

Exploration of aggressive behavior among adolescent in Indonesia

Afdal Afdal^{1*}, Miftahul Fikri², Nurmaida Pane³, Wiwin Andriani⁴

^{1,2,3,4}Departement of Guidance and Counseling, Faculty of Education, Universitas Negeri Padang, Indonesia

*Corresponding author, e-mail: afdal@konselor.org

Abstract

Aggressive behavior is one of the problems which have a negative impact on adolescents, especially on their development process. This study aims to determine the extent to which students' aggressive behavior is predictable by gender and domicile origin. The participants of this study were a total of 2681 Indonesian teenagers aged 14-20 years, that anonymously and voluntarily filled out this instrument. The instrument used was the AF Aggressive Behavior Instrument Scale (AFABIS), which has been tested for validity and reliability with a significance of 0.08. Furthermore, data testing was carried out using network psychometrics and Rasch analysis. The results from the network psychometrics analysis showed that there was a good structure of participants in terms of gender and domicile origin (city, suburban, rural) and a significant difference in aggressive behavior was raised. The results showed that male adolescents tend to show more aggressive behavior compared to females. Furthermore, it showed that the tendency of displaying aggressive behavior by adolescents in rural areas is more tenuous compared to those in suburbs of cities and cities. These results may be used as initial data by counselors for psychological intervention on aggressive behavior featured by adolescents.

Keywords: Aggressive behavior, adolescent, psychometric network, rasch analysis

How to Cite: Afdal, A., Fikri, M., Pane, N., & Andriani, W. (2020). Exploration of aggressive behavior among adolescent in Indonesia. *Konselor*, 9(4), 165-173. doi:<https://doi.org/10.24036/0202094111914-0-00>



This is an open access article distributed under the Creative Commons 4.0 Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. ©2020 by author.

Introduction

The prevalence of aggressive behavior in Indonesia has continuously increased, from 6325 cases in 2013 to 952,397 in 2017 and further increased in 2020 (Etika & Yunalia, 2020; Putra, A., & Mardison, 2018; Yanizon, 2019). It is one of the problems that have a negative impact on adolescents, especially during their development process. Aggressive behavior is any physical or verbal behavior that is intended to cause harm to another individual (Karneli et al., 2018; Tentama, 2013). Behavior is categorized as aggressive, when it aims to hurt others, even though the attempt is unsuccessful (Myers, 2012; Tentama, 2013). Several studies have discovered that difficulties in peer relationships, video games that tend to contain elements of violence and lack of life control lead to aggressive behavior. (Estévez, E., Jiménez, T. I., & Moreno, 2018; Hasan et al., 2018; Jerabeck & Ferguson, 2013). In China, children experiencing a negative parenting style showed more aggressive behavior compared to those experiencing a positive parenting style (Lei et al., 2018). Meanwhile, in Korea, there is a relationship between aggressive adolescent behavior as imposed by parents from both social and academic comparisons (Lee et al., 2020).

Furthermore, this type of behavior may lead to the development of personal symptoms, such as depression, feelings of stress and loneliness (Karababa, 2020; Shao, D., Zhang, H. H., Long, Z. T., Li, J., Bai, H. Y., Li, J. J., & Cao, 2018), loss of happiness and lack of empathy (Estévez et al., 2018; Steffgen, G., König, A., Pfetsch, J., & Melzer, 2011). Several studies have shown that some causes of aggressive behavior among adolescents are related to gender and peers (ZinatMotlagh, F., Atae, M., Jalilian, F., MirzaeiAlavijeh, M., Aghaei, A., & Shirazi, 2013), experiences as victims of aggression, age and culture (Barlett et al., 2008; Denson et al., 2011; Franco, C., Amutio, A., López-González, L., Oriol, X., & Martínez-Taboada, 2016; Hayley et al., 2017; Pérez-Fuentes, M. D. C., Molero Jurado, M. D. M., Barragán Martín & Gázquez Linares, 2019), cognitive development, education level and degree of

exposure (Cho et al., 2016), provocation, pain, stress and heat (Estévez, E., Jiménez, T. I., & Moreno, 2018; Franco, C., Amutio, A., López-González, L., Oriol, X., & Martínez-Taboada, 2016; Groves & Anderson, 2017; Pérez-Fuentes, M. D. C., Molero Jurado, M. D. M., Barragán Martín & Gázquez Linares, 2019).

