes pertinent to the study's objectives, each containing targeted questions to explore specific areas of interest.

The interviews conducted in this study involved the parents and the psychological specialist. The structured guide for the interview was divided into three main axes:

- **First Axis:** This section gathered personal data about the case's family background, including parental information, the birth phase, and the developmental stages of the child.
- **Second Axis:** This axis was dedicated to gaining a deeper understanding of the child's developmental progress in various areas such as personal hygiene and language skills.
- **Third Axis:** The focus here was on assessing the child's progress under the provided treatment, exploring the extent of parental accompaniment and participation, and evaluating its impact on the management of autism.

C. Clinical Observation

Clinical observation was employed to monitor the therapeutic exercises performed with the subjects, as well as to observe the behaviors of the children within the center. This method also included observing interactions between the mothers and the specialists during therapy sessions, providing insights into familial involvement and its influence on the therapy's effectiveness.

2.3 Cases Presentation

2.3.1 Introduction of the First Case

The first case study concerns a male child born on February 5, 2018, in Mostaganem. He is the youngest in a family that includes the father, mother, and three siblings. His entry

into the world was marked by several challenges: he was an unplanned pregnancy, experienced a delayed natural birth, and required incubation for fifteen days due to oxygen deprivation to his brain. Breastfed for only fifteen days, he was subsequently cared for by his aunt due to being an unwanted child.

Despite growing up in a financially stable environment, he faced significant developmental hurdles. Diagnosed with moderate autism after joining the center at the age of two, he exhibited major disorders including delayed language development, linguistic issues such as incorrect pronunciation and articulation, and behavioral problems characterized by aggression and hyperactivity.

2.3.2 Interview Schedule:

Interview	Duration	Date	Interview Focus
First	20 minutes	13/02/2023	Guidance and counseling the mother on therapeutic exercises to apply with her son.
Second	30 minutes	02/05/2023	Collecting preliminary information, building trust with the examinee.
Third	20 minutes	03/05/2023	Gaining more understanding of the case and gathering information.
Fourth	30 minutes	06/05/2023	Learning about the case's progress and treatment results.
Fifth	20 minutes	08/05/2023	Speaking to the specialist and gathering more information about the case, determining if the parents contributed to the treatment.

2.3.3 Summary of Interviews:

From the interviews conducted, it was observed that the mother of the case is keen on participating in his therapeutic program, which positively impacted the case in the treatment and the effectiveness of the program, leading to better results. The mother of the

case applies a set of exercises and activities of the therapeutic program at home, under the guidance of the psychological specialist.

This has helped him better understand the activities. Regarding language, his language has improved, forming sentences and speaking when he wants to request something. In terms of independence, he has become independent in personal hygiene and eating. He has also become social and interacts with his peers, and he does not face difficulties when meeting another person but interacts with them normally.

2.3.4 Application of the Applied Behavior Analysis (ABA) Program:

The ABA program was applied to the case under the supervision and assistance of the specialist, which primarily focuses on increasing desired behaviors through various positive reinforcement methods. The program application lasted for two months, and I will detail in the treatment process chart the activities specific to the case for each axis.

Table 1: Social Skills, Independence, and Communication, distributed over 16 sessions per axis, are marked as follows:

- (-): Failure.
- (+): Success.
- (+/-): Partial Success.

Goals	Activities/Sessions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Social Skills	Playing with Adults	+/-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+	+	+
	Playing with Children	+	+	+	+	+/-	+/-	+/-	+	+	+	+/-	+	+	+	+	+
	Imitation on Request	-	-	-	-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+
	Eye Contact	-	-	-	-	+/-	+/-	+	+	+	+	+	+	+	+	+	+

	Expressing Emotions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Role-playing	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+	+	+	+	+
	Initiating Dialogue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Telling a Story	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Recounting the Past	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Communication	Yes/No	-	-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+	+
	Asking Questions	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
	Answering "What is this?"	+/-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+	+	+
	"What is your name?"	-	-	-	-	-	+/-	+/-	+	+	+	+	+	+	+	+	+
	Knowing the Five Senses	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+	+	+	+
	Knowing Gender/Sex of Self and Others	-	-	-	+/-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+
	Knowing Uses of Objects	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Associating Picture with Meaning	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+	+	+	+
	Describing What's in the Picture	-	-	-	-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+
	Knowing Colors	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Knowing Shapes	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+	+	+	+	

