

Social media exposure to adolescent sexual behavior

Afifah Aristawidya¹, Ema Waliyanti^{2*}

^{1,2} School of Nursing, Faculty of Medicine and Health Sciences, Universitas Muhammadiyah Yogyakarta, Indonesia
[emawaliyanti@umy.ac.id*](mailto:emawaliyanti@umy.ac.id)

*corresponding author



ARTICLE INFO

Article history

Received, 15th June 2025

Revised, 19th November 2025

Accepted, 26th November 2025

Keywords

Social Media;
Risky sexual behavior;
Adolescent;

ABSTRACT

The Indonesian Child Protection Commission in 2022, stated that 96% of children aged 10-17 years in Indonesia had opened negative content (pornography) with an average of 64 hours of use per month for 4,500 junior and senior high school students. The increasing interest of adolescents in sexual issues encourages them to seek information about sexuality through various media. This study aimed to examine the association between the extent of social media use and adolescents' involvement in risky sexual behaviors. The population in this study were all eight grade students, with a sampling technique using purposive sampling with a total of 82 people based on the inclusion criteria, namely adolescents who actively use social media and are willing to be research respondents. Data collection was carried out using a closed questionnaire consisting of two parts, namely a social media use questionnaire and a questionnaire on risky sexual behavior in adolescents. The research instrument was prepared by the researcher based on relevant theories and tested for validity and reliability using the Cohen's Kappa test. Data analysis was carried out using the Chi-Square test to determine the relationship between social media use and risky sexual behavior in adolescents. The results showed that social media use was in the low category of 49 people (59.8%) and risky sexual behavior in the medium category of 64 people (78%). Statistical tests showed that there was a relationship between social media use and risky sexual behavior in adolescents with a *p* value of 0.000 (*p*<0.05). There is a relationship between social media use and risky sexual behavior in adolescents. Adolescents are expected to be able to use social media wisely and avoid pornographic content.

This is an open access article under the CC-BY-SA license.



1. Introduction

Teenagers often face various challenges, one of which is related to sexuality. Sexual behavior refers to a variety of actions and interactions that are influenced by sexual desire, which can occur both between individuals of the opposite sex and the same sex (Alimoradi et al., 2017). Risky sexual behavior among adolescents can have significant consequences for both themselves and their partners. The potential impacts include unwanted pregnancy, early marriage, abortion, and an increased risk of contracting sexually transmitted infections (STIs) such as HIV/AIDS. Such behaviors may lead to reproductive health problems and serve as one of the main factors contributing to the spread of infectious diseases. Furthermore, risky sexual behavior can result in severe outcomes, including premarital pregnancy, unsafe abortion, and even death (Kazdouh et al., 2019).

Their high curiosity makes them actively seek information about this through various types of media. Social media is an online medium where users can easily participate, share, and create content, including blogs, social networks, wikis, forums, and virtual worlds (Kustiawan et al., 2022). Along with technological advancements, social media is now increasingly dominating and is starting to

replace traditional media such as TV, radio, and newspapers, because they are easier and faster to access. According to the report *We Are Social* (Salsabil., 2024), in January 2022 the number of active social media users in Indonesia reached 191 million people, up 12.35% from the previous year which amounted to 170 million users. This shows that social media is increasingly becoming the main source of information for the public, including teenagers. According to the Indonesian Child Protection Commission in 2022, 97% of adolescents have watched pornography, 7% of adolescents have kissed, *genital simulation* (groping the genitals) and *Oral sex*, adolescents are not virgins 62.7%, while adolescents admit to having had an abortion in 21.2%. This has the potential to negatively impact their psychological development and increase the risk of risky sexual behavior. From 2016 to 2024, the Ministry of Communications and Digital has blocked a total of 2,439,076 pieces of content on various social media platforms and taken steps to address the spread of negative content on a few major platforms such as X (formerly Twitter), Meta (which includes Facebook and Instagram), and TikTok. As an illustration, as many as 1,433,812 pieces of content have been removed from platform X, while Meta recorded 745,306 pieces of content that have been blocked.

