Chapter 4: Relationship between online digital exposure and early unintended pregnancies among adolescents in Zimbabwe

Dr Shupikai Zebron,
Zimbabwe Open University,
Zimbabwe
https://orcid.org/0009-006-2993-3439
shupizebron@gmail.com

Dr Prudence Mavhemwa,
Zimbabwe Open University,
Zimbabwe
https://orcid.org/0000-0002-8140-7114
pmavhemwa@gmail.com

Abstract

This chapter looked at how online digital exposure could be linked to early pregnancies amongst adolescents in Zimbabwe. It examined the impacts of greater access to digital technologies and social media and increased online interaction on adolescent sexuality and being at risk of unintended pregnancy. Although a number of studies focused on adolescent pregnancy and digital technology respectively, there was a dearth of studies focusing on adolescent pregnancy and digital technology intersection, and in the Zimbabwean context, hence the need to fill this gap in a qualitative study. A phenomenological qualitative design was used. The subjects of the study were six adolescents ranged from 13 to 19 years old contact by purposive sampling who had unwanted pregnancy. Semi-structured interviews and focus group discussions were used to collect data. Principles of informed consent, confidentiality, anonymity and voluntary participation were respected. Results indicated that consuming pornographic websites and peer pressure online contributed to higher risk levels of sexual behaviours. Parental supervision and low level of Digital literacy contributed to vulnerability of children to Digital influences that are correlated with unwanted pregnancies. The study suggested that there should be a comprehensive education of digital literacy and greater effort to increase the involvement of parents in promoting safer use of the Web in order to ensure lower adolescent pregnancy rates.

Keywords: Adolescents; Digital Exposure; Online Behaviour; Unintended Child Pregnancies; Zimbabwe.

1. Introduction and Background

1. Adolescent sexual and reproductive health continues to be a major public health challenge in Sub-Saharan Africa (SSA), with adolescent pregnancy frequently leading adolescents to drop out of school, face health problems and facilitating the conversion of an existing cycle of socially-economic vulnerability. Zimbra's fast-paced growth of mobile telecommunications infrastructure and the ready availability of internet in the country's last 10 years has revolutionised the Zimbabwean youth's social networks. Mobile platforms (mainly WhatsApp, TikTok, Facebook, and Instagram) have turned into key spaces for communication, identity

construction, and peer interaction within the world of today's adolescents. Odgers and Jensen (2020) state that digital access has led to unprecedented opportunities to learn and engage with others, but has also led to exposure of unsupervised digital spaces for young people. The same applies in rural, peri-urban and urban Zimbabwean communities as the adolescent population are increasingly using digital spaces while they remain to be undigitally literate and less protected by family mediation (Odgers & Jensen, 2020). There is emerging empirical evidence that show that unregulated exposure to digital content online including watching pornography, peer pressure from online encrypted communications, online grooming and other forms of exposure have an association with shifts in sexual attitudes and behaviours amongst adolescents (Odudu, 2024; Hushin, 2025). The usage of digital technologies and adolescent pregnancy have largely been explored as distinct fields of study in the literature of Zimbabwe despite the growing concern by educators, parents and child protection enthusiasts. It is apparent that current public health literature is mainly centered on socio-cultural and economic determinants of early pregnancy (e.g., poverty, child marriage and access to contraceptive services) and ICT studies focus on digital inclusion, e-learning and/or infrastructure development (Muyonga et al., 2024, Machoka et al., 2024, Lesinskienė et al., 2025). This chapter attempts to fill this empirical void by focusing on the lived experiences of online digital exposure in relation to the sexual decision-making of adolescents in Zimbabwe that leads to early unintended pregnancies among girls. The following questions were used to guide the research:

2. What forms of online digital exposure are most prevalent among Zimbabwean adolescents, and how do they influence sexual knowledge, attitudes, behaviours, and decision-making?
3. How do socio-cultural, economic, and technological factors shape the relationship between online digital exposure and early unintended pregnancies among adolescents in Zimbabwe?
4. What protective interventions, including digital literacy and technology-based sexual health education, can reduce the risk of early unintended pregnancies among Zimbabwean adolescents?

2. Theoretical Framework

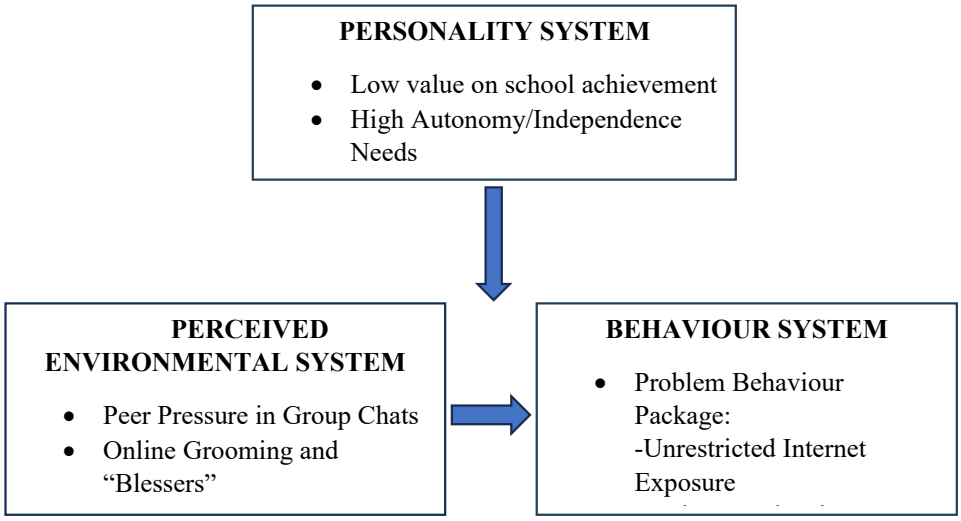
2.1 Introduction

To capture both the active psychological motivations driving adolescent media engagement and the socio-behavioural risk structures shaping their sexual decision-making, this study grounds its phenomenological analysis in two complementary frameworks; the Problem Behaviour Theory (PBT) and Uses and Gratifications Theory (UGT).

2.2 Problem Behaviour Theory (PBT)

Formulated by Richard and Shirley Jessor (1987), Problem Behaviour Theory (PBT) is a social-psychological framework designed to explain how adolescent engagement in behaviours that depart from conventional societal and legal norms such as early sexual initiation, substance abuse, and delinquency emerges from dynamic balances of risk and protective factors (Darvishi et al., 2022). PBT conceptualises adolescent risk-taking through three interrelated psychosocial systems shown in Figure 1:

Figure 1: Three interrelated psychosocial systems



(*Ideas drawn from* Jessor 1987, Wohab, 2015)

2.2.1 The Personality System

This system encompasses the internal cognitive, affective, and value structures of the adolescent. In the context of digital media engagement, risk factors within the personality system include a high value placed on independence/autonomy from parental authority, low valuation of academic achievement, low self-esteem, and low perceived intolerance for deviance (Jessor, 1987, Wohab, 2015). Adolescents seeking external validation or asserting autonomy are more inclined to experiment with online relationships or conform to hyper-sexualised trends.

