

Effectiveness of Self-Regulation of Emotion Modules to Reduce Negative Aggressive Behavior of Student

Purwadi¹, Wahyu Nanda Eka Saputra¹, Said Alhadi¹, Amien Wahyudi¹, Agus Supriyanto¹, Siti Muyana¹

¹Guidance and Counseling Department, Universitas Ahmad Dahlan, Yogyakarta, Indonesia

*Corresponding Author: wahyu.saputra@bk.uad.ac.id

Copyright©2018 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Abstract The problem of aggressive behavior is continuously more developing in form and intensity. The impact felt by victims and perpetrators of aggressive behavior is also more and more complex. One way to reduce aggressive behavior is to train students in self-regulation of emotion, which in this study the exercises are done with the help of modules. The purpose of this study is to determine the effectiveness of the self-regulation of emotion modules to reduce aggressive behavior. This study uses a quasi-experimental type with a nonequivalent control group design model. The instrument used in this study was a scale of aggressive behavior. The data analysis technique used is the independent sample t-test. The results of the study concluded that there was a significant difference in the aggressive behavior of students who were given self-regulation of emotion module interventions with students who were given traditional counseling interventions. The aggressive behavior of students who were given the self-regulation of emotion module intervention was lower than the aggressive behavior of students who were given traditional counseling interventions.

Keywords on-line aggression, violence, solution-focused brief counseling

1. Introduction

"Bhineka Tunggal Ika" is the basic motto of the Indonesian people which is upheld by every citizen of Indonesia, including implemented in the school environment [1], [2]. The motto has the meaning that the Indonesian people have a variety of cultures, but they remain a unity. These cultural differences can lead to problems if they are not supported by the strong characteristics each Indonesian has. Therefore, character education is emphasized to be implemented well in the educational settings of the era of the industrial revolution [3]. One of the characteristics that need to be built by adolescents is self-regulation [4]–[6]. This ability of self-regulation includes self-regulation of emotion,

which adolescents need to have the ability to be able to regulate the emotions that exist in themselves precisely and with their own abilities.

In the era of the industrial revolution 4.0, various shocks and problems arise in adolescents, both intrapersonal and interpersonal problems in schools. These problems can trigger other problems when they are not competent to regulate emotions, and other problems arise that can harm themselves and others. Thus, it becomes a need for adolescents to be capable of foster comprehensible emotions when they are dealing with certain problems, where the ability of adolescents to express clear emotions is correlated with adolescent depression and other psychopathological problems [7], [8].

The inability of adolescents to regulate the emotions that exist in him has an impact on the emergence of other forms of maladaptive behavior, one of which is aggressive behavior [9], [10]. This aggressive behavior is one of the instincts that exist in every human, which in Freud's concept of psychoanalysis is called Thanatos [11]. In addition, adolescents who show aggressive behavior, this is because they are not able to suppress the feelings of frustration they experience, so they overflow in these destructive behaviors [12].

The problem of aggressive behavior is in the spotlight in Indonesian schools, even has caused death victims. The level of aggressive behavior of Vocational high-school students in Yogyakarta City, Indonesia is extremely tall at 5%; lofty category by 26%; average category by 40%; nasty category by 21%; very base categories by 8% (Saputra & Handaka, 2018). The aggressive behavior of students in Yogyakarta, Indonesia at the junior high school level was in the excessively towering category at 1%; high category 13%; medium category 37%; paltry category 43%; a very low category of 6% [14]. In fact, the level of aggressive behavior of male and female students in Yogyakarta, Indonesia at the vocational high school level tends to be the same [15].

One of the factors causing the emergence of aggressive behavior in adolescents is the failure of students to regulate the emotions that exist in him. The inability of adolescents to regulate emotions can affect various problems and

psychopathological risks to adolescents [16]–[19]. Based on these data, it becomes the basis for school counselors to build good self-regulation of emotion skills so that they can suppress aggressive behavior that is often raised.

In this study, the counselor trains the ability of self-regulation of emotion with the help of modules. This compiled module can facilitate students to learn and practice independently in self-regulation of emotion. Self-regulation of emotion consists of seven components, namely receiving; evaluating; triggering; searching; formulating; implementing; and assessing [20]. Thus, the purpose of this study is to determine the effectiveness of the self-regulation of the emotion modules in reducing aggressive behavior. The results from this study are expected to be a reference for school counselors in their efforts to help students reduce their aggressive behavior.

Previous studies have found that the self-regulation of the emotion modules is categorized as appropriate for school counselors to implement in helping students reduce aggressive behavior [21]. Another research also concludes that self-regulation is a way for counselors to help students reduce aggressive behavior by students [22]. These studies provide a basis for strengthening the testing of the regulation of emotion modules to reduce aggressive behavior.

2. Method

2.1 Research design

This experimental study uses a quasi-experimental type with a nonequivalent control group research design. Subjects involved in this study were 84 students who were divided into two groups by not randomly. This is not the same as true experimental type where two groups are divided into two randomly. One group became an experimental group that was given intervention self-regulation of emotion modules, and one group was given conventional counseling intervention.

2.2 Data collection

This study uses an aggressive behavior scale (ABS) instrument. ABS is arranged using four aspects of aggressive behavior, namely physical aggression, verbal aggression, anger, and hostility [23]. ABS consists of 29 items that are declared valid with coefficients of 0,321 to 0,769. The reliability coefficient on this instrument is 0,871 and is included in the high category.

2.3 Subject of study

Subjects involved in this study were 84 juniors high-school students in a special area of Yogyakarta who had a high level of aggressive behavior. The research subjects were divided into two groups. Unlike true experimental design studies, in these quasi-experimental design study

groups are not divided randomly. One group is called an experimental group that is given an intervention self-regulation of emotion modules, and one group is called a control group that is given a conventional counseling intervention.

2.4 Research stages

This research was conducted in seven stages. First, the research team formulated research objectives. Second, the research team formulated the research design and division of work of the research team. Third, formulate data collection instruments. Fourth, test the instrument to determine the validity and reliability of the instrument. Fifth, spread the instruments to do the pretest. Sixth, conduct counseling interventions, both in the experimental and control groups. Seventh, conduct posttest and analysis of research data to determine the effectiveness of self-regulation of emotion to reduce aggressive behavior.

2.5 Data analysis technique

Data analysis techniques for this study used independent sample t tests. This data analysis technique is a parametric test to identify significant differences in mean or mean between two free groups with interval / ratio data scales. The two free groups referred to here are two groups that are not paired, meaning the source of data comes from different subjects. The results of this data analysis are a comparison of the level of aggressive behavior of groups of students who are given the intervention self-regulation of emotion modules and groups of students who are given conventional counseling interventions.

3. Results

Data analysis techniques using the Independent sample t test require several assumptions that must be met. The first assumption is that both data are normally distributed. The normality test in this study uses the Kolmogorov-Smirnov test, where the test results are described in table 1.

Table 1. Test of Kolmogorov-Smirnov

	Strategy	Kolmogorov-Smirnov ^a		
		Statistic	df	Sig.
AggrBehav	1,00	,129	42	,078
	2,00	,128	42	,079

In table 1, it is known that the coefficient Sig. in the group of students who were given the intervention self-regulation of emotion modules was 0,078 and the coefficient Sig. in the group of students who were given conventional counseling interventions was 0,079. Sig coefficient. in both groups is greater than 0,05. Based on these coefficients it is concluded that the two data are normally distributed, so the first

assumption, that is, normally distributed data, has been fulfilled.

The second assumption in this study is both homogeneous data. Homogeneity test is described in table 2.

Table 2. Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Aggr Behav	Based on Mean	,000	1	82	,994
	Based on Median	,000	1	82	1,000
	Based on Median and with adjusted df	,000	1	81,995	1,000
	Based on trimmed mean	,000	1	82	1,000

The table above shows the homogeneity test results with the Levene's Test method. The Levene value is shown in the Value based on Mean row, 0,000 with the Sig coefficient. amounted to 0,994 were greater than 0,05, which means there is a similarity between the variances between groups or, which means homogeneous. Thus, the second assumption in this study has been fulfilled.

After the assumption test is carried out, an analysis is carried out using the Independent sample t test. The results of the analysis using the Independent sample t test found that there were significant differences in the level of aggressive behavior in the group of students who were given self-regulation of emotion module's interventions with groups of students who were given conventional counseling interventions. Based on the average level of aggressive behavior, students who were given self-regulation of emotion modules had lower levels of aggressive behavior compared to the group of students who were given conventional counseling interventions. The results of data analysis using SPSS-assisted Independent sample t test can be seen in Tables 3 and 4.

Table 3. Group statistics

	Strategy	N	Mean	Std. Deviation	Std. Error Mean
Aggr	1,00	42	78,7619	10,93620	1,68749
Behav	2,00	42	95,7619	10,97849	1,69402

In table 3, the statistical group can be interpreted that N is 42 for each treatment. The mean of the experimental group is 78.7619, and the control group is 95.7619. The values of standard deviation and standard error of the experimental group were lower than the control group. The standard error of mean is to describe the average distribution of a sample against the average of all possible samples.

In table 4, it appears that the f obtained is 0,000 with a significance of 0,994, which means it is greater than 0,05 (0,994 > 0,05) so this means that the variant of the population group is homogeneous. Thus the homogeneity requirements for comparative analysis are met. Furthermore, the results of the data analysis obtained a coefficient of t count of -7,110 with a probability of 0,000 when compared to 0,05, the probability value is smaller, which means there are differences in aggressive student behavior between groups given the intervention self-regulation of emotion modules and groups that are given conventional counseling interventions. If analyzed based on the average score of aggressive behavior, the score of aggressive behavior groups of students who were given self-regulation of emotion modules intervention was lower (78,7619) than the scores of aggression behavior of groups of students who were given conventional counseling interventions (95,7619). So it can be concluded that the aggressive behavior of students who are given self-regulation of emotion modules interventions decrease more significantly than students who are given conventional counseling interventions.

Table 4. Independent sample test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Std. Error Difference
Aggr Behav	Equal variances assumed	,000	,994	-7,110	82	2,39109	-17,00000
	Equal variances not assumed			-7,110	81,99	2,39109	-17,00000

4. Discussion

The results from the study concluded that self-regulation modules can be effectively used to help students reduce aggressive behavior. The conclusion was proved that the aggressive behavior within the group of students who were given the self-regulation of emotion module's intervention was lower than the score of the group's aggression behavior of students who were given conventional counseling interventions. The results from this study prove that school counselors can utilize self-regulation of emotion modules to help students reduce aggressive behavior.

Aggressive behavior is still a serious problem that occurs in adolescents where this behavior involves elements such as biological elements, personality development, social processes, basic cognitive processes, short-term and long-term processes, and decision-making processes [24]. Aggressive behavior is a form of behavior that intentionally hurts others, both physically and non-physically. Aggressive behavior is a complex phenomenon that operates at several levels, with different meanings, and is expressed through diverse forms of violent behavior [25]. Aggressive behavior is physical or verbal behavior that aims to hurt others [26]. Aggressive behavior is born to respond to threats (according to perception or really exist) originating from other individuals or groups outside the group [27].

Aggressive behavior as behavior or behavioral tendencies whose intention is to hurt others both physically and psychologically where the aggressiveness itself has four aspects, namely verbal aggression, anger, hostility, physical aggression [23]. These four aspects of aggressive behavior form the basis of the preparation of instruments in this study, specifically the scale of aggressive behavior. Even now there is also a new aggressive face, online aggression [28]–[31]. This aggressive behavior model is demonstrated by adolescence by sending messages aimed at hurting others through social media. This aggressive behavior model is very much felt today internationally, especially in Indonesia.

One way to reduce aggression behavior is to help students learn to optimize self-regulation of emotion. Self-regulation of emotions is needed for someone in regulating behavior, making decisions, and others. Emotional regulation is an intrinsic experience that produces emotions and is after that informed of cognitive abilities to give emotion an influence and sense of behavior [32]. Emotions occur because there is a stimulus in a person and next reflected into behavior.

Emotional regulation becomes one of the aspects of concern for individuals who engage in aggressive behavior. Various studies have concluded that the high or low level of aggressive behavior of students is influenced by the high or low ability of students to regulate their emotions [10], [33]. This is the basis for counselors to develop the ability of self-regulation of emotion to help students get out of aggressive behavior problems that are often done. Another literature also mentions that self-regulation of emotion is an alternative strategy for counselors to reduce aggressive behavior [34].

