

EXAMINATION OF STUDIES FOR AUTISTIC CHILDREN IN TURKEY

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ABSTRACT

Article History

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The purpose of the study is to examine studies done for children with autism in Turkey and examine the trend of the studies. For this purpose, a total of 49 studies were examined in the National Thesis Center, Google Scholar, Ulakbilim and Dergi Park databases. A form was developed under qualitative research approaches by using the categorical analysis technique, one of the descriptive analysis methods, to examine the publications. The developed form categorizes the publication years of the studies, authors, sample distributions and numbers, subject areas, research methods, data collection tools and training methods. As a result of the descriptive analysis of the studies, it has been determined that the applied behavior analysis method is frequently used among education methods. It is seen that the studies increased between 2016-2021. As the sample size, generally 1-5 people, pre-school and primary education levels were chosen equally as the sample distribution. Studies focus on social interaction as a subject area in education. As a research method, among single subject research models, cross-subject research method and multiple research models were frequently preferred. In addition, the most preferred data analysis method is graphical analysis.

Keywords: Autism, Autism Spectrum Disorder, Autistic Education, Special Education Methods.

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INTRODUCTION

Autism Spectrum Disorder (ASD) is a lifelong neurodevelopmental disorder that usually occurs at the age of 2 years or later (American Psychiatric Association, 2013). It causes the individual to adhere to routine, to be overly sensitive or insensitive to sensory stimuli, to be insufficient in social communication areas, to exhibit repetitive behaviors, and to have limited areas of interest (Kırcaali-İftar, 2007). However, symptoms can be reduced by improving them throughout life.

Although ASD has no known cause or definitive treatment, studies show that individuals with autism can live an independent and productive life with early intervention and training. In particular, early-stage education is considered to be the most appropriate solution to the ASD problem, as it can improve reasoning skills (Konstantinidis, Luneski, Nikolaidou, Hitoglou-Antoniadou, & Bamidis, 2009).

Individuals with ASD must go through certain teaching processes in order to survive as an individual and to adapt to community life. Autism, which is a spectrum with the word meaning that progresses differently in each individual, causes individuals to show different development or disability. For this reason, the education process of individuals with ASD is focused on the area with insufficiency (Tekin-İftar, 2012). Inadequate areas are collected in 3 areas:

- Social interaction problems,
- Communication problems,
- Limited / recurring interests and behaviors.

Since a child with ASD can develop very differently from any child with ASD, the diagnosis and intervention process may also change according to these differences (Dunn & Kientz, 1997). For this reason, it is important that individuals with ASD find individual learning ways and provide more effective and useful trainings.

Training Methods

Education methods are developing day by day and there are new training methods. But as the most widely known scientifically based methods; applied behavior analysis, teach, relationship-based methods, social stories, and facilitated communication methods are used (Tohum Autism, 2021).

Applied Behavior Analysis

It is defined as the process of developing new behaviors and changing inappropriate behaviors with appropriate behaviors by objectively analyzing individual behaviors and environmental characteristics, and it is a discipline that proves this process with experimental studies (Birkan, 2013). Appropriate behaviors are increased by using reward mechanisms, and inappropriate behaviors are reduced / eliminated by using deterrent mechanisms. Teaching methods under applied behavior analysis:

- Teaching with Discrete Trials,
- Early Intensive Behavioral Training,
- Teaching with Activity Schedules,
- Teaching with Fading Lines,
- Being a Model with Video,
- Opportunity Teaching,
- Functional Evaluation and Analysis,
- Picture Exchange Communication System (PECS),
- It consists of Verbal Behavior method.

Treatment and Education of Autistic and Related Communication Handicapped (TEACCH)

It is defined as the method in which the physical environment is structured based on the skills, interests and needs of the child with ASD and the activities are prepared in a way that the child will follow (Tohum Autism, 2021). In the TEACCH approach, in order for the child to adapt, the environment is arranged and the skills are provided from simple to complex, in an individualized manner. It is known to be effective in increasing skills and reducing behavioral problems (Mesibov, Shea & Schopler, 2005).

Relation-Based Methods

It aims to ensure that children with ASD enjoy their social interaction skills by prioritizing their emotional development (Tohum Autism, 2021). Since the movements are thought to have deep meanings, the child's movements are only watched without obstructing, and it is tried to interact with the movements similar to the child's movements.

