



# The Application of Social Story with Positive Reinforcement To Improve Kindergarten Student's Social Skills

Melani Aprianti<sup>1</sup>, Riana Sahrani<sup>2</sup>, Debora Basaria<sup>2</sup>

<sup>1</sup>Mercu Buana University. Email: [melaniaprianti@yahoo.com](mailto:melaniaprianti@yahoo.com)

<sup>2</sup>Tarumanegara University Jakarta

**Abstract:** *The purpose of this study was to evaluate the role of social story with positive reinforcement in increasing the social skills of kindergarten student. Social story with positive reinforcement is the reading of a story that is specifically made to help a child to handle specific social situation that the child encounter, with giving positive reinforcement aimed to increase the targeted behavior. This study used a single case design method with one respondent chosen by purposive sampling technique based on criteria given. The pre-test and post test evaluation of social skills are using Social Skill Improvement System-Rating Scale by Gresham & Elliot (2008). The evaluation of this study is also done by observing the frequency of targeted behavior before, during and after the intervention. The observation is done by event recording technique. The implementation of Social Story with positive reinforcement's effectiveness is marked by the increasing post test scores of Social Skill Improvement System-Rating Scale on the targeted behaviors based on the participant condition and pre-test scores. In details, the increasing scores are from the targeted behavior on the engagement subscales from 44 to 62 or 18 points increments, on the communication subscales from 54 to 77 or 23 points increments and on assertiveness subscales from 22 to 59 or 37 points increments. The effectiveness of the intervention is also can be seen from the increasing frequency of targeted behaviors based on the observation of the frequency of targeted behavior before, during and after the intervention. The increasing behavior frequency in communication subscales is 66,7%, in engagement subscales is 72% and in assertiveness subscales is 81%.*

**Key Words:** *social skills, kindergarten student, social story, positive reinforcement.*

## INTRODUCTION

Before entering school education, a child should own readiness for school. School readiness is a condition of the extent to which the child is ready to learn the material taught in schools (Beale & Herriot, 2004).

Bierman, Blair, Nelson, Nix, and Welsh's research (2010) found that children who are better prepared to enter school will get better academic achievement and have better social emotional adaptation that will raise positive behavior (Buettner, Hur & Jeon, 2014).

School readiness consists of five dimensions: physical and motor development, social and emotional development, learning approach, language development and knowledge / cognitive (Richardson & Young, 2007; Professional Association for Childcare and Early Years, 2013). Most parents now prefer to prepare the child's cognitive skill to enter elementary school as reported in the study of Erhamwilda (2007) and research of Bandy, Diamond and Reagan (2000) also from UNICEF data (2004) in Britto (2012).

Meanwhile according to the Professional Association For Childcare And Early Years (2013) the most important skill that a child must have in order to be able to face the demands of school is social skills. Muijs and Reynolds (2011) mentions social skills is one of several key skills for school readiness of pre-school

children. Having social skills will maximize the opportunities for children to engage in learning and undergo challenges that exist in the schools.

Social skills can also predict the acceptance of others to the child, school adaptation, psychological adjustment and adaptability to the higher demands of the social environment (Hupp, Jewel, LeBlanc & Warner, 2009). When a child does not have the social skills, he/she will have difficulties in social initiatives, provide social response and understand social situations.

There are many techniques that can be applied to improve the social skills of children. One is by using the technique of applied behavioral analysis (Larue, Newcomer & Weiss, 2009). Reinforcement is one of the basic principles of *operant* used in applied behavior analysis (Sarafino, 2012). Reinforcement is a consequence of the behavior that reinforces the behavior in order to make the behavior more frequent. The exact form of reinforcement which in this case is positive reinforcement, a procedure which the stimulus provided immediately after the target behavior that are expected emerge (Kazdin, 2013; Sarafino, 2012; Ryan, 2011).

Application of the applied behavioral analysis techniques to improve the social skills of children can be combined with social story (Ladner, Mandal-Blasio, Scheiner & Sheridan, 2009; Farmer, 2013). Social stories are stories created to help children succeed to understand certain social situations and help them able to display the expected behavior in a certain social situation. (Gray, 2004). Gray (2004) also explains that social story can provide an overview of the situation, skill or concept of socially relevant clue and a response is expected in a certain situation.