For Indonesian people, especially teenagers, social media has become an inseparable part of daily life. Many of them can barely get away from their smartphones and are always actively on social media throughout the day (Fronika, 2019). Popular platforms such as Facebook, Instagram, Twitter, and YouTube have made a huge impact around the world. Each has distinctive features that support various forms of interaction, such as sending messages, sharing posts, commenting, and following other people's accounts. The types of content available are also very diverse, ranging from videos, live broadcasts (live streaming), podcasts, to other interactive content. This diversity makes users more active and creative, and it influences the way they communicate and disseminate information.

Technological developments in Indonesia, especially internet access and social media, have an important role in changing premarital sex behavior among adolescents. Technological advancements allow teens to easily access different types of information, including information about sexuality. According to Ghaffar & Kusumaningrum (2021) and Maulina & Alim (2020), adolescents can now be exposed to sexual content more easily, either intentionally or unintentionally, through digital platforms. This can affect their views on relationships and sexual behavior. Quick and unrestricted access to this kind of information can also have a negative impact if it is not accompanied by proper sex education from family, school, or the environment. Therefore, this technological development requires stricter supervision and good guidance from parents and educators so that adolescents can manage information wisely and not get caught up in risky behavior. Based on the background that has been presented, it is important to find out more about the relationship between social media and risky sexual behavior in adolescents.

2. Method

This research method uses a correlational method using a Cross-Sectional approach. The population in this study is adolescents who attend one of the Private Junior High Schools in Yogyakarta which totals 104 people. The number of samples used was 82 respondents. In this study, the researcher used sampling with *purposive sampling* techniques. Sample selection is carried out randomly based on predetermined inclusion and exclusion criteria. The selected sample was adjusted to the inclusion criteria, namely grade VIII students who were 13 or 14 years old, used social media, and were willing to become respondents. The research was carried out in October – November 2024 at one of the private junior high schools in Yogyakarta. The research instrument used a questionnaire on social media use with 10 questions and risky sexual behavior with 15 questions that have been tested for validity. The Risk for Sexual Behavior instrument uses a four-point Likert scale to assess the frequency of adolescents' engagement in risky sexual behaviors. Each item is scored from 1 to 4, ranging from "never" to "very often." Total scores are calculated by summing all item responses, producing a score range that reflects the respondent's level of involvement in risky sexual behavior. Lower scores indicate minimal involvement, moderate scores reflect occasional engagement, and higher scores represent more frequent and consistent participation in risky behaviors. This scoring procedure ensures transparency and supports accurate interpretation of the study findings. The statistical analysis used in this study was the Spearman Rank (Spearman Rho) test, which aimed to determine the relationship between two variables: the level of social media use and risky sexual behavior among adolescents. This non-parametric test was selected because both variables were measured on an ordinal scale and the data were not normally distributed. The analysis yielded a p-

value of 0.000 ($p < 0.05$), indicating a significant relationship between social media use and risky sexual behavior among adolescents. The results of the *content validity index* for the social media usage variable obtained a value of 0.8. Variables of sexual behavior are at risk of obtaining a *content validity index* value of 0.9, so the questionnaire is valid and can be used. The reliability test of this study used Cohen's Kappa. Cohen's Kappa results for the variable of social media use and the variable of risky sexual behavior are 1, so it is said that the value is very strong. The data analysis in this study used spearman rho. The Risk for Sexual Behavior instrument was chosen because it aligns with the study's aim of assessing risky sexual behaviors associated with social media exposure. It is adolescent-specific, easy to administer, and effectively captures key behavioral indicators—such as hugging, kissing, and touching making it suitable for measuring the influence of social media on adolescents' sexual behavior. This research has been declared ethically feasible with the number 330/EC-KEPK FKIK UMY/XII/2024 by paying attention to the ethical principles, namely *informed consent, fidelity, confidentiality*.

3. Results

3.1. Characteristics of Respondents

The respondents in this study were 82 respondents in one of the private junior high schools in Yogyakarta that used social media platforms including YouTube, TikTok, Instagram, and WhatsApp. The characteristics of the respondents of this study consisted of gender and age.