Humans have the ability to regulate the emotions that exist in him, of course, in his own way too. One of the literature states that someone regulates the emotions that exist in him caused by two motives, namely hedonistic and instrumental motives [35]. People who pursue hedonistic motives, they look for emotions to increase the ratio of pleasure that exists in him to the pain that is being experienced. Whereas people who have instrumental motives, they target the potential benefits of emotions apart from their direct phenomenology. Counselors who facilitate the development of self-regulation of emotion, encourage students to have instrumental motives, so they can look for potential benefits when regulating their emotions and can reduce aggressive behavior.

Self-regulation of emotion can improve symptoms of anxiety, depression and self-esteem of individual users of the substance. Activities in the self-regulation of emotion training stage are focused on breathing (not focused on distractions), thus showing changes, namely (a) reducing the experience of negative emotions, (b) reducing amygdala activity, and (c) increasing activity in the brain regions involved in attention dissemination [36]. Self-regulation of emotion generally consists of receiving or accepting, evaluating or evaluating, triggering or making a change, searching or finding a solution, formulating or designing a plan, implementing or implementing a plan, assessing or measuring the effectiveness of the plan that has been made.

In this study, counselors facilitate students to learn to optimize self-regulation of emotion by using modules. The results of research on the use of modules stated that the learning process of students who use the help of modules can encourage students to solve problems collaboratively, clarify their roles, and provide information from their perspectives [37]. Based on these results, it can be understood that a student who learns self-regulation of emotion by using modules, they can learn independently to solve aggressive behavior problems according to their perspectives and ways.

Modules used to help students develop a self-regulation of emotion to reduce aggressive behavior are categorized as appropriate for use by counselors [21]. The principal components in the module consist of six components, namely receiving, evaluating, triggering, searching, formulating, implementing, and assessing [21]. The seven foremost components in self-regulation of emotion modules can facilitate students to reduce aggressive behavior that is often done.

This research is supported by other studies, which conclude that Emotion-Related Self-Regulation can assist students in improving student adjustment in the school environment [38]. However, in this study self-regulation of emotion was used to improve student adjustment, while this study was used to reduce aggressive behavior. In addition, in this study self-regulation of emotion did not involve students' independence in learning, whereas in this study the emphasis was on the aspect of student independence in learning because self-regulation of emotion was implemented with the help of modules.

Other studies have concluded that emotional regulation strategies can be used by counselors to effectively reduce aggressive behavior [39]. However, in this study the identified aggressive behavior focused on aspects of physically and relationally aggressive, whereas in this study aggressive behavior was identified with more specific forms, namely physical, verbal, anger, and hostility. In addition, the study was conducted on preschool children. So emotional regulation strategies are still being debated whether children of this age can be charged with emotional regulation strategies. In contrast to this study in which the subjects involved were junior high school-aged children, which in terms of developmental level, they could be trained to regulate the emotions that exist in themselves.

Other studies also concluded that emotion regulation influences aggressive behavior that arises because of the provocation from others [40]. However, this research is classified as correlation research and there is no attempt to identify the effect of certain strategies implemented by counselors to reduce aggressive behavior, whereas in this study, classified as experimental research, which aims to test the effectiveness of self-regulation of emotion modules to reduce aggressive behavior. In addition, in this study the identified aggressive behavior was limited to aggressive behavior in the face of provocation or reactive aggressive behavior, whereas in this study, the aggressive behavior that was identified could be in the form of reactive or proactive.

This study has limitations. One limitation in this study is the research design that uses quasi-experimental design, in which the two groups are not randomly divided like true experimental design research. In subsequent studies, the assignment of research subjects to the experimental and control groups should be done randomly (Random Assignment), so that the internal validity is high.

5. Conclusions

Aggression behavior becomes a problem that has increasingly high complexity. In this research, it has been proven that one of the counseling techniques that used self-regulation of emotion modules can be used to help students reduce aggressive behavior. Counselors help counselees develop a self-regulation of emotion by involving seven main components, namely receiving, evaluating, triggering, searching, formulating, implementing, and assessing. This research should be a reference for counselors to use self-regulation of emotion modules to help the guidance and counseling program in building a culture of peace in the school environment.

Acknowledgements

Thank you to the Ministry of Research and Technology of the Republic of Indonesia for providing material support for this research. In addition, a thank you also was sent to Universitas Ahmad Dahlan for facilitating the completion of

this research and producing a new work, namely self-regulation of emotion modules.

REFERENCES

- [1] M. I. Farisi, "Bhinneka Tunggal Ika [Unity in Diversity]: From Dynastic Policy to Classroom Practice," *J. Soc. Sci. Educ.*, vol. 13, no. 3, pp. 83–89, 2014, doi: 10.2390/jsse.
- [2] I. Hambali and M. Gipayana, "A cognitive stage-experiential psycho-educational guidance model to enhance the Bhineka Tunggal Ika (Unity in diversity) awareness," *J. Soc. Sci.*, vol. 5, no. 1, pp. 19–28, 2016, doi: 10.25255/jss.2016.5.1.19.28.
- [3] O. R. P. R. Linge, F. Khoirunnisa, and F. S. Silitonga, "Character Education Based on Psychology Perspective in the Industrial Revolution Era 4.0," vol. 295, no. ICETeP 2018, pp. 263–265, 2019, doi: 10.2991/icetep-18.2019.63.
- [4] P. Alex Linley et al., "Character strengths in the United Kingdom: The VIA Inventory of Strengths," *Pers. Individ. Dif.*, vol. 43, no. 2, pp. 341–351, 2007, doi: 10.1016/j.paid.2006.12.004.
- [5] C. Seligman, Martin E.P., Park, Nansook and Peterson, "The VIA classification of character strengths," VIA Institute on Character. 2004.
- [6] Via Institute On Character, "Character Strengths, Character Building Experts: VIA Character," Via Institute On Character, 2017. [Online]. Available: <https://www.viacharacter.org/www/>.
- [7] J. Gruber et al., "Positive Emotion Specificity and Mood Symptoms in an Adolescent Outpatient Sample," *Cognit. Ther. Res.*, vol. 41, no. 3, pp. 393–405, 2017, doi: 10.1007/s10608-016-9796-7.
- [8] A. D. Kendall et al., "Measuring Positive Emotion With the Mood and Anxiety Symptom Questionnaire," *Assessment*, vol. 23, no. 1, pp. 86–95, 2016, doi: 10.1177/1073191115569528.
- [9] D. S. Chester, L. M. Merwin, and C. N. Dewart, "Maladaptive perfectionism's link to aggression and self-harm: Emotion regulation as a mechanism," *Aggress. Behav.*, vol. 41, no. 5, pp. 443–454, 2015, doi: 10.1002/ab.21578.
- [10] T. Robertson, M. Daffern, and R. S. Bucks, "Emotion regulation and aggression," *Aggress. Violent Behav.*, vol. 17, no. 1, pp. 72–82, 2012, doi: 10.1016/j.avb.2011.09.006.
- [11] F. Caropreso, "The death instinct and the mental dimension beyond the pleasure principle in the works of Spielrein and Freud," *Int. J. Psychoanal.*, vol. 98,

- no. 6, pp. 1741–1762, 2017, doi: 10.1111/1745-8315.12630.
- [12] G. Eissa and S. W. Lester, “Supervisor role overload and frustration as antecedents of abusive supervision: The moderating role of supervisor personality,” *J. Organ. Behav.*, vol. 38, no. 3, pp. 307–326, 2017, doi: 10.1002/job.2123.
- [13] W. N. . Saputra and I. B. Handaka, “Perilaku Agresi Pada Siswa SMK di Yogyakarta,” *Fokus Konseling*, vol. 4, no. 1, pp. 1–8, 2018.
- [14] S. Alhadi, P. Purwadi, S. Muyana, W. N. E. Saputra, and A. Supriyanto, “Agresivitas Siswa SMP di Yogyakarta,” *J. Fokus Konseling*, vol. 4, no. 1, p. 93, 2018, doi: 10.26638/jfk.507.2099.
- [15] W. N. E. Saputra, N. Hanifah, and D. N. Widagdo, “Perbedaan Tingkat Perilaku Agresi Berdasarkan Jenis Kelamin pada Siswa Sekolah Menengah Kejuruan Kota Yogyakarta,” *J. Kaji. Bimbing. dan Konseling*, vol. 2, no. 4, pp. 142–147, 2017, doi: 10.17977/um001v2i42017p142.
- [16] K. A. McLaughlin, M. L. Hatzenbuehler, D. S. Mennin, and S. Nolen-Hoeksema, “Emotion dysregulation and adolescent psychopathology: A prospective study,” *Behav. Res. Ther.*, vol. 49, no. 9, pp. 544–554, 2011, doi: 10.1016/j.brat.2011.06.003.
- [17] K. Keenan, “Emotion Dysregulation as a Risk Factor for Child Psychopathology,” *Clin. Psychol. Sci. Pract.*, vol. 7, no. 4, pp. 418–434, 2000, doi: 10.1093/clipsy/7.4.418.
- [18] T. P. Beauchaine and D. Cicchetti, “Emotion dysregulation and emerging psychopathology: A transdiagnostic, transdisciplinary perspective,” *Development and Psychopathology*, vol. 31, no. 3, pp. 799–804, 2019, doi: 10.1017/S0954579419000671.
- [19] A. Bazarnik, “Emotion dysregulation and psychopathology in epilepsy,” *Pol. Merkur. Lekarski*, vol. 44, no. 264, pp. 302–307, 2018.
- [20] B. J. Knox, R. G. Lugo, Ø. Jøsok, K. Helkala, and S. Sütterlin, “Towards a Cognitive Agility Index: The Role of Metacognition in Human Computer Interaction,” vol. 1, pp. 243–250, 2017, doi: 10.1007/978-3-319-58750-9.
- [21] S. Alhadi, W. N. E. Saputra, Purwadi, A. Wahyudi, A. Supriyanto, and S. Muyana, “Self-Regulation of Emotion Module to Reduce Aggressive Behavior,” vol. 387, pp. 23–26, 2020, doi: 10.2991/icei-19.2019.6.
- [22] C. N. DeWall, R. F. Baumeister, T. F. Stillman, and M. T. Gailliot, “Violence restrained: Effects of self-regulation and its depletion on aggression,” *J. Exp. Soc. Psychol.*, vol. 43, no. 1, pp. 62–76, 2007, doi: 10.1016/j.jesp.2005.12.005.
- [23] A. H. Buss and M. Perry, “The Aggression Questionnaire,” *J. Pers. Soc. Psychol.*, vol. 63, no. 3, pp. 452–459, 1992, doi: 10.1037/0022-3514.63.3.452.
- [24] C. N. Dewall, C. A. Anderson, and B. J. Bushman, “The general aggression model: Theoretical extensions to violence,” *Psychol. Violence*, vol. 1, no. 3, pp. 245–258, 2011, doi: 10.1037/a0023842.
- [25] J. M. Ramirez, “Some dichotomous classifications of aggression according to its function,” *J. Organ. Transform. Soc. Chang.*, vol. 6, no. 2, pp. 85–101, 2009, doi: 10.1386/jots.6.2.85_1.
- [26] D. Myers, *Social psychology*. New York: Mc Graw-Hill, 2012.
- [27] V. V. MacLaren, L. A. Best, and E. E. Bigney, “Aggression-hostility predicts direction of defensive responses to human threat scenarios,” *Pers. Individ. Dif.*, vol. 49, no. 2, pp. 142–147, 2010, doi: 10.1016/j.paid.2010.03.024.
- [28] D. M. Law, J. D. Shapka, J. F. Domene, and M. H. Gagné, “Are Cyberbullies really bullies? An investigation of reactive and proactive online aggression,” *Comput. Human Behav.*, vol. 28, no. 2, pp. 664–672, 2012, doi: 10.1016/j.chb.2011.11.013.
- [29] D. M. Law, J. D. Shapka, and B. F. Olson, “To control or not to control? Parenting behaviours and adolescent online aggression,” *Comput. Human Behav.*, vol. 26, no. 6, pp. 1651–1656, 2010, doi: 10.1016/j.chb.2010.06.013.
- [30] A. G. Zimmerman and G. J. Ybarra, “Online aggression: The influences of anonymity and social modeling,” *Psychol. Pop. Media Cult.*, vol. 5, no. 2, pp. 181–193, 2016, doi: 10.1037/ppm0000038.
- [31] N. E. Werner, M. F. Bumpus, and D. Rock, “Involvement in internet aggression during early adolescence,” *J. Youth Adolesc.*, vol. 39, no. 6, pp. 607–619, 2010, doi: 10.1007/s10964-009-9419-7.
- [32] M. Vandekerckhove, C. Von Scheve, S. Ismer, S. Jung, and S. Kronast, *Regulating Emotions: Culture, Social Necessity, and Biological Inheritance*. Australia: Blackwell Publishing, 2009.
- [33] T. N. Sullivan, R. C. Garthe, E. A. Goncy, M. M. Carlson, and K. L. Behrhorst, “Longitudinal Relations between Beliefs Supporting Aggression, Anger Regulation, and Dating Aggression among Early Adolescents,” *J. Youth Adolesc.*, vol. 46,