2.2.2 The Perceived Environment System

This system focuses on social controls, environmental role models, and perceived support or disapproval from immediate social networks (Fajobi et al., 2026). Key environmental risk factors include exposure to peer groups advocating early sexual experience, low parental disapproval or active unawareness of online activities, and exposure to older adult solicitations online (*"blesser"* culture). Protective environmental mechanisms, such as strict parental digital monitoring and strong school bonding, act as barriers against risky online exposure.

2.2.3 The Behaviour System

PBT posits that problem behaviours do not occur in isolation; rather, they form a "problem behaviour syndrome" or package (Jessor, 1987, Wohab, 2015). Within this system, risky digital habits (e.g., participating in adult chat rooms, exchanging explicit imagery, unmonitored late-night internet access) co-occur with real-world risky behaviors (e.g., skipping school, alcohol or substance experimentation, and unprotected intercourse).

2.2.4 The Concept of Proneness

The cumulative interplay across these three systems determines an adolescent's overall proneness toward early unintended pregnancy. When rebellious personal values align with high peer pressure in

encrypted channels and an absence of parental digital supervision, the adolescent exhibits high proneness toward sexual risk-taking (Widman, 2016).

2.3 Uses and Gratifications Theory (UGT)

Complementing the socio-behavioural risk orientation of PBT, Blumler and Katz's (1974) Uses and Gratifications Theory (UGT) provides an audience-centered communication perspective that explains *why* and *how* adolescents actively seek out specific digital platforms. Rather than viewing adolescents as passive recipients of digital influences, UGT asserts that young people are goal-oriented media consumers who select specific platforms to satisfy psychosocial needs (Sichach, 2023). Table 1 shows the Uses and Gratifications taxonomy.

Table 1: Uses and Gratifications taxonomy

USES AND GRATIFICATIONS TAXONOMY	
1. Information and Surveillance	Seeking Information on SRHR and body changes
2. Entertainment and Diversion	Escaping routine, viewing viral trends
3. Personal Identity	Model search, reinforcing self-worth
4. Social Integration	Connecting in group chats, peer-belonging

2.3.1 Core Assumptions of UGT

UGT operates under four central assumptions within digital adolescent research:

1. Active Audience: Adolescents intentionally choose media platforms based on specific personal goals.
2. Initiative in Need Satisfaction: The audience member takes the primary initiative in connecting media choices with gratification goals.
3. Competitive Media Landscape: Social media platforms compete with traditional offline activities (e.g., sports, family discussions, schoolwork) for time and attention.
4. Self-Awareness: Adolescents possess sufficient self-awareness to report their motivations for using specific applications like WhatsApp or TikTok.

2.3.2 Gratification Typology in Adolescent Digital Environments

Literature (Martin et al., 2024, Principi et al., 2019, Rahmani et al., 2022) shows that adolescent engagement with digital media is driven by four primary categories of psychosocial needs:

- **Information and Surveillance:** Due to cultural taboos surrounding sex education in Zimbabwean households, adolescents actively use internet search engines and social platforms to anonymously acquire knowledge about body changes, romantic relationships, and sexual health.
- **Entertainment and Diversion:** Platforms such as TikTok and Instagram are used as mechanisms to escape emotional distress, boredom, or difficult socio-economic conditions at home.
- **Personal Identity:** Adolescents utilise digital channels to experiment with self-expression, seek social validation through likes and comments, and identify adult or peer role models.
- **Social Interaction and Integration:** Encrypted messaging apps like WhatsApp fulfill the deep developmental need for peer belonging, group acceptance, and social connectivity.

2.3.3 Theoretical Synthesis and Applied Relevance

While UGT explains the initial active motives that draw Zimbabwean adolescents into unmonitored digital spaces, PBT explains how the resulting digital encounters (such as exposure to sexually explicit content, peer pressure in WhatsApp groups, and cyber-grooming) shift the balance between risk and protective factors. Together, these theories provide a robust conceptual bridge between active digital platform consumption and real-world behavioural pathways that lead to early unintended adolescent pregnancies. Table 2 below illustrates the integrated theoretical model:

Table 2: The Integrated Theoretical Model

Integrated Theoretical Model	
Uses and Gratifications Theory (UGT)	Problem Behaviour Theory (PBT)
(Media Choices and Motivations) • Active Audience (Information Needs) • Identity Formation and Diversion • Social Interaction and Peer Connection	• Personality System (Values and Autonomy) • Perceived Environment (Peer Pressure) • Behaviour system (Clustered Risks)
Adolescent Decision-Making	
Unrestricted Digital Exposure ⟶ Online Grooming and Risky Behaviour ⟶ Pregnancy	

(Drawn from Jessor, 1987, Katz et al., 1973)

2.4 Literature review

2.4.1 Introduction

Adolescents have greater access to digital technology in Zimbabwe with the increased use of smartphones, the internet and social media platforms such as WhatsApp, TikTok and YouTube. Though these platforms have their educational and social values, there are issues to be addressed relating to their influence on adolescents' attitudes and behaviors, particularly their sexuality and reproductive health. Adolescents are curious, influenced by peers, and come from a culture that sees the Internet as a great source of information, particularly relating to relationships and sexuality. Sexually explicit material and online peer pressure can lead to risk-taking sexual behaviour. Unintended pregnancy is a high public health problem in Zimbabwe affecting education, health and future opportunities to many, and especially for the young. Although poverty and lack of reproductive health information have been investigated, the impact of digital exposure has lesser focus. This literature review thus explores the link between online digital engagement and early adolescent unintended pregnancies, exploring digital engagement, sexual behaviours, media's influence and evidence.

2.4.2 Online Digital Exposure and Adolescent Behaviour

Behaviors with digital technologies are ubiquitous in the daily life of adolescents, according to Masri-Zada et al., (2025), an increase in adolescents' access to information and interaction is resulting from the use of smartphones, social media platforms (Facebook, WhatsApp, Instagram, TikTok), and internet-enabled devices. Analysis of some studies shows that adolescents devote a lot of their time to the Internet to communicate, learn and get entertainment (Muyonga et al., 2024, Machoka et al., 2024, Lesinskienė et al., 2025). In Zimbabwe, the rising trend of internet accessibility and the widespread use

of smartphones have led to adolescents viewing a number of content on the internet that can shape their attitudes, values and behaviour (Martin, et al., 2024). The authors' research also highlights that adolescents are especially vulnerable to online influences because of their developmental age when they are forming their identity, curious and keen on conforming to peers. In this regard, Principi et al., (2019), argue that too much online use is correlated with risky behaviors, loss of parental supervision and exposure to messages which reinforce ideas that early sexual experiences make for normality.