Table 1. Frequency distribution of respondents in Yogyakarta Private Junior High School students

Characteristics of respondents	Frequency (n)	Percentage (%)
Age		
13 years	26	31
14 years	56	68
Gender		
Man	56	68
woman	26	31
Total	82	100

Source: primary data2025

Based on **table 1**, it shows that the characteristics of respondents in students at Yogyakarta Private Junior High School are at least 14 years old, which is 56 people (68%) and the most male, which is 56 people (68%).

3.2. Social Media Use in Adolescents in Junior High School Yogyakarta Resort & Spa

Table 2. Social media use of Yogyakarta Private Junior High School

Social media use	Frequency (n)	Percentage (%)
High	4	4,9
Moderate	29	35,4
Low	49	59,8
Total	82	100

Source: primary data2025

Based on **table 2** showing the use of social media in students at Yogyakarta Private Junior High School, the results were obtained that most students had low social media use as many as 49 people (59.8%).

3.3. Risky Sexual Behavior in Adolescents in Private Junior High School in Yogyakarta

Table 3. Risky sexual behavior in students of Yogyakarta Private Junior High School

Risky sexual behavior	Frequency (n)	Percentage (%)
High	0	0
Moderate	64	78
Low	18	22
Total	82	100

Source: primary data 2025

Based on [table 3](#), the results show that most of the respondents have moderate risk sexual behavior, namely 64 people (78%).

3.4. The Relationship between Social Media Use and Risky Sexual Behavior in Adolescents in Private Junior High Schools in Yogyakarta

Table 4. Correlation between social media use and risky sexual behavior in adolescents at Yogyakarta Private Junior High School

Social media usage rate	Levels of adolescent risky sexual behavior						P Value	
	Low		Moderate		High			
	N	%	N	%	N	%		
Low	46	56,1	3	3,7	0	0		
Moderate	18	22	11	13,4	0	0		
High	0	0	4	4,9	0	0	0,000	
Total	64	78,1	18	22	0	0		

Source: primary data 2025

Based on [table 4](#), the relationship between social media use and risky sexual behavior in adolescents in the low category is 46 people (56.1%). Based on the results of the statistical test using *spearman*, a p value of 0.000 was obtained, which means $p < 0.05$, meaning that there is a relationship between the use of social media and risky sexual behavior in adolescents at Yogyakarta Private Junior High School.

4. Discussion

4.1. Use of Social Media

The results showed that as many as 49 students (59.8%) in Junior High School Yogyakarta Resort & Spa has a relatively low level of social media use. However, the results of the study show that most teens remain engaged in activities such as accessing, sharing, and searching for pornographic content. According to Santrock (2002), technological advances have encouraged the dissemination of information and sexual stimulation through various mass media such as the internet, television, magazines, and videos. This condition sparks teens' curiosity and encourages them to explore further. These findings are in line with research [Arfiani \(2023\)](#) which mentions that adolescents who are exposed to mass media are 1.6 times more likely to engage in high-risk sexual behavior compared to those who are not exposed.

The use of social media is influenced by various factors, one of which is age. In this study, respondents were 13–14 years old, who were included in the category of middle adolescence. [Pathmendra \(2023\)](#) deep *Journal of Medical Internet Research* conducted a systematic review showing that adolescents aged 10 to 19 who were exposed to pornographic content were more likely to start engaging in sexual activity earlier. These findings suggest that exposure to pornographic content can have a major influence on adolescent sexual behavior. Middle-aged teenagers tend to use social media to satisfy their curiosity about the various things available on the platform. In addition, they are also active on social media because they follow trends that are popular among peers. Even though teenagers as one of the social media users are still not able to sort out useful activities. They also tend to be easily influenced by social life on social media, without thinking about the positive and negative impacts caused by their activities ([Aprilia et al., 2020](#)).