Social Stories

It is a narrative method written specifically for children with ASD on issues that they have difficulty understanding (Tohum Autism, 2021). They are known as stories that contain pictures or drawings that can be read in a short time. It provides information transfer by using the 5W1H (who, what, where, how and when) method in order to explain the determined social situation (Sani-Bozkurt & Vuran, 2014).

Facilitated Methods of Communication

In the alternative communication method created for children with ASD who cannot communicate verbally, it is defined as a method that helps an assistant to write on the keyboard with the physical support (Tohum Autism, 2021). However, studies have suggested that the method is ineffective, considering that the messages have an auxiliary effect.

The Purpose and Importance of the Research

In the education process, it is important to determine the learning paths and environments of individuals with ASD and to use appropriate teaching techniques (Korkmaz, 2003). It is known that the education process prepared correctly has a positive effect on the education

of individuals with ASD. In this context, it is important to examine studies on the education of autistic individuals and to reveal their similarities and differences as they may guide future studies. In this context, the following questions were sought by examining publication years, authors, sample distributions and numbers, subject areas, research methods, data collection tools, data analysis methods and training methods:

- How is the distribution of the studies over the years?
- How is the thesis and article distribution of the studies?
- What is the distribution of thesis studies according to universities?
- How is the subject distribution of the studies in the context of disability in children with autism?
- What are the training methods used in the studies?
- What are the research methods used in studies?
- What are the data collection tools used in the studies?
- How is the sample distribution of the studies?
- What are the sample sizes used in the studies?

METHOD

Research Design

In this study, the categorical analysis technique was used. Yıldırım and Şimşek (2011), the stages of descriptive analysis as framing, processing data, describing and interpreting. Categorical analysis technique is the division of a message into units and grouping it into categories according to the criteria determined beforehand or created during the analysis (Tavşancıl & Aslan, 2001).

Study Group

The study group of the research consists of theses and articles published in the databases of the National Thesis Center, Google Scholar, Ulakbilim and Dergi Park. The study includes studies for the education of autistic children in Turkey until 2021. In this context; "Autism", "education", "video model", "TEACCH", "social stories", "PECS", "facilitated communication methods", "applied behavior analysis" in the National Thesis Center, Google Scholar, Ulakbilim and Dergi Park databases. "Relationship-based methods", "activity charts" and "Autism", 21 theses and 18 articles were reached. In the articles produced from theses, they were not included in the study group because the basic research was theses.

Data Collection Tools

According to the scope of the research, the Autism Research Study Form for the Education of Children of Made in Turkey was prepared in order to collect data from 2003 to 2021. In this form, there are boxes containing studies, publication years, authors, sample distributions and numbers, subject areas, research methods, data collection tools and training methods. During

the examination of the studies, additional boxes were created according to the needs and the form was finalized.

Data Collection Process

Some criteria have been determined for the inclusion of the studies in the research:

- To be included in the databases of the National Thesis Center, Google Scholar, Ulakbilim and Dergi Park,
- Working Group of Turkey and the Turkish language is limited,
- Articles published in a peer-reviewed journal,
- The keywords, title and summary information are suitable for the specified keywords,
- Among the aims or sub-goals of the studies, it aims to provide specially developed education for children with autism.

Data Analysis

The research took place in the study in line with the keywords and criteria. Due to the fact that the databases are more than one, repetitive publications and articles produced from these were removed from the data set. At the end of the research, analyzes were made by transferring the data to the analysis program. The results of the study are presented in graphics.

FINDINGS

Research conducted for the examination of the studies for autistic children's education in Turkey was published as a result of descriptive analysis, the subject was handled, training methods used, research design, data collection methods, sample type, sample size and data analysis methods are presented below under the heading. Findings were analyzed based on research questions.

How is the distribution of the studies over the years?

When the distribution of the studies by years is examined, the studies increase, as can be seen in Figure 1. The issue's gaining importance in recent years can be interpreted as a result of the increase in the number of studies.