2.4.3 Adolescent Sexual Behaviour and Early Unintended Pregnancies

Available literature on adolescent pregnancy in Zimbabwe posits that some of the key drivers of the subject include early sex initiation, lack of knowledge on sexual and reproductive health, poverty, peer pressure and poor access to sexual and reproductive health services (Martin, et al.,2024). Though national efforts have been made to improve education about the reproductive health, adolescent pregnancy is still a major concern for public health and developmental needs. Research has found that inconsistent use of contraception, misconceptions on fertility, coercive relationships and the lack of communication with parents and/or guardians regarding sexual health have all been related to unintended pregnancies (Moloi & Malapela, 2024, Muyonga et al., 2024, Machoka et al., 2024, Lesinskienė et al., 2025). This leads to poor health and/or psychosocial issues, school dropouts, and economic restrictions for young mothers.

2.4.4 Influence of Digital Media on Adolescent Sexual Attitudes and Practices

The study indicated that digital media can shape the perception of adolescence regarding sexuality through the provision of sexually explicit materials, romanticism in relationships, and messages created by peers related to sexual behavior (Masri-Zada et al., 22025, Martin et al., 2024, Rahmani et al., 2022). Being exposed to this kind of content can result in lenient sexual attitudes, early sexual initiation, and greater risk of engaging in risky sexual behaviors. These social media sites additionally make it feasible to date and interact with individuals on-line and strangers, and also provide immediate communications, including sexually. However, literature also highlights the empowering effect of digital platforms when it comes to dissemination of sexual and reproductive health information, awareness of contraceptives and informed decision making (Principi et al., 2019, Rahmani et al., 2022).

2.5 Empirical Evidence on the Relationship Between Online Digital Exposure and Early Unintended Pregnancies

Martin, et al., (2024) and Odudu, (2024), conducted empirical studies in various regions, and both studies reveal a correlation between high adolescent digital engagement and escalating sexual risk. Studies have demonstrated that exposure to pornography at a young age increases likelihood of early sexual initiation, increased number of sexual partners, and inconsistent use of contraception amongst adolescents (Principi et al., 2019 and Rahmani et al., 2022). From an African perspective, it has been observed that exposure to sexualised media content has been linked to an increased risk of engaging in sexual behaviors that can increase the likelihood of pregnancy (Fajobi et al., 2026). While the direct links between digital exposure and unintended pregnancy in Zimbabwe are still under-researched, studies that are available indicate that online influences can foster risky sexual behaviours, which are known risk factors for adolescent pregnancy. (Martin, et al., 2024) Based on the literature, there is the need to be better understood about this relationship on the basis of the context.

2.5.1 Digital Proliferation and Youth Engagement in Sub-Saharan Africa

The use of digital technology has reshaped the way that young people in Sub-Saharan Africa gain access to information, participate civically, learn, and pursue economic opportunities (Toumaras, 2025). Though the penetration of mobiles has increased, there are gender differences (females lag behind males) as also in access among poor children and girls (due to education and poverty). Notwithstanding

the above, however, digital platforms are integral to civic engagement, as evidenced in the #FeesMustFall protests in South Africa, the #EndSARS protests of 2020 in Nigeria and Kenya's Gen Z protests in 2024 (Moore et al., 2026). They also facilitate education and health by delivering sexual and reproductive health services to youth and providing information and awareness, as well as entrepreneurship and job and skill promotion opportunities through online markets and learning (Masri-Zada et al., 2025). But obstacles remain, such as inadequate infrastructure and inadequate policies. New media platforms, such as TikTok, Instagram, and WhatsApp, also provide avenues for cultural expression and storytelling, connecting traditional practices with digital platforms.

2.5.2 The Zimbabwean Context: Structural Factors and Reproductive Health Gaps

Adolescent reproductive health outcomes in Zimbabwe are influenced by a range of structural barriers, such as poverty, poor health provision, gender inequality, unequal access to education, and digital technologies (Tome, 2024). There are cultural taboos and a lack of access to youth-friendly services, especially in rural areas, that can create barriers for many young people in accessing accurate sexual and reproductive health information. Economic hardship and lack of opportunities of employment further contributes to increased vulnerability to risky sexual behaviours, unintended pregnancies and early marriages. While digital technologies can provide adolescents with new opportunities to access reproductive health information and support, many are not connected to the internet, do not have access to digital devices and/or have limited digital literacy skills. All these structural issues underscore the need for interventions that are inclusive, accessible and contextually relevant, further enhancing reproductive health knowledge and uptake of services by Zimbabwean youth.

3. Methodology

A qualitative approach was used in this study to provide a detailed description of adolescents' experiences, perceptions and attitudes of using the online tools for obtaining information on sexual and reproductive health issues. Qualitative data was found to be a suitable approach for the study as it allowed for rich and detailed data and these data would help explore the perspectives of participants in their social and cultural context. The data collection methods were interviews and discussions that allow the respondents to freely express their data or their experiences/opinions regarding the problem.

3.1 Research Paradigm

This study adopts post-positivist paradigm (Kivunja & Kuyini, 2017): assumes that the reality may be objectively assessed based on systematic observations and empirical measurements. It is appropriate since there is an aim to investigate how online digital exposure relates to early unplanned pregnancies among Zimbabwean adolescents with measurable variables and statistical analysis. A post-positivist perspective allows researchers to test hypotheses, to find patterns and associations, make conclusions and rely on evidence; and to recognise that knowledge is always relative and can be socially and contextually shaped. This paradigm is appropriate, then, for drawing conclusions and conclusions about early unintended pregnancy in teens and what interventions, policy and practice might look like if they used the conclusions.

3.2 Research Design

This study used a phenomenological research design (Creswell & Poth, 2018) which is concerned with gaining insight into, and awareness of, what people in particular contexts have to say about a certain phenomenon. It was consistent with a search for understanding the ways adolescents' experiences, perceptions and meanings of digital technologies as sources of their reproductive

health information. This enabled the study to showcase the subjective reality of the participants and gain better understanding of opportunities and challenges of digital access in the Zimbabwean context.

3.3 Target Population

The target population of this study were the Zimbabwean adolescents aged 13 to 19 years using and/or having access to digital tools like mobile phones, social media platforms and internet platform as well as counsellors, teachers, parents and authorities from the Ministry of Primary and Secondary Education of Education (informants). The adolescents were targeted in this study as they represent a significant youth group that is turning to digital media for information, communication, education and sexual and reproductive health (SRH) needs. The study involved a diversity of social and education contexts to reflect a variety of experiences and viewpoints around the use of digital technologies for reproduction health information consumption. The population was deemed suitable as adolescents are known to be the most active users of digital platforms and are highly susceptible to reproductive health issues that could be addressed by the quality and inaccessibility of information online (Salifu & Abubakari, 2024).

3.4 Sample

The study sample consisted of 15 participants namely 6 adolescent participants, 2 counsellors, 4 teachers, 4 parents and one official from the Ministry of Primary and Secondary Education (MOPSE) from Primary and Secondary education. The adolescents were the primary informants while the counsellors, teachers, parents and MOPSE official were key informants because of their ad hoc knowledge and experiences on the phenomenon of early pregnancy. The nature of this composition also allowed the study to obtain a wider range of views and overall understanding of the issue which was investigated.

