

Occupational Therapy as an Approach to Improving Communication Skills (Verbal-Nonverbal) in Children with Autism Disorder

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Keywords: occupational therapy; verbal and nonverbal communication skills; children with autism spectrum disorder (ASD).

ABSTRACT

The research paper focuses on the topic of occupational therapy, its importance, definition, history, characteristics, the difference between it and physical therapy, and its role with children with autism spectrum disorder, as well as the classification, diagnosis, and intervention methods for autism spectrum disorder (ASD). The research paper also recommends some suggestions and recommendations that help benefit from occupational therapy in improving communication skills. Verbal and non-verbal

Introduction

The occupational therapy as a therapeutic method that focuses on helping people with autism disorder by developing verbal and non-verbal communication skills, visual communication skills and visual tracking, which aim to increase their concentration time, and cognitive and perceptual skills, to reach the highest levels of independence and thus correct societal integration. (Larkin, W., Hawkins, R. O., & Collins, T, 2016)

Leo Kanner is credited with establishing the first definition of autism spectrum disorder in 1943. Kanner defined it and distinguished it from other disorders, describing them in the past as withdrawal from social situations. Kanner explained many of the characteristics and characteristics associated with the disorder, as ancient doctors in the Middle Ages noticed that there were children They do not speak, their communication and interaction with their parents and those around them is weak, and they show many patterns of abnormal behavior, but after the nineteenth century and the beginnings of a shift in the outlook on psychological sciences, a clear interest in autism emerged. (Lindsay, M & Vilayanur, S,2017,311).

According to the Individual With Disabilities Education Act, it is a developmental disorder that significantly affects social interaction, verbal and non-verbal communication, and appears before the age of three years, and negatively affects the child's educational performance. Sri Rushdi, 2010; Sumaya Jamil, 2011), Wing (1996) confirms that autism spectrum disorder affects the child's ability to communicate, language, and interact with others. The disorder is not considered a disease, nor is it contagious, nor is it acquired through contact with the environment.

Autism spectrum disorder is considered one of the most difficult behavioral disorders, as a result of its negative impact on most aspects of performance and personality. Muhammad Kamel (2005) agrees with many researchers about the high incidence of the disorder,

which indicated that the disorder has begun to spread widely recently, and since autism spectrum disorder Autism Spectrum Disorder affects a group of children at one of the most important stages of development, which is early childhood (less than 3years). It was necessary to pay attention to early detection of the disorder at that stage, citing the increased opportunity to improve and treat children with it in a timely manner, so that Such children are able to get along with themselves, with others, and with society, while delayed detection, diagnosis, and treatment make it difficult to improve and treat such cases. (Hisham El-Khouly, 2008, 44)

Proper and accurate diagnosis at an early age is an important requirement for people with autism spectrum disorder, whether high or low functioning, because the chances of improving the condition of these sufferers depend on the amount of early intervention they are exposed to at an early age (Wong, C., Odom, S., Cox, A.,2015,,1955).

A study by Rebecca ,J; Elizabeth ,A; Alden ,L; & Faherty ,A.(2017). indicates that the triad of symptoms that characterize autism spectrum disorder is not just behaviors that occur by chance, but rather are the result of a fundamental disorder that causes these symptoms to appear in an interconnected manner. Therefore, the presence of a disorder in only one side of the triangle does not mean at all a disorder. The autism spectrum, and it should be named after this aspect in which there are deficiencies only without diagnosing it with autism spectrum disorder. The child may have a disorder in social interaction only, or in communication only, or in imagination only. The essence of the disorder here varies according to the type of field in which the symptoms appear. It is necessarily different from the essence of autism spectrum disorder.

The results of most studies have confirmed that remedial learning programs that are implemented with people with autism

spectrum disorder at an early developmental stage during the growth period contribute effectively to achieving better chances of success for them in life, and that these programs are not intended for those procedures that are implemented with people with autism for periods of time. Long and intermittent, but rather the good programs that help improve their condition are those that are provided to them permanently, continuously, on a daily basis, and for a short period that does not make them bored.

(Rebecca J; Elizabeth A; Alden L; & Faherty A, 2017, 430).

