



RESEARCH ARTICLE

URL article: <http://jurnal.fkmumi.ac.id/index.php/woh/article/view/woh9304>**The Relationship Between Internet Use And Adolescent Sexual Behavior**^CMuthahharah¹, Eka Hadrayani², Huriati³, Yunita Vebrianti Amanda⁴^{1,2,3,4} Department of Nursing, Faculty of Medicine and Health Sciences, UIN Alauddin Makassar, Gowa, South Sulawesi, IndonesiaEmail Corresponding Author^(C): muthahharah.ners@uin-alauddin.ac.id,
muthahharah.ners@uin-alauddin.ac.id¹, eka.hadrayani@uin-alauddin.ac.id², huriati.bahuddin@uin-alauddin.ac.id³, yunitaamanda03@gmail.com⁴

ABSTRACT

The increasing use of the internet among adolescents may influence risky sexual behavior. This study aimed to determine the relationship between internet use and sexual behavior among 11th-grade students at SMA Negeri 1 Gowa using a quantitative cross-sectional design. A total of 189 respondents were selected through simple random sampling. Data were collected using structured questionnaires and analyzed using the Chi-square test. The results showed that 57.7% (109 students) were heavy internet users and 59.3% (112 students) engaged in risky sexual behavior. Among heavy internet users, 71.6% demonstrated risky sexual behavior, compared to 42.5% among light users, indicating a higher likelihood of risky behavior in adolescents with greater internet use. Statistical analysis revealed a significant association between internet use and sexual behavior ($p < 0.05$), demonstrating a meaningful relationship between the variables. In conclusion, heavy internet use is associated with an increased risk of unsafe sexual behavior among adolescents. These findings highlight the importance of adolescent health programs that strengthen parental supervision, improve digital literacy, and promote responsible internet use to prevent risky sexual behavior.

Keywords: Internet Use; Sexual Behavior; Adolescents; Senior High School.

PUBLISHED BY :

Faculty of Public Health
Universitas Muslim Indonesia

Address :

Jl. Urip Sumohardjo Km. 5 (Campus II UMI)
Makassar, Sulawesi Selatan.

Email :

jurnalwoh.fkm@umi.ac.id

Phone :

+62 82188474722

Article history

Received 12 January 2026

Received in revised form 20 April 2026

Accepted 7 July 2026

Available online 13 July 2026

Licensed by [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

INTRODUCTION

The internet has become an essential part of daily life for young people, acting as a primary means for communication, access to information, and entertainment. According to findings from the United Nations Children's Fund, over 70% of young people around the world are online, which heightens their likelihood of encountering inappropriate material, such as pornography, that could affect their views and actions related to sex (1). Even with abundant information available, young people still face the danger of partaking in unsafe sexual practices. Statistics from the World Health Organization reveal that roughly 30% of sexually active teens reported not utilizing condoms during their most recent sexual encounter, underscoring the persistent issue of risky sexual conduct among youth (2).

Globally, information gathered by the World Health Organization reveals that nearly 21 million girls between the ages of 15 and 19 become pregnant each year, highlighting an ongoing issue with adolescent reproductive health (3). In Indonesia, greater internet accessibility for teens has led to worries about their behavior, with the Indonesian Child Protection Commission reporting that about 80% of adolescents are online, and exposure to internet pornography is linked to a greater chance of participating in premarital sexual activities (4).

Adolescent sexual behavior is shaped by multiple factors, including biological development, peer influence, family environment, and media exposure (5). The internet, especially social platforms, has emerged as a leading source of information for young people; however, it also offers unrestricted access to sexual material that can shape their views and choices (6). Earlier research indicated that teenagers might have sufficient understanding of sexual health but still participate in dangerous sexual activities, implying that having knowledge on its own does not guarantee safe practices (7).

Despite many investigations into how internet usage affects teenage sexual conduct, the results continue to vary (8). Certain research indicates a strong link between extensive internet usage and heightened risky sexual activities, whereas other studies suggest that internet usage does not directly influence this behavior, with contextual elements like parental oversight, social circles, and personal coping skills being more critical (9). These varying results highlight a distinct lack of research concerning the relationship between internet usage and both behavioral and environmental influences on the sexual conduct of adolescents, especially in certain socio-cultural contexts (10).

