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ORIGINAL ARTICLE

PARENTAL INTERACTIONS AND CYBERBULLYING ON PSYCHOLOGICAL IMPACT OF HIGH SCHOOL ADOLESCENTS IN SUMBERSARI DISTRICT, JEMBER

Interaksi Orangtua dan Paparan Cyberbullying Terhadap Dampak Psikologis Remaja SMA di Kecamatan Sumbersari Kabupaten Jember

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ABSTRACT

Background: The National Survey stated 45% of 2,777 Indonesian youths had experienced cyberbullying, including harassment via chat applications (45%), distribution of personal documentation (41%) and other harassment (14%). A preliminary study in Jember Regency stated that 21 out of 30 students had been victims of cyberbullying. **Purpose:** To find out the correlation between parental interaction (the role of monitoring online activity, disciplining and potential conflict) and exposure to cyberbullying (flamming, harassment, denigrations, impersonations, outing, exclusion, cyberstalking) on psychological impact (self-confidence, anxiety, hopelessness and suicidal intent) of high school youth in Sumbersari District, Jember Regency. **Methods:** This is a quantitative research that was conducted at 12 Senior High Schools at Sumbersari District, Jember with a total population of 5,346 students. Simple random sampling research, of 358 Lemeshow sampling students. Collecting interview data and filling out a questionnaire forJanuary 2019. Analysis of chi-square bivariate test data. **Results:** The significance of parental interaction was found related to conflict with the level of self-confidence and anxiety of adolescents (p 0.00; OR 2.77 and p 0.02; OR 1.71). Interestingly, it was found that harassment had an impact on the level of self-confidence (p 0.00; OR 2.29), anxiety (p 0.00; OR 1.92), hopelessness (p 0.00; OR 2.91) and intention to commit suicide (p 0.02; OR 1.84). Cyberstalking had an impact on the level of self-confidence (p 0.00; OR: 3.02), anxiety (p 0.00; OR: 1.81), hopelessness (p 0.00; OR: 5.50) and intention to suicide (p 0.00; OR: 2.44). **Conclusion:** Parental interactions and exposure to cyberbullying have a significant effect and play an important role in the psychological impact experienced in adolescence.

ABSTRAK

Latar Belakang: Sejumlah 45% dari 2.777 remaja Indonesia mengalami cyberbullying termasuk pelecehan melalui aplikasi chatting (45%), penyebaran dokumentasi pribadi (41%) dan pelecehan lainnya (14%). Kabupaten Jember merupakan pengguna internet terbanyak ketiga di Jawa Timur (20%). Studi pendahuluan di Kabupaten Jember menyatakan 21 dari 300 siswa menjadi korban cyberbullying. **Tujuan:** *Mengetahui hubungan interaksi orangtua (peran pengawasan aktifitas online, pendisiplinan, peluang konflik) dan paparan cyberbullying (amarah, pelecehan, pencemaran nama baik, peniruan, tipu daya, perundungan, penguntitan data) terhadap dampak psikologis (kepercayaan diri, kecemasan, putus asa, niat bunuh diri) remaja SMA di Kecamatan Sumbersari Kabupaten Jember.* **Metode:** *Penelitian kuantitatif pada 12 sekolah SMA/SMK sederajat, populasi 5346 siswa. Penelitian simple random sampling, sampel Lemeshow 358 siswa. Pengumpulan data wawancara dan pengisian angket periode Januari 2019. Analisis data uji bivariat chi-square.* **Hasil:** *Ditemukan signifikansi peluang konflik orangtua-anak dengan tingkat percaya diri dan kecemasan (p 0.00; OR 2.77 dan p 0.02; OR 1.71). Menariknya ditemukan signifikansi pelecehan (harrasment) berdampak pada tingkat kepercayaan diri (p 0.00; OR 2.29), kecemasan (p 0.00; OR 1.92), putus asa (p 0.00; OR 2.91) serta niat bunuh diri (p 0.02; OR 1.84). Ditemukan pula signifikansi penguntitan data (cyberstalking) berdampak pada tingkat kepercayaan diri (p 0.00; OR 3.02), kecemasan (p 0.00; OR 1.81), putus asa (p 0.00; OR 5.50) serta niat bunuh diri (p 0.00; OR 2.44).* **Simpulan:** *Interaksi orangtua dan paparan cyberbullying berpengaruh signifikan serta berperan penting terhadap dampak psikologis yang dialami pada usia remaja.*

