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The Effect of a Play-Based Training Program on Developing Verbal and Non-verbal Communication Skills among Autistic Children

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Abstract

The research set out to determine how well a play-based training program improved the verbal and nonverbal communication skills of children with ASDs. Learn how much improvement in verbal and nonverbal communication skills has been maintained after a month of participation in the program for children with autism. The research sample consisted of 20 participants, 10 males, and 10 females, and they were randomly assigned to one of two groups: the experimental group (n = 10) and the control group (n = 10) from Autism centers in Amman. Post-test measures of verbal and nonverbal communication skills showed statistically significant differences between the control and experimental groups, favoring the latter. Additionally, the research demonstrated that the experimental group's mean scores in verbal and non-verbal communication skills improved significantly between pre- and post-measurement, indicating the program's success. There are also no statistically significant differences between pre- and follow-up- assessments test scores for the experimental groups' verbal and nonverbal communication skills.

Keywords: Play-Based Training • Verbal and Non-verbal Communication Skills • Autistic Children

Introduction

Autism is one of the most mysterious and complex developmental disabilities, both in terms of its causes and factors, or in terms of its psychometric and clinical manifestations, or the severity of its non-adaptive behavior patterns [1]. It is a condition characterized by a set of symptoms and manifestations that are dominated by disturbances in social or linguistic skills, as well as an imbalance in sensory responses to stimuli, in addition to the absence of the ability to communicate with others, and the absence of language and speech despite the availability of linguistic abilities [2]. A child who suffers from autism cannot interact with others and integrate into society and has no problem staying alone throughout his life. He is preoccupied with himself, withdraws into himself, refuses interference from others, and is characterized by the dullness of feelings [2,3]. The severity of autism varies from one child to another.

The language and communication disorders suffered by children with autism are among the pivotal and fundamental disorders that negatively affect aspects of their normal development, their social interaction with others, and their integration within their local communities [4,5]. These

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disorders in children with autism include both verbal and non-verbal communication disorders. These children not only lack spoken language but also lack language in all its forms [6]. They also lack grammar and language skills, and at the same time, they do not try to compensate for this weakness in language, its components and skills by using non-verbal communication methods such as gestures, movements, or simulation, in addition to that they are unable even to use visual communication.

In order to reduce language and communication difficulties experienced by children with autism, attempts to intervene in training and rehabilitation programs are necessary and important to develop the ability of these children to communicate with others by teaching and training them on how to express their needs, feelings and feelings in more than one way [7,8]. This is done by providing the appropriate environment in which the child learns the skills of imitating some sounds, movements, and actions, paying attention to a specific stimulus among a number of stimuli, responding to certain commands, expressing what the child wants, and naming some pictures or things [9].

Moreover, the intervention in training and therapeutic programs to develop the communication skills of children with autism provides them with a number of new social behavior patterns that help them learn alternative forms of language communication. Thus reducing both verbal and non-verbal communication disorders they have [10]. When reviewing the literature on language communication skills, verbal and non-verbal communication are more of the problems that children with autism spectrum disorder suffer from [11]. Play is one of the important educational means that most studies agreed on its importance and effectiveness in developing various skills of children with autism in an interesting and fun way and in filling their spare time with useful things [12].

Therefore, this study may be an attempt to develop some linguistic communication skills among children with an autism disorder by using play, focusing on skills (verbal and non-verbal communication), which may contribute to increasing their linguistic output. Thus, developing their ability to communicate with others, improving their condition in the future, helping those around them to understand them, and alleviating the symptoms of autism as much as possible.

Research questions

In light of the above, the present research seeks to address the following questions:

- Do the verbal and non-verbal communication scores of the control group and the experimental group change after the program's implementation?
- Are there significant differences in the verbal and nonverbal communication scores of the experimental group before and after the implementation of the program?
- Did the experimental group's verbal and nonverbal communication scores change in the post- and follow-up of the program?

Literature review

Linguistic communication is one of the most fundamental parts of communicating information; it also represents the social connection between individuals and is one of the most crucial foundations of the justification for social interaction [13]. For a variety of reasons, communication and language are afflicted with a variety of disorders, and some children suffer from difficulties in language communication, as these difficulties are more prevalent in individuals with cognitive disabilities and have a substantial impact on the development and acquisition of language [14].

