

Review

Sexting among College Students in Africa: A Scoping Review of Prevalence, Risk Factors, and Impact

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Abstract: Sexting has become a common mode of expression within the digital realm. Understanding sexting in the context of African college campuses is crucial, as it reflects the impact of technological advancements and the interplay of cultural norms, values, and societal factors. This review seeks to provide evidence to inform context-specific initiatives and policies aimed at promoting responsible digital communication and enhancing the well-being of college students within the continent. This scoping review followed the guidelines by Askey and O'Malley. The search for records was conducted in four main electronic databases including PubMed, PsycINFO, Central, and JSTOR. Additional searches were conducted using Google Scholar, Google, and ProQuest. A total of 11 articles met the eligibility criteria and were included in the review. Results: The findings of this review are grouped under the following four main headings: type of sexting, prevalence, predictors of sexting, and outcomes of sexting. The main types of sexting were sending and receiving nude pictures and sexually explicit messages and posting explicit videos and photos on social media. The prevalence rates for general sexting ranged from 9.9% to 74.4%. Positive outcomes of sexting included increased condom negotiation skills and sexual communication that contribute to safer sexual practices. Negative sexual outcomes included high-risk-taking sexual behaviour such as multiple sexual partners. This review highlights the intricate facets of sexting among African college students, and emphasises the interplay between digital communication, societal norms, and individual behaviours. Policies should prioritise cyberbullying prevention, privacy protection, and ethical technology use.

Keywords: sexting; college students; sexual and reproductive health; Africa



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1. Introduction

In today's digital age, communication methods have undergone a profound transformation, with sexting emerging as a significant facet of modern communication [1–4]. Sexting involves the exchange and sharing of sexually explicit messages, images, or videos via digital devices, and it has become a prevalent and evolving aspect of contemporary communication [5,6]. This practice is gaining traction among college students in Africa, as well as in other parts of the world, prompting questions about prevalence, motivations, and

impact [7]. The digital landscape has revolutionised the way young adults communicate, connect, and express their desires and intimate thoughts [1,8]. Sexting, in its various forms, has become a common mode of expression within this digital realm [8]. However, a significant concern within sexting is the uncertainty surrounding the destination of sexually explicit content, as it can easily be forwarded or shared without the sender's knowledge or consent.

Understanding sexting in the context of African college campuses is crucial because it does not only reflect the impact of technological advancements but also highlights the interplay of cultural norms, values, and societal factors [2,9,10]. The implications of sexting extend beyond individual behaviours, affecting relationships, mental health, and educational environments [5,10–12]. Media attention has primarily focused on the potential negative consequences of sexting, such as the unauthorised distribution of intimate content, especially when shared without the sender's consent [8–10,13]. However, there are serious legal ramifications, particularly if those involved are underage. Sexting has also been linked to adverse effects on mental health and an increased likelihood of engaging in risky behaviours in reviewed papers that sampled studies conducted in the USA, Europe, Australia, Canada, and Asia [7,14]. Furthermore, situations such as blackmail, sexual abuse, and instances where consent is absent, which are often reported to law enforcement, further heighten concerns related to health and sexual risk behaviours [14,15].

Going beyond examining prevalence and outcomes, it is essential to consider other aspects of sexting behaviours. Gaining insight into African college students' perceptions of sexting, including their attitudes, their understanding of associated risks, and their motivations for participating in such activities, would provide a more comprehensive understanding of why these behaviours occur among college students. Moreover, as sexting continues to garner attention globally, there is a growing need for evidence-based insights to inform education, policy, and intervention strategies [1,10,11,15].

Despite the proliferation of opinion pieces and critical discussions surrounding sexting, there is a noticeable absence of reviews systematically mapping evidence on the prevalence and correlates of sexting among college students in Africa. Existing reviews have primarily focused on evidence from America, Europe, Canada, Australia, and Asia [5,7,11,14,16]. Given that research into sexting behaviours is still in its early stages and has exhibited significant variations in research questions and methodologies across various fields of inquiry [17–22], there is a pressing need for a comprehensive synthesis tailored to the African context. Mapping existing evidence using scoping review methodology is essential to understand the scope of existing evidence on sexting among college students in Africa [18].

This review will provide a more coherent understanding of existing findings related to sexting behaviour, accurately pinpoint research gaps, and offer clearer guidance for future research directions. Hence, the purpose of this review is to map evidence of the prevalence and correlates of sexting among college students in Africa. By comprehensively examining existing research on sexting among college students in Africa, this review aims to provide evidence to inform context-specific initiatives and policies aimed at promoting responsible digital communication and enhancing the well-being of college students in Africa.

2. Methods

2.1. Research Design

This review adopted the methodological framework proposed by Arksey and O'Malley [18] for conducting scoping reviews. This approach involves the following six key stages: identifying the research question, identifying relevant studies, selecting studies, charting the data, collating, summarising, and reporting the results and consultations.