INTRODUCTION

The internet has become a necessity for most people, especially teenagers. The internet makes it easier for unlimited communication networks and higher socializing opportunities. Based on data from the Association of Indonesian Internet Network Providers 2017, internet content consumed by users consists of the three largest categories, namely social media with 129.2 million (97%), entertainment with 128,4 million (96%) and news with 127.9 million (96%). The age group of 15-19 years reached 12.5 million users, and 10-15 years as many as 768 thousand users (1,2). Moreover, the internet is also the most accessible source of negative information for teenagers. The increase in the internet and incorrect cell phone use can have an impact on the wrong use of information technology, which is detrimental, one form of which is cyberbullying (3,4).

Cyberbullying is an act of violence that intimidates or disturbs weak people and generally occurs on social media (5). More than 41% of adolescents aged 13-17 years experience bullying with 3/4 of them being bullied by their peers. The National Survey 2015 stated that 45% of 2,777 Indonesian youth experienced cyberbullying, including harassment via chat applications (45%), distribution of personal documentation (41%) and other harassment (14%). It is estimated that around 16% of high school students reported being bullied electronically (online) in 2015 and in the 12 months prior to the survey (6,7).

According to Utama et al (8), cyberbullying can have negative impacts in the form of instability which makes it difficult for victims to adjust to the social environment, focus on learning is disturbed, and interferes with the development of mental health and lack of acceptance in peer groups which results in loneliness and social isolation, low self-esteem, and depression. Most bullying occurs between the ages of 13-14 years and usually falls around the age of 15-16 years for both the bully and the victim (9).

One of the most difficult issues of adolescent development is related to social adjustment. Many adolescents reach adulthood with various problems caused by a lack of attention, affection and

guidance from their parents. Other factors are also related to minimal support such as stimulation, learning motivation, reasonable rewards and punishments, peer groups, stress, school, love and affection and the quality of children's interactions with parents in psychosocial development in adolescents will affect the formation of identity in attitude or behavior (10,11).

Jember people are the third largest internet users in East Java (20%). Based on the results of a preliminary research study conducted at a high school in Sumbersari District, Jember Regency, from 30 respondents, there were 21 (70%) students had been victims of cyberbullying, with 17 (56%) of them stating that cyberbullying had disrupted their quality of life.

Observing the impact caused by cyberbullying, this research is important to do to prevent feelings of resentment, depression, sadness that come from the actions of a bully, destroy the level of confidence and can push people over the line and cause suicide attempts. Because of this issue, this study aims to determine the significance of parental interaction (the role of supervising online activities, disciplining, and opportunities for conflict) and exposure to cyberbullying (anger, harassment, defamation, imitation, deception, bullying and data stalking) on the psychological impact (self-confidence, anxiety, despair and suicidal ideation).

METHODS

This study was a quantitative research with a cross sectional design. The research was conducted at 12 senior high schools in Sumbersari District, Jember Regency for the period of January 2019, with a total population of 5,346 students. Sampling calculations were assessed using the Lemeshow formula, a total of 358 students were obtained for a survey using simple random sampling technique.

Primary data was collected through interviews, questionnaires and observation, supported by secondary data from the Department of Education and Culture, the Department of Communication and Informatics, and data from the Jember District Health Office. A preliminary study in Jember Regency stated that 21 out of 30 students had been victims of cyberbullying. Data presentation consists of presenting data in the form of tables and narratives. Data analysis was performed by SPSS with a chi-square bivariate test. This research was approved by Health Research Ethics Committee of Faculty of Dentistry, Universitas Jember, No.2167/UN25.8/KEPK/DL/2023.

RESULTS

Correlation between Parents Interactions and the Psychological Impact of Adolescents

The results showed a significant relationship between the existence of parent-child conflict and the emergence of psychological effects related to decreased self-confidence and anxiety.