- no. 5, pp. 982–994, 2017, doi: 10.1007/s10964-016-0569-0.
- [34] P. Purwadi and S. Said Alhadi, “Self-Regulation of Emotion as an Alternative to Reduce Student’s Aggressiveness,” *Adv. Soc. Sci. Educ. Humanit. Res.*, vol. 173, pp. 2003–2005, 2018, doi: 10.2991/icei-17.2018.69.
- [35] M. Tamir, “Why Do People Regulate Their Emotions? A Taxonomy of Motives in Emotion Regulation,” *Personal. Soc. Psychol. Rev.*, vol. 20, no. 3, pp. 199–222, 2016, doi: 10.1177/1088868315586325.
- [36] P. R. Goldin and J. J. Gross, “Effects of Mindfulness-Based Stress Reduction (MBSR) on Emotion Regulation in Social Anxiety Disorder,” *Emotion*, vol. 10, no. 1, pp. 83–91, 2010, doi: 10.1037/a0018441.
- [37] P. Solomon et al., “Students’ perceptions of interprofessional learning through facilitated online learning modules,” *Med. Teach.*, vol. 32, no. 9, pp. 391–398, 2010, doi: 10.3109/0142159X.2010.495760.
- [38] N. Eisenberg, T. L. Spinrad, and N. D. Eggum, “Emotion-Related Self-Regulation and Its Relation to Children’s Maladjustment,” *Annu. Rev. Clin. Psychol.*, vol. 6, no. 1, pp. 495–525, 2010, doi: 10.1146/annurev.clinpsy.121208.131208.
- [39] J. Helmsen and F. Petermann, “Emotion regulation strategies and aggressive behavior of preschool children,” *Prax. Kinderpsychol. Kinderpsychiatr.*, vol. 59, no. 10, pp. 775–791, 2010, doi: 10.13109/prkk.2010.59.10.775.
- [40] J. L. Vaydich, “The influence of emotion regulation on aggressive behavior in the face of provocation,” 2011.

**View / Edit My Manuscript**[Submit Manuscript](#)[My Manuscripts](#)[View / Edit Profile](#)[Change Password](#)[Logout](#)**Journal Title**

Universal Journal of Educational Research

Manuscript Title

EFFECTIVENESS OF SELF-REGULATION OF EMOTION MODULES TO REDUCE NEGATIVE AGGRESSIVE BEHAVIOR OF STUDENT

Abstract

The problem of aggressive behavior is continuously more developing in form and intensity. The impact felt by victims and perpetrators of aggressive behavior is also more and more complex. One way to reduce aggressive behavior is to train students in self-regulation of emotion, which in this study the exercises are done with the help of modules. The purpose of this study is to determine the effectiveness of the self-regulation of emotion modules to reduce aggressive behavior. This study uses a quasi-experimental type with a nonequivalent control group design model. The instrument used in this study was a scale of aggressive behavior. The data analysis technique used is the independent sample t-test. The results of the study concluded that there was a significant difference in the aggressive behavior of students who were given self-regulation of emotion module interventions with students who were given traditional counseling interventions. The aggressive behavior of students who were given the self-regulation of emotion module intervention was lower than the aggressive behavior of students who were given traditional counseling interventions.

Keywords

aggressive behavior, self-regulation of emotion, modules

Copyright

Yes

History Records

Date	Latest Status	Editor Comment
2020-05-01	Final Publication	Your manuscript has been published and the electronic version is available online.
2020-04-19	Accepted for Publication	Your manuscript has been accepted for publication. Please complete the payment following the Payment Instructions sent by Daniel Anderson (comment.hrpub@gmail.com) within 2 weeks.
2020-04-09	Ready for Acceptance	Your manuscript will be accepted for publication. Please complete the payment following the Payment Instructions sent by Daniel Anderson (comment.hrpub@gmail.com) within 2 weeks.
2020-03-30	Revision Requested	The review report of your paper has been sent to your mailbox. If you fail to receive it, please contact Daniel Anderson(comment.hrpub@gmail.com). Or you can download the report by clicking the "Review Report(s)" at the right column. Please send the revised paper to Daniel Anderson.
2020-02-11	Under Peer Review	Your manuscript meets the general criteria for the journal and has been sent out for peer review. Usually, it takes 50 days or so to complete the peer review. The report will be sent to you by Daniel Anderson (comment.hrpub@gmail.com). Report is also downloadable by clicking the "Review Report(s)" at the right column.
2020-02-07	Initial Screening	Your manuscript has been assigned to editors for initial screening. The outcome of initial screening will be sent to you by Mark Robinson (preview.hrpub@gmail.com) within 5 business days.
2020-02-06	Submit Success	

Author Feedback

Submit

Cancel

Copyright © 2013 Horizon Research Publishing Ltd . All rights reserved.

Pada tanggal 12 Maret 2020 artikel mendapat balikan dari reviewer untuk merevisi konten artikel.

The screenshot shows a Gmail interface on a Windows desktop. The browser tabs include WhatsApp, HRPUB | Online Submission, and Revision after Peer Review. The search bar contains 'ujer'. The email is from Daniel Anderson (comment.hrpub@gmail.com) dated Mar 12, 2020, 7:22 PM. The email content is as follows:

Dear Wahyu Nanda Eka Saputra,

Thank you for your interest in publishing your work in HRPUB.

Your manuscript has now been peer reviewed and the comments are accessible in Word format.

Usually, we invite 2 peer reviewers for one manuscript. Compared with both review reports, the overlapped parts can be ignored. Please confirm all comments from the two reviewers have been effected in your paper.

We would be grateful if you could address the comments of the reviewers in a revised manuscript and answer all questions raised by reviewers in a cover letter.

Please download the publication agreement (http://www.hrpub.org/download/HRPUB_Publication_Agreement2020.pdf) and fill in the author name, manuscript title, manuscript ID and signature, then send a scanned version to us.

Please submit the revised paper to us by email in MS Word or LaTeX format within two weeks. Currently, the online submission system only accepts newly submitted papers.

Look forward to receiving your revised manuscript as soon as possible.

Please acknowledge receipt of this email.

The taskbar at the bottom shows several open Word documents titled 'Peer_Review_Rep...docx' and 'UJER-19515269.doc'. The system tray shows a temperature of 28°C Kabut and the time 11:56 PM.

Peer Review Report

Notes

Please return the completed report by email within 21 days;

About HRPUB	
Horizon Research Publishing, USA (HRPUB) is a worldwide open access publisher serving the academic research and scientific communities by launching peer-reviewed journals covering a wide range of academic disciplines. As an international academic organization for researchers & scientists, we aim to provide researchers, writers, academic professors and students the most advanced research achievements in a broad range of areas, and to facilitate the academic exchange between them.	
Manuscript Information	
Manuscript ID:	19515269
Manuscript Title:	Effectiveness of Self-Regulation of Emotion Modules to Reduce Negative Aggressive Behavior of Student
Evaluation Report	
General Comments	The study's purpose "is to determine the effectiveness of the self-regulation of emotion modules to reduce aggressive behavior." The study's results suggest that the aggressive behavior of students who utilized self-regulation of emotion modules was lower than students who were given traditional counseling approaches. Overall, the manuscript is well-written and flows nicely.
Advantage & Disadvantage	The study makes a modest contribution to the field. The study would be of some interest to school counselors and educational psychologists. The researchers acknowledge one of the limitations of the study is the research design.
How to improve	To enhance the manuscript, the following items need addressed: <ul style="list-style-type: none"> • Pronoun/Antecedent Agreement Throughout Manuscript: (adolescents..."him" needs to be "themselves") (Part I-paragraphs 3 and 5) (Humans..."him" needs to be "themselves" (Part 4-paragraph 6); (Student..."they" needs to be deleted) (Part 4-paragraph 8) • Part 1-paragraph 4 (first sentence needs rewritten) • Part 2.3-paragraph 1 (first sentence-"juniors" needs to be "junior") • Part 2.3-paragraph 1-How do we know that the students had high levels of aggressive behavior? How were they selected?
Please rate the following: (1 = Excellent) (2 = Good) (3 = Fair) (4 = Poor)	
Originality:	3
Contribution to the Field:	3
Technical Quality:	2
Clarity of Presentation :	2

Depth of Research:	3
Recommendation	
Kindly mark with a ■	
<input type="checkbox"/> Accept As It Is	
<input checked="" type="checkbox"/> Requires Minor Revision	
<input type="checkbox"/> Requires Major Revision	
<input type="checkbox"/> Reject	

Return Date: 3/6/20

Peer Review Report

Notes

Please return the completed report by email within 21 days;

About HRPUB	
Horizon Research Publishing, USA (HRPUB) is a worldwide open access publisher serving the academic research and scientific communities by launching peer-reviewed journals covering a wide range of academic disciplines. As an international academic organization for researchers & scientists, we aim to provide researchers, writers, academic professors and students the most advanced research achievements in a broad range of areas, and to facilitate the academic exchange between them.	
Manuscript Information	
Manuscript ID:	19515269
Manuscript Title:	Effectiveness of Self-Regulation of Emotion Modules to Reduce Negative Aggressive Behavior of Student
Evaluation Report	
General Comments	This study is very important for reduce negative aggressive behavior of high-school students. However, there are some issues that must be clarified.
Advantage & Disadvantage	The topic of this study is very important for student reducing their aggressive behavior. This study examine the difference of the level of aggressive behavior of groups of students who are given the intervention self-regulation of emotion modules and groups of students who are given conventional counseling interventions. However, the authors didn't descript the process of intervention, such as, how long each module conduct and what are the details. In addition, the process of the conventional counseling intervention should be descript in this study.

How to improve	<p>1 the authors should give more details of the process of two different intervention. Such as how long each module conduct and what specific method was done. And whether the process of the conventional counseling intervention include some emotional regulation should be stated.</p> <p>2 what kind of valid and reliability coefficients should be reported.</p> <p>3 the effect size of t-test should be reported.</p> <p>4 In the results part, we encouraged the authors report whether there are differences between two groups in four aspects of aggressive behavior.</p>
Please rate the following: (1 = Excellent) (2 = Good) (3 = Fair) (4 = Poor)	
Originality:	2
Contribution to the Field:	3
Technical Quality:	2
Clarity of Presentation :	3
Depth of Research:	3
Recommendation	
Kindly mark with a ■	
<input type="checkbox"/> Accept As It Is	
<input type="checkbox"/> Requires Minor Revision	
<input checked="" type="checkbox"/> Requires Major Revision	
<input type="checkbox"/> Reject	

Return Date: 2020/3/7

Peer Review Report

Notes

Please return the completed report by email within 21 days;

About HRPUB	
Horizon Research Publishing, USA (HRPUB) is a worldwide open access publisher serving the academic research and scientific communities by launching peer-reviewed journals covering a wide range of academic disciplines. As an international academic organization for researchers & scientists, we aim to provide researchers, writers, academic professors and students the most advanced research achievements in a broad range of areas, and to facilitate the academic exchange between them.	
Manuscript Information	
Manuscript ID:	19515269

Manuscript Title:	Effectiveness of Self-Regulation of Emotion Modules to Reduce Negative Aggressive Behavior of Student
Evaluation Report	
General Comments	Improving the aggressive behaviors of students is a pressing issue internationally. The authors should be applauded to address such an important topic in this study. However, more work should be done to improve the clarity of the literature review and method section, as well as the accuracy of the results section. Below are some comments:
Advantage & Disadvantage	<ol style="list-style-type: none"> 1. The self-regulation learning module is a critical independent variable of this study but limited information about the learning module was addressed in the literature review and method section. 2. The description of the research design and subject of the study was similar. Please eliminate duplicate information. 3. The results of the test of assumptions for the t-test could be moved to 2.5 data analysis so that the results section could be focused on the results of the t-test analysis. 4. The accuracy of the explanation of the t-test analysis should be reexamined to ensure the results and the following discussion are accurate. 5. The numbers reported in the text and table (e.g., 1,00 or 0,079) did not follow the APA style.
How to improve	<ol style="list-style-type: none"> 1. Please describe the theoretical background of the module in the literature and provide more information about the structure, content, and procedure of using the module in the method section. 2. It would be helpful for the readers to better understand the results if the author provides more demographic information about the background of the participants (e.g., gender, grade/age, criteria for determining the high level of aggressive behavior). In addition, the results of the manuscript could be enriched, if the author conducts further analysis (e.g, t-test on gender or F test on grade) of the data. 3. Please consult statistic books to check the explanation of the t-test results to ensure the accuracy of the results.
Please rate the following: (1 = Excellent) (2 = Good) (3 = Fair) (4 = Poor)	
Originality:	3
Contribution to the Field:	4
Technical Quality:	4
Clarity of Presentation :	4
Depth of Research:	4
Recommendation	
Kindly mark with a ■	
<input type="checkbox"/> Accept As It Is	
<input type="checkbox"/> Requires Minor Revision	
<input checked="" type="checkbox"/> Requires Major Revision	
<input type="checkbox"/> Reject	

Return Date: 3/21

Pada tanggal 2 April 2020, tim penulis melakukan perbaikan dan artikel yang sudah direvisi diupload kembali melalui email ditujukan kepada dewan editor.

