## **Sex Education on Social Media**



Nicola Döring Ilmenau University of Technology, Ilmenau, Germany

### Synonyms

Digital sex education; Online sex education; Sex advice on social media; Sex ed on social media; Sex education apps; Sex edutainment on social media; Sexual health education on social media; Sexual health information on social media; Sexual information on social media; Sexuality education on social media; Virtual sex education

## Definition

Sex Education: Sex education is an umbrella term for different types of educational measures that address a variety of sexual issues and aim to foster sexual literacy. Sexual literacy means the knowledge, attitudes, and skills necessary to protect and advance a person's sexual health, rights, and wellbeing in a socially responsible and consensual way. Sex education comes in two main forms: As informal sex education provided by laypersons such as parents and peers through everyday conversations and as formal sex education provided by trained sex educators who offer counseling, courses, exhibitions, workshops, and other

A. D. Lykins (ed.), *Encyclopedia of Sexuality and Gender*, https://doi.org/10.1007/978-3-319-59531-3 64-1 educational formats in a predefined setting (e.g., in a school, a home for disabled people, or a sexual health clinic).

*Social Media:* Social media is an umbrella term for different digital media platforms that allow users to present themselves on personal profile pages, connect and communicate with other people, and create, share, and comment on digital media content such as text, images, sound, and video.

Sex Education on Social Media: With the popularization of the internet and social media, both informal and formal sex education is now increasingly distributed via different digital channels (e. g., websites, smartphone apps) including social media platforms (e.g., Facebook, YouTube, Instagram, Twitter, Snapchat, TikTok). Sex education on social media has become widespread, and research in this area is on the rise.

### Introduction

Typically, sex education targets children and adolescents (UNESCO, 2018; WHO & BZgA, 2010). However, adults and seniors also have sexual information needs and wish to improve their sexual literacy (Fileborn et al., 2017; Garrity, 2010). Sexual information needs are, nonetheless, targetspecific. They differ not only among age groups but also among people of diverse genders, sexual identities, cultural and religious backgrounds, relationship and family situations, physical and

<sup>©</sup> Springer Nature Switzerland AG 2021

mental health statuses, disabilities, and so on. The sexual information needs of different populations concern a variety of sexual issues and are expressed more or less cautiously or directly: A teenage girl entering her first sexual relationship might wonder how she can know whether a boy really loves her, a teenage boy might ask himself what penis size is normal, while a young man who is pornography-experienced but has never had sexual intercourse might ask why women moan so loudly when they have sex.

#### Sex Education Needs

From the perspective of both sex education practitioners and sex education researchers, it is important to listen to people's authentic sexual questions to ensure that sex education truly caters to diverse information and support needs. Traditional sex education often focuses exclusively on risk prevention, in terms of preventing unwanted pregnancies, sexually transmitted infections (STIs), and sexual violence.

Such a risk-focused approach misses people's more complex concerns and insecurities around their sexual lives and their search for sexual identity, pleasure, and well-being, as exemplified in the following selection of representative questions. "How do I know if I'm pansexual, bisexual, or a lesbian?" - "Intercourse hurts and I never achieve orgasm. What is wrong with me?" -"After 22 years of marriage and a divorce I don't know how to find a partner again. I tried those dating apps but they are horrible. What am I supposed to do?" - "Is the anti-HIV pill truly safe?" - "I'm pregnant and my husband refuses to have sex with me. He says it hurts the baby. Is he right?" - "Menopause tanked my libido and I feel awful. All of my girlfriends are taking hormones but I think artificial hormones will give me cancer. What should I do?" - "Is the G spot really a thing?" – "I'm in a long-distance relationship and we often engage in sexting. I think it's hot, but is it safe?" - "My girlfriend just told me that she'd been raped. I'm shocked and devastated and don't know what to say or do." - "We have a daughter with special needs going through puberty. We worry about her safety but also want her to have an active love life once she is ready. What should we do?" – "I'm a very religious person and want to wait until marriage, but my boyfriend is pushing me to have sex. I definitely don't want to do it. But I also don't want to lose him. What now?" – "I recently put on weight. My husband doesn't care but I feel so uncomfortable in my body that I avoid any kind of intimacy. Whenever we talk about it, it ends in a huge fight." – "My wife has Alzheimer's. I take care of her at home and I am wondering, can I have sex with her or would that be unethical? I still have sexual feelings and I don't want to cheat on her." – "What is the best sex toy for female masturbation?" – "I masturbate daily, often several times in a row. Am I a sex addict?"