Aggressive behavior is a type of behavior displayed by an individual, with the aim of causing harm to others that neither wants the behavior to come verbally nor physically (Sobur, 2003; Yang, Joshi, Jahanshad, Thompson, & Baker, 2017). Therefore, it a type of behavior required to attack, rape or cause harm to an individual, with the aim of causing disturbances or maliciously accusing the victim (Fagel et al., 2014). Furthermore, it is accompanied with beliefs, thoughts, desires and anger that are intended to deliberately threaten or hurt the victim's feelings or self-esteem both on the object and individual (Enopadria, C., Neherta, M., & Fernandes, 2018). Based on this phenomenon, aggressive behavior is a type of behavior that causes both physical and psychological harm to others and requires special attention and intervention. Therefore, this study examined various solutions required to deal with this aggressive problem. The results obtained may be used as initial data in identifying ways to reduce aggressive behavior, among adolescents through guidance and counseling by teachers or counselors (Prayitno et al., 2017). Furthermore, it is expected to be of assistance in finding appropriate model to further study aggressive behavior.

Method

Participants

A quantitative approach with descriptive method was used in this study. The participants were a total of 2681 individuals (33.8% male and 66.2% female) selected from various regions in Indonesia and within the age range of 14-20 years ($M = 13.4$, $SD = 1.25$). Furthermore, sample selection was carried out using cluster sampling in the geographic area of Indonesia. The main sampling units were the urban, suburban and rural geographic areas of the three communities, representing 34.1%, 49.5% and 16.4%, respectively.

Measurement

This study reveals the aggressive behavior of students in Indonesia in terms of gender and origin of domicile. It was measured using the AF Aggressive behavior Scale (AFABIS), which was adapted from the theory of Buss, AH & Perry, (1992) that has been translated and adapted into Indonesian in a short version and tested with item reliability logic 1.00 and logic reliability person 0.8. This FABIS measuring instrument consisted of 15 items (Anger = 3 items, Harassment = 4 items, Physical = 5 items, Verbal = 3 items) with measurements using rating scale 1-4.

Data analysis

The study results were analyzed using Network Psychometrics analysis (Epskamp et al., 2016; Hallquist et al., 2001) and Rasch Model analysis (Sumintono, B., & Widhiarso, 2015). Network Psychometrics analysis is a model of psychometric item response, which is understood as a proxy for variables that interact directly with one another (Epskamp et al., 2017). Meanwhile, Rasch model analysis was carried out to determine the validity and reliability of participants and items. Data analysis using network analysis involves JASP version 0.9.6.1 software, while Rasch model analysis involves using the Winstep Version 3.72 application (Linacre, 2011) and a collection of study data that is accessible through the Open Science Framework (Fikri, 2020).

Results and Discussion

Descriptive Data

The results of data analysis using JASP 0.9.0.1 software. reveal a descriptive aggressive behavior can be seen in the table. 1

Table 1 <Summary Statistics AF Agresif Behavior Scale (AFABIS)>

Classification	Interval	F
Very High	>50	0
High	43-49	121
Moderate	36-42	1509
Low	29-35	976
Very low	<28	75
		2681

The measurement results of the Summary Statistics AF Aggressive behavior Scales (AFABIS) are shown in Table 1. It is seen that the aggressive behavior of adolescents is in the moderate category ($n = 1509$) and some in the high category ($n = 121$). The processing results show that more than half of Indonesian adolescents have problems with aggressive behavior. This type of behavior is accompanied with beliefs, thoughts, desires and anger that are intended to hurt the feelings or self-esteem of others (Enopadria, C., Neherta, M., & Fernandes, 2018; Putra, A., & Mardison, 2018). Furthermore, the results of this measurement showed that there are contradictions in the life of the Indonesians, towards the recognition of the existence of polite and courteous attitudes towards others (Affan, 2016). There is harmony between people, *Bhineka Tunggal Ika* (although there are different ethnic and cultures, they still live together, harmoniously) (Maneechukate, 2018). In addition, the estimation from the description of the statistical processing results is shown in table 2. The results of the description of data processing are as follows, Valid ($n = 2681$), Missing ($n = 0$), Mean (36,37), Std. deviation (3,809), Variance (14,51), Min measure (22), Max measure (49), Men (36,34) and Women (36,39).