The screenshot shows a Gmail interface with the following elements:

- Browser Tabs:** (2) WhatsApp, HRPUB | Online Submission - Ma, ID:19515269 - wahyu.saputra@b
- Address Bar:** https://mail.google.com/mail/u/0/#search/ujer/KtbxLrjKSthcfnwmttZZPTMDSbMjHPFVq
- Gmail Header:** Search for "ujer", "Active" status, and "UNIVERSITAS AHMAD DAHLAN" profile.
- Left Sidebar:** Compose, Mail (Inbox: 2, Starred), Chat (No conversations), Spaces (No spaces yet), Meet (New meeting, My meetings).
- Email Content:**
 - From: Wahyu Nanda Eka Saputra <wahyu.saputra@bk.uad.ac.id> to Daniel
 - Date: Thu, Apr 2, 2020, 12:38 AM
 - Subject: Dear editorial team
 - Body: "I have revised the manuscript entitled Effectiveness of Self-Regulation of Emotion to Reduce Negative Aggressive Behavior of Student. Thank you"
 - Attachments: 2 Attachments
 - HRPUB_Publicatio... (PDF)
 - UJER-19515269.doc (Word document)
- Taskbar:** Shows multiple instances of "Peer_Review_Rep...docx" and "UJER-19515269.doc", along with system tray information: 28°C Kabut, 11:57 PM.

Effectiveness of Self-Regulation of Emotion Modules to Reduce Negative Aggressive Behavior of Student

Purwadi¹, Wahyu Nanda Eka Saputra¹, Said Alhadi¹, Amien Wahyudi¹, Agus Supriyanto¹, Siti Muyana¹

¹Guidance and Counseling Department, Universitas Ahmad Dahlan, Yogyakarta, Indonesia

*Corresponding Author: wahyu.saputra@bk.uad.ac.id

Copyright©2018 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Abstract: The problem of aggressive behavior is continuously more developing in form and intensity. The impact felt by victims and perpetrators of aggressive behavior is also more and more complex. One way to reduce aggressive behavior is to train students in self-regulation of emotion, which in this study, the exercises are done with the help of modules. The purpose of this study is to determine the effectiveness of the self-regulation of emotion modules to reduce aggressive behavior. This study uses a quasi-experimental type with a nonequivalent control group design. The instrument used in this study was a scale of aggressive behavior. The data analysis technique used is the independent sample t-test. The results of the study concluded that there was a significant difference in the aggressive behavior of students reduced through self-regulation of emotion module interventions with students who reduced traditional counseling interventions. The aggressive behavior of students who reduced the self-regulation of emotion module intervention was lower than the aggressive behavior of students who reduced traditional counseling interventions.

Keywords: on-line aggression, violence, solution-focused brief counseling

1. Introduction

"Bhineka Tunggal Ika" is the primary motto of the Indonesian people, which is upheld by every citizen of Indonesia, including implemented in the school environment [1], [2]. The motto has the meaning that the Indonesian people have a variety of cultures, but they remain a unity. These cultural differences can lead to problems if there aren't support by the strong characteristics each Indonesian has. Therefore, character education to be implemented well in the educational settings of the era of the industrial revolution [3]. One of the characteristics that need to be built by adolescents is self-regulation [4]–[6]. This ability of self-regulation includes self-regulation of emotion, which adolescents need

to have the ability to be able to regulate the emotions that exist in themselves precisely and with their skills.

In the era of the industrial revolution 4.0, various shocks and problems arise in adolescents, both intrapersonal and interpersonal issues in schools. These problems can trigger other items when they are not competent to regulate emotions, and other issues arise that can harm themselves and others. Thus, it becomes a need for adolescents to be capable of foster comprehensible emotions when they are dealing with specific problems. The ability of adolescents to express bright emotions is related to adolescent depression and other psychopathological issues [7], [8].

The inability of adolescents to regulate the emotions that exist in themselves has an impact on the emergence of other forms of maladaptive behavior, one of which is aggressive behavior [9], [10]. This aggressive behavior is one of the instincts that exist in every human, which in Freud's concept of psychoanalysis is called Thanatos [11]. Also, adolescents who show aggressive behavior, this is because they are not able to suppress the feelings of frustration they experience, so they overflow in these destructive behaviors [12].

The problem of aggressive behavior is in the spotlight in Indonesian schools, even has caused death victims. The level of aggressive behavior of Vocational high-school students in Yogyakarta City, Indonesia is extremely tall at 5%; lofty category by 26%; average category by 40%; nasty category by 21%; very base categories by 8% [13]. The aggressive behavior of students in Yogyakarta, Indonesia at the junior high school level was in the excessively towering category at 1%; high category 13%; medium category 37%; paltry category 43%; a very low category of 6% [14]. In fact, the level of aggressive behavior of male and female students in Yogyakarta, Indonesia at the vocational high school level tends to be the same [15]. Problems caused aggressive behavior in the spotlight in schools.

One of the factors causing the emergence of aggressive behavior in adolescents is the failure of students to regulate the emotions that exist in themselves. The inability of adolescents to regulate emotions can affect various problems and psychopathological risks to adolescents [16]–[19]. Based on these data, it becomes the basis for school

counselors to build good self-regulation of emotion skills so that they can suppress aggressive behavior that is often raised.

In this study, the counselor trains the ability of self-regulation of emotion with the help of modules. This compiled module can facilitate students to learn and practice independently in the self-regulation of emotion. Self-regulation of emotion consists of seven components, namely receiving, evaluating, triggering, searching, formulating, implementing, and assessing [20]. Thus, the purpose of this study is to determine the effectiveness of self-regulation emotion modules for reducing aggressive behavior. The results of this study are the reference for school counselors in their efforts to help students overcome their aggressive behavior.

Previous studies have found that modules of self-regulation of emotion right appropriate for school counselors to implement in helping students reduce aggressive behavior [21]. Another research also concludes that self-regulation is a way for counselors to help students reduce aggressive behavior by students [22]. These studies provide a basis for strengthening the testing of the regulation of emotion modules to reduce aggressive behavior.

2. Method

2.1 Research design

This experimental study uses a quasi-experimental type with a nonequivalent control group, experiment research design. The subjects involved in this study were 84 students who were divisible into two groups by not randomly. The model is not the same as the true experimental type, where two groups are dividedly into two randomly. One group became an experimental group that applied intervention self-regulation of emotion modules, and one group implemented conventional counseling intervention.

2.2 Data collection

This study uses an aggressive behavior scale (ABS) instrument. ABS divided using four aspects of aggressive behavior, namely, physical aggression, verbal aggression, anger, and hostility [23]. ABS consists of 29 items that are declared valid with coefficients of 0,321 to 0,769. The reliability coefficient on this instrument is 0,871 (the high category).

2.3 Subject of study

Subjects involved in this study were 84 junior-high-school students in a specialized area of Yogyakarta who had a high level of aggressive behavior. The research subjects divisible into two groups. Unlike true experimental design studies, in these quasi-experimental design study groups aren't divided randomly. One group called an experimental group that

reduced intervention self-regulation of emotion modules, and one group called a control group that reduced a conventional counseling intervention. The subjects of this study determined using a simple random sampling technique after the chosen subjects implemented an instrument in the form of a questionnaire to be able to know the condition of students' self-regulation emotion.

2.4 Research stages

This research conducted in seven stages. First, the research team formulated research objectives. Second, the research team formulated the research design and division of work of the research team. Third, formulate data collection instruments. Fourth, test the instrument to determine the validity and reliability of the instrument. Fifth, spread the instruments to do the pretest. Sixth, conduct counseling interventions, both in the experimental and control groups. Seventh, conduct posttest and analysis of research data to determine the effectiveness of self-regulation of emotion to reduce aggressive behavior.

2.5 Data analysis technique

Data analysis techniques for this study used independent sample t tests. This data analysis technique is a parametric test to identify significant differences in mean or mean between two free groups with interval / ratio data scales. The two free groups referred to here are two groups that are not paired, meaning the source of data comes from different subjects. The results of this data analysis are a comparison of the level of aggressive behavior of groups of students who reduced the intervention self-regulation of emotion modules and groups of students who implemented conventional counseling interventions.

3. Results

The feasibility of the product or modules has been rating by the experts and the practitioner's judgment. The following table shows the product feasibility by the expert and practitioner. Cohen's Kappa Coefficient Inter-rater reliability analysis showed that there is a significant agreement between expert and the practitioner in the level of 5% significance related to the product being developed [21].

Table 1. Results of Expert's and Practitioner's Judgement

Aspect	Average Score
Product overview	3,07
Product accuracy in reducing aggressive behavior	3,27
Product usability for counselor in reducing students' aggressive behavior	3,1
Average	3,18

Data analysis techniques using the Independent sample t-test require several assumptions that must do. The first assumption is that both data distributed. The normality test in this study uses the Kolmogorov-Smirnov analysis described in table 2.

Table 2. Test of Kolmogorov-Smirnov

	Strategy	Kolmogorov-Smirnov ^a		
		Statistic	df	Sig.
AggrBehav	1,00	,129	42	,078
	2,00	,128	42	,079

In table 2, described that the coefficient Sig. in the group of students who implemented the intervention self-regulation of emotion modules was 0,078 and the coefficient Sig. in the group of students who applied conventional counseling interventions was 0,079. Sig coefficient. In both groups is higher than 0,05. Based on these coefficients, it is the conclusion that the two data distributed, so the first assumption, that is, normally distributed data, has been fulfilled.

The second assumption in this study is comparable data—the homogeneity test described in table 3.

Table 3. Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Based on Median	,000	1	82	1,000	
Based on Median and with adjusted df	,000	1	81,995	1,000	
Based on trimmed mean	,000	1	82	1,000	

The table above shows the homogeneity test results with Levene's test method. The Levene's value pictured in the Value-based on the Mean row, 0,000 with the Sig coefficient. Amounted to 0,994 was higher than 0,05, which means there is a similarity between the variances between groups or, which means homogeneous. Thus, the second assumption in this study has according to the hypothesis.

After the assumption test is carried out and analyzed using the Independent sample t-test. The results of the analysis using the Independent sample t-test found that there were significant differences in the level of aggressive behavior in

the group of students who reduced self-regulation of emotion module's interventions with groups of students who implemented conventional counseling interventions. Based on the average level of aggressive behavior, students who implementation self-regulation of emotion modules had lower levels of aggressive behavior compared to the group of students who implemented conventional counseling interventions. The results of data analysis using SPSS and assisted Independent sample t-test can describe in Tables 4 and 5.

Table 4. Group statistics

	Strategy	N	Mean	Std. Deviation	Std. Error Mean
Aggr Behav	1,00	42	78,7619	10,93620	1,68749
	2,00	42	95,7619	10,97849	1,69402

In table 4, the statistical group can describe that N is 42 for each treatment. The mean of the experimental group is 78.7619, and the control group is 95.7619. The values of standard deviation and standard error of the experimental group were lower than the control group. The standard error from mean is to describe the average distribution of a sample against the ordinary all possible samples.

In table 4, it appears that the f obtained is 0,000 with a significance of 0,994, which means it is higher than 0,05 (0,994 > 0,05). The variant of the population group is homogeneous. The homogeneity requirements for comparative analysis are met. The results of the data analysis obtained a coefficient of t count of -7,110 with a probability of 0,000. The probability of 0,000 when compared to 0,05, the probability value is smaller, which means there are differences in aggressive student behavior between groups given the intervention self-regulation of emotion modules and groups that implemented conventional counseling interventions. If analyzed based on the average score of aggressive behavior, the count of aggressive behavior groups of students who reduced self-regulation of emotion modules intervention was lower (78,7619) than the scores of aggressive behavior of groups of students who implementation conventional counseling interventions (95,7619). It can conclude that the aggressive behavior of students who reduced self-regulation of emotion modules interventions decreases more significantly than students to was implementation conventional counseling interventions.