#### Sex Education Approaches

To deal constructively with sexual issues like those expressed above entails improving sexual literacy, reducing sexual risks, and fostering sexual well-being. The leading ethical model guiding and shaping professional sex education worldwide is the Sexual and Reproductive Health and Rights (SRHR) framework, which has been endorsed by authoritative institutions such as the World Health Organization (WHO & BZgA, 2010), UNESCO (2018), the World Association of Sexual Health (WAS, 2014), and the International Planned Parenthood Federation (IPPF, 2008). The SRHR framework stresses that everyone has the human right to express and enjoy their sexualities in an age-appropriate, self-determined, healthy, and consensual way and be protected from sexual harm and violence. Core values of the SRHR framework are gender equality, sexual diversity, and sexual consent, as well as government responsibility for the provision of accessible sexual healthcare and sexual education services. Regarding sexual decision-making, the SRHR framework does not promote certain lifestyles (e.g., sexual abstinence until marriage, or monogamy) but promotes responsible sexual self-determination based on sexual literacy. It is also important to note that the SRHR framework is not individualistic but points to the relevance of societal conditions, power relations, and social norms when it comes to sexual expression.

Just as the SRHR approach is followed by many professional sex educators who learned about it during their vocational training, many peer sex educators endorse it because it is rooted in widely accepted notions of human rights. However, some professional and peer sex educators stick to a more traditional risk-focused approach, and some even dismiss human rights and promote discriminatory (e.g., homophobic, transphobic, misogynist) messages.

In the age of the internet, both informal and formal sex education can not only be found offline but increasingly online as well. Online sex education in general and sex education on social media in particular have been met with both hopes and fears (e.g., Cookingham & Ryan, 2015; Döring, 2009; Todaro et al., 2018): While supporters hope that digital channels will help to improve the scope, reach, and efficiency of sex education that is in line with the SRHR framework, critics warn that social media will spread even more sexual misinformation and disinformation.

### State of Research

Academic research on digital sex education is conducted within and between different disciplines, such as education, medicine, nursing, counseling, sexology, psychology, sex research, gender studies, queer studies, and internet research. To structure the research field, four main research questions (RQs) can be raised, according to the classic Lasswell formula: "Who says what in which channel to whom with what effect?" (Lasswell, 1948), which is commonly used in communication science:

- RQ1: Who provides sex education on social media?
- RQ2: What forms and content does sex education on social media have?
- RQ3: Who uses sex education on social media?
- RQ4: What effects does sex education on social media have?

The main scientific methods used to answer these RQs are experimental and non-experimental evaluation methods, qualitative interviews, quantitative surveys, and media content and media quality analyses.

### Who Provides Sex Education on Social Media?

Providers of sex education on social media fall into three main categories: (1) professional sexual health organizations, (2) individual professional sex educators, and (3) laypersons serving as peer sex educators.

### Professional Sexual Health Organizations

Leading institutions of sexual health promotion and sex education such as Planned Parenthood, the Centers of Disease Control (CDC), the WHO, or research institutes provide sex education websites and sex education smartphone apps and are active on social media as well. For example, Planned Parenthood (www.plannedparenthood. org) has accounts on several social media platforms (Twitter, Instagram, Facebook, and YouTube) where the organization makes available its contact information, sex education messages, values regarding sexual and reproductive health and rights, and current activities and campaigns, and invites people to get in touch and ask questions. Professional organizations are the most credible sources for evidence-based sexual health information. Also, they are the most resourceful actors in the field and can afford to create innovative digital sex education interventions, such as smartphone apps or even sexual health bots based on artificial intelligence technology (e.g., the "Roo" bot from Planned Parenthood: https://roo. plannedparenthood.org).

It is, however, a challenge for sexual health organizations to keep up with the ever-changing social media landscape and quickly adopt new platforms. While TikTok, for example, became the fastest growing social media platform in 2020 and attracted the attention of many young people, most sexual health organizations stayed away from it. Hence, they missed out on the chance to reach young people on their preferred new digital platform and the chance to get involved in ongoing discussions about sex education and their own organizations. On TikTok, for example, postings with the hashtag #plannedparenthood had been viewed more than 70 million times by October 2020, according to platform statistics, without Planned Parenthood itself even being present on the platform and thus without the organization itself being able to join and shape this conversation.

