Adolescents' Involvement in Cyberbullying: The Importance of Peer Social Interaction

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Abstract—**Adolescents are spending increasing amounts of time using internet that has positive and negative effects on young people. One of the great risk of being involved in using internet is cyberbullying, that is an intentional act carried out repeatedly through electronic devices to hurt someone. Cyberbullying behavior among adolescents have been caused by social and peer interaction because their knowledge level about technology is mutually similar one another. The aim of this study was to determine the relationship between peers' social interaction and cyberbullying behavior in adolescents. The method is quantitative study using a correlational design with cross-sectional approach. A total of 92 respondents were found to be having cyberbullying behavior. The results showed cyberbullying behavior of 84 respondents with a low category, peer social interaction behavior as many as 56 respondents. The relationship between peers' social interaction and cyberbullying behavior in adolescents is weak because there are other factors that can influence adolescents behaving cyberbullying in addition. Promotive and preventive action in the form of peer social interaction is able to prevent cyberbullying in adolescents**

Keywords— adolescents, cyberbullying, peers' social interaction

I. INTRODUCTION

Adolescents are spending increasing amounts of time using internet. The era in which there is growing number of internet users has been taking place in anywhere, anytime, and experienced by anyone. Most Internet users in Indonesia, such as the result of a survey conducted by APJII (Asosiasi Pengguna Jasa Internet) in 2018 which explains that internet users in Indonesia reached 64.8% and the majority of 91% internet users are young people [1]. The use of the internet has positive and negative impacts for adolescents, for example, the internet can help teenagers in their learning process but teens can also get entangled with inappropriate behavior on the internet called cyberbullying.

Cyberbullying is a deliberate action carried out repeatedly through electronic devices to hurt someone. Cyberbullying in Indonesia, according to APJII (2018), found that 49% of Indonesians have been bullied on the internet or cyberbullied.

Based on the data from UNICEF (2016), the number of cyberbullying that occurs among Indonesian teenagers is

as much as 50% of 40 [2]. Cyberbullying that occurred in Yogyakarta, according to the research by Larasati and Fitria [3] which observes social media accounts of Junior and Senior High School students in Yogyakarta, indicates 61.53% result.

Cyberbullying behavior can occur in adolescents because of the social interaction of adolescents with their peers. Basically, adolescents acquire social support from friends, and if adolescents experience social errors through face to face or cyberspace, it may cause adolescents to behave cyberbullying. In fact, the level of technological knowledge of adolescents with their friends is not much different.

The role of nurses in overcoming cyberbullying behaviors in adolescents is to educate parents and adolescents, it could be done by students teaching their parents how to download and use applications to help both parties understand the proper use of social media and what qualifies as a bully and its implications for the health of young adulthood. Secondly, the students could give immediate treatments after adolescents being exposed to reduce the impact and worsening of cyberbullying that has occurred. Thirdly, the students could perform long-term or intensive mental health care[4].

A preliminary study was conducted by researchers at 10 high school students in Yogyakarta on October, 2019 through an open question questionnaire and interview. The result of the preliminary study reveals that of 8 students out of 10 students had committed cyberbullying behavior. They said that the teenagers had taken down his friend by commenting and mocking his friend using words that were not pleasant and some assumed that the act was just for a joke. Peer social interaction behavior in adolescents gets all adolescents saying friends are important and influential. Adolescents tend to follow what their friends do, such as daily language, appearance habits, applications used to communicate with friends, they tend to imitate what is trending as well. The result of interview conducted by counseling and public relation teachers explains that 98% of the students who used to say harsh words at school were actually influenced by their peers.

School's efforts in the prevention and management of cyberbullying have not yet existed, but the school has

implemented a prevention of bullying actions, namely anti-bullying poster contests and advice during the flag ceremony so as to have created a mindset for students not to engage in direct bullying, indirect bullying, or cyberbullying behavior. Based on the described phenomenon, that the majority cases of cyberbullying occur among adolescents, and that wrong social peer interaction might cause cyberbullying, the researchers are interested in conducting research on the relationship between peer social interaction and cyberbullying behavior in adolescents.

II. METHOD

This research is a quantitative study using a descriptive correlational design with cross sectional method. The sample is 92 respondents who committed to behaving cyberbullying. The research instrument used cyberbullying behavior questionnaire and the questionnaire of social interaction behavior of peers adopted from the research conducted by Sutarjo [4].