Therapeutic Interventions

These programs help to develop a set of skills in several main areas, such as: academic skills such as reading, speaking and listening, logical thinking, the ability to use computers and use mathematical numbers well, personal skills such as leadership, self-confidence, challenging difficulties and innovation, and practical skills such as teamwork and the ability to Problem solving, decision-making, planning, negotiation, and self-reliance skills such as self-awareness, the ability to adapt, and self-promotion. All of these skills and others are the true beginning of training a child with autism spectrum disorder (Dela et al. 2015).

Children on the autism spectrum - in general - suffer from a weakness in the skill of self-awareness, regulation of emotions, and social interaction with those around them, which leads them to become isolated around themselves, hinders their ability to communicate with others, and also hinders their ability to use the capabilities that they enjoy (Samson et al, 2016). ; Milagros et al., 2015)

Schedule Activity schedules:

The Exchanging Communication System (PECS) is a communication program that has become widely used, especially with children with autism. Accordingly, the available

research provides evidence - first - that PECS was easily learned by most participants, and provides a means of communication for individuals who have little functional speech. Or without it. Data suggest some positive impact on communication behaviors (Preston & Carter, 2019).

There are many training programs that have been designed and presented to children with autism spectrum disorder in order to rehabilitate, train, and care for these children, including: programs to improve communication responses, programs to achieve independence, adaptive behavior, and self-care programs, including (study: Mahmoud Imam 2014; Asma Abdel Latif 2015; Rehab Allah Al-Sayed, 2015; Reda Abdel Sattar, 2007; Azza Jamal, 2017), and other problems in children with autism spectrum disorder, and these methods are the best methods that have proven very effective in dealing with children with autism spectrum disorder and trying to rehabilitate and treat them. For example, but not limited to, the study of Ahmed Al-Dawaideh (2009), who revealed the effectiveness of a program based on behavioral theory in developing verbal communication skills and reducing some behavioral problems in people with autism disorder, which indicated the effectiveness of behavioral therapy and its techniques in developing communication and reducing behavioral problems in people with autism. Autism spectrum disorder, as well as Randa Al-Momani (2011), who indicated the effectiveness of reinforcement as a behavioral therapy technique in improving communication and social interaction skills in children with autism spectrum disorder. This was confirmed by the study of Hadeel Al-Shawabkeh (2013), the aim of which was to test the effectiveness of a behavioral training program. In developing non-verbal communication skills among children on the autism spectrum, the results of which indicated the effectiveness of behavioral therapy in developing their communication skills. Both (Mustafa Abu Al-Majid and

Khaled Saad Sayed) relied on behavioral therapy techniques such as: reinforcement, modeling, and shaping in developing adaptive behavior in children. Children on the autism spectrum, and also a study by Jodi et al (2013), which aimed to confirm the effectiveness of a training program based on the use of behavioral skills in teaching verbal and non-verbal conversational skills to people with autism spectrum disorder. The study relied on the techniques of reinforcement, modeling, role playing, and feedback, and its results yielded A significant improvement was reported in the level of response and verbal and non-verbal conversation skills in the natural environment for individuals with autism spectrum disorder.

Music therapy:

Music therapy is used to achieve therapeutic goals carried out by the specialist to bring about desired changes in the individual's behavior, as music is the art that children with disabilities can feel in general, including those with autism spectrum disorder, as music has helped increase their linguistic growth and development (Adel Abdullah Muhammad , Ihab Ezzat, 2008), and Danielle (2016) states that music therapy develops and develops pronunciation and speech understanding, and playing a specific instrument helps increase the duration and intensity of concentration, improve social behaviors, increase focus and attention, and increases communication attempts (verbs, verbal expressions, Through the results I reached during this process, I found that music therapy is an effective and effective treatment for children with autism, and Omar Khattab (2001) indicates that music therapy is of particular importance with children with autism. Autism spectrum disorder due to the nature of music as a linguistic material, and musical activities are designed to support the child's activities, while Amani Hassan's (2013) study on the effect of exposure to songs in developing some communication skills in autistic children indicated the effectiveness of the

program in developing communication in children with autism spectrum disorder. Autism. Music therapy also helps in modifying the social behavior of children with autism spectrum disorder, and this confirms what Adel Abdullah (2004) pointed out that music has a role in developing communication among people with autism spectrum disorder, which works to improve their social skills.

