

# Role of Cognitive Behaviour Group Therapy in Improving Social Information Processing In Agression Students

Dina Argitha, Soemiarti Patmonodewo, Naomi Soetikno, Flora Grace Putrianti, Haniek Farida, Titisa Ballerina, Moh. Rusnoto Susanto

**ABSTRACT**--- *Social Information Processing (S.I.P.) explains how the cognitive stages in individuals when judging a situation they are facing, thus this theory can be used to understand the thinking process of an individual when showing aggression. In order to elevate the ability of S.I.P., cognitive behaviour therapy can be performed in order to reduce the act of violence, anger, impulsiveness, focus and to enhance the ability in problem solving. On the teenager, group intervention is considered highly successful because they are in the stage of confirming an occurring problem into a problem that requires solution by all involved. The purpose of this research is to find out the roles of cognitive behaviour group therapy in order to elevate the ability of S.I.P. in teenage students behaving aggressively. Research use the experiment method with the one group pretest-posttest design. Result of research show an increase of S.I.P. ability on all the participants.*

**Keywords**—*Cognitive Behavior Group Therapy, Social Information Processing, Aggression, Adolescence.*

## I. INTRODUCTION

In Indonesia, the phenomenon of aggression in adolescents, especially students often occurs and increases. According to the Indonesian Child Protection Commission[1] from 2011 to 2014 there were 1,480 cases of violence that occurred in schools and almost all of them were conducted by students aged 12 to 17 years. The number of cases is considered high and becomes a problem for the world of education which should be able to foster and educate each student well[1].

Adolescences are a transitional period in the life span of individuals who are between childhood and adulthood experiencing a crisis of self-identity so that they will seek self-identity in the environment. They seek identity by exploring. The search for self-identity can be done by behavioral experiments that are different from the existing social rules, one of which is aggression behavior[2]. Aggression is a behavior that hurts others in the form of physical and verbal aggression[3].

**Revised Manuscript Received on May15, 2019.**

**Dina Argitha**, Magister of Psychology, Universitas Tarumanagara, Jakarta, Indonesia.

**Soemiarti Patmonodewo**, Faculty of Psychology, Universitas Tarumanagara, Jakarta, Indonesia.

**Naomi Soetikno**, Faculty of Psychology, Universitas Tarumanagara, Jakarta, Indonesia.

**Flora Grace Putrianti**, Faculty of Psychology, Universitas Sarjanawiyata Tamansiswa, Yogyakarta, Indonesia.

**Haniek Farida**, Faculty of Psychology, Universitas Sarjanawiyata Tamansiswa, Yogyakarta, Indonesia.

**Titisa Ballerina**, Faculty of Psychology, Universitas Sarjanawiyata Tamansiswa, Yogyakarta, Indonesia.

**Moh. Rusnoto Susanto**, Department of Art Education, Universitas Sarjanawiyata Tamansiswa, Yogyakarta, Indonesia.

One of the problems of aggression behavior displayed by students occurred at Junior High School X, North Jakarta. From personal communication with the counseling teacher at the school, it is known that at the beginning of the 2016-2017 school year, junior high school (SMP X) had around 1207th graders who were a combination of other school transfer students and students from the X elementary school. Problems began when five students from X elementary school does not like the behavior of a transfer student from another school. The five students began to bully the transfer students, such as hiding textbooks almost every day in more than one month with the aim of getting students punished by the teacher for not carrying books. Then yell at the transfer students in front of other students with inappropriate words, like "dumb you!", "Don't have a brain?!", "kid in the village!", And so on that are carried out almost every day for more than one month. The reason given by the five students showing this behavior is only to embarrass transfer students and make them uncomfortable at school.

The five students in SMP X behave aggressively because they feel themselves threatened by the presence of the transfer student. Aggression behavior occurs when an individual feels threatened by a condition or behavior that makes him uncomfortable[4]. The aggression displayed by the five junior high school students was classified as a type of proactive aggression. In proactive aggression, individuals will plan the right response or behavior to achieve certain goals in social situations[4]. Proactive aggression is consistent with social learning theory which gives the opinion that aggression behavior can help an individual achieve the desired goals[4]. In other words, junior high school X students display aggression behavior to achieve the desired goal of making the transfer student feel uncomfortable in junior high school X.

