

## Self Control And Peer Attachment: Unraveling Their Links to Adolescent Cybersex Behavior

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**Abstract.** Cybersex, a component of Online Sexual Activity (OSA), is defined as engaging in sexual activities over the internet. This study aims to examine the relationship and influence of adolescent characteristics, family characteristics, self-control and peer attachment on cybersex behavior in adolescents. This study used a quantitative approach with an explanatory design on 116 adolescents in West Tanjung Jabung Regency, Jambi with a purposive sampling technique with the criteria that adolescents aged 16-18 years and often access sexual content or who have been exposed to sexual content. Data processing used Microsoft Excel software and the Statistical Package for Social Science (SPSS) program. The correlation test results show that self-control has a significant negative relationship with cybersex behavior, while peer attachment has a significant positive relationship with cybersex behavior. In addition, multiple linear regression analysis was performed to examine the simultaneous influence of self-control, peer attachment, and other relevant variables on cybersex behavior. The regression results showed a significant negative effect between self-control and length of friendship on cybersex behavior, as well as a significant positive effect of peer attachment and the duration of adolescents' gatherings with their friendship groups on cybersex behavior.

**Keywords:** *adolescents, cybersex behavior, peer attachment, self-control.*

### Introduction

The internet has become an integral component of contemporary life, significantly influencing various demographic groups. Its capacity to enhance productivity through the provision of valuable information and resources is among its notable advantages. According to a study conducted by the Indonesian Internet Service Providers Association (APJII) in 2017, the number of internet users in Indonesia reached approximately 143.26 million, with the island of Sumatra accounting for 19.09 percent of this total, making it the second-highest region in terms of internet usage. This data suggests that Sumatra is among the islands with a significant number of residents who regularly utilize the internet in their daily lives.

Internet access can yield positive outcomes when employed appropriately, but it also presents challenges, particularly in relation to the accessibility of inappropriate content. A study conducted by Ramadani (2019) indicated that 91.25 percent of respondents had encountered pornographic material while navigating the internet. The proliferation of advanced information and communication technologies has inadvertently facilitated the dissemination of such content. Current trends indicate that pornography is readily accessible across various online platforms (Astuti, 2018).

The widespread of pornography availability poses a particular risk to adolescents, who are increasingly prone to exposure to pornographic material and related content. Furthermore, the increasing engagement of young users with social media platforms augments the likelihood of accessing applications that can lead to involvement in cybersex. Such applications have the potential to instigate detrimental behaviors among adolescents who engage with them. Research conducted by Sunardi et al. (2020) indicates that a substantial 68.1 percent of adolescents in Jambi Province have engaged in risky sexual behaviors, including holding hands, embracing, kissing, petting, and sexual intercourse. In 2018, data from the Jambi Provincial Education Office revealed that 2,339 students across all educational levels in Jambi dropped out of school. Several factors contribute to this concerning trend. Notably, for high school students, one prevalent reason for dropout is early marriage, which often results from unintended pregnancies occurring outside of wedlock (Subekti, 2019).

Adolescents are particularly susceptible to sexual content, influenced by both external factors—such as the accessibility and affordability of sexual media online and peer influences—and internal factors related to the adolescents themselves, including levels of self-control, curiosity, and the addictive nature of sexual content consumption (Agastya et al., 2020). Regarding external factors, notably, the degree of attachment to their peers is theorized to have a strong association with deviant sexual behavior in adolescents. During adolescence, individuals experience critical opportunities for social development, wherein the establishment of friendships plays a pivotal role. As a result, adolescents often find themselves inclined to mimic the attitudes and values demonstrated by their peers, as highlighted by McMillan, Felmlee, and Osgood (2018).

However, the influence of peer relationships can also have adverse effects, particularly when adolescents become affiliated with peer groups that exhibit maladaptive behaviors.

A study by Hakiki et al. (2022) found a significant relationship between peer attachment, alienation, and deviant sexual orientation. Specifically, the experience of alienation from their peers can adversely affect their understanding and expression of sexual orientation. Individuals can adopt behavioral patterns influenced by their social environment, particularly through interactions with peers. Negative peer influences can be detrimental to adolescent's negative behavior. In addition, research conducted by Najib (2018) also revealed that peer influence can lead to detrimental outcomes concerning sexual behaviors among adolescents. This evidence suggests that adolescents are particularly vulnerable to the negative behaviors of their peers, especially when embedded within a group that engages in deviant practices.