Another factor that affects the use of social media is gender. The results of the study show that the majority of genders in this study are male. A total of 56 people while 26 women are

women. Adolescent boys generally have a higher level of knowledge than adolescent girls. This is due to their great curiosity about sexuality as well as their courage to seek information in various places and times. Meanwhile, adolescent girls tend to feel embarrassed to discuss or seek information related to the topic (Arfiani et al., 2023). Men have greater freedom than women and tend to feel free to engage in risky sexual behavior, because they think they will not suffer significant consequences. On the other hand, women are more concerned about the impact of such behaviors, especially because of risks such as out-of-wedlock pregnancies, which can carry moral and material burdens, both in the family and in the surrounding environment (Lestari & Lindayani, 2024). Research conducted by Mattebo et al. (2022), found that the influence of pornography is influenced by other supporting factors. Among them are an uncondusive family environment, lack of parental supervision, and previous traumatic experiences such as physical and sexual violence that can exacerbate the psychological impact of exposure to pornography.

4.2. Risky Sexual Behavior

The results showed that most of the students had premarital sexual behavior in the moderate category, namely 64 people. The results of this study revealed that the majority of adolescents had engaged in risky sexual behaviors, such as holding, hugging, kissing and collecting pornographic content. Sexually, adolescents at this time have the courage to make physical contact with the opposite sex to risky sexual activities (Purnama et al., 2020).

The results of this study are in line with the findings Rettob (2021), which shows that the stages of risky sexual behavior in adolescents begin with holding hands (82.7%) and followed by hugging (60.7%). Forms of sexual behavior include various physical actions, such as holding hands, hugging the waist or shoulders, kissing (including kissing the lips, foreheads, and cheeks), touching sensitive areas of the partner's body, rubbing between the genitals, and having sexual intercourse (Buana et al. 2024).

Factors that affect risky sexual behavior in adolescents are age. In middle-aged adolescents curiosity about sex increases, as well as the urge to try or explore sexual behavior. It also has to do with the search for self-identity. This is proven by research Marisa (2022) found that adolescents aged 11–14 years have been involved in various sexual behaviors, such as masturbation (80.65%), touching (82.26%), kissing (55.22%), and intercourse (6.45%). This suggests that even at a young age, adolescents have already begun to explore sexual behavior.

Another factor that affects sexual behavior in adolescents is gender. In men, an increase in sexual behavior can occur with only a slight increase in testosterone levels, whereas in women, higher testosterone levels are needed to trigger similar behaviors (Amalia., 2025). Another factor that influences sexual behavior in adolescents is the use of social media. Social media allows easy access to sexually explicit content, teenagers who often see this kind of content can experience normalization of sexual behavior and want to try it themselves. Social media provides a space for them to explore and express themselves, which sometimes also includes sexual exploration, whether in the form of communication, sharing photos/videos, or seeking validation from others. In line with research conducted by Merdiyanti (2024) Regarding the factors that affect adolescent sexual behavior, it is stated that there is a relationship between the source (media) of information and sexual behavior.

4.3. The Relationship of Social Media Use with Risky Sexual Behavior in Adolescents

Based on the results of the Spearman Rank test, the variables of social media use and risky sexual behavior among adolescents showed a significance value of 0.000 ($p < 0.05$). These findings indicate a significant relationship between social media use and risky sexual behavior in adolescents. This result is consistent with the study by Rettob and Murtiningsih (2021), which found a significant relationship between social media use and adolescent sexual behavior with a p-value of 0.005. Similarly, Katharina and Yuliana (2020) also found, using the Spearman Rho test, that exposure to pornographic content on social media was significantly associated with adolescent sexual behavior ($p = 0.001$).

Higher exposure to social media increases the risk of risky sexual behavior because adolescents are more frequently exposed to sexually explicit content, permissive social norms, and peer influences that normalize early sexual activity. Repeated exposure can heighten curiosity, reduce perceived risks, and encourage imitation of such behaviors in real life. Several studies have shown that the strength of

this relationship is moderate but statistically significant, with correlation coefficients (r) ranging between 0.35–0.45.