2.2. Identifying Research Questions

The following research questions guided this review:

1. What is the prevalence of sexting among college students in Africa?
2. What are the correlates of sexting among college students in Africa?

2.3. Identifying Relevant Studies

A comprehensive search strategy was developed to identify relevant studies. The search was conducted across the following four main electronic databases: PubMed, PsycINFO, Central, and JSTOR. Additional searches, including for grey literature, were conducted using Google, Google Scholar, and ProQuest. The search terms included variations in “sexting”, “college students”, “Africa”, “prevalence”, and “correlates”. The Boolean operators AND/OR were used to combine the search terms effectively. MeSH terms were developed for searches in PubMed. The MeSH terms were then modified for searches in the other databases. The MeSH terms for the search conducted in PubMed is presented in Table 1.

Table 1. Search strategy in PubMed.

| Search # | Search Terms |
|--|---|
| #1. Search to identify sexting | Sexting* [MeSH Term] OR Sex messaging* OR Sex texts* OR Textual relationships* OR Sexual communication* OR Sexting behaviour* OR Digital flirting* OR Electronic sexual communication* OR Cybersex* OR Virtual intimacy* |
| #2. Search to identify college students | College students* [MeSH Term] OR University students* OR Higher education students* OR Post-secondary students* OR Undergraduate students* OR *Tertiary education students* |
| #3. Search to identify countries in Africa | Africa* [MeSH Term] OR sub-Saharan Africa* OR Angola* OR Benin* OR Botswana* OR Burkina Faso* OR Burundi* OR Cape Verde* OR Cameroon* OR Central African republic* OR Chad* OR Comoros* OR Congo* OR Democratic Republic of Congo* OR Cote d'Ivoire* OR Equatorial Guinea* OR Eritrea* OR Eswatini* OR Ethiopia* OR Gabon* OR Gambia Ghana* OR Guinea* OR Guinea Bissau* OR Kenya* OR Lesotho* OR Liberia* OR Madagascar* OR Malawi* OR Mali* OR Mauritania* OR Mauritius* OR Mozambique* OR Namibia* OR Niger* OR Nigeria* OR Rwanda* OR Sao Tome & Principe* OR Senegal OR Seychelles* OR Sierra Leone* OR Somalia* OR South Africa* OR South Sudan* OR Sudan* OR Tanzania* OR Togo* OR Uganda* OR Zambia* OR Zimbabwe* |
| #4. Search to identify prevalence | Prevalence* [MeSH Terms] OR Percentage* OR Proportion* OR Rate* |
| #5. Search to identify correlates of sexting | Correlates* [MeSH Terms] OR Risk factors* [MeSH terms] OR Determinants* OR Causes* OR Outcomes* OR Associated factors* OR Contributors* OR Predictors* OR Influences* |
| Overall search strategy | Combined search strategy 1: #4 AND #1 AND #2 AND #3 |
| | Combined search strategy 2: #5 AND #1 AND #2 AND #3 Filters activated: English language; From 01/01/2000 |

2.4. Study Selection

The inclusion and exclusion criteria were established to guide the selection of studies for this review. The records retrieved from the search conducted in the databases were transferred to Mendeley software, where duplicates were removed. Titles and abstracts were then screened for full-text papers. This screening was conducted by 15 trained graduate students and teaching assistants and supervised by the authors. Full-text records of eligible abstracts and titles were then retrieved for further screening independently by two authors based on the inclusion and exclusion criteria. Excluded records were provided with reasons. The eligibility criteria are presented in Table 2.

Table 2. Eligibility criteria.

| Inclusion Criteria | Exclusion Criteria |
|--|---|
| 1. Studies conducted among college students in African countries. | 2. Studies conducted among college students outside Africa. |
| 3. Studies focused on sexting, which includes the exchange of sexually explicit messages, images, or videos through digital communication platforms. | 4. Studies that did not report on variables of interest. |
| 5. Studies published in the English language. | 6. Studies published in a language other than English. |
| 7. Peer-reviewed and grey literature. | 8. Reviews, conference papers, abstracts, letters, editorials, preprints, and commentaries. |
| 9. Papers published online in the year 2000 and later. | |

2.5. Data Charting

A data charting form was developed and piloted to systematically extract relevant information from the selected studies. Data extracted included the study characteristics (e.g., author, year, study design, sample size, and data collection methods), sexting prevalence rates, identified correlates of sexting, and any other key findings. Data charting was handled independently by two groups, with each group having three independent researchers. This was done to ensure that accurate and reliable data were extracted from the included studies. Discrepancies and disagreements among the groups were resolved during weekly meetings by authors.

