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Application of the Prompting Technique to Increase the Frequency of Eye Contact in Autism Spectrum Disorder (ASD)

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Abstract

This study aims to determine whether there is influence or not from the prompting technique to improve the ability to make eye contact in children with autism spectrum disorders in interacting and communicating with others. The research method used in this study is a mixed method or combination (mixed method) which combines quantitative data with qualitative data. The research subject was one student who was a child with an autistic spectrum disorder at SLB Agro Industry Bandung. There are three prompts applied in this study, namely verbal prompts, gestural prompts and physical prompts. The application of this technique is accompanied by extrastimulus and positive reinforcement. Prompting is carried out in the least-to-most procedure with the aim of providing assistance from the weakest first. This means that if the subject can make eye contact with the weakest prompt, then the next prompt does not need to be given. Data was obtained through direct observation recording of each treatment session carried out. The data obtained is depicted in a graph showing changes and improvements from the initial treatment given to the last treatment. The results showed that there was an increase in the frequency of making eye contact when prompting was given. Even so, eye contact did not appear consistently every time the subject was called by name, but it was consistent enough when it was done using prompting techniques with gestural prompts and giving extra stimuli in the form of toys and the subject's favorite food.

Keywords: *Eye Contact, Prompting, Children with Autistic Spectrum Disorders*
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Introduction

Children with autism spectrum disorders are children who experience neurodevelopmental disorders which are characterized by disturbances in social communication and interaction as well as limited and repetitive behavior (APA, 2013). (Williams & Williams, 2010) explains that Autism is a profound and poorly understood developmental disorder that severely impairs a person's abilities, particularly in the areas of language and social relationships.

Meanwhile (Yuwono & Pd, 2019) describes that children with autism spectrum disorders are children with very complex or severe neurobiological disorders in their long lives, which include disturbances in aspects of behavior, social interaction, communication and language, as well as emotional disturbances and sensory perception , even on the motor aspect. This complex and severe developmental disorder, usually seen before the age of three years, which appears in the inability to communicate and express feelings and desires.

Humans as social beings, can never be separated from the activities of interacting with other people. Social interaction is an activity carried out between two or more people to influence each other and give effect to each other. This means that social interaction must be carried out reciprocally by both parties by responding and reacting to social behavior that occurs. By carrying out social interactions one can help each other to meet all needs and survive in life.

There are two conditions that must be met in social interaction, namely social contact and communication. Social contact is a relationship between two or more people who react to each other, either directly or indirectly. While communication is the process of sending and receiving messages from one party to another. If these two things are not met, social interaction will never occur.

This is the main problem in children with autism spectrum disorders. Children with interaction, communication and behavior barriers are characterized by persistent deficits in social communication and social interaction in various contexts. This includes deficits in social reciprocity, nonverbal communicative behaviors used for interaction and skills in developing, maintaining, and understanding relationships.

Learn more about this source text. This deficit condition in social interaction and communication becomes weaker when eye contact is not made. One of the characteristics of children with autism is avoiding eye contact. Even though eye contact is an important prerequisite for social contact and direct communication with others. Eye contact is the foundation for more complex behaviors, so it is often targeted first for other behaviors (Cintaka & Djuwita, 2019).

Explanation (Srimardayeti, 2022) states the same thing, that eye contact is a condition for communicating. Eye contact is one aspect that is included in non-verbal communication, non-verbal communication is usually used to describe communication events other than spoken or written words. Eye contact is one of body language that is used as a communication tool before spoken language is used. This eye contact is the most important aspect to maintain. When social interaction and communication occurs directly, then someone turns to the other direction, the connection between themselves and the other person will be lost.

Another opinion (Hendarko & Anggraika, 2018) explains that eye contact behavior is coordinating visual attention to other people. Eye contact behavior is the behavior of turning the head and face to the person calling, looking into the eyes of the person calling, whether accompanied by talk and activity or not accompanied by talk and

activity. Eye contact is the most basic form of social attention. Based on the description above, it is believed that practicing eye contact in children with autism spectrum disorders can improve social skills such as increasing attention and social interaction.

Based on a preliminary study that researchers conducted at SLB Agro Industry Cisarua Bandung, researchers found a subject who had a deficit in eye contact. The results of observations or observations of researchers, this subject only wants to look at objects that interest him without wanting to look at the person holding or giving the object, let alone stare at him. When the researcher tried to bring his face closer to the subject's face, the subject tried to avoid it by looking the other way and even closing his eyes. Subjects also tend to squint and see things out of the corner of their eyes.