Table 2 <Estimation Descriptive Data Analysis>

Estimation	Value
Valid	2681
Missing	0
Mean	36.37
Std. Deviation	3.809
Variance	14.51
Min Measure	22.00
Max Measure	49.00
Men	36.34
Women	36.39

These results indicate that the processed data is suitable for observing the aggressive behavior of adolescents. Furthermore, the participants of this study provided answers to the question items given. Judging from the study sample data, women ($n = 1785$) and men ($n = 896$), it is seen that what should be measured has been carried out. The detailed description of the statement items provided is shown in Table 3.

Table 3 <Descriptive Statistics AF Aggressive Behavior Scale (AFABIS)>

Code	Valid	Missing	Mean	Std. Deviation	Min	Max
AA1	2681	0	3.445	0.617	1.000	4.000
AA2	2681	0	2.003	1.004	1.000	4.000
AA3	2681	0	1.244	0.544	1.000	4.000
HA1	2681	0	2.093	1.112	1.000	4.000
HA2	2681	0	1.375	0.751	1.000	4.000
HA3	2681	0	2.306	1.023	1.000	4.000
HA4	2681	0	2.978	1.270	1.000	4.000
FA1	2681	0	3.221	0.875	1.000	4.000
FA2	2681	0	3.378	0.940	1.000	4.000
FA3	2681	0	3.746	0.566	1.000	4.000
FA4	2681	0	3.094	0.985	1.000	4.000
FA5	2681	0	2.845	0.518	1.000	4.000
VA1	2681	0	1.693	0.891	1.000	4.000
VA2	2681	0	1.617	0.863	1.000	4.000
VA3	2681	0	1.335	0.857	1.000	4.000

Table 3 shows the valid, missing, mean, standard deviation, minimum value and maximum value of adolescent aggressive behavior. Based on Table 3, the HA4 item had a higher standard deviation score of 1,270 compared to other items. This implies that HA4 is more heterogeneous compared to other items. Although, there is a possibility that the respondent's answer to the HA4 item varied compared to others.

However, during the measurement process, it is appropriate. The activities carried out showed that the participants have properly filled any measurements taken. This is in line with a valid instrument, which directly measures what should be measured and is seen from the items and instrument (Bruine de Bruin & Carman, 2018; Kam & Chan, 2018; Vindbjerg et al., 2020). Furthermore, the results of the data revealed that nothing was missing in the data tabulation that was carried out.

Network Analysis

Network analysis is a psychometric item response model, which is understood as a proxy for variables that interact directly with one another (Epskamp et al., 2017). For example, aggressive symptoms, such as resistance, problems with lack of interaction with others and low self-esteem have traditionally been thought to be determined by common latent variables such as aggressiveness or behaviors that result from being aggressive (Enopadria, C., Neherta, M., & Fernandes, 2018; Siswanto et al., 2019). Meanwhile, in network model, these phenomena are hypothesized instead to form mutually reinforcing networks of variables. An example is problem of interacting with others that may lead to loss of positive energy, low self-esteem, being repulsive, threatening, hitting actions which in turn reinforce relationship problems with other people. In this regards, such a network model offers a completely different conceptualization of why psychometric variables cluster the way they do. However, it has been suggested in the literature that latent variables might somehow fit into closely-knit sets of observations.

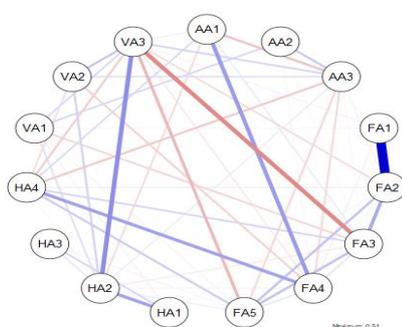


Figure 1 <Estimated FABIS Item>

The network model estimation in Figure 1 shows in general the strength of the relationship shown by the line weights between variables. The tendency of aggressive behavior between variables or nodes is known to be directly related (edge) and has a blue line. Meanwhile, the red line shows that there is a tendency for a negative relationship to appear, such as VA3 and FA3. Therefore, network plots, nodes and edges need to be positioned in a way that reflects the relationship patterns, which exist in the data.