2.6. Collating, Summarising, and Reporting the Results

In the process of collating, summarising, and reporting the results, the gathered data underwent a comprehensive synthesis to illuminate the prevalence of sexting within the context of African college students, along with its associated factors. Employing a qualitative approach, this scoping review ventured into a nuanced examination of the collected information. The technique of thematic analysis (i.e., thematic grouping), as recommended by Arksey and O'Malley, was adeptly utilised, strategically pinpointing common threads and correlations related to sexting evident across the various studies scrutinised. This meticulous analysis paved the way for a narrative synthesis, allowing for a deeper exploration and articulation of the discoveries and patterns embedded within the body of literature. Through this process, a robust and comprehensive overview emerged, shedding light on the prevalence and intricate dynamics surrounding sexting behaviours among African college students.

2.7. Consultations

A chartered librarian at the Sam Jonah Library, Kwame Kodua-Ntim, was consulted during the search and screening for relevant papers. A review was performed, and subject experts were also consulted to ensure that the topic under review was thorough and the scoping review approach was strictly adhered to in order to enhance the replicability and robustness.

3. Search Results

The initial search across the main databases yielded 679 records, complemented by an additional 13 from alternative databases, resulting in a cumulative total of 692 records. Subsequently, the elimination of 111 duplicate records using Mendeley software was performed. After an extensive screening of titles and abstracts, 555 records were excluded, leaving 26 full-text records for further scrutiny. Concurrently, the reference lists of these identified full-text records were reviewed, contributing 4 additional eligible records. Altogether, 30 full-text articles were assessed for inclusion. Ultimately, 11 records met the

criteria for inclusion in this scoping review, with detailed reasons provided for the excluded (19) records. See details presented in Figure 1.

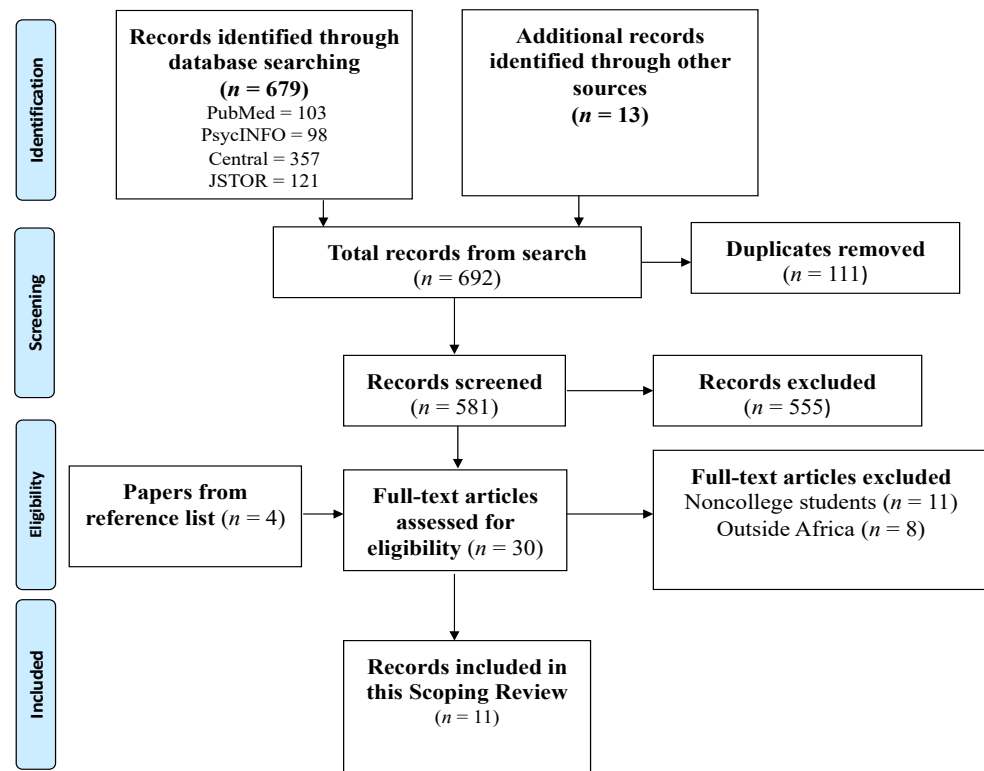


Figure 1. Prisma flow chart showing search results and screening processes.

3.1. Study Characteristics

The majority (5) of the included studies were conducted in Nigeria, followed by Kenya (4), Botswana (1), and Egypt (1). See details in Figure 2. The majority (9) of these studies were cross-sectional surveys, with the rest being qualitative studies (2). See Table S1 (Supplementary Materials) for details.

3.2. Findings

The findings of this review are grouped under the following four main headings: type of sexting, prevalence, predictors of sexting, and outcomes of sexting.

3.2.1. Type of Sexting

This review shows that various types of sexting engaged by young people include sending nude pictures of themselves to their partners [19–21,23,24]. Also, sharing sexually suggestive images or photos was another form of sexting used by young people [24,25]. Usually, young people used words in the form of text through which sexually charged or explicit messages were sent to their partners [26–31]. A previous scoping review has found sexually explicit messages to be common among teens in sexual relationships [27]. Through these text messages, they communicated their feelings of sexual stimulation and intention to their partners [26]. Another form of sexting found in this review was the recording and sharing of explicit videos [26,31]. Others also posted these sexually explicit videos and photos on their social media pages for viewing by their contacts [29]. Thus, viewing or reading explicit materials using their phones was another way by which young people engaged in sexting [31].

