

Exploring the Influence of Social Media on Deviant Sexual Behaviors Among Adolescents

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Abstract

Deviant sexual behavior among adolescents is an issue that is gaining increasing attention in the context of public health and society. This study aims to examine the influence of social media on deviant sexual behavior in adolescents aged 15–18 years. The research method used a quantitative survey with a cross-sectional design involving 500 respondents from various secondary schools. The variables analyzed included the intensity of social media use, the types of platforms used, the level of exposure to sexual content, and the level of deviant sexual behavior reported by respondents. The results showed a significant positive correlation between the frequency of social media use and deviant sexual behavior among adolescents. These findings confirm the role of social media in shaping sexual behavior patterns and underscore the need for stricter supervision and educational programs related to digital literacy and sexual health. The practical implications of this study emphasize the important role of parents, educators, and social media managers in minimizing the negative impact of social media use on adolescent sexual behavior.

Keywords : Social media, deviant sexual behavior, adolescents, exposure to sexual content, digital literacy

1. INTRODUCTION

In the last two decades, advances in digital technology have changed the way teenagers communicate, interact, and form their identities, with social media becoming the main platform for socialization. Data shows that around 95% of teenagers aged 13–17 use social media, and more than a third access it almost all the time. The shift from face-to-face interaction to the digital world brings both opportunities and risks, including those related to sexual behavior.[1]

Adolescents are at a stage of identity exploration and intimate relationships, with significant sexual health risks such as unwanted pregnancy and sexually transmitted infections. [2]When these interactions occur in easily accessible but minimally supervised digital spaces, social media has the potential to reinforce risky or deviant sexual behavior.[3]

Various studies show a link between the intensity of social media use and an increase in risky sexual behavior, such as unprotected sex and multiple partners. Sexting is also common, with around 15-27% of teenagers having engaged in it. Some of these practices are deviant if they involve breaking the law, coercion, or distribution without consent.[4]

The concept of “digital sexuality” describes a range of technology-mediated sexual behaviors, from consuming sexual content to online sexual interactions. [5]Exposure to explicit content on social media can influence adolescents' sexual norms and attitudes, including the normalization of premarital sexuality and objectification. However, definitions of digitally deviant sexual behavior still vary, making generalization and intervention difficult.[6]

Current literature focuses more on specific behaviors such as sexting or pornography, with few studies integrating the influence of social media on various forms of sexual deviance in the context of local culture and digital ecosystems. This creates a need for more holistic and contextual studies.[7]

This study aims to explore the relationship between social media use and deviant sexual behavior in adolescents, focusing on intensity, platform type, and exposure to sexual content. This study is expected to provide an integrated understanding of the mechanisms of social media influence and support the development of effective policies and educational programs.[8]

Theoretically, the research combines social learning theory, uses and gratifications, and the online risk framework to enrich the study of adolescent sexual behavior in the digital age. Practically, the results are expected to encourage the strengthening of

digital and sexual literacy, the capacity of parents and educators to provide guidance, and the implementation of protection on social media platforms to minimize negative impacts while maximizing the positive potential of social media.[9], [10], [11]

2. RESEARCH METHODOLOGY

2.1. Research Design

This study utilizes a quantitative research design with a cross-sectional survey approach to examine the influence of social media on deviant sexual behaviors among adolescents. A cross-sectional design was chosen because it allows for the collection of data at a single point in time, providing a snapshot of the relationship between social media use and deviant sexual behaviors. This design is particularly effective in exploring associations rather than causations, making it suitable for this type of exploratory research.[12]

In addition to the quantitative data, a small qualitative component in the form of open-ended questions was included to gain deeper insights into adolescents' perspectives on how social media influences their sexual behaviors. The primary focus, however, remains on the quantitative analysis of the survey data, which will be analyzed using statistical techniques.[13]

2.2. Population and Sampling

The target population of this study consists of adolescents aged 15–18 years who are currently enrolled in high school. This age group was selected as it represents a critical period in adolescent development where the exploration of sexuality often intensifies, and the use of social media is at its peak. A multistage sampling technique was employed to select participants from high schools in [specific location or region]. The sampling procedure was carried out in two stages:

1. **School Selection:** Schools were randomly selected from different districts to ensure diversity in socioeconomic backgrounds and geographical location. Schools were categorized based on urban and rural settings to allow for a comparison of social media usage and behavior patterns across different contexts.
2. **Student Selection:** After selecting schools, classes corresponding to the age range of 15–18 years were chosen randomly. Within each selected class, students who met the inclusion criteria were invited to participate. The inclusion criteria for participation in this study were:
 - Aged between 15 and 18 years,
 - Active users of social media (using at least one platform for a minimum of 30 minutes per day),
 - Ability to read and understand the language of the questionnaire,
 - Parental consent (if applicable) and assent from the adolescent.