3.5 Sampling Strategy

Purposive sampling was used for this study to select participants who had knowledge and had directly experienced the technologies used for accessing information on reproductive health (Nyimbili & Nyimbili, 2024). The selection of the respondents for this study was done using non-probability sampling technique where respondents were considered as potential respondents who were apt to provide rich, relevant and detailed inputs in the study of the phenomenon. In total, 6 adolescents and 9 informants (including 2 counsellors, 2 teachers, 4 parents and 1 official from the organisation MOPE) from the urban and peri-urban study sites were included. The size of the sample was deemed sufficient for a phenomenological investigation as the problem was explored in the detail in which the experiences of the participants were thoughtfully revealed. The data collection process was continued until data saturation was reached, that is, no new theme emerged from the data and no new meaningful picture was produced from the last interview.

3.6 Data Collection Methods

The following dual qualitative data collection strategies (Taherdoost, 2021) were used to collect the data.For all participants, a Semi-Structured Interview Guide was used that was standardised and expert validated. A standardised semi-structured interview schedule was used to collect the data based on 5 major constructs of Problem Behaviour Theory (PBT) and Gratifications Theory (GT). All participants (N=15) responded to the same thematic questions (e.g., platforms used, whether parents knew about, how they could intervene and other consequences of pornography; explicit exposure; peer to peer interactions; and Sexual and Reproductive Health and Rights (SRHR)

knowledge); probing follow-on questions were deliberately used to learn more about every individual's digital journey. Below is the description of the instruments used in the data collection.Semi-Structured Individual Interviews: Conducted with all 15 participants to allow for deep, empathetic, and confidential exploration of personal experiences, online habits, relationship histories, and the sequence of events leading to unintended pregnancy.

Focus Group Discussions (FGDs): Two FGD sessions (6–8 participants per session) were conducted to explore broader group dynamics, shared digital cultures, social media trends, peer pressure mechanisms, and perceptions of parental monitoring.

3.7 Data Analysis Approach

Data was analysed using thematic Analysis, following Braun and Clarke's ((Braun & Clarke, 2022)) six-phase qualitative framework:

Audio Transcriptions ⟶ Initial Codes ⟶ Searching Themes ⟶ Reviewing Themes ⟶ Defining Themes ⟶ Final Narrative Report

1. **Familiarization with Data:** Transcribing recorded audio verbatim (translating Shona/Ndebele passages into English) and repeated reading of transcripts.
2. **Generating Initial Codes:** Assigning meaningful labels to raw data excerpts related to online behavior, peer pressure, explicit content, and sexual decision-making.
3. **Searching for Themes:** Grouping related codes into broader thematic categories representing shared lived experiences.
4. **Reviewing Themes:** Checking candidate themes against the full dataset to ensure internal homogeneity and external heterogeneity.
5. **Defining and Naming Themes:** Specifying the conceptual essence of each theme in relation to the phenomenological inquiry.
6. **Producing the Report:** Weaving together empirical excerpts with theoretical and literature interpretations.

3.8 Ethical Considerations

Given the vulnerability of minor participants and the sensitivity of teenage pregnancy, strict ethical standards were observed:

Informed Consent and Assent: Written parental/guardian consent was obtained for participants under 18 years, accompanied by written minor assent. Participant consent was obtained directly for emancipatory/older adolescents (18–19 years).

Anonymity and Confidentiality: All personal identifiers were removed; pseudonyms (e.g., Participant A, Participant B) were used in all notes and manuscript drafts.

Voluntary Participation: Participants were informed of their right to withdraw from the study at any point without penalty.

Psychosocial Support: Referral pathways to professional guidance counsellors and social workers were pre-arranged for participants demonstrating emotional distress during discussion of sensitive personal histories.

4.0 Results and Discussion

4.1 Demographic and Digital Profile Summaries

Table 1 shows the demographic and digital profile Summaries of selected learner participants.

Table 1: Demographic and Digital Profile Summary of Selected Learner Participants ($n = 6$)

ID	Age	Location	Education Status	Primary Platforms	Key Risk Vector
PL1	16	Peri-Urban (Harare)	Dropped out (Form 3)	WhatsApp, TikTok	Peer Pressure / Slay Culture
PL2	17	Urban (Highfield)	Completed O-Level	Instagram, Telegram	Explicit Content Exposure
PL3	15	Peri-Urban (Epworth)	Dropped out (Form 2)	WhatsApp (Borrowed Wi-Fi)	Low Parental Digital Literacy
PL4	18	Urban (Chitungwiza)	Out of School	TikTok, Dating Apps	Material Dependency / Escape
PL5	14	Peri-Urban (Norton)	Dropped out (Form 1)	Facebook, WhatsApp	Online Grooming ("Blesser")
PL6	19	Urban (Chinhoyi)	Completed O'Level	Facebook, WhatsApp	Online Grooming("Blesser")

PL – Learner Participant

4.2 Theme 1: Digital Exposure and Adolescent Sexual Socialization

With the ubiquity of smartphones and Internet connections, the use of the Internet has become an everyday part of the lives of the young adolescents. Adolescents tend to connect with friends, classmates, and, at times, strangers outside of their social circles through social media like WhatsApp, Facebook, TikTok, and Instagram. Whilst they offer a chance for communication, entertainment and disseminating information they can also expose young people to different influences and experiences. In addition, spending hours on screens and being allowed to use the internet on their own puts teens at greater risk of consuming even more content, and usually without parental or caregiver supervision. This has led to the seizure of technology changing the way that adolescents seek information, build social relationships and manage their identities, to a profound degree, both in good and bad ways.

PL2: Chipo (Information Seeking vs. Exposure to Explicit Content) said,

> *"At home, sex is never discussed; it's a taboo. My aunties never talked to me about it. So, when I started having feelings and questions about boys, I used Google and Telegram groups [CODE: Active SRHR Information Seeking]. But when you search for health topics online, pop-up ads and links send you to adult sites or explicit Telegram channels where people share pornographic videos [CODE: Unsolicited Explicit Exposure]."*

This narrative shows how parents' failure to communicate important developmental milestones information with their children expose them to explicit sexual content on the internet hence leading them to unwanted pregnancies. Chipo went on to say,

"It normalised things that weren't normal for someone my age [CODE: Desensitisation]. The videos made it look like everyone my age was having sex continuously without consequences. When my boyfriend asked us to try what we saw online, I thought it was normal romance. I didn't realise how easily one mistake could lead to pregnancy because no one online talks about the real, painful consequences [CODE: Unrealistic Media Norms]."