Table 5. Independent sample test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Std. Error Difference
Aggr Behav	Equal variances assumed	,000	,994	-7,110	82	2,39109	-17,00000
	Equal variances not assumed			-7,110	81,99	2,39109	-17,00000

4. Discussion

The results of the study concluded that self-regulation modules could effectively help students reduce aggressive behavior. The conclusion described that the aggressive behavior within the group of students who implemented the self-regulation of the emotion module's intervention was lower than the score of the group's aggressive behavior of students who implementation conventional counseling interventions. The results from this study prove that school counselors can utilize self-regulation of emotion modules to help students reduce aggressive behavior.

Aggressive behavior is still a severe problem that occurs in adolescents where this behavior involves elements such as biological elements, personality development, social processes, basic cognitive processes, short-term and long-term processes, and decision-making processes [24]. Aggressive behavior is a form of action that intentionally hurts others, both physically and non-physically. Aggressive behavior is a complex phenomenon that operates at several levels, with different meanings, and application through diverse forms of violent behavior [25]. Aggressive behavior is physical or verbal behavior that aims to hurt others [26]. Aggressive behavior is born to respond to threats (according to perception or exist) originating from other individuals or groups outside the group [27].

Aggressive behavior as behavior or behavioral tendencies whose intention is to hurt others both physically and psychologically with the aggressiveness itself has four aspects, namely verbal aggression, anger, hostility, physical aggression [23]. These four aspects of aggressive behavior form the basis of the preparation of instruments in this study, precisely the scale of aggressive behavior. Even now, there is also a new aggressive face, online aggression [28]–[31]. This aggressive behavior model shown by adolescence by sending messages aimed at hurting others through social media. This aggressive behavior model can used in a manner today internationally, especially in Indonesia.

One way to reduce aggressive behavior is to help students learn to optimize the self-regulation of emotion. Self-regulation of emotions used for someone in regulating expression, making decisions, and others. Emotional regulation is an intrinsic experience that produces emotions and is, after that, informed of cognitive abilities to give emotion an influence and sense of behavior [32]. Emotions occur from a stimulus in a person and next reflected into action.

Emotional regulation becomes one of the aspects of concern for individuals who engage in aggressive behavior. Various studies have concluded that the high or low level of aggressive behavior of students is affect by the high or low ability of students to regulate their emotions [10], [33]. The strength is the basis for counselors to develop the skill of self-regulation of emotion to help students get out of aggressive behavior problems that are often occurring. Another literature also mentions that self-regulation of emotion is an alternative strategy for counselors to reduce

aggressive behavior [34].

Humans can regulate the emotions that exist in themselves, of course, in their way too. One of the literature states that someone regulates the emotions that exist in him caused by two motives, namely hedonistic and instrumental motives [35]. People who pursue hedonistic purposes, look for emotions to increase the ratio of pleasure that exists in themselves to the pain that is occurring. Whereas people who have instrumental goals, they target the potential benefits of emotions apart from their direct phenomenology. A school counselor who facilitates the development of self-regulation of emotion, encourage students to have instrumental motives, so they can look for potential benefits when regulating their emotions, and can reduce aggressive behavior.

Self-regulation of emotion can improve symptoms of anxiety, depression, and self-esteem of individual users of the substance. Activities in the self-regulation of emotion training stage are focused on breathing (not focused on distractions), thus showing changes, namely (a) reducing the experience of negative emotions, (b) reducing amygdala activity, and (c) increasing activity in the brain involved in attention dissemination [36]. Self-regulation of emotion generally consists of receiving or accepting, evaluating or evaluating, triggering or making a change, searching or finding a solution, formulating or designing a plan, implementing or implementing a strategy, assessing or measuring the effectiveness of the approach that has been a plan.

In this study, counselors facilitate students to learn to optimize the self-regulation of emotion by using modules. The results of research on the use of modules stated that the learning process of students who use the help of modules could encourage students to solve problems collaboratively, clarify their roles, and provide information from their perspectives [37]. Based on these results, it can reveal facts that a student who learns self-regulation of emotion by using modules, can learn independently to solve aggressive behavior problems according to their perspectives and ways.

Modules used to help students develop self-regulation of emotion to reduce aggressive behavior of categorized as appropriate for use by counselors [21]. The principal components in the module consist of six elements, namely receiving, evaluating, triggering, searching, formulating, implementing, and assessing [21]. The seven principal components in the self-regulation of emotion modules can facilitate students to reduce aggressive behavior that is occurring. In this research process, students are training in emotional self-regulation skills that have been explained in detail in the module, thus leading to a directive method in which students must be more active in applying emotional self-regulation skills.

This research is supported by other studies, which conclude that Emotion-Related Self-Regulation can assist students in improving student adjustment in the school environment [38]. However, in this study, self-regulation of emotion was used to enhance student adjustment, while this

study can reduce aggressive behavior. In this study also self-regulation of emotion did not involve students' independence in learning. In this study, the emphasis was on the aspect of student independence in education because the self-regulation of emotion can be developed with helping by modules.

Other studies have concluded that self-regulation of emotion strategies can be used by counselors to reduce aggressive behavior effectively [39]. However, in this study, the identified aggressive behavior focused on aspects of physically and relationally aggressive. In contrast, in this study, aggressive behavior was recognized with more specific forms, namely physical, verbal, anger, and hostility. The study also implemented on preschool children. So emotional regulation strategies are still can discussed whether children of this age applied with emotional regulation strategies. In contrast to study in which the subjects involved were junior high school-aged children, which in terms of developmental level, they could train yourself to regulate the emotions that exist in themselves.

Other studies also concluded that emotion regulation influences aggressive behavior that arises because of the provocation from others [40]. However, this research can't be classified as correlation research, and there is no attempt to identify the effect of specific strategies implemented by counselors to reduce aggressive behavior. Whereas in this study ranked as experimental research, which aims to test the effectiveness of self-regulation of emotion modules to reduce aggressive behavior. In this study also the identified aggressive behavior was limited to aggressive behavior in the face of provocation or reactive aggressive behavior, whereas in this study, the aggressive behavior that could be in the form of reactive or proactive.

Aggressive behavior that can be minimized, can suppress the emergence of negative perceptions of the school climate in students. Negative perceptions of the school climate are proven to reduce academic performance [41]. School counselors can make various efforts to suppress the emergence of aggressive behavior, among others by using the help of the self-regulation of emotion module [21], implementing a peace counseling approach [42], and solution-focused briefing counseling [43].

This study has limitations. One limitation of this study is the research design that uses a quasi-experimental design, and the two groups aren't randomly divided like true experimental design research. In subsequent studies, the assignment of research subjects to the experimental and control groups should be implementation randomly (Random Assignment), so that the internal validity is high.

5. Conclusions

Aggression behavior becomes a problem that has increasingly high complexity. In this research, it has revealed that one of the counseling techniques that used self-regulation of emotion modules can be used to help students

reduce aggressive behavior. Counselors help counselees develop self-regulation of emotion by involving seven principal components, namely receiving, evaluating, triggering, searching, formulating, implementing, and assessing. This research should be a reference for counselors to use self-regulation of emotion modules to help the guidance and counseling program in building a culture of peace in the school environment.

Acknowledgements

Thank you to the Ministry of Research and Technology of the Republic of Indonesia for providing material support for this research. A thank you also to Universitas Ahmad Dahlan for facilitating the completion of this research and producing new work, namely the self-regulation of emotion modules.

REFERENCES

- [1] M. I. Farisi, "Bhinneka Tunggal Ika [Unity in Diversity]: From Dynastic Policy to Classroom Practice," *J. Soc. Sci. Educ.*, vol. 13, no. 3, pp. 83–89, 2014, doi: 10.2390/jsse.
- [2] I. Hambali and M. Gipayana, "A cognitive stage-experiential psycho-educational guidance model to enhance the Bhineka Tunggal Ika (Unity in diversity) awareness," *J. Soc. Sci.*, vol. 5, no. 1, pp. 19–28, 2016, doi: 10.25255/jss.2016.5.1.19.28.
- [3] O. R. P. R. Linge, F. Khoirunnisa, and F. S. Silitonga, "Character Education Based on Psychology Perspective in the Industrial Revolution Era 4.0," vol. 295, no. ICETeP 2018, pp. 263–265, 2019, doi: 10.2991/icetep-18.2019.63.
- [4] P. Alex Linley et al., "Character strengths in the United Kingdom: The VIA Inventory of Strengths," *Pers. Individ. Dif.*, vol. 43, no. 2, pp. 341–351, 2007, doi: 10.1016/j.paid.2006.12.004.
- [5] C. Seligman, Martin E.P., Park, Nansook and Peterson, "The VIA classification of character strengths," *VIA Institute on Character*. 2004.
- [6] Via Institute On Character, "Character Strengths, Character Building Experts: VIA Character," *Via Institute On Character*, 2017. [Online]. Available: <https://www.viacharacter.org/www/>.
- [7] J. Gruber et al., "Positive Emotion Specificity and Mood Symptoms in an Adolescent Outpatient Sample," *Cognit. Ther. Res.*, vol. 41, no. 3, pp. 393–405, 2017, doi: 10.1007/s10608-016-9796-7.
- [8] A. D. Kendall et al., "Measuring Positive Emotion With the Mood and Anxiety Symptom Questionnaire," *Assessment*, vol. 23, no. 1, pp. 86–95, 2016, doi: 10.1177/1073191115569528.

- [9] D. S. Chester, L. M. Merwin, and C. N. Dewart, "Maladaptive perfectionism's link to aggression and self-harm: Emotion regulation as a mechanism," *Aggress. Behav.*, vol. 41, no. 5, pp. 443–454, 2015, doi: 10.1002/ab.21578.
- [10] T. Robertson, M. Daffern, and R. S. Bucks, "Emotion regulation and aggression," *Aggress. Violent Behav.*, vol. 17, no. 1, pp. 72–82, 2012, doi: 10.1016/j.avb.2011.09.006.
- [11] F. Caropreso, "The death instinct and the mental dimension beyond the pleasure principle in the works of Spielrein and Freud," *Int. J. Psychoanal.*, vol. 98, no. 6, pp. 1741–1762, 2017, doi: 10.1111/1745-8315.12630.
- [12] G. Eissa and S. W. Lester, "Supervisor role overload and frustration as antecedents of abusive supervision: The moderating role of supervisor personality," *J. Organ. Behav.*, vol. 38, no. 3, pp. 307–326, 2017, doi: 10.1002/job.2123.
- [13] W. N. . Saputra and I. B. Handaka, "Perilaku Agresi Pada Siswa SMK di Yogyakarta," *Jurnal Fokus Konseling*, vol. 4, no. 1, pp. 1–8, 2018.
- [14] S. Alhadi, P. Purwadi, S. Muyana, W. N. E. Saputra, and A. Supriyanto, "Agresivitas Siswa SMP di Yogyakarta," *J. Fokus Konseling*, vol. 4, no. 1, p. 93, 2018, doi: 10.26638/jfk.507.2099.
- [15] W. N. E. Saputra, N. Hanifah, and D. N. Widagdo, "Perbedaan Tingkat Perilaku Agresi Berdasarkan Jenis Kelamin pada Siswa Sekolah Menengah Kejuruan Kota Yogyakarta," *J. Kaji. Bimbing. dan Konseling*, vol. 2, no. 4, pp. 142–147, 2017, doi: 10.17977/um001v2i42017p142.
- [16] K. A. McLaughlin, M. L. Hatzenbuehler, D. S. Mennin, and S. Nolen-Hoeksema, "Emotion dysregulation and adolescent psychopathology: A prospective study," *Behav. Res. Ther.*, vol. 49, no. 9, pp. 544–554, 2011, doi: 10.1016/j.brat.2011.06.003.
- [17] K. Keenan, "Emotion Dysregulation as a Risk Factor for Child Psychopathology," *Clin. Psychol. Sci. Pract.*, vol. 7, no. 4, pp. 418–434, 2000, doi: 10.1093/clipsy/7.4.418.
- [18] T. P. Beauchaine and D. Cicchetti, "Emotion dysregulation and emerging psychopathology: A transdiagnostic, transdisciplinary perspective," *Development and Psychopathology*, vol. 31, no. 3, pp. 799–804, 2019, doi: 10.1017/S0954579419000671.
- [19] A. Bazarnik, "Emotion dysregulation and psychopathology in epilepsy," *Pol. Merkur. Lekarski*, vol. 44, no. 264, pp. 302–307, 2018.
- [20] B. J. Knox, R. G. Lugo, Ø. Jøsok, K. Helkala, and S. Sütterlin, "Towards a Cognitive Agility Index: The Role of Metacognition in Human Computer Interaction," in *International Conference on Human-Computer Interaction*, 2017, vol. 1, pp. 243–250.
- [21] S. Alhadi, W. N. E. Saputra, Purwadi, A. Wahyudi, A. Supriyanto, and S. Muyana, "Self-Regulation of Emotion Module to Reduce Aggressive Behavior," *Advances in Social Science, Education and Humanities Research*, vol. 387, pp. 23–26, 2020, doi: 10.2991/icci-19.2019.6.
- [22] C. N. DeWall, R. F. Baumeister, T. F. Stillman, and M. T. Gailliot, "Violence restrained: Effects of self-regulation and its depletion on aggression," *J. Exp. Soc. Psychol.*, vol. 43, no. 1, pp. 62–76, 2007, doi: 10.1016/j.jesp.2005.12.005.
- [23] A. H. Buss and M. Perry, "The Aggression Questionnaire," *J. Pers. Soc. Psychol.*, vol. 63, no. 3, pp. 452–459, 1992, doi: 10.1037/0022-3514.63.3.452.
- [24] C. N. Dewart, C. A. Anderson, and B. J. Bushman, "The general aggression model: Theoretical extensions to violence," *Psychol. Violence*, vol. 1, no. 3, pp. 245–258, 2011, doi: 10.1037/a0023842.
- [25] J. M. Ramirez, "Some dichotomous classifications of aggression according to its function," *J. Organ. Transform. Soc. Chang.*, vol. 6, no. 2, pp. 85–101, 2009, doi: 10.1386/jots.6.2.85_1.
- [26] D. Myers, *Social psychology*. New York: Mc Graw-Hill, 2012.
- [27] V. V. MacLaren, L. A. Best, and E. E. Bigney, "Aggression-hostility predicts direction of defensive responses to human threat scenarios," *Pers. Individ. Dif.*, vol. 49, no. 2, pp. 142–147, 2010, doi: 10.1016/j.paid.2010.03.024.
- [28] D. M. Law, J. D. Shapka, J. F. Domene, and M. H. Gagné, "Are Cyberbullies really bullies? An investigation of reactive and proactive online aggression," *Comput. Human Behav.*, vol. 28, no. 2, pp. 664–672, 2012, doi: 10.1016/j.chb.2011.11.013.
- [29] D. M. Law, J. D. Shapka, and B. F. Olson, "To control or not to control? Parenting behaviours and adolescent online aggression," *Comput. Human Behav.*, vol. 26, no. 6, pp. 1651–1656, 2010, doi: 10.1016/j.chb.2010.06.013.
- [30] A. G. Zimmerman and G. J. Ybarra, "Online aggression: The influences of anonymity and social modeling," *Psychol. Pop. Media Cult.*, vol. 5, no. 2, pp. 181–193, 2016, doi: 10.1037/ppm0000038.