In understanding aggression behavior, some researchers find that the cognitive stages of individuals play an important role in interpreting the situation and / or deciding what actions to take in the situation at hand. Although these individual cognitive factors play an important role in aggression behavior, unfortunately this factor has not been explored empirically by many other researchers[5]. Crick & Dodge[5] introduced social information processing (SIP) theory that considers the role of emotions in cognitive decision making. SIP explains how cognitive stages in

individuals provide an assessment of the situation at hand, so that this theory can be used to understand how individual thinking processes display aggression behavior.

Social information processing consists of a series of stages. These cognitive stages occur before a person responds to social situations[4]. When an individual cannot pass the stage properly an unwanted response will appear, the response can take the form of aggression. Fite[4]said that more than 100 studies found that social information processing significantly affected the aggression of adolescence.

Social information processing consists of six stages (1) encoding, an individual's ability to capture instructions or cues that exist in social situations; (2) interpretation is the ability of individuals to interpret the instructions or stimuli they get in a situation; (3) the determination of the purpose of the stimulus, the individual clarifies the purpose of the social situation that is happening; (4) selection of responses, individuals will choose possible responses to be displayed; (5) evaluating responses, individuals assess the response they have chosen; and (6) displaying behavior or response according to purpose[6].

To improve the ability of social information processing in adolescents can be done intervention cognitive behavioral therapy (CBT). Chen[7] believe that CBT has several advantages, such as increasing S.I.P.'s ability, reducing acts of violence, anger, and impulsivity. In addition, CBT is also believed to be able to help individuals focus on social awareness and problem solving[8].

Tucker &Oei[9] explained that the intervention of groups with CBT or better known as cognitive group behavior therapy (CGBT) has more advantages, as each participant can get to know the emotions felt by others, share experiences and share opinions or suggestions. to others so that individuals feel that they are beneficial to others. In this group intervention, members also get positive support from each group member[9]. And intervention with groups in adolescents is considered to have high success because adolescents are in the stage of conformity where each existing problem becomes a problem that is familial and must be solved together by their peers[10].Based on the explanation above, this study aims to determine the role of cognitive therapy behavior in improving S.I.P. in students behaving aggressively.

## II. METHOD

This research is quasi experiment design with one group pretest-posttest design. Participants are five student from SMP X. They are male adolescents aged 12-14 years; bullied in school; have an average level of intelligence or above average based on the Culture Fair Intelligence Test.

*Instrument* Culture Fair Intelligence Test, Culture Fair Intelligence Test (CFIT) is a nonverbal test of fluid intelligence created by Raymond B. Cattel. The aim of the establishment of CFIT is to measure fluid intelligence in a pattern that is free from cultural influences[11]. This test is designed to provide an estimate of intelligence that is free from the influence of language, culture, and different levels of education[12]. Culture Fair Intelligence Test itself has validity 0.83 and reliability of 0.92[13].

Social Information Processing, The measurement of social information processing was adapted from Arsiwalla's[14] dissertation entitled "the interplay of positive parenting and positive social information processing in the prediction of children 's social and behavioral adjustment". In individuals who behave aggressively there are errors in their social information processing stage, this measuring instrument will measure four aspects of an individual's SIP, namely encoding, attribution or interpretation, response selection, and evaluating the response. Arsiwalla[14] combines the stages in Crick & Dodge's[15] SIP. In the SIP created by Crick & Dodge[15]there are six stages of SIP namely encoding, interpretation, goal setting, selection of responses or possible responses that arise, evaluation of responses, and respond according to their goals. Meanwhile, the SIP stages measured by Arsiwalla[14] combine interpretation and goal setting into one stage.

*Intervention procedures*, The intervention consisted of six sessions with themes designed by researchers at each session. The intervention was carried out twice a week which lasted about one hour. The theme of the six intervention sessions is (1) cognitive behavior therapy; (2) automatic thoughts; (3) cognitive restructuring; (4) controlling your thoughts; (5) controlling your behaviours; (6) problem solving.

