# The Effectiveness of Positive Reinforcement Techniques in Improving the Social Behavior of Blind Children

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**Abstract**

Visually impaired children generally have problems in social behavior, one of which is being very closed and quiet in the school environment. Based on the results of the assessment carried out, 2 visually impaired children were found in inclusive schools who had low social behavior. The purpose of this study is to test the effectiveness of positive reinforcement techniques in improving the social behavior of visually impaired children. The variables in this study are positive reinforcement techniques and social behavior of visually impaired children. This study uses a type of quantitative research through the Single Subject Research (SSR) approach. The research design used in this study is a multiple baseline cross subjects design. The research subjects were 2 visually impaired children in class XI at SMK Negeri 7 Padang. Data is collected through observation and tests. The data collection tool in this study is in the form of a social behavior assessment instrument. The data was analyzed using visual graphs consisting of in-condition analysis and inter-condition analysis. The results of the study showed an increase in social behavior in blind children in inclusion schools. This study uses positive reinforcement techniques in improving effective social behavior to be applied to blind children in inclusion schools.

**Keywords:** Blindness, Social Behavior, Positive Reinforcement.

## Introduction

Social behavior is very necessary in life, especially in the surrounding environment such as in the school environment. The inability of children to behave socially as expected by their environment, can result in children being isolated from the environment, not forming confidence in themselves, withdrawing from the environment, and so on. As a result, children will experience obstacles in their later development (Rohayati, 2013). Inclusion or inclusive education can be interpreted as a philosophy and practice of education for children with special needs in public schools. In other words, children with special needs benefit from inclusive

education from studying in public schools with other children (Hendrawati et al., 2018).

The urgency of several problems related to the causes of ABK failure in inclusive schools is their difficulty in adjusting to learning demands, lack of social skills, and lack of acceptance of ABK by teachers and peers (Marlina et al., 2022). There was an increase in social skills in children with peer-mediated learning disabilities compared to classroom teachers (Marlina, 2017). One of the important components in teaching social behavior to children with special needs is reinforcement. However, the reinforcement usually comes from adults (Marlina, 2018). Therefore, classroom teachers need to develop social competencies as a priority for children with special needs. Inclusion of students with special needs is most effective when teachers are actively involved in assessing students and helping them acquire appropriate social skills. It is important for blind children to be taught the social skills necessary to interact effectively with their peers (Celeste, 2006).

Visually impaired children face many challenges in social interaction with their watchful peers. To be effective in social interactions, children need to have certain skills, including the ability to read and interpret social signals from others and to act appropriately in response to those signals. The difficulty faced by visually impaired children to be able to perceive nonverbal communication cues (which are generally visual) results in this child needing special ways to acquire social skills, such as the skill to initiate and maintain interactions. Without these skills, blind children often miss out on opportunities to interact and become isolated in their group (Tarsidi, 2014). Social behavior is not an ability that is acquired from birth but is acquired through the learning process, either learning from parents as the figure closest to the child or learning from peers and the community (Perdani, 2013).

From the results of the assessment conducted by the author at school, the author found that 2 visually impaired children who experienced social behavior, namely subjects E and R, experienced difficulties in social behavior in the school environment, especially in the classroom. Meanwhile, the interview with the special assistant teacher explained that E and R are very closed and quiet in the school environment, especially in the

classroom, and they also rarely go to school because they often wake up late. It can be seen that positive reinforcement is needed here to improve the social behavior of blind children. Positive reinforcement is providing pleasant consequences when an expected behavior arises with the aim that the behavior is carried out again consistently (Maftuhah & Noviekayati, 2020).

## Social Behavior of Blind Children

Social behavior is where positive social behavior is seen from a person's skills interacting with the ability to initiate social interactions and the ability to respond (Maftuhah & Noviekayati, 2020). Social behavior is the ability to create harmonious and satisfying social relationships, adapt to the social environment and solve social problems faced as well as being able to develop aspirations and present themselves, with the characteristics of mutual respect, independence, knowing life goals, discipline and being able to make decisions (Maryani & Syamsudin, 2009). In the process of social interaction, there are conditions that must be met in order for this interaction to occur. There are two main conditions for social interaction, namely social contact and communication. Contact comes from the Latin words or con which means together, and tango or tangere which means to touch. So if it is interpreted literally, contact means touching together. Although it is literally interpreted as touching together, in reality the contact that occurs does not always have to be touching. Social contact occurs when there are actions and reactions between the parties in contact (Maftuhah & Noviekayati, 2020).