- [31] N. E. Werner, M. F. Bumpus, and D. Rock, "Involvement in internet aggression during early adolescence," *J. Youth Adolesc.*, vol. 39, no. 6, pp. 607–619, 2010, doi: 10.1007/s10964-009-9419-7.
- [32] M. Vandekerckhove, C. Von Scheve, S. Ismer, S. Jung, and S. Kronast, *Regulating Emotions: Culture, Social Necessity, and Biological Inheritance*. Australia: Blackwell Publishing, 2009.
- [33] T. N. Sullivan, R. C. Garthe, E. A. Goney, M. M. Carlson, and K. L. Behrhorst, "Longitudinal Relations between Beliefs Supporting Aggression, Anger Regulation, and Dating Aggression among Early Adolescents," *J. Youth Adolesc.*, vol. 46, no. 5, pp. 982–994, 2017, doi: 10.1007/s10964-016-0569-0.
- [34] P. Purwadi and S. Said Alhadi, "Self-Regulation of Emotion as an Alternative to Reduce Student's Aggressiveness," *Adv. Soc. Sci. Educ. Humanit. Res.*, vol. 173, pp. 2003–2005, 2018, doi: 10.2991/icei-17.2018.69.
- [35] M. Tamir, "Why Do People Regulate Their Emotions? A Taxonomy of Motives in Emotion Regulation," *Personal. Soc. Psychol. Rev.*, vol. 20, no. 3, pp. 199–222, 2016, doi: 10.1177/1088868315586325.
- [36] P. R. Goldin and J. J. Gross, "Effects of Mindfulness-Based Stress Reduction (MBSR) on Emotion Regulation in Social Anxiety Disorder," *Emotion*, vol. 10, no. 1, pp. 83–91, 2010, doi: 10.1037/a0018441.
- [37] P. Solomon et al., "Students' perceptions of interprofessional learning through facilitated online learning modules," *Med. Teach.*, vol. 32, no. 9, pp. 391–398, 2010, doi: 10.3109/0142159X.2010.495760.
- [38] N. Eisenberg, T. L. Spinrad, and N. D. Eggum, "Emotion-Related Self-Regulation and Its Relation to Children's Maladjustment," *Annu. Rev. Clin. Psychol.*, vol. 6, no. 1, pp. 495–525, 2010, doi: 10.1146/annurev.clinpsy.121208.131208.
- [39] J. Helmsen and F. Petermann, "Emotion regulation strategies and aggressive behavior of preschool children," *Prax. Kinderpsychol. Kinderpsychiatr.*, vol. 59, no. 10, pp. 775–791, 2010, doi: 10.13109/prkk.2010.59.10.775.
- [40] J. L. Vaydich, "The influence of emotion regulation on aggressive behavior in the face of provocation," 2011.
- [41] W. N. E. Saputra, A. Supriyanto, B. Astuti, Y. Ayriza, and S. Adiputra, "The Effect of Student Perception of Negative School Climate on Poor Academic Performance of Students in Indonesia," *Int. J. Learn. Teach. Educ. Res.*, vol. 19, no. 2, pp. 279–291, 2020.
- [42] W. N. E. Saputra et al., "Peace Counseling Approach (PCA) to Reduce Negative Aggressive Behavior of Students," *Univers. J. Educ. Res.*, vol. 8, no. 2, pp. 631–637, 2020.
- [43] C. D. Wiretna, W. N. E. Saputra, A. Muarifah, and M. Barida, "Effectiveness of solution-focused brief counseling to reduce online aggression of student," *Univers. J. Educ. Res.*, vol. 8, no. 3, pp. 1092–1099, 2020.

HRPUB Publication Agreement

Horizon Research Publishing (HRPUB) is a worldwide open access publisher with over 50 peer-reviewed journals covering a wide range of academic disciplines. As an international academic organization, we aim to enhance the academic atmosphere, show the outstanding research achievement in a broad range of areas, and to facilitate the academic exchange between researchers.

The LICENSEE is Horizon Research Publishing(HRPUB), and

The LICENSOR is Purwadi

The purpose of this agreement is to establish a mutually beneficial working relationship between The LICENSEE and The LICENSOR.

WHEREAS it is the goal of the LICENSEE to provide an open access platform and
WHEREAS the LICENSOR is willing to furnish electronically readable files in accordance with the terms of this Agreement:

Manuscript Title: Effectiveness of Self-Regulation of Emotion Modules to Reduce
Negative Aggressive Behavior of Student

Manuscript ID: 19515269

It is mutually agreed as follows:

COPYRIGHT:

1. LICENSOR retains all copyright interest or it is retained by other copyright holder, as appropriate and agrees that the manuscript remains permanently open access in LICENSEE's site under the terms of the Creative Commons Attribution International License (CC BY). LICENSEE shall have the right to use and archive the content for the purpose of creating a HRPUB record and may reformat or paraphrase to benefit the display of the HRPUB record.

LICENSEE RESPONSIBILITIES:

2. LICENSEE shall:
- Correct significant errors to published records for critical fields, described as the title, author, or bibliographic citation fields;
 - Provide free access to the full-text content of published articles;
 - Provide availability to the perpetual archive with exception for unavailability due to maintenance of the server, installation or testing of software, loading of data, or downtime outside the control of the LICENSEE.

LICENSOR RESPONSIBILITIES:

3. LICENSOR shall confirm that:
- Copyrighted materials have not been used in the manuscript without permission
 - The manuscript is free from plagiarism and has not been published previously;
 - All of the facts contained in the material are true and accurate.

Please sign to indicate acceptance of this Agreement.

LICENSOR



Signature of Authorized LICENSOR Representative
Purwadi

Date

LICENSEE – Horizon Research Publishing



Signature of HRPUB Officer

Date

Effectiveness of Self-regulation of Emotion Modules to Reduce Negative Aggressive Behavior of Students

Purwadi, Wahyu Nanda Eka Saputra^{*}, Said Alhadi, Amien Wahyudi, Agus Supriyanto, Siti Mulyana

Department of Guidance and Counseling, Universitas Ahmad Dahlan, Indonesia

Received February 6, 2020; Revised April 2, 2020; Accepted April 19, 2020

Copyright©2020 by authors, all rights reserved. Authors agree that this article remains permanently open access under the terms of the Creative Commons Attribution License 4.0 International License

Abstract The problem of aggressive behavior is continuously more developing in form and intensity. The impact felt by victims and perpetrators of aggressive behavior is also more and more complex. One way to reduce aggressive behavior is to train students in self-regulation of emotion, for which in this study, the exercises are done with the help of modules. The purpose of this study is to determine the effectiveness of the self-regulation of emotion modules to reduce aggressive behavior. This study uses a quasi-experimental type with a nonequivalent control group design. The instrument used in this study was a scale of aggressive behavior. The data analysis technique used is the independent sample t-test. The results of the study concluded that there was a significant difference in the aggressive behavior of students, who reduced through self-regulation of emotion module interventions from students who reduced traditional counseling interventions. The aggressive behavior of students, who reduced the self-regulation of emotion module intervention was lower than the aggressive behavior of students who reduced traditional counseling interventions.

Keywords Aggressive Behavior, Self-regulation of Emotion, Modules

1. Introduction

"Bhineka Tunggal Ika" is the primary motto of the Indonesian people, which is upheld by every citizen of Indonesia, including implemented in the school environment [1], [2]. The motto has the meaning that the Indonesian people have a variety of cultures, but they remain a unity. These cultural differences can lead to problems if there aren't supports by the strong characteristics each Indonesian has. Therefore, character education to be implemented well in the educational

settings of the era of the industrial revolution [3]. One of the characteristics that need to be built by adolescents is self-regulation [4]–[6]. This ability of self-regulation includes self-regulation of emotion, which adolescents need to have the ability to be able to regulate the emotions that exist in themselves precisely and with their skills.

In the era of the industrial revolution 4.0, various shocks and problems arise in adolescents, both intrapersonal and interpersonal issues in schools. These problems can trigger other items when they are not competent to regulate emotions, and other issues arise that can harm themselves and others. Thus, it becomes a need for adolescents to be capable of foster comprehensible emotions when they are dealing with specific problems. The ability of adolescents to express bright emotions is related to adolescent depression and other psychopathological issues [7], [8].

The inability of adolescents to regulate the emotions that exist in themselves has an impact on the emergence of other forms of maladaptive behavior, one of which is aggressive behavior [9], [10]. This aggressive behavior is one of the instincts that exist in every human, which in Freud's concept of psychoanalysis is called Thanatos [11]. Also, adolescents who show aggressive behavior, this is because they are not able to suppress the feelings of frustration they experience, so they overflow in these destructive behaviors [12].

The problem of aggressive behavior is in the spotlight in Indonesian schools, even has caused death victims. The level of aggressive behavior of Vocational high-school students in Yogyakarta City, Indonesia is extremely tall at 5%; lofty category by 26%; average category by 40%; nasty category by 21%; very base categories by 8% [13]. The aggressive behavior of students in Yogyakarta, Indonesia at the junior high school level was in the excessively towering category at 1%; high category 13%; medium category 37%; paltry category 43%; a very low category of 6% [14]. In fact, the level of aggressive behavior of male and female students in Yogyakarta, Indonesia at the vocational high school level tends to be the

same [15]. Problems caused aggressive behavior in the spotlight in schools.

One of the factors causing the emergence of aggressive behavior in adolescents is the failure of students to regulate the emotions that exist in themselves. The inability of adolescents to regulate emotions can affect various problems and psychopathological risks to adolescents [16]–[19]. Based on these data, it becomes the basis for school counselors to build good self-regulation of emotion skills so that they can suppress aggressive behavior that is often raised.

In this study, the counselor trains the ability of self-regulation of emotion with the help of modules. This compiled module can facilitate students to learn and practice independently in the self-regulation of emotion. Self-regulation of emotion consists of seven components, namely receiving, evaluating, triggering, searching, formulating, implementing, and assessing [20]. Thus, the purpose of this study is to determine the effectiveness of self-regulation emotion modules for reducing aggressive behavior. The results of this study are the reference for school counselors in their efforts to help students overcome their aggressive behavior.