Conversely, adolescents with lower levels of social media exposure are less likely to engage in risky sexual behavior. They have fewer opportunities to encounter or imitate sexualized behaviors and are more likely to receive information about sexuality from structured sources such as parents, teachers, or formal education. Therefore, high social media exposure acts as a risk factor, while low exposure functions as a protective factor against risky sexual behavior among adolescents.

Along with the development of the times, the use of mobile phones as one of the sources of information has been very much or almost all teenagers have gadgets that can be obtained easily and cheaply, it is easy for teenagers to get and access pornographic sites through the internet so that it can affect adolescents' sexual behavior (Andi et al., 2023). Especially in an era of sophistication with the internet, the flow of information exchange is difficult to filter when considering the differences in western and eastern cultures. This makes it easier for teenagers to be exposed to pornography (Wati, 2022).

This is supported by Wati's (2022) research, found that adolescents who are more exposed to social media have the potential to have 18 people (72.0%) of them have mild risk sexual behaviors, and 1 person (7.7%) of adolescents who are not exposed to non-risk sexual behaviors are 1 person (7.7%). Adolescents exposed to pornography were 1,335 times more likely to engage in premarital sex behaviors compared to adolescents who were not exposed. Adolescents who are in the phase of curiosity and exploration tend to imitate what they see or hear from the mass media. Therefore, efforts that can be made are to provide education about the importance of filtering information properly, so that adolescents can get the right source of information and not make mistakes in understanding it (Nuraini & Sari, 2023). This is in accordance with Sarwono (2019) in Watches (2022) which states that exposure to pornography is increasing due to the dissemination of information and sexual stimulation through mass media and technology such as videos, *smartphone*, social media networks, and others have become unstoppable. Teenagers who are in a period of curiosity and want to try will imitate what they see or hear from the mass media, especially because they do not know the full sexual problem from their parents.

Based on the theory put forward by Nasabith and Aburdance, in Merdiyanti (2024) Social media can have a positive impact when used for good purposes, but on the contrary it can have a negative impact when used for bad things. There is no denying that the use of gadgets brings positive benefits, such as facilitating communication, providing quick access to the knowledge needed at any time, and expanding the network of friends. However, when the intensity of social media use is relatively high, teens tend to interact more with friends virtually, which can ultimately affect their social skills in the real world.

5. Conclusion

Based on the results and discussions that have been submitted, it can be concluded that there is a relationship between social media use and sexual behavior in adolescents. It is hoped that adolescents can use social media wisely, namely by filtering useful information, staying away from pornography, and increasing understanding of the dangers of unsafe sexual behavior and maintaining healthy and positive relationships.

This study recommends that parents and educators strengthen reproductive health education and provide guidance on healthy social media use, including helping adolescents filter information and avoid exposure to harmful content. Schools are encouraged to conduct socialization programs that promote responsible digital behavior to reduce the risk of engaging in unsafe sexual practices.

For adolescents, it is advised to use social media wisely by selecting beneficial content, limiting screen time, and improving digital literacy to critically evaluate information and prevent being influenced by content that may encourage risky sexual behavior.

Acknowledgment

The researcher expressed his gratitude to all participants, teachers and school principals who had given permission during the research process. Gratitude is also addressed to the Universitas Muhammadiyah Yogyakarta for the support provided in the implementation of this research.

References

Alimoradi, Z., Kariman, N., Simbar, M., & Ahmadi, F. (2017). Contributing factors to high-risk sexual behaviors among Iranian adolescent girls: A systematic review. *International Journal of Community Based Nursing and Midwifery*, 5(1), 2.

Andi Fitri Farwati, Muhammad Ikhtiar, & Nur Ulmy Mahmud. (2023). Faktor Yang Berhubungan Dengan Perilaku Seksual Remaja Di SMAN 2 Kabupaten Bone. *Window of Public Health Journal*, 4(3), 449–461. <https://doi.org/10.33096/woph.v4i3.788>

Aprilia, R., Sriati, A., & Hendrawati, S. (2020). Tingkat Kecanduan Media Sosial pada Remaja. *Journal of Nursing Care*, 3(1), 41–53. <https://doi.org/10.24198/jnc.v3i1.26928>

Arfiani Arfiani, Husnul Khatimah, & Kurniati Akhfar. (2023). Faktor-Faktor Yang Berhubungan Dengan Perilaku Seksual Remaja Di Kabupaten Bulukumba. *Jurnal Riset Ilmu Kesehatan Umum Dan Farmasi (JRIKUF)*, 1(4), 131–146. <https://doi.org/10.57213/jrikuf.v1i4.222>

Fronika, W. (2019). Permulaan Bisnis Dalam Media Sosial. *Fakultas Ilmu Pendidikan Universitas Negeri Padang Email*, 1–15.

