

The Influence of Social Media Interaction and Reproductive Health Knowledge on Risky Sexual Behavior Among Adolescents

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Article Info	Abstract
<p>Article History Received: 2025-12-21 Revised: 2026-05-06 Published: 2026-06-30</p> <p>Keywords: adolescents; knowledge; risky behavior; social media interaction</p>	<p><i>Social media plays a pivotal role in shaping adolescents' reproductive health knowledge and sexual behavior by providing broad access to health information while simultaneously exposing users to misinformation that may increase risky sexual practices. This study aimed to examine the relationship between social media interaction, reproductive health knowledge, and risky sexual behavior among adolescents. A quantitative study with a cross-sectional design was conducted involving 335 respondents selected using probability sampling with a purposive sampling approach. Data were collected through a structured questionnaire. The independent variables were social media interaction and reproductive health knowledge, while the dependent variable was risky sexual behavior. Data were analyzed using Spearman's rho correlation test with a significance level of $p < 0.05$. The results indicated a significant relationship between social media interaction and risky sexual behavior ($p = 0.000$; $r = -0.230$), although the correlation strength was weak. Reproductive health knowledge was also significantly associated with risky sexual behavior ($p = 0.048$; $r = -0.106$), demonstrating a similarly weak negative correlation. These findings suggest that both social media interaction and reproductive health knowledge are significantly associated with risky sexual behavior among adolescents, although the magnitude of these relationships remains relatively weak. Strengthening digital health literacy and comprehensive reproductive health education is essential to promote healthier sexual decision-making among adolescents.</i></p>
Artikel Info	Abstrak
<p>Sejarah Artikel Diterima: 2025-12-21 Direvisi: 2026-05-06 Dipublikasi: 2026-06-30</p> <p>Kata kunci: interaksi media sosial; perilaku berisiko; pengetahuan; remaja</p>	<p>Media sosial berperan penting dalam membentuk pengetahuan dan perilaku seksual remaja karena menyediakan akses luas terhadap informasi kesehatan reproduksi, tetapi juga meningkatkan risiko paparan informasi yang tidak akurat yang dapat mendorong perilaku seksual berisiko. Penelitian ini bertujuan menganalisis hubungan interaksi media sosial dan pengetahuan kesehatan reproduksi dengan perilaku seksual berisiko pada remaja. Penelitian menggunakan pendekatan kuantitatif dengan desain cross-sectional. Data dikumpulkan melalui kuesioner terhadap 335 responden yang dipilih menggunakan teknik probability sampling dengan metode purposive. Variabel independen meliputi interaksi media sosial dan pengetahuan kesehatan reproduksi, sedangkan variabel dependen adalah perilaku seksual berisiko. Analisis dilakukan menggunakan uji Spearman rho dengan tingkat signifikansi $p < 0,05$. Hasil menunjukkan interaksi media sosial berhubungan signifikan dengan perilaku seksual berisiko ($p=0,000$; $r=-0,230$), meskipun kekuatan korelasinya lemah. Pengetahuan kesehatan reproduksi juga berhubungan signifikan dengan perilaku seksual berisiko ($p=0,048$; $r=-0,106$) dengan korelasi yang lemah. Disimpulkan bahwa interaksi media sosial dan pengetahuan kesehatan reproduksi memiliki hubungan signifikan dengan perilaku seksual berisiko pada remaja, meskipun kekuatan hubungannya relatif rendah.</p>

INTRODUCTION

The widespread use of social media has significantly influenced adolescent reproductive health. Platforms such as Instagram, TikTok, and Twitter provide

adolescents with easy access to information regarding sexuality and reproductive health. Indonesia is among the countries with a high level of social media use, making these platforms one of the primary sources

of information for adolescents (Muhtar, 2023). While social media can facilitate access to health information, much of the available content is inaccurate, misleading, or lacks scientific credibility, thereby increasing adolescents' vulnerability to risky sexual behaviors (Pratama & Sari, 2021; Andayani et al., 2022; Kartika et al., 2025). Studies have consistently reported a significant relationship between social media use and adolescent sexual behavior, indicating that excessive or uncontrolled exposure to online content may encourage premarital sexual activities and unsafe sexual practices (Andayani et al., 2022; Siska, 2021).