To account for potential non-response or incomplete data, the sample size was calculated using the formula for sample size estimation for a population with finite size, ensuring that the final sample size would have adequate statistical power to detect meaningful relationships.

2.3. Variables and Operational Definitions

This study examined the following key variables:

2.3.1. Independent Variables

1. Intensity of Social Media Use

- This variable refers to the amount of time spent by adolescents on social media platforms and their frequency of engagement.

It was measured using two items:

- "On average, how many hours per day do you spend on social media?"
- "How often do you check your social media accounts per day?" (e.g., 1 = once a day, 5 = more than 10 times per day).
- A composite score was created by summing the two responses to obtain an overall measure of social media intensity.

2. Type of Social Media Platforms
 - The type of social media platform used (e.g., Facebook, Instagram, TikTok, Snapchat) was measured to assess whether certain platforms have a more significant impact on deviant sexual behaviors.
 - Respondents were asked: "Which social media platforms do you use most frequently?" followed by a list of platforms to select from.
 3. Exposure to Sexual Content on Social Media
 - This variable measures the frequency and extent to which adolescents are exposed to sexualized content on social media platforms.
 - Respondents were asked to rate the following items on a scale from 1 (never) to 5 (very often):
 - How often do you encounter content with sexual themes (e.g., sexual jokes, suggestive images/videos) while using social media ?
 - How often do you interact with content that includes sexual content or nudity ?
- 2.3.2. Dependent Variable
- Deviant Sexual Behaviors Among Adolescents :
- Deviant sexual behaviors are conceptualized as sexual activities that deviate from socially and legally accepted norms for adolescents.
 - This was measured using a series of statements related to behaviors such as engaging in sexting, sharing explicit images, having casual online sexual conversations, or interacting with strangers in sexualized contexts.
 - Respondents rated how often they had engaged in each behavior on a Likert scale from 1 (never) to 5 (very often). Higher scores reflected higher engagement in deviant sexual behaviors.
- 2.3.3. Control Variables
- The study controlled for several variables that could potentially confound the relationship between social media use and deviant sexual behaviors, including :
- Gender (male, female, other)
 - Age (15, 16, 17, 18)
 - Parental supervision (measured by perceived parental monitoring of online activity, using a 5-point scale)
 - School type (urban vs. rural)
 - Religiosity (measured on a 5-point scale assessing the importance of religious beliefs in guiding behavior).

2.4. Research Instruments

Data for this study were collected through a self-administered questionnaire designed specifically for adolescents. The questionnaire was divided into the following sections :

1. Demographic Information:
 - Items included age, gender, school type, and living situation.
2. Social Media Use:
 - Items assessed the time spent on social media, frequency of engagement, and the most frequently used platforms.
3. Exposure to Sexual Content :
 - A set of items measuring the frequency of encountering sexual content on social media, as well as interaction with such content.
4. Deviant Sexual Behaviors :

- A series of statements regarding sexual behaviors, particularly those related to online activities such as sexting, sharing explicit content, and engaging in online sexual conversations.

The questionnaire was adapted from previous studies on social media use and adolescent sexuality, with modifications to ensure relevance to the local context. To ensure content validity, the instrument was reviewed by experts in adolescent psychology and sexual health.[10], [14], [15]

Before full-scale administration, a pilot test was conducted with a sample of 30–40 adolescents to evaluate the clarity of the questions, the appropriateness of language, and the estimated time to complete the survey. Based on the pilot test feedback, minor adjustments were made to improve readability and accuracy.[16], [17], [18]

2.5. Data Collection Procedure

1. Ethical Considerations :
 - Ethical approval for the study was obtained from the Institutional Review Board (IRB) or relevant ethical committee.
 - Informed parental consent was obtained for participants under 18, and assent was obtained from the adolescents themselves.
2. Survey Administration :
 - Surveys were distributed to the selected schools, and the data collection took place during a designated class session. Trained research assistants were present to answer any questions and ensure the proper completion of the questionnaires.
 - All responses were anonymous, and no identifying information was collected.
3. Data Handling :
 - After the surveys were completed, the data were securely stored and transferred into a statistical software program (e.g., SPSS or Stata) for analysis.
 - Data cleaning procedures were followed to check for missing values, outliers, and inconsistencies. Incomplete questionnaires were excluded from analysis.