Karakter, J. P., Studi, P., Fakultas, P., & Bosowa, U. (2024). *Gambaran Sikap Remaja Terhadap Perilaku Seksual Pranikah di Kota Makassar Description Of Adolescent Attitudes Towards Premarital Sexual Behavior In Makassar*. 4(2), 691–696. <https://doi.org/10.56326/jpk.v4i2.3764>

Kazdouh, E., El-Ammari, & Bouftini. (2019). Perceptions and intervention preferences of Moroccan adolescents, parents, and teachers regarding risks and protective factors for risky sexual behaviors leading to sexually transmitted infections in adolescents: qualitative findings. *Reprod Health*, 16(1), 138.

Kustiawan, W., Nurlita, A., Siregar, A., Aini Siregar, S., Ardianti, I., Rahma Hasibuan, M., & Agustina, S. (2022). Media Sosial Dan Jejaring Sosial. *Maktabun: Jurnal Perpustakaan Dan Informasi*, 2(1), 1–5.

Lestari, R., & Lindayani, L. (2024). Faktor-Faktor Yang Mempengaruhi Perilaku Seksual Pada Remaja Disekolah Menengah Pertama. *Jurnal Keperawatan PPNI Jawa Barat*, 2(1), 34–45.

Marisa, R., Kurniyati, S., & Fitri, I. (2022). Perilaku Seksual Pada Remaja Usia 11 – 14 Tahun di SMPN 2 Kepahiang. *Jurnal Ilmu Kesehatan*, 8(1), 81–86.

Merdiyanti, D., Surmiasih, Wulandari, R. Y., & Palupi, R. (2024). Hubungan Penggunaan Media Sosial dengan Perilaku Seksual Remaja di SMP N 3 Padang Ratu. *Health Research Journal of Indonesia*, 2(3), 227–233. <https://doi.org/10.63004/hrji.v2i3.331>

Nuraini, N., & Sari, Y. M. (2023). Faktor-Faktor yang Berhubungan dengan Perilaku Seksual Remaja Pra Nikah Tahun 2022. *Journal of Healthcare Technology and Medicine*, 9(1), 121. <https://doi.org/10.33143/jhtm.v9i1.2792>

Pathmendra, P., Raggatt, M., Lim, M. S. C., Marino, J. L., & Skinner, S. R. (2023). Exposure to Pornography and Adolescent Sexual Behavior: Systematic Review. *Journal of Medical Internet Research*, 25. <https://doi.org/10.2196/43116>

Purnama, L. C., Sriati, A., & Maulana, I. (2020). Gambaran perilaku seksual pada remaja. *Holistik Jurnal Kesehatan*, 14(2), 301–309. <https://doi.org/10.33024/hjk.v14i2.2761>

Rettob, N., & Murtiningsih, M. (2021). Hubungan Penggunaan Media Sosial Whatsapp Berkonten Pornografi dengan Perilaku Seksual Berisiko pada Remaja di SMKN X Jakarta Timur. *Jurnal Akademika Baiturrahim Jambi*, 10(1), 145. <https://doi.org/10.36565/jab.v10i1.293>

Salsabil, P. S., & Manafe, L. A. (2024). *YUME : Journal of Management Analisis Penggunaan Media Sosial Dalam Rencana Pemasaran Pt . Virgo Barokah Food*. 7(2), 1005–1015.

Wati, A. (2022). *Jurnal ilmiah kesehatan dan kebidanan volume I no 1 maret 2022*. 1(1), 25–30.