## III. DISCUSSION

Aspects that have been successfully improved are the ability of participants to capture existing social clues, enhance the ability of participants to interpret an event to be more positive or not prejudiced in others, reduce the possibility of selecting an aggression behavior response, increase the likelihood of choosing an assertive behavior response, and increase ability to evaluate aggression behavior. The results of this study are in line with the interventions made by Chen[7] said that CBGT can improve the ability of social information processing to male adolescent inmates with cases of violence.

**Table1: Result of Pre-Post Test S.I.P.**

	Z	Asymp. Sig. (2-tailed)
Stage 1 Encoding	-2.032	.042
Stage 2 <i>hostile</i>	-2.041	.041
Stage 3 <i>benign</i>	-2.041	.041
Stage 4 aggression	-1.841	.066
Stage 5 stopping	-.816	.414
Stage 6 assertive	-1.414	.157

Based on the results of statistical tests using Wilcoxon, it is known that the ability of S.I.P. who experienced a significant difference. Significant differences occur in stage 1 or encoding ( $Z = -2.032$ ;  $p < 0.05$ ); stage 2 benign section ( $Z = -2.041$ ;  $p < 0.05$ ); and stage 3 part of silent behavior ( $Z = -.816$ ;  $p < 0.05$ ).



Increased ability of social information processing (SIP) in participants is caused by several things. Individual SIP skills can increase if they can distinguish behaviors that are carried out by people around them are intentional or not[15]. The results showed that the ability of the first stage or the encoding of the participants increased after the intervention. Participants can better sort out intentionally done behaviors.

In the second stage of SIP capability, there is an increase in interpretation where participants can interpret social situation instructions into non-aggression situations, this is in line with Parker[16] which states that individuals who have good abilities in the second stage do not always interpret social instructions as threaten. In the third stage, namely the possibility of response selection, participants in this study had an increase but not significant.

In the fourth stage, there is an increase in response evaluation but not significant. In this case, participants believe that what they are doing is the right decision. In line with the results of research Fontaine, Burks, and Dodge<sup>[24]</sup>, which adds that these individuals believe that what they do will lead to positive results.

In the session of problem solving skills intervention, the participants can improve their problem solving abilities by sharing knowledge and experience between participants. In research conducted by Busari[8] also shows that intervention with CBGT can improve the ability of individuals to solve their problems.

Another positive impact that was obtained from the intervention of this group was that the participants could express their opinions and emotions so that they were indirectly felt by other participants. In accordance with what was revealed by Tucker & Oei[9] namely through CBGT interventions, participants can share experiences and contribute opinions and suggestions to other participants so that they make themselves feel useful to others. In addition, according to previous research conducted by Wolgensinger[17], the participants in this study also received positive support from members of their group. The smoothness of the implementation of this intervention is influenced by adequate facilities, such as large classrooms and cool air, projectors that help researchers in delivering material, as well as ergonomic tables and chairs.

The success of this study was supported by the implementation of interventions conducted twice a week. According to Erikson[10] in adolescence, individuals will develop loyalty, trust, and conformity to others when they often spend time together. Researchers proved Erikson's theory that participants became trusting each other and caused a sense of security between members.

#### IV. CONCLUSION

CBGT can enhance the ability of participants to capture existing social clues, improve the ability of participants to interpret an event to be more positive or not prejudiced in others, reduce the possibility of selecting an aggression behavior response, increase the likelihood of choosing an assertive behavior response, and improve the ability to evaluate aggression behavior.

In subsequent studies it is expected to have a greater number of participants and also come from several schools in certain regions so that the results of the study can specify

the ability of social information processing to students in the region. The next researcher is expected not to intervene in the school because it can affect the therapeutic process where participants will hesitate to the researcher. The results of subsequent studies will be maximized if the researchers are of the same sex as the study participants. This is because during puberty, adolescents will feel sexual attraction which can affect their behavior during the research process.

#### ACKNOWLEDGMENT

I would like to thank you my colleagues Soemiarti Patmonodewo, Naomi Soetikno, Flora Grace P, Haniek Farida, and Moh. Rusnoto Susanto for their synergistic collaboration in the elaboration process and compilation of this manuscript. We thank to Faculty of Psychology Universitas Tarumanagara for the permission to conduct this research. Our special thanks go to Institutional Leaders of Sarjanawiyata Tamansiswa University Yogyakarta for the institutional support in terms of a scientific publication collaboration. It can contribute to dedicating knowledge within globally useful scientific disciplines and publications.