Additionally, there has been minimal investigation employing behavioral nursing theories, like Dorothy E. Johnson's Behavioral System Model, to clarify the sexual behavior of adolescents in connection with their internet usage (11). A majority of earlier research has concentrated mainly on statistical correlations without delving into the behavioral processes that inform adolescents' choices. This points to a theoretical deficiency in comprehending adolescent sexual conduct through the lens of behavioral systems (12)

This study was carried out at SMA Negeri 1 Gowa in Gowa Regency, South Sulawesi, because issues concerning teenage sexual conduct were noted within the school. Interviews with guidance and counseling (BK) teachers revealed that two students had been expelled due to unwed pregnancy, while five students were seen participating in dating activities, such as holding hands both in the classroom and outside. These results highlight that risky sexual activities among teenagers are a significant concern in Gowa Regency's educational context. Consequently, the purpose of this research is to investigate the connection between internet usage and sexual behavior in adolescents, aiming to assist in creating effective prevention strategies that involve schools, families, and health care providers.

METHOD

This research utilized a quantitative analytical framework through a cross-sectional method to investigate the connection between internet usage and sexual conduct among teenagers. The investigation took place at SMA Negeri 1 Gowa, located in South Sulawesi, focusing on the entire population of 11th-grade students. A sample of 189 individuals was chosen by implementing simple random sampling to guarantee that it was representative and to minimize selection bias. The gathering of data occurred over a span of three days following the acquisition of ethical clearance from the Research Ethics Committee at the Faculty of Medicine and Health Sciences, Alauddin State Islamic University in Makassar (No. C.127/KEPK/FKIK/VII/2025).

The independent variable for this research was the use of the internet, which was characterized by how much adolescents interacted with online media, assessed through measures of how often, how long, the reasons for usage, and the kinds of content accessed. The dependent variable focused on sexual conduct, specifically the actions of adolescents concerning romantic and sexual engagements, which were classified into low, medium, and high-risk behaviors according to specific behavioral indicators. Information was gathered through organized questionnaires that had been evaluated for content validity by specialists and had passed reliability assessments using Cronbach's alpha coefficient, demonstrating adequate internal consistency prior to the gathering of data.

Possible sources of bias were examined in this research. There may have been information bias resulting from self-reported answers to sensitive subjects like sexual activities, which might cause individuals to underreport due to the desire to conform socially. Additionally, recall bias could have been a factor, as participants were required to provide information about their past internet usage and actions. To reduce these biases, the survey was conducted anonymously, respondents were guaranteed privacy, and uniform instructions were given. The data were evaluated with univariate analysis to outline the distribution of variables and bivariate analysis utilizing the Chi-square test to investigate the connection between internet usage and sexual behavior, establishing statistical significance at $p < 0.05$.

RESULTS

The respondents in this study were students of SMA Negeri 1 Gowa. The characteristics of the respondents are presented in the table below:

Table 1. Characteristics of Respondents

Characteristics	n	%
Age		
16 Years	115	60.8 %
17 Years	74	39.2 %
Gender		
Male	60	31.7%
Female	129	68.3%
Child to		
First	77	40.7 %
Second	54	28.6 %
Third	37	19.6 %
Fourth	21	11.1 %
Father's Job		
Civil Servants	24	12.7 %
Entrepreneur	151	79.9 %
Not Working	14	7.4 %
Mother's Job		
Civil Servants	28	14.8 %
Entrepreneur	17	9 %
Not Working	144	76.2 %
Father's Age		
18-44 Years	36	33.3 %
45-59 Years	119	63 %
60-74 Years	7	3.7%
Mother's Age		
18-44 Years	81	42.9 %
45-59 Years	106	56.1 %
60-74 Years	2	1.1 %
Total	189	100 %

Table 1 The research focused on 11th-grade students at SMA Negeri 1 Gowa in South Sulawesi, serving as a representation of teenagers in an educational environment. According to the demographic data shown in Table 1, a considerable portion of the participants was 16 years old (60.8%) and mostly female (68.3%), signifying that the individuals primarily belonged to the middle phase of adolescence, a time marked by heightened social engagement and greater interaction with digital technology. A significant number of the participants were firstborns (40.7%), implying a family dynamic where parents' expectations and guidance might affect the behavior of adolescents.

Regarding their family situation, most of the fathers were found to be business owners (79.9%), whereas a large number of mothers were not engaged in formal employment (76.2%). Furthermore, both fathers and mothers were mostly aged between 45 and 59 years. These attributes indicate a fairly mature

parental age group, which could influence approaches to parenting, communication styles, and oversight related to teenagers' online activities and social conduct within the research area.