Cybersex behavior among adolescents is also associated with self-control. Lestari and Hartosujono (2017) found that adolescents with strong self-control are better equipped to manage their engagement in cybersex activities, whereas those with poor self-regulation show an increased propensity for such behaviors. According to Baumeister and Boone (2004), self-control is the ability of individuals to regulate their behavior in accordance with the values, morals, or rules within society to foster positive conduct. In other words, self-control reflects the individual's capacity to modify actions, emotions, and feelings to avoid negative behaviors. Supporting this view, Kusumo and Harsono (2022), in a study of 60 university students in Malang, revealed a significant relationship between self-control and cybersex behaviors, showing that students with higher levels of self-control exhibited lower instances of such activities. Similarly, Damayanti and Islamiah (2024) demonstrated that adolescents with low self-control were more likely to engage in harmful online practices such as cyberbullying, reinforcing the broader evidence that inadequate self-regulation increases vulnerability to diverse forms of maladaptive digital behavior.

Given these insights, previous works of literature highlight that adolescents are particularly susceptible to cybersex behavior due to a combination of external and internal

factors. Therefore, this study aims to confirm the influence of relationship self-control and peer attachment as critical factors and influential elements of adolescents' cybersex behaviors in Sumatera Island, particularly in Jambi Province. This study aims to: 1) identify the characteristics of families and adolescents, along with levels of adolescent self-control, peer attachment, and cybersex behavior, 2) analyze the relationships among adolescent characteristics, family characteristics, self-control, and peer attachment in relation to cybersex behavior, and 3) evaluate the impact of family characteristics, adolescent characteristics, self-control, and peer attachment on cybersex behavior among adolescents.

### **Method**

This study used a quantitative method with a *cross-sectional* design. The research location was chosen *purposively*, namely in Tanjung Jabung Barat Regency, which is included in the top 10 districts with the highest internet usage rate in Jambi Province (BPS Jambi, 2018) and as a district that has the largest number of students from the top 5 districts in Jambi Province. The data collection process was carried out *online* by distributing questionnaires via *Google Forms*. The sampling process was carried out by *non-probability* sampling with a *purposive sampling* technique. The sample criteria are adolescents aged 16-18 years who have accessed or been exposed to sexual content on *online* platforms. Teenagers who live in Tanjung Jabung Barat Regency. The total number of respondents involved in this study was 116 respondents.

The data collected include family characteristics, adolescent characteristics, adolescent self-control, peer attachment, and *cybersex* behavior in adolescents. Self-control in adolescents is measured using a scale adapted from Leonardhi (2018), which uses aspects from Averill (see Ghufon 2010), and consists of three aspects, namely behavior control, cognitive control, and decisional control, with a *Cronbach's alpha* value of 0.859. This measurement tool consists of 37 questions using a Likert scale ranging from 1–5 (never, seldom, sometimes, often, and always). Examples of questions in this instrument include: "difficulty in refraining from accessing the internet," "discipline in accessing the internet," and "thinking about the consequences of using the internet." Measurement of peer attachment variables using *The Inventory of Parent and Peer Attachment* (IPPA) instrument developed by Armsden & Greenberg (1987) with a *Cronbach's alpha*

value of 0.882. The number of valid items in this instrument is 25, consisting of favorable and unfavorable questions. This instrument uses a Likert scale (1 = never, 2 = seldom, 3 = sometimes, 4 = often, and 5 = always). Examples of questions in this instrument include: "your friends understand you", "you feel comfortable sharing your thoughts and feelings with your friends," and "you feel that you cannot trust your friend." Meanwhile, the measurement of behavioral variables of *cybersex* behavioral tendencies uses an instrument developed by Delmico in 1997, namely the *Internet Sex Screening Test* (ISST) instrument, with a *Cronbach's alpha* value of 0.982. Measurement of each variable uses a Likert scale (1 = Never, 2 = Seldom, 3 = Sometimes, 4 = Often, 5 = Very often). Examples of questions in this instrument include: "I spend more than 5 hours online for sexual activities," "I purchased sexual content online," and "I use the internet for sexual activities." Each score per question item is summed up and made into a total score in each variable. Furthermore, the total score of each variable is converted into an index score to equalize units in making comparisons in categorizing data per variable.