The respondents completed the questinnaire individually during class time. Before participating in this research, the respondents were told that the questionnaire response would be done voluntarily, they were allowed to stop responding the questions anytime, and there were no correct or wrong answers. Moreover, the responses would be treated confidentially. Consent for the students involvement in the research was initially given by the head teacher. Letters that outlined the nature of research were then sent to the parents of the students and the parents were ensured to have received the information. Parents were asked to contact the school if they did not want their son/daughter to participate in the study.

III. RESULT

Based on Table 1, it is explained that the respondent's characteristic for gender are 63 respondents (68.48%), they are mostly 16-year-old and spend 5 – 6 hours internet activity (33.70%).

1) Cyberbullying Behavior
Cyberbullying behavior in this study determines the level of cyberbullying behavior. Table 2 below shows that the most cyberbullying behavior is in low category as many as 84 respondents (91.30%).

2) Peer Social Interaction Behavior
Peer social interaction behavior in this study was used to determine the level of behavior of adolescents social interaction with their peers. Table 3 shows that the social interaction behavior of peers is mostly as many as 56 respondents (60.87%).

3) Relationship of Peer Social Interaction with Cyberbullying Behavior
Table 4 shows weak relationship between social interaction with peers cyberbullying behavior with $p = 0.027$ where $p < 0.05$, therefore, there is a relationship between peers social interaction with cyberbullying behavior in adolescents, the correlation value equal to 0.231 which is where r is 0.20 to 0.399 so that interpretation is weak, and the direction of the correlation is positive. This means that the higher the level of peer social interaction, the higher the cyberbullying will be.

IV. DISCUSSION

A. Characteristics of the Respondents

1) Age
The results of research conducted by researchers found that there are 44 16-year-old respondents (47.83%) who experienced cyberbullying. The results of this study are in line with research conducted by Rachmatan and Ayunizar [6] to find the most common cyberbullying behavior which occurs at the age of 16 years old, which is as many as 176 respondents (48.35%) and then followed by the age of 17 years old, which is as many as 132 respondents (36.3%), this is because adolescence is the period where adolescents have greater curiosity. Research conducted by Wiryada, Martiarini, and Budiningsih [7] found that the age of 16 years included cyberbullying behavior in the high category of 170 respondents (69%), this is because aspects of moral emotions, moral values, and moral cognitive in adolescence predict the occurrence of bullying and cyberbullying in adolescents. It is necessary to educate adolescents to recognize and understand that cyberbullying is an act that is morally deviating.

Age 16 is the transition period from childhood to early adulthood where adolescents start to change. At this period, emotional control is still lacking, unstable, and adolescents tend to try new things, such as accessing the internet or any other advanced technology. As a result, negative behaviors such as cyberbullying can be triggered to take place among them [8].

The results of this study prove that cyberbullying mostly occurs among adolescents at the age of 16. This is due to the fact that adolescents are in the critical period where they are seeking for their true identities, such as trying new things on the internet. Through such increasing technological sophistication, adolescents could express their feelings. However, lack of emotional control could trigger cyberbullying behavior.

TABLE I.   CHARACTERISTIC OF SUBJECT

Variabel	n	%
Gender: Women		
Men	29	31,52
	63	68,48
Age:		
15 years old	20	21,74
16 years old	44	47,83
17 years old	22	23,91
18 years old	6	6,52
Internet activity usage:		
< 1 hour	4	4,35
1-2 hour	12	13,04
3-4 hour	28	30,43
5-6 hour	31	33,70
> 7 hour	17	18,48

TABLE II.   CYBERBULLYING BEHAVIOUR

Category	N	%
Low Moderat High	84	91,30
	8	8,70
	0	0

TABLE III.   PEER SOCIAL INTERACTION BEHAVIOR

Category	N	%
Very low Low Moderat	0	0
High Very high	0	0
	33	35,87
	56	60,87
	3	3,26

