The Difference in Aggression and Emotion Regulation on Adolescent Cyberbullying Perpetrators

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Abstract
This study aims to empirically examine the differences in emotional regulation and aggression in adolescent male and female cyberbullying perpetrators. The participants in this study are adolescent cyberbullies in the Pati Residency within 10-22 years of age. This is quantitative research with data collection tools used to measure the scales of cyberbullying behavior, emotional regulation, and aggression. Sampling uses a quota sampling technique to identify 200 people, consisting of 100 boys and 100 girls, as cyberbullying perpetrators who resided in the Pati Residency (Rembang, Blora, Pati, Kudus, Jepara). The data analysis method uses the t-test technique. The results show significant differences in emotional regulation and aggression in adolescent male and female cyberbullying perpetrators. The first analysis demonstrates no significant difference between emotional regulation in adolescent male and female cyberbullying perpetrators, while the second analysis shows significant differences between aggression in male and female cyberbullying perpetrators, where the aggression of males is higher than females.

Keywords: emotion regulation, aggression, cyberbullying, adolescents

1. Introduction
Nowadays, social interaction is not merely limited to individuals meeting face to face with others, but it is already shifted from real life to the virtual world. Social media is a term that describes various technologies used to involve other people in collaboration, exchanging information, and interactivity using web-based content [1]. The growing utilization of the internet and social media also raises the possibility of aggressive behavior and cyberbullying [2].

Cyberbullying is an action conducted through electronic devices that are intentionally slandering or harming individual psychological well-being and emotion [2]. The empirical definitions related to cyberbullying, which is the usage of the internet as a technology...
media to send aggressive and offending words or pictures to hurt certain individuals or groups [3]. Among the types of cyberbullying includes sending message repeatedly with offending language using digital technology, bullying to someone based on their status, sending or posting slandering information about someone, disguising using other personal identities to send an improper and inappropriate message, performing trickery to persuade someone to convey private information which later is posted using an electronic communication device, excluding someone from the online group, disturbing, harassing, or sending a threatening message through digital media technology [4].

Currently, the phenomenon of cyberbullying is increasing prevalent in society, especially in adolescents. Research shows that adolescent internet users are involved in some online aggressions, 10% of the victim and 40% of perpetrators with an average of age 14 years old are indicated involved in cyberbullying [5, 6]. Another research also found that boys and girls are equally participating in cyberbullying, however, they have different reasons and methods [7].

The study result shows that the highest type of cyberbullying performed by adolescent girls is by outing and trickery, i.e. the action to spread information or photo that makes the individual shame of it, persuading with trickery to obtain a secret then spread it through social media and exclusion is an action to exclude someone or expelling an individual intentionally in an online group, whereas in boys, the highest type of cyberbullying performed is flaming, intentionally sending a message or harsh language post, swearing words, frontal and vulgar such as mocking and cursing [8].

Cyberbullying behavior in adolescents relates to their ability in regulating emotions [9]. Emotional regulation is a set of cognitive operations that can adjust to emotional responses in various ways, include the increase or the decrease intensity of the feeling state, inhibit behavior that flows from emotion, or change cognitive activity, and or motor perception, form or content, that relate to various emotions [10].

Gender is one of the factors that influences emotional regulation adolescent express emotion differently, the girls mostly by crying show the feeling of fear, sadness, guilt, and loneliness compared to the boys that mostly hide those feelings because it is considered as signs of weakness [11].

Besides emotion regulation, aggression also relates to cyberbullying behavior [3]. Aggression refers to behavior that is motivated by hostile and raging feelings which the main reason is to hurt another person, either physically or psychologically [13]. Gender is one of the aspects that can influence aggression in an individual, that conclusion come from some studies that boys tend to be more aggressive than girls, men often generate
direct aggression such as physical violence, pushing, rejecting, throwing at something to someone, yelling, and mocking; while on the girls, the aggression is more indirect, such as spread rumor, gossip, tell others not to get in touch with the target, make up stories, so the target gets trouble with it and so forth [13].

Cyberbullying behavior is a kind of aggressive action in a verbal form, the perpetrator uses a verbal type of communication by writing on social media about what he/she is experiencing into social media. Research that explored the relation of gender with aggressiveness and cyberbullying, it has not been expressed clearly to determine the significance level in the relation of gender with aggression and cyberbullying due to varied findings and research result [14].

Cyberbullying can take many forms through social media, adolescent mostly are social media user, which are susceptible to become perpetrator because they are in the stage of emotional development. The aim of the current study was to examine the difference in emotion regulation and aggression on adolescent cyberbullying perpetrator between boys and girl.

2. Research Method

This is a quantitative research using t-test technique for the data analysis. Population in this research were adolescent cyberbullying perpetrators in Pati Residency with an age of 10-22 years old. The data collection technique in this research was the quota sample technique. The set of sample quotas in this research was 200 subjects of people that were consisted of 100 boys and 100 girls cyberbullying perpetrators located in Pati Residency, (Rembang, Blora, Pati, Kudus, and Jepara).