Adolescence is characterized by rapid physical, psychological, and social development, accompanied by heightened curiosity and identity exploration (Sarwono, 2012; Pratama & Sari, 2021). During this period, adolescents frequently seek information through digital media, where they may encounter pornographic or misleading content that shapes unhealthy perceptions of sexuality (Izzatun, 2019). The absence of comprehensive reproductive health education further increases adolescents' susceptibility to engaging in unprotected sexual activity, resulting in unintended pregnancy, sexually transmitted infections (STIs), stigma, and educational disruption (Amaylia et al., 2020; Lumban Gaol & Stevanus, 2019).

Several studies have demonstrated that reproductive health knowledge plays a crucial role in preventing risky sexual behavior. Adolescents with higher levels of reproductive health knowledge tend to

exhibit healthier attitudes and behaviors regarding sexuality (Harahap & Harahap, 2022; Alaydasari, 2024; Lukmana, 2017). However, research has also shown that many adolescents still possess inadequate knowledge of reproductive health due to limited access to appropriate education and reliable information sources (Thaha et al., 2021). Therefore, strengthening reproductive health education in schools and communities is essential, as recommended by the Indonesian Ministry of Health through the Regulation of the Minister of Health of the Republic of Indonesia Number 25 of 2014 concerning Child Health Efforts (Kementerian Kesehatan RI, 2014).

The continuing occurrence of adolescent pregnancy and early marriage in several regions of Indonesia further highlights the need for collaborative efforts among governments, schools, healthcare providers, families, and communities to improve reproductive health literacy and promote responsible sexual behavior (Handayani et al., 2020). Therefore, investigating the relationship between adolescents' social media use, reproductive health knowledge, and sexual behavior is essential for developing evidence-based educational interventions that effectively utilize social media as a platform for health promotion while minimizing its potential negative impacts

METHODS

This quantitative study used a cross-sectional design. Data were collected using a questionnaire from 335 respondents. The sampling technique used was probability

sampling with a purposive method. The independent variables in this study were social media interaction and reproductive health knowledge, while the dependent variable was risky sexual behavior. To analyze the influence between variables, a Spearman rho statistical test was performed with a p value $< \alpha$ 0.05. The collected data were recorded for input and processed using Microsoft Excel and SPSS.

RESULTS AND DISCUSSION

The research data and analysis are presented in tabular and narrative form. The objectives are to identify social media interactions among adolescents, measure the level of reproductive health knowledge and risky sexual behavior in adolescents and analyze the relationship between social media interactions and risky sexual behavior in adolescents, the relationship between reproductive health knowledge and risky sexual behavior in adolescents. The results of this study are known to show a frequency distribution based on age with an average age of 16.88 years. Based on gender, most respondents were female, as many as 192 respondents (55%). Based on information sources, adolescents obtained information from more than two sources as many as 196 people (56%). The types of media frequently used were Instagram as many as 273 (30%) respondents, TikTok as many as 230 (25%) respondents, WhatsApp as many as 232 (25%) respondents.

Table 1. Respondent characteristics by gender and information sources

Karakteristik	Frekuensi (n)	Persen (%)
Jenis Kelamin		
Laki-laki	158	45
Perempuan	192	55
Sumber Informasi		
Orang tua	21	6
Sekolah	77	22
Media sosial	35	10
Teman	21	6
>2 sumber	196	56
Total	350	100

Table 2. Respondent characteristics based on data based on average age

Variabel	Mean	Median	Modus	Maksimum	Minimum
Usia	16,88	17	17	20	15

Table 3. Respondent characteristics based on frequently used media

Jenis Media	Frekuensi (n)	Persen (%)
Tiktok	230	25
Instagram	273	30
Whatsapp	232	25
Twitter	82	9
Telegram	62	7
Facebook	33	4
Total	912	100

Table 4. Respondent characteristics based on data based on reproductive health knowledge, risky behavior, social media interactions, and dating behavior