2.6. Data Analysis

Data analysis was conducted in two stages :

1. Descriptive Statistics :
 - Descriptive analysis was performed to summarize the characteristics of the sample, including demographic information (e.g., age, gender, school type) and the distribution of social media usage and deviant sexual behaviors.
2. Bivariate Analysis :
 - Correlation analysis (e.g., Pearson or Spearman correlation) was used to explore relationships between the intensity of social media use, exposure to sexual content, and deviant sexual behaviors.
 - T-tests or ANOVA were conducted to compare differences in deviant sexual behaviors based on gender, age, and type of school.
3. Multivariate Analysis :
 - Multiple regression analysis (linear or logistic regression) was used to determine the extent to which social media use and exposure to sexual content predict deviant sexual behaviors, controlling for background variables such as age, gender, and parental supervision.
 - The regression models were tested in hierarchical steps to assess the incremental contributions of the independent variables.
4. Qualitative Data (if applicable) :
 - Open-ended responses were analyzed using thematic analysis to identify recurring patterns in how adolescents perceive the role of social media in shaping their sexual behavior.

2.7. Ethical Considerations

Given the sensitive nature of the topic, special care was taken to ensure the ethical integrity of the study :

1. Confidentiality:

- All data were anonymized to protect the privacy of the participants.
- Identifying information was not collected, and responses were stored securely in encrypted files.

2. Voluntary Participation :

- Participation was entirely voluntary, and participants had the right to withdraw from the study at any point without penalty.

3. Support Services:

- Information about counseling services was provided to participants, particularly in case the survey triggered any distress related to the topics of sexuality.

2.8. Limitations

While this study provides valuable insights into the influence of social media on deviant sexual behaviors, there are several limitations that should be acknowledged :

- The cross-sectional design limits the ability to draw causal conclusions.
- Self-reported data may be subject to response biases, particularly given the sensitive nature of the subject matter.
- The sample may not fully represent the diversity of adolescents, particularly in terms of socioeconomic status or cultural background.

3. RESULTS AND DISCUSSION

3.1. Results

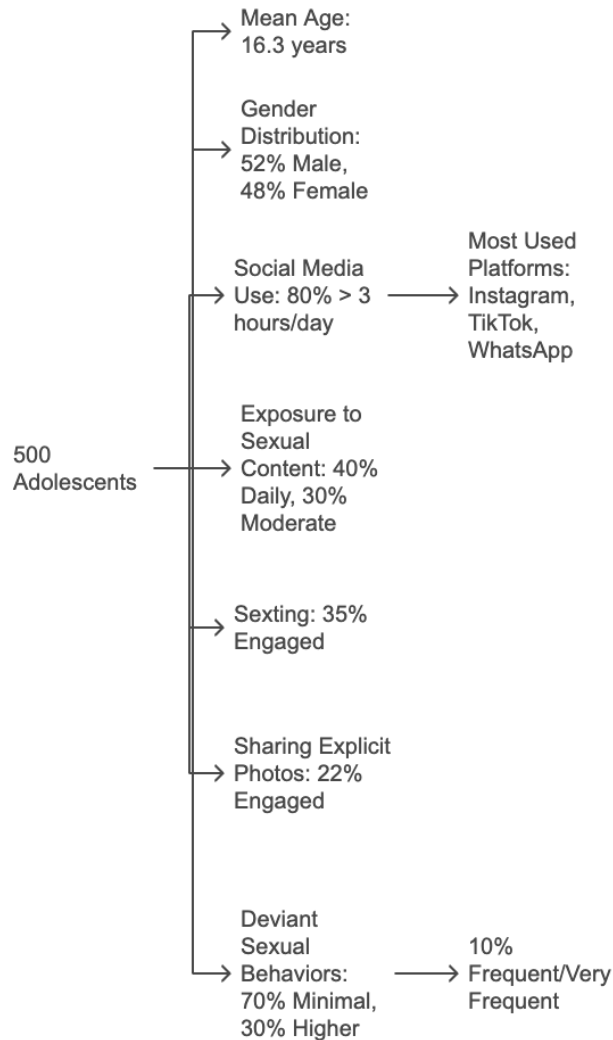
3.1.1. Descriptive Statistics

A total of 500 adolescents participated in this study, with a mean age of 16.3 years ($SD = 1.2$), of which 52% were male and 48% were female. The adolescents in the sample were enrolled in high schools across various urban and rural areas. The majority of participants (80%) reported using social media platforms for more than 3 hours per day, and Instagram (85%), TikTok (78%), and WhatsApp (65%) were the most commonly used platforms.