Sexual health organizations are not only relatively slow to adopt the newest social media platforms; they also face the problem of relatively low reach. On social media the "human touch" is key: The broader audience most eagerly follows personalities and celebrities and is always looking for a personal connection with online content providers. It is precisely this personal connection which large organizations often fail to provide.

On the other hand, sexual health organizations are quite successful in reaching and informing professionals on social media: Following, for example, Planned Parenthood on YouTube, Facebook, Twitter, or Instagram can help researchers and practitioners stay up to date with the institution's latest activities.

Furthermore, sexual health organizations are at the forefront of the development and evaluation of digital sexual health interventions (e.g., Guse et al., 2012; Mangone et al., 2016; Nguyen et al., 2019) and digital comprehensive sex education programs (e.g., Marques et al., 2015; Müller et al., 2017; Mustanski et al., 2015; Whiteley et al., 2012). These interventions and programs are mostly delivered via smartphone apps or websites and only partly through social media services. They are often not publicly available, but reserved for specific groups or closed projects, and hence are mostly beyond the scope of social media sex education, which is publicly available.

### Individual Professional Sex Educators

Individual professional sex educators often outperform large sexual health institutions on social media. They manage to provide sex education on social media in an approachable, entertaining, and personal manner which includes sharing their own sexual experiences. This enables them to build noteworthy fan communities and even become social media influencers or social media stars (Johnston, 2017). Individual professional sex educators provide the personal connection that large organizations often fail to create. For example, Hannah Witton is a young sex educator with an academic background in sexual history from the UK who has grown a large fan base with her podcast "Doing it!" and her YouTube channel "Hannah Witton." She addresses body image issues and talks about her own large breasts. She deals with not only female sexual pleasure, masturbation, and porn, but also with sexuality and disability issues, sharing her own experiences of using a stoma. Her most popular videos have garnered millions of views. Hannah Witton's reach on YouTube (635,000 subscribers) is about ten times larger than that of Planned Parenthood (60,000 subscribers, as of October 2020). Another example of a professional sex educator who is very popular on social media is Dr. Lindsey Doe from the USA, whose podcast and YouTube channel are both named "Sexplanations." On her YouTube channel she provides comprehensive, evidence-based sex education and, according to the channel description, has covered more than 365 topics and reached over 190 nations. Still another example is the sexologist Lic. Cecilia Ce from Argentina, who provides comprehensive sex education on her Spanish-language Instagram account "lic.ceciliace," which had 630,000 subscribers as of October 2020. She addresses, among other issues, sex after pregnancy, female sexual pleasure, and intimate couple communication.

The three selected sex educators are typical insofar as they are female and represent an SRHR approach with an emphasis on sex-positive feminist endorsement of female sexual pleasure. While official statistics on professional social media sex educators are lacking to date, the 2020 international UNESCO conference "Switched On," addressing sex education in the digital space, anecdotally demonstrated that many sex educators embrace gender equality and focus on pleasure (Döring, 2020a). Individual sex educators usually run their social media accounts independently or hire a small team to assist them in video production and online community management. Successful professional sex educators on social media can make a living based on their social media business, usually complemented by additional products and services (e.g., books and offline workshops).

### Laypersons Serving as Peer Sex Educators

The third and largest group of online sex educators is laypersons who serve as peer sex educators. Peer-to-peer sex education takes place in many different online forums and groups, be it general online health forums or dedicated sexual health and sexual relationships forums (e.g., Cohn & Richters, 2013), or online fan forums and dedicated erotic fan fiction forums (e.g., Döring, 2020b; Masanet & Buckingham, 2015). Online forum discussions on sexuality are text-based and anonymous and directly address questions as diverse as those presented in the introduction. Sometimes, online sex education forums invite or accept trained sexual health professionals as members to support the forum community and ensure information quality.

In addition to text-based sex education in online forums, photo- and video-based communication is also gaining traction in the field of peerto-peer sex education. Some peer educators run their own weblogs, Instagram, TikTok, or YouTube channels. While professional sex educators draw on their professional knowledge and combine it with personal experience, peer educators focus mainly on sharing their own sexual experiences, skills, and attitudes and complement these with scientific knowledge on sexuality insofar as they are able to do so in respect of background research. Peer educators usually aim to inform, encourage, and support others in their sexual development and expression. This is particularly important for girls and women whose sexual expressions are culturally restricted through social norms like the sexual double standard and whose sexual desires have been mostly ignored by traditional sex education (Fine, 1988; Fine & McClelland, 2006). Peer sex educators acting as role models on social media are also particularly important for sexual minority groups, who are often neglected by traditional sex education (Manduley et al., 2018).