Karakteristik	Frekuensi (n)	Persen (%)
Pengetahuan Kespro		
Kurang	15	4
Cukup	273	78
Baik	62	18
Perilaku Beresiko		
Tidak beresiko	330	94,2
Beresiko	19	5,4
Sangat beresiko	1	0,2
Interaksi media sosial		
Rendah	80	23
Sedang	183	52
Tinggi	87	25
Perilaku pacaran		
Sedang berpacaran	119	35
Pernah berpacaran	120	35
Tidak pernah berpacaran	60	17
Tidak berpacaran	45	13
Total	350	100

Most respondents (273 people) had sufficient knowledge. Non-risky behavior was found in 330 respondents (94.2%). Social media interactions were mostly at a moderate level (180 respondents (52%). Regarding dating behavior, 120 respondents (35%) had dated and 199 respondents (35%) were currently dating.

Table 5. The Influence of Social Media Interactions on Risky Sexual Behavior

Interaksi media sosial	Perilaku seksual						Total	
	Tidak Beresiko		Beresiko		Sangat Beresiko		Jumlah (n)	Persen (%)
	Jumlah (n)	Persen (%)	Jumlah (n)	Persen (%)	Jumlah (n)	Persen (%)		
Rendah	79	24	0	0	1	100	80	23
Sedang	167	51	16	84	0	0	183	52
Tinggi	84	25	3	16	0	0	87	25
Total	330	100	19	100	1	100	350	100

Uji Spearman P Value = 0,000 (r = -0,230)

The Spearman test results between the social media interaction variable and risky sexual behavior obtained a p value = 0.00 (<0.05), meaning that there is an influence between the social media interaction variable and risky sexual behavior. In addition, the r (Correlation Coefficient) value was obtained at -0.230, which indicates that the influence of social media on risky sexual behavior is relatively weak. The r (Correlation Coefficient) value is negative, meaning that the higher the intensity or influence of social media received by a person, the lower or reduced their sexual behavior.

Social media can be used to reduce risky behavior in adolescents, particularly by improving media literacy and education disseminated on social media platforms. Adolescents with good literacy tend to be more critical in filtering and understanding information, allowing them to make more responsible decisions regarding reproductive health and avoid risky

behaviors such as casual sex and other impulsive behaviors. This research aligns with Andayani's study, which found a correlation between social media use and sexual behavior in adolescents aged 15-18 at SMA Negeri 1 Dawan Klungkung [Andayani, 2022]. The findings suggest that strengthening information through social media can increase knowledge and understanding of reproductive health and healthy sexual behavior in adolescents. In addition, social media can be a place for teenagers to get positive social support, including communities that encourage healthy lifestyles and avoid risky behavior.

Table 6. The Effect of Reproductive Health Knowledge on Risky Sexual Behavior

Pengetahuan Kesehatan Reproduksi	Perilaku seksual						Total	
	Tidak Beresiko		Beresiko		Sangat Beresiko		Jumlah (n)	Persen (%)
	Jumlah (n)	Persen (%)	Jumlah (n)	Persen (%)	Jumlah (n)	Persen (%)		
Kurang	14	4	1	5	0	0	15	4
Cukup	269	16	8	42	1	100	273	78
Baik	52	80	10	53	0	0	62	18
Total	330	100	19	100	1	100	350	100

Uji Spearman P Value = 0,048 (r = -0,106)

The Spearman test results between the reproductive health knowledge variable and risky sexual behavior obtained a p value of 0.048 (<0.05), meaning that there is an influence between the reproductive health knowledge variable and risky sexual behavior. In addition, the r (Correlation Coefficient) value of -0.106 was obtained, indicating that the influence of social media on risky sexual behavior is relatively weak. The r (Correlation Coefficient) value is negative, meaning that the higher the reproductive health knowledge a person receives, the lower or reduced their sexual behavior.

Good knowledge can increase individual awareness of unsafe risky

behaviors, such as unwanted pregnancy, STI transmission, and psychological impacts. Good knowledge for adolescents, particularly regarding reproductive health includes understanding physical changes during puberty, maintaining reproductive hygiene, knowledge about fertility, pregnancy, preventing sexually transmitted infections, and the ability to access youth-friendly reproductive health services [Alaydasari, 2024]. This can help adolescents become more aware of and able to control their sexual urges, and are more likely to delay sexual activity.