Linguistic communication is the coordination of listening and expression skills and the use of them in the proper order; it refers to the child's ability to communicate with others using spoken linguistic symbols and includes listening, then understanding, then expressing, and finally communicating with listening agai [13]. Communication is also described as the act of transferring, obtaining, or exchanging information between influential and affected persons in a manner that results in a change in attitudes or behavior. Communication is also known as the exchange of information, views, and emotions between persons. It takes a sender to be a message and a receiver to decode or comprehend the message, and communication is inevitably a social activity that involves language, whether spoken, written, or non-verbal, in order to communicate amongst dissimilar persons.

Language is the symbolic system used in communication, and it consists of numerous symbols and rules for constructing symbols [14]. Language is the social symbol in which individuals engage in communication. The language may be verbal (speaking, writing, singing) or non-verbal (moving parts of the body, facial expression), as well as vocal (speech sounds and non-verbal noises, such as a grin) [15]. Language is often referred to as the system of evidence and rules that permit the collecting and organization of this evidence [16]. Consequently, language is a system whose rules and features rely on a sound system agreed upon by a group of individuals. This system is made possible by the voting equipment (the mouth). Language is utilized for interpersonal communication and is regarded as the most effective means of communicating and expressing thoughts and feelings across all languages [16].

There must be a sender, a receiver, and a message in order for communication to occur [17]. The sender holds ideas that are translated into symbols that the recipient may comprehend. Communication happens only when the sender and recipient have the same interpretation of the message. The encoding of thoughts into signs and symbols is an essential aspect of communication. Communication signals relate to immediate occurrences, such as individuals or feelings. These messages may consist of gestures, social rituals, or verbal patterns. Communication requires the employment of the senses of sight, hearing, and occasionally touch on the part of the receiver in order to receive the message meaning and build an understanding of what was communicated. Communication is divided into two types [18,19]:

- Non-verbal communication: All forms of communication that

depend on non-verbal language, sometimes known as silent language, are included in this section. Three forms of nonverbal communication are:

- Signal language: It consists of the simple or complex signals that a person uses to communicate with others.
- Action language: It includes the movements that a person does to convey to others what he wants of meanings or feelings.
- Objects language: It refers to what the provider of communication does - other than signs, instruments, and movement - to represent the meanings or emotions he wishes to send, such as wearing black clothing, which is utilized in many countries to indicate the wearer's melancholy.
- Verbal communication: It is the process of converting thoughts into particular words and organizing them in such a manner that they may be communicated orally or in writing, contains:
- Phonology: It is the phonetic system in the language and the linguistic rules that govern the phonemic groups. The phonemic system includes the ability to distinguish between linguistic sounds and the way of pronunciation.
- Morphology: It includes the system of linguistic rules that govern the construction of words and the construction of different forms of the word derived from the basic origins of its meaning.
- Syntax: Refers to the linguistic rules that govern the order of words to form sentences and the relationship between the elements of the sentence.
- Semantics: Refers to the actual words used in speech and their meaning, each word has its own semantics such as a pen indicating A name for a specific thing, a big denoting a specific adjective, tomorrow denotes a specific time, and I a pronoun denoting the speaker, going denotes a source of the verb go.

The significance of communication is that it offers a living entity the sense that it is a part of those around it and that it is a person similar to the others engaging with, influencing, and influencing it [20]. In order to attain greater success, a person's wishes and expectations must be met via communication, and he must expand the lines of communication and understanding with everyone he converses with out of an instinctual belief that this connection with others is the key to achieving his goals [21]. This reference upon which a person depends in order to interact with others is one of the most significant features of that person, and communication as a tool and a goal is one of the most fundamental vocabularies in the human existence system [22]. People with autism are categorized into four types based on their interpersonal communication styles, as follows [23,24]:

A child who lives in his own world: He is an introverted youngster who lives in his own world, where contact with others is minimal, if not nonexistent. He has a minimal relationship with his parents and close relatives, conducts his work alone, and engages in unorthodox play. His mode of communication is shouting, he laughs for no apparent reason, and he understands just a few phrases.

The child who summons others: This child is able to communicate with others and request assistance by withdrawing his hand when he needs something particular or by gazing at them and smiling when he wants 2 3Bto join in a game. He also knows the routines he is used to.

The child who communicates first: He engages in nice interactions and indicates when he seeks a certain item. The remarks conveyed to him are easily comprehended by him. He talks as he provides affirmative or negative responses. He greets people and then leaves them.