Previous studies such as research studies from Ganz, Lorimer, Myles and Simpson (2002), research from Powell-Smith and Sansosti (2008), Chan and O'Reilly's research (2008) and Shepherd's research (2012) found that social story can improve social skills in children with special needs. But research of social story application on normally developing children are still limited as revealed in research of Benish and Bramlet (2011) and also in McNelly and Smith's research (2013). From the above description, it is necessary to study social story application with positive reinforcement to improve normally developed kindergarten student's Social Skills.

## **Review of Literature**

### **Social skills**

Social skills are learned and socially acceptable behaviors that allow a person to interact positively with others (Cook, Elliott, Gresham & Vance, 2011). Hupp, Jewel, LeBlanc and Warner (2009), Bellini (2008) and Gimpel and Merrell (1998) divide social skills deficits into two: acquisition and performance. Social skills deficits in terms acquisition is a deficit due to that particular children do not have the required skills. Children do not know how to perform certain social skills in a variety of situations. Interventions to problems in the acquisition of social skills deficits is to teach the social skills needed.

Meanwhile, social skills deficits in terms of performance is when the child's condition is able to perform certain social skills in a specific situation but don't have the skill in other situations. In Bellini (2008) stated that social skills deficits in performance are caused by some factors such as motivation, anxiety, memory and self efficacy. Interventions to address social skills deficits in terms of performance is to improve false point of view / feelings, to give prompt and or provide reinforcement (Hupp, Jewel, LeBlanc & Warner, 2009; Gimpel & Merrell, 1998).

### **Social Story**

Social story is a story created specifically to help children successfully handle certain social situations often faced by children (Gray, 2004). Gray (2004) mentioned that social story gives an overview of the situation, skill or concept of socially relevant clue and a response that is expected in a given situation based on the specific problems of individual social skills.

Further Gray explained that the social story made in the style and format that is specified so as to distinguish social story from the fiction and non-fiction, children's literature traditional, social script, task analysis or other visual strategies. Social story has ten coverage that should be considered as follows: (a) how to present the information in a story, (b) the inside part of the story, (c) the specific topic of the story (d) the presentation of the story from the perspective of the child, (e) the language in the story, (f) sentence in the

story, (g) the purpose of the story, (h) the format of the story, (i) illustration of the story, and (j) the title of the story.

In Heward (2009), McCathren and Wright (2012), Briody and McGarry (2005) stated that the social story has advantages such as: (a) give information on how to deal with certain situations, (b) assist the child in understanding the confusing situation so could reduce children's anxiety, (b) improve the behavior of children and help children understand the social situation, and (c) built specifically with the problems and the child's condition. Using of social story is appropriate for children regarding the characteristics of children who love to see a picture in a book, love to be read by adults and begin to show empathy and concern for others.

### **Positive Reinforcement**

Positive reinforcement is a procedure in which a stimulus was given immediately after the target behavior appeared with the aim to increase the occurrence of such behavior in the future. The stimulus provided is usually something fun / favored by the individual (Kazdin, 2013; Sarafino, 2012; Ryan, 2011).

The procedure for provision of effective positive reinforcement should make these things into consideration: the quantity, quality and timing of administration. The quantity of giving the reinforcement is often first and then became scarce, the quality of the reinforcer means it is meaningful to the individual, time of administration of the reinforcement is a reinforcer should be delivered immediately everytime target behavior appears before finally moving to the intermittent schedule where reinforcer is not always given to each occurrence of the behavior (Kazdin, 2013; Sarafino 2012 ; Ryan, 2011).

Other procedures in the provision of positive reinforcement that the author did in this study was the procedures to establish a generalization of behavior. Generalization is a change in behavior that continue to carry on conditions beyond training/intervention. One of generalization form is response maintenance and transfer. Response maintenance and transfer is a condition in which the behavior continue to occur after the intervention program was stopped and behavioral changes brought on places and situations outside intervention (Kazdin, 2013).

Response maintenance and transfer can be formed by gradually eliminating the relationship between the antecedent, behavior and consequences to help behavior persisted outside intervention. This can be done by making a schedule of continuous reinforcement, which is any behavior that appears given a reinforcement, gradually changed into intermittent schedule, in which where not every appearance of behavior is always given reinforcer. Another thing you can do also is to extend the interval between the behavior with the reinforcement when the behavior has been formed, using a level to get reinforcement and gradually eliminate the components of the intervention.

Social story can serve as interventions to address the issue of performance (Bellini, 2008). Gray as cited in Arnold and Howley (2005) explains that social story can prepare children to face social situations by predicting the social situation and the expected behavior. Furthermore social story also provides strategies that make the individual able to assess the social situation, predict and understand what to do so it could reduce the anxiety experienced by individuals. Social story also serves as a prompt to encourage a child's behavior (Sansosti, 2008).

