

The Effectiveness of One-To-One Instruction Strategies on Improving the Academic, Social, and Functionality of Children With Autism

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Abstract

The study aimed to know the effectiveness of one-to-one instruction strategies on improving the academic, social, and functionality of children with Autism. The method used was qualitative analysis. Articles published were selected and analyzed. The results showed that from the qualitative studies of the methodology, it is evident that the one-to-one instructional strategies indeed affected social skills and academic What about functionality of children with Autism. In light of the results, the study suggested some recommendations.

Keywords: One-To-One Instruction Strategies, Academic, Social, Functionality, Children with Autism

1. Introduction

Instructional strategies motivate students and help them to increase their attention span. Through this strategy, the student learns how to organize the knowledge learned in a way that they can understand and remember easily. Effective instructional strategies can accommodate a variety of student differences. Some of the instructional strategies include; cooperative learning, issue-based inquiry, group discussion, service learning, independent study, cognitive organizers, portfolio development and role-playing (Rossi, 2018).

The objective of this research is to examine the efficacy of one-to-one instructional strategies for improving academic and social function. This is analyzed by reviewing the implementation of a one-to-one Strategies to improve the academic function and social skills

of children who have autism. The primary goal of the one-to-one instructional method is to address some of the more explain. Important social information can be shared through this unique method; the direct interaction can help to boost the social skills of individuals who have autism while the knowledge passed to the child improves their academic and function (Lynch, McCleary, & Smith, 2018).

1.1 Studies Am Social Skills of Children With Autism

Autism spectrum disorder (ASD) is a neurodevelopmental condition of heterogeneous etiology, categorized by social communication deficits, repetitive or restrictive behaviors and interests. Epidemiological studies display that the incidence of autism is increasing, and the treatment of autism is vitally important (Hamadneh, Al-Bayyari, & Hamadneh, 2019).

Leo Kanner first reviewed autism in the year 1943. He identified and labeled autism based on the personal observations that he made from children in his clinic. He noted that some of these children had schizophrenia but was different due to the lack of hallucinations and the early onset of the symptoms. Since then, there has been a lot of research that has been done identifying the symptoms of autism (El-Zraigat, 2016). They include language impairments, love for routine and social isolation. Today, there are even tests that can be used to diagnose autism even though the symptoms vary from individual to individual. There are also IQ tests that have been used in assessing the child's IQ to find the appropriate treatment. Through treatments, some of the children can live a normal life. However, some severe forms of the disease have progressed even to adulthood (Suleiman, Abed Al Hafiz, & Nafe', 2015).

According to (Mubaydin & El-Zraigat, 2019) results showed that the performance level on the social interaction scale with its items and the cognitive performance scale with its items reached an average level among Children with Autism Spectrum Disorder.

According to (Constantin, Johnson, Smith, Lengyel, & Brosnan, 2017), Autism results in behavioral problems in the classroom. Children who have autism are often destructive and have poor social skills. They find it hard to initiate and maintain relationships. The teachers aim to solve this problem with positive reinforcement (treats) and negative reinforcement (add reference). This sometimes results in replacing one behavior with another since the actual problem is not solved. It is essential to understand why exactly the problem is happening.

Moreover, children who have autism have poor social skills. They struggle with making friends in class and maintaining those friends. One-to-one instructional strategies have claimed to be an effective method for who have autism in school. Through direct interaction, the teacher can impact a certain behavior or social skill into the child, Through spending time with the instructor, the child can learn how to interact and become more social in school (O'Handley, Radley, & Whipple, 2015).

Few quality studies have been done in analyzing the effectiveness of the one-to-one instructional strategy. The results obtained have also been variable (Acar, Tekin-Iftar, & Yikmis, 2016). This is attributed to the imperfection of studies and the inadequate description of the participants. The use of different instructional strategies has also made it difficult for results to be obtained. Also, the large variation in the symptoms exhibited by children who have autism has also played a huge impact on the results that have been obtained in research.

Many papers have been published to aid in finding more information (Crespi, Leach, Dinsdale, Mokkonen, & Hurd, 2016).

1.2 Studies Aim the Efficacy of One-to-one Instructional Strategies in Improving Children's Social Skills Whether With or Without Disabilities

Children are usually cautious when they meet new people. This is regardless of whether they have a disability or not. They are afraid to trust new people. Through one-to-one instructional strategies, they can learn how to interact with each other (Foss, 2016). They learn what to say and how to say it. They also learn how to behave with others. They learn not to take other people's things, not to be mean to others among other social skills (El-Zraigat, 2016).

1.3 Studies Aim the Effect of the one-To-One Instructional Strategies in improve the Social Skills of Disabled Children

In most cases, children with disabilities may feel inferior. They may suffer from low self-esteem. They tend to avoid social interactions since they are unable to keep up with their peers. One-to-one instructional strategies help the child understand that inability is no disability. Even though they may be unable to walk or have a slowed speech, they can still do something that the others cannot (Tanner, Hand, O'toole, & Lane, 2015)

1.4 Research Questions

Some of the research questions that will be answered are:

Research question 1: can one-to-one instructional strategy develop the academic function and social skills of children who have autism?

Research question 2: can one-to-one instructional strategy promote the academic understanding ability of individuals with autism especially children?

Research question 3: Can one-to-one instructional boost the ability of children who have autism to initiate an interaction with other children?

Research question 4: can one-to-one strategy promote the ability of children who have autism to maintain interaction with other children?