CONCLUSION

Based on the research that has been conducted on respondents with the title The Influence of Social Media Interaction and Reproductive Health Knowledge on Risky Sexual Behavior Among Adolescents, in this study the following conclusions can be drawn: Most adolescents have moderate social media interaction, Most adolescents have sufficient knowledge, Most adolescents have been and are currently dating, There is an influence of social media interaction on risky sexual behavior in adolescents and the correlation level is classified as weak and There is an influence of Reproductive Health Knowledge on Risky Sexual Behavior the correlation level is classified as weak.

REFERENCES

- Alaydasari, ZA. (2024). Overview of the Level of Adolescent Knowledge about Reproductive Health at State Senior High School 2 Banguntapan in 2024
- Andayani, A. A. I. A. D., Sandra, I. P. G. Y., & Diyu, I. N. P. (2022). The Relationship
- Between Social Media Use and Sexual Behavior in Adolescents Aged 15-18 Years at SMA Negeri 1 Dawan Klungkung [Bali Institute of Health Technology]. Repository. Itekes-Bali. Ac. Id. https://repository.itekes-bali.ac.id/medias/journal/ANAK_AGU_NG_ISTRI_ALIT_DWI_ANDAYAN.pdf.
- Amaylia, N. K. W., Arifah, I., & Setiyadi, N. A. (2020). *Pendidikan kesehatan reproduksi remaja*.
- Handayani, S., Oxyandi, M., & Rahayu, H. D. (2020). Analisis Upaya Pencegahan Perilaku Seksual Pranikah pada Siswa SMA. *Jurnal 'Aisyiyah Medika*, 5(2), 143-155.
- Harahap, L. J., & Harahap, L. J. (2022). Hubungan Pengetahuan Kesehatan Reproduksi dengan Perilaku Seksual Remaja di SMA Negeri 8 Padangsidempuan. *Bioedunis Journal*, 1(2), 67-72.
- Izzatun, Dessy Nisa. 2019. "The Influence of Parenting Styles in Shaping Early Childhood Social and Emotional Behavior." Thesis. Faculty of Education and Teacher Training, Walisongo State Islamic University, Semarang.
- Kartika, K., Rahmadani, P., & Maidaliza, M. (2025). Hubungan Penggunaan Media Sosial dengan Perilaku Seksual Remaja di SMA Negeri. *Jurnal Kesehatan Medika Sainatika*, 16(1), 168-177
- Kementerian Kesehatan RI. (2014). *Peraturan Menteri Kesehatan Republik Indonesia Nomor 25 Tahun 2014 tentang Upaya Kesehatan Anak*
- Lumban Gaol, S. M. M., & Stevanus, K. (2019). Pendidikan Seks pada Remaja. *Fidei: Jurnal Teologi Sistematika dan Praktika*, 2(2)
- Lukmana, C. I. (2017). Gambaran Tingkat Pengetahuan tentang Kesehatan Reproduksi pada Siswa SMP Muhammadiyah 3 Yogyakarta.

- Muhtar. (2023). *Media sosial yang paling banyak digunakan di Indonesia*.
- Pratama, Denny, and Yanti Puspita Sari. 2021. "Characteristics of Adolescent Development | Jurnal Edukasimu." *Edukasimu.Org* 1, no. 3: 1–9. <http://edukasimu.org/index.php/edukasimu/article/view/49>.
- Sarwono, S. W. (2012). *Psikologi Remaja*. Jakarta: Rajawali Pers.
- Siska. (2021). *Pengaruh Media Sosial terhadap Perilaku Seksual Remaja di Wilayah Kayu Manis VI RT 06 RW 05 Matraman Raya Tahun 2021*.
- Thaha, R., Riswan, & Yani, R. (2021). Faktor-Faktor yang Mempengaruhi Pengetahuan Remaja tentang Kesehatan Reproduksi di SMPN 1 Buntao Kabupaten Toraja Utara. *Jurnal Komunitas Kesehatan Masyarakat*, 3, 52–74.