The approach often used in psychological networks is the Fruchterman-Reingold algorithm (Fruchterman & Reingold, 1991), which computes the optimal layout in order that the nodes with less power and fewer connections are placed farther away, while those with more and/or stronger connections are placed closer to each other. This implies that there is a direct relationship between the aggressive behavior variables that were raised in this study. Furthermore, the development of a graph as a package visualization of relationship patterns between nodes in a network is an invaluable contribution to advancing network analysis (Epskamp et al., 2012; Hevey, 2018). This is because, in analysis network, nodes represent psychological variables e.g. behavior, while lines represent unknown statistical relationships e.g. correlations, predictive relationships, that are estimable from data. A node can represent a single item of scale, sub scale or composite scale, therefore the choice depends on the type of data that provides the most appropriate understanding of the question to be discussed. There are two types of edges that can be present in a network: (1) directional edges: a connected node and one head edge having an arrowhead showing a one-way affect, or (2) an undirected edge: a node having a connecting line showing some connection but does not show direction since there is an arrow to show the direction of the effect. Therefore, network may be described as directed i.e. all edges are routed or undirected i.e. they rout no edges. For example, edge direction has been used in network psychology primarily to represent cross-relationships between variables (Bringmann et al., 2016; Hevey, 2018). Meanwhile, a directed network may be cyclic i.e. following a directed edge from a given node to the end and back to the node or acyclic i.e. not being able to start at a node and end back at that node again by following the directed edge.

Network model estimation on the interaction analysis of aggressive behavior is seen from the psychometric shown in the line weights of Figures 2 and 3. It shows that, in general the edges that appear are not directed i.e. the nodes have connecting lines that show some relationship but with no arrows to show the direction of the effect. However, there is tendency for a direct relationship between variables, especially FA1 and FA2 which have a very strong relationship as seen in the blue line for men and women. Meanwhile, the red line on male participants indicates that there is a tendency for a negative relationship to appear with VA3, FA3, FA5, HA4, AA3, AA1, while the female respondents are known to be only FA5, VA3 and FA3. This implies that there are differences in measurements that occur between men and women seen from the network plot shown, where men are more likely to have a negative relationship between variables compared to women. From these results it is seen that men show more aggressive behavior compared to women, consequently it is easier for men to display negative behavior.

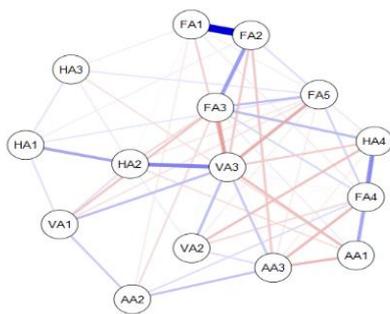


Figure 2 <AFABIS Men>

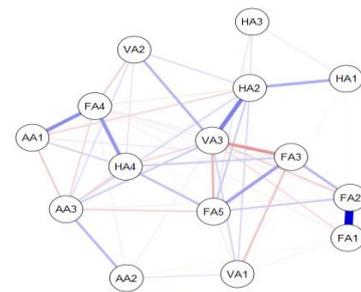


Figure 3 <AFABIS Women>

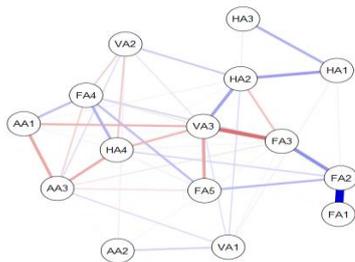


Figure 4 <City>

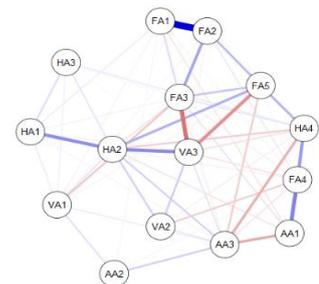


Figure 5 <Suburbs>

Furthermore, the estimation of the line weight network model seen from Figure 4, 5 & 6 shows that the edges are raised and directed i.e. nodes that are connected, with one edge head having an arrow that shows a one-way effect. In addition an undirected edge is shown, i.e. nodes having connecting lines showing multiple relationships but with no arrows to indicate the direction of the effect

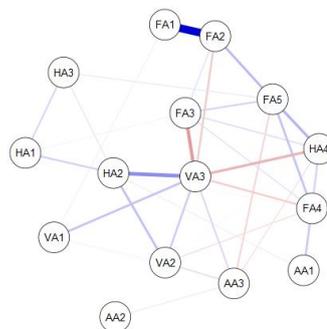


Figure 6 <Rural Area>

Basically, there is no fundamental difference in the problem of aggressive behavior raised by urban, suburban and rural adolescents. However, in the network model analysis, it appears that there is a gap

caused by the network model of rural adolescents rather than cities and suburbs. This proves that adolescents living in rural areas are more likely to have no effect on that which appears in the disclosure of aggressive behavior among rural adolescents, but have a strong density in urban and suburban areas.

