

# The Impact of Internet Addiction and Family Communication Patterns on Reproductive Health and the Risk of Sexual Violence Among High School Boys in Yogyakarta, Indonesia

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## Abstract

**Background:** In recent years, the rapid advancement of technology and the widespread use of the internet have significantly impacted the behavior and overall well-being of adolescents. One alarming trend is the increasing prevalence of internet addiction among high school students, which has been linked to various psychological and social issues. Internet addiction, characterized by excessive and compulsive use, can interfere with daily activities, social interactions, and academic performance. This phenomenon has raised concerns, especially regarding its potential effects on adolescent mental health and behavioral outcomes. Among the most concerning consequences is the possible association between internet addiction and an increased risk of sexual violence. Adolescents who engage heavily in internet use may be more vulnerable to online and offline sexual exploitation, as they may be exposed to inappropriate content or engage in risky behaviors.

**Objectives:** The study aimed to examine the role of internet addiction and family communication patterns in influencing the propensity for sexual violence among male high school and vocational students in Yogyakarta. Specifically, it sought to assess whether these factors are associated with an increased risk of experiencing sexual violence.

**Methods:** This research utilized a quantitative design. The sample consisted of 380 students from high schools and vocational schools in Yogyakarta, selected through cluster random sampling. Data were collected using three measurement instruments: the Child Sexual Abuse Questionnaire (CSAQ), the Internet Addiction Test (IAT), and a modified Family Communication Patterns Questionnaire. The data were analyzed using linear regression analysis conducted with R and Python software.

**Results:** The study's findings, based on simultaneous testing, revealed an F-value of 17.111 and a p-value of 0.000, indicating that both internet addiction and family communication patterns significantly influence the likelihood of male students experiencing sexual violence.

**Conclusion:** The results suggest that internet addiction plays a significant role in increasing the propensity for sexual violence among male adolescents. Specifically, higher levels of internet usage were associated with a greater likelihood of experiencing sexual violence.

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However, while family communication patterns showed a simultaneous effect, they did not independently influence the tendency to experience sexual violence.

**Keywords:** internet addiction; family communication patterns; sexual violence; high school; Indonesia

## Background

Sexual violence against children is a public health problem affecting millions worldwide. Sexual violence occurs because someone forces or forces a child to perform sexual activities through physical contact (sexual intercourse, attempted sexual intercourse, oral contact through the genitals, directly or through clothing) and deviance through non-contact, such as exposing children to activities of adult sex or pornography and the use of children for prostitution or pornography (American Psychological Association, 2009). Child sexual abuse is generally defined as physical contact between a child and an adult, another significantly older person, or someone in a position of power or control over the child. The child is used for the sexual stimulation of an adult or another person (World Health Organisation, 2004).

Sexual violence does not only occur in women but also often occurs in men. Research by Negriff et al. (2014) found around 4.5% of male students were forced to engage in sexual activity during their lifetime, and most of the acts were not done through physical contact or penetration (Negriff et al., 2014). The Centers for Disease Control and Prevention reports that one in six men experience sexual violence before 18. Men tend to be less willing or less likely to disclose their sexual violence experience than women, limiting the description of the problem. In one study, about 66.9% of girls were more likely to have evidence of sexual violence than 50.8 boys (Lalor K & McElvaney R, 2010).

According to Komisi Perlindungan Anak Indonesia (2017), out of 2.556 sexual violence victims, as many as 56.46% of sexual violence occurred in boys, and this case was higher than sexual violence against girls, which amounted to 43.46%. In Indonesia, the prevalence of sexual violence against children is 6.37% for boys and 6.28% for girls (Komisi Perlindungan Anak Indonesia, 2017). The children experienced one type of sexual violence before the age of 18. The most frequent experience of sexual violence is unwanted sexual touch, both for men and women. This study explains that sexual violence in men is higher than in women (Kurniasari Alit, 2017).

According to the LBH (legal aid agency) report in Yogyakarta, there were 42 cases of sexual violence. The information, which was compiled from March 2020 to April 2021, consists of 30 pieces of sexual harassment cases, five cases of Online Gender-Based Violence (KBGO), three cases of rape, two instances of harassment, and two instances of gender-based economic threats (WargaJogja.com, 2021). Likewise, cases of sexual abuse (sodomy) occurred in high school students in a hotel in Yogyakarta; the perpetrators were the teachers themselves, and based on the results of the investigation, so far, nine students have been victims of harassment, all of whom are students of the perpetrators (RadarJogja.com, 2016). Then in 2017, there was an act of sodomy against elementary school students in the mosque's bathroom in Gondokusuman Yogyakarta (krjogja.com, 2017).