Independence	Using the Toilet	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Washing Hands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Drying Hands	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Drying Face	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Brushing Teeth	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Using Eating Utensils	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Eating Independently	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
	Dressing	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+	+	+	+	+

2.3.5 General Conclusion for the First Case:

From the results obtained from interviews with the case's mother and the psychological specialist, and after applying the Applied Behavior Analysis (ABA) program with the case, we conclude that the mother's participation in her son's therapeutic program led to improvements in various aspects, as well as progress in the therapeutic program.

We see improvements in social skills such as playing with other individuals, imitation skills, and role-playing, as well as in communication where he has started to form sentences and understands his five senses, and knows the uses of objects. In terms of independence, the case is independent in terms of hygiene and eating.

As for language, his language has become understandable, and he can form sentences, but he does not initiate conversations or engage in dialogue, does not recount past events, and does not express or show his emotions.

The use of reinforcement and rewards for each success or for overcoming undesirable behaviors had an effective impact, leading to the success of the therapeutic program.

2.3.6 Introduction of the Second Case

The case, M, is six years old, born on May 6, 2019, in Mostaganem, a male from a family consisting of a father, mother, and one brother. The case was from a desired pregnancy, had a natural birth, and was breastfed naturally. The case was diagnosed with moderate autism, his language is not understandable, he does not articulate sounds correctly, does not engage in dialogue, has continuous crying without reason, exhibits stereotypical behaviors, and has not acquired independence in hygiene, although he has acquired it in eating.

2.3.7 Interview Schedule:

Interview	Duration	Date	Interview Focus
First	20 mins	07/05/2023	Collecting preliminary information. Getting to know more about the case.
Second	Missing	Missing	Missing
Third	20 mins	09/05/2023	Collecting more information about the case with the psychologist. Determining if the parents of the case contributed to the treatment.
Fourth	30 mins	14/05/2023	Monitoring the results of applying the therapeutic program.

2.3.8 Summary of Interviews:

From the interviews conducted, it was observed that the parents of the case do not contribute to the implementation of the therapeutic program for their child, as they miss the guidance interviews and do not practice the exercises at home, which has delayed his development in several aspects.

In terms of language, he forms sentences and expresses himself, but most of his speech is not understandable. Regarding independence, he has not become independent in terms of hygiene; he still wears diapers at night and at the center, the specialist accompanies him to the restroom. However, he is independent in terms of eating.

He suffers from stereotypy; if he gets used to something or a place, he becomes attached to it and does not change. Socially, he does not interact with new people immediately but only after he becomes accustomed to them. The case is also attached to his grandmother,

as I noticed he talks about her frequently, possibly because his parents pay more attention to his younger brother.

2.3.9 Application of the Applied Behavior Analysis (ABA) Program:

The ABA program was applied with the case under the supervision and assistance of the specialist, which primarily focuses on increasing desired behaviors through various positive reinforcement methods. The program was applied for two months, as detailed in the treatment process chart with activities specific to each axis.

Table 2: Social Skills, Independence, and Communication, marked as follows:

- (-): Failure.
- (+): Success.
- (+/-): Partial Success.

Goals	Activities/Sessions	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Social Skills	Playing with Adults	-	-	-	-	-	-	+/-	+/-	+/-	+	+	+	+	+	+	+
	Playing with Children	-	-	-	-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+
	Imitation on Request	-	-	-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+
	Eye Contact	-	-	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-
	Expressing Emotions	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
	Role-playing	-	-	-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	+
	Initiating Dialogue	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Telling a Story	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Recounting the Past	-	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	
Communication	Yes/No	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	
	Asking Questions	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	
	Answering "What is this?"	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	
	"What is your name?"	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+	+	+	+	+	
	Knowing the Five Senses	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	
	Knowing Gender/Sex of Self and Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Knowing Uses of Objects	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
	Associating Picture with Meaning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Describing What's in the Picture	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	Knowing Colors	-	-	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-
Knowing Shapes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Independence	Using the Toilet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Washing Hands	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	
	Drying Hands	-	-	-	-	-	-	+/-	+/-	+/-	+	+	+	+	+	+	+	+	
	Drying Face	-	-	-	-	-	-	-	+/-	+/-	+/-	+	+	+	+	+	+	+	
	Brushing Teeth	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+/-	+	+	+	+	+	+	+	