Correlation Analysis

The results of processing analysis using the JASP application show that the correlation matrix which is carried out on aspects of aggressive behavior (anger, harassment, physical, and verbal) is shown in Table 4. Pearson Correlations.

Tabel 4 <Pearson Correlations>

		Pearson Correlations			
		Anger	harassment,	physical	Verbal
Anger	Pearson's r	—	-0,013	-0.043	0.102
	p-value	—	0.514	0.025	< .001
Harassment,	Pearson's r	-0.013	—	0.167	-0.002
	p-value	0.514	—	< .001	0.922
Physical	Pearson's r	-0.043	0.167	—	-0.301
	p-value	0.025	< .001	—	< .001
Verbal	Pearson's r	0.102	-0.002	-0.301	—
	p-value	< .001	0.922	< .001	—

The results from the processing analysis using the JASP application, which show the correlation matrix carried out on aspects of aggressive behavior i.e. anger, harassment, physical and verbal are presented in Table 4. Pearson Correlations. It is seen that the relationship between harassment and anger $r = -0.013$. This implies that harassment has a correlation with anger. Consequently, prevention needs to be carried out by various parties in handling anger or harassment (Kolla et al., 2017; Tara & Ahsan, 2020; Thakur & Paul, 2017; ZinatMotlagh, F., Atae, M., Jalilian, F., MirzaeiAlavijeh, M., Aghaei, A., & Shirazi, 2013). Furthermore, from the relationship between physical behavior and anger, a correlation of $r = -0.043$ is seen. This implies that physical behavior with anger is also negatively correlated and has a relationship. Therefore, when physical behavior appears, anger behavior may also appear in the individual (Kolla et al., 2017). In terms of verbal with anger $r = 0.102$, which implies that there is a visible correlation between verbal and anger. Therefore, when verbal aggressive behavior is raised strongly, anger behavior also appears in adolescents (Bogdan et al., 2016; Kim et al., 2020). Lastly, the physical relationship with harassment has a correlation of $r = 0.167$. This implies that there is a significant relationship between physical relationship and harassment. Therefore, if physical aggressive behavior is high, harassment will also be high. Furthermore, in the existence of nuisance actions carried out by adolescents, there is a tendency for physical actions (Savolainen et al., 2020; Zhang et al., 2019). The study carried out in China showed that self-esteem to aggression is particularly important for adolescents. Therefore, interventions targeting adolescent self-esteem and implicit personality theory may be effective ways to reduce aggression (Li et al., 2019). Another study in China discovered that self-control has a substantial negative relationship with aggression, which is moderated by age, gender and acts of aggression (Lei et al., 2020). Based on these findings, it is seen that the behaviors raised, such as anger, harassment, physical and verbal in aggressive behavior can be overcome by minimizing existing behaviors.

Conclusion

Aggressive behavior is one of the problems that has a negative impact on adolescents, especially on their development process. The purpose of this study was to determine the extent to which students' aggressive behavior is predictable by gender and domicile origin. The results showed that aggressive behavior is moderate in some adolescents and high in others. Furthermore, the network model analysis shows that there is a strong interaction between variables. The aggressive behavior of men and women showed that men are more likely to have negative relationships compared to women. This also shows that men have higher possibilities of displaying aggressive behavior compared to women. Judging from the domicile of adolescents living in rural areas, they tend to be more sparsity in determining aggressive behavior compared to those in urban and suburban areas. The results of this study may be used as initial data in handling aggressive adolescent behavior that occurs in Indonesia. However, treatments to be carried out can be different in terms of gender and origin of domicile of adolescents indicated to have aggressive behavior.

Acknowledgment

Acknowledge anyone who has helped you with the study, including: Researchers who supplied materials, reagents, or computer programs; anyone who helped with the writing or English, or offered critical comments about the content, or anyone who provided technical help.