Table 2. Frequency Distribution of Internet Use Among Teenagers

Internet Usage	n	%
Viewing Frequency		
≤ 5 times (Light)	64	33.9 %
≥ 6 times (Heavy)	125	66.1 %
Viewing Duration		
≤ 30 minutes (Light)	85	45 %
≥ 31 minutes (Heavy)	104	55 %
Type of Scene		
≤ Kissing on the cheek/forehead (Light)	129	68.3 %
≥ Kissing (Heavy)	60	31.7 %
Perception		
≤ Normal (Light)	156	82.5 %
≥ Pleasant (Heavy)	33	17.5 %
Total	189	100 %

Table 2. Internet usage among teenagers in the research area was quite common. The majority of participants indicated that they go online six times or more (66.1%) and typically spend 31 minutes or longer on each visit (55%), pointing to the fact that using the internet is a regular part of daily life for students. Regarding the type of content consumed, most participants mentioned watching lighter material (68.3%), whereas 31.7% acknowledged viewing more intense content. A significant number of respondents considered sexual content to be normal (82.5%), implying that there is a degree of acceptance of such media among the youth in the study area.

Table 3. Frequency Distribution of Internet Users

Internet Usage	n	%
Light Users	80	42.3 %
Heavy Users	109	57.7 %
Total	189	100 %

Table 3 Patterns of internet utilization among teenagers in the researched region demonstrate that most participants were identified as heavy users. According to Table 3, 57.7% of the participants fell into the category of heavy internet users, whereas 42.3% were identified as light users. This indicates that extensive internet engagement is prevalent among the students in this academic environment.

Table 4. Frequency Distribution of Sexual Behavior Among Adolescents at Gowa State High School 1

Sexual Behavior	n	%
Light Sexual Behavior	77	40.7 %
Heavy Sexual Behavior	112	59.3 %
Total	189	100 %

Table 4. Sexual conduct trends among teenagers in the research area show that most participants were identified as partaking in intense sexual activity. According to the data in Table 4, 59.3% of the

participants indicated involvement in heavy sexual behavior, whereas 40.7% were deemed to be involved in less intense sexual behavior. This result implies that the occurrence of higher-risk sexual activities is quite common among students in this educational environment.

Table 5. Relationship Between Internet Use and Sexual Behavior

Internet Usage	Sexual Behavior				Total	<i>P</i>
	Light	%	Heavy	%		
Light Users	46	57.5%	34	42.5%	80	0.000
Heavy Users	31	28.4%	78	71.6%	109	
Total	77	40.7%	112	59.3%	189	

The connection between online activity and sexual conduct in the researched area reveals a distinct trend. Over fifty percent of individuals classified as light internet users displayed minimal sexual behavior, whereas a larger segment of those identified as heavy internet users showed elevated sexual behavior. This pattern suggests that greater engagement with the internet in this educational environment correlates with a heightened likelihood of risky sexual activities among teenagers. When applying the Chi-square statistical method, a notable association was found between internet usage and sexual conduct ($p < 0.05$), validating that patterns of internet engagement are closely linked to sexual behavior among 11th-grade pupils at SMA Negeri 1 Gowa.

DISCUSSION

The findings from this research revealed that a large number of participants indicated frequent internet usage, while a notable percentage of teenagers exhibited unsafe sexual behaviors (13). This result may be explained by the high proportion of respondents who reported frequent and prolonged internet access, which increases opportunities for exposure to online information, social media interactions, and sexually explicit content. Continuous exposure to such content may gradually influence adolescents' perceptions, attitudes, and behaviors regarding sexuality by shaping their understanding of intimate relationships and reducing sensitivity to social norms related to sexual behavior (14).

Regular and extended internet use also increases adolescents' exposure to online interactions that may encourage curiosity and experimentation. During middle adolescence, individuals experience a developmental stage characterized by identity exploration, emotional changes, curiosity, and a growing desire for intimacy, making them more susceptible to external influences such as digital media (15). Furthermore, limited parental supervision and inadequate guidance may allow adolescents to access inappropriate online content without sufficient control (16). Environmental factors, including peer influence and family communication patterns, may further strengthen the effect of internet exposure on adolescent behavior (17). Therefore, internet use does not act as a direct cause of risky sexual behavior alone but serves as a facilitating factor that interacts with adolescents' emotional, social, and environmental conditions, particularly when self-control and parental monitoring are insufficient (18).