The index score results that have been obtained are then used to calculate the average of each variable. Furthermore, the average is used to determine the category of each variable. The *cybersex* variable is grouped into three groups that have been categorized by Delmonico et al. (2001). Scores in the interval 0-42 will be categorized as *recreational users*, scores 43-85 will be categorized as *at-risk users*, and scores  $\geq 86$  will be categorized as *sexual compulsive users*. Furthermore, for self-control and peer attachment, variables will be grouped into three categories including low (<60), medium (60-79), and high (80) (Farhatilwardah et al., 2019; Hasanah et al. 2023). While the *cybersex* variable uses a *cut-off point* that uses the formula from Azwar (2012), namely by calculating the mean and standard deviation value and then dividing it into three categories, including low (<12), medium (12-74), and high (>74).

Data processing and analysis were carried out using *Microsoft Excel* 2019 and *IBM Statistical Package for Social Sciences* (SPSS) 25 software. The process of *entering/inputting*, coding, scoring, and cleaning used *Microsoft Excel*, while validity tests, reliability tests, descriptive analysis, correlation and multiple linear regression analyses other statistical analyses were carried out using the *IBM Statistical Package for Social Sciences* (SPSS). To test the hypotheses, multiple linear regression was employed to examine the relationship between adolescent characteristics, self-

control, peer attachment, and cybersex behavior. This method was chosen to assess the simultaneous influence of multiple predictors on cybersex behavior.

### **Result**

This study involved 116 adolescents in the age range of 16-18 years. Respondents who participated in this study were dominated by women, namely 74 people and 42 male respondents. As many as 44 percent use the internet for more than 5 hours per day, while only 7.8 percent use the internet for one to two hours per day. As many as 65.5 percent of teenagers have more than 4 close friends with a length of friendship that has been established for more than 12 months, 69.8 percent and the remaining teenagers have only been making friends for less than 12 months. About 30.2 percent of teenagers meet with their peers more than 13 times per week. Meanwhile, 69.8 percent of other teens meet less than 13 times per week. A total of 69 percent of teenagers gather for three hours to more than three hours in one meeting with their peers.

Family characteristics in this study consisted of parental status, father's age, mother's age, father's education level, mother's education level, father's working status, mother's working status, family size, and parents' income. The average status of adolescent parents in this study is complete. The age of the respondents' parents in this study was predominantly at the age of 41 to 60 years. Based on the level of education of parents, the average is up to diploma graduates. Based on the descriptive test results, the average parent has a job. In addition, it is known in this study that 50.9 percent of families are in the small family category consisting of one to four people in the nuclear family.

Table 1.

Minimum, maximum, mean, standart deviation and categorization of self-control, peer attachment, and *cybersex* behavior.

| Variable     | Category |      |        |      |      |   | Min-Max   | Mean ± SD  |
|--------------|----------|------|--------|------|------|---|-----------|------------|
|              | Low      |      | Medium |      | High |   |           |            |
|              | n        | %    | n      | %    | n    | % |           |            |
| Self-control | 91       | 78,4 | 25     | 21,6 | 0    | 0 | 18,6-76,9 | 51,1±11,21 |

|                        |    |      |    |      |    |      |           |            |
|------------------------|----|------|----|------|----|------|-----------|------------|
| <b>Peer Attachment</b> | 10 | 8,6  | 76 | 65,5 | 30 | 25,9 | 37,0-90,0 | 67,1±10,08 |
| <b>Cybersex</b>        | 22 | 19,0 | 63 | 54,3 | 31 | 26,7 | 0-90      | 43,0±31,00 |

### *Self-Control*

The self-control measured in this study is the ability to control behavior, the ability to control stimuli, the ability to anticipate events, the ability to interpret events, and the ability to control decisions in adolescents. The results of the study show that adolescents have low self-control, with an average index value of 51.1. In addition, when viewed through its dimensions, the ability to control behavior dimension found that 64.7 percent of adolescents were categorized as low. In the dimension of the ability to control stimuli, 90.5 percent of adolescents were categorized as low, while in the dimension of the ability to anticipate events, 71.6 percent were categorized as low. In the dimension of the ability to interpret events and control decisions, 72.4 percent and 75 percent of adolescents were also in the low category.