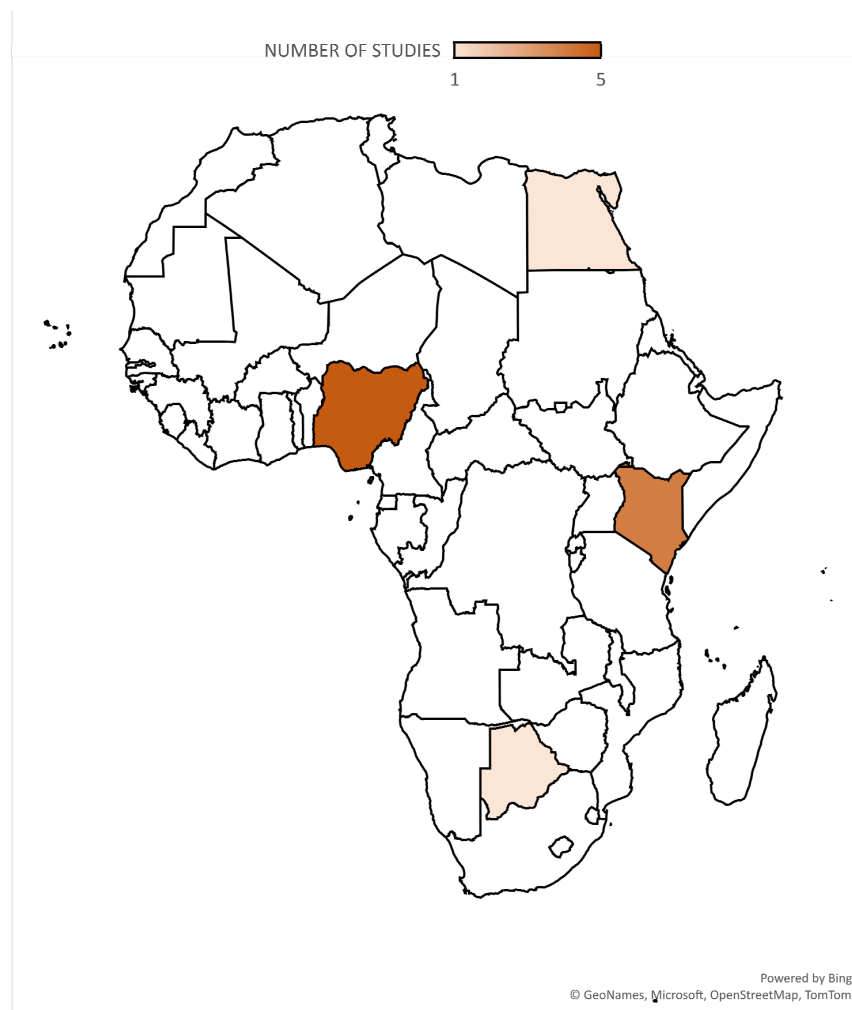


Figure 2. Map showing where the included studies were conducted.

It was evident that not all of these sexts were voluntarily shared, as the review showed that some young people felt pressured to have sex or engage in sexual activities online [20]. Similarly, these individuals shared intimate information without the permission or request of the recipient [20]. Also, others were recipients of these sext messages with very strong sexual language and words [19,20,25,28,31].

3.2.2. Prevalence of Sexting

Six studies reported on the prevalence of sexting among young people. Data on the prevalence of sexting is categorised under the following three headings: general sexting, which represents those who both received and sent sext messages; prevalence among recipients; and prevalence among initiators.

3.2.3. Prevalence of General Sexting

The prevalence rates among college students who received and sent sext messages ranged from 9.9% [23] to 61.2% in Namibia [25]. Apart from one study [23], which reported a prevalence rate of 15.3% among the study population in Uganda, all other studies found the prevalence rate of general sexting to be greater than 20 percent, with two studies reporting prevalence rates of 21.6% [20] and 24.7% [31]. While the remaining three studies recorded 37.9% in Nigeria [32], 33.4% in Ethiopia [33], and 48% in Kenya [24].

3.2.4. Prevalence Among Initiators of Sexting

The prevalence rate for initiators of sexting ranged from 0.6% to 77%. Evidence from the review indicate that the type of sext informed the prevalence rates among youth initiating and sending the sext. For instance, a study found a low prevalence rate of 0.6% among college students sending sext messages [25]. On the contrary, other studies recorded higher prevalence rates of 17.5% [20] and 57% [24]. Also, a prevalence rate of 36.5% was recorded among those who sent nude photographs [19] to their partners. On the other hand, the prevalence rates among those who had posted a message with sexual content and those who had posted photographs considered to be sexually explicit on their social media account were 84.3% [29] and 77%, respectively [29].