4.2 Theme 2: **Social Media Relationships, Exploitation, and Vulnerability**

This theme brought together what participants felt in relation to their own experiences of relationships, exploitation and vulnerability that they engage with on social media. Social media can be significant places for establishing and keeping up romantic relationships, especially online dating and virtual courtship, among adolescents. There is pressure to conform to behaviours that friends, influencers, and celebrities believe are socially accepted due to an individual's need to be acknowledged, accepted, and recognised by peers online. These sites can provide a chance to make connections with others, but can also leave teens exposed to a lot of risks. Sexual solicitation, grooming by older adults who exploit the trust and vulnerability of teens, requests for nude photos or messages can all occur in an online interaction. Sexting is just one of the behaviours that can make adolescents more vulnerable to cyber exploitation, coercion and manipulation. Thus, the digital space have the potential to influence the process of building relationships as well as to increase adolescents' risk to engage in risky sexual behaviours and experience negative effect on their reproductive health.

PL1: Rudo (Peer Pressure in Encrypted WhatsApp Groups), had this to say**;**

"At first, my mother bought me a small phone for school research during COVID-19. But my school friends added me to secret WhatsApp groups called 'Vana VeSlay' [Youths who live lavishly]. In those groups, girls posted videos dancing to viral TikTok trends and showing off expensive clothes, smartphones, and fast food given to them by older boyfriends. If you didn't post pictures showing you were 'active' or having fun, they made fun of you, calling you 'rural' or 'backward'. I felt so much pressure to fit in."

The experience Rudo narrates indicates some form of digital exclusion or cyber-peer pressure. She goes on to say;

"One of the girls in the group connected me to a guy who had a car and money for data bundles. He used to send me airtime and private messages late at night telling me I was beautiful. I wanted to take nice pictures for WhatsApp status to show my friends I was also 'slaying'. When we met, he expected sex in return for the money and gifts [CODE: Transactional Materialism]. Because I didn't know much about birth control and I was afraid to ask my parents, therefore I got pregnant [CODE: SRHR Knowledge Deficit]."

Furthermore, Participant 6, Nagier (PL6) related how she ended up falling pregnant and later being rejected,

"I met this guy on Facebook, he was handsome and showed me love. We exchanged cell numbers and began to communicate on WhatsApp. He then started sending me money through Ecocash…it was interesting; I had found the love of my life. We decided to elope, although I

had not met him personally. He sent money to my parents to inform them he was with me (a traditional way of notifying elopement and intention to marry). Later I realised he never loved me as I thought he did…but I was pregnant. He then dumped me and the baby…. I had to go back home."

PT 1(Teacher Participant – PT): Mr Nhamo, a teacher expressed his concern on WhatsApp groups that children form and some things they share on social media that usually lead to unwanted pregnancies.

"I have noticed that children misuse the WhatsApp group that we create for learning. They end up soliciting sexual relationships privately in the pretext of sharing notes. Most of them are on Facebook and other platforms where we cannot control their behaviours. You then just realise that a girl, sometimes under age, is no longer attending lesson because they fell pregnant."

4.3 Theme 3: Digital Media, Sexual Health Knowledge, and Family Mediation

Theme 3 is about the issues that occur when children have unsupervised access to social media and come across the wrong information regarding sex and sexual relationships. For many young people the internet is now an easy resource to access, allowing them to learn about sexuality and sexual and reproductive health in ways that they might not have been able to previously – solving the problem of 'self-learning' sexuality, relationships and contraception. But digital platforms also offer access to information that may encourage misconceptions and make risky decisions, such as inaccurate, misleading, or incomplete information that can be challenging to the education sector. Young people's ability to critically evaluate information on the internet is frequently limited as a result of digital literacy difficulties and are susceptible to misinformation. Additionally, parents who do not monitor even as much as they do when their teen is online, or who do not talk to their adolescent about sexual health, or who may not know as much about the Internet as they do about sexual health, can limit the impact of guidance and monitoring. Conversely, positive parental involvement, communication and knowledge can be crucial protective factors in supporting adolescents and helping them to access information responsibly and make healthy sexual and reproductive health choices.

PL3: Tarisai (Lack of Parental Monitoring and Digital Illiteracy) had this to say about parental monitoring and digital illiteracy.

"My grandmother, who I live with, doesn't know how to use a touch-screen phone [CODE: Intergenerational Digital Divide]. She thought I was using the phone for schoolwork whenever I was staring at the screen late at night. She didn't know I was chatting with older boys on Facebook."

She went further to say,

"Because there was no one checking my phone, I stayed online all night [CODE: Unrestricted Nighttime Access]. I met a boy online who promised to buy me school uniforms and shoes. Since my grandmother was struggling financially, I saw him as a helper [CODE: Economic Vulnerability]. We started meeting secretly after chatting on WhatsApp. If my grandmother understood how social media works, she would have guided me before I got into trouble [CODE: Absent Protective Controls]."

PP1 (Parent Participant): **Mrs Mhofu,** expressed her concerns on lack of knowledge/digital illiteracy and parental monitoring,

> *"We parents are requested by the school to buy our children smart phones. Just imagine that we cannot even operate our own televisions. They manage the electrical gadgets in the home, so we leave everything to them. You only panic when you notice their change in behaviour especially having sexual relationships that are weird. You are called at school where you get to know about these behaviours… at the end of it all, you get an unwanted grandchild…the school fees goes into the drain….just because of the internet."*

As well Mr Mpoto (**PP2)** expressed similar concerns but blamed the school system for encouraging the use of cellphones. He had this to say,

> *"We are now unable to control our children because of the demand for these gadgets by the school. Isn't there any other way of monitoring the use of these? My boy ended up impregnating a girl at such a young age. I wondered where he learnt about it all…then I had they were into pornography…eish the world has gone to the dogs."*

PP3 had a different view from the other parents, she said,

> *"It is our fault; we are failing to give rules to our children while they are at home. Our Christian values, especially our denomination teaches us how to groom our children so that they remember the rules even when they are in school."*

PP4, a modern parent who has been in the diaspora had this to say,

> *"These things are complicated. You try to make your child understand the dangers out there, but when they meet other children, all is lost. The school, the playground, especially when the government restricts us from punishing our children the way our own parents did, I tell you, you won't win with these children. Where I was all these years, children learn things that are not permissible in our culture and sometimes you are made helpless by their laws."*

4.4 Theme 4: Contextual Influences, Consequences, and Prevention of Early Pregnancy

This theme depicts that encountering uncensored internet content contributes to early pregnancies. Adolescent exposure to digital experiences is greatly influenced by socio-cultural and economic factors, which create situational possibilities to exposure to unintended pregnancies. Poverty can shape access to digital technologies and gender norms and social expectations can impact adolescents' engagement with online spaces and sexual relationships. Varying levels of cultural silence around sexuality can drive both less open conversation about sexuality and a lack of access to accurate sexual health information, and rural-urban divides can shape the way people use the internet and how often they are exposed to accurate information. Digital impacts that can lead to early pregnancy can also have significant consequences for the adolescent, such as poor school attendance, missed school opportunities, stigma and social exclusion, emotional impact, strain on family dynamics and increased economic burden. Challenges must be addressed holistically with an integrated Digital Sexuality Education (DSE) accompanied by Digital Literacy, school-based awareness building efforts, robust online child protection and accessible adolescent-friendly SRHS care. This can help empower youth to

safely engage in digital spaces and lower their risk of unintended pregnancy and its social and economic impacts.