Sexual violence against boys that continues to occur will negatively impact. Boys who are victims of sexual abuse are more than three times more likely to have multiple sexual partners, more than twice as likely to have unprotected sex, and more than five times more likely to be involved in pregnancy than boys who have not experienced sexual violence. This places children at increased risk of contracting sexually transmitted diseases, including hepatitis C and human immunodeficiency virus (HIV) (Homma et al., 2012). Boys who experienced sexual violence had twice the increased risk of suicide attempts, increased risk of alcohol, family, and marital problems, drug use, and depression than men who did not. As children, boys who were sexually abused were three times more likely to have sex with a partner than boys who weren't used. In addition, someone who has experienced sexual violence in childhood can experience sexual dysfunction in adulthood, including premature ejaculation (McCabe et al., 2016).

Pornographic content via the internet can be a contributing factor to sexual violence against men. Excessive internet consumption can lead to misperceptions about sexuality and sexual relationships. Boys exposed to pornographic content can become accustomed to unrealistic depictions of sex, which can lead to an inability to

identify or respond appropriately to sexual violence. Apart from that, internet usage behavior will cause addiction. People become addicted to applications that encourage excessive internet use, such as cyber-sexual, cyber-relational, and cyberbullying addiction (Poli, 2017).

Livingstone & Smith's (2014) research found that one in five teens experience negative sexual experiences from online media (Livingstone S & Smith P., 2014). The Internet is widely used to do schoolwork, play online games, and watch movies/cinema, but many teenagers also use the Internet to connect with someone to meet new people for friendship, love, and sex (Jonsson et al., 2019). The research results by Kim et al. (2017) found that sexual victimization is associated with problematic internet use in adolescents. The tendency of sexual abuse occurred in the group with a mild level of internet addiction (Kim et al., 2017).

Apart from internet use, communication patterns within the family also have an influence on the development of adolescent behavior, including sexual violence against adolescent boys. Poor or open communication between parents and children can create an environment that is vulnerable to sexual exploitation, because teenagers may feel they have no space to talk about the problems they face, including potential sexual harassment or violence. According to Widman et al. (2017), parent-adolescent sexual communication is one factor that can positively impact adolescent sexual behavior. Practically and theoretically, parents can be involved as agents in disseminating sexual understanding for adolescents. Parents can play an important role in conveying sexual information and significantly influence adolescents' sexual attitudes, values, and beliefs regarding risk. Parents can also provide a model for open and honest communication about sexual health issues. Theoretically, the classical ecological systems theory of human development shows that individuals live in a series of systems that settle in an environment, especially families. Dynamic family systems or vice versa can, directly and indirectly, influence adolescent behavior (Widman et al., 2017).

Sexual violence against boys that continues to occur will have a negative impact, while research on sexual violence against adolescent boys in Indonesia is still lacking. Indonesian society's perspective on sexual violence, especially for boys, is still limited. This is supported by reports of sexual violence against women who always get the spotlight, whereas when it happens to men, it is the opposite. One thing that makes victims of violence or sexual harassment reluctant to speak up is the negative response from society (Eka Prasetya, 2020). This study shows the effect of internet use addiction and family communication patterns on the tendency to experience sexual violence in male high school / vocational high school students in Yogyakarta.

This study focuses on sexual violence experienced by boys by looking at how high the role of internet use addiction and family communication patterns is. The subjects are students who are in high school in the city of Yogyakarta, Indonesia, both those who have experienced sexual violence and those who have not experienced sexual violence. Based on the background presented, the aims of this study are twofold. First, to examine the role of internet use addiction on the tendency to experience sexual violence among high school and vocational school boys in Yogyakarta. Second, to investigate the role of family communication patterns on the tendency to experience sexual violence among the same demographic. This research seeks to understand how these factors individually and collectively influence the vulnerability of male students to sexual violence, which is a significant issue in Indonesia.