### *Peer Attachment*

The level of friendship attachment in adolescents is measured through three dimensions, namely trust, communication between peers, and alienation. Based on the research results obtained on the dimension of trust, it can be said that adolescents are in the moderate category with an average index value of 75.6. This means that, on average, adolescents already have a sufficient level of trust in their peer group. In the dimension of communication between peers, more than half of the respondents (56.9%) were categorized as high. This can be interpreted as adolescents having intense communication patterns in their play groups. Meanwhile, in the alienation dimension, 53.4 percent of adolescents were in the low category, meaning that adolescents did not feel alienated or ignored in their friendship groups. Overall, it can be concluded that peer attachment is in the high category, with an average index value of 67.1.

### *Cybersex Behavior*

Based on the results of the study, *cybersex* behavior in adolescents, as much as 54.3 percent of examples are in the moderate category. This *cybersex* behavior is measured through four dimensions, the first dimension of *online sexual compulsivity*, more than two-thirds of the examples are categorized as moderate, namely 55.2 percent. In the second dimension, namely *online sexual*

*spending*, the proportion of dominant adolescents is categorized as moderate as 51.7 percent. In the third dimension, namely *online sexual behavior social*, 68.1 percent were categorized as high, and in the *online behavior isolated* dimension, 47.4 percent were still categorized as moderate. Overall, adolescents are in the moderate category, with an average index value of 43. In other words, adolescents who contribute to this study have an average tendency to engage in *cybersex* behavior.

Based on the level of user categorization according to Delmonico *et al* (2001), it can be seen that 28.4 percent of adolescents are *recreational users*. This means that teenagers access sexual content only as a form of curiosity. In addition, 34.5 percent of teenagers are *at-risk users*. This means that there is no compulsive behavior but some sexual problems after using the internet. While 37.1 percent of other teenagers are *sexually compulsive users*. This means that adolescents are already in the stage of pleasure in pornographic content, carrying out sexual activities with many unknown people because they use the internet as a forum or place for sexual activity.

*Relationship between Adolescent Characteristics, Family Characteristics, Self-Control, Peer Attachment, and Cybersex Behavior*

The results showed that gender ( $r = -.260$ ;  $p < .01$ ) was significantly negatively related to self-control. This means that female adolescents in this study have higher self-control than male adolescents. The results of the correlation test also show that the duration of internet use (daily) of adolescents ( $r = -.346$ ;  $p < .01$ ) is significantly negatively related to self-control. This means that the higher the duration of internet use in adolescents, the lower the self-control possessed by adolescents.

Based on the results of the study also showed that the self-control variable has a significant negative relationship with *cybersex* behavior ( $r = .390$ ;  $p < .01$ ). This means that the higher self-control of adolescents, the lower the *cybersex* behavior carried out by adolescents. Meanwhile, based on the results of the study, there was also a significant positive relationship ( $r = .289$ ;  $p < .01$ ) between peer attachment and *cybersex* behavior. This means that there is a unidirectional relationship between the variables of peer attachment and *cybersex*, in other words, the higher the peer attachment between adolescents, the higher the *cybersex* behavior in adolescents. Meanwhile,

the variables of peer attachment and self-control have a negative relationship although not significant.

Table 2.

Correlation coefficient values between family characteristics, adolescent characteristics, self-control, peer attachment, and *cybersex* behavior.

| Variable                         | Peer Attachment | Self-Control | Cybersex |
|----------------------------------|-----------------|--------------|----------|
| Adolescents Characteristics      |                 |              |          |
| Age                              | .136            | .113         | .175     |
| Gender                           | -.002           | -.260**      | -.028    |
| Number of close friend           | .031            | .073         | .021     |
| Duration of internet use (daily) | .064            | -.346**      | .175     |
| Length of friendship             | -.009           | .071         | -.140    |
| Frequency of meeting             | -.096           | -.159        | -.021    |
| Duration of gathering            | -.097           | -.009        | .139     |
| Family Characteristics           |                 |              |          |
| Father age                       | .089            | .057         | -.61     |
| Father education level           | -.118           | .073         | .051     |
| Working status                   | .020            | .010         | -.109    |
| Mother age                       | -.058           | .120         | -.106    |
| Mother education level           | -.093           | .129         | .022     |
| Working status                   | -.156           | .188         | -.143    |
| Family size                      | -.002           | .014         | .001     |
| Parents' marital status          | .074            | -.098        | .120     |
| Peer Attachment                  | 1               | -.138        | .289**   |
| Self-control                     | -.138           | 1            | -.390**  |

Notes: \*significant at  $p < 0.05$ ; \*\*significant at  $p < 0.01$ . Gender (0 = female; 1 = male); Father working status (0 = unemployed; 1 = employed); Mother working status (0 = unemployed; 1 = employed); Parents' marital status (0 = incomplete; 1 = complete).