Interviews conducted by researchers with classroom teachers and parents also provide a similar picture. That the subject always avoids eye contact, although occasionally it can be achieved but only lasts no more than five seconds. Minimal eye contact further adds to the barriers in social interaction and communication with the subject.

The subject's parents also explained that the subject had been diagnosed with Autism Spectrum Disorder by a specialist doctor. However, the researchers themselves also tried to identify using DSM V and equipped with the M-CHAT assessment (Tm, 2014). This identification and assessment will be used to create an intervention program for the subject. The results of the assessment showed that the subject experienced severe levels of social interaction, communication and behavior barriers.

Inadequate eye contact is one of the deficiencies or deficits that underlies many obstacles to the subject. So that other people must actively invite the subject to interact by following the eyes and with a firm tone and a more expressive face by providing interesting things so that the subject makes eye contact while really paying attention.

Based on the problems above, the researcher wants to apply the prompting technique to increase eye contact with the subject. This technique is one of the principles of the ABA method which is usually used to train the social skills of children with autism spectrum disorder in learning basic social skills such as paying attention, maintaining eye contact and controlling problems (Handoyo Y, 2006).

In this study, researchers used prompt techniques, namely verbal prompts, gestural prompts, and physical prompts as well as providing extra stimuli in the form of food and toys that the subject likes to increase eye contact in children with autism spectrum disorder. Research using this prompting technique has been carried out by previous researchers (Rakhi Cintaka 2019), which was applied to children with Global Developmental Delay. Likewise research conducted by Dewa Ayu Diah Tri Paramita Putri Nadia 2018, promting techniques and transfer of stimulus control to increase eye contact in children with Autism Spectrum Disorder. And (Srimardayeti, 2022) who only apply verbal and physical prompts to increase eye contact in children with autistic spectrum disorders.

From several similar studies above, the authors want to apply prompting (verbal, gestural and physical) to children with autism spectrum disorder.

The prompting technique is a behavior modification technique that is used to increase the likelihood that a person will perform a behavior in a certain situation and time (Miltenberg dalam (Cintaka & Djuwita, 2019). The prompting technique is also appropriate when a person has not been able or has not learned to display the target behavior. So the purpose of this study was to find out whether there was an influence or not from the application of the prompting technique to increase eye contact in children with autism spectrum disorders.

Method

This research uses mixed methods or a combination (mixed methods). Creswell

(2014: 5) explains that mix-methods is a research approach that combines or associates qualitative and quantitative approaches. The combined research method is a type of research that combines two research methods including quantitative and qualitative research. This research can also be said to be research with data analysis, then it is integrated in the form of findings and finally draws a conclusion (Subagyo dalam (Indrawan & Jalilah, 2021)

From the definition above it can be concluded that Mix-method research is research that combines or combines two qualitative and quantitative research approaches together in one study in order to obtain better and more complete research results. Researchers use data with data sources derived from qualitative and quantitative methods and then combine them into complete and interrelated data.

In this study, the qualitative data sources are sources obtained by data collection techniques through observation, documentation and interviews with teachers and parents in gathering information on children's activities while in the home environment related to their eye contact behavior. While the quantitative sources in this study were data sources obtained from the results of implementing the prompting technique program to increase children's eye contact.

Data collection was also carried out through direct observation of the target behavior during treatment with action tests. The test is used to find out how often the child makes eye contact and is recorded in the observation sheet. The treatment was carried out in 7 meetings. Quantitative data is in the form of test results of prompting techniques to increase eye contact, then qualitative data will show the results of observational data on the application of prompting techniques to improve eye contact ability.

Results and Discussion

Research on the application of prompting techniques to increase eye contact was conducted on children with autism spectrum disorder. The subject is a student at SLB Agro Industry Cisarua Bandung with the initials Z, who is in first grade in the 2022/2023 school year. This research was conducted from 23 November to 16 December 2022. In this study the techniques applied were prompts in the form of verbal prompts, gestural prompts, and physical prompts.

Prompting is a systematic technique or strategy used to get the right response. (Wahyudin, n.d.) explains that prompting has its levels as follows:

1. Full physical prompt, namely helping students by touching (usually on the elbow or arm)
   Example: Students are being introduced to apples with flash card media and instructions: hold it!
2. The model is helping students by giving examples after the child gives a response.
   Example: Instructions: “draw a circle!”
   If the child responds incorrectly, for example instead of making a circle but making a line, then the teacher gives an example by making the correct circle and asking students to imitate the picture of the circle.
3. Gestural, namely with movement instructions
   Example: Instructions: “hold the apple!”
   If the child does not respond, then the teacher helps by pointing to the correct object (flash card with an apple).
4. Verbal, namely helping students give instructions with speech.
   Example: instruction: "hold the apple!"
   If the child does not respond, the teacher can emphasize the letter "a" which means for "a-pel".
5. Symbols or visuals, namely helping students by using symbols or pictures.
   Example: Instructions: “hold the apple!”
   If the child does not respond, the teacher can give or show a concrete apple.
6. Independent (no prompt), namely students respond to instructions without assistance or independently.