This research is interesting to research, because this case is still rarely raised as a problem and is even neglected, because some people do not believe that men experience sexual violence. To find out clearly, by conducting this research it is hoped that we can answer the following questions: to what extent is the role of addiction to internet use in the tendency to experience sexual violence among high school and vocational school students in Yogyakarta? Additionally, what impact does family communication patterns have on the likelihood that a boy will experience sexual violence? By exploring these questions, this research hopes to shed light on important factors that contribute to the risk of sexual violence in male students, and ultimately to inform prevention and intervention measures.

## **METHODS**

### **Study Design**

The research approach used is quantitative. The quantitative approach allows researchers to collect numerical data analysis through statistical analysis of samples using instruments that have been set. The research design used in

research is a survey research design. The survey research design is the quantitative research procedure to obtain a description of the population's attitudes, behavior, and characteristics obtained through samples (Creswell, 2012). The study was conducted to measure the role of internet use addiction and family communication patterns on the tendency to experience sexual violence in male high school/vocational students.

### **Samples/Participants**

The population in this study focused on boys student high school/vocational in Yogyakarta and based on sample calculations using Lemeshow (1997) (Lemeshow J, 1997), a sample of 380 students was obtained. Sample was carried out at two schools, consisting of male high school/vocational students in Yogyakarta. The sample technique was carried out using random cluster sampling.

### **Data Collection**

The measuring instruments used in this research are: i) Child Sexual Abuse Questionnaire (CSAQ): This measuring instrument has been used in various studies on sexual violence, especially those that occur in adolescents, which was developed by Mohler et al. (2014) with a Cronbach Alpha coefficient scale of 0.763. Contains 14 statements to assess various forms of sexual violence experienced. Eight statements were categorized as sexual violence without physical contact, and six statements as sexual violence with physical contact (Mohler et al., 2014). This measuring tool uses a Likert scale with four answer choices "very often", "often", "rarely", and "never". ii) Internet Addiction Test (IAT): This measuring tool is used to assess problems resulting from excessive internet use by looking at the extent to which adolescents' exposure to the internet causes sexual violence, developed by Young (1996) with a Cronbach's alpha coefficient for the measurement scale of 0.913. This measuring tool contains 20 statements consisting of six aspects, including the "salience" aspect containing five statements, the "overuse" aspect containing five statements, the "anticipation" aspect containing two statements, the "wanting work" aspect containing three statements, and the "wanting work" aspect containing three statements. overuse" contains five statements. the element "under control" contains three statements and the aspect "neglecting social life" consists of two statements. This measuring tool uses a Likert scale with four answer choices, namely "very often", "frequently", "rarely" and "never." iii) (Young K.S, 1996). Family Communication Pattern Questionnaire: This measuring tool is used to assess how much communication patterns are built in the family by seeing whether poor communication patterns in the family cause sexual violence in teenagers, developed by Gupta & Geetika (2019) with a Cronbach alpha coefficient value for the measurement scale is 0.869. Contains 18 statements consisting of three aspects: the conversation orientation aspect contains 10 statements, the conformity orientation aspect contains five statements, and the social orientation aspect contains three statements. This measuring tool uses a Likert scale, namely "very suitable", "suitable", "not suitable", and "very not suitable" (Gupta & Geetika, 2019).

After obtaining school approval to conduct the research, all high school/vocational students selected as respondents were explained the aims and objectives of the study. All students were gathered with the help of accompanying teachers in each school in Yogyakarta, adhering to strict health protocols. Students were explained how to fill out the questionnaire in the Google form. Filling out via Google forms was done because it was considered more effective, so the school suggested filling out the questionnaire online.

### **Data Analysis**

Data analysis

Data analysis techniques are data processing techniques that aim to obtain appropriate conclusions. Descriptive analysis was carried out to determine the characteristics of sexual violence, types of sexual violence, internet usage habits, and family communication patterns. Statistical analysis uses linear regression analysis, which is an approach that models the dependent variable Y and one or more independent variables called X (predictors) to see how much the independent variables can predict or play a role in the dependent variable. This analysis is considered appropriate to find out how much the independent variable can predict or play a role in the dependent variable and to find out how much the predictor variable contributes to the dependent variable and the analysis uses the R and Python versions.

## Ethical Considerations

This study was conducted following ethical guidelines to ensure the safety, privacy, and well-being of all participants. Prior to data collection, approval was obtained from the relevant school authorities in Yogyakarta. Participation in the study was entirely voluntary, and informed consent was obtained from all students involved. For students under 18, consent was also obtained from their parents or guardians. The purpose and procedures of the study were clearly explained to the participants, emphasizing that they could withdraw at any time without any negative consequences. Confidentiality of the data was maintained by anonymizing responses and securely storing all collected data. Additionally, due to the sensitive nature of the topic, students were provided with information on where to seek help and support if they experienced any distress as a result of participating in the study.