Chi-square analysis Table 1 illustrates a p-value of 0.00 <0.05, indicating that there was a significance between parent-child conflict and the level of self-confidence, accompanied by an OR risk value of 2.77 (1.64-4.66). There is an unfavorable conflict between parents and children, the risk of impaired self-confidence is up to 2.7 times higher than adolescents with good parental interaction. Furthermore, it was found that there was a significant relationship between parent-child conflict and the impact of anxiety on adolescents, with a p-value of 0.018 <0.05 and OR 1.71 (1.05-2.80). It can be stated that children with parental conflict will have a 1.71 times higher effect on the anxiety experienced, including in socializing activities.

Correlation between Cyberbullying and the Psychological Impact of Adolescents

Categories observed from this study were divided into seven groups flamming, harassment, denigrations, impersonations, outing, exclusion, and cyberstalking. Out of the seven exposures to cyberbullying, overall, they have varying significance and risk values for the impact on adolescent psychology. The results of the study in Table 2 show that out of 358 high school/equivalent teenage respondents in the Sumbersari District, Jember Regency, a significant relationship and the highest risk score were found in 2 (two) variables of exposure to cyberbullying related to cyberstalking or stalking data on the psychological impact of adolescents related to feelings of hopelessness worth OR 5.50 (2.83-10.71) and related to a decrease in self-confidence worth OR 3.02 (1.78-5.11)

One of the long-term effects that cyberbullying victims can experience is the emergence of suicidal intentions. Observing the research results, three out of seven cyberbullying exposure variables were found to be significant for the psychological impact of adolescents related to suicidal intent. The interactions of these crucial

variables include exposure to cyberbullying related to harassment (harassment) worth OR 1.84 (1.08-3.14), impersonation (impersonation) worth OR 2.02 (1.20-3.40) and cyberstalking (data stalking) worth OR 2.44 (141-4.19).

Table 1

The Correlation between Parents Interactions and the Psychological Impact of Adolescents

Parents Interactions	Psychological Impact							
	Self-confidence		Anxiety		Hopelessness		Suicidal Intent	
	n (%)	*p-value* OR (95% CI)	n (%)	*p-value* OR (95% CI)	n (%)	*p-value* OR (95% CI)	n (%)	*p-value* OR (95% CI)
The role of monitoring online activity	57 (26.76%)	0.18 1.40 (0.84-2.31)	118 (55.39%)	0.49 1.15 (0.75-1.77)	44 (20.65%)	0.33 1.31 (0.75-2.27)	49 (23.00%)	0.35 1.28 (0.75-2.17)
Disciplining	77 (24.60%)	0.72 1.142 (0.54-2.41)	173 (55.27%)	0.17 1.54 (0.82-2.89)	63 (20.12%)	0.14 2.01 (0.76-5.31)	66 (21.22%)	0.87 0.94 (0.44-2.00)
Potential conflict	36 (39.56%)	**0.00*** **2.77 (1.64-4.66)**	58 (63.73%)	**0.02*** **1.71 (1.05-2.80)**	22 (24.17%)	0.14 1.53 (0.86-2.72)	25 (27.47%)	0.09 1.58 (0.91-2.76)