Of all the prompt levels above, they are given according to the student's abilities

or do not have to be in the sequence as above. In addition, it is hoped that prompts are not always used or go down in level according to the abilities that have been achieved, because the purpose of this prompt is so that students will be able to respond to the correct answer without assistance.

In this study, researchers only used three prompts, namely verbal prompts, gestural prompts and physical prompts. The verbal prompt in question is an instruction verbally to the subject in order to form eye contact behavior with the person making the prompt, such as "look here". Meanwhile, the gestural prompts referred to in this study are in the form of gestures made by the researcher so that eye contact is formed, such as pointing to the eye, applauding or directing objects that the subject likes close to the eyes so that the subject sees and looks into the eyes of the prompter. While the physical prompts referred to in this study are assistance given by making physical contact, such as; holding the subject's chin and head and then directing it towards the researcher's face to form eye contact. This activity is also accompanied by giving extra stimuli in the form of toys and the subject's favorite food and giving positive reinforcement in the form of praise when the subject succeeds in carrying out the target. The stages of applying the prompting technique are clearer as below:

Table 1. Stages of the Prompting Technique

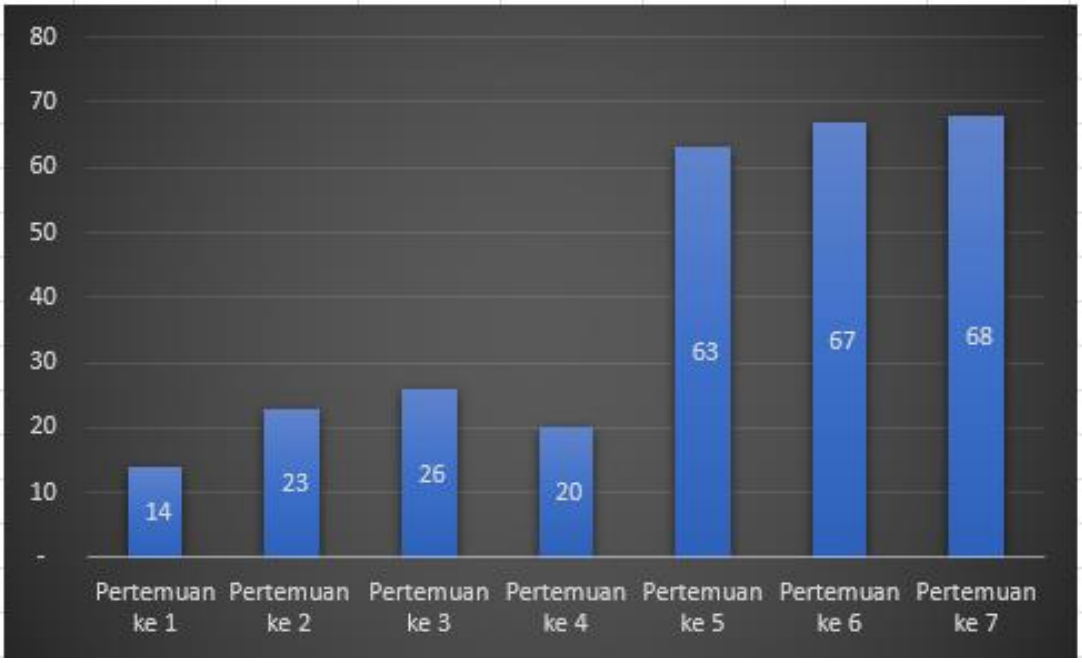
Stage	Description of the implementation of the Promt program	Promt
1	The researcher sits across from the subject	-
2	Researchers call the subject's name (Z) 3 times	Tanpa Promt
3	If the subject's eye contact behavior has not yet appeared, the researcher says “Z, look!” (verbal prompt) while holding the toy you want to give (extrastimulus prompt) in front of the researcher's eyes. Verbal Prompts are carried out 3 times	Verbal Promt
4.	If after giving extrastimulus and verbal prompts, eye contact has not appeared, the researcher makes gestures such as clapping, snapping fingers and/or showing toys/food (extrastimulus prompts). carried out, the researcher immediately directed and pointed at the eyes while saying “look here” until eye contact was formed. The prompt assistance is carried out a maximum of 3 times	Gestural Promt
5.	If after giving extrastimulus, gestural, and verbal prompts before the subject's eye contact behavior has not appeared, the researcher holds the subject's chin or moves the subject's head towards his face (physical prompt) and says "Z, look!" (verbal prompt). The researcher will hold the subject's face facing his face for 3 seconds	Physical Promt

