

Cybersex behavior and related factors among adolescents in Indonesia

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ABSTRACT

Cybersex behavior can lead to potential harm and addiction among adolescents. The aim of this study was to analyze factors that influence cybersex behavior among adolescents. The design used in this study was a cross-sectional. Data was collected from students at senior high school from March to June 2022 using simple random sampling. Total sample was 140 students. The questionnaire were parental sexual communication questionnaires, family monitoring questionnaires, peer interaction questionnaires, internet addiction test (IAT), internet sex screening test. Data was analyzed using Spearman's Rho test. The results showed that parental sexual communication was in the low category (55.7%), family monitoring was in the low category (39.3%), most of the adolescent's peer interaction was at a moderate level (88.6%), the use of social media was moderate (85%), cybersex behavior was at risk was 97.1%. The results show that there was a relationship between parental sexual communication and cybersex behavior ($p=0.002$); peer interaction and cybersex behavior ($p=0.002$), social media and cybersex behavior ($p=0.000$); family monitoring and cybersex behavior ($p=0.000$) among adolescents. Parental monitoring and communication, social media use education and look for positive peer are important factors to prevent cybersex behavior among adolescents.

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1. INTRODUCTION

Technological developments show very rapid progress, both in hardware and software, including social media [1]. Social media has negative and positive effects [2]. Several studies showed that the positive effect of social media was related to education, business, and society [3]–[5]. Meanwhile, one of the negative effects of social media based on a previous study was related to cybersex behavior [6]–[8].

Cybersex is related to activity that increases sexual arousal and is carried out online such as looking for a sex partner, communicating between two people who discuss sex, and looking for sexual content on the internet and sometimes followed by masturbation [7]. Cybersex behavior is a category of online sexual activity (OSA). These activities will make someone become addicted and have potential harm [9]. Cybersex behavior can lead to potential harm: its moral and social effects. Morally effect refers to immoral activity, such as prostitution. like premarital sex. The social effect refers to deterioration of any sexual relationship [10]. Many studies mentioned that cybersex behavior is associated with homosexuality, bisexuality, and no or more than one sexual partner [11]–[13]. This behavior also leads to anxiety, depression, and loneliness as well as psychological damage [14], [15]. Most of the studies showed that cybersex behaviors had negative effects.

The factor that influences cybersex behavior are interactional factors such as using social media [7], [16], [17], and environmental factors such as peers. Social media can be used to look for friends and also it can be used to communicate and interact with each other. In addition, sharing information, images, audio, text, and video is also available on social media. Due to these reasons, adolescents easily access pornography content [18], [19]. Family monitoring is also a predictor of cybersex behavior among adolescents. Family including parents can prevent adolescents from cybersex addiction and supervise their children when they are online and they can do effective communication to increase knowledge in terms of sexual behavior with their children [20]–[22]. Consistent with previous studies, we investigated factors that influence cybersex behavior among adolescents. We predicted parental communication, peer interaction, social media use, and family monitoring as factors that influence cybersex behavior. Understanding these factors can be used as a strategy to prevent cybersex behavior addiction.

2. METHOD

The design used in this study was a correlation design with a cross-sectional. Data was collected from students at Senior High School 12 Surabaya from March to June 2022 using simple random sampling. Total sample was 140 students with inclusion criteria, students in senior high school, having smartphones and internet, and living with their parents. Previous studies mentioned that the minimum sample size to produce adequate statistics is 100 [23].

We used self-report questionnaires to collect the data. All the questionnaires were evaluated for validity and reliability by the author. The questionnaires were parental sexual communication questionnaires. It had 10 items, each item was valid with T-value >1.96 and p-value <0.05 , therefore the questionnaire was valid [24]; family monitoring questionnaires had 18 items, each with a score 1-4, and this questionnaire had adequate construct validity [25]; peer interaction questionnaires had 15 items [26], each with score 1-4. The score range between 15-29 is considered low interaction, 30-44 is moderate interaction, and 45-60 is good interaction. The questionnaire had adequate convergent validity with $r > 0.2$ [27], the Cronbach alpha of this questionnaire was 0.906; internet addiction test (IAT) had 20 items with 5 point Likert scale, the Cronbach alpha of this questionnaire was 0.99 [28]; internet sex screening test had 25 items to measure problematic sexual behaviors are occurring online. It had adequate CVI (0.91) and the Cronbach alpha was 0.85 [9].

Data was analyzed using Spearman's Rho test. We removed missing data and used skewness and kurtosis to ensure whether the data normal distribution or not [29]. This study was granted by ethical clearance from KEPK Stikes Hang Tuah Surabaya with the number PE/66/VI/2022/KEP/SHT.