Previous studies have found that modules of self-regulation of emotion are right appropriate for school counselors to implement in helping students reduce aggressive behavior [21]. Another research also concludes that self-regulation is a way for counselors to help students reduce aggressive behavior by students [22]. These studies provide a basis for strengthening the testing of the regulation of emotion modules to reduce aggressive behavior.

2. Method

2.1. Research Design

This experimental study uses a quasi-experimental type with a nonequivalent control group, experiment research design. The subjects involved in this study were 84 students who were divisible into two groups by not randomly. The model is not the same as the true experimental type, where two groups are divided into two randomly. One group became an experimental group that applied intervention self-regulation of emotion modules, and one group implemented conventional counseling intervention.

2.2. Data Collection

This study uses an aggressive behavior scale (ABS) instrument. ABS is divided using four aspects of aggressive behavior, namely, physical aggression, verbal aggression, anger, and hostility [23]. ABS consists of 29 items that are declared valid with coefficients of 0,321 to 0,

769. The reliability coefficient on this instrument is 0,871 (the high category).

2.3. Subject of Study

Subjects involved in this study were 84 junior-high-school students in a specialized area of Yogyakarta who had a high level of aggressive behavior. The research subjects were divided into two groups. Unlike true experimental design studies, in these quasi-experimental design study groups aren't divided randomly. One group was called an experimental group that reduced intervention self-regulation of emotion modules, and one group was called a control group that reduced a conventional counseling intervention. The subjects of this study were determined using a simple random sampling technique after the chosen subjects implemented an instrument in the form of a questionnaire to be able to know the condition of students' self-regulation emotion.

2.4. Research Stages

This research was conducted in seven stages. First, the research team formulated research objectives. Second, the research team formulated the research design and division of work of the research team. Third, formulate data collection instruments. Fourth, test the instrument to determine the validity and reliability of the instrument. Fifth, spread the instruments to do the pretest. Sixth, conduct counseling interventions, both in the experimental and control groups. Seventh, conduct posttest and analysis of research data to determine the effectiveness of self-regulation of emotion to reduce aggressive behavior.

2.5. Data Analysis Technique

Data analysis techniques for this study used independent sample t tests. This data analysis technique is a parametric test to identify significant differences in mean or mean between two free groups with interval / ratio data scales. The two free groups referred here are two groups that are not paired; meaning the source of data comes from different subjects. The results of this data analysis are a comparison of the level of aggressive behavior of groups of students who reduced the intervention self-regulation of emotion modules and groups of students who implemented conventional counseling interventions.

3. Results

The feasibility of the product or modules has been rating by the experts and the practitioner's judgment. The following table shows the product feasibility by the expert and practitioner. Cohen's Kappa Coefficient Inter-rater reliability analysis showed that there is a significant

agreement between expert and the practitioner in the level of 5% significance related to the product being developed [21].

Table 1. Results of Expert’s and Practitioner’s Judgment

Aspect	Average Score
Product overview	3,07
Product accuracy in reducing aggressive behavior	3,27
Product usability for counselor in reducing students’ aggressive behavior	3,1
Average	3,18

Data analysis techniques using the Independent sample t-test require several assumptions that must do. The first assumption is that both data distributed. The normality test in this study uses the Kolmogorov-Smirnov analysis described in table 2.

Table 2. Test of Kolmogorov-Smirnov

	Strategy	Kolmogorov-Smirnov ^a		
		Statistic	df	Sig.
AggrBehav	1,00	,129	42	,078
	2,00	,128	42	,079

In table 2, described that the coefficient Sig. in the group of students who implemented the intervention self-regulation of emotion modules was 0,078 and the coefficient Sig. in the group of students who applied conventional counseling interventions was 0,079. Sig coefficient. In both groups is higher than 0,05. Based on these coefficients, it is the conclusion that the two data distributed, so the first assumption, that is, normally distributed data, has been fulfilled.

The second assumption in this study is comparable data—the homogeneity test described in table 3.

Table 3. Test of Homogeneity of Variance

		Levene Statistic	df1	df2	Sig.
Aggr Behav	Based on Mean	,000	1	82	,994
	Based on Median	,000	1	82	1,000
	Based on Median and with adjusted df	,000	1	81,995	1,000
	Based on trimmed mean	,000	1	82	1,000

The table above shows the homogeneity test results with Levene's test method. The Levene’s value pictured in the Value-based on the Mean row is 0,000 with the Sig coefficient. Amounted to 0,994, it was higher than 0,05, which means there is a similarity between the variances between groups or, which means homogeneous. Thus, the

second assumption in this study has been according to the hypothesis.

After the assumption test is carried out and analyzed using the Independent sample t-test. The results of the analysis using the Independent sample t-test found that there were significant differences in the level of aggressive behavior in the group of students who reduced self-regulation of emotion module's interventions with groups of students who implemented conventional counseling interventions. Based on the average level of aggressive behavior, students who implementation self-regulation of emotion modules had lower levels of aggressive behavior compared to the group of students who implemented conventional counseling interventions. The results of data analysis using SPSS and assisted Independent sample t-test can be described in Tables 4 and 5.

Table 4. Group statistics

	Strategy	N	Mean	Std. Deviation	Std. Error Mean
Aggr Behav	1,00	42	78,7619	10,93620	1,68749
	2,00	42	95,7619	10,97849	1,69402

In table 4, the statistical group can describe that N is 42 for each treatment. The mean of the experimental group is 78.7619, and the control group is 95.7619. The values of standard deviation and standard error of the experimental group were lower than the control group. The standard error from mean is to describe the average distribution of a sample against the ordinary all possible samples.

In table 4, it appears that the f obtained is 0,000 with a significance of 0,994, which means it is higher than 0,05 (0,994 > 0,05). The variant of the population group is homogeneous. The homogeneity requirements for comparative analysis are met. The results of the data analysis obtained a coefficient of t count of -7,110 with a probability of 0,000. The probability of 0,000 when compared to 0,05, is smaller, which means there are differences in aggressive student behavior between groups given the intervention self-regulation of emotion modules and groups that implemented conventional counseling interventions. If analyzed based on the average score of aggressive behavior, the count of aggressive behavior groups of students who reduced self-regulation of emotion modules intervention was lower (78,7619) than the scores of aggressive behavior of groups of students who implementation conventional counseling interventions (95,7619). It can conclude that the aggressive behavior of students who reduced self-regulation of emotion modules interventions decreases more significantly than students who implemented conventional counseling interventions.

Table 5. Independent sample test

		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Sig. (2-tailed)	Std. Error Difference
Aggr Behav	Equal variances assumed	,000	,994	-7,110	82	2,39109	-17,00000
	Equal variances not assumed			-7,110	81,99	2,39109	-17,00000

4. Discussion

The results of the study concluded that self-regulation modules could effectively help students reduce aggressive behavior. The conclusion described that the aggressive behavior within the group of students who implemented the self-regulation of the emotion module's intervention was lower than the score of the group's aggressive behavior of students who implemented conventional counseling interventions. The results from this study prove that school counselors can utilize self-regulation of emotion modules to help students reduce aggressive behavior.

Aggressive behavior is still a severe problem that occurs in adolescents where this behavior involves elements such as biological elements, personality development, social processes, basic cognitive processes, short-term and long-term processes, and decision-making processes [24]. Aggressive behavior is a form of action that intentionally hurts others, both physically and non-physically. Aggressive behavior is a complex phenomenon that operates at several levels, with different meanings, and application through diverse forms of violent behavior [25]. Aggressive behavior is physical or verbal behavior that aims to hurt others [26]. Aggressive behavior is born to respond to threats (according to perception or existence) originating from other individuals or groups outside the group [27].

Aggressive behavior as behavior or behavioral tendencies whose intention is to hurt others both physically and psychologically with the aggressiveness itself has four aspects, namely verbal aggression, anger, hostility, physical aggression [23]. These four aspects of aggressive behavior form the basis of the preparation of instruments in this study, precisely the scale of aggressive behavior. Even now, there is also a new aggressive face, online aggression [28]–[31]. This aggressive behavior model shown by adolescence by sending messages is aimed at hurting others through social media. This aggressive behavior model can be used in a manner today internationally, especially in Indonesia.

One way to reduce aggressive behavior is to help students learn to optimize the self-regulation of emotion. Self-regulation of emotions is used for someone in regulating expression, making decisions, and others. Emotional regulation is an intrinsic experience that produces emotions and is, after that, informed of cognitive abilities to give emotion an influence and sense of behavior

[32]. Emotions occur from a stimulus in a person and next reflected into action.

Emotional regulation becomes one of the aspects of concern for individuals who engage in aggressive behavior. Various studies have concluded that the high or low level of aggressive behavior of students is affected by the high or low ability of students to regulate their emotions [10], [33]. The strength is the basis for counselors to develop the skill of self-regulation of emotion to help students get out of aggressive behavior problems that are often occurring. Another literature also mentions that self-regulation of emotion is an alternative strategy for counselors to reduce aggressive behavior [34].

Humans can regulate the emotions that exist in themselves, of course, in their way too. One of the literature states that someone regulates the emotions that exist in him caused by two motives, namely hedonistic and instrumental motives [35]. People, who pursue hedonistic purposes, look for emotions to increase the ratio of pleasure that exists in themselves to the pain that is occurring. Whereas people who have instrumental goals, they target the potential benefits of emotions apart from their direct phenomenology. A school counselor, who facilitates the development of self-regulation of emotion, encourages students to have instrumental motives, so they can look for potential benefits when regulating their emotions, and can reduce aggressive behavior.

Self-regulation of emotion can improve symptoms of anxiety, depression, and self-esteem of individual users of the substance. Activities in the self-regulation of emotion training stage focus on breathing (not focus on distractions), thus showing changes, namely (a) reducing the experience of negative emotions, (b) reducing amygdala activity, and (c) increasing activity in the brain involved in attention dissemination [36]. Self-regulation of emotion generally consists of receiving or accepting, evaluating or evaluating, triggering or making a change, searching or finding a solution, formulating or designing a plan, implementing or implementing a strategy, assessing or measuring the effectiveness of the approach that has been a plan.

In this study, counselors facilitate students to learn to optimize the self-regulation of emotion by using modules. The results of research on the use of modules stated that the learning process of students who use the help of modules could encourage students to solve problems collaboratively, clarify their roles, and provide information from their perspectives [37]. Based on these results, it can reveal facts

that a student who learns self-regulation of emotion by using modules, can learn independently to solve aggressive behavior problems according to their perspectives and ways.

Modules used to help students develop self-regulation of emotion to reduce aggressive behavior categorized as appropriate for use by counselors [21]. The principal components in the module consist of six elements, namely receiving, evaluating, triggering, searching, formulating, implementing, and assessing [21]. The seven principal components in the self-regulation of emotion modules can facilitate students to reduce aggressive behavior that is occurring. In this research process, students are training in emotional self-regulation skills that have been explained in detail in the module, thus leading to a directive method in which students must be more active in applying emotional self-regulation skills.

This research is supported by other studies, which conclude that Emotion-Related Self-Regulation can assist students in improving student adjustment in the school environment [38]. However, in this study, self-regulation of emotion was used to enhance student adjustment, while this study can reduce aggressive behavior. In this study also self-regulation of emotion did not involve students' independence in learning. In this study, the emphasis was on the aspect of student independence in education because the self-regulation of emotion can be developed with help of modules.

Other studies have concluded that self-regulation of emotion strategies can be used by counselors to reduce aggressive behavior effectively [39]. However, in this study, the identified aggressive behavior focused on aspects of physically and relationally aggressive behavior. In contrast, in this study, aggressive behavior was recognized with more specific forms, namely physical, verbal, anger, and hostility. The study was also implemented on preschool children. So emotional regulation strategies still can be discussed whether children of this age applied with emotional regulation strategies. In contrast to study in which the subjects involved were junior high school-aged children, which was in terms of developmental level, they could train themselves to regulate the emotions that exist in themselves.

Other studies also concluded that emotion regulation influences aggressive behavior that arises because of the provocation from others [40]. However, this research can't be classified as correlation research, and there is no attempt to identify the effect of specific strategies implemented by counselors to reduce aggressive behavior. Whereas, this study ranked as experimental research, which aims to test the effectiveness of self-regulation of emotion modules to reduce aggressive behavior. In this study also the identified aggressive behavior was limited to aggressive behavior in the face of provocation or reactive aggressive behavior, whereas in this study, the aggressive behavior could be in the form of reactive or proactive behavior.

Aggressive behavior that can be minimized, can suppress the emergence of negative perceptions of the school climate in students. Negative perceptions of the school climate are proven to reduce academic performance [41]. School counselors can make various efforts to suppress the emergence of aggressive behavior, among others by using the help of the self-regulation of emotion module [21], implementing a peace counseling approach [42], and solution-focused briefing counseling [43].