TABLE IV.   RELATIONSHIP OF PEER SOCIAL INTERACTION WITH CYBERBULLYING

		Peer Social Interaction										P value	r
		Very low		Low		Moderate		High		Very high			
		N	%	N	%	N	%	N	%	N	%		
Cyberbullying	Low	0	0	0	0	32	30.1	49	51.9	3	2.7		
	Moderate	0	0	0	0	1	2.9	7	4.9	0	0	.027	.231
	High	0	0	0	0	0	0	0	0	0	0		
Total		0		0		33		56		3			

2) Gender

The results of the study conducted by the researchers found that most of the males engaged in cyberbullying behavior as many as 63 respondents (68.48%). The results of the study conducted by the researchers found that most of male respondents were engaged in cyberbullying behavior as many as 63 respondents (68.48%)[9]. The results of this study are not in line with the research conducted by Pandie and Weismann [9] stating that there is no difference between men and women doing cyberbullying, each as much as 45.8%. It is because men tend to use threats in an immediate way than to use the cyberbullying method as revenge so that victims feel intimidated and frightened. Meanwhile, women tend to use word of mouth and internet to spread, inform rumors or confidential / personal information related to the victim.

The results of the research conducted by Sartana and Afriyeni [10] differ from the previous results revealing that cyberbullying behavior is most common in males. From the results of the study, it was found that men tend to commit cyberbullying than women. As many as 46 respondents (61%) of 76 respondents who were the perpetrators tend to take action consistently because they believe that these acts are very easy to do with the ease of inexpensive access to afflict victims.

Men are more likely to bully offline and online because they exhibit more aggressive behavior, have a higher level of anger and react more to stressful events than women. In addition, they have previously experienced or become victims. Therefore, as adolescents, they take revenge for emotional wounds by showing the same form of aggression they have experienced before than women who rarely respond to it [11].

The results of this study indicate cyberbullying behavior occurs in male respondents where they are more aggressive and usually have experienced it. When they have grown up and become more sophisticated individuals, adolescents can reciprocate what someone has done to them by continuously and consistently threaten victims to be afraid.

3) Active use of a smartphone

The research conducted by the researchers found that the activeness of respondents in using the internet is 5-6 hours as many as 31 respondents (33.70%). The results of this study are in line with the research conducted by Wangid (12) to get

the old results of internet usage of until ≤8 hours per day is 53.38% and user duration <2 hours is 42.98%.

The research conducted by Ragasukmasuci and Adiyanti [13] obtained the results of respondents' activeness in using the internet with a duration of 3-6 hours / day are as many as 184 people (28.5%), and a duration of 1-3 hours / day as many as 160 people (24.8%) which indicate the longer the duration of internet usage the higher the cyberbullying behavior.

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Cyberbullying Behavior

The results of the research conducted by the researchers found that cyberbullying behavior with the most category is the low category with 84 respondents (91.30%). This is supported by the research conducted by Rachmatan and Rayyan [14] to get the results of respondents who showed cyberbullying in the low category as much as 94.14% of 102 respondents. These results are caused by several factors that can influence adolescents to conduct cyberbullying behavior so that cyberbullying perpetrators perform repetitive actions in a relatively low frequency that is 1 to 4 times. The results of the study conducted by Ragasukmasuci and Adiyanti [13] with 646 respondents received the highest number of respondents where 604 respondents (93.5%) are in the low category. This is because adolescents are engaged in jokes which are still identified as a cyberbullying action such as teasing friends as a joke, exclusion, and ridicule.

Cyberbullying behavior has often occurred among adolescents where each perpetrator in cyberbullying has a form in doing cyberbullying such as harassment, exclusion, impersonation, denigration, outing and trickery, flaming, and cyberstalking which is caused by several factors of teenage cyberbullying behavior, namely family, environmental, and self-factor [9]. Cyberbullying is very dangerous because it is very easy to do as the perpetrators can simply click on what they want to share so that people can easily see. In addition, the perpetrators of cyberbullying can do it anytime and anywhere by hiding their identities so that the victims find it difficult to find out and report [15].

The results also found that 84 respondents (91.30%) also get low results because there is a prevention of bullying that has been implemented by schools, namely the poster bullying competition to create a mindset for students not to engage in direct bullying behavior or indirect bullying or cyberbullying.