### Peer Sex Educators Supporting the SRHR Framework

Hence, there are many peer sex educators to be found on social media who come from a sexpositive feminist background, from the LGBTIQ + community, the asexuality community, the polyamory community, the BDSM community, the sex work community, the disability community, and so on. They usually support the SRHR framework. What is most noteworthy about peer sex educators on social media is their authenticity and candor. They have overcome the respective stigma of their sexual minority identity, openly present themselves on social media, share their intimate experiences and struggles, and aim to encourage and empower their fellow minority group members as well as to enlighten the broader public. Some peer sex educators not only talk about sexual rights but also engage in online activism for such rights (e.g., the #metoo moveagainst sexual violence ment and the #bodypositivity movement for more self-acceptance) and encourage their followers to join.

Previous studies have pointed to peer sex educators from the LGBTIQ+ community who share stories of coming out or everyday lives as part of a homosexual couple (e.g., Lovelock, 2019; McBean, 2014). On social media, even minorities within minorities are represented, for example, non-binary trans YouTubers and trans YouTubers of color (Miller, 2019). Women support and educate each other online, for example, in finding the best sex toys through sex toy review videos or weblogs (e.g., Döring & Poeschl, 2020) and are breaking with the common norm of female sexual modesty.

More and more YouTubers from the disability community are using social media to address their sexual health, rights, and well-being. One noteworthy example from the disability community is the YouTube channel "Squirmy and Grubs" (740,000 subscribers as of October 2020) run by the young "inter-abled" couple Hannah and Shane. Shane has a severe muscle wasting disease and uses a wheelchair. "Shane's disability plays a huge role in their relationship, however, not in the way most people expect," as the channel description announces. The couple shares their life with the YouTube audience in a very entertaining, lighthearted, but also honest and informative way. Both talk openly about their relationship issues and how they make physical intimacy work. Their video "How to cuddle – 5 Amazing Cuddling Tips" had been viewed two million times by October 2020 and provides a great sex education lesson on how to overcome sexual norms, find out what works for an individual couple, and address physical limitations with humor and grace. This type of sex education content is practically unseen on legacy media such as the TV and is not covered by traditional sex education.

### Peer Sex Educators Dismissing the SRHR Framework

However, on social media there are also a growing number of peer sex educators who explicitly dismiss the SRHR framework's core values, such as gender equality, sexual diversity, and sexual consent. Some come from religious or political backgrounds and disseminate, for example, the homophobic idea that non-heterosexual-identified people are sinners and need conversion therapy or the transphobic idea that transgender individuals do not truly exist. Other peer sex educators come from a secular misogynist and anti-feminist background and disseminate the idea that women cannot be trusted and should, hence, be regarded and used as mere sexual objects:

- So-called "Pick-up artists" ("PUAs") act as role models and provide offline and online courses for men on how to trick girls and women into sexual activity by using measures of manipulation and pressure (e.g., Bratich & Banet-Weiser, 2019).
- Within the "Incel" (short for "Involuntary celibates") online community, young men lament being unfairly rejected sexually and educate each other about their presumed right to have sex with young, attractive women – regardless of their consent (e.g., Bratich & Banet-Weiser, 2019).
- In the "MGTOW" (short for "Men Going Their Own Way") online community, men educate each other in how to become emotionally

independent from women by despising them and reducing them to disposable sex objects (e. g., Ribeiro et al., 2020).

Various misogynist online movements are on the rise, linked with offline violence and interconnected with each other (Abdulla, 2020). They create an online conglomerate presumably in favor of "men's rights" called the "Manosphere" (Ribeiro et al., 2020).

Online communities whose peer sex education on social media dismisses basic human rights and propagates discrimination and violence against homosexual, transgender, or female individuals are under-researched and often overlooked in discussions about sex education on social media.

# What Forms and Content Does Sex Education on Social Media Have?

Regarding the form and content of social media sex education, it is relevant to address: (1) design and usability, (2) thematic scope, and (3) information quality.