PL4 (Nyasha) related her story,

> *"Life at home was stressful, I had no money, no food, and constant arguments. Being online was my escape [CODE: Psychological Escapism]. On Instagram, you see people living luxurious lives in Harare, going to fancy restaurants and wearing expensive wigs. I wanted that life so badly to escape my reality [CODE: Material Aspiration]."*

She went on to say,

> *"To maintain an impressive online profile, you need money for hair, clothes, and data bundles. I met a working guy on Facebook who offered to pay for my lifestyle. I felt dependent on him because he bought me bundles to stay online [CODE: Digital Dependency]. When he demanded unprotected sex, I couldn't say no because I didn't want to go back to being poor and offline [CODE: Coercive Transactional Sex], obviously I missed my period and the man disappeared from my life…I became another at 13"*

PL5 (Farai) said,

> *"He inboxed me on Facebook when I was 13... [whispers, looks down at her hands]. He was an adult man, over 30 years old [CODE: Adult Grooming / Solicitation]. He started sending me small amounts of money via Ecocash for airtime [CODE: Financial Grooming Inducement]. He told me I was mature for my age and that his wife didn't understand him."*

When asked if she shared this secret with anyone, she went further to say,

> *"[Shaking head rapidly] No, he told me it was our secret and warned me that if I told my parents, they would take my phone away [CODE: Coercive Isolation]. I feared losing the phone and the money. Over time, he groomed me into meeting him in town. I didn't even understand what pregnancy fully meant until I missed my periods [CODE: Early Adolescent Vulnerability]."*

PT2: Mrs Kondo, a teacher who manages G & C classes shared her experience with teenagers.

> *"We might try to assist these teenagers get sexual information and make them understand why some social media platforms need to be avoided until they are able to restrain themselves. At this age it is very difficult for us teachers to control them when at home their parents do not give them rules or monitor them. There is need that parents work together with us, that way we can win some who are still innocent."*

The interviews with the counsellors and the MOPSE official revealed that,

PC 1: Ms Toto, a counsellor shared her experience with adolescents who fell pregnant through social media use. She had this to say,

"When you discuss their issues, they usually regret not listening to their elders. They usually feel that they are being oppressed when they are told to restrain from surfing unsafe platform that display pornography etc, at the end of it all, they discover that those men were dicing with their lives. It would be advisable if we would go back to the tradition where children are taught their cultural norms, maybe this would deter them from messing up their lives."

PC 2: Mr Bhobho thought that that the 'ama 2k' as he called them need a firm hand if we have to term them. He said,

"Besides pregnancy, these children access information about drugs on the internet. When they are brought for counselling, it is too late. What parents need to do is catch them young. Give the discipline at the tender age. If they need counselling, it must be a lifelong counselling whereby the service is sought at every transition to a different developmental stage."

Overally, the MOPSE official (**PEO 1)** had to make a comment on the use of smart phones in school.

"Children are learning through 'project' nowadays and it is inevitable to avoid the smart phones. It is now the duty of the parent to find ways of disciplining the child on how to use the gadget. Remember the parent is the one who finances the data used to surf the internet, if the child is restricted to data the suffices downloading important material, then they will not have time to surf unnecessary information that leads to pregnancy. But unfortunately, some parents think that giving their children a lot of money to spend at school is love and that lead to undesirable behaviours. Parents and the school need to come up with rules that protect the child, that way, we may win."

This focus group discussion identified that there is a significant impact of social media culture on the vulnerability of adolescents towards early pregnancies in Zimbabwe. There were descriptions of the interconnectedness of digital inclusion and social status, such as the participant Nyasha (PL4) describing a digital invisibility that impacts adolescents who are not part of the digital world, because either they lack a mobile device or mobile data. "Keeping visible socially is often women's motivations for soliciting financial support from men and paving all the way to exploitative relationships, she wrote, "for purchasing data." In this regard, Rudo (PL1) pointed out that cyber-bullying and peer pressure continues to be a major problem in social media platforms, especially in WhatsApp groups as the youth are judged on their social media presence and lifestyle exhibitions. Digital peer pressure is more powerful and pervasive than peer pressure, as they are pressured by peers 24/7 by being digital, she emphasised. An additional area of conversation was on the limited parental understanding creating adolescents vulnerable. Chipo (PL2) and Nagier (PL6) noted that many parents don't know what features like 'disappearing messages', 'private chats', and 'restricted online groups' are, leading to 'feature opacity. This is because participants felt that there was a lack of digital knowledge, coupled with the online engagement of adolescents, allowing an older male to take advantage by exploiting its position of power and hence creating what participants called exploitative asymmetry. Moreover, Tarisai (PL3) said that when the adolescents look for information on sexual and reproductive health on the internet, they tend to rather come across pornographic information or information that deviates from the actual SRH messages. She pointed out that knowledge of online safety and sexual safety information within school is both scarce and limited and that adolescents receive this instruction from their peers who might also lack accurate information. It also emerged that for adolescents, online environments can be somewhere to 'meet the unmet needs' when it comes to emotional, social and financial needs. Farai (PL5) and Nagier (PL6) shared how many youths think they are seeking love, attention, validation,

and money online, as these are not available in their home situations or their communities. Instead however, they often find themselves in situations involving older men, coerced relationships and strong peer pressure, leading to risk of unintended pregnancies and school drop-out. In total, the participants perceived social media as a powerful tool that is closely associated with disempowerment, financial poverty, lack of parental care, misinformation and emotional exposure, which contributes to raising the chances of adolescents to get pregnant. The theoretical mapping of the empirical finings is shown in Table 2.

Table 2 : Theoretical Mapping of Empirical Findings

Theoretical Domain(PBT/UGT)	Sub-System/Category	Empirical Finding/Code	Participant Mapping
UGT: Information and Surveillance	Active Need Seeking	Searching for SRHR information due to family taboos; encountering adult pop-ups.	Chipo(PL2),Tarisai(PL3)
UGT: Social Integration and Diversion	Psychological Escapism	Seeking peer validation in encrypted groups to escape poverty or domestic stress.	Rudo(PL1), Nyasha (PL4)
PBT: Perceived Environment	Low Social Control/High Risk	Unmonitored digital access, “blesser” solicitations, and peer :slay” norms.	Rudi (PL1),Tarisai(PL3),Farai (PL5), Nagier (PL6)
PBT: Problem Behaviour Package	Low Academic Valuation/High Autonomy	Prioritising unmonitored chats leading to transactional gifts that lead to unprotected sex.	Nyasha(PL4),Farai(PL5), Nagier (PL6)

Discussion

Theme 1: Digital Exposure and Adolescent Sexual Socialization The findings indicate that the broadband revolution has dramatically changed adolescents' engagement with information, socializing, and sexuality. This is consistent with the report of Fajobi et al., (2026) in West Nigeria, reporting social media as the push factor towards risky behaviours that results in pregnancy. Participants noted that access to smartphones was widespread, social media platforms used by adolescents frequently and that they spent a long time on the internet, largely without supervision, increasing their opportunities to be exposed to sexualised content. Teen exposure to sexual content in media, online communication related to relationships and models of romantic and sexual behaviour may, as in Social Learning Theory, lead them to have different attitudes and understandings about sexuality, especially since such content is repeated. Participants said that the internet can normalise early sexual activity and drive curiosity of sexual experiences, sometimes causing adolescents to try out what they see on the internet. By implication, findings thus show that the use of digital technologies does not simply represent an act of using communication devices but that it can also lead to the influence of the communication on adolescents' beliefs, values and intention to act on sexuality.