Blindness is an individual who has a barrier in vision, an individual who is unable to use his or her vision at all, which consists of total blindness who cannot use his vision to see anything and who still has residual vision or Low Vision (Sundari & Iswari, 2020).

There are four main categories that can shape a person's social behavior, namely the behavior and characteristics of others, cognitive processes, environmental factors, and cultural tatar (Byrne, 2003). There are two theories of social behavior, namely (1) Sociological behavior theory, namely This theory is built in order to apply the principles of behavioral psychology into sociology. The basic concept of behavioral sociology is reward. (2) Social exchange theory (Exchange) is the theory of social exchange taken

from the concepts and principles of behavioral psychology (behavioral psychology). In addition, it is also taken from the basic concepts of economics such as cost, reward and profit (George, 2014).

## Application of Positive Reinforcement Techniques

Reinforcement is the process by which a behavior is reinforced, by increasing the tendency of the behavior to be repeated with the aim of eliminating unwanted behaviors or to teach positive behaviors gradually (Putri & Widiastuti, 2019). Positive reinforcement is one of the techniques that develops in passing conditioning. In its application, this technique is believed to be where an event that is presented immediately that follows the behavior causes the behavior to increase in frequency (Ni luah ASRI, 2013).

Steps of the stages of positive reinforcement intervention according to (Saputra, 2020) modified by the author as follows:

1. Collecting information about the problem through ABC analysis. Researchers observe as long as children are in the school environment both in the classroom and outside the classroom.

2. Select the target behavior you want to improve. The behavior to be improved is social behavior that is focused on the child's ability to initiate social interaction and the child's ability to respond.

3. Establish baseline data for initial behavior. The researcher conducted baseline data for 4 meetings on subject R and 8 meetings on subject E.

4. Determine meaningful reinforcement. Here, the researcher uses positive reinforcement for both children, namely in the form of rewards that the children like. Here, the researcher provides an understanding of the importance of social interaction with the surrounding environment both at school and at home. After that, the researcher made a discussion group with the children about how to solve problems and told about daily activities.

5. Setting a schedule for providing reinforcement. Here the researcher observes the child and explains to the child when the reinforcement is given to the child. The child will get the reward if the child manages to collect more than five coins, the coins will be given if the child shows the desired social behavior both in the classroom, in the school environment and in the child's residence.

6. The application of positive reinforcement. Here the researcher will give coins first if the child shows the desired social behavior at each intervention meeting. Children collect 5 coins to get rewards.

**Research Methods**

**Research Design**

The research design in this study is *Multiple-baseline designs.* A multiple-baseline *design* is a design that has better internal validity than other designs. This design provides tight control over the intervention conditions. The conclusion of the results of this research with *a multiple-baseline* design allows results that show a functional relationship (cause and effect) between the independent variable and the bound variable (target behavior). There are three types in *this multiple-baseline* design , namely *multiple baseline cross variables, multiple baseline cross conditions,* and *multiple baseline cross subjects.* This study uses *a multiple baseline cross subjects design* (Marlina, 2021).

A multiple baseline cross subjects *design* is a design that changes one behavior with an intervention on two or more subjects (Marlina, 2021).

**Subjek Penelitian**

**Tabel 1. Subjek Penelitian**

| It | Name | Obstacles | Gender | Assessment Results |
|---|---|---|---|---|
| 1. | Ervan | Blind | Man | 1. Children are often alone. 2. Children are less open to friends, teachers and the environment. 3. Children are shy when they are talked to. |
| 2. | Rizki | Blind | Man | 1. Children are often alone in class. 2. Children are less open to friends, teachers and the environment. 3. Children are selfish |

The subjects of this study are 2 visually impaired children who experience social behavior problems. Here the teacher acts as an informant and also a supervisor. Meanwhile, the researcher acts as the executor of the positive reinforcement technique. Based on the results of the assessment, there were 2 visually impaired children who experienced

problems in social behavior with the result of the percentage of children's abilities in subject E which was 31.81%. Meanwhile, the percentage of children's abilities in subject R was 13.61%. The initial condition of children that E and R are very closed and quiet in the school environment, sometimes they are also selfish in class to be selfish, and they also rarely go to school because they are often late to wake up.