## Design and Usability of Sex Education on Social Media

Sex education websites and smartphone apps developed by sexual health institutions have been evaluated in regard to their design features, user interface, and overall usability (e.g., Mangone et al., 2016; Whiteley et al., 2012). Results usually demonstrate good usability. The formal characteristics of sex education on social media, such as Instagram postings, TikTok videos, or YouTube videos, on the other hand, have attracted little research interest. Overall, this social media content today shows fairly high audio and video production quality and is provided on established social media platforms that ensure good usability. Consequently, social media sex education does not seem to be suffering from design or usability problems.

## Thematic Scope of Sex Education on Social Media

There is no national or international catalog of the most influential social media sex education materials. Hence, it is not possible to provide statistical data on the thematic scope of the material. However, based on observations and ongoing discussions in the field, five hypotheses on the thematic scope of social media sex education seem plausible but need empirical testing:

- Social media sex education covers all topics suggested as relevant by traditional sex education curricula. Traditional sex education's main focus is on the prevention of unintended pregnancies, STIs and HIV, and sexual violence. These topics are well-covered on social media, as can be easily confirmed through social media searches with respective key words.
- 2. Social media sex education covers topics related to sexual pleasure more frequently and in more detail than traditional sex education. Traditional sex education is focused much more on the prevention of sexual risks and harm than on the facilitation of sexual well-being and pleasure. This limitation is overcome on social media, where many professional and peer sex educators endorse a sex-positive approach and openly discuss masturbation, orgasm, sex toys, and diverse techniques for solo and partnered sex. Of particular note are female sex educators who share their personal masturbation experiences and help to overcome the taboo of female masturbation.
- 3. Social media sex education covers topics related to gender diversity and sexual diversity more frequently and in more detail than traditional sex education. For literally all identities and lifestyles inside and out of the sexual and gender mainstream, positive role models and materials can be found on social media. Topics extensively discussed among young people on social media, such as pansexual identities, polyamorous relationships, demi-sexual desires, queer porn, or gender transitioning, are usually beyond the scope of traditional sex education.
- 4. Social media sex education covers topics relevant for adults and seniors more frequently

and in more detail than traditional sex education. While traditional sex education is strongly focused on children and adolescents, social media sex education covers topics relevant for older populations, such as dating in later life, sexual activity after menopause, sexuality and chronic illness or disability, or sexual desire in long-term relationships.

5. Social media sex education covers topics related to online sexual activities (OSA) more frequently and in more detail than traditional sex education. Social media sex educators, by definition, are familiar with the internet's multiple intersections with sexuality. They often address OSA such as sexting, online sex dating, different types of online pornographies, different types of sexual online harassment, and so forth and hence help their audience to upgrade their sexual literacy for the digital age.

## Information Quality of Sex Education on Social Media

A common reservation about social media sex education is its presumed low information quality. As social media platforms by definition allow all users to upload their own user-generated content (UGC) without any quality control, sex education material on social media is met with suspicion. And, indeed, social media sex education content is available that contradicts human rights and the values of the SRHR framework as illustrated above.

Furthermore, sex educators whose content is in line with the SRHR framework can still deliver incomplete, biased, or incorrect information. Poor information quality can occur, for example, when professional or peer sex educators are guided by prejudices, are not up to date with the current state of research, do not double-check all their messages, or consciously push a biased message to attract attention. Media content and media quality analyses mostly report quantitative results, such as:

- Of N = 155 YouTube videos on premature ejaculation, 57% provide "poor" information (Kaynak et al., 2020)
- Of the N = 150 most viewed YouTube videos on HIV, 45% provide "misleading" information (Ortiz-Martinez et al., 2017)

- Of N = 73 YouTube videos on the intrauterine device (IUD) produced by peer sex educators, 31% contain "misinformation" (Allen et al., 2012)
- Of N = 38 YouTube videos on the single-rod contraceptive implant produced by peer sex educators, 26% contain "misinformation" (Paul et al., 2017)

Qualitative content analyses point to quality deficiencies such as the affirmation of traditional gender norms or traditional norms of motherhood (e.g., in YouTube videos about birth; Longhurst, 2009).

Unfortunately, almost all studies that address information deficiencies in social media sex education fail to provide reasonable benchmarks or comparative data. Without comparative data, we cannot make sense of individual error rates reported for samples of social media sex education material. It is also worth noting that even severely flawed social media sex education content could be helpful, if the audience has no other or no better source of information available. The trope of unreliable social media content has not been convincingly backed up with data so far, and comparative analyses are called for.