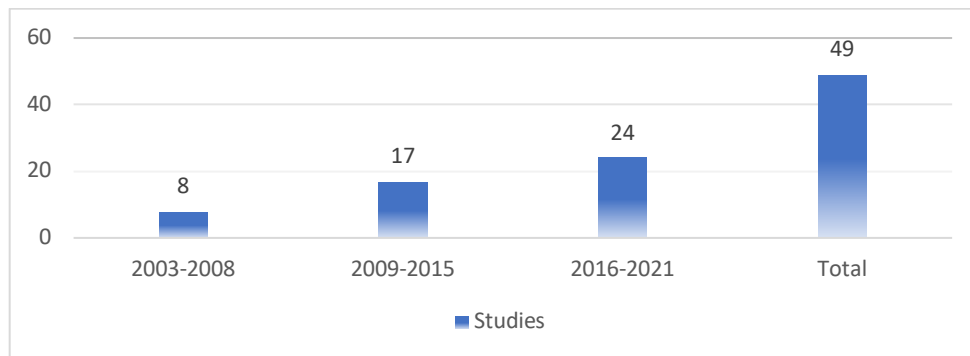


Figure 1. Distribution of studies by years

What is the sample distribution and size of the studies?

The sample distribution of the studies is shown in Figure 2. when Figure 2 is examined, it is seen that the sample distribution of studies conducted for autistic children is mostly carried out for pre-school and primary education levels. However, it is noteworthy that the studies for secondary education level are less compared to other levels. Considering that early stage education is seen as more useful and effective, it can be interpreted as a result of the sample distribution being less at secondary education level and higher at pre-school and primary education levels.

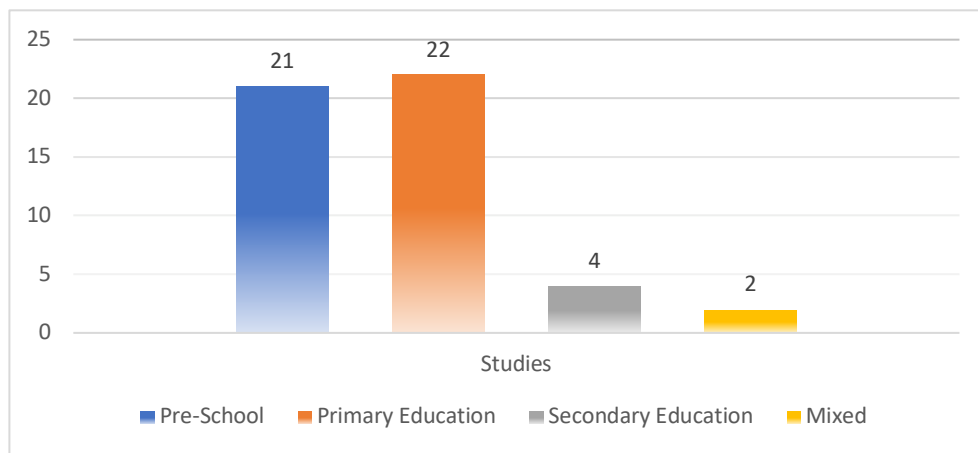


Figure 2. Sample distribution

The sample size of the study is shown in Figure 3. It is seen that the sample size is by far more in studies conducted with 1-5 people. The reason for this can be considered as the fact that it is difficult to reach students who require special education / autistic students, and the studies conducted do not comply with the criteria of the target audience due to the fact that autism is the spectrum.

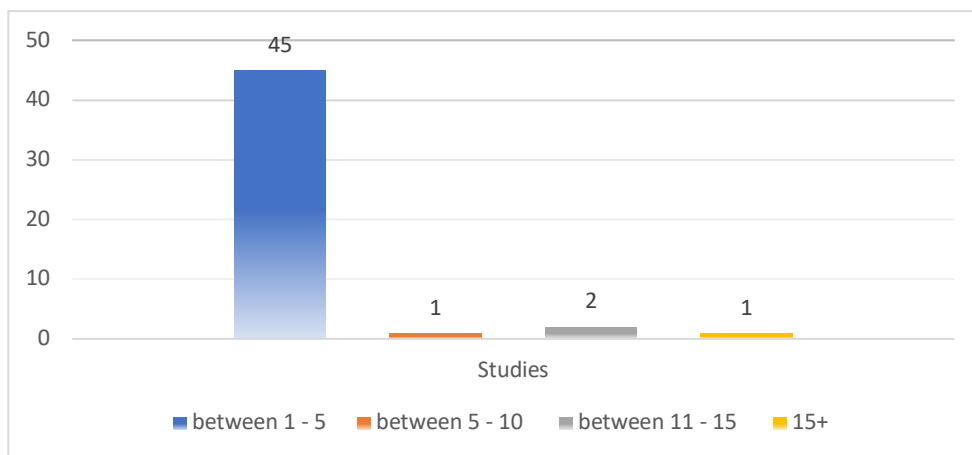


Figure 3. Sample size

How is the subject distribution of the studies in the context of the subject with disabilities in children with autism?