Theme 2: Social Media Relationships, Exploitation, and Vulnerability

Study findings also echo other similar scenarios such as the findings of widow's et al., (2016) which also found that peer influences may be present, and in the case of the present study, social media platforms may facilitate romance formation as well as bringing the adolescent into a risky situation with regards to exploitation in the sexual context. Individuals explained the ways in which online contact, virtual flirting, and desire for peer acceptance can lead to quick emotional bonds, which can escalate into intimate relationships. It was thought that actor/actress life might be understood through social media and being accepted by them might encourage certain relationship expectations and behaviors in adolescents. The online encounters were also bringing dangers to young people including, but not limited to, sexual solicitation, grooming by adults and/or older persons, sexting, and coercive relationships. Participants highlighted that there is a tendency that adolescents seek affection, financial support and/or social acceptance online, and this gives them an opportunity to be manipulated by others who take advantage of their emotional and financial needs. This digital space, therefore, served as a means of socialisation and a space where teen girls are at an increased risk of early and unwanted pregnancies due to unbalanced and exploitative relationships.

Theme 3: Digital Media, Sexual Health Knowledge, and Family Mediation

What the results suggest is that digital media is a multifaceted medium that can be both a provider of sexual and reproductive health information as well as a source of misinformation. Machoka et al., (2024) study in the urban informal settlements of Kenya found that girls are not receiving health education from parents, consequently, females are misinformed by their peers and predators. In today's study, the respondents affirmed that the young people are mostly using the internet as a source of information on sex, contraception and relationship because of the accessibility and anonymity found in the digital media. They also pointed to the fact that when children or adolescents do a search online, they are often exposed to inaccurate, misleading or sexually explicit information instead of evidence-based health information. Poor digital literacy is another challenge faced by adolescents when it comes to assessing the credibility of online content. The results also show that the parental guidance is an important mediator in adolescents online experience. Many parents, participants said, lack digital literacy and do not know what platforms and technologies young people are using, making it difficult for parents to keep abreast of this activity. However, it was recognised that parental presence and active support, open communication, and informed supervision are safe and protective factors that are essential to assist the adolescent to navigate digital sex spaces safely and make informed decisions about sexual health.

Theme 4: Socio-Cultural Influences, Consequences, and Prevention of Early Pregnancy in the Digital Era

A study by Muyonga et al., (2024) in Central and Eastern Uganda shows there are a lot of socio-cultural drivers and barriers to addressing repeat teenage pregnancies and early child/forced marriages. The results of the present study also show that socio-cultural and economic factors influence the digital exposure-adolescent pregnancy link. Participants emphasized the role poverty, gender norms, cultural taboos on sexuality, and the urban-rural divide on digital access play in shaping adolescents' experiences with the online world, and their online vulnerability to engaging in sexual risk-taking. Economic hardship was thought to be associated with a higher level of dependence for transactional relationships such as smartphone use and access to internet data being dependent on support from older partners. The participants also spoke about the consequences on the lives of digitally influenced pregnancies: school dropout, educational disruption, stigma, social exclusion, emotional distress, family conflicts and additional costs were discussed. Addressing these challenges, participants identified holistic prevention

approaches, incorporating digital sexual and reproductive health and rights education, digital skills development, in-school awareness campaigns, enhanced online child protection systems and better access to adolescent-friendly sexual and reproductive health provision. These interventions were perceived as important to ensuring that adolescents have a chance to learn about, understand, and receive adequate protection and information on how to avoid risky situations in digital spaces and avoid unintended pregnancies.

Conclusion

This study posited that digital exposure has become a major determinant that affects the sexual attitudes, behaviours and vulnerability of young people to unintended pregnancies. Adolescent's access to smartphones, social media websites and internet services with sexualised content, online relationships and digital peer influences that shape their perception of sexuality, has increased their exposure. Overall, digital platforms offer opportunities for communication, learning, and accessing sexual and reproductive health information, but they also create risks for adolescents, including misinformation, online grooming, sexual solicitation and exploitative relationships. The results also showed that poverty, gender norms, cultural taboos associated with sexuality, and lack of parental supervision are intertwined and compound the risk that adolescents face from digital exposure on engaging in risky sexual behaviour and premature pregnancy. Right therefore, adolescence pregnancy in the Digital era cannot be just understood as individual behaviour but as complex which is influenced from the interaction of Digital, Social, Economic, cultural and familial influences.

Recommendations

1. **Strengthen Comprehensive Digital Sexuality Education** Schools should integrate age-appropriate digital sexuality education into the curriculum to equip adolescents with accurate knowledge on sexuality, reproductive health, online safety, consent, and healthy relationships.
2. **Promote Digital Literacy Among Adolescents** Adolescents should be trained to critically evaluate online content, identify misinformation, protect their privacy, and recognise online risks such as grooming, sexual exploitation, and cyberbullying.
3. **Enhance Parental Engagement and Digital Competence** Parents and guardians should receive training on emerging digital platforms, online communication trends, and strategies for monitoring and guiding adolescents' internet use. Open communication regarding sexuality and online behaviour should be encouraged within families.
4. **Implement School-Based Awareness Programmes** Schools should establish regular awareness campaigns on responsible social media use, reproductive health, gender-based violence prevention, and the potential consequences of risky online relationships.
5. **Strengthen Online Child Protection Mechanisms** Government agencies, internet service providers, and social media companies should collaborate to improve online safety measures, strengthen reporting systems, and enforce regulations that protect adolescents from online exploitation and abuse.
6. **Improve Access to Adolescent-Friendly Sexual and Reproductive Health Services** Health institutions should provide confidential, accessible, and youth-friendly services that offer accurate information, counselling, and contraception to adolescents.
7. **Address Socio-Economic Vulnerabilities** Community and government interventions should target poverty reduction and economic empowerment programmes for vulnerable families to reduce adolescents' dependence on transactional relationships for digital resources or financial support.

8. **Promote Multi-Sectoral Collaboration** Effective prevention of adolescent pregnancy in the digital era requires collaboration among schools, families, healthcare providers, community leaders, policy-makers, and technology companies to create supportive environments that foster safe digital engagement and healthy adolescent development.
9. **Encourage Further Research** Future studies should explore the long-term effects of digital exposure on adolescent sexual behaviour and examine effective interventions for preventing unintended pregnancy in increasingly digitalised environments, particularly in low-resource settings such as Zimbabwe.