## **RESEARCH METHODS**

Participants of this study is one boy aged 7 years old, education level is kindergarten level B, have a average level of intelligence but experiencing deficits in social skills. In this research, ethnicity, socioeconomic and religious is not restricted. The study design used is a single-subject (small-n) experimental design.

The intervention in this research takes place at participant's home and in school. Preliminary data about child's condition is known by performing a psychological assessment in the form of intelligence tests, School Maturity Tes, Drawing/ Graphic tests and CBCL (Children Behavior Checklist). Parent and teacher are also interviewed to get complete data of the child's condition.

The targeting of behavior that will be intervened performed by using a social skill measuring instrument named social skill-rating scale system improvement (SSIS-RS). SSIS-RS is developed by Gresham and Elliot (2008), consisted of 46 items to measure the seven dimensions of social skills. Those dimensions are communication, cooperation, assertive behavior, responsibility, empathy, social participation and self-control.

These interventions are made in five sessions, with one session takes 60 minutes. Each social story was read in three sessions. Each session consists of these activities: read stories, answering comprehension question and role play (More, 2011). Participants also had the duty to practice these behaviors in class the next day. Positive reinforcement was given based on the appearance of the targeted behavior from the results of observations in the morning when the participant is in the classroom. In the first five sessions of this intervention, any targeted behavior that appeared was given positive reinforcement in the form of the participants's favourite foods like chocolate and biscuits. Analysis of the intervention results obtained through post test using the measuring instrument SSIS-RS.

The effectiveness of the implementation of social story with positive reinforcement in this study is characterized by increased post test score results through measuring devices using Social Skill Rating Scale Improvement System-on target behavior in this interventions that are determined based on the condition of the participant and pre-test results.

## RESULT

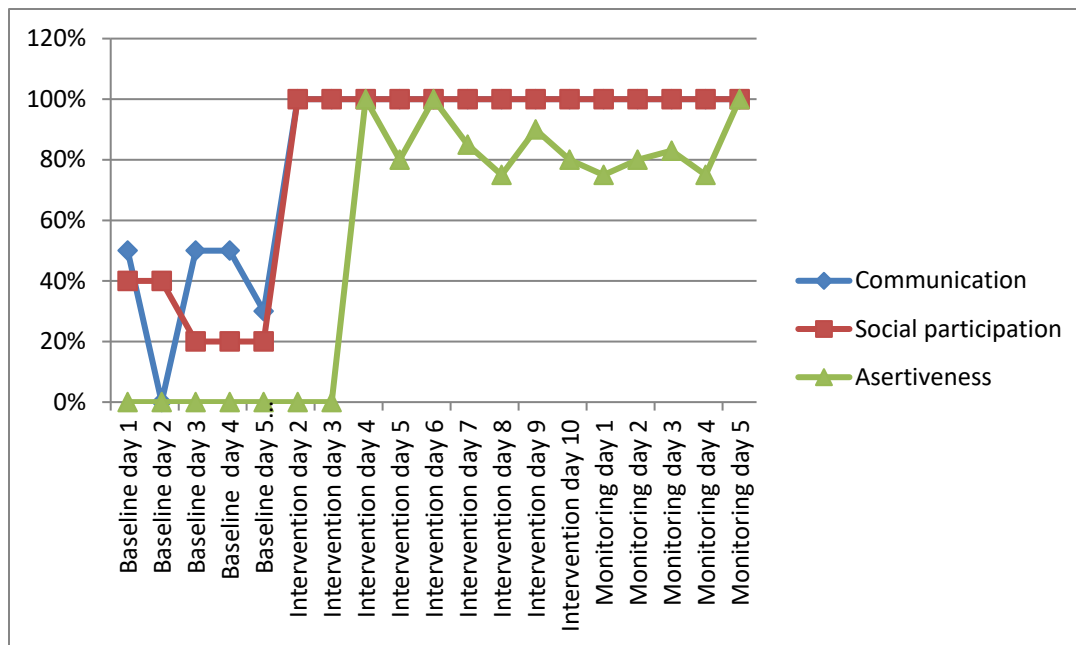
The result of this intervention carried out by reviewing the results of pre-test and post test obtained by using Social Skills Improvement System-Rating Scale from Gresham & Elliot (2008) as this intervention measuring device. The result of the application of intervention also done by reviewing the frequency of the target behavior occurrence observed before, during and after intervention, gained from observation with event recording techniques. The effectiveness of the implementation of intervention using social story with positive reinforcement in this study is characterized by increased post test score results gained from using Social Skill Rating Scale Improvement System-on intervention's target behavior, are also determined based on the condition of the participants and pre-test results.