Using Eating Utensils	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Eating Independently	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Dressing	-	-	-	-	-	-	-	-	+/-	+/-	+/-	+/-	+/-	+	+	+	+	

2.3.10 General Conclusion for the Second Case:

The evaluation of the second case, based on the interviews with the child's mother and the psychological specialist, alongside the application of the Applied Behavior Analysis (ABA) program, revealed significant findings. The lack of parental participation in the therapeutic process resulted in minimal progress across various developmental areas.

Notably, the child showed limited social engagement, preferring solitude and interaction with toys over human contact, which is reflected in his poor eye contact and preference for isolation. Communication skills remained underdeveloped, as he frequently resorted to crying to express discontent or to avoid participation in activities. In terms of independence, the child has not yet mastered basic self-care skills such as toilet training.

The stubborn nature of the child compounded these challenges, rendering reinforcement techniques ineffective, particularly as he showed resistance to participating in exercises at the center.

3. General Conclusion

Through extensive interviews and the rigorous implementation of the Applied Behavior Analysis (ABA) program, our research conclusively identifies parental involvement as pivotal for the efficacy of the ABA therapeutic approach. The data derived from this framework revealed noticeable behavioral improvements and the acquisition of new skills among the participants over a two-month span. Nonetheless, the restricted duration allotted for the program's execution inherently limited its effectiveness, particularly concerning the development of more intricate skills which necessitate prolonged and consistent practice both in the specialized center and at home under parental supervision.

In the first case study, significant advancements were observed across various dimensions, including social skills, communication abilities, and personal independence. These

improvements were largely attributed to the mother's active collaboration with both the researcher and the psychological specialist, coupled with her steadfast commitment to administering the therapeutic program at home.

Specifically, in the realm of social skills, the participant exhibited enhanced engagement in playing with both adults and peers, as well as improved eye contact. Communication skills were notably better, evidenced by a deeper understanding of meanings, appropriate use of objects, and consistent responses to yes/no inquiries. The domain of independence was particularly remarkable, with the individual achieving complete success in all targeted activities, thereby demonstrating a substantial degree of autonomy and a robust grasp of the program, as well as an enthusiastic participation in the presented activities.

Conversely, the second case presented challenges primarily due to the mother's limited cooperation with the research team and the psychological specialist, which significantly hindered the participant's progress in several areas. Observations indicated either stagnant progress or only partial successes in essential social skills such as maintaining eye contact, engaging with adults, and initiating conversations.

The communication skills of this participant were similarly affected, with notable difficulties in linking images to their respective meanings, describing pictured scenarios, and understanding sensory inputs, which collectively suggest a fundamental misunderstanding of the intended activities. In terms of independence, this participant struggled with basic self-care skills, showing inability in using the toilet independently and only partial success in hand washing and tooth brushing.

This comparative analysis starkly underscores the essential role of consistent and engaged parental participation in optimizing the therapeutic outcomes of ABA interventions, especially when tackling complex behavioral and developmental objectives.

4. Discussion of Hypotheses in Light of Research Results and Previous Studies:

4-1 Discussion and Interpretation of the General Hypothesis of the Study:

The general hypothesis of the study posited: "The role of parental accompaniment in the success of the ABA therapeutic program." To verify this hypothesis, we utilized interviews with the parents of the case study and with the psychological specialist, alongside the application of the Applied Behavior Analysis (ABA) program.