State why people have been acknowledged and ask their permission. Acknowledge sources of funding, including any grant or reference numbers. Please avoid apologize for doing a poor job of presenting the manuscript.

References

- Affan, M. H. (2016). Membangun kembali sikap nasionalisme bangsa Indonesia dalam menangkal budaya asing di era globalisasi. *Jurnal Pesona Dasar*, 3(4).
- Barlett, C. P., Harris, R. J., & Bruely, C. (2008). The effect of the amount of blood in a violent video game on aggression, hostility, and arousal. *Journal of Experimental Social Psychology*, 44(3), 539–546. <https://doi.org/10.1016/j.jesp.2007.10.003>
- Bogdan, S. R., Măirean, C., & Havârneanu, C. E. (2016). A meta-analysis of the association between anger and aggressive driving. *Transportation Research Part F: Traffic Psychology and Behavior*, 42, 350–364.
- Bringmann, L. F., Pe, M. L., Vissers, N., Ceulemans, E., Borsboom, D., Vanpaemel, W., Tuerlinckx, F., & Kuppens, P. (2016). Assessing temporal emotion dynamics using networks. *Assessment*, 23(4), 425–435.
- Bruine de Bruin, W., & Carman, K. G. (2018). Measuring subjective probabilities: the effect of response mode on the use of focal responses, validity, and respondents' evaluations. *Risk Analysis*, 38(10), 2128–2143.
- Cho, H., Lee, S., Choi, J., Choi, S., & Kim, D. (2016). An exploratory study on association between Internet game contents and aggression in Korean adolescents. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2016.12.077>
- Denson, T. F., Spanovic, M., Aviles, F. E., Pollock, V. E., Earleywine, M., & Miller, N. (2011). The Effects of Acute Alcohol Intoxication and Self-Focused Rumination on Triggered Displaced Aggression. *Journal of Aggression, Maltreatment & Trauma*, 20(2), 128–147. <https://doi.org/10.1080/10926771.2011.546750>
- Enopadria, C., Neherta, M., & Fernandes, F. (2018). The Relationship of Aggressive Trauma and Interpersonal Relationships with Aggressive Adolescent Behavior in Padang. *International Journal of Innovative Science and Research Technology*, 3(9), 384–387. <https://ijisrt.com/wp-content/uploads/2018/10/IJISRT18SP258.pdf>
- Epskamp, S., Cramer, A. O. J., Waldorp, L. J., Schmittmann, V. D., & Borsboom, D. (2012). Qgraph: Network visualizations of relationships in psychometric data. *Journal of Statistical Software*, 48. <https://doi.org/10.18637/jss.v048.i04>
- Epskamp, S., Maris, G. K. J., Waldorp, L. J., & Borsboom, D. (2016). Network psychometrics. *ArXiv Preprint ArXiv:1609.02818*.
- Epskamp, S., Maris, G., Waldorp, L. J., & Borsboom, D. (2017). Network psychometrics. *The Wiley Handbook of Psychometric Testing: A Multidisciplinary Reference on Survey, Scale and Test Development*, 2–2, 953–986. <https://doi.org/10.1002/9781118489772.ch30>
- Estévez, E., Jiménez, T. I., & Moreno, D. (2018). Aggressive behavior in adolescence as a predictor of personal, family, and school adjustment problems. *Psicothema*, 30(1).
- Estévez, E., Jiménez, T. I., & Moreno, D. (2018). Aggressive behavior in adolescence as a predictor of personal, family, and school adjustment problems. *Psicothema*, 30(1).
- Etika, A. N., & Yunalia, E. M. (2020). The Effect of Emotional Intelligence on Aggressive Behavior in Late Adolescence. *STRADA Jurnal Ilmiah Kesehatan*, 9(2), 1702–1707.
- Fagel, S., de Sonnevile, L., van Engeland, H., & Swaab, H. (2014). School-associated problem behavior in childhood and adolescence and development of adult schizotypal symptoms: a follow-up of a clinical cohort. *Journal of Abnormal Child Psychology*, 42(5), 813–823.
- Fikri, M. (2020). Indonesian Aggressive Behavior Adolescent Data. Retrieved from *Osf.Io/3ehjc*.
- Franco, C., Amutio, A., López-González, L., Oriol, X., & Martínez-Taboada, C. (2016). Effect of a mindfulness training program on the impulsivity and aggression levels of adolescents with behavioral problems in the classroom. *Frontiers in Psychology*, 7, 1385.
- Fruchterman, T. M. J., & Reingold, E. M. (1991). Graph drawing by force-directed placement. *Software: Practice and Experience*, 21(11), 1129–1164.
-