Play therapy:

Many writings indicate that play is one of the most important vital needs of the child that deserves attention and care, because play is the basic characteristic and feature of childhood, and it is

Communication is: the exchange of ideas or information in a written, verbal, or non-verbal manner, based on shared values Marume F, Bronwyn G, Hilary W. (2017).

believes that non-verbal communication is a channel of communication that includes facial features or expressions, gestures, eye contact, touch, and body language, and children with autism spectrum disorder find it very difficult to understand and use these channels.

It is accompanied by a deficiency in adopting appropriate social behavior, and this is known as the ability to assume mental, social, and emotional roles. As for children with autism spectrum disorder, they are not able to form certain beliefs, realize what others believe, or perceive the intentions of others, and evaluate their behaviors in light of that, nor They can express their emotions in an acceptable way, and they cannot distinguish between different emotions, and most of their social behaviors are socially unacceptable. (Scott, J ; Clarck, C ; & Brady, M. ,2019).

Types of Communication

defines it as: the use of joint attention, facial features or facial expressions, gestures, touch, eye contact, and body language to convey a

message to another. This division includes all types of communication that depend on non-verbal language, and it is sometimes called the silent language. Some researchers divide non-verbal communication into types, including:

Sign language: It consists of simple or complex signs that a person uses to communicate with others to convey a message or request what he wants.

In the language of movement and actions: It includes the movements that a person makes to convey the meanings, feelings, or emotions he wants, including a specific message (Scott, J., 2016).

Children on the autism spectrum show difficulties in both receptive and expressive communication. This qualitative deficiency in both verbal and non-verbal communication represents an essential symptom in the diagnosis of autism spectrum disorder. This deficiency appears in many ways, from a child who has no communication at all to another who has many words. But he is unable to use it, interpret body language, or fully understand other effective aspects of communicating with others. This deficiency also extends to non-verbal communication skills, which include joint attention, eye contact, physical posture, and gestures. People with autism spectrum disorders may be completely non-verbal. They may have limited meaningful speech, or they may actually be very talkative. Regardless of their verbal abilities, though, almost all people with autism spectrum disorder have difficulty using speech in social interactions. This is because they face the dual challenge of their own difficulties in expressing ideas appropriately, and the difficulties of others in understanding and accepting them (Lisa, 2018, 56).

Communication Skills

A clear definition of the requisite skills is needed to identify and summarize previous research on educational approaches to develop learners' communication and

interaction abilities. One approach to enable the child to better express himself/herself is by recognizing elusive behaviors as communicative, and setting out to teach more functional skills, thereby reducing challenging behaviors. Through applied behavioral analysis (ABA) children's behaviors can be systematically modified by examining the antecedents and consequences of the child's responses (De Rivera, 2008). Children's challenging or elusive expressions can be considered prelinguistic behaviors (Durand & Merges, 2001; Keen et al., 2001) and are valid means of expressing the needs and wants of the individual.

Autism spectrum disorder is a type of complex developmental disorder that remains with the child from its appearance and throughout his life, affecting all of his development and keeping him away from normal growth. This type of developmental disorder affects communication, whether verbal or non-verbal communication, as well as social relationships, and Most of the mental abilities of children on the autism spectrum appear during the first three years of the child's life, and he loses contact with and benefit from those around him, whether people, experiences, or experiences he goes through. This type of disorder is incurable, but it can improve with early therapeutic intervention (Soha Amin, 2001), and children with autism spectrum disorder are characterized by a deficit in the communication process (33%-55%) of them do not develop their communication to meet their simple daily needs, which requires providing them with tools or techniques that help them in the communication process. (Joanne & Ann, 2019, 69)

The child is observed with a severe deficiency in language acquisition, a deficiency in the ability to imagine, shortcomings, weak interests, and a severe deterioration in social relationships. The child shows a reluctance to communicate with those around him, even with his parents and siblings, and he makes repetitive movements, and includes a defect

in all aspects of development, including attention and perception. And learning, language, social skills to communicate with reality, and motor and behavioral skills (Kjellmer et al 2012, 177).