## Who Uses Sex Education on Social Media?

The use of social media sex education is widespread in the population. However, certain characteristics among populations and situations lead to particularly intensive use.

### **Characteristics of User Populations**

Sexuality-related questions like those presented in the introduction, albeit prevalent, are still associated with considerable shame and guilt for many people. Consequently, they often shy away from consulting peers or professionals in their offline lives and prefer to turn to the internet for sexual education. Surveys show that younger and older people consult the internet about their sexual questions and problems (Adams et al., 2003; Döring et al., 2017; Mitchell et al., 2014; Simon & Daneback, 2013). Overall, social media users cherish online sex education for its easy accessibility anytime anywhere. They also like its broad scope of topics as well as the anonymity and discretion it allows. However, they feel challenged to find the right information and evaluate its accuracy. People with better digital literacy, as well as better general health literacy, are expected to be more effective in using social media for sexual health purposes.

Furthermore, people who lack access to targetspecific comprehensive sex education in their offline environment (e.g., because of their cultural, religious, or family background or sexual minority status) are more intensive users of social media sex education. Interview studies, for example, show how LGBTQ+ youth use search engines to access social media sex education (Delmonaco et al., 2020; Magee et al., 2012).

### **Characteristics of Usage Situations**

The search for sexuality education on social media can be triggered by different situational factors, such as normative developmental tasks (e.g., first visit to the gynecologist), relationship or health problems (e.g., recent sexual dysfunction, conflict, or breakup), surprising public events (e.g., unexpected coming-out of a celebrity as homosexual, HIV-positive, or transgender) as well as regular public events (e.g., World AIDS Day; Döring, 2017).

# What Are the Effects of Sex Education on Social Media?

The aim of sex education is to foster people's sexual literacy so that they are better equipped to protect and improve their sexual health, rights, and well-being. However, the actual results of sex education vary significantly according to who uses what type of social media sex education in which way. Several negative and positive effects are discussed.

### **Negative Effects**

Public and academic debates about the effects of online sexual activities usually have a fairly strong negative bias (Döring, 2009), sometimes even to the point of moral panic. Overwhelmingly, problematic online content such as pornography, risky online behavior such as sexting, and online victimization such as the sexual solicitation and grooming of children by adults are addressed. Social media are consequently regarded mainly as a risk factor in adolescent sexual socialization (e.g., Cookingham & Ryan, 2015; Randall & Langlais, 2020).

In line with this negative framing of OSA is a skeptical view of social media sex education. Based on the abovementioned studies that demonstrate fairly high error rates in social media sex education material, it is assumed that negative effects in terms of misinformation are the main effect (e.g., Kaynak et al., 2020; Ortiz-Martinez et al., 2017). As a consequence, young people are advised to stay away from social media sex education and turn to their parents, teachers, or professional sex educators at school instead.

Furthermore, the social media sex educators' open and detailed conversations about diverse sexual lifestyles and their focus on pleasure are sometimes regarded as a threat. Peer sex educators exposing their more or less uncommon sexual lifestyles do not automatically foster sexual empowerment, according to critics, but can easily put pressure on young people who might think their conventional sex lives are "not good enough" and might feel obliged to take more sexual risks or become confused about their sexual or gender identity (Cookingham & Ryan, 2015). This type of criticism against comprehensive and inclusive sex education is not new; rather, it has been updated for the internet age. To date, empirical research has not confirmed any negative effects of open conversations on sexuality, whether offline or online (Grose et al., 2013).

Last but not least, the often-overlooked misogynist online communities, described above as the "Manosphere," which aggressively promote the objectification of girls and women in their peer sex education, pose a danger in terms of the promotion of sexual violence (Abdulla, 2020; Ribeiro et al., 2020). Several calls for censorship of this kind of social media content have been made, and the social media platform Reddit, for example, banned two of its Incel subreddits (r/ incels, r/Braincels) in reaction to public protest. Nevertheless the "Manosphere" continues to grow.

### Positive Effects

Hypotheses on social media sex education's negative or positive impact often depend on assumptions about healthy sexual upbringing. The abovementioned hypotheses on negative effects regard social media sex education material as mostly disruptive as it confronts young people with supposedly age-inappropriate or excessive sexual information.