Peer Social Interaction Behavior

The results of research conducted by researchers find that the social interaction behavior of peers at most is high as many as 57 respondents (61.95%). The results of research conducted by Pandie and Weismann [9] get 82.5% results environment such as adolescent interaction is the thing that influences adolescents to behave cyberbullying. The results of the study conducted by Budiarti [16] with 336 respondents found that interaction in peer groups was strongly correlated in cyberbullying behavior by 127 respondents (75%), this was because the level of knowledge of adolescents with their friends was not much different and that adolescents could strengthen friendship is not only through face to face but also can share information virtually.

Peer social interaction is important for adolescents because during this period adolescents live in groups with the same age and with the social interaction of peers they feel they have hope and support from their peers so that teens get feedback that helps teens maintain their self-image as capable individuals , attractive and valuable [17].

Social interaction with peers allows teens to express their feelings, strengthen friendships, get to know each other better, and get peer support, so that with peer support, adolescents are also associated with a decrease in the possibility of involvement in direct bullying or indirect bullying or cyberbullying [13].

The results of the researchers found that the results of the social interaction behaviors of peers at most were 57 respondents (61.95%). get closer when participating in the same extracurricular activities so that their friendship gets closer.

Relationship of Peer Social Interaction with Cyberbullying Behavior

The results of the research conducted by the researchers found that there is a weak and positive relationship between peer social interactions and cyberbullying behavior indicated by the obtained results of p value = 0.027 (<0.05) and r = 0.231 (0.20-0.399). The results of the study conducted by Budiarti [16] are in line with this research which obtain low results for cyberbullying, high for peer interactions, but get a quite strong relationship between cyberbullying behavior and interactions with peers that is 127 respondents (75%) of 336 respondents caused by positive social interactions with peers. As a result, adolescents can further strengthen their friendship and connect with each other so that the occurrence of cyberbullying is low. However, if the social interaction of adolescents with their friends is negative, it can trigger cyberbullying where their technological knowledge level is not far from each other and there is mutual mocking that can lead to cyberbullying actions if their friends get cyberbully treatment. This is possible to happen because teenagers have trusted the behavior that their friends used to do.

A research conducted by Mawardah and Adiyanti [19] found that a peer group relationship with cyberbullying behavior is as much as 63.7%. This is because cyberbullying behavior depends on adolescents' relationships with friends so that they must carefully select positive or negative relationships that will give them good or bad impact. For teenagers, finding out the social influence that is happening when their friends change the attitudes and behavior is in accordance with social norms because it can affect their tendency to conduct cyberbullying behavior.

A research conducted by Pandie and Weismann [9] found that in addition to peers who influenced adolescents to conduct cyberbullying behavior (82.5%), there were other factors such as family factors getting 70.5% and self or internal factors that got 66.5%. Family factors can occur because parents' style in educating their children is not good which can indirectly make children follow bad habits such as aggressive behavior. Factors from the adolescent themselves is emotional maturity because in the future it can be a benchmark for adolescents to do deviant behavior such as bullying and cyberbullying without thinking about the risks that can be caused. Emotional maturity of adolescents comes from themselves as they can prioritize and critically evaluate first when reacting to a situation rather than being emotional. Therefore, when there are adolescents showing their emotions without thinking first, they are categorized as emotionally immature teenagers [19].

The research conducted by the researchers found that there is a weak relationship between peer social interaction and cyberbullying behavior. This is because in addition to the influencing interactions between peers that can affect the behavior of adolescents doing cyberbullying, there are other factors that support the adolescents to engage in cyberbullying behavior such as family factors and self-factor.

V. Conclusion

It can be concluded that that peer social interaction involves cyberbullying in adolescence. The higher the level of peer social interaction, the higher cyberbulying behavior. In addition, there were other factors such as family factors and self or internal factors that influenced cyberbullying. Good parenting is needed to prevent aggressive behavior and build emotional maturity in order to have an adaptive coping mechanism. The current findings have implications for knowing the prevalence of peer social interaction with cyberbullying events in adolescents at school so that it is expected to be able to do promotive and preventive actions against cyberbullying events and social interactions of adolescents. It is important for the school to always supervise, educate, follow up as well as pay better attention to the adolescents' behavior especially when using social media. In addition, other further studies can use the data of this research as reference material, add insight into the field of knowledge, as well as examine it deeper to find out how the influence of social interaction at each stage of adolescence on cyberbullying behavior.

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