3.2.5. Prevalence Among Recipients of Sext

Fewer studies reported on the prevalence rate of sexting among those who were only receivers of sext. The prevalence rate of young people who received sext messages ranged from 23.6% [25] to 57.4% [24]. A relatively lower prevalence rate of 5.4% was recorded among those who received both sext messages and nude photographs [23].

3.3. Predictors of Sexting

3.3.1. Socio-Demographic Characteristics

This review found that age is a predictor of sexting behaviour. College students aged <18 years and those between ages 18 and 24 years were more likely to send or receive sext messages [19,24,31,33,34]. Also, ethnicity was found to predict sexting behaviours [19,33]. Other included studies found that being male influenced the likelihood of sending or receiving a sext [24,31,33,34]. Relationship status was also found to be a predictor of sexting and included being married, cohabiting, or engaged [24]. For instance, a study found that being in a casual relationship influenced an individual's sexting behaviour [31]. Also, a low monthly stipend or allowance was a predictor of sexting [19]. As a result, those who dated for economic gain were more likely to send a sext [26]. Another factor believed to predict sexting behaviour was schooling in a public institution [33]. Also, being in the second [35] and final years of study [35] were predictors of sexting decisions. Furthermore, college students with mothers who had a tertiary-level of education were more likely to sext [25].

3.3.2. Online Behaviour and Personality Traits

Possession and usage of a smart phone is a predictor of sexting among college students [19,31,35]. Access to social media also influenced college students' willingness to sext [35]. For example, frequent online activities (visits to social media sites or handles) provide college students with opportunities to search and flirt with romantic partners, which increase the likelihood of sending and receiving sext [35]. Also, ever having received a sext was a predictor of also sending a sext [25]. The personality characteristics of college students predict their likelihood of sexting. For instance, a study reported that college students with low self-esteem were also likely to sext [36].

3.3.3. Sexuality and Substance Use

Evidence from this review suggests that college students' sexual activity is a predictor of sexting [25]. Also, being a virgin was found to promote the practice of sexting [35]. In relation to sexual orientation, identifying as LGBTQ+ was found to influence one's willingness to sext [34]. Alcohol and drug use was also reported to promote the practice of sexting [25].

3.4. Outcomes of Sexting

The outcomes of sexting are grouped into positive and negative.

3.4.1. Positive Outcomes of Sexting

Two studies indicated that sexting among young adults is associated with certain positive outcomes. Firstly, there is evidence suggesting that sexting may lead to increased

condom negotiation skills [23]. This positive impact on sexual communication can contribute to safer sexual practices. Additionally, the research found positive attitudes toward unprotected sexual practices among individuals engaged in sexting [35].

3.4.2. Negative Outcomes of Sexting

The negative consequences of sexting are well-documented in the literature. Early sexual intercourse has been identified as an adverse outcome [24]. This implies a potential link between engaging in sexting and an increased likelihood of early sexual debut. Risky sexual behaviour, including high sexual risk-taking behaviour and an increase in sexual partners, has been consistently associated with sexting [19,21,33]. Moreover, the negative impact extends to online hostility, including cyberbullying [21] and online sexual victimisation [37]. Social consequences such as social shaming and damage to reputation have also been reported [21,38]. Sexting is further linked to various psychological issues, including anxiety, depression, and emotional problems [39]. The forwarding of sexts was identified as a specific concern among college students [25]. The thematic analysis is presented in Table 3.

Table 3. Thematic analysis.

| Main Theme | Indicator | Author |
|--|--|------------------|
| Type of sexting | Sending nude pictures | [19,20,26,37] |
| | Sending of sexually suggestive image/photo | [24,25,37] |
| | Received a sext/text messages with very strong sexual language and words | [19,25,26,31] |
| | Received naked photographs | [26] |
| | Sexually charged/explicit text messages | [21,23,26,29,30] |
| | Communicating feelings of sexual stimulation and intention | [21] |
| | Recorded explicit images and videos | [21,31,37] |
| | Pressured to have sex or engage in sexual activities online | [20] |
| | Shared intimate information without permission | [20] |
| | Posted a picture or video on their social media pages | [29] |
| Prevalence | Saw or read sexually explicit materials using their phone | [31] |
| | General prevalence—9.9% | [23] |
| | General sexting—15.3% | [23] |
| | General prevalence—21.6% | [20] |
| | General prevalence—24.7% | [31] |
| | General prevalence—33.37% | [33] |
| | General prevalence—37.9% | [32] |
| | General prevalence—48% | [24] |
| | General prevalence—61.2% | [25] |
| | Received nudes and sext—5.4% | [23] |
| | Receivers only—23.6% | [25] |
| | Received sext—47.0% | [19] |
| | Received a sext—57.4% | [24] |
| | Sent sext—0.6% | [25] |
| | Sent sext—17.5% | [20] |
| Sent nudes—36.5% | [19] | |
| Sent sext—57% | [24] | |
| Posted a picture considered to be sexual on their social media account—77% | [29] | |
| Posted a message with sexual content—84.33% | [29] | |