These findings are consistent with previous studies reporting that excessive internet use is associated with increased sexual interest and risky sexual behavior among adolescents. Previous research has shown that adolescents who frequently use internet-based platforms tend to initiate sexual activity earlier because of repeated exposure to sexually explicit materials and peer influences (19). Similarly, other studies have demonstrated that prolonged internet use is significantly associated with more permissive attitudes toward premarital sexual behavior, particularly among adolescents who receive limited parental supervision (20). The consistency between the present findings and previous studies suggests that unrestricted internet exposure consistently influences adolescent sexual behavior through cognitive, emotional, and social mechanisms across different populations (21).

From the perspective of Johnson's Behavioral System Model, frequent internet use and exposure to sexually explicit content can be viewed as external stressors that disrupt the equilibrium of the sexual subsystem, which regulates the need for affection, intimacy, and interpersonal relationships (11). When adolescents receive inadequate parental guidance, emotional support, and behavioral supervision, they may respond to these stressors by engaging in maladaptive behaviors, including risky sexual practices (22). Thus, the influence of internet use on adolescent sexual behavior is determined not only by the frequency of internet use but also by contextual factors such as family supervision, peer environment, and adolescents' ability to regulate their own behavior (23).

Overall, the findings suggest that excessive internet use, together with environmental and social factors, plays an important role in shaping adolescent sexual behavior. These results highlight the need for comprehensive preventive strategies, including strengthening parental supervision, improving adolescents' digital literacy, and promoting self-regulation skills to support healthy behavioral development (24).

CONCLUSIONS AND RECOMMENDATIONS

This research reveals that heavy internet usage is a prevalent behavior among 11th-grade pupils at SMA Negeri 1 Gowa and is markedly linked to increased instances of risky sexual activities. The results suggest that regular and extended encounters with online material heighten teenagers' susceptibility to participating in actions connected to sexual exploration, especially in settings where oversight and direction are minimal. Importantly, this research enhances the comprehension of teenage sexual conduct by emphasizing the role of internet usage as a behavioral risk element that combines with psychosocial factors during the adolescent growth phase. By utilizing Johnson's Behavioral System Model, the research offers a theoretical rationale suggesting that overexposure to the internet may act as external pressure, disrupting the equilibrium of the sexual subsystem and consequently increasing the likelihood of unhelpful behavioral reactions. This theoretical incorporation fortifies the scientific contribution beyond mere statistical correlation. Essentially, these results indicate the need to implement targeted preventive measures in both the school and home environments, especially by enhancing parental monitoring, boosting digital literacy, and encouraging self-control among teenagers.

Consequently, this research presents relevant evidence that can guide health promotion initiatives in schools and reproductive health programs for adolescents in comparable educational environments.

REFERENCES

1. UNICEF. The State of the World's Children 2021. 2021;
2. World Health Organization (WHO). Adolescent sexual and reproductive health: The global challenges. *Int J Gynecol Obstet*. 2024;131:S40–2.
3. Jaya S, Putra P, Meiyuntariningsih T, Ramadhani HS, Psikologi F. Intensitas Penggunaan Media Sosial dan Kecenderungan Pelecehan Seksual Pada Remaja. *Inn J Psychol Res*. 2022;2(1):46–57.
4. Prihandini P. Studi Komparasi Chi-Square Perilaku Konsumsi Pornografi Bagi Remaja Berdasarkan Perbedaan Jenis Kelamin. *J Komun Pembang*. 2023;18(02):163–75.
5. Fadillah R, Widyatuti. Perilaku Pengguna Media Sosial Dengan Perilaku Seksual Pranikah Pada Remaja SMA. *J Ners Widya Husada [Internet]*. 2023;5(3):87–94. Available from: <http://journal.uwhs.ac.id/index.php/jners/article/view/337>
6. Astuti W, Muna Z, Julistia R. Gambaran Kontrol Diri Pada Siswa SMP Kota Lhokseumawe Dalam Mencegah Perilaku Seksual Pranikah. *J Divers*. 2021;7(1):72–8.
7. Indriyani L, Aniroh U. Hubungan Tingkat Stres dengan Siklus Menstruasi pada Remaja Putri. *J Keperawatan Berbudaya Sehat*. 2023;1(1):16–21.
8. Ulang AT, Rahma R, Seweng A. Hubungan Peran Internet Dengan Perilaku Seksual Remaja Pada Masa Pandemi. *Hasanuddin J Public Heal*. 2022;3(1):47–55.
9. Oktavia F. HUBUNGAN ANTARA PENGGUNAAN MEDIA SOSIAL DENGAN PERILAKU SEKSUAL REMAJA. 2022; Available from: <https://repository.unika.ac.id/id/eprint/16247>
10. Tefiantoro Aji RW, Setiawati OR, Mandala Z, Putri AM. Pengaruh Pornografi Melalui Gadget Terhadap Perilaku Seksual Pada Siswa Smp. *J Ilmu Kedokt dan Kesehat*. 2024;11(1):108–13.
11. Johnson DE. The behavioral system model for nursing. *Conceptual models for nursing practice vol. 1*. 1980. 205–216 p.
12. Notoatmodjo S. Metodologi Penelitian Kesehatan. Dalam: *Metodologi Penelitian Kesehatan [Internet]*. UIN Alauddin Makassar. 2021. 43–44 p. Available from: https://repositori.uin-alauddin.ac.id/19810/1/2021_Book Chapter_Metodologi Penelitian Kesehatan.pdf
13. Merentek VG, Tucunan AAT, Rumayar A. Hubungan media internet dan peran keluarga