## RESULTS

Sexual violence in male students of SMAN 11 and SMKS Bopkri 1 Yogyakarta showed that of the 380 respondents studied, 172 (45.3%) experienced sexual violence, while among those who did not experience sexual violence as many as 208 (54.7%) (Figure 1).

The distribution of types of sexual violence experienced by respondents in Table 1 shows that 14 types of sexual violence are classified into three categories: rare, frequent, and very frequent sexual violence. Instagram, Facebook, email, telegram, or any other internet service and were forced or urged to touch or kiss another person (on his lips, his body, and his private parts) by 76 (44.2%) respondents each. At the same time, the items of sexual violence most less experienced respondents were ever forced or pressured to look at the genitals of adults or other children, which amounted to 20 (11.6%) respondents.

Based on figure 1 on the characteristics of sexual violence experienced by respondents. The age of respondents who first experienced sexual violence from 172 respondents the highest at the age of 11-13 years is as much as 66 (38.4%), while the sex of the perpetrator who committed sexual violence the most was male at 114 people. The age of the highest perpetrator is the age of 18 years 99 (57.6%). Next is the relationship between the perpetrator and respondents who experienced sexual violence, according to which the most foreigners are 77 (44.8%). Then the place of occurrence of sexual violence experienced by respondents based on the answers given by respondents the highest is another 88 or 51.2%. Respondents mentioned that some of the sexual violence scenes they shared the most were via the Internet, whether with WhatsApp (chat and video) or other internet media. Then the other place is on the street, the alley there is even a mention of the river. Furthermore, the disclosure of violence they experienced from 172 respondents, around 111 who chose other answers. The different solution is that most choose not to express and even complain and surrender completely to God.



**Figure 1** Comparison of Characteristics and Distribution of Tendency to Experience Sexual Violence

Based on the F test (simultaneous) and t test (partial). The F test is used to determine the effect of independent variables (internet addiction and family communication patterns) on the dependent variable (tendency to experience sexual violence) in a study simultaneously or together. The F and t tests use a significance value of 5% or 0.05; This means that there is a significant influence of the independent variable on the dependent variable.

Based on the R output table above, it is known that the value of  $F = 17.111$  and the significance of  $p = 0.000$  or  $p < 0.01$ , it can be concluded that the hypothesis is accepted or that the variables of addiction to internet use and family communication patterns together play a role in the tendency to experience sexual violence in male high school / vocational students in Yogyakarta.

**Table 1** The role of internet use addiction and family communication patterns on the tendency to experience sexual violence in boys student high school/vocational in Yogyakarta

Variable	Odds ratio test			Simultaneous test (G-test)	
	Sig	Exp B	95% CI for exp B Lower-Upper	Chi-square	Sig
Internet use addiction	0.000	5.829	0.083 – 0.167	9.843	0.007
Family communication patterns	0.373	0.892	0.025 – 0.067		

The first hypothesis in this study is that internet use addiction has a role in the tendency to experience sexual violence in male high school / vocational students in Yogyakarta City. Based on the results of the t-test in the "Coefficients" output table in table 1, it is known that the significance value of the internet use addiction variable is  $p = 0.000$ . Because of the importance of  $p < 0.01$ , it can be concluded that the hypothesis is accepted, meaning that internet use addiction plays a very significant role in the tendency to experience sexual violence in male SMA/SMK students in Yogyakarta City. The second hypothesis in this study is that family communication patterns play a role in the tendency to experience sexual violence in male high school / vocational students in Yogyakarta. Based on the R "coefficients" output table above, it is known that the significance value of the family communication pattern variable is 0.373. Because the  $p \text{ value} > 0.05$ , it can be concluded that the hypothesis is rejected. This means there is no significant role in family communication patterns and the tendency to experience sexual violence in male SMK / SMK Yogyakarta City students.

## Discussion

Based on the major hypothesis, internet use addiction and family communication patterns play a role in the tendency to experience sexual violence. In families with high conformity communication, differences of opinion can lead to conflict and create many problems. Therefore, one uses the Internet excessively to escape difficulties (Salehi et al., 2012). Adolescents who are affected by problems in the family feel more interested in accessing the Internet and its virtual space, enjoy social media viewing more, and have attachments with other groups of internet users in a variety of shared content, including pornographic, cyber-sexual content, and even invitations to sexual activity, so that the condition these have the potential to experience sexual violence (Tajalli & Zarnaghash, 2017).