It is divided into 3 subject areas according to the scope of the study and the area it aims to teach. Some of the studies represent more than one subject area. For this reason, priority subject area is included in the chart. When Figure 4 is examined, it is seen that most of the studies are conducted on social interaction problems. Since it is known that autistic children show inadequacies in social interaction, it can be interpreted as the studies are primarily aimed at eliminating these inadequacies.

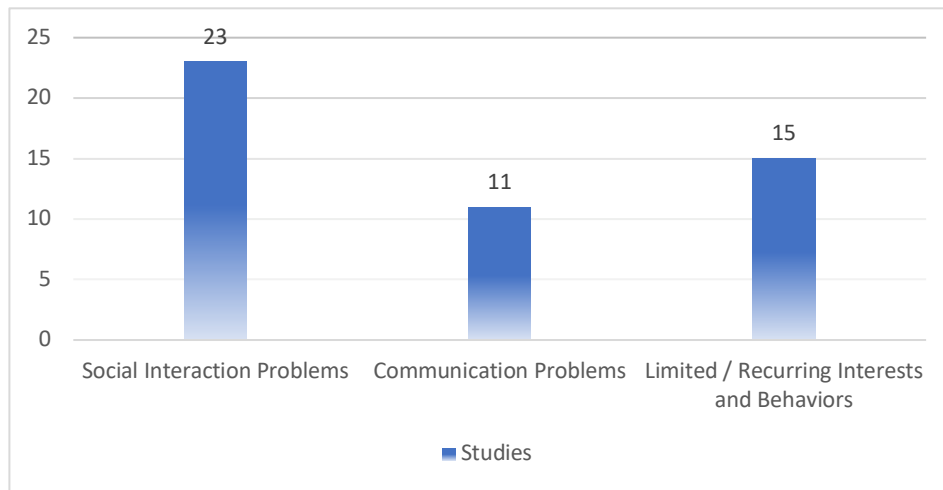


Figure 4. Subject area distribution

What are the training methods of the studies?

When Figure 5 is examined, it is seen that Applied Behavior Analysis method is mostly used as training methods. Within the scope of the study, 15 articles, 22 master theses and 5 doctoral dissertations using applied behavioral analysis methods were reached. When the studies using the applied behavior analysis method are examined, it consists of 15 studies with teaching with discrete trials, 6 with teaching with activity charts, 4 with replicating teaching, 11 with video modeling, 3 with opportunity teaching, and 3 with PECS.

There are 5 doctorate and 1 master thesis using the social stories method.

There is only 1 article using TEACCH.

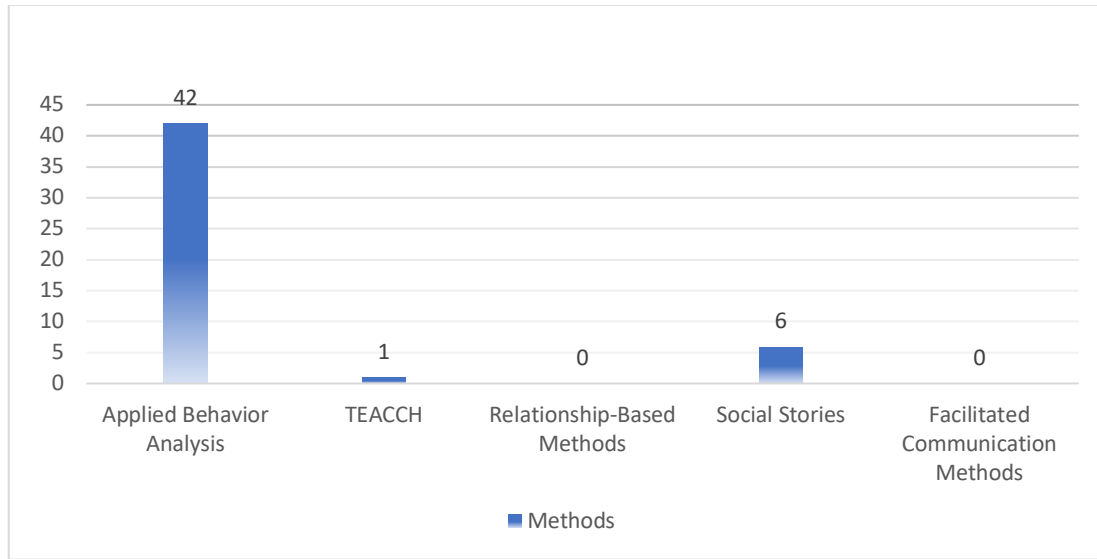


Figure 5. Distribution of training methods

What is the data collection tools of the studies?