The implementation of the prompting technique was carried out in 7 meetings. Each meeting was held for approximately 45 minutes with 10 trial sessions. Each session is given a break of up to approximately 2 minutes. For each session there are three instructions for each prompt and no prompt. This there are 120 instructions (see) with details; three times without prompts, three times with verbal prompts, three times with gestural prompts, and three times with physical prompts, so

that becomes 12 times, because in each session there are 10 sessions, then 12 is multiplied by 10 so that the total becomes 120 instructions. This technique uses the least to most prompting procedure method.(Cintaka & Djuwita, 2019) explains that perhaps the subject does not need physical promt to make eye contact. So the researchers tried to give promt from the weakest first.

From the seven meetings where the treatment was carried out, data was obtained and there was an increase in the targeted behavior, starting from 17% at the first meeting and treatment up to 68%. With the graph as shown below;

Graph 1. Percentage of Gaining Eye Contact Ability with Prompting Techniques



It can be seen from the graph above that during the treatment the subject gets an increased score at each meeting. The details are as follows:

1. In the first meeting, a score of 17 out of 120 was obtained in total, so the value obtained was 17%. When the treatment was first carried out, the subject was distracted because of the change of class teacher with the researcher so that the subject often left the class to follow his class teacher.
2. The second meeting, a total score of 28 out of 120 was obtained, so the value obtained was 23%. Researchers are looking for strategies so that the subject does not leave the classroom, one of which is by using light toys. This extra stimulus is able to make eye contact with the subject.
3. The third meeting, a total score of 31 out of 120 was obtained, so the value obtained was 26%. The subject is getting used to it and looks comfortable when given the treatment
4. The fourth meeting, a total score of 24 out of 120 was obtained, so the value obtained was 20%. In this session the researcher took turns doing the treatment with other researchers, so that the subject was distracted again and resulted in the percentage of eye contact that was formed decreased.
5. The fifth meeting, a total score of 76 out of 120 was obtained, so the value obtained was 63%. In this session there was a spike in scores. Because in

physical promt the researcher tries to position the subject on his back, then the researcher faces the face in a position above the subject's face. This is done while playing, and can make eye contact.

6. The sixth meeting, a total score of 80 out of 120 was obtained, so the value obtained was 67%.
7. The last (seventh) meeting, obtained a score of 82 out of 120 in total, so the value obtained was 68%.

Based on the above data, the application of the prompting technique to a subject at the Agro-Industry SLB was found to be effective in increasing the frequency of his eye contact. This is in accordance with similar research conducted by (Cintaka & Djuwita, 2019) that the application of Promting is effective in increasing the frequency of eye contact in children with Global Developmental Delay. Likewise research that has been conducted by (Srimardayeti, 2022) states that the use of the prompting technique given to children with Autistic Spectrum Disorder (ASD) can increase child G's eye contact. Meanwhile (Paramita Putri Nida & Hartiani, 2018) j also states that modification of eye contact behavior Promting and transfer of stimulus control techniques are also effective for increasing eye contact with autism spectrum disorders.

This research, which was conducted on subjects with the initials Z at SLB Agro Industry Cisarua Bandung, also obtained data showing an increase in the frequency of the subject's eye contact using verbal prompts, gestural prompts and physical prompts. The appearance of the subject's eye contact is quite diverse, with the following details:

1. The first meeting made eye contact without prompts 2 times, used verbal prompts 7 times, used gestural prompts 7 times and used physical prompts 1 time. Each of the total number of instructions is 120 times
2. The second meeting, the appearance of eye contact without prompts was twice, using verbal prompts four times, using gestural prompts eight times and using physical prompts 13 times, each of the total number of instructions being 120 times.
3. The third meeting, the appearance of eye contact without prompts was once, using verbal prompts four times, using gestural prompts 10 times and using physical prompts 16 times, each of the total number of instructions being 120 times.
4. The fourth meeting, the appearance of eye contact without prompts was three times, using verbal prompts three times, using gestural prompts 11 times and using physical prompts seven times, each of the total number of instructions being 120 times.
5. The fifth meeting, the appearance of eye contact without prompts was three times, using verbal prompts 24 times, using gestural prompts 25 times and using physical prompts 23 times, each of the total number of instructions being 120 times.
6. The sixth meeting, the appearance of eye contact without prompts was five times, using verbal prompts 28 times, using gestural prompts 26 times and using physical prompts 21 times, each of the total number of instructions being 120 times.
7. The seventh meeting, the appearance of eye contact without prompts was three times, using verbal prompts 28 times, using gestural prompts 28 times and using physical prompts 23 times, each of the total number of instructions being 120 times.