Table 3. Cont.

| Main Theme | Indicator | Author |
|---|--|--------------------------|
| Predictors of sexting | Being male | [24,31,33,34,37] |
| | Age above 18 years | [19,24,31,33] |
| | Age (puberty) younger than 18 | [34] |
| | Level of study—2nd year | [24] |
| | Senior year students—SS3 | [35] |
| | Married, cohabiting, and engaged | [24] |
| | Being in a serious relationship | [31] |
| | Being in a casual relationship | [31] |
| | Ethnicity—Urhobo | [19,33] |
| | Low monthly allowance | [19] |
| | Use of smart phones/owning a mobile phone | [19,31,35] |
| | Access to social media | [35] |
| | Searching online for romantic partners | [35] |
| | Flirting with romantic partners online | [35] |
| | Having an online blog | [35] |
| | Sexual orientation—LGBT | [34] |
| | Sexual activity | [25] |
| | Low self-esteem | [36] |
| | Having mothers educated at a tertiary level | [25] |
| | Had ever received sexts/perceived sexting experience | [25] |
| | Alcohol use and higher frequency of sexting | [25] |
| | Drug use | [25] |
| | Dating a “sponsor” or “cougar” for economic gain | [26] |
| | Attending government school | [33] |
| | Not a virgin | [35] |
| | Outcomes of sexting | Early sexual intercourse |
| Risky sexual behaviour | | [19,21,33] |
| High-risk-taking sexual behaviour | | [33] |
| Increase in sexual partners | | [25] |
| Cyberbullying | | [21] |
| Online sexual victimisation | | [37] |
| Social shaming/damage of reputation | | [21,38] |
| Psychological disturbance of youth | | [39] |
| Anxiety | | [25,39] |
| Depression | | [39] |
| Emotional control | | [39] |
| Worrying about their sexts being forwarded | | [25] |
| Condom negotiation | | [23] |
| Positive attitude toward unprotected sexual practices | | [35] |

4. Discussion

This scoping review mapped evidence on sexting among African college students. The evidence suggests diverse patterns encompassing image, text-based exchanges, videos, and social media postings. Studies suggested varying rates of sexting across initiator, and recipient categories, ranging from 9.9% to 61.2%. Predictors of sexting included age, being male and in an intimate relationship, poverty, online presence, sexual behaviours,

personality traits, and substance use as influential factors. Positive outcomes included improved sexual communication skills, while negative consequences comprised early sexual activities, risky behaviour, cyberbullying, and psychological distress. This review found both positive and adverse outcomes.

4.1. Type of Sexting

The diverse array of sexting practices identified in this review illuminates the intricate ways college students in Africa engage in digital sexual communication. These behaviours, ranging from sending explicit messages to sharing intimate visuals, underscore the complexities of sexual expression in the digital era [19,29]. Understanding these practices is crucial, as they reflect evolving societal norms and the fusion of technology with intimate communication. The review revealed that not all instances of sexting were consensual. Some young individuals felt coerced or pressured into engaging in sexual activities online, while others shared intimate information without the recipient's consent [20]. This non-consensual sharing resulted in instances in which recipients received unsolicited explicit messages, including strong sexual language and naked photographs [19,22,25,31].

These findings underscore the complexities surrounding sexting behaviours among young individuals. While consensual sexting might serve as a means of intimate communication, nonconsensual sharing, or feeling coerced into such activities raises concerns about privacy, emotional well-being, and individual autonomy. The instances in which individuals shared intimate information without consent or felt pressured highlight vulnerabilities in online interactions, emphasising the need for digital literacy and education. Additionally, the unsolicited explicit messages and naked photographs signifies potential risks associated with online communication, emphasising the importance of fostering a safe and respectful online environment. This calls for comprehensive educational programmes emphasising consent, digital etiquette, and respectful communication to mitigate the risks linked with nonconsensual sexting practices among young individuals.

4.2. Prevalence of Sexting

The prevalence rates of sexting reported in the studies portray a complex landscape of digital sexual behaviour among young individuals, reflecting the intricate nature of their interactions in contemporary digital spaces. This spectrum of prevalence rates across different forms of sexting, be it as senders, recipients, or both, reflects the multifaceted dynamics underlying these digital exchanges [24]. For instance, the wide variance in the prevalence of general sexting, where individuals both sent and received sext messages, hints at varying cultural attitudes toward digital intimacy, access to technology, and differing interpretations of what constitutes sexting within different contexts [22,23]. The disparity in prevalence rates among initiators, based on the type of sexting involved, suggests diverse inclinations in how young people choose to express themselves sexually in digital spheres [24,25]. Lower rates of certain sexting behaviours, juxtaposed against significantly higher rates in other forms, might signify varying comfort levels, motivations, or perceived risks associated with different modes of digital sexual communication [29].