The autistic child... he may be the child who is standing in the middle of the field at recess spinning around in circles, or she may be the child who can't stand the way a certain fabric feels on her body or the way a certain texture of food feels in her mouth, or it may be the child who is throwing a severe temper tantrum because they just can't communicate their needs. Autism Spectrum Disorder (ASD) is a class of developmental disabilities which cause severe impairments to a child's communication, their social interactions, and in their play and behaviour. This disorder presents itself differently in each child with respect to severity and symptoms. ASD encompasses the following disorders: autism, Asperger's disorder, and Pervasive Developmental Disorder – Not Otherwise Specified. Other related disorders include: Rett's syndrome, and childhood disintegrative disorder.

Occupational therapists perform all sorts of duties to assist children to develop skills and assist families to function in their everyday routines. Some examples include:

- OTs may develop strategies and ideas in partnership with the family to enable the child to develop his/her skills.
- Collaborating with other professionals who have an important role in assisting children to develop skills, such as speech pathologists, special educators or early childhood educators.
- Parent support and Education - particularly around transitional issues that occur during the 0-6 yr age range, such as, understanding and adjusting to a diagnosis; planning for kinder and school transitions; and understanding about other services and resources that are available to children and families

- Consultation - liaison/collaboration with kinder/childcare/school staff/preschool field officers and other community organisations.

Occupational Therapy:

Occupational Therapy is a therapeutic method that uses specific activities to develop communication skills, improve the individual's physical, mental, and social performance, overcome deficiencies or deficits, improve his ability to perform daily duties and work independently, and reduce dependence on others (Villagas, 2016, 1).

Occupational therapy is a therapeutic method that uses activities to improve communication skills and reduce dependence on others (Villega, 2016, 278).

Occupational therapy is an art and science by which individuals are helped to integrate into daily life through occupation, i.e. enabling them to perform functions that enhance their health and increase their well-being. The function here refers to everything that an individual does in his daily life, whether communicating with others verbally or non-verbally, and these functions determine his identity and his feeling about himself (Osiceanu, M. & Zaharesu, Y, 2017, 26).

The Canadian Organization of Occupational Therapists (CAOT) defines it as: a type of health care that helps solve problems that reduce and hinder a person's ability to do things that are important to them such as self-care, getting dressed, eating and drinking, moving around the house, going to work, or School, participation in the community, recreational activities, sports, and social activities. American Occupational Therapy Association(AOTA ,2020).

Occupational therapy is a method of treatment that uses its activities to improve communication skills with others, overcome deficiencies or incapacities, and improve his ability to perform daily duties and tasks independently by reducing dependence on

others.(Wohlers, N. & Stephenson, B. ,2020).

The Merriam-Webster Collegiate Dictionary provides a definition of six words to understand what occupational therapy is.

- Profession: an activity to which an individual is associated.
- Treatment: Treating a disease or disability (inability).
- Goal: the end towards which effort is directed.
- Activity, situation or topic involved.
- Independence: self-reliance.
- Function: Action appropriate to a specific person and no other O'Brien, J.(2020).

Role of Occupational Therapy

Occupational therapy services focus on enhancing participation and performance of activities of daily living (ADLs), education, play, leisure, rest and sleep, instrumental activities of daily living (IADLs) and social participation within the person's environment. The service follows a process which include evaluation, intervention, and assessing the outcomes from the intervention applied (American Occupational Therapy Association, 2008). These services can be provided at individual, organizational, and population level. The evaluation process is needed to gain insight of the client's occupational profile and occupational performance. Thereafter evaluate the enablers and barriers to necessary and valued occupations of the client. (O'Brien, J.(2020).

Objectives of occupational therapy

The American Occupational Therapy Organization (AOTA) indicates that the goal of occupational therapy is: an individual assessment of the person through which therapeutic goals are determined, and customized interventions are made to improve the individuals' abilities to perform activities of daily living, and the results are evaluated to ensure that the planned goals are achieved and modifications are made to the treatment plan. If necessary, a comprehensive

assessment of the beneficiary's home and environment such as the workplace or school, and necessary recommendations for the use of assistive devices and training on how to use them) American Occupational Therapy Association ,2018).