Table 2

Correlation between Cyberbullying and the Psychological Impact of Adolescents

Exposure to Cyberbullying	Psychological Impact							
	Self-confidence		Anxiety		Hopelessness		Suicidal Intent	
	n (%)	*p-value* OR (95% CI)	n (%)	*p-value* OR (95% CI)	n (%)	*p-value* OR (95% CI)	n (%)	*p-value* OR (95% CI)
Flamming	76 (24.91%)	0.51 1.26 (0.62-2.58)	173 (56.72%)	**0.10*** **2.16 (118-3.94)**	61 (20.00%)	0.24 1.64 (0.70-3.81)	68 (22.36%)	0.25 1.58 (0.71-3.52)
Harassment	61 (30.80%)	**0.00*** **2.29 (1.36-3.84)**	121 (61.11%)	**0.00*** **1.92 (1.25-2.93)**	51 (25.75%)	**0.00*** **2.91 (1.60-5.29)**	51 (25.75%)	**0.02*** **1.84 (1.08-3.14)**
Denigrations	29 (32.95%)	**0.02*** **1.79 (1.05-3.05)**	52 (59.09%)	0.26 1.32 (0.81-2.15)	28 (31.81%)	**0.00*** **2.68 (1.53-4.69)**	24 (27.27%)	0.11 1.55 (0.89-2.72)
Impersonation	36 (31.57%)	**0.02*** **1.74 (1.05-2.88)**	73 (64.03%)	**0.00*** **1.84 (1.16-2.90)**	27 (23.68%)	0.12 1.53 (0.88-2.65)	34 (29.82%)	**0.00*** **2.02 (1.20-3.40)**
Outing	45 (29.03%)	0.06 1.56 (0.96-2.54)	99 (63.87%)	**0.00*** **2.05 (1.33-3.14)**	44 (28.38%)	**0.00*** **2.95 (1.70-5.12)**	40 (25.80%)	0.07 1.59 (0.95-2.65)
Exclusion	34 (33.66%)	**0.01*** **1.95 (1.17-3.25)**	58 (57.42%)	0.40 1.21 (0.76-1.93)	28 (27.72%)	**0.00*** **2.08 (1.19-3.61)**	26 (25.74%)	0.20 1.42 90.82-2.44)
Cyberstalking	63 (33.33%)	**0.00*** **3.02 (1.78-5.11)**	115 (60.84%)	**0.00*** **1.81 (1.19-2.76)**	56 (29.62%)	**0.00*** **5.50 (2.83-10.71)**	53 (28.04%)	**0.00*** **2.44 (1.41-4.19)**

DISCUSSION

Correlation between Parents Interactions and the Psychological Impact of Adolescents

According to Caivano et al (12), one of the factors behind the occurrence of cyberbullying behavior is the role of parents. Parents have the most important role in children's physical and mental development because it is with parents that children interact for the first time. The role of parents is to provide the basis for education, create a warm and pleasant home atmosphere, and provide an understanding of the good and bad norms that exist in society. Including the role of parents is very important in providing socialization to their children, especially in the formation of children's behavior.

Weak parental supervision of supervision of social media affects adolescents in providing support and good interactions with children (12,13). Teenagers are reluctant to tell their parents about online incidents that happen to them, this is because they don't want their parents to limit their online activities. In addition to victims experiencing physical problems, victims of cyber bullying also have psychological problems such as stress, decreased self-confidence, excessive anxiety, fear of socializing with their environment. Victims of bullying are also hampered from actualizing themselves, feel uncomfortable, feel afraid and intimidated, have low self-esteem and are worthless (13).

Correlation between Cyberbullying and the Psychological Impact of Adolescents Flaming

In line with the results of research conducted on high school/ vocational school/ equivalent youth in Sumbersari District, Jember Regency, the majority have received cyberbullying in the form of flaming or angry messages. Respondents stated that the form of flaming received contained harsh, insulting, offensive, or impolite words. In line with the results of research by Huang et al (2023) identifying flaming behaviors as cyberbullying was positively associated with self-enhancing humor (r=0,23; p<0.001) (14). It is in line that the most common form of cyberbullying or cyberbullying by perpetrators is sending messages with words full of anger continuously (15,16).

The possible impact on cyberbullying victims can be in the form of psychological disorders, such as excessive anxiety, always feeling afraid, depression, suicidal thoughts, post-traumatic stress symptoms, feeling depressed, afraid of meeting the bully, even depression and suicidal intent (12,17).

Harassment

It is known that high school/vocational school/equivalent teenagers in Sumbersari District, Jember Regency stated that they had received harassment in the form of disturbances on their social media accounts carried out continuously by other people. In line with research by Alotaibi (18), proposed a significant relationship between social media use and the behavioral intention of students (t=1.97; p<0.01). Cyber-harassment usually involves actions or behaviors that torture, annoy, terrorize, offend, or threaten someone via email, instant message or the like (19).