### *Influence of Adolescent Characteristics, Family Characteristics, Self-Control, Peer Attachment and Cybersex Behavior*

Table 3 presents the results of the influence test conducted using multiple linear regression tests. The model includes testing the effect of independent variables on the dependent variable. The linear regression model in this study can be said to be significant because the significance value of this model is .000 ( $p < .05$ ). Based on the results of multiple linear regression tests in Table 3, the adjusted coefficient value (*Adjusted R Square*) shows .239, which is 23.9 percent of the factors that influence the tendency of *cybersex* behavior explained by the variables in this research model. While the other 76.1 percent is the influence of other variables outside of this

study. The regression test results show that adolescent age  $\beta = .182$  has a significant positive influence on *cybersex* behavior ( $p = .039$ ). That is, every increase in adolescent age will increase *cybersex* behavior in adolescents by .182 units. Furthermore, based on the regression test results, it is also found that peer attachment  $\beta = .241$  has a significant positive influence on *cybersex* behavior in adolescents ( $p = .007$ ). This means that every increase in attachment to peers will increase *cybersex* behavior in adolescents by .241 units. In addition, one of the characteristics of adolescents, namely the duration of gathering  $\beta = .235$  also shows a significant positive effect on *cybersex* behavior ( $p = .012$ ). This means that every increase in the duration of time spent with peer groups will increase adolescent *cybersex* behavior by .235 units. Meanwhile, self-control has a coefficient value  $\beta = -.406$  and has a significant negative effect on *cybersex* behavior in adolescents ( $p < .01$ ). This means that the higher the self-control possessed by adolescents, the lower the *cybersex* behavior in adolescents by .406 points. Furthermore, the variable that has a significant negative influence on *cybersex* behavior is one of the characteristics of adolescents, namely the length of friendship that has been established between adolescents and their friendship groups. The length of friendship has a coefficient value of  $\beta = -.201$  and shows a significant negative influence on adolescent *cybersex* behavior ( $p = .029$ ). This means that the longer the friendship between adolescents and their friendship groups, the less adolescents will engage in *cybersex*.

Table 3.

The coefficient values of the regression model between family characteristics, adolescent characteristics, self-control, peer attachment and *cybersex* behavior.

| Variable                 | <i>Cybersex</i>               |                                     |                 |
|--------------------------|-------------------------------|-------------------------------------|-----------------|
|                          | Unstandardize coefficient (B) | Standardize coefficient ( $\beta$ ) | Sig. (2-tailed) |
| (Constanta)              | 70.005                        |                                     | .097            |
| Age                      | 7.669                         | .182                                | <b>.039**</b>   |
| Gender                   | -6.452                        | -.100                               | .318            |
| Duration of internet use | -.017                         | -.001                               | .996            |
| Parents' marital status  | -2.264                        | -.029                               | .819            |
| Number of close friend   | -.449                         | -.007                               | .940            |
| Length of friendship     | -13.547                       | -.201                               | <b>.029**</b>   |
| Frequency of meeting     | -4.672                        | -.069                               | .459            |
| Duration of gathering    | 15.680                        | .235                                | <b>.012**</b>   |
| Father age               | -1.335                        | -.034                               | .798            |
| Father education level   | .516                          | .026                                | .840            |
| Father Working status    | -10.528                       | -.143                               | .177            |
| Mother age               | -4.609                        | -.106                               | .342            |
| Mother education level   | 4.047                         | .176                                | .168            |

| Variable                | <i>Cybersex</i>                  |                                           |                     |
|-------------------------|----------------------------------|-------------------------------------------|---------------------|
|                         | Unstandardize<br>coefficient (B) | Standardize<br>coefficient<br>( $\beta$ ) | Sig. (2-<br>tailed) |
| Mother Working status   | -.768                            | -.012                                     | .896                |
| Family size             | -2.279                           | -.041                                     | .643                |
| Self-control (index)    | -1.122                           | -.406                                     | .000**              |
| Peer Attachment (index) | .773                             | .241                                      | .007**              |
| F                       |                                  |                                           | 3.120               |
| Sig.                    |                                  |                                           | .000**              |
| R. Square               |                                  |                                           | 0.351               |
| Adjusted R Square       |                                  |                                           | 0.239               |