**Research Setting**

This research was carried out in SMK Negeri 7 Padang Raya Padang Indarung, kelurahan Cengkeh, kecamatan Lubuk Begalung road. The implementation of this research was carried out when the child was outside the classroom when the learning process was completed and was carried out in the boarding house where the child lived not far from the school. The research was conducted around the school environment and this school is one of the schools organizing inclusion in the city of Padang. This research was carried out every day starting on October 3, 2022 with a duration of 3x60 minutes every day.

**Behavioral and Measurement Targets**

Target behavior is the ability to behave socially in visually impaired children, including the ability of children

to initiate interactions and provide responses. The instruments used in measurements are based on theories put forward by (Maftuhah & Noviekayati, 2020) related to indicators that a person must master in social behavior. Target behavior is measured by a percentage related to social behavior ability with social behavior instruments.

**Results and Discussion**

*Baseline*

The baseline *condition* is the condition of the child's ability to behave socially before being given an intervention. Observations on *baseline* conditions were carried out with a number of sessions on different subjects because the research used *a multiple baseline across subjects design.* The *baseline* condition is seen from the percentage format of data collection for two social behavior subjects at each meeting, namely subject R and subject E. The first four sessions of data collection for two subjects are marked as *baseline conditions.* After the data are stable, the intervention is applied to subject R, while the *baseline* condition remains applicable to subject E. This is done because the data collection on each subject is adjusted to the order of the level of the subject to be given the

intervention. Therefore, the first subject had four meeting sessions and the second subject had eight meeting sessions for baseline data.

**Intervention**

The intervention condition is the second condition when the subject of social behavior perceived by the child is given treatment or intervention. This study uses Positive Reinforcement as a form of treatment for each subject to be studied.

The first social behavior subject, subject R, was given the first intervention after the first four sessions for baseline data collection showed stable data, while the observation of *baseline conditions* continued on subject E. The intervention condition for the first subject was carried out as many as four meeting sessions when the change in the first behavior was achieved. After the intervention session for the first subject is achieved, then the treatment of the second subject, namely subject R, is carried out while the intervention on the first subject is still continued. The intervention session for subject E started in session 9 to session 12.
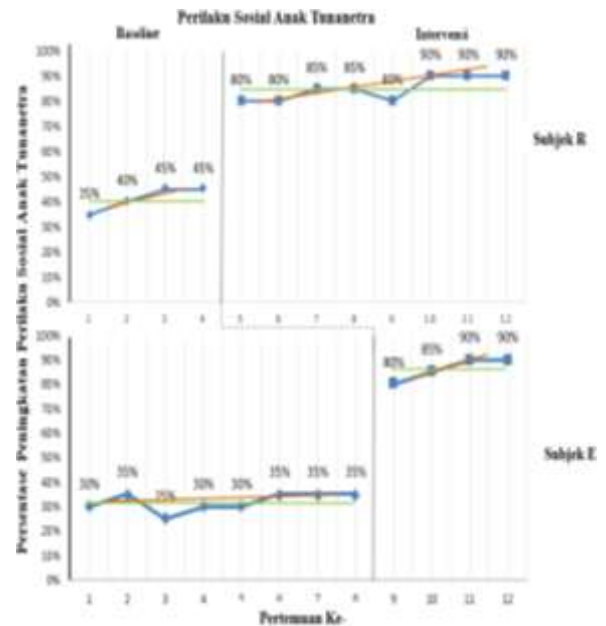
**Data Analysis**

**Analysis in Conditions**



Figure 1. In-condition analysis graph

Information:

| | |
|---|---|
| ▬▬▬ | Mean Level |
| ▬▬▬ | Data Trail |
| ▬ ▬ ▬ | *Split-middle* |
| ▬▬▬ | *Estimation of Direction Tendency* |
| ▬▬▬ | Barrier Between Conditions |

Subject R before being given positive reinforcement intervention had not increased. It can be seen in figure 2 and table 4 where the tendency of the direction of social behavior of R subjects has not increased with a change level of 10%. The tendency of stability in the initial condition was unstable with a percentage of 25% which then increased in the condition after the intervention was given, which was up to 90% as the largest number.