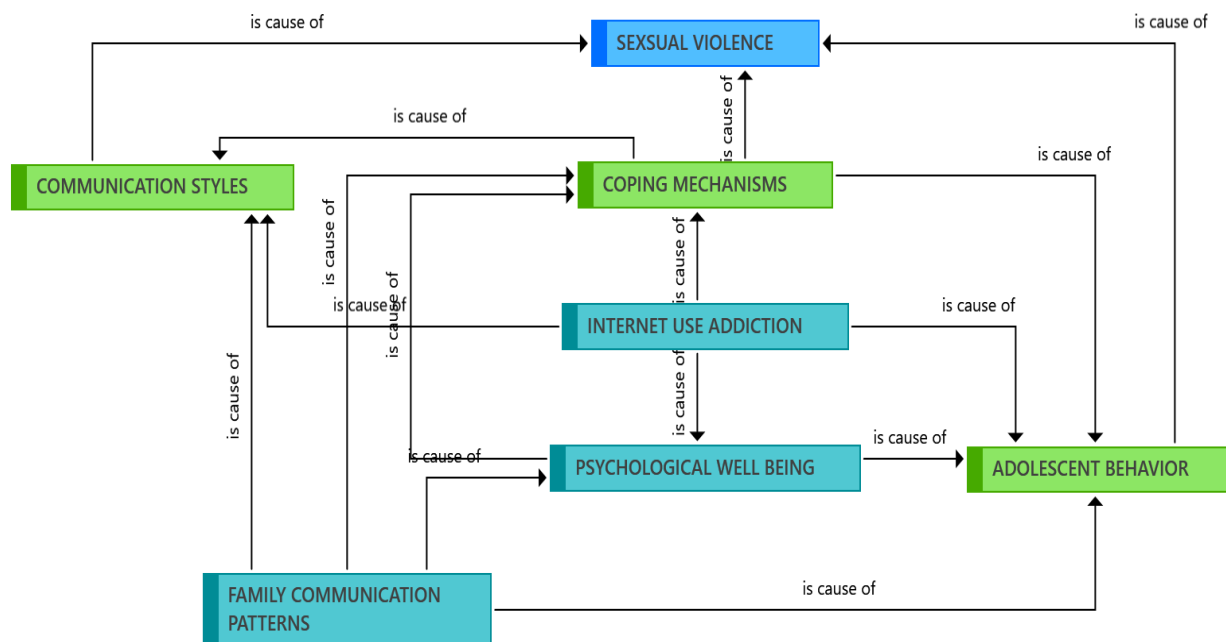
Based on the hypothesis testing that has been carried out, it shows that addiction to internet use plays a role in the tendency to experience sexual violence in male high school / vocational students in Yogyakarta. Goldberg (1996) describes internet addiction as a maladaptive internet use pattern leading to clinical disorders (I. K. Goldberg, 1996). According to Beard & Wolf (2004), internet addiction is excessive use of the Internet that causes a person's psychological disorders (both mental and emotional), education, work, and social concepts. Psychological dynamics show that male adolescents with lower psychological well-being are at increased risk of using sexually explicit Internet material, meaning that individuals who suffer from poor psychological well-being may use online sexual content as a coping mechanism or a means of relieving dysphoria teenage boy (Keith W. Beard & Eve M. Wolf, 2004). Furthermore, adolescent boys with excessive sexual interest are at increased risk for developing a tendency to use sexual Internet materials compulsively. Explicit conceptualization of compulsive use of sexual Internet material as a technological variant of hypersexual behavior or sex addiction (Doornwaard et al., 2016).



Young (1996) explains that a person experiencing internet addiction is caused by salience, a condition where a person may feel happy with the Internet, hide his behavior from others, and may even show a loss of interest in other activities but prefers to be alone playing online (Young K.S, 1996). This condition occurs due to the mediation of poor coping/cognitive responses to certain situations. A person fails to determine the coping process when sexual violence occurs through online media because he cannot change his perception or conception of the salience experienced. Coping behavior that should be done to reduce internet addiction does not occur so that the avoidance of pornographic and cyber-sexual content, whether intentional or as a victim, is not carried out. Internet use can be a coping response to emotional or social difficulties (Walsh & Dillillo, 2011). When Internet activities are used excessively to cope with negative affective states and alternative ways to cope with the lack of social support, one can avoid negative feelings by using Internet activities. Coping responses affect well-being and psychopathology and can be a factor in sexual violence when Internet activity with negative content and online sexual solicitations is used to overcome negative effects (McNicol & Thorsteinsson, 2017).