The child who participates in communication: He can communicate with others, discuss the past and the future, express his feelings, and comprehend many words, but he cannot comprehend the origins of communication and confrontation, especially in unfamiliar situations; he finds it difficult to participate in the conversation, and he relies on encounters when he cannot express himself in his own way.

Play is an educational medium that works to a large extent to form the child's personality in its various dimensions. Play is an essential pillar for the development of the child's social, linguistic, perceptual, and cognitive aspects, as the natural way of learning is through play [25]. Piaget states in his book Children's symbol formation that a child's motions are adequate to demonstrate that he is engaged in play. He also thinks that play is selfmotivated by the kid to obtain pleasure for himself, that it is necessary for the child's development, and that it shows his progress, as the forms or kinds of play are closely tied to the phases of his development since each level has its own games [26]. Freud also notes that play starts with the kid in a self-satisfying form, which is represented by the use of the lips, fingers, eves, and the full surface of the skin. This style of play is concentrated on the child's individuality and expresses his body or his mother's body via his relationship with her for the aim of nourishment and health care [27]. As for Good, stated that play is a child-initiated, child-directed, or childinitiated, child-initiated action undertaken for the joy of entertainment, which in turn improves the child's cerebral, psychological, physical, and emotional capacities. Play is a movement or set of actions meant for fun, speed, and lightness in consuming, using, or discarding anything [26].

Play is one of the important elements of a child's life. Through it, he learns a lot about the world around him. Discovery and feeling different things develop play and understanding of the world around him. Then the child begins to use games to symbolize the things around him [28]. The pretend and social play patterns of autistic children differ from other children, as they spend little time in "functional" pretend play compared to normal children. Although "functional" pretend play does not require acting abilities, children with autism show low levels of functional play or perform simple functional play such as "putting the spoon in a bowl but without moving it". Their play is characterized by repetition and stereotyping in dealing with objects, play tools, and non-functional use of them.

Among the important things that playing with children with autism can achieve are the following [29]:

- It develops symbolic understanding as the child understands that the puppet can represent a human being in real life. Children's ability to use coding while playing enables them to learn about the real world and how to interact with their environment and use appropriate language during this interaction. During play, children can assume some roles such as the role of a doctor, Engineer, teacher.
- Promotes social development by learning about rules and behaviors and testing his experiences.
- Promotes social development by learning about rules and behaviors and testing his experiences.
- Developing linguistic and non-linguistic communication and developing receptive and expressive language.
- Helps express feelings verbally.

Children with autism can imitate unfamiliar gestures and actions, but they rarely imitate them automatically. They tend not to raise play challenges for themselves and prefer to stick to their favorite toys, such as parking toy cars in rows or fiddling with strings. Children with autism are described as children with limited play abilities, especially when the play includes imagining. Their play is highly repetitive and stereotypical. They are preoccupied with repeating stereotypical activities and engage in them for long hours without being distracted by the current events around them. Although these repetitive activities arouse their interest, the limited play restricts their opportunity. In expanding their understanding of causes and effects [30]. The autistic child also prefers individual play and does not participate in group play, where he fails to push others to play with him, and if he participates with other children, he deals with them emotionlessly, as they suffer from deficits in communicative play behaviors such as eye contact, sharing, joint attention, avoiding contact with others, and they spend a lot of time playing alone and exhibit less interaction and communication with others than their typically developing peers [31].

Play contributes significantly to the autistic child's acquisition of social competence and personal information through which his motor ability can be invested for self-reliance and focus. Therefore, choosing appropriate games for the autistic child is important. Games, especially kinetic games, are very useful and have a great impact on directing the desired behaviors of this child, as well as developing focus and attention [31]. These skills are among the foundations that seek to train the autistic child to discipline and adapt to form the bonds and social relationships that the autistic child needs [12]. However, there is a significant issue, as we are not dealing with an average kid, but rather an outstanding youngster that requires us to make an effort to be some of his positives and promote him [25]. Consequently, selecting the appropriate games is a challenging endeavor, and many crucial factors must be taken into account.

Previous Studies

Fadel (2015) assessed how well the Syrian organization for the disabled's training program for the development of certain language communication abilities in autistic children had worked. Twelve autistic children—10 boys and 2 girls—made up the research sample. They were divided into two experimental groups, each of which included six kids—five boys and one girl—as well as a control group, which likewise had six kids (5 boys and 1 girl). The researcher created a training program for the development of a few specific linguistic communication abilities, as well as a scale to measure the appreciation of linguistic communication skills, for the study's aims (understanding, expression, and label). The study highlighted how well the program approved in the current study helped autistic children develop some non-verbal communication skills. The study's findings also showed how well the program helped them develop their linguistic communication skills, with the exception of the ability to understand, a month after they applied through telemetric delayed.