Occupational therapy, educational and behavioral interventions:

The role of occupational therapy as a therapeutic method that focuses on helping people with autism disorder lies in developing communication and social interaction skills, communication skills, and visual tracking, which aims to increase his concentration, cognitive, and perceptual skills to reach the highest levels of independence and thus healthy community integration (Larkin, W., Hawkins, R. O., & Collins, T. ,2016,524).

Occupational therapy through sensory integration:

Using occupational therapy with children with autism spectrum disorder and knowing its effect on them. Some studies have confirmed its importance, including a study (Lin et al, 2016), which aims to the effectiveness of sensory processing during occupational therapy in reducing the severity of sensorimotor disorders associated with children with autism spectrum disorder, and a sample was formed. The study included (13) children with an average age of (4-7) years. The childhood sensory-motor outcome measure was used and the sensory-motor susceptibility tasks for children were tested. The results of the study revealed that attention must be given to occupational therapy and attention to arousal and sensory processing of information received through the senses to obtain appropriate responses, and thus develop the different skills of children with autism spectrum disorder.(Lin, T & Rogers, S. ,2016).

Therefore, attention must be paid to early therapeutic intervention for children with autism spectrum disorder to support and increase the child's self-reliance and improve

functional abilities through many therapeutic models, most notably occupational therapy. Research results confirm that occupational therapy represents an effective treatment for children with autism spectrum disorder. These parents often make treatment choices without adequate information, and they face problems in building and maintaining treatment programs. Although parents do not have sufficient information about their children's condition, they decide to treat their children based on the occupational therapist, as he has a distinguished position in helping children with autism spectrum disorder. It can provide vital information about evidence-based treatment, provide assistance in overcoming obstacles facing intensive treatment, including selecting team members, and providing ongoing support to family members. (Sunusi, C., Soetjningsih, H., & Kristijanto, I., 2019).

Categories served by occupational therapy:

For cases for which occupational therapy is provided, it may include:

- Children who suffer from developmental delays and disorders that hinder their motor, cognitive and sensory skills.
- Children who have specific difficulties that hinder their functional and organizational abilities.
- Adults whose abilities have been affected as a result of accidents or chronic diseases.
- Elderly people whose functional abilities have been damaged
- Children or adults who have psychological disabilities that affect their daily functions.
- Categories and cases that occupational therapy addresses. Sumaya Hussein Malkawi mentioned three types of cases that are used in occupational

therapy and they fall under three main headings:

- Psychological conditions.
- Neurological physical conditions.
- Developmental cases.

Similarities and differences between occupational therapy and physical therapy

Occupational therapy and physical therapy are two complementary fields. Both fields work with the rehabilitation team. However, there are some differences between them:

- Occupational therapy focuses on improving the individual's ability to perform daily life activities, while physical therapy focuses on improving the individual's physical ability to perform physical movements.

- Both occupational and physical therapy focus on improving the physical health and motor skills of the individual, in addition, occupational therapy focuses on cognitive skills such as: awareness, attention, concentration, memory, and higher cognitive skills, such as: self-awareness, organization, time management, planning, Decision making and problem solving skills.

- Both rely on evaluation and provision of therapeutic services to improve sensory motor skills, such as: balance, standing, walking, and pain management associated with physical neurological conditions, and occupational therapy focuses on the integration of sensory motor skills (integration of the work of the five senses).

- Both fields provide services for people with autism, but occupational therapy focuses on other types of disabilities and injuries, such as mental, hearing, and visual disabilities (Sarsak, H., 2020, 33).

The importance of occupational therapy for people with autism spectrum disorder:

Mental illness greatly affects an individual's ability to participate in daily life activities, and here comes the role of occupational therapy in helping people with mild autism develop the skills necessary to live appropriately

(2013, Scheinholtz, 2010, 12) (AOTA). Occupational therapy programs provide assistance in many forms, including: strengthening the health care program in schools, facilitating the development of writing at school age, enhancing functional skills for children with developmental disabilities, providing individual treatment for those who have sensory processing problems, meeting the child's psychological and social needs, and teaching coping strategies. This is what resulted from the study (Blackwell & Andrea, 2018), which emphasized the role of occupational therapy in improving mental health practice in schools, and the effective role of the occupational therapist in promoting psychological and mental health and intervening in schools.