The distribution of data collection tools used in the studies is shown in Figure 6. Since some of the studies used more than one type of data collection tool, the data were included in the chart. It is seen that observation / interview forms are mostly used to collect data in studies. Considering the target audience of the studies, it can be interpreted as an evaluation based on the desired behavior.

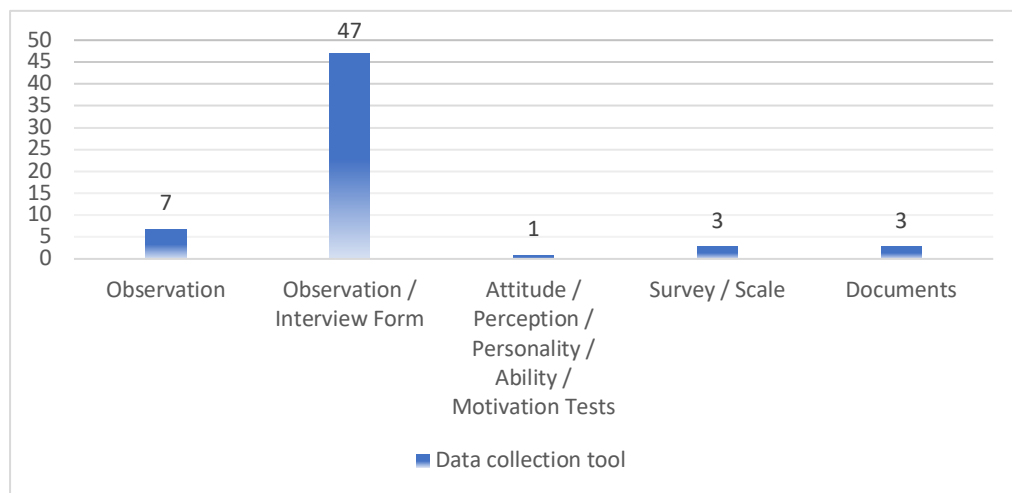


Figure 6. Distribution of data collection tools

How is the thesis and article distribution of the studies?

When the thesis-article distribution of the research is examined, as can be seen in Figure 7, within the scope of the research, a total of 49 studies, including 16 articles, 23 master's and 10 doctoral dissertations, were discussed.

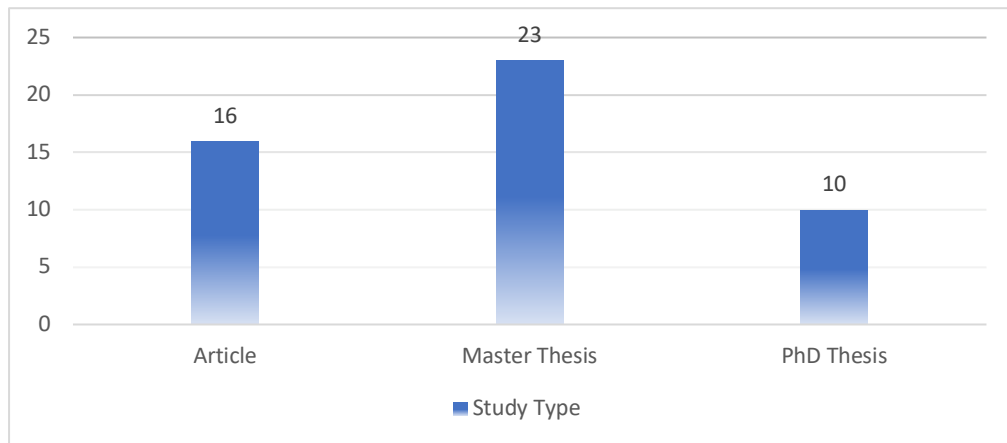


Figure 7. Distribution of study type

What are the research methods of the studies?

The research methods distribution of the studies is shown in Figure 8. Within the scope of the study, among the single-subject research models, the inter-subject multiple probe model method with probing trials 25, the adaptive rotational applications model method 13 among the single-subject research methods, the parallel applications model method 2 from the single-subject research models, the phenomenology research method 1, the case / case study method 3. Experimental model method with pre-test post-test control group was used 5 times. The low number of subjects in special education can be shown as the reason why single-subject research designs are used more frequently than other designs.