#### REFERENCES

1. B. N. Seniati, L., Yulianto, A., & Setiadi, *Psikologi Eksperimen*. Jakarta: Indeks, 2008.
2. I. Aulya, A., Ilyas, A., & Ifdil, "Perbedaan Perilaku Agresif Siswa Laki-Laki dan Siswa Perempuan," *J. Pendidik. Indones.*, vol. 2, pp. 92–97, 2016.
3. D. Soetikno, N., Tirta, S., & Apriyungun, "Psikoedukasi Pada Petugas Panti: Values Dalam Penanggulangan Perilaku Agresi Pada Remaja," *J. Bakti Masy. Indones.*, vol. 1, 2018.
4. P. J. Fite, "Reactive and Proactive Aggression in Adolescent Males: Examining Differential Outcomes 10 Years Later in Early Adulthood," *Crim. Justice Behav.*, vol. 37, pp. 141–157, 2010.
5. A. Bowen, K. N., Roberts, J. J., Kocian, E. J., & Bartula, "An Empirical Test of Social Information Processing Theory and Emotions in Violent Situations," *West. Crim. Rev.*, vol. 15, pp. 18–24, 2014.
6. I. Calvate, E., & Orue, "Cognitive Schemas and Aggressive Behavior in Adolescents: The Mediating Roles of Social Information Processing," *Spasish J. Psychol.*, vol. 13, pp. 190–121, 2010.
7. Chen, "Cognitive Behavioral Therapy to Reduce Overt Aggression Behavior in Chinese Young Male Violent Offenders," *J. Aggress. Behav.*, vol. 40, pp. 329–336, 2014.
8. I. Karismatika, "Terapi Kognitif Perilaku untuk Remaja dengan Gangguan Tingkah Laku," *J. Sains dan Prakt. Psikol.*, vol. 2, pp. 296–301, 2014.
9. T. P. S. Tucker, M. & Oei, "Is Group More Cost Effective than Individual Cognitive Behavior Therapy? The Evidence is not Solid Yet," *Behav. Cogn. Psychother.*, vol. 35, pp. 77–91, 2007.
10. G. Papalia, D. E. & Martorell, *Experience Human Development*, 13th ed. New York: Mc-Graw Hill, 2015.
11. A. & U. Anastasi, *Tes Psikologi: Terjemahan*. Jakarta: PT Indeks, 2007.
12. R. M. & S. Kaplan, *Psychological Testing: Principles, Application, And Issues*. Belmont: Thomson Wadsworth, 2005.



13. C. O. Kpolvie, P. J., & Emekene, "Psychometric Advent of Advanced Progressive Matrices-Smart Version (APM-SV) for Use in Nigeria," *Eur. J. Stat. Probab.*, vol. 4, pp. 20–60, 2016.
14. D. D. Arsiwalla, "The Interplay of Positive Parenting and Positive Social Information Processing in The Prediction of Children's Social and Behavior Adjustment," Auburn University, 2009.
15. D. P. Runions, K. C., & Keating, "Young Children's Social Information Processing: Family Antecedents and Behavioral Correlates," *J. Dev. Psychol.*, vol. 43, pp. 838–849, 2007.
16. K. Parker, "The Role of Social Information Processing in the Relation between Interparental Conflict and Child Aggression. Disertation of Doctoral Degree," Virginia Commonwealth University, 2014.
17. L. Wolgensinger, "Cognitive Behavioral Group Therapy for Anxiety: Recent Development," *Dialogues Clin Neurosci*, vol. 17, pp. 347–351, 2015.

### AUTHORS PROFILE



**First Author** personal profile which contains their education details, their publications, research work, membership, achievements, with photo that will be maximum 200-400 words.



**Second Author** personal profile which contains their education details, their publications, research work, membership, achievements, with photo that will be maximum 200-400 words.



**Third Author** personal profile which contains their education details, their publications, research work, membership, achievements, with photo that will be maximum 200-400 words.