In this research, researcher using cyberbullying behavior scale [15], emotion regulation scale [16], and aggression scale [17]. A variant analysis technique was used to find the presence of emotion and aggression regulation in cyberbullying perpetrators as a dependent variable and gender as an independent variable.

3. Result and Discussion

3.1. Normality Test

Based on Z-score test conducted to find how much the value gap from the observation of a set of the sample toward its mean in standard deviation unit, from 200 samples data taken, there were 28 subjects that were eliminated, so that, it became 172 subjects
because data score was considered not normal which exceeds Z-score normal limit of 
(Z<-3.0) or (Z>+3.0).

3.2. Homogeneity Test

The homogeneity test result that the emotion regulation variable obtained from F value 
as much as 0.634 with p-value as much as 0.427 (p>0.05), so the scores show that 
data is homogeneity. Same result in the aggression variable is the result obtained from F 
value as much as 0.525 with p-value much as 0.470 (p>0.05).

3.3. Data analysis

The result shows that the t-test in emotion regulation obtained significance as much 
as 0.836 (p>0.05) with t-value as much as 0.207 and the mean score on the boys is as 
much as 58.26 while the mean score on the girls is as much as 57.93. This shows that 
there is no significant difference between emotion regulation in teenage boys and girls 
cyberbullying perpetrators.

Based on table 1, it shows that there is a difference in aggression and emotion 
regulation in adolescent boys and girls, it is seen from its significance by coefficient as 
much as 0.009 (p<0.05) and t-value as much as 2.626, it means that there are significant 
differences in aggression and emotion regulation on boys and girls cyberbullying 
perpetrators.

### Table 1: t score and mean score boys and girls emotion regulation and aggression.

| Variable                               | t    | Sig (2-tailed) | Mean  |
|----------------------------------------|------|----------------|-------|
| Boys' emotion regulation & aggression  | 2.626| 0.009          | 68.35 |
| Girls' emotion regulation & aggression | 2.626| 0.009          | 63.77 |

### Table 2: t-score and mean score boys' and girls emotion regulation.

| Variable               | t    | Sig (2-tailed) | Mean  |
|------------------------|------|----------------|-------|
| Boys' Emotion Regulation| 0.207| 0.836          | 58.26 |
| Girls' Emotion Regulation| 0.207| 0.836          | 57.93 |

### Table 3: t-score and mean score boys' and girls' aggression.

| Variable      | T    | Sig. (2-tailed) | Mean  |
|---------------|------|----------------|-------|
| Boys' Aggression | 3.452| 0.001          | 78.44 |
| Girls' Aggression | 3.452| 0.001          | 69.62 |
Based on table 3, it shows that the aggression t-test obtained a significance of 0.001 (p<0.05) with a t-score is as much as 3.452; and the mean score on the boys is as much as 78.44, while the mean score on the girls is 69.62. This shows that there is a significant difference in aggression between adolescent boys and girls cyberbullying perpetrators, where the boys are higher compared to the girls.

The major hypothesis result shows that adolescent boys have higher in both aggression and emotion regulation compared to girls. Research also stated that there is a significant difference in emotion regulation between adolescent boys and girls, the difference is influenced by the differences in expressive suppression and also sociocultural demand to them; whereas the girls are given more freedom to express the emotion while the boys are demanded to suppress more on their emotion (Hasmarlin & Hirmaningsih, 2019). Gender is one of the factors that can influence an individual in arranging or regulating emotion (Wulandari & Hidayah, 2018). Based on the theory and the study result related to cyberbullying perpetrator and cognitive reappraisal of emotion regulation strategy, it is found that the individual ability in regulating emotion is actually diverse and the strategy used is also different, where the skill in regulating emotion can be learned and trained.

Confirm to the research result, there is a difference in aggression between boys and girls, that boys are higher than girls in the amount of physical aggression, adolescent boys prefer committing physical and verbal aggression directly, while girls prefer indirect aggression such as gossiping (Dryburgh & Vachon, 2019; Hess & Hagen, 2006). Aggressiveness has a significant influence on cyberbullying behavior tendency, there is a significant influence of aggressiveness and emotion regulation simultaneously toward cyberbullying (Syafanda, 2018).

Minor hypothesis one shows that t-test result from the emotion regulation variable obtains significance as much as 0.836 (p>0.05), with t-value is as much as 0.207 and the mean value on boys is as much as 58.26 while the mean value on girls is as much as 57.93. Which there is no significant difference between adolescent boys’ and girls’ emotional regulation.

Based on gender, there is no difference in emotion regulation between adolescent boys and girls, it can be concluded that emotion regulation on gender is not a determinant factor of emotion (Yolanda & Wismanto, 2017).