Moreover, the prevalence rates among different categories of sexting, such as sending explicit messages or sharing nude photographs, illuminate varying preferences, motivations, and contextual factors driving these behaviours among young individuals [19,33]. The disparity in prevalence rates among those engaging in sexting on social media platforms might highlight the role of digital environments and online personas in shaping and influencing sexual expression among young people [29]. These findings underscore the need for a nuanced understanding of sexting behaviours, considering cultural nuances, technological influences, and individual motivations to develop tailored interventions and comprehensive digital literacy programmes [20,31]. Such insights are vital for effectively addressing the risks and challenges associated with sexting while fostering healthier digital interactions among young individuals.

4.3. Predictors of Sexting

The predictors of sexting behaviour among young individuals, as highlighted in this review, reveal a complex interplay between various socio-demographic, online engagement, sexual activity, and personality characteristics. Younger age (<18 years), for instance, emerges as a significant factor, likely due to developmental stages and the exploration of sexual identities during adolescence and young adulthood. This phase of curiosity and self-discovery might lead individuals who have recently reached puberty or are in the 18–24 age bracket to be more inclined toward sexting, seeking to express and explore their evolving sexual identities [19,24].

Moreover, socio-cultural aspects, like gender norms, appear to influence sexting behaviours, with males showing a higher propensity for engaging in sexting. This might reflect societal attitudes toward masculinity and sexuality that encourage or permit more explicit forms of communication by males compared to females [24,34]. Additionally, relationship status and financial factors contribute significantly; being in a serious relationship or facing financial constraints seems to drive individuals toward sexting, potentially influenced by the need for intimacy, emotional connection, or economic support [19].

The role of online presence and activity stands out, with smartphone ownership, social media access, and engaging in online interactions fostering a greater likelihood of sexting. This is indicative of the digital landscape's influence on intimate communication and relationships. Online spaces allow for easy access to potential partners and platforms for sexual expression, contributing to the normalisation and ease of engaging in sexting behaviours [31,35]. Furthermore, past sexting experiences, sexual activities, and specific sexual identities play roles in predicting sexting behaviours, reflecting diverse sexual experiences and identities and their influence on digital communication practices [25,34]. The association between having multiple partners and engaging in more sexting might be due to individuals seeking to maintain intimacy and excitement with different partners. Conversely, virgins might engage in sexting as a safe way to explore and express their sexuality without physical interaction. Both groups may use sexting as a means to fulfil their sexual needs and curiosities in ways that align with their respective experiences and comfort levels.

These findings collectively highlight the nuanced dynamics surrounding sexting behaviours among young individuals, influenced by developmental, social, and digital factors. The implications point toward the necessity of comprehensive sexual education, digital literacy programmes, and mental health support tailored to address the complexities and risks associated with sexting behaviours. Educating youth about consent, respectful communication, and healthy relationships within the digital sphere becomes pivotal in mitigating potential negative consequences while fostering a safe and informed online environment. Additionally, recognising and acknowledging the diverse socio-cultural contexts and individual experiences that shape sexting behaviours is crucial in designing effective intervention strategies and support systems.

4.4. Sexting Outcomes

The outcomes of sexting among young adults reveal a dichotomy of positive and negative consequences that intertwine with complex socio-behavioural dynamics. Positive outcomes, albeit fewer in comparison, indicate certain beneficial aspects associated with sexting behaviour. Studies suggest an association between sexting and increased condom negotiation skills [23]. This could be attributed to enhanced sexual communication among partners, potentially leading to safer sexual practices. However, another study by [35] indicated a positive attitude toward unprotected sexual practices among sexting individuals, underscoring the intricate and sometimes contradictory attitudes toward sexual behaviour within the context of sexting.

Conversely, the negative outcomes associated with sexting are notably substantial and multifaceted. One concerning aspect is the link between sexting and early sexual intercourse [24], indicating a potential correlation between sexting engagement and the

onset of sexual activities at a younger age. This early sexual debut might result from increased exposure to sexual content or pressure to engage in sexual behaviour after sexting interactions. Furthermore, risky sexual behaviours such as high-risk-taking sexual and increased sexual partners have been consistently associated with sexting in various studies [19,26,33], potentially indicating a connection between sexting and a more liberal attitude toward sexual encounters.

The negative impact extends beyond physical implications and into the digital realm. Instances of cyberbullying and online sexual victimisation [26,37] highlight the vulnerability of individuals engaging in sexting, subjecting them to online harassment and exploitation. Moreover, the repercussions branch into social and psychological domains, encompassing social shaming, reputational damage [26,38] and various psychological disturbances such as anxiety, depression, and emotional control issues [39]. The fear of sexts being forwarded, as highlighted in [25], exacerbates the psychological distress associated with sexting, manifesting in heightened anxiety about privacy breaches and social consequences.