Improved scores appear on the target's behavior on social participation subscale from 44 to 62 or by 18 points, the communication subscale from 54 to 77 or by 23 points and the subscale assertive from 22 to 59 or by 37 points. In addition to the target behavior in subscale interventions, there are also behavioral changes in other subscales such as the self-control subscale. Changes also occur in subscale empathy. Changes in the above behavior is a behavior change outside the targeted behavior in the intervention. This shows that the response generalization also occur. Responses generalization is that behavior change beyond the focus behavior of intervention (Kazdin, 2013).

Improvement was also seen on the frequency of target behaviors based on the observation of the participant's behavior in school. In detail, compared with baseline, increase appear in communication subscale (66.7%), on the subscale of social engagement (72%) and the assertive behavior subscale (81%). On the participant's everyday behavior in school, appear some changes such as: before being given intervention on social engagement subscale, participant rarely greet friends and teachers. He rarely took the initiative to start a conversation with a friend and teacher. He seldom join the activities with friends except when prompted. In the communication subscale, participant answered questions given to him in a voice that is soft and unclear. He was mostly silent when being asked. At assertive behavior subscale, participant never express his feelings, thoughts, desires or difficulty, for example he did not ask if he didn't understand the lesson, never ask for help when in difficulties and also never defend himself when being disturbed. He only showed the face of confusion, tension, sweating and wringing of hands but did not want to express the difficulty, even when teacher asked.

After the implementation intervention using social story with positive reinforcement, participant indicates increased frequency in communication subscale as participants consistently answer any questions given to him in loud and clear voice. On social engagement subscale also showed improved behavior, Participant is now consistently greet friends and join them afterwards. Participant also consistently greet the teachers in the classroom to say hello. In assertive behavior subscale, participant showed an increase in behaviors such as he is now able to express feelings, thoughts, desires and or difficulty with asking if he did not understand the lesson, ask for help when he was having trouble and also defend himself when disturbed by expressing his objections and feelings when disturbed.

The comparison of target behavior occurrence frequency in this intervention can be seen on the graph below:



## CONCLUSSION AND RECOMMENDS

From the research results, it can be concluded that applying social story intervention along with positive reinforcement can increase kindergarten student's social skills. There are some suggestions related to this research, such as: (a) to encourage the emergence of behavior on social skills deficits with performance issues, some prompt can be given directly to the actual social situation.

Those prompt can be done by giving verbal or gestural prompt. But it should be noted that the prompt administration systematically designed to disappear gradually in order to make prompt administration effective, (b) to stimulate a child's social skills, active role of parents and teachers is needed. Giving the right model for children to learn social interaction and praise to motivate children to do social interactions should be conducted intensively, (c) Parents and teachers can also apply the social story with positive reinforcement method to improve the social skills of children.

## REFERENCES

- Beale, I. & Herriot, S. (2004). *Is your child ready for school: a guide to parents*. New Jersey, NJ: Acer Press.
- Bellini, S. (2008). *Building social relationship: a systematic approach to teach social interaction skill to children and adolescent with autism spectrum disorder and other social difficulties*. Shawnee Mission, KS: Autism Asperger.
- Benish, T.M. & Bramlet, R.K. (2011). Using Social Stories to decrease aggression and increase positive peer interaction in normally developing pre-school children. *Educational Psychology in Practice*, 27(1), 1-17.
- Briody, J. & McGarry, K. (2005). *Using Social Stories to Ease children's Transitions* (Social Studies). Retrieved from [www.journal.naeyc.org/about/permissions.asp](http://www.journal.naeyc.org/about/permissions.asp)
- Britto, P.R. (2012). *School readiness: A conceptual framework*. New York, NY: Unicef.
- Buetnerr, C.K., Hur, E. & Jeon, L. (2014). Family and Neighborhood Disadvantage, Home Environment, and Children's School Readiness. *Journal of Family Psychology*, 28(5), 718-727.
- Chan, J.M. & O'Reilly, M.F. (2008). A Social Stories intervention package for students with autism in inclusive classroom settings. *Journal of Applied Behavior Analysis*, 41(3), 405-409
- Cook, C.R., Elliott, S.N., Gresham F.M, & Vance, M.J. (2011). Comparability of the Social Skills Rating System to the Social Skills Improvement System: Content and Psychometric Comparisons Across Elementary and Secondary Age Levels. *School Psychology Quarterly*, 26(1), 27-44.