The concept of a person experiencing addiction to internet use if he feels happy has a strong urge to access the Internet and excessive or unhealthy controlled behavior regarding internet use that causes disturbance or difficulty in several domains of life. According to Young, three important points for someone suspected of experiencing internet addiction are ignoring work. Someone more interested in internet activities than work so that it interferes with work productivity; Ignoring social life is a condition in which a person is most likely to use online relationships as a tool to relieve the burden of thoughts and stress so that he ignores family and people around him, but tends to interact with fellow internet users; Furthermore, lack of self-control is a condition in which a person has difficulty managing online time, often playing online for longer than he is (Young K.S, 1996).

Internet addicts cannot control themselves, so they neglect other activities. Generally, teenagers addicted to the Internet forget time school and ignore the surrounding environment. Generally, people who experience internet addiction are motivated by a life that makes individuals' emotional and psychological needs less fulfilled both in the family environment and outside (school, the surrounding environment), so internet media is believed to overcome their needs. When the Internet becomes the only means of fulfilling emotional and psychological conditions, individuals make friends or participate in online communities and other uses such as games, entertainment, etc. Someone who starts to make intimate friendships with other people dares to watch negative content so that someone becomes vulnerable to sexual violence (Hadis Abdul, 2008).



**Figure 2** The role of internet use addiction on the tendency to experience sexual violence

### *The role of family communication patterns on the tendency to experience sexual violence*

Based on the hypothesis testing that has been done, it shows that family communication patterns do not play a role in the tendency to experience sexual violence in boys high school/vocational students in Yogyakarta. The indifference of parents and families in communication patterns can encourage children to behave negatively and even engage in sexual violence as perpetrators and victims. The involvement of children in sexual activities is not fully understood, and for that, children cannot give informed consent (Anvari MH et al., 2012). According to Ritchie (1991), parents use their power to force children's conformity to their parents in the family environment. In addition, parents reject the competence of children, impose their strength, and want an absolute agreement (Ritchie David, 1991). This means that family communication patterns show the concept of openly sharing feelings and ideas about parental support and motivation for children (LD & Fitzpatrick, 1990). According to Koerner & Fitzpatrick (2002), Family Communication Patterns are a theory about the family that focuses on the communication patterns of parents and children related to building a shared social reality. Family communication patterns are an integral part of the family process of understanding family relationships, developing behavior, and interpreting and evaluating the behavior of oneself and other family members (Koerner & Fitzpatrick, 1997).

In this study, family communication patterns still generally explain the application of communication in the family, namely conformity orientation refers to the formation of an atmosphere that produces homogeneous beliefs related to attitudes, values, and ideas, which are characterized by uniformity of empathy conversation orientation that leads to the family by creating a climate that can encourage all members to participate and interact in discussing various topics in the family. Researchers suspect that the family communication pattern that is closely related to sexual violence is sexual communication between parents and adolescents, as shown in Research Rogers (2017) which explains that there is a consistent relationship between parent-adolescent sexual contact and adolescent sexual attitudes and safe sex that can affect sexual intentions and behavior (Adam A. Roger, 2017). Similarly, research Harris (2016) shows that parent-adolescent sexual communication can reduce risky adolescent sexual behavior. However, teenagers are still reluctant to communicate with their parents, especially about reproductive and sexual health issues. Students prefer to discuss with their peers than with their parents (Harris, 2016). This is due to the lack of parental communication skills and parental knowledge about reproductive and sexual health issues, which are the main reasons students cannot discuss these issues with parents and families (Habte et al., 2017).