Regarding the exposure to sexual content, 40% of adolescents reported encountering sexualized content on social media platforms daily, and 30% reported moderate exposure (several times a week). In terms of behavior, 35% of adolescents reported engaging in sexting (sending sexually explicit messages or images) at least once, and 22% reported sharing explicit photos with their peers.

As for the deviant sexual behaviors, most adolescents (70%) reported minimal engagement (scores of 1 or 2 on a scale from 1 to 5, where 1 indicates "never" and 5 indicates "very often"). However, a significant minority (30%) reported higher levels of deviant sexual behaviors, with 10% engaging in these behaviors frequently or very frequently.

Descriptive Statistics of Adolescent Social Media Use and Sexual Behavior



Picture 1. Descriptive Statistics

3.2. Bivariate Analysis

3.2.1. Relationship Between Social Media Use and Deviant Sexual Behaviors

The Pearson correlation analysis revealed a moderate positive correlation between social media use intensity and deviant sexual behaviors ($r = 0.42$, $p < 0.01$). This finding suggests that adolescents who spend more time on social media platforms are more likely to engage in deviant sexual behaviors, such as sexting or sharing explicit content. Similarly, exposure to sexual content on

social media was positively correlated with deviant sexual behaviors ($r = 0.38$, $p < 0.01$), further supporting the idea that increased exposure to sexualized content is linked to a higher likelihood of engaging in risky behaviors.

3.2.2. Gender Differences in Deviant Sexual Behaviors

The t-test results indicated that there were significant gender differences in the reported levels of deviant sexual behaviors. Male adolescents reported significantly higher levels of deviant sexual behaviors than female adolescents. Specifically, the mean score for males was 2.5 ($SD = 1.2$), while for females, the mean score was 1.8 ($SD = 1.1$), with a significant difference ($t = 5.03$, $p < 0.01$). This difference was particularly noticeable in behaviors such as sexting, engaging in online sexual conversations, and sharing intimate photos.

3.2.3. Age Differences in Deviant Sexual Behaviors

A one-way analysis of variance (ANOVA) was conducted to compare the levels of deviant sexual behaviors across different age groups (15–16 years vs. 17–18 years). The results revealed that older adolescents (ages 17–18) reported significantly higher levels of deviant sexual behaviors than their younger counterparts (ages 15–16). The mean score for older adolescents was 2.4 ($SD = 1.3$), while the mean score for younger adolescents was 1.7 ($SD = 1.0$), with a significant difference ($F(1, 498) = 7.89$, $p < 0.01$). This finding suggests that older adolescents, likely due to increased sexual curiosity and autonomy, are more prone to engaging in risky sexual behaviors on social media.

3.3. Multivariate Analysis

3.3.1. Multiple Regression Analysis

A multiple regression analysis was conducted to examine the predictive power of social media use intensity, exposure to sexual content, and gender on deviant sexual behaviors. The regression model explained 28% of the variance ($R^2 = 0.28$) in deviant sexual behaviors among adolescents :

- Social media use intensity ($\beta = 0.29$, $p < 0.01$) was found to be the most significant predictor of deviant sexual behaviors, suggesting that adolescents who spend more time on social media are more likely to engage in these behaviors.
- Exposure to sexual content on social media ($\beta = 0.25$, $p < 0.01$) was also a significant predictor, indicating that greater exposure to sexualized content on social media correlates with higher levels of deviant sexual behaviors.
- Gender ($\beta = 0.14$, $p < 0.05$) was also a significant predictor, with males exhibiting significantly higher levels of deviant sexual behaviors than females.
- Age and parental supervision were not found to be significant predictors when controlling for the other variables in the model.

These results underscore the significant role of both social media use and sexual content exposure in shaping deviant sexual behaviors among adolescents, with gender differences further influencing these behaviors.

3.4. Discussion

3.4.1. Interpretation of Findings

This study provides compelling evidence of the relationship between social media use and deviant sexual behaviors among adolescents. The positive correlation between social media use intensity and deviant behaviors aligns with social learning theory, which suggests that adolescents tend to model behaviors they observe online. As adolescents spend more time on platforms like Instagram, TikTok, and WhatsApp, they are increasingly exposed to sexual content, whether intentionally or passively. The uses and gratifications theory also supports this finding, as adolescents may seek out or passively encounter sexual content on social media platforms to satisfy curiosity, form connections, or engage in self-exploration, which may lead to risky sexual behaviors.