Teenage boys and girls have the high potential to be equally in emotion regulation through diverse emotional expression. Cyberbullying gives chances to students either
boys or girls to wreak their emotion in the form of aggression if they are encountering a situation that potentially emerges conflict (Saputra et al., 2017).

Minor hypothesis two shows t-test result from aggression variable, it was obtained significance of 0.001 ($p < 0.05$) with t value as much as 3.452 and the mean value on boys is as much as 78.44, while the mean value on girls is as much as 69.62. This shows that there is a significant aggression difference between adolescent boys and girls cyberbullying perpetrators, whereas boys’ aggression is higher compared to the girls.

It is shown that generally male students are quite aggressive, either physically, verbally, or undermining other’s people property, this is because of male students are hard to control their emotions when it is compared to female students; while on female students, the behavior is less aggressive, in terms of physically, verbally, or undermining other’s personal property, the boys are higher than the girls in committing aggression, both verbally and physically, as well as lesser in committing indirect aggression or “relational” (Aulya et al., 2016; Del Giudice, 2009).

Other research also shows that there is a significant difference between adolescent boys and girls in aggressive behavior, that the boys have a higher aggressiveness compared to the girls, the higher aggressive behavior of someone, the self-control owned is low, and conversely (Istiqamah, 2019).

4. Conclusion

Based on the data analysis conducted, it is found there is a difference in the coefficient value of emotion regulation and aggression on adolescent boys and girls. It is seen from significance with coefficient is as much as 0.009 ($p < 0.05$), this shows that there is a significant difference in emotion regulation and aggression on adolescent boys and girls cyberbullying perpetrators.

References

[1] Reio TG, Ortega CCL. “Cyberbullying and its emotional consequences.” in Emotions, Technology, and Behaviors. 2016;0:145–158. Available from: https://doi.org/10.1016/b978-0-12-801873-6.00008-x

[2] Robinson Y, Petherick W. “Circumscribing cyberbullying: Toward a mutual definition and characterizations of aggression, assault, and recklessness via
telecommunications technology." in The Psychology of Criminal and Antisocial Behavior: Victim and Offender Perspectives. 2017. Available from: https://doi.org/10.1016/B978-0-12-809287-3.00010-9

[3] Bauman S. Cyberbullying: What Counselors Need to Know. USA: John Wiley & Sons, Inc; 2014.

[4] Kowalski RM, Giumetti GW, Schroeder AN et al. Bullying in the digital age: A critical review and meta-analysis of cyberbullying research among youth. Psychological Bulletin. 2014;140(4):1073–1137. Available from: https://doi.org/10.1037/a0035618

[5] Ybarra ML, Mitchell KJ. Online aggressor/targets, aggressors, and targets: A comparison of associated youth characteristics. Journal of Child Psychology and Psychiatry and Allied Disciplines. 2004;45(7):1308–1316. Available from: https://doi.org/10.1111/j.1469-7610.2004.00328.x

[6] Pandie MM, Weismann ITJ. Pengaruh cyberbullying di media sosial terhadap perilaku reaktif sebagai pelaku maupun sebagai korban cyberbullying pada siswa kristen SMP Nasional Makassar. Jurnal Jaffray. 2016;14(1):43–62. Available from: https://doi.org/10.25278/j.v14i1.188.43-62

[7] Rachmatan R, Ayunizar SR. Cyberbullying pada remaja SMA di banda aceh. Jurnal Insight Fakultas Psikologi Universitas Muhammadiyah Jember. 2017;13(2):67–79. Available from: http://jurnal.unmuhjember.ac.id/index.php/INSIGHT/article/view/811

[8] Baroncelli A, Ciucci E. Unique effects of different components of trait emotional intelligence in traditional bullying and cyberbullying. Journal of Adolescence. 2014;37(6):807–815. Available from: https://doi.org/10.1016/j.adolescence.2014.05.009

[9] Lerner RM, Lamb ME, Freund AM. The Handbook of Life-Span Development. 2nd ed. USA: John Wiley & Sons Inc; 2010.

[10] Wade C. Psikologi. 2nd ed. Indonesia: Erlangga; 2009.

[11] Gilovich T, Keltner D, Chen S et al. Social Psychology. NYC, USA: Norton & Company; 2013.

[12] Baron RA, Byern D. Psikologi Sosial. 2nd ed. Indonesia: Erlangga; 2005.

[13] Kokkinos CM, Voulgaridou I. Relational and cyber aggression among adolescents: Personality and emotion regulation as moderators. Computers in Human Behavior. 2017;68:528–537. Available from: https://doi.org/10.1016/j.chb.2016.11.046

[14] Willard N. Educator’s guide to cyberbullying, cyberthreats & sexting. Online. 2007;0:1–16.
[15] Gross JJ, Thompson RA. (2007). Emotion regulation: Conceptual foundation. Handbook of Emotion Regulation. USA: The Guilford Press; 2007. 3-24.

[16] Krahe B. Perilaku Agresif. Indonesia: Pustaka Pelajar; 2005.