The results of this study are also in line with researchers from Khaliza et al (20), adolescents who have experienced harassment are 1.76 times more likely to experience symptoms of depression. Students who experience sexual violence both at home and in the school environment will have a risk of depressive disorders. A history of sexual harassment and violence, especially in adolescence, will cause mental health problems such as depression, psychosis, self-esteem, anxiety and post-traumatic disorders (21).

Denigration

The study's results found that on average high school/vocational school/equivalent students in Sumbersari District, Jember Regency, received around 15.60% of cyberbullying related to denigration or defamation. Physical violence that happens to children or adolescents includes humiliation, denigration, space goat, threat or ridicule (19).

The negative effects of cyberbullying, one of which is denigration based on the experiences of victims feeling depressed, sad, angry and frustrated (19). Some of the victims claimed to have been injured both physically and mentally. Exposure to denigration (defamation) makes the victims feel helpless, worthless and not confident. Some victims often feel afraid and embarrassed to attend school.

Impersonations

Most of the research respondents did not get cyberbullying treatment related to this impersonation. Impersonation is an act of cyberbullying in the form of pretending to be someone else and posting material to make other people feel difficult and making posts to make the

victim look bad (22). Impersonation and posting hurtful messages for the public to view, embarrass the victim and ruin the victim's reputation can have a serious emotional and psychological impact on adolescents (3).

Outing

Few research results found that cyberbullying was related to an outing on the psychological impact of high school/vocational high school/equivalent teenage respondents in Sumbersari District, Jember Regency. The most commonly used form of cyberbullying were outing (14.50%) (3). The outing is spreading information that embarrasses someone, sending or posting confidential information, information that embarrasses someone, sending or posting secrets, information or photos of someone (22).

Exclusion

The results of the research statistical test stated that the form of cyberbullying related to exclusion (group expenditure) had a significant relationship with the psychological impact of high school/vocational school/equivalent adolescents in Sumbersari District, Jember Regency. Based on the types of cyberbullying, it is known that teenagers who do exclusion generally have the power to do it to other people, whereas teenagers who feel they are ostracized will lose the ability to regulate themselves. The results of other studies show that the highest forms of cyberbullying committed by adolescents are outing and exclusion, namely 46.70% with a frequency of 1 to 4 times in the last 6 months. Exclusion is isolating or removing someone intentionally in an online group or online discussion forum (22). In the questionnaire question items, as many as 29% of victims received ridicule from social media groups deliberately and then were expelled from the group, this could occur due to gender issues or which resulted in situational factors and personal character factors.

Cyberstalking

In line with the research results, most of the respondents were classified as low or did not receive cyberstalking treatment. At its most basic definition, cyberstalking involves the repeated pursuit of a person using an electronic or internet-enabled device. Repeated chasing or data stalking includes unsolicited electronic communications, and can be threatening, coercive, or intimidating. Ultimately, stalking is a crime that creates fear, terror, intimidation, stress or anxiety in the victim. Due to the repetitive nature of cyberstalking, victims may lose a sense of control over their own life, never knowing when the stalker may appear or contact the victim again (18). There is a relationship between cyberstalking and mental health. With the high prevalence of cyberbullying, this has a greater potential to make victims experience depressive symptoms, anxiety symptoms, and below-average adolescent welfare. It is also supported by adolescents' increasing use of mobile devices and the internet (23).

CONCLUSION

The results of the study stated that from 358 senior high school respondents in the Sumbersari District, Jember Regency, there was a significant correlation between the existence of parent-child conflict and the emergence of psychological impacts related to decreased self-confidence and the emergence of anxiety in adolescents. The highest significance and risk value were found in 2 (two) cyberbullying exposure variables related to cyberstalking or data stalking on the psychological impact of adolescents related to feelings of hopelessness and decreased self-confidence. One of the long-term effects that can be experienced by cyberbullying victims is that 3 (three) out of 7 (seven) cyberbullying exposure variables are found to be significant for the psychological impact of adolescents related to suicidal intent.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest in this study.

AUTHOR CONTRIBUTIONS

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