We deduce that the first case achieved improvement in several aspects and various skills compared to the second case, which did not show significant improvement. This substantiates that the general hypothesis has been realized in the cases under study. Therefore, parental accompaniment plays a crucial role in the success of the ABA therapeutic program. This finding aligns with the study by Jamal Al-Khatib and Mouna Al-Hadidi (1998), which indicated that for a therapeutic program to be effective and successful, the family's contribution to its implementation and their assistance to the psychological specialist are essential. The participation of parents in the therapeutic educational programs provided to their child makes them more understanding of the needs of the autistic child and equips them with essential information about support resources, also increasing the likelihood of generalizing the responses learned, and thus the services provided to the child become more comprehensive and better suited to meet their needs.

4-2 Discussion and Interpretation of the Results of the First Hypothesis:

The first hypothesis was labeled: "Parental accompaniment contributes to the development of social skills in autistic children," which we observed through our field study. The first case was successful in this regard, as demonstrated by the table. The case improved in many activities such as playing with adults, playing with children, eye contact, yes/no responses, knowing the five senses, recognizing gender of self and others, understanding uses of objects, describing what's in pictures, associating pictures with meanings, knowing colors, and knowing shapes.

This improvement was due to the mother's cooperation with us and her application of the therapeutic program at home, unlike the second case, which did not show significant improvement in the social skills aspect, especially in terms of playing with adults, eye contact, answering 'what is this?', knowing the five senses, recognizing gender, understanding uses of objects, describing pictures, associating pictures with meanings, knowing colors, and shapes. This lack of progress was due to the mother's non-cooperation with the researcher and the psychological specialist and her failure to apply the therapeutic program at home.

From the above, we conclude that the first hypothesis stating that parental accompaniment contributes to the development of social skills in autistic children is acceptable and proven. This is consistent with the study by Mohammad Al-Fawzan (2003), which demonstrated

that family participation in the training process of their autistic child contributes to the development of social skills, social interaction, speaking, and the perception of skills that serve them.

4-3 Discussion and Interpretation of the Results of the Second Hypothesis:

The second hypothesis posited: "Parental accompaniment contributes to the development of independence skills in autistic children," as observed through our field study. The first case demonstrated significant improvement in independence skills and in all activities related to this aspect, such as using the toilet, brushing teeth, drying the face, dressing, and eating independently.

This improvement can be attributed to the mother's cooperation with the psychological specialist. In contrast, the second case did not fully acquire independence skills in many activities, such as going to the toilet, brushing teeth, drying the face, and dressing, due to the mother's lack of cooperation with the psychological specialist.

From the evidence gathered, we conclude that the second hypothesis, stating that parental accompaniment contributes to the development of independence skills in autistic children, is acceptable and proven. This finding aligns with the study by Ibrahim Abdellah Al-Zuraikat (2006), which indicated that parental participation has a significant impact on therapeutic programs for autism from several aspects such as communication skills and independence skills. Parents are viewed as active participants in the therapeutic process, which requires cooperation between home and the center.

This evidence underscores the critical role of familial support in enhancing the effectiveness of therapeutic interventions for autism, particularly in fostering essential life skills that promote autonomy and independence in autistic children.

5. Conclusion:

This research explores the impact of parental involvement on the efficacy of the Applied Behavior Analysis (ABA) program, highlighting its significance in addressing one of the most challenging developmental disorders—autism. Through this inquiry, we have

elucidated the role of therapeutic partnerships in enhancing the effectiveness of the ABA program.

The research provides a comprehensive overview of the most advanced and pivotal behavioral therapeutic strategies employed with autistic children, underscoring the ABA program's effectiveness when there is comprehensive participation from all involved parties, especially the parents. The collaboration between parents and psychological specialists is crucial in reinforcing diverse behavioral skills—from independence to communication to social interactions—thereby significantly enhancing the effectiveness of the therapeutic program.

In light of the research findings, the following suggestions were proposed:

- _ It is imperative to extend this therapeutic program to additional centers that specialize in the treatment of children with autism.
- _ The involvement of parents in the therapeutic programs for their autistic children is crucial and should be encouraged.
- _ There is a pressing need to train educators and provide them with the requisite information, experiences, and skills to implement this program effectively with autistic children.

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