Notes: \*\*significant at 0.5 level; significant at 0.1 level. Gender (0 = female; 1 = male); Parents' marital status (0 = incomplete; 1 = complete); Number of close friends (0 =  $\leq 4$  people; 1 =  $> 4$  people); Length of friendship (0 =  $\leq 12$  months; 1 =  $> 12$  months); Frequency of meeting (0 =  $< 13$  times per month; 1 =  $\geq 13$  times per month); Duration of gathering (0 =  $< 3$  hours; 1 =  $\geq 3$  hours); Father working status (0 = unemployed; 1 = employed); Mother working status (0 = unemployed; 1 = employed); Family size (0 =  $\leq 4$  people; 1 =  $> 4$  people)

## Discussion

This study investigates the interplay between adolescent and family characteristics, adolescent self-control, and peer relationships concerning the propensity for cybersex behavior among adolescents. In today's digital age, cybersex—defined as engaging in sexual activities online—represents a significant deviant behavior. According to data from Indonesia's Ministry of Communication and Information (Kominfo), adolescents accessed approximately 244,738 instances of pornographic content in 2019. This concern is echoed in the findings of Putri and Nawangsih (2023), which indicate that Indonesian adolescents are increasingly engaging in online sexual activities, with most spending less than one hour per week on such endeavors.

The study findings reveal that the tendency toward cybersex behavior among adolescents falls within a moderate range. This suggests that many adolescents in the sample are indeed inclined to engage in cybersex, primarily through accessing or participating in sexual activities online. These results align with research by Anggreiny et al. (2018), which categorizes adolescent activities as risky cybersex behavior when they involve viewing pornography—such as images, videos, or sexually explicit literature. Cooper (2002) identifies three key factors, known as the "triple 'A' engine," that contribute to the prevalence of cybersex activities: anonymity, accessibility, and affordability. Anonymity, in particular, allows individuals to engage in

cybersex without revealing their true identities, fostering a sense of freedom when participating in erotic activities such as sharing sexual stories or engaging in online chat or phone sex.

Additionally, this study observed that adolescents exhibited low levels of self-control, indicating a significant number of teenagers struggle to regulate their internet usage according to their needs. These findings correlate with research conducted by Andaryani et al. (2013), which highlights that individuals with low self-control often find it challenging to direct and manage their internet activities, potentially leading to negative consequences.

In terms of demographic factors, this study reveals a significant negative correlation between gender, duration of internet use, and self-control. Specifically, female adolescents demonstrate better self-control than their male counterparts. This observation aligns with findings from Bobbio et al. (2019), which indicate that men typically exhibit lower self-control than women, leading to a higher propensity for negative and deviant behaviors. Individuals with high self-control are better equipped to manage their internet usage and weigh potential consequences effectively (Widiana et al., 2004). Conversely, those with low self-control struggle to regulate their internet activity. The correlation test also indicated a negative relationship between peer attachment and self-control. These results echo the research conducted by Brauer and Corter (2016), which found that individuals with strong peer connections are more susceptible to negative influences. In essence, the detrimental effects of robust peer ties can facilitate mutual influence among adolescents in making poor decisions, including engaging in deviant behaviors (Lestari & Satwika, 2018).

The study also found that the level of peer attachment among adolescents is generally moderate, suggesting that they feel sufficient trust within their peer groups to share personal stories and problems. Evidence of this is seen in the dimension of peer communication, which scored relatively high with an average index value of 78.7. This finding correlates with Lestari and Satwika (2018), who noted that adolescents with strong peer attachments are more inclined to openly express their emotions, feelings, and thoughts due to the understanding and support provided by friends. Additionally, Rukmini and Lisnawati (2020) highlighted that adolescents form close bonds with peers that resonate with their developmental characteristics.