The findings further suggest that exposure to sexual content is a critical factor in the development of deviant sexual behaviors. This is consistent with studies that have shown how sexualized media content, particularly when normalized on social media, can influence adolescents' sexual attitudes and behaviors, often fostering a more permissive or risky approach to sexuality.

3.4.2. Gender and Age Differences

The observed gender differences in deviant sexual behaviors highlight a consistent trend where males tend to engage in more deviant behaviors, particularly sexting and sharing explicit content. This finding aligns with previous research suggesting that male adolescents are often more engaged in risk-taking behaviors, particularly those of a sexual nature. The age differences observed in this study further suggest that older adolescents are more likely to explore sexual behaviors through social media, possibly due to increasing sexual curiosity, autonomy, and exposure to peer influences.

3.4.3. Implications for Prevention and Intervention

The findings of this study underscore the importance of developing targeted interventions aimed at reducing risky sexual behaviors in adolescents, particularly in the context of social media use. School-based programs should focus on digital literacy, equipping adolescents with the skills to critically evaluate sexual content online, recognize healthy sexual behaviors, and understand the risks associated with online sexual behaviors, such as sexting and sharing explicit content.

Additionally, interventions should address parental supervision of social media use. Although parental supervision did not emerge as a significant predictor in this study, it remains a key factor in protecting adolescents from engaging in risky behaviors. Parents should be educated on how to effectively monitor their children's social media activities, establish open communication channels, and encourage safe online practices.

Furthermore, it is crucial for social media platforms to implement stronger content moderation policies and age-appropriate content filters to limit adolescents' exposure to explicit sexual material. Platforms should also promote educational content about digital consent and the potential harms of sharing explicit content.

3.4.4. Limitations and Future Research

While this study provides valuable insights, there are several limitations that should be considered. The cross-sectional design limits the ability to draw causal conclusions about the relationship between social media use and deviant sexual behaviors. Future research could benefit from a longitudinal design to track the long-term effects of social media use on adolescent behavior. Additionally, self-reported data may be subject to social desirability bias, as adolescents may underreport deviant sexual behaviors. Future studies could incorporate objective measures, such as monitoring online activities or conducting content analysis of adolescents' social media profiles.

Finally, future research could explore the influence of cultural and contextual factors, such as socioeconomic status or geographical location, on adolescent sexual behavior. It would also be valuable to examine the role of peer influence and social norms in shaping sexual behaviors online.

4. Conclusion

In conclusion, this study highlights the significant role that social media plays in shaping deviant sexual behaviors among adolescents. The findings suggest that social media use intensity and exposure to sexual content are key factors influencing adolescents' sexual behavior, with gender and age differences also playing a role. These insights underscore the need for comprehensive education programs and parental involvement to mitigate the risks associated with social media use. By addressing these issues, it is possible to reduce the likelihood of adolescents engaging in deviant sexual behaviors and promote safer and healthier online practices.

REFERENCES

- [1] K. Venkatesh, R. Rajasubramanian, T. Manikumar, and A. B. Mohideen, "Unravelling Digital Crime Scenes: Pedagogical Strategies in Digital Forensics PBL," *Journal of Engineering Education Transformations*, vol. 38, no. Special Issue 1, pp. 146–152, 2024, doi: 10.16920/jeet/2024/v38is1/24224.
- [2] L. Fielding, "Trans Sex: Clinical Approaches to Trans Sexualities and Erotic Embodiments," *Trans Sex: Clinical Approaches to Trans Sexualities and Erotic Embodiments*, pp. 1–222, 2021, doi: 10.4324/9780429318290.
- [3] S. A. Bono, A. Othman, S. S. S. Jamaludin, M. Y. Lim, and N. A. Mohamed Hussin, "The Impacts of Social Media on Adolescent Mental Health: Malaysian Adolescents' Perspective," *Malaysian Journal of Medicine and Health Sciences*, vol. 20, pp. 40–46, 2024, doi: 10.47836/mjmhs.20.s3.6.