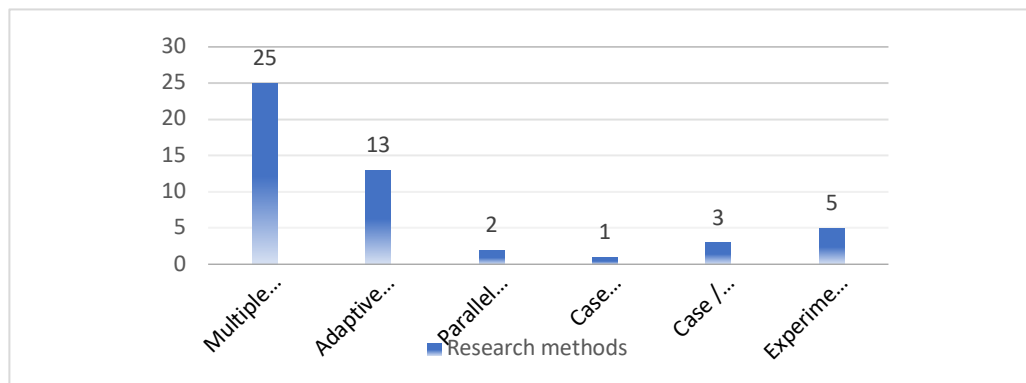


Figure 8. Research methods distribution

What are the data analysis methods of the studies?

The distribution of data analysis methods of the studies is shown in Figure 9. Considering that single-subject research methods are intense within the scope of the study, it is seen that the graphical analysis method, which is quite frequently used in the analysis of single-subject research methods.

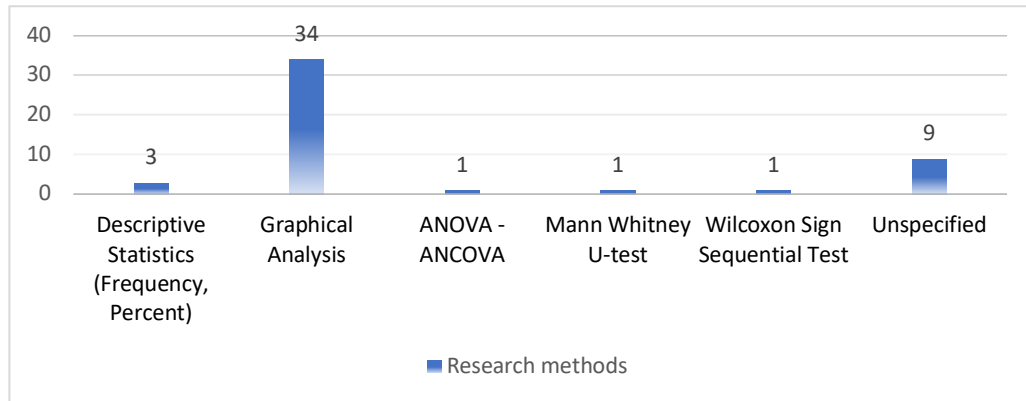


Figure 9. Data analysis methods distribution

DISCUSSION AND CONCLUSION

When the results of the research are examined, it is seen that the studies on the education of children with autism gained momentum between the years 2016-2021. It is thought that the development of autism awareness over time is a result of this acceleration. The positive feedback of the education given to children with autism gave importance to the studies. For this reason, it is normal for literature studies to increase.

It is seen that 24 of the 49 studies examined are on social skills teaching. This intensity is evaluated by the fact that the most common symptom of ASD is difficulties in social relations. Since social relations in ASD are a lifelong problem, it is thought that the studies are in this direction.

In the researches, it is seen that the study groups were selected as 21 primary education levels, 22 pre-school levels, 4 secondary education levels and 2 mixed study groups. Early education in special education is considered very necessary. For this reason, it is thought that primary and pre-school levels are frequently preferred in studies.

40 of the examined studies carried out their research with single-subject research methods, which are frequently preferred in areas where the number of subjects is limited. Accordingly, the concentration of the sample size on groups of 1-5 strengthens the interpretation. In 47 studies, observation/interview forms were used as data collection tools.

According to these findings, it is seen that the studies are generally carried out with a similar subject area, similar education method and similar research method. In the sense of progressing the literature on a wider range:

Studies can also be conducted on different educational topics.

Less used training methods can be used more in studies. In this way, you can have more clear information about training methods.

The effectiveness of the trainings can be measured more clearly by using the secondary education study group in the studies.

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