The correlation tests further indicated a significant negative relationship between self-control and cybersex behavior. In other words, higher self-control in adolescents corresponds to lower instances of cybersex behavior. This reflects findings from Hitalessy and Damariyanti (2022), which assert that adolescents with low self-control often act impulsively, resort to physical confrontations, take risks, and struggle to manage their emotions, making them particularly vulnerable to deviant behaviors, including cybersex. Lestari and Hartosujono (2017) also support the idea that individuals with strong self-control are better at managing cybersex behavior, while low self-control can be a significant risk factor (Heryan et al., 2021).

Moreover, the data revealed a positive relationship between peer attachment and cybersex behavior, indicating that increased peer attachment correlates with a higher likelihood of engaging in cybersex. This finding is consistent with Priyangi (2018), who documented a positive relationship between the two variables, particularly when negative interactions within peer groups contribute to cybersex behavior. Over half of the respondents reported that sexual content had circulated within their friendship groups, underscoring how a negative peer environment can prompt cybersex behavior. According to Syarifuddin et al. (2019), 51% of cybersex behaviors were attributed to peer influence.

Regression analyses confirmed a significant negative impact of self-control on cybersex behavior. This is consistent with Karsinta (2017), who found a notable link between self-control and cybersex behavior, and Ginting and Rustika (2017), who asserted a similar connection with premarital sexual behavior. In essence, low self-control can predispose adolescents to engage in cybersex. The lack of self-regulation and emotional control significantly contributes to sexual behaviors, making self-control a crucial factor in managing cybersex. Such behaviors can be easily instigated by both external and internal influences, which underscore the need for solid self-control to mitigate these risks.

Furthermore, the regression tests indicated a significant positive relationship between peer attachment, the duration of peer interactions, and cybersex behavior. Research by Ningrum and Fikry (2024) supports this assertion, showing a significant positive impact of peer influence on adolescent cybersex behavior. If peer attachment negatively affects self-control, it may lead to

undesirable behaviors (Irkhami et al., 2022). Thus, individuals with strong peer ties are more vulnerable to negative behavioral influences (Brauer & Corter, 2016).

### **Conclusion**

In this study, the average age of adolescents ranged from 16 to 18 years. Male adolescents exhibited a greater propensity for engaging in cybersex behaviors compared to their female counterparts. On average, these adolescents reported spending more than five hours per day online. The level of self-control among participants was classified as low. In contrast, the quality of peer attachment and instances of cybersex behavior were both rated at moderate levels. The findings indicate a negative correlation between self-control and cybersex behavior in adolescents; specifically, lower levels of self-control are associated with increased cybersex activity. Conversely, peer attachment showed a significant positive relationship with cybersex behavior, suggesting that stronger friendship bonds correlate with higher engagement in such activities. Furthermore, results from the effect analysis demonstrated that both self-control and the duration of friendships have a significant negative impact on cybersex behavior. This implies that higher self-control and longer-lasting friendships are associated with a reduction in cybersex behaviors among adolescents. In contrast, peer attachment and the length of time spent with peer groups positively influence cybersex behavior, indicating that stronger attachment among peers and increased social interactions elevate the likelihood of engaging in cybersex among adolescents.

### *Suggestion*

The study findings indicate that adolescents tend to exhibit low levels of self-control, as evidenced by their preference for internet usage over engaging in real-life activities. This trend is particularly concerning when it comes to accessing sexual content online. To mitigate these behaviors, several recommendations can be implemented. First, it is

essential to limit visits to websites featuring sexual material, refrain from joining communities that promote such content, and reduce online purchases of explicit materials. These actions can help prevent the reinforcement of compulsive behaviors associated with repetitive consumption of sexual content. Parents play a crucial role in promoting healthy technology use among adolescents. Establishing time limits for technology usage and encouraging educational applications of technology can foster a more productive online experience. Additionally, educating children about digital literacy, including understanding the importance of not sharing personal or private information, can enhance their safety in navigating social media. In terms of adolescent social environment, particularly friendships, also significantly influences behavior. To cultivate a positive peer atmosphere, adolescents should practice open communication within their social circles and engage in enriching activities, such as outdoor pursuits, to reduce their reliance on technology and limit exposure to sexual content online. For future research, a qualitative approach could offer deeper insights into the relationships between self-control, peer attachment, and cybersexual behavior. Examining various age groups or contrasting findings from students in different educational settings, such as religious versus vocational schools, could reveal notable differences based on the surrounding school environment and peer dynamics. Such investigations may yield a more nuanced understanding of these issues.

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