These outcomes underscore the intricate nature of sexting behaviours among young adults, where positive aspects like improved communication coexist with concerning implications that extend across sexual, digital, social, and psychological spheres. The findings highlight the need for comprehensive sexual education that not only emphasises safe sexual practices but also addresses the broader implications of digital interactions. It emphasises the necessity of interventions focusing on digital literacy, mental health support, and the development of coping mechanisms to mitigate the negative outcomes associated with sexting. Additionally, promoting a culture of consent, respectful communication, and responsible digital citizenship remains crucial in navigating the complexities surrounding sexting behaviours.

4.5. Limitations

Despite employing a structured methodology, this scoping review harbours certain limitations. Its focus on English-language publications might have excluded valuable insights from non-English literature, introducing a language bias. Additionally, the inclusion of multiple reviewers, albeit supervised, could introduce subjectivity in study selection and data extraction. The review's broad temporal scope and lack of critical appraisal might affect data consistency and reliability. Furthermore, the heterogeneity of African contexts and populations might limit the findings' generalisability.

4.6. Implications for Practice, Policy and Research

4.6.1. Implications for Policy and Practice

To effectively address the complex landscape of sexting among African college students, a strategy that harmonises education, policy, and community engagement is indispensable. Robust sexual education initiatives should be culturally sensitive, focusing on digital ethics, consent, and responsible online conduct. Additionally, comprehensive digital literacy programmes need to cultivate critical thinking abilities, emphasising privacy safeguards and ethical online citizenship. Integrating mental health support within educational systems is vital, offering resources to students grappling with anxiety, depression, or cyberbullying stemming from sexting experiences. Policy frameworks should prioritise cyberbullying prevention, privacy preservation, and ethical technology utilisation, extending across educational institutions and societal frameworks. Collaborative alliances among educators, policymakers, mental health experts, and technology stakeholders are pivotal in crafting comprehensive interventions. Tailoring these interventions to respect diverse cultural norms is crucial, acknowledging the nuanced perspectives on digital communication and relationships across varied societal contexts.

Practical recommendations include implementing comprehensive sexual education that incorporates modules on digital behaviour, consent, and the implications of sexting into the curriculum. Enhancing digital literacy through workshops that teach students how to protect their privacy and engage ethically online is also essential. Establishing

accessible counselling services focused on issues related to sexting and its psychological impacts is necessary for providing adequate mental health support. Furthermore, policy development should create clear guidelines within educational institutions to address sexting, emphasising support rather than punishment. Community involvement is crucial, engaging parents, local leaders, and community organisations in discussions about sexting and digital safety. Encouraging the development and use of apps and platforms that promote safe digital interactions can provide technological solutions to these challenges.

4.6.2. Implications for Research

Continuous research and feedback are important for gathering data on the effectiveness of these initiatives and adapting them to the changing digital landscape. It is important to address the openness or restrictions, as well as the social views on discussing sex, sexuality, or sexting discourses in African countries. Many African nations have legal consequences for the LGBTQ+ population, creating significant barriers to conducting research in these areas and impacting sexting culture. Social views in many regions are conservative, with strong cultural and religious taboos against openly discussing sexual topics. These factors result in limited research and a reluctance among scholars to engage in discourses on sexting. Acknowledging these issues helps provide readers with a clearer understanding of the social dynamics in African societies and explains the scarcity of related study samples, reflecting the broader context in which these topics are addressed.

4.6.3. Suggestions for Future Studies

Future reviews could address the limitations of this review by widening the search scope, incorporating non-English literature, and employing a more exhaustive range of databases and search terms to enhance comprehensiveness and mitigate potential biases. Future research on sexting among African college students should focus on cross-cultural studies, delving into diverse regions to understand the nuanced impacts of cultural variations in sexting behaviours. Longitudinal studies tracking sexting behaviours over time among this demographic could offer insights into the evolution of attitudes, behaviours, and associated outcomes. Additionally, exploring the intersectionality of sexting with mental health, consent education, and digital literacy programmes specific to African contexts is essential. To mitigate language bias, future studies should endeavour to include non-English literature, widening the scope of insights. Moreover, examining the influence of socio-economic factors, technological advancements, and societal perceptions on sexting practices in these regions could offer valuable perspectives for tailored interventions and policy frameworks.

5. Conclusions

This scoping review delved in depth into the intricate facets of sexting among African college students, revealing a nuanced interplay between digital communication, societal norms, and individual behaviours. Highlighting both positive and negative outcomes, the review underscores the necessity for tailored, culturally sensitive sexual education programmes, digital literacy initiatives, and mental health support. Policy frameworks should prioritise cyberbullying prevention, privacy protection, and ethical technology use, fostering collaboration among educators, policymakers, mental health professionals, and technology entities for holistic interventions adaptable to the evolving digital landscape. Acknowledging limitations such as language bias and the heterogeneity of contexts, future research should aim for the broader inclusion of literature to enhance comprehensiveness and applicability, providing a foundational understanding to guide further exploration and interventions concerning sexting among African college students.

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/sexes5030022/s1>, Table S1: Extracted data from reviewed studies.

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Abbreviations

USA, United State of America.

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