This study has limitations. One limitation of this study is the research design that uses a quasi-experimental design, and the two groups aren't randomly divided like true experimental design research. In subsequent studies, the assignment of research subjects to the experimental and control groups should be implemented randomly (Random Assignment), so that the internal validity is high.

5. Conclusions

Aggression behavior becomes a problem that has increasingly high complexity. In this research, it has revealed that one of the counseling techniques that used self-regulation of emotion modules can be used to help students reduce aggressive behavior. Counselors help counselees develop self-regulation of emotion by involving seven principal components, namely receiving, evaluating, triggering, searching, formulating, implementing, and assessing. This research should be a reference for counselors to use self-regulation of emotion modules to help the guidance and counseling program in building a culture of peace in the school environment.

Acknowledgments

Thank you to the Ministry of Research and Technology of the Republic of Indonesia for providing material support for this research. A thank you also to Universitas Ahmad Dahlan for facilitating the completion of this research and producing new work, namely the self-regulation of emotion modules.

REFERENCES

- [1] M. I. Farisi, "Bhinneka Tunggal Ika [Unity in Diversity]: From Dynastic Policy to Classroom Practice," *J. Soc. Sci. Educ.*, vol. 13, no. 3, pp. 83–89, 2014, doi: 10.2390/jss.
- [2] I. Hambali and M. Gipayana, "A cognitive stage-experiential psycho-educational guidance model to enhance the Bhineka Tunggal Ika (Unity in diversity) awareness," *J. Soc. Sci.*, vol. 5, no. 1, pp. 19–28, 2016, doi:10.25255/jss.2016.5.1.1 9.28.
- [3] O. R. P. R. Linge, F. Khoirunnisa, and F. S. Silitonga,

- “Character Education Based on Psychology Perspective in the Industrial Revolution Era 4.0.” vol. 295, no. ICETeP 2018, pp. 263–265, 2019, doi: 10.2991/icetep-18.2019.63.
- [4] P. Alex Linley et al., “Character strengths in the United Kingdom: The VIA Inventory of Strengths,” *Pers. Individ. Dif.*, vol. 43, no. 2, pp. 341–351, 2007, doi: 10.1016/j.paid.2006.12.004.
- [5] C. Seligman, Martin E.P., Park, Nansook and Peterson, “The VIA classification of character strengths,” *VIA Institute on Character*. 2004.
- [6] Via Institute On Character, “Character Strengths, Character Building Experts: VIA Character,” *Via Institute On Character*, 2017. [Online]. Available: <https://www.viacharacter.org/www/>.
- [7] J. Gruber et al., “Positive Emotion Specificity and Mood Symptoms in an Adolescent Outpatient Sample,” *Cognit. Ther. Res.*, vol. 41, no. 3, pp. 393–405, 2017, doi: 10.1007/s10608-016-9796-7.
- [8] A. D. Kendall et al., “Measuring Positive Emotion with the Mood and Anxiety Symptom Questionnaire,” *Assessment*, vol. 23, no. 1, pp. 86–95, 2016, doi: 10.1177/1073191115569528.
- [9] D. S. Chester, L. M. Merwin, and C. N. Dewart, “Maladaptive perfectionism’s link to aggression and self-harm: Emotion regulation as a mechanism,” *Aggress. Behav.*, vol. 41, no. 5, pp. 443–454, 2015, doi: 10.1002/ab.21578.
- [10] T. Robertson, M. Daffern, and R. S. Bucks, “Emotion regulation and aggression,” *Aggress. Violent Behav.*, vol. 17, no. 1, pp. 72–82, 2012, doi: 10.1016/j.avb.2011.09.006.
- [11] F. Caropreso, “The death instinct and the mental dimension beyond the pleasure principle in the works of Spielrein and Freud,” *Int. J. Psychoanal.*, vol. 98, no. 6, pp. 1741–1762, 2017, doi: 10.1111/1745-8315.12630.
- [12] G. Eissa and S. W. Lester, “Supervisor role overload and frustration as antecedents of abusive supervision: The moderating role of supervisor personality,” *J. Organ. Behav.*, vol. 38, no. 3, pp. 307–326, 2017, doi: 10.1002/job.2123.
- [13] W. N. Saputra and I. B. Handaka, “Perilaku Agresi Pada Siswa SMK di Yogyakarta,” *Jurnal Fokus Konseling*, vol. 4, no. 1, pp. 1–8, 2018.
- [14] S. Alhadi, P. Purwadi, S. Muyana, W. N. E. Saputra, and A. Supriyanto, “Agresivitas Siswa SMP di Yogyakarta,” *J. Fokus Konseling*, vol. 4, no. 1, p. 93, 2018, doi: 10.26638/jfk.507.2099.
- [15] W. N. E. Saputra, N. Hanifah, and D. N. Widagdo, “Perbedaan Tingkat Perilaku Agresi Berdasarkan Jenis Kelamin pada Siswa Sekolah Menengah Kejuruan Kota Yogyakarta,” *J. Kaji. Bimbing. dan Konseling*, vol. 2, no. 4, pp. 142–147, 2017, doi: 10.17977/um001v2i42017p142.
- [16] K. A. McLaughlin, M. L. Hatzenbuehler, D. S. Mennin, and S. Nolen-Hoeksema, “Emotion dysregulation and adolescent psychopathology: A prospective study,” *Behav. Res. Ther.*, vol. 49, no. 9, pp. 544–554, 2011, doi: 10.1016/j.brat.2011.06.003.
- [17] K. Keenan, “Emotion Dysregulation as a Risk Factor for Child Psychopathology,” *Clin. Psychol. Sci. Pract.*, vol. 7, no. 4, pp. 418–434, 2000, doi: 10.1093/clipsy/7.4.418.
- [18] T. P. Beauchaine and D. Cicchetti, “Emotion dysregulation and emerging psychopathology: A transdiagnostic, transdisciplinary perspective,” *Development and Psychopathology*, vol. 31, no. 3, pp. 799–804, 2019, doi: 10.1017/S0954579419000671.
- [19] A. Bazarnik, “Emotion dysregulation and psychopathology in epilepsy,” *Pol. Merkur. Lekarski*, vol. 44, no. 264, pp. 302–307, 2018.
- [20] B. J. Knox, R. G. Lugo, Ø. Jøsok, K. Helkala, and S. Sütterlin, “Towards a Cognitive Agility Index: The Role of Metacognition in Human Computer Interaction,” in *International Conference on Human-Computer Interaction*, 2017, vol. 1, pp. 243–250.
- [21] S. Alhadi, W. N. E. Saputra, Purwadi, A. Wahyudi, A. Supriyanto, and S. Muyana, “Self-regulation of Emotion Module to Reduce Aggressive Behavior,” *Advances in Social Science, Education and Humanities Research*, vol. 387, pp. 23–26, 2020, doi: 10.2991/icei-19.2019.6.
- [22] C. N. DeWall, R. F. Baumeister, T. F. Stillman, and M. T. Gailliot, “Violence restrained: Effects of self-regulation and its depletion on aggression,” *J. Exp. Soc. Psychol.*, vol. 43, no. 1, pp. 62–76, 2007, doi: 10.1016/j.jesp.2005.12.005.
- [23] A. H. Buss and M. Perry, “The Aggression Questionnaire,” *J. Pers. Soc. Psychol.*, vol. 63, no. 3, pp. 452–459, 1992, doi: 10.1037/0022-3514.63.3.452.
- [24] C. N. Dewall, C. A. Anderson, and B. J. Bushman, “The general aggression model: Theoretical extensions to violence,” *Psychol. Violence*, vol. 1, no. 3, pp. 245–258, 2011, doi: 10.1037/a0023842.
- [25] J. M. Ramirez, “Some dichotomous classifications of aggression according to its function,” *J. Organ. Transform. Soc. Chang.*, vol. 6, no. 2, pp. 85–101, 2009, doi: 10.1386/jots.6.2.85_1.
- [26] D. Myers, *Social psychology*. New York: Mc Graw-Hill, 2012.
- [27] V. V. MacLaren, L. A. Best, and E. E. Bigney, “Aggression-hostility predicts direction of defensive responses to human threat scenarios,” *Pers. Individ. Dif.*, vol. 49, no. 2, pp. 142–147, 2010, doi: 10.1016/j.paid.2010.03.024.
- [28] D. M. Law, J. D. Shapka, J. F. Domene, and M. H. Gagné, “Are Cyberbullies really bullies? An investigation of reactive and proactive online aggression,” *Comput. Human Behav.*, vol. 28, no. 2, pp. 664–672, 2012, doi: 10.1016/j.chb.2011.11.013.
- [29] D. M. Law, J. D. Shapka, and B. F. Olson, “To control or not to control? Parenting behaviours and adolescent online aggression,” *Comput. Human Behav.*, vol. 26, no. 6, pp. 1651–1656, 2010, doi: 10.1016/j.chb.2010.06.013.
- [30] A. G. Zimmerman and G. J. Ybarra, “Online aggression: The influences of anonymity and social modeling,” *Psychol. Pop. Media Cult.*, vol. 5, no. 2, pp. 181–193, 2016, doi: 10.1037/ppm0000038.
- [31] N. E. Werner, M. F. Bumpus, and D. Rock, “Involvement in internet aggression during early adolescence,” *J. Youth*

- Adolesc.*, vol. 39, no. 6, pp. 607–619, 2010, doi: 10.1007/s10964-009-9419-7.
- [32] M. Vandekerckhove, C. Von Scheve, S. Ismer, S. Jung, and S. Kronast, *Regulating Emotions: Culture, Social Necessity, and Biological Inheritance*. Australia: Blackwell Publishing, 2009.
- [33] T. N. Sullivan, R. C. Garthe, E. A. Goncy, M. M. Carlson, and K. L. Behrhorst, “Longitudinal Relations between Beliefs Supporting Aggression, Anger Regulation, and Dating Aggression among Early Adolescents,” *J. Youth Adolesc.*, vol. 46, no. 5, pp. 982–994, 2017, doi: 10.1007/s10964-016-0569-0.
- [34] P. Purwadi and S. Said Alhadi, “Self-Regulation of Emotion as an Alternative to Reduce Student’s Aggressiveness,” *Adv. Soc. Sci. Educ. Humanit. Res.*, vol. 173, pp. 2003–2005, 2018, doi: 10.2991/icei-17.2018.69.
- [35] M. Tamir, “Why Do People Regulate Their Emotions? A Taxonomy of Motives in Emotion Regulation,” *Personal. Soc. Psychol. Rev.*, vol. 20, no. 3, pp. 199–222, 2016, doi: 10.1177/1088868315586325.
- [36] P. R. Goldin and J. J. Gross, “Effects of Mindfulness-Based Stress Reduction (MBSR) on Emotion Regulation in Social Anxiety Disorder,” *Emotion*, vol. 10, no. 1, pp. 83–91, 2010, doi: 10.1037/a0018441.
- [37] P. Solomon et al., “Students’ perceptions of interprofessional learning through facilitated online learning modules,” *Med. Teach.*, vol. 32, no. 9, pp. 391–398, 2010, doi: 10.3109/0142159X.2010.495760.
- [38] N. Eisenberg, T. L. Spinrad, and N. D. Eggum, “Emotion-Related Self-Regulation and Its Relation to Children’s Maladjustment,” *Annu. Rev. Clin. Psychol.*, vol. 6, no. 1, pp. 495–525, 2010, doi: 10.1146/annurev.clinpsy.121208.131208.
- [39] J. Helmsen and F. Petermann, “Emotion regulation strategies and aggressive behavior of preschool children,” *Prax. Kinderpsychol. Kinderpsychiatr.*, vol. 59, no. 10, pp. 775–791, 2010, doi: 10.13109/prkk.2010.59.10.775.
- [40] J. L. Vaydich, “*The influence of emotion regulation on aggressive behavior in the face of provocation*,” 2011.
- [41] W. N. E. Saputra, A. Supriyanto, B. Astuti, Y. Ayriza, and S. Adiputra, “The Effect of Student Perception of Negative School Climate on Poor Academic Performance of Students in Indonesia,” *Int. J. Learn. Teach. Educ. Res.*, vol. 19, no. 2, pp. 279–291, 2020.
- [42] W. N. E. Saputra et al., “Peace Counseling Approach (PCA) to Reduce Negative Aggressive Behavior of Students,” *Univers. J. Educ. Res.*, vol. 8, no. 2, pp. 631–637, 2020.
- [43] C. D. Wiretna, W. N. E. Saputra, A. Muarifah, and M. Barida, “Effectiveness of solution-focused brief counseling to reduce online aggression of student,” *Univers. J. Educ. Res.*, vol. 8, no. 3, pp. 1092–1099, 2020.