Mashhour (2016) examined the efficacy of a suggested training program based on playgroup activities in fostering social skills development in an autistic kid enrolled in a private school run by the Abu Dhabi Education Council (ADEC). An autistic 11-year-old was included in the study's sample population. Both qualitative and quantitative methodologies were used to the data analysis. In support of the post-application, the findings revealed a statistically significant difference between the pre- and post-assessments of the social interaction lists. This demonstrates the efficiency of the suggested training program, which is based on playgroup activities, in fostering social skills in the research sample on both scales of visual communication and easy command execution as well as social interaction and participation.

Bin Saeed et al. (2020) aimed to find out to know what extent affects paramedical games in achieving social interaction in a sample of children with autism spectrum disorder at the Pedagogical Psychological Center for the mentally disabled in the state of Albaydh. The study sample consisted of (5) children with autism spectrum disorder between the ages of (7-12) years chosen in the simple random technique. The study used the experimental curriculum, and the questionnaire was used as a tool to collect data and measure social interaction. The results indicated that there are statistically significant differences after the application of the recreational play program to achieve social interaction among children of autism spectrum disorder in favor of the experimental group, and the presence of statistically significant differences after the application of the competitive play program to achieve social interaction among children of autism spectrum disorder in favor of the experimental group.

Mousa and AL.Qatawneh (2022) analyzed the results of a training program that used game strategy to help a sample of autistic kids in Nablus strengthen their social skills. 16 autistic spectrum disorder patients between the ages of 4 and 8 made up the research sample. A control group and an experimental group were created from the research sample. The social skills assessment and a training program created using playing strategy were the two instruments used to accomplish the study's objectives. The study's findings showed that there were average score disparities between the two scales that were statistically significant for kids with autism spectrum disorders in the experimental group. The findings demonstrated a difference between the pre- and post-results in the areas of emotional reactions, involvement, self-adjustment, and visual communication, according to the social skills scale. The outcomes also showed that there were statistically significant variations in the mean scores between the experimental group of autistic children and the control group. In areas such as visual communication, social engagement and involvement, self-adjusting, emotional reactions, and total score, the disparities were emphasized in the post findings for the social skills scales.

Research Methodology

The study used an experimental methodology that allows for the analysis of the effects of an independent variable (play-based training program) on a dependent variable (verbal and non-verbal communication skills). One of the experimental method's designs, which allowed for the creation of a control group and an experimental group using a random selection of the sample children and pre- and post-measurements, was chosen by the researcher. It was as follows:

- The sample's (20) chosen children were divided into two groups at random (control and experimental).
- Confirm that the kids in the two groups are comparable in terms of their verbal and nonverbal communication abilities.
- Apply the play-based training program to the experimental group while withholding it from the control group.
- Performing a post-measurement for the two groups (control and experimental) to gauge the impact of the independent variable.
- The experimental group is retested after roughly a month to see if the play-based training program is still having an impact and to ensure that the change in the dependent variable (verbal and nonverbal communication skills) is genuine and not just transient.

Population and Sample

Children with autism who get treatment at centers for autism in Amman during the dates of 1/10/2022-1/12/2022 were the sample participants in this research. The people included in this research sample were those who met the criteria listed below:

- 1. The youngster should fall between the age ranges of 12 to 18 years.
- 2. That the youngster has no impairments that might impair his capacity to respond or comprehend, such as hearing impairment, and this condition has been confirmed by the medical reports provided to these children by the Ministry of Health.
- 3. The youngster's intellect level must be normal, and an IQ test administered in a Jordanian setting has shown that this is the case. According to the findings of the verbal and nonverbal communication scale after being applied to youngster, the youngster also has a problem with verbal and nonverbal communication.

Twenty children who fulfilled the criteria were split into two equal groups of ten children each at random from the twenty children who matched the criteria. The play-based training program created for the purposes of this research was administered to one of the two groups, which was randomly chosen to be the experimental group. The other group served as the control group and did not receive the play-based training program. The play-based training program was applied to the experimental sample over the course of two months at a pace of ten sessions per month, giving each youngster 20 sessions in total.

Research Instrument

To achieve the objectives of the research, two study instruments were used:

First: a scale of verbal and nonverbal communication skills.