-
- Groves, C. L., & Anderson, C. A. (2017). ScienceDirect Aversive events and aggression. *Current Opinion in Psychology*, 19, 144–148. <https://doi.org/10.1016/j.copsyc.2017.03.027>
- Hallquist, M. N., Wright, A. G. C., & Molenaar, P. C. M. (2001). Problems with centrality measures in psychopathology symptom networks: Why network psychometrics cannot escape psychometric theory. *Multivariate Behavioral ...*, 36(2). http://www.tandfonline.com/doi/abs/10.1207/S15327906MBR3602_02
- Hasan, Y., Bègue, L., Scharkow, M., & Bushman, B. J. (2018). Corrigendum to “The more you play, the more aggressive you become: A long-term experimental study of cumulative violent video game effects on hostile expectations and aggressive behavior” (J. Exp. Soc. Psychol. (2013) 49 (224–227)(S0022103112002259)(10.10. *Journal of Experimental Social Psychology*, 74(2), 328. <https://doi.org/10.1016/j.jesp.2017.08.009>
- Hayley, A., Cox, E., Zinkiewica, L., Graham, K., Wells, S., Zhou, J., & Miller, P. G. (2017). Barroom aggression among Australian women: associations with heavy episodic drinking, trait aggression, and conformity to gender norms. *Journal of Substance Use*, 22(3), 1–8. <https://doi.org/10.1080/14659891.2016.1184334>
- Hevey, D. (2018). Network analysis: A brief overview and tutorial. *Health Psychology and Behavioral Medicine*, 6(1), 301–328. <https://doi.org/10.1080/21642850.2018.1521283>
- Jerabeck, J. M., & Ferguson, C. J. (2013). The influence of solitary and cooperative violent video game play on aggressive and prosocial behavior. *Computers in Human Behavior*, 29(6), 2573–2578. <https://doi.org/10.1016/j.chb.2013.06.034>
- Kam, C. C. S., & Chan, G. H. H. (2018). Examination of the validity of instructed response items in identifying careless respondents. *Personality and Individual Differences*, 129, 83–87.
- Karababa, A. (2020). The relationship between trait anger and loneliness among early adolescents: The moderating role of emotion regulation. *Personality and Individual Differences*, 159, 109856.
- Karneli, Y., Firman, F., & Netrawati, N. (2018). Upaya Guru BK/Konselor untuk menurunkan perilaku agresif siswa dengan menggunakan konseling kreatif dalam bingkai modifikasi kognitif perilaku. *Pedagogi: Jurnal Ilmu Pendidikan*, 18(2), 113–118.
- Kim, K., Yee, J., Kim, J. H., Chung, J. E., Lee, K. E., Song, G., & Gwak, H. S. (2020). Health behaviors associated with aggression in Korean adolescents: data from 2 cross-sectional studies. *American Journal of Health Behavior*, 44(2), 271–282.
- Kolla, N. J., Meyer, J. H., Bagby, R. M., & Brijmohan, A. (2017). Trait anger, physical aggression, and violent offending in antisocial and borderline personality disorders. *Journal of Forensic Sciences*, 62(1), 137–141.
- Lee, Y., Ha, J. H., & Jue, J. (2020). Structural equation modeling and the effect of perceived academic inferiority, socially prescribed perfectionism, and parents' forced social comparison on adolescents' depression and aggression. *Children and Youth Services Review*, 108(104649).
- Lei, H., Chiu, M. M., Cui, Y., Zhou, W., & Li, S. (2018). Parenting style and aggression: a meta-analysis of mainland Chinese children and youth. *Children and Youth Services Review*, 94, 446–455.
- Lei, H., Chiu, M. M., Quan, J., & Zhou, W. (2020). Effect of Self-Control on Aggression among Students in China: A meta-analysis. *Children and Youth Services Review*, 105107.
- Li, S., Zhao, F., & Yu, G. (2019). Ostracism and aggression among adolescents: Implicit theories of personality moderated the mediating effect of self-esteem. *Children and Youth Services Review*, 100, 105–111.
- Linacre, J. M. (2011). *A User's Guide to WINSTEPS Ministeps Rasch-Model Computer Programs*. <https://doi.org/ISBN 0-941938-03-4>
- Maneechukate, S. (2018). Karakter Masyarakat Indonesia Berdasarkan Peribahasa. *Indonesian Language Education and Literature*, 4(1), 91–102.
- Myers, D. G. (2012). *Psikolog Sosial Edisi 10. Terjemahan oleh Aliya Tusyani, dkk.* Salemba Humanika.
- Pérez-Fuentes, M. D. C., Molero Jurado, M. D. M., Barragán Martín, A. B., & Gázquez Linares, J. J. (2019). Family functioning, emotional intelligence, and values: Analysis of the relationship with aggressive behavior in adolescents. *International Journal of Environmental Research and Public Health*, 16(3), 478.
- Prayitno, Afdal, Ifdil, & Ardi, Z. (2017). Layanan Bimbingan Kelompok & Konseling Kelompok yang Berhasil. In *Ghalia Indonesia*.
- Putra, A., & Mardison, S. (2018). Perilaku Agresif Peserta Didik di MTsN Thawalib Padusunan. *Jurnal Al-Taujih: Bingkai Bimbingan Dan Konseling Islami*, 4(1), 32-41.
- Savolainen, J., Brauer, J. R., & Ellonen, N. (2020). Beauty is in the eye of the offender: Physical attractiveness and adolescent victimization. *Journal of Criminal Justice*, 66(101652).
-