This study's results align with Research Ajayi & Olawuyi (2016), which found no significant difference in parental communication patterns regarding the prevention of sexual violence based on gender, religion, and family type (Ajayi & Olawuyi, 2016). This study is not in line with Mmari et al.'s (2016) research, which revealed that parents are an important source of information for sexual and reproductive health. Lack of parental presence and communication results in sexual intercourse and even sexual violence (Mmari et al., 2016). The results of this study are also not in line with Nedombeloni & Oyedemi (2014), which explain that interpersonal communication in the family shapes the socialization of boys towards the acceptance of gender roles that are displayed in the social construction of masculinity and femininity. As a result, it affects perceptions of rape/sexual violence. And social efforts to combat sexual violence (Nedombeloni & Oyedemi, 2014). Likewise, the results of this study are not in line with the Research of Buelga et al. (2017), which explains that there is a relationship between family communication and sexual violence, where communication that does not go well and tends to be closed between parents and adolescents leads to cyberactivism (Buelga et al., 2017).

#### *Limitation and recommendation*

Limitations inherent in this study include its restricted focus on male high school/vocational students in Yogyakarta, Indonesia, thus potentially limiting the generalizability of findings to broader populations. Moreover, reliance on self-reported data might introduce biases, as participants may underreport sensitive experiences or misinterpret survey questions. The study's cross-sectional design also impedes establishing causal relationships between variables, calling for longitudinal investigations to elucidate the temporal dynamics between internet addiction, family communication patterns, and the tendency to experience sexual violence. While validated measurement tools were utilized, they may not capture the full complexity of constructs under scrutiny, suggesting the need for mixed-methods approaches to provide richer insights into underlying mechanisms.



To address these limitations and expand knowledge in the field, future research endeavors could encompass more diverse samples, including individuals from varied socio-economic backgrounds and geographical regions. Incorporating longitudinal studies would allow tracking participants over time, offering deeper insights into developmental trajectories and long-term effects. Additionally, qualitative methods could be employed to explore adolescents' lived experiences and perceptions concerning internet use addiction, family communication patterns, and sexual violence. Finally, future research could focus on developing and evaluating interventions aimed at preventing sexual violence among adolescents, leveraging insights gained to design effective strategies promoting healthy internet use behaviors and fostering supportive family environments. Through such endeavors, a more comprehensive understanding of the complex interplay between these factors could be attained, facilitating more targeted and impactful interventions in the realm of adolescent sexual violence prevention.

## Conclusion

The study concludes that addiction to internet use and communication patterns simultaneously play a role in the tendency to experience sexual violence in student boys high school/vocational in Yogyakarta. Partially, internet use addiction plays a significant role in the propensity to experience sexual violence. This means that the higher the habit of male students using the Internet, the more likely they are to experience sexual violence. Meanwhile, although it plays a role simultaneously, the family communication pattern does not affect the tendency to experience sexual violence in boys student high school/vocational in Yogyakarta.

Research findings show that internet use addiction and family communication patterns have a significant influence on the tendency to experience sexual violence in adolescents. The implications of these results emphasize the importance of the family's role in building healthy and open communication patterns, so that it can become an initial bulwark to prevent the negative impacts of uncontrolled internet exposure. In addition, digital education and literacy programs are needed that involve parents and teenagers to increase awareness of the risks that arise from excessive internet use, including exposure to dangerous content and risky online interactions. The government and educational institutions can also play an active role in integrating material related to digital security and strengthening family values in the curriculum, in order to create an environment that supports the development of mentally and emotionally healthy teenagers.

This research can be used as a guide for schools in approaching students who experience sexual violence to take preventive action so that it does not happen again, and psychotherapy can be used to treat mental and emotional disorders of students who experience psychological trauma due to the sexual violence they have experienced. The results of this research can also be used as a basis for further research to explore the problem of sexual violence experienced by students, which can be seen from other variables such as knowledge about sexual violence, mental health, peer influence, parental support, socio-economics which are thought to be closely related to adolescent sexual violence, especially against boys.

## Declaration Conflicting Interest

The authors have no conflicts of interest to declare.

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## Author Contribution

AR conceptualized the study, developed the research design, collected and analyzed data, and wrote the initial draft of the manuscript while coordinating the overall research activities and managing correspondence. SU contributed to the theoretical framework, designed the questionnaires, and provided expertise in professional psychology, aiding in data interpretation and manuscript refinement. AA assisted with data analysis using statistical methods, contributed to the research methodology, and

participated in data interpretation, offering statistical expertise and supporting the manuscript writing process. FN provided reproductive health expertise, contributed to the study's design, assisted in data collection, and helped develop the final manuscript. All authors read and approved the final version and agreed to be accountable for all aspects of the work, ensuring the accuracy and integrity of the research.

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