The play-based training program for children with ASD served as the basis for the scale that the researcher created. The scale has 22 questions that were ordered in descending order of difficulty, measuring verbal skills with 12 items and nonverbal skills with 10. The scale was used for the research sample as a pre-, post-, and follow-up measurement instrument.

Second: The play-based training program

A training program that is based on a playing strategy to develop verbal and nonverbal communication skills has been prepared. This was done in accordance with the steps that were taken in these programs after consulting theoretical literature and earlier studies such as Fadel (2015), Mashhour (2016), and Mousa and AL.Qatawneh (2022). This program is designed to teach children both verbal and nonverbal communication skills by having them participate in a series of activities that are focused on playing strategies and acquiring the necessary abilities. These activities are covered in the curriculum. The curriculum includes several ways to learn, such as painting, storytelling, acting, and physical play exercises. They received training in the program where they were already receiving their education.

Instrument Validity

The validity of the scale was examined using both of the following methods:

- By presenting the contents of the scale to (10 arbitrators) and adopting the proportion (80%) as the percentage of approval of the agreement between the arbitrators, the validity of the scale's content is established.
- By using it on a sample of ten experimental children with ASD, the scale's discriminating validity was tested. The discriminatory validity coefficients of the (F) values were (7.43 and 8.23), both of which are statistically significant.

In terms of reliability, the internal consistency of the scale was determined using the internal consistency technique in accordance with Cronbach's alpha equation. The reliability coefficient overall was (0.873), and the reliability coefficients for the dimensions were (0.753-0.867).

Data Analysis

Following the completion of the data collection process, the mean scores and standard deviations of the pre-and post-test were determined. The impact size was discovered to illustrate how effectively the play-based training program assisted children and adolescents with ASD in improving their verbal and nonverbal communication skills. This was determined by using the Eta square. The Wilcoxon test and the Z-value were also used to demonstrate the degree of dissimilarity between two samples with comparable characteristics.

Result and Discussion

Results of the first question

It was ensured that the experimental and control groups had similar

levels of verbal and nonverbal communication skills before the play-based training program was implemented, as indicated in (Table 1).

According to (Table 1), there are no statistically significant differences in the pre-test mean scores of the children's verbal or nonverbal communication skills between the experimental group and the control group.

In order to answer the first question which states "Do the verbal and non-verbal communication scores of the control group and the experimental group change after the program's implementation?". The results were shown in the following (Table 2).

According to the data in Table 2, the post-test scores of the experimental group significantly outperformed those of the control group on both the verbal and nonverbal communication skills scale and the overall score. This indicates that both the verbal and nonverbal communication abilities of the children in the sample are rather advanced.

These findings imply that, relative to children with ASD in the control group, children in the experimental group improved after enrolling in the research program. The researcher also believes that the significant increase in the experimental group's mean scores on tests of verbal and nonverbal communication skills after enrolling in the training program is attributable to the children's usage of the training program's tactics of reinforcement and imitation. The children in the control group have been less bored and more attentive as a consequence of this. Results like these are consistent with those found in studies by Fadel (2015), Mashhour (2016), Bin Saeed, Majdi, and Hizum (2020), and Mousa and AL.Qatawneh (2022), all of which demonstrated the efficacy of play-based training programs in enhancing children with ASD's social interaction.

In order to answer the second question which states "Are there significant differences in the verbal and nonverbal communication scores

of the experimental group before and after the implementation of the program?". The results are shown in the following (Table 3).

According to (Table 3), there are differences in the mean scores of the experimental group in the areas of verbal and nonverbal communication skills, as well as the total score, that favor the post-measurement. These differences are statistically significant. After the intervention, both the children in the experimental group's verbal and nonverbal communication abilities improved significantly.

The researcher also believes that the extent of improvement in the mean scores of the children of the experimental group after applying for the training program on verbal and nonverbal communication skills is due to the fact that attempts to interfere with treatment programs by implementing training or educational methods for the skills of children with ASD are a new means of supplying them with help them learn alternative forms of communication and also help them learn some app. In other words, the researcher believes that the extent of improvement in the mean scores of the children of the experimental group after applying for This finding is consistent with the findings that were found in the research conducted by Fadel (2015), Mashhour (2016), Bin Saeed, Majdi, and Hizum (2020), and Mousa and AL.Qatawneh (2022).