-
- Shao, D., Zhang, H. H., Long, Z. T., Li, J., Bai, H. Y., Li, J. J., & Cao, F. L. (2018). Effect of the interaction between oxytocin receptor gene polymorphism (rs53576) and stressful life events on aggression in Chinese Han adolescents. *Psychoneuroendocrinology*, *96*, 35–41.
- Siswanto, Karimullah, Prasetyawati, R., & Nurhayati. (2019). Environmental cultured education and its implication on the student's competencies in an adiwiyata school. *Cakrawala Pendidikan*, *38*(3), 552–564. <https://doi.org/10.21831/cp.v38i3.23154>
- Steffgen, G., König, A., Pfetsch, J., & Melzer, A. (2011). Are cyberbullies less empathic? Adolescents' cyberbullying behavior and empathic responsiveness. *Cyberpsychology, Behavior, and Social Networking*, *14*(11), 643–648.
- Sumintono, B., & Widhiarso, W. (2015). *Aplikasi Pemodelan Rasch pada Asessment Pendidikan*. Trim Komunikata.
- Tara, U., & Ahsan, S. (2020). Cognitive hardiness as a moderator in the relationship between generalized workplace harassment and anger among working women in Pakistan. *Journal of Human Behavior in the Social Environment*, *30*(8), 971–988.
- Tentama, F. (2013). Perilaku anak agresif: Asesmen dan intervensinya. *Jurnal Kesehatan Masyarakat (Journal of Public Health)*, *6*(2).
- Thakur, M. B., & Paul, P. (2017). Sexual harassment and related factors: A preliminary investigation. *Indian Journal of Health & Wellbeing*, *8*(10).
- Vindbjerg, E., Carlsson, J., Mortensen, E. L., Makransky, G., & Nielsen, T. (2020). A Rasch-based validity study of the Harvard Trauma Questionnaire. *Journal of Affective Disorders*, *277*, 697–705.
- Yanizon, A. (2019). Penyebab Munculnya Perilaku Agresif Pada Remaja. *KOPASTA: Jurnal Program Studi Bimbingan Konseling*, *6*(1).
- Zhang, A., De Luca, S., Oh, S., C., L., & Song, X. (2019). The moderating effect of gender on the relationship between bullying victimization and adolescents' self-rated health: An exploratory study using the Fragile Families and Wellbeing Study. *Children and Youth Services Review*, *96*, 155–162.
- ZinatMotlagh, F., Ataei, M., Jalilian, F., MirzaeiAlavijeh, M., Aghaei, A., & Shirazi, K. K. (2013). Predicting aggression among male adolescents: an application of the theory of planned behavior. *Health Promotion Perspectives*, *3*(2), 269.