- Erhamwilda (2007). Studi tentang harapan orang tua dalam pembinaan anak pada tk/ ra di desa Tani Mulya kecamatan Ngamprah kabupaten Bandung. *Mimbar*, 13(2), 235-254.
- Farmer, L. (2013). *Library services for youth with autism spectrum disorder*. California, CA: American Library Association
- Ganz, J.B., Lorimer, P.A., Myles, B.S. & Simpson, R.L. The use of social stories as a preventative behavioral intervention in a home setting with a child with autism. *Journal of Positive Behavior Intervention*, 4(1), 53-60.
- Gimpel, G.A. & Merrell, K.W. (1998). *Social skill of children and adolescent*. New Jersey, NJ: Lawrence Erlbaum Associates.
- Gray, C. (2004). Social stories 10: the new defining and criteria. *Jenison Autism Journal*, 15(4), 1-28.
- Heward, W.L (2009). *Exceptional children: An introduction to special education* (9<sup>th</sup> ed). New Jersey, NJ: Merrill Pearson.
- Hupp, S.D.A, Jewel, J.D., LeBlanc, M. & Warner, E. (2009). History and overview. Dalam Matson, J.L. (Ed.). *Social skills and behavior in Children* (pp.1-21). New York: Springer.
- Kazdin, A. E. (2013). *Behavior modification in applied settings* (7<sup>th</sup> ed). Illinois, IL: Maveland Press.
- Ladner, T., Mandal-Blasio, R., Schreiner, G., & Sheridan, K. (2009). Challenging behaviors. Dalam Matson, J.L. (Ed.). *Social skills and behavior in Children* (pp.97-116). New York, NY: Springer.
- Larue, R.H., Newcomer, A., & Weiss, M.J. (2009). Social skills and autism: understanding and addressing the deficits. Dalam Matson, J.L. (Ed.). *Applied Behavior Analysis for Children with Autism Spectrum Disorders* (pp.129-144). New York, NY: Springer.
- McCathren, R.B. & Wright, L.A. (2012). Utilizing social stories to increase prosocial behavior and reduce problem behavior in young children with autism. *Child Development Research*, 2012, 1-13. doi:10.1155/2012/357291.
- McNelly, M.E. & Smith, J.D. (2013). Effects of social stories on the behaviors of typically developing preschoolers. *Dialog*, 16(4), 48-63.
- More, C.M. (2011). Social stories and young children: Strategies for teachers. *Intervention in School and Clinic*, 47(3), 167-174.
- Muijs, D. & Reynolds, D. (2011). *Effective teaching: Evidence and practice*. London, UK: SAGE.
- Powel-Smith, A. & Sansosti, F.J. (2008). Using computer presented social stories and video models to increase the social communication skills of children with high-functioning autism spectrum disorders. *Journal of Positive Behavior Intervention*, 10(1), 162-178.
- Professional Association for Childcare and Early Years. (2013, September). *What does "school ready" really means? : A research report from Professional Association for Childcare and Early Years*. Broomley : Professional Association for Childcare and Early Years.
- Richardson, L. M. & Young, M.E. (2007). *Early child development from measurement to action: A priority for growth and equity*. Washington, DC : World Bank Publication.
- Ryan, C.S. (2011). Applied Behavior Analysis: Teaching Procedures and Staff Training for Children with Autism. Dalam William. T. (Ed.). *Autism Spectrum Disorder-from genes to environment* (pp.919-212). Retrieved from <http://www.intechopen.com/books/autism-spectrum-disorders-from-genesto-environment/applied-behavior-analysis-teaching-procedures-and-staff-training-for-children-with-autism>
- Sansosti, F.J. (2008). Teaching Social Behavior to Children with Autism Spectrum Disorders Using Social Stories: Implications for School-Based Practice. *SLP-ABA Special Compiled Issue*, 2(4), 36-45.
- Sarafino, E. P. (2012). *Applied behavior analysis : Principles and procedures for modifying behavior*. Hoboken, NJ: John Wiley & Sons.
- Shepherd, A. (2012). The case of Drew: An animated social narrative intervention to improve the social skills of a student with a mild intellectual disability. *Journal of Student Engagement: Education matters*, 2(1), 65-77.