Furthermore, the results of the intervention carried out on R subjects showed a 10% change level which can be said to be an increase from 80% to 90%. The data of this condition also showed an upward trend which showed that there was a positive change in R subject after positive reinforcement intervention was given. Meanwhile, the initial condition of subject E's social behavior before being given positive reinforcement has not increased. Furthermore, the results of the intervention carried out on subject E showed a 10% change level which can be said to be an increase from 80% to 90%. The data of this condition also showed an upward trend which showed a positive change in subject E after being given a positive reinforcement intervention.
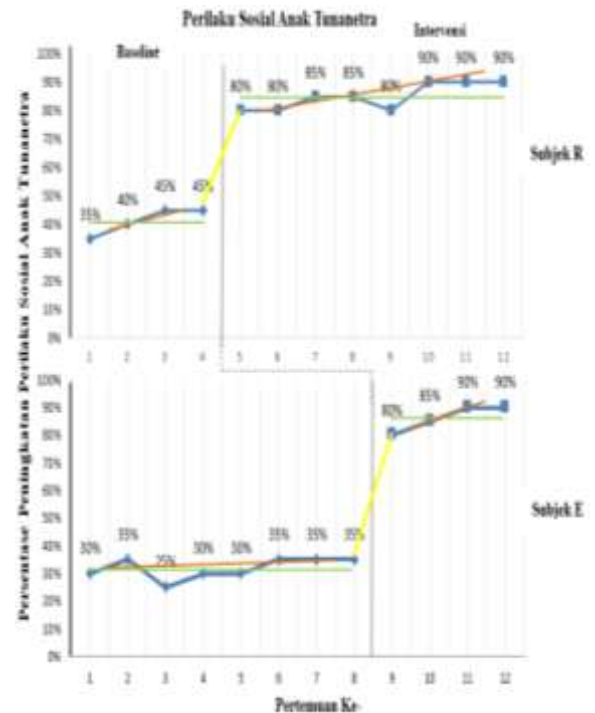
**Inter-Condition Analysis**



Figure 2. Charts of inter-condition analysis

Information:

| | |
|---|---|
| ▬▬▬ | Mean Level |
| ▬▬▬ | Data Trail |
| ▬ ▬ ▬ | *Split-middle* |
| ▬▬▬ | *Estimation of Direction Tendency* |
| ▬▬▬ | *Barrier Between Conditions* |
| ▬▬▬ | Upper Limit Trend |

The initial condition of subject R showed that he had changed with the frequency of social behavior indicated by the *mean level* value of 41. In the condition after the application of positive reinforcement, the directional tendency increases until it obtains a percentage of 90%. The change in the

direction tendency of R subjects between conditions after the intervention of coping strategy showed a change in tendency to increase with an overlap percentage of 25%, which showed a positive effect of positive reinforcement treatment. So that the provision of interventions for behavior in R subjects showed a positive effect.

In the initial condition, subject E showed a change with the frequency of social behavior indicated by the *mean level* value of 32. In the condition after the application of positive reinforcement, the directional tendency increases until it obtains a percentage of 90%. The change in the direction of subject E between conditions after the administration of positive reinforcement intervention showed an increase in tendency with an overlap percentage of 13%, which showed a positive effect of the positive reinforcement treatment. So that the provision of interventions for

behavior in subject E showed a positive effect.

## Discussion

The results of the data analysis showed that the provision of interventions with positive reinforcement was effective in improving social behavior in visually impaired children. Positive reinforcement is self-adjustment from demands both from the environment and from within and outside oneself which is considered beyond the limits of one's ability, which is carried out when there are demands that are felt to be opposed, burdening the resources owned, by making cognitive and behavioral efforts to reduce, minimize and restrain demands. The results of positive reinforcement research are generally positive reinforcement techniques to improve social interaction skills in schizophrenia cases (Maftuhah & Noviekayati, 2020); To increase confidence in learning in students with positive reinforcement techniques (Ni

luah ASRI, 2013); for the application of reinforcement techniques to improve learning outcomes (Fitriani et al., 2014). The research on positive reinforcement techniques applied shows positive effectiveness in efforts to improve social behavior felt by visually impaired children in inclusive education providers. The existence of positive feedback in the form of improving social behavior in visually impaired children is expected to be a guide for strategies that are tailored to individual needs.

**Conclusion**

Based on the data obtained from the results of the research analyzed related to positive reinforcement techniques in improving the social behavior of visually impaired children at SMK Negeri 7 Padang, the researcher concluded several things as follows:

1. Positive reinforcement techniques are effective in improving the social behavior of visually impaired children. The overlap data shows that the overlap of data is small so that the influence of the intervention on the target is better.

2. The results of data analysis prove that the techniques given using positive reinforcement techniques are effective in improving the social behavior of visually impaired children.

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