3. RESULTS AND DISCUSSION

Table 1 shows the characteristics of respondents. Regarding age, most of participants were 17 years old (80.7%), and 60% respondents was men. All of the respondents were living with their parents (100%). Table 2 shows the frequency (N) and the percentage (%) of variables as well as the p-value of correlation among variables. The total score of sexual communication and peer interaction had a significantly positive correlation to cybersex behavior ($p=0.002$). The total score of social media use and family monitoring also had a significantly positive correlation with cybersex behavior ($p=0.000$). This study explores the relationship between cybersex behavior and related parental sexual communication, peer interaction, social media use, and family monitoring factors among adolescents. Based on the results of the study, it is shown that there is a relationship between sexual communication; peer interaction; social media use; family monitoring; and cybersex behavior among adolescents.

Table 1. Characteristics of respondents

Data	Frequency (N)	Percentage (%)
Age (years)		
16	10	7.1
17	113	80.7
18	17	12.1
Total	140	100
Sex		
Girl	56	40
Boy	84	60
Total	121	100
Living with		
Parent	140	100
Sibling	0	0
Boarding house	0	0
Total	140	100

Table 2. Correlation among study variables

Variables		Cybersex behavior						Total (N)
		No risk		Moderate risk		High risk		
		N	%	N	%	N	%	
Parental sexual communication ^a	Low	0	0	77	98.7	1	1.3	78
	Moderate	1	2.4	41	97.6	0	0	42
	High	2	1	18	90	0	0	20
	Total	3	2.1	136	97.1	1	0.8	140
Peer interaction ^a	Low	0	0	10	100	0	0	10
	Moderate	3	2.2	120	96.8	1	1	124
	High	0	0	6	100	0	0	6
	Total	3	2.1	136	97.1	1	0.7	140
Social media use ^b	Normal	0	0	1	100	0	0	1
	Mild	0	0	15	100	0	0	15
	Moderate	3	2.5	115	96.6	1	0.8	119
	High	0	0	5	100	0	0	5
	Total	3	2.1	136	97.1	1	0.7	140
Family monitoring ^b	Normal	1	1.3	76	97.4	1	1.3	78
	Mild	1	2.4	41	97.6	0	0	42
	Moderate	1	5	19	95	0	0	20
	Total	3	2.1	136	97.1	1	0.8	140

Note: ^a = Spearman's rho 0.002 (p<0.05), ^b = Spearman's rho 0.000(p<0.05).

Parental communication has an important influence on adolescent sexual behavior. Effective communication between parents and adolescents has been identified as the main strategy to increase knowledge in terms of sexual behavior in order to minimize risky sexual among adolescents [20], [21]. There were several kinds of parental sexual communication, such as sex education, integrity, and behavior of parents as an educator in daily activities [30], [31]. Meanwhile, there was also negative parental sexual communication, such as only talking more about sexual risk than sexual positive [32]. In the questionnaire, the participants reported that their parents tend to warn and threatened the consequences of cybersex behavior without good education and communication.

This study showed that 96.8% of participants had high-risk cybersex behavior, it had moderate peer interaction. It also showed that there was relationship between peer interaction and cybersex behavior. Previous studies mentioned that peer significant influence on cybersex among adolescents [33]. In addition, they also make their peer as role models. Adolescents form a group with their peer and make more intense interaction than with their family. Peer can change personality among adolescents into both positive and negative behavior [34]. Adolescents who follow the negative behavior of their peers can cause cybersex behavior addiction. Therefore, school and family monitoring are needed to protect adolescents from negative peer and environment [35].

Most of the respondents showed moderate using social media and they were at risk of cybersex behavior. It also showed that there was a relationship between the use of social media and cybersex behavior [36]–[38]. Cybersex behavior occurs due to misuse of social media for sexual purposes. Previous studies mentioned that individuals who access sexual material tend to have negative consequences [39], [40], such as browsing about pornography, dating with many people, and engaging in online sexual activities with unknown people. They also look for high fantasies to fulfill their curiosity.

Based on this study, family monitoring and cybersex behavior had a significant relationship. Previous studies mentioned that adolescents' development process needs the mother's role, involvement of family, mother's expectations, communication, and quality of relationships [20]–[22]. Based on our study the questionnaire showed that family monitoring refers to good communication, warmth, empathy, and emotional support from parents to adolescents and it can prevent cybersex behavior addiction among adolescents. The limitation in this study was considered the participants were adolescents in senior high school, which may not be representative of all young in Indonesia. Despite the limitation, this study provided evidence that parental sexual communication, family monitoring, social media use, and peer were factors that affected cybersex behavior among adolescents.

4. CONCLUSION

Cybersex behavior is the activity of watching pornography that involves sex chat, and using devices such as web-cams to perform sexual activities. These activities can increase sexual desire for adolescents and they can be addictive. Parental monitoring and communication, social media use education, and looking for positive peer are important factors in preventing cybersex behavior among adolescents.




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