References

Blumler, J. G., & Katz, E. (1974). The Uses of Mass Communications. SAGE Publications, Incorporated.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches (4th ed.).* London. SAGE Publications.

Darvishi, M., Atef Vahid, M. K., Elhami Athar, M., Trejos-Castillo, E., & Habibi Asgarabad, M. (2022). The explanation of adolescent delinquent behaviors based on Jessor's problem behavior theory (PBT) in Iran: the role of individual vulnerability, opportunity risk availability, and perceived support. *Frontiers in Psychiatry*, *13*, 744794. https://doi.org/10.3389/fpsyt.2022.744794

Fajobi, O., Esimai, O. A., Akinwumi, A. F., & Olugbade, O. T. (2026). Social media engagement and risky sexual behaviours among out-of-school adolescents in Ile-Ife, South-west, Nigeria. *Vulnerable Children and Youth Studies*, *21*(1), 135-149. https://doi.org/10.1080/17450128.2025.2478161

Hushin, H. (2025). Increasing global access to education with digital technology. *International Journal of Education and Digital Learning (IJEDL)*, *3*(4), 167-176. https://doi.org/10.54443/ijedl.v3i4.259

Jessor, R. (1987). Problem-behavior theory, psychosocial development, and adolescent problem drinking. *British Journal of Addiction, 82*(4), 331–342. https://doi.org/10.1111/j.1360-0443.1987.tb01490.x

Kivunja, C., & Kuyini, A. B. (2017). Understanding and Applying Research Paradigms in Educational Contexts. International Journal of Higher Education, 6, 26-41. https://doi.org/10.5430/ijhe.v6n5p26

Lesinskienė, S., Andruškevič, J., & Butvilaitė, A. (2025). Adolescent pregnancies and perinatal mental health—Needs and complex support options: A literature review. *Journal of clinical medicine*, *14*(7), 2334.

Machoka, B. N., Kabiru, C. W., & Ajayi, A. I. (2024). "My father insisted that I have the baby but not in his house": Adolescent pregnancy, social exclusion and (dis)empowerment of girls in an urban informal settlement in Kenya. *PLOS global public health*, *4*(9), e0003742. https://doi.org/10.1371/journal.pgph.0003742

Martin, K., Peh, R. W. C., Tembo, M., Mavodza, C. V., Doyle, A. M., Dziva Chikwari, C., ... & Ferrand, R. A. (2024). Factors associated with the use of digital technology among youth in Zimbabwe: Findings from a cross-sectional population-based survey. *Journal of medical Internet research*, *26*, e52670. https://doi.org/10.2196/52670

Masri-Zada, T., Martirosyan, S., Abdou, A., Barbar, R., Kades, S., Makki, H., Haley, G., & Agrawal, D. K. (2025). The Impact of Social Media & Technology on Child and Adolescent Mental Health. *Journal of psychiatry and psychiatric disorders*, *9*(2), 111–130.

Moloi, P.T. & Malapela, R.G., 2024, 'Adolescent girls' perceptions regarding the use of contraceptives in Ekurhuleni District, Gauteng', *Health SA Gesondheid* 29(0), a2580. https://doi.org/10.4102/hsag.v29i0.2580

Moore, H.J., Boothroyd, A., Tzivanakis, N. & Woodcraft, S. (2026). Protesting a History. *Gen Z, the 2024-2025 Uprising and Kenya's New Political Consciousness*. London, Institute for Global Prosperity, ULC.

Muyonga, M., Kagurusi, P., Nankanja, M., Ayanga, I., Kampire, P., Tigaiza, A., & Nabacwa, M. S. (2024). Socio-cultural drivers and barriers to addressing repeat teenage pregnancies and early child/forced marriages in Central and Eastern Uganda. *African Journal of Reproductive Health*, *28*(12), 148-164. https://doi.org/10.29063/ajrh2024/v28i12.16

Muzingili, T., Muntanga, W., & Zvada, V. E. (2024). A phenomenological study on pregnant and young mothers' experiences on second-chance education in Zimbabwe. *Cogent Social Sciences*, *10*(1), 2367730. https://doi.org/10.1080/23311886.2024.2367730

Nyimbili, F., & Nyimbili, L. (2024). Types of purposive sampling techniques with their examples and application in qualitative research studies. https://doi.org/10.37745/bjmas.2022.0196

Odgers, C. L., & Jensen, M. R. (2020). Annual Research Review: Adolescent mental health in the digital age: facts, fears, and future directions. *Journal of child psychology and psychiatry, and allied disciplines*, *61*(3), 336–348. https://doi.org/10.1111/jcpp.13190

Odudu, Q. (2024). Technological solutions for protecting children from online predators: current trends and future directions. *Available at SSRN 4986870*. https://ssrn.com/abstract=4986870 or http://dx.doi.org/10.2139/ssrn.4986870

Principi, N., Magnoni, P., Grimoldi, L., Carnevali, D., Cavazzana, L., & Pellai, A. (2019). Consumption of sexually explicit internet material and its effects on minors' health: latest evidence from the literature. *Minerva Pediatrica*.

Rahmani, A. M., Bayramov, S., & Kiani Kalejahi, B. (2022). Internet of Things Applications: Opportunities and Threats. *Wireless personal communications*, *122*(1), 451–476. https://doi.org/10.1007/s11277-021-08907-0

Salifu, R., & Abubakari, A. (2024). Adolescents, Social Media and Access to Reproductive Health Information and Services in Ghana: Prospects and Challenges. In Obstetrics and Gynecology. IntechOpen. https://doi.org/10.5772/intechopen.111768

Sichach, M. (2023). Uses and gratifications theory-background, history and limitations. *History and Limitations (November 17, 2023)*. https://dx.doi.org/10.2139/ssrn.4729248

Taherdoost, H. (2021). Data collection methods and tools for research; a step-by-step guide to choose data collection technique for academic and business research projects. *International journal of academic research in management (IJARM)*, *10*(1), 10-38. https://hal.science/hal-03741847v1

Tome A. R. (2024) A critical analysis of the challenges faced by young people with neurodevelopmental disorders in accessing Sexual Reproductive Health Services in Zimbabwe. A case of Zimcare Trust, Zimbabwe. *Journal of Social Issues in Non-Communicable Conditions & Disability, 3(1)*, 209-222.

Toumaras, N. (2025). Networked hyperlocal activists: Digital democracy and engagement in sub-Saharan Africa. *Social Media+ Society*, *11*(2), 20563051251345945. https://doi.org/10.1177/20563051251345945

Widman, L., Choukas-Bradley, S., Helms, S. W., & Prinstein, M. J. (2016). Adolescent Susceptibility to Peer Influence in Sexual Situations. *The Journal of adolescent health : official publication of the Society for Adolescent Medicine*, *58*(3), 323–329. https://doi.org/10.1016/j.jadohealth.2015.10.253

Wohab, A. (2015). A conceptual framework of risk-taking behaviours of adolescents while using the internet in Bangladesh. *International Journal of Computer Applications*. https://doi.org/10.5120/ijca2015907699