Hypotheses that predict positive effects have different underlying assumptions. They do not picture the pre-social media era as a phase of healthy and happy upbringings that was abruptly disturbed by explicit online content and risky OSA. Instead, they point to the many problems young people had and still have to face in terms of sex-negative, fear-mongering, shameand guilt-inducing, sexist, racist, ableist, ageist, homophobic, transphobic, and other discriminatory attitudes. Against this backdrop, social media sex education is regarded as a helpful tool to promote a sex-positive, inclusive perspective on sexuality that takes the values of the SRHR approach seriously. In interview studies and surveys, social media users overwhelmingly report positive effects of social media sex education, such as knowledge gain, identity validation, encouragement, reassurance, and improved agency (e.g., Bauermeister et al., 2019; Cover et al., 2020; Day & Christian, 2017; Döring & Mohseni, 2018; Miller, 2017; Schulz et al., 2020; Simon & Daneback, 2013).

Strong positive effects, albeit anecdotal, are also visible across all comment sections of social media, where the audience enthusiastically thanks the social media sex educators for their helpful content: "I absolutely love how positive u are!! Some of us are a bit underage but it's pretty great learning about how u can explore ur sexualityyy"; "I wish you were our health class teacher instead of the guy we got stuck with in school"; and "OMG thank you I have no one to talk to about sex."

### Conclusion

What most typifies sex education on social media is the large amount and high reach of very personal UGC provided by individual professional sex educators and lay persons serving as peer sex educators. While lack of information quality control and quality deficiencies in terms of error rates are a common concern, respective studies are inconclusive as they do not provide comparative data or realistic benchmarks regarding error rates in offline contexts. While it appears that social media sex education often addresses topics that are neglected in traditional sex education (e.g., focus on pleasure and focus on adults as target group), hypotheses on the thematic scope of social media education need to be tested. Online and social media sex education is popular among internet users because it allows easy, anonymous, shame- and guilt-free access to a broad variety of sexual information as well as sexual role models. Researchers point to both negative and positive effects of social media sex education (e.g., sexual misinformation or sexual empowerment).

Future research should aim at closing five main research gaps:

- The core questions of who the most influential social media sex educators are and what the most influential social media sex education materials are need to be answered at national and international levels. The respective answers should be updated regularly by means of monitoring.
- 2. Based on this monitoring of the social media sex education landscape, it is possible to carry out systematic analyses of the topical scope and information quality, which should provide comparative data regarding offline sex education.
- More attention should be dedicated to social media sex educators' approaches and ethical frameworks, particularly when it comes to approaches that dismiss the SRHR framework.
- User and usage studies are needed that enable a better understanding of how and where different target groups can be reached on social

media platforms. A particular focus on underserved target groups is advisable.

5. Comprehensive studies on social media sex education effects are needed that cover both negative and positive effects in a balanced way, are backed up with sound theories, and use valid effect measures.

For professionals in the field of sexual health and sexual education, it is important to check social media regularly, to see how they, their institutions, and their topics are represented. It is also important for them to speak with their clientele about social media sex education, or even become active on social media themselves. Digital channels are essential not only for the sexual education of the general population but also for the training of sexual health professionals, who are challenged to include OSA in their sex education curriculum and move at least some of their sex education offerings from offline to online mode.

### **Cross-References**

- ► Dating Apps
- Emerging Adulthood
- ► LGBTIQ+
- Older Adulthood
- Online Dating Sites
- Pornography
- Sex and the Internet
- Sex Dolls and Sex Robots
- Sex Toys

### References

- Abdulla, S. M. (2020). Underground anti-woman and incel movements and their connection to sexual assault. In R. Geffner, J. W. White, L. K. Hamberger, A. Rosenbaum, V. Vaughan-Eden, & V. I. Vieth (Eds.), Springer reference live. Handbook of interpersonal violence across the lifespan (pp. 1–26). Cham, Switzerland: Springer. https://doi.org/10.1007/978-3-319-62122-7\_198-1
- Adams, M., Oye, J., & Parker, T. (2003). Sexuality of older adults and the Internet: From sex education to cybersex. *Sexual and Relationship Therapy*, 18(3), 405–415. https://doi.org/10.1080/1468199031000153991