2. Methodology

The method used was qualitative analysis. Articles published were selected and analyzed. The articles for the study were obtained from various psychology and education databases including CINAHL, ERIC PSYCH INFO, and EBSCO host among others. The articles chosen were based on a definite exclusion inclusion criteria; they are selected if they were opinion-based; articles used were published within the last five years; articles included if they were peer-reviewed; articles included if they were scholarly articles. There is also a pre and posttest, which is social skills improvement scale (SSIS). This scale is used to provide further qualitative results. Tests are conducted, and the results analyzed using the scale (Pane, Sidener, Vladescu, & Nirgudkar, 2015).

3. Results

From the qualitative studies of the methodology, it is evident that the one-to-one instructional strategies indeed affected social skills and academic for whom. Levels of evidence were applied to analyze the efficacy of instructional strategies in children. They include:

Level 1: Evidence from studies of instructional strategies in autism children.

Level 2: Evidence from studies of the effectiveness of instructional strategies on the enhancement of social skills and academic function of children with or without disabilities.

Level 3: Evidence from studies of the effect of instructional strategies on developing the social skills and academic function among kids with disabilities.

Each one had five studies. Out of fifteen case studies, four showed that the one-to-one instructional strategies had a positive impact on the behaviors in children have autism. Only two studies showed that it had a positive impact on children regardless of whether they had disabilities or not, three studies did not have a conclusive result. Three studies showed that the instructional strategies helped individuals with disabilities, especially children, to initiate an interaction and maintain it (Wright et al., 2016).

4. Discussion

Children with autism often have a problem with social skills and function. They often display aggressive behaviors or inappropriate behaviors. When placed in a stressful situation, they experience anxiety and find it difficult to perform some of the tasks. This research paper has shown that one-to-one instructional strategies indeed have a massive impact on children. They can be used to modify academic, social and functionality in have autism (Garzotto, Gelsomini, Occhiuto, Matarazzo, & Messina, 2017).

The children showed an increased improvement in understanding academics, initiating interaction and maintaining these interactions. They were also able to learn new skills and reduce anxiety (Foss, 2016). Table 1 below highlights the various types of one-to-one instructional strategies, the instance of their use as well as the percentage of interaction that is achieved from their use. They were also able to learn new skills and reduce anxiety (Foss, 2016). Table 1 Shows The use of one to one instructional strategies source (Belland, Burdo, & Gu, 2015). Figure 1 shows the use of one to one Problem facing autism children and results.

Table 1. The use of one to one instructional strategies source

Type of One-to-One Scaffolding	Number Insances	of % of Total Interactions	Contingent
Enlisting student interest	0	0%	
Controlling Frustration	1	0.50%	
Providing Feedback	32	14.70%	
Indication Important task Elements to Consider	90	41.50%	
Modeling Expert Processes	8	3.70%	
Questioning	66	30.40%	
Technical Troubleshooting	12	5.50%	
Other Lecturing	8	3.70%	
Total	217	100%	



Figure 1. Problem facing autism children and results

Instructional strategies are beneficial to children. In addition to the one-to-one interaction that initiates positive changes, the reinforcement of the parents and teacher throughout the day. The positive reinforcement and one-to-one interaction with the children help to modify the behaviors of the child and boost functionality. Additional studies need to be done to determine whether the children will respond to the instructional strategy alone without any other intervention. The additional research should also include the variables that are responsible for the differences in response (Kuravackel, Ruble, Wiemken, & Kelley, 2018).

This study controlled some of the limitations. For instance, the children participating in the study were diagnosed by the doctor to have autism or disabilities. It was also a blind study since the teachers were not aware of what the researcher was looking for and had no idea whether the children were undergoing treatment or are at which level of autism or disabilities. On the other hand, observers did not know which behavior the instructional strategy targeted and therefore could not be biased. During the observation, no reference was made to the earlier interaction with the instructor. There was also no change in verbal praise if the child implemented the skill reinforced during the one-to-one session.

There are, however, some limitations to this research. The tools used, especially the SSIS may not have been tested for validity. The sample sizes were also very small. Another limitation was that the sample was only representing children who fit in the criteria, which were children suffering from autism and children diagnosed with disabilities (Bode & Vraga, 2015). This design did not allow the assessment of other variables. It also lacked a control group that could identify some of the attributes or challenges. The study was only focused on one-to-one interaction. It did not specify if they are verbal or electronic, making it difficult to draw a conclusive result on which method is specific on children with autism (Burger-Caplan, Saulnier, Jones, & Klin, 2016). Another limitation is that children with disabilities had a wide range. It did not specify mental or physical disabilities. The study only ran for two weeks. If the study could have continued for a longer time, it may have been easier to see some of the significant changes in behaviors.

5. Recommendations

In order to make progress on the knowledge of the efficacy of one-to-one instructional strategies, it is necessary to control some of the limitations highlighted in this study. For future research, researchers could analyze the one-to-one strategy combined with the specific reinforcement system and analyze the effectiveness. For example, after reading the story, the teacher could give the child a token of appreciation every time the child implemented the behavior that was targeted in the story. The effectiveness of the two methods can then be

analyzed (Qi, Barton, Collier, Lin, & Montoya, 2018).

More research is also required in analyzing whether the effects of the instructional strategy are maintained or generalized. This means that analyzing if a specific behavior influenced through one-to-one instructional strategies is maintained or if the behavior is returned to the baseline once the strategy is removed. This study should stretch longer the initial intervention phase and the potential benefits analyzed (Bode & Vraga, 2015).

6. Conclusions

This research aimed at analyzing the efficiency of one-to-one instructional strategies in improving the social skills of Saudi Arabian children with autism. The findings showed that one-to-one instructional strategies could change behavior or social skill and enhance academic and function in individuals with autism or disability, especially the children who have autism. Through this method, behavior can be transferred to the child.

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