In order to answer the third question which states "Did the experimental group's verbal and nonverbal communication scores change in the postand follow-up of the program?". The results are shown in the following (Table 4).

According to (Table 4), there are no statistically significant alterations in the mean scores achieved by the experimental group during the post-test or the follow-up evaluations. This provides evidence that the efficacy of the program has been maintained throughout the follow-up period and that there has been no relapse after the completion of the program. This result

Table 1. Pre-Measurement

Dimensions	Group	N	Mean Rank	Sum of Ranks	U	Z	Р
Verbal communication skills	Experimental	10	10.3	103	20	0.703	0.603
	Control	10	10.7	107	38		
Nonverbal communication skills	Experimental	10	11.45	114.5	28.3	1.254	0.224
	Control	10	9.55	95.5			
Total	Experimental	10	11.3	113	40	0.081	0.758
	Control	10	9.7	97	48		

Dimensions	Group	N	Mean Rank	Sum of Ranks	U	z	Р
Verbal communication skills	Experimental	10	14.1	141	1/	2.874	0.008
	Control	10	6.9	69	14		
Nonverbal communication skills	Experimental	10	16.3	163	2.2	3.47	0
	Control	10	4.7	47	3.3		
Total	Experimental	10	14	140	41	3.402	0
	Control	10	7	70	4.1		

Table 2. Post-Measurement

Dimensions	Pre/ Post	N	Mean Rank	Sum of Ranks	Z	Р
Verbal communication skills	Negative rank	1	1	1	3.102	0.002
	Positive rank	9	6	54		
	Ties	0				
	Total	10				
Nonverbal communication skills	Negative rank	1	1	1	2.98	0.005
	Positive rank	9	6	54		
	Ties	0				
	Total	10				
Total	Negative rank	1	1	1	2.85	0.006
	Positive rank	9	6	54		
	Ties	0				
	Total	10				

Table 3. Pre and Post-Measurement

Dimensions	Pre/ Follow	N	Mean Rank	Sum of Ranks	Z	Р
Verbal communication skills	Negative rank	3	3.5	10.5	1 402	0.175
	Positive rank	0	0	0		
	Ties	7			1.402	
	Total	10				
Nonverbal communication skills	Negative rank	6	6.5	39	1.661	0.231
	Positive rank	3	3	9		
	Ties	1				
	Total	10				
Total	Negative rank	6	7	42	1.205	0.12
	Positive rank	4	5.2	20.8		
	Ties	0				
	Total	10				

Table 4. Post and Follow-up Measurement

may be interpreted in light of the children's obtained abilities in verbal and nonverbal communication, as well as the continuing practice of the activities provided by the program, which allowed them the capacity to deal with the situation.

In addition to the constant assessment that took place throughout the session as well as the homework that was assigned for each session, which led to the training impact continuing after the follow-up time had concluded. This demonstrates the level of their participation as well as their enthusiasm for gaining knowledge via this program. The foundations used in using certain specifications for the training program hall to avoid child distraction factors such as adequate seating for the child, adequate lighting in the hall, and the hall being free of other educational means and posters are also responsible for the improvement that occurred in the children who were a part of the experimental group. This improvement was observed in the children who were a part of the experimental group. The success of the program can be attributed to the wide variety of educational methods and tools that were implemented during the course of its development. These educational methods and tools included audio-visual aids that helped the child make the connection between his or her actions and their thoughts, as well as tangible experiences and opportunities to listen to and imitate the vocabulary of the target language.

Conclusion

This research adds credence to the idea that children and young adults with Autism Spectrum Disorder (ASD) may benefit from participating in a training program that is centered on play in terms of the development of both verbal and nonverbal communication abilities. It also implies that training programs focused on play may be more beneficial than traditional ones at enhancing the amount of competency these children have in their verbal and nonverbal communication abilities. Therefore, in order to achieve the objectives of the program, it is beneficial for instructors to enhance both the verbal and nonverbal communication skills of the students in their classrooms. Children with autism who participate in a training program that is centered on play showed improvements in their abilities to imitate, seek attention, create tension, and reduce boredom. The results of this research project indicated how a training program focused on play may assist autistic children in developing their verbal and nonverbal communication abilities. The foundations used in using specific specifications for the training program hall to prevent child distraction factors such as good seating for the child, good lighting in the hall, and the hall being free of other educational tools and posters can be used to come to the conclusion that a play-based training program promotes an environment that is calm and stress-free and gives students the opportunity to support, encourage, and acknowledge one another.

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