- dengan perilaku seksual remaja di SMA Negeri 1 Motoling Barat tahun 2020. *J Kesmas*. 2021;10(3):66–73.
14. Mulyati & NRH. Jenis kelamin pada siswa SMA Mardisiswa Semarang survei APJII (asosiasi penyelenggara jasa Internet Indonesia) menunjukan pertumbuhan media lainnya . Hal ini didukung oleh survei Indonesian Digital Ssocation (IDA) yang. *J Empati*. 2018;7(Nomor 4):152–61.
 15. Ardela MP, Prabawati NG, Wati LR. Perbedaan Efektivitas Diskusi Kelompok dan Penyuluhan Pendidikan Seksual terhadap Perubahan Persepsi tentang Perilaku Seksual Siswi SMAN 1 Kandat Kabupaten Kediri. *J Qual Women's Heal*. 2020;3(1):92–100.
 16. Indrijati H. Internet use and adolescent premarital sexual behavior. 2024;
 17. Riya R, Ariska L. Faktor-faktor yang Berhubungan dengan Perilaku Seksual Pranikah pada Remaja. *J Ilm Univ Batanghari Jambi*. 2023;23(2):2123.
 18. Kemenag. Kementrian Agama Republik Indonesia. 2019;
 19. Efrati Y. Parental practices as predictors of adolescents' compulsive sexual behavior: a 6-month prospective study. Vol. 33, *European Child and Adolescent Psychiatry*. 2024. 241–253 p.
 20. Amalia KN, Halim U. Penggunaan Internet sebagai Media Pembelajaran. *J Publ (Basic Appl Res Publ Commun)*. 2022;1(1):37–48.
 21. BKKBN (Badan Kependudukan dan Keluarga Berencana Nasional). Survey Demografi dan Kesehatan Indonesia. 2018;
 22. Sarwono SW. Psikologi Remaja (Revisi ed.). Jakarta: Rajawali Pers. 2015;
 23. Purwanto A, Ningtyias FW, Ririanty M. Niat Penghentian Akses Pornografi Pada Remaja Sebagai Upaya Pencegahan Perilaku Seksual Pranikah. *Ikesma*. 2023;19(1):27.
 24. Praghlapati A, Hidayati E, Suprayitno E, Anggorowati. Aplikasi Model Sistem Perilaku Johnson Dalam Asuhan Keperawatan. *J Keperawatan [Internet]*. 2023;15(September):1299–308. Available from: <http://journal.stikeskendal.ac.id/index.php/Keperawatan%0AAPLIKASI>
 25. Bukit DS, Rochadi RK, Paparan Lama Internet dan Media Sosial Hubungannya Terhadap Perilaku Seks Remaja. *J Ilm [Internet]*. 2024; Available from: <http://journal.stikeshangtuah-sby.ac.id/index.php/JIKSHT/article/view/342%0Ahttps://journal.stikeshangtuah-sby.ac.id/index.php/JIKSHT/article/download/342/248>