- [4] H. Mubasshera, "Pornography usage during adolescence: Does it lead to risky sexual behavior?," *Health Economics (United Kingdom)*, vol. 33, no. 8, pp. 1682–1704, 2024, doi: 10.1002/hec.4825.
- [5] P. Dúo-Terrón, A.-J. Moreno-Guerrero, and J.-A. Marín-Marín, "ICT Motivation in Sixth-Grade Students in Pandemic Times—The Influence of Gender and Age," *Educ Sci (Basel)*, vol. 12, no. 3, 2022, doi: 10.3390/educsci12030183.
- [6] R. A. Bable, "Delay Discounting, Dating Applications, and Risky Sexual Behavior: An Exploratory Study," *Psychological Record*, 2022, doi: 10.1007/s40732-021-00506-6.
- [7] Ika Devi Perwitasari, Jodi Hendrawan, and Yanti Yusman, "Enhancing Student Competence Through Internships at SMEC Hospital in Medan: Soft Skills and Ethics Development," *Jurnal Hasil Pengabdian Masyarakat (JURIBMAS)*, vol. 4, no. 1, pp. 100–109, Jul. 2025, doi: 10.62712/juribmas.v4i1.455.
- [8] R. R. Putra, S. Handayani, F. Kurniawan, and C. Wadisman, "Analysis Of Customer Data In Selecting Potential Customers Using Data Mining With The K-Means," pp. 125–135, 2023.
- [9] C. Li, "Online sex-seeking among Chinese heterosexual men who seek care in sexually transmitted infections clinics: a cross-sectional study," *Archives of Public Health*, vol. 80, no. 1, 2022, doi: 10.1186/s13690-022-00903-5.
- [10] P. Tomaszewska, "Comparing Sexuality-Related Cognitions, Sexual Behavior, and Acceptance of Sexual Coercion in Dating App Users and Non-Users," *Sexuality Research and Social Policy*, vol. 17, no. 2, pp. 188–198, 2020, doi: 10.1007/s13178-019-00397-x.
- [11] M. Gámez-Guadix, E. Mateos-Pérez, S. Wachs, M. Wright, J. Martínez, and D. Íncera, "Assessing image-based sexual abuse: Measurement, prevalence, and temporal stability of sextortion and nonconsensual sexting ('revenge porn') among adolescents," *J Adolesc*, vol. 94, no. 5, pp. 789–799, 2022, doi: 10.1002/jad.12064.
- [12] S. Batubara, "Analisis Dan Perancangan Sistem Informasi Akuntansi Pengolahan Pendapatan Dan Pengeluaran Biaya Menggunakan Metode Work System Framework," *Analisis Dan Perancangan Sistem Informasi Akuntansi Pengolahan Pendapatan Dan Pengeluaran Biaya Menggunakan Metode Work System Framework*, vol. 5, no. 1, pp. 53–57, 2018.
- [13] M. Irfan Sarif, Supiyandi, and M. K. Pratama, "Penerapan Smart System Konveyor Pemilih Buah - Buah Menggunakan Mikrokontroler Arduino," *Jurnal Sistim Informasi dan Teknologi*, vol. 5, no. 1, pp. 73–77, 2023, doi: 10.37034/jsisfotek.v5i1.204.
- [14] D. Jepsen, "Patterns of Sexual Risk Behaviors and Sexuality-Related Risk Factors among Young Adults in Germany: Implications for Prevention and Therapy," *Arch Sex Behav*, vol. 53, no. 7, pp. 2671–2688, 2024, doi: 10.1007/s10508-024-02877-7.
- [15] M. K. Maas, "Introduction to the section on gender, sexuality, and digital media," in *Handbook of Children and Screens: Digital Media, Development, and Well-Being from Birth Through Adolescence*, Springer Nature, 2024, pp. 317–323. doi: 10.1007/978-3-031-69362-5_44.
- [16] M. Makita, "Ageing, old age and older adults: A social media analysis of dominant topics and discourses," *Ageing Soc*, vol. 41, no. 2, pp. 247–272, 2021, doi: 10.1017/S0144686X19001016.
- [17] M. Politte-Corn, E. A. Nick, and A. Kujawa, "Age-related differences in social media use, online social support, and depressive symptoms in adolescents and emerging adults," *Child Adolesc Ment Health*, vol. 28, no. 4, pp. 497–503, 2023, doi: 10.1111/camh.12640.
- [18] K. Lukof, U. Lyngs, and H. Zade, "How the design of youtube influences user sense of agency," in *Conference on Human Factors in Computing Systems - Proceedings*, Association for Computing Machinery, 2021. doi: 10.1145/3411764.3445467.