The main goal of occupational therapy in mental health is to support and develop children's skills and provide them with the support required to live as independently and productively as possible, (Uruma et al., 2019,611) (Ahn, 2019,611), and to improve the quality of life in general (Mcqueen, 2014:183) (Yang et al, 2020, 1503) This can happen through occupational therapy interventions that lead to adaptation to the environment, modifying tasks, learning skills, and educating the individual and his family in order to increase participation and performance of daily activities, especially activities with The meaning is his (2018, AOTA). There is a lot of evidence that occupational therapy intervention is successful in improving the outcomes of many children with autism. Intervention can occur in the areas of education, employment, skills training, health and self-care, and cognitive rehabilitation and adaptation (AOTA 2020). In the study (Schaaf, Hunt & Benevides, 2019), the study (Zaharescu & Osiceanu, 2017), and the study (Fabrizi, S.,Ilto, M.&Winton, K, 2016), the positive effect of occupational therapy appears in improving adaptive behavior, increasing participation in home and family activities, in addition to improving self-esteem and

reducing behavioral Aggression in autism. As for the study (Apetrei et al, 2018), the study (Novak, I. & Haron, I, 2019), and the study (Mahoney et al, 2016), its results revealed the effectiveness of occupational therapy in improving the participation of people with autism in community activities, and improving their skills. lifestyle, improving the level of independence and quality of life.

Occupational therapy helps all ages - including children with developmental delays or those who have mental or physical problems that affect their development - improve their movement, sensory processing, communication, and play skills. It also improves fine and large movements. It also helps children who suffer from deficiencies in their daily skills. Each intervention is designed to suit the child's needs. (Jasmin et al2017)

The role of occupational therapy is clearly evident with regard to people with autism in improving verbal and non-verbal communication skills, increasing positive adaptive behavior, improving academic and school development in general, and also in using available resources, skills and values to prepare individual and group interventions. (AOTA, 2014)

Occupational therapy interventions contribute to enhancing the mental health of individuals, including:

- 1- A positive emotional state such as: (a feeling of well-being and happiness).
- 2- A positive psychological and social state such as self-acceptance, satisfactory relationships, and self-control.
- 3- Resilience in the face of adversity and the ability to cope with life pressures (Burson et al., 2017, 711). This effect of occupational therapy appears in the study of (Ikiugu et al, 2017), and the study of (Fabrizi, S.,Ilto, M.&Winton, K, 2016) which showed an improvement in job performance. Health, well-being and fun for children with autism.

Practicing Occupational Therapy with Children with a Diagnosis of Autism Spectrum Disorder

According to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), the primary diagnostic criteria for autism spectrum disorder (ASD) include: (a) "persistent deficits in social communication and social interaction across multiple contexts;" (b) "restricted, repetitive patterns of behavior, interests, or activities;" (c) "symptoms [are] present in the early developmental period (but may not become fully manifest until social demands exceed limited capacities, or many be masked by learned strategies in later life);" (d) "symptoms cause clinically significant impairment in social, occupational, or other important areas of current functioning;" and (e) "these disturbances are not better explained by intellectual disability or global developmental delay" (American Psychiatric Association, 2013). The behavioral deficits and excesses included in these criteria are common targets of occupational therapy interventions and are considered skills associated with activities of daily living (Scott, 2016). While some of OT interventions focus primarily on one of the aforementioned targets (e.g. using Social Stories to improve social interactions), others focus on multiple targets, such as Sensory Integration's focus on sensory processing and functional deficits. This variance allows for occupational therapists to use their clinical judgment in utilizing the most appropriate intervention for each individual's specific needs. The possible interventions in the realm of autism vary, however, in their relevance to OT specifically—a topic of interest to a particular study conducted by (Case-Smith & Arbesman, 2008).