Thus the data obtained is that the prompt that most evokes eye contact with the subject is a gestural prompt. This is thought to be caused because through the gestural prompt technique the researcher makes gestures by moving the subject's favorite toy or food in the researcher's hand and then bringing it closer to the eye, so that eye contact is formed.

Conclusion

Based on the condition of the subject as seen from the results of the assessment, interaction and communication skills, especially in terms of eye contact, were very minimal, the subject tended to avoid eye contact thereby increasing obstacles and difficulties in achieving other behavioral targets. Because of that, an intervention is needed to increase eye contact with prompting techniques, namely verbal, gestural and physical prompts. After the program was given for seven meetings with 10 sessions, data was obtained that there was an increase in the appearance of eye contact on the subject. That is, at the beginning of the treatment it showed a score of 14% and continued to rise until it reached 68% in the last treatment (7th meeting).

It is recommended that this program be carried out by parents at home, teachers at school and those involved in the education of children with interaction, communication and behavior barriers or children with autism spectrum. Treatment that is given continuously and consistently is believed to produce stable results. With increased eye contact skills, other abilities such as verbal imitation, nonverbal and communication skills and other behaviors can develop and continue to improve.

It is recommended for further researchers to continue this research regarding what form of prompt is most effective in increasing the frequency of eye contact in children with autism spectrum disorder.

Selengkapnya tentang teks sumber ini

Bibliography

Cintaka, Rakhi, & Djuwita, Efriyani. (2019). Penerapan prompting untuk meningkatkan frekuensi kontak mata pada anak dengan global developmental delay. *Jurnal Ilmiah Psikologi Terapan*, *7*(2), 199–210. https://doi.org/10.22219/jipt.v7i2.7995

Handoyo Y. (2006). *No Title* (4th ed.). Retrieved from https://pustaka.unm.ac.id/opac/detail-opac?id=38744

Hendarko, Anita Carolina, & Anggraika, Ike. (2018). Efektivitas Teknik Prompting dan Positive Reinforcement untuk Meningkatkan Frekuensi Kontak Mata pada Anak Prasekolah dengan Autisme. *Journal Psikogenesis*, *6*(2), 176–185. https://doi.org/10.24854/jps.v6i2.700

Indrawan, Deni, & Jalilah, Siti Rahmi. (2021). Metode Kombinasi/Campuran Bentuk Integrasi Dalam Penelitian. *Jurnal Studi Guru Dan Pembelajaran*, *4*(3), 735–739. https://doi.org/10.30605/jsgp.4.3.2021.1452

Paramita Putri Nida, Dewa Ayu Diah Tri, & Hartiani, Fenny. (2018). Modifikasi Perilaku Kontak Mata Pada Anak Dengan Autism Spectrum Disorder (Asd). *Seurune : Jurnal Psikologi Unsyiah*, *1*(1), 34–52. https://doi.org/10.24815/s-jpu.v1i1.9923

Srimardayeti, Nadia. (2022). Meningkatkan Kemampuan Kontak Mata Anak Gangguan Spektrum Autisme (GSA) Menggunakan Teknik Prompting. *MSI Transaction on Education*, *3*(2), 57–64.

Tm, M. chat r F. (2014). Validation of the Modified Checklist for Autism in Toddlers, Revised With Follow-up (M-CHAT-R/F). *Pediatrics*, *133*(1), X5–X5. https://doi.org/10.1542/peds.2013-1813d

Wahyudin, Restiyanti. (n.d.). APA ITU PROMPTING & APA MANFAAT PROMPTING? Retrieved April 14, 2023,

from https://sekolahku.sch.id/2022/11/19/apa-itu-prompting-dan-apa-manfaat-prompting/
Williams, Betty Fry, & Williams, Randy Lee. (2010). Effective programs for treating autism spectrum disorder: Applied behavior analysis models. In *Effective Programs for Treating Autism Spectrum Disorder: Applied Behavior Analysis Models*. https://doi.org/10.4324/9780203855034

Yuwono, Imam, & Pd. (2019). *Instrumen Asessmen Perkembangan*.

APA (2013), *Diagnostic And Statistical Manual Of Mental Disorders . American Psychiatric Association Publishing*

Creswell, J. W. (2014). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (4th ed.). Thousand Oaks, CA: Sage.

Profil Penulis

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