The role of occupational therapy in improving communication in children with autism:

Occupational therapy plays an active role in developing the independence of children with autism by improving their ability to perform daily tasks and reaching them to the

acceptable societal integration. (Mason & Bagatell, 2015,33)

Application of occupational therapy with children with autism aims to replace negative behaviors that hinder the performance of life tasks with adaptive positive behaviors. This means focusing on the following:

- Reducing negative behaviors.
- Increasing positive qualitative behaviors.
- Academic and school success.
- Exploiting the child's available potential and skills to the fullest extent possible. (Wohlers, 2020: 18-19)

Occupational therapy helps children with mild autism to master fine motor skills so that they can live independently, such as:

- Fine motor movements needed for writing and vocational training.
- Developing motor-visual coordination.
- Developing life skills. (Fawzia Abdullah Al-Jamida, 2013, 298)

Occupational therapy provides activities that stimulate the systems responsible for functional impairment and improve the deficit identified through the initial assessment. This is evident in the studies of Wuang, H..(2013). Kottop Hallgren (2005), Kattorp A, Hallgren M, Bernspang B, & Fisher AG. (2003). These studies aimed to assess the effectiveness of occupational therapy to improve daily life activities in children with autism.

Proposed recommendations for how to benefit from occupational therapy in improving verbal and nonverbal communication skills:

- Make this program suitable for use in a variety of institutions, such as psychological counseling clinics, rehabilitation centers, and various behavioral institutions.
- The family should participate in training the child, as the mother plays the biggest role in developing the child's language. The time she spends with the child is the longest and best for teaching him vocabulary and acquiring language in a natural way.
- Speak in short, simple phrases and avoid

using single words, but include them in short sentences. This makes it more understandable for the child.

(A) Recommendations for professionals working with children with autism spectrum disorder:

– Provide training for teachers and speech therapists working with children with ASD to educate them about the psychological, social, and linguistic characteristics of this group of children. This will help to identify educational, rehabilitation, and guidance programs that are appropriate for their needs, abilities, and potential.

– Provide training for psychologists and social workers at schools and rehabilitation centers for children with special needs with ASD to educate them about the importance of using occupational therapy training techniques and provide them with the latest information on children with autism spectrum disorder.

– Train psychologists, speech therapists, and teachers on how to develop guidance and training programs that can help children with ASD to improve and live in society to a large extent, instead of being introverted and isolated from the surrounding world, through their rehabilitation in various ways.

– Develop an advisory package for families of children with ASD that includes methods for dealing with these children and ways to address the problems that arise in the child's life, and to provide the ideal methods for dealing with these problems.

– The importance of early intervention to protect children with ASD from the health, emotional, psychological, and social problems they face, based on the possibility of mitigating the effects of disability if it is detected and treated early in life.

– The importance of cooperation between professionals and taking an integrated team approach, whether in diagnosis or treatment.

– The importance of combining educational, psychological, and health efforts to rehabilitate children with ASD.

(B) Recommendations for children with

autism spectrum disorder:

– The need to take into account the individual differences in the programs provided for this group of children, in terms of their planning and implementation, to achieve the unique care for each child.

– The need to focus on the principle of reinforcement and motivation in teaching these children.

– The need to pay attention to the category of children with ASD and to create special classes for them and to develop special programs and educational and educational strategies on scientific and objective bases that take into account these children and their personality traits, and provide them with opportunities for natural growth.

– Providing an integrated team to take care of this category, including a pediatrician, a psychiatrist, a psychologist, in addition to the school and the family.

– Relying on the strengths of each child as an individual case so that effective treatment can be provided.

(C) Recommendations for families of children with autism spectrum disorder:

– It is necessary to hold awareness courses for families of children with ASD aimed at accepting disability, which leads to reducing the psychological pressures they suffer as a result of the presence of a child with ASD in the family.

– It is necessary to make the child with ASD feel accepted and loved by those around him in the family, school, and community, as social acceptance plays a major role in achieving emotional balance, especially parental acceptance.

– It is important to reduce criticism and blame directed at the child with autism spectrum disorder, especially in front of others, but to seek positive behaviors in his behavior and praise him and praise him so that he can remove from himself feelings of fear and anxiety.

– It is necessary to involve parents and family in the programs provided to their child through continuous follow-up of the child

and providing solutions to the problems that arise for the child.

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