- Allen, A., Nguyen, B., Nagalla, R., & Jensen, J. (2012). Social media and the IUD – A YouTube content analysis. *Contraception*, 86(3), 316. https://doi.org/10. 1016/j.contraception.2012.05.115
- Bauermeister, J. A., Muessig, K. E., LeGrand, S., Flores, D. D., Choi, S. K., Dong, W., et al. (2019). HIV and sexuality stigma reduction through engagement in online forums: Results from the HealthMPowerment intervention. *AIDS and Behavior*, 23(3), 742–752. https://doi.org/10.1007/s10461-018-2256-5
- Bratich, J., & Banet-Weiser, S. (2019). From pick-up artists to Incels: Con(fidence) games, networked misogyny, and the failure of neoliberalism. *International Journal* of Communication, 13, 5003–5027.
- Cohn, A., & Richters, J. (2013). 'My vagina makes funny noises': Analyzing online forums to assess the real sexual health concerns of young people. *International Journal of Sexual Health*, 25(2), 93–103. https://doi. org/10.1080/19317611.2012.719852
- Cookingham, L. M., & Ryan, G. L. (2015). The impact of social media on the sexual and social wellness of adolescents. *Journal of Pediatric and Adolescent Gynecol*ogy, 28(1), 2–5. https://doi.org/10.1016/j.jpag.2014.03. 001
- Cover, R., Aggleton, P., & Clarke, K. (2020). Education and affinity? Pedagogies of sexual citizenship in LGBTIQ youth support videos. *Journal of Youth Studies*, 23(2), 221–236. https://doi.org/10.1080/13676261. 2019.1593334
- Day, F., & Christian, A. J. (2017). Locating black queer TV: Fans, producers, and networked publics on YouTube. *Transformative Works and Cultures*, 24. https://doi.org/10.3983/twc.2017.0867
- Delmonaco, D., Marcu, G., & Haimson, O. L. (2020). Search engines and the sex education information practices of LGBTQ+ youth. *Proceedings of the Association for Information Science and Technology*, 57(1). https://doi.org/10.1002/pra2.364
- Döring, N. (2017). Sexualaufklärung im Internet: Von Dr. Sommer zu Dr. Google[Online Sexuality Education: From Dr. Sommer to Dr. Google] [Sexuality education on the Internet: From Dr. Sommer to Dr. Google]. Bundesgesundheitsblatt, Gesundheitsforschung, Gesundheitsschutz, 60(9), 1016–1026. https://doi.org/ 10.1007/s00103-017-2591-0
- Döring, N. (2020a). "Switched On": UNESCO-Konferenz 2020 zur sexuellen Bildung im digitalen Raum. Zeitschrift für Sexualforschung, 33(03), 178–180. https://doi.org/10.1055/a-1213-9618
- Döring, N. (2020b). Erotic fanfiction. In A. D. Lykins (Ed.), *Encyclopedia of sexuality and gender*. Cham, Switzerland: Springer International Publishing; Imprint: Springer.
- Döring, N., Daneback, K., Shaughnessy, K., Grov, C., & Byers, E. S. (2017). Online sexual activity experiences among college students: A four-country comparison. *Archives of Sexual Behavior*, 46(6), 1641–1652. https:// doi.org/10.1007/s10508-015-0656-4

- Döring, N., & Mohseni, M. R. (2018). Are online sexual activities and sexting good for adults' sexual Wellbeing? Results from a National Online Survey. *International Journal of Sexual Health*, 30(3), 250–263. https://doi.org/10.1080/19317611.2018.1491921
- Döring, N., & Poeschl, S. (2020). Experiences with diverse sex toys among German heterosexual adults: Findings from a national online survey. *Journal of Sex Research*, 57(7), 885–896. https://doi.org/10.1080/00224499. 2019.1578329
- Döring, N. M. (2009). The Internet's impact on sexuality: A critical review of 15years of research. *Computers in Human Behavior*, 25(5), 1089–1101. https://doi.org/10. 1016/j.chb.2009.04.003
- Fileborn, B., Lyons, A., Hinchliff, S., Brown, G., Heywood, W., & Minichiello, V. (2017). Learning about sex in later life: Sources of education and older Australian adults. *Sex Education*, *17*(2), 165–179. https://doi. org/10.1080/14681811.2016.1273829
- Fine, M. (1988). Sexuality, schooling, and adolescent females: The missing discourse of desire. *Harvard Educational Review*, 58(1), 29–54. https://doi.org/10. 17763/haer.58.1.u0468k1v2n2n8242
- Fine, M., & McClelland, S. (2006). Sexuality education and desire: Still missing after all these years. *Harvard Educational Review*, 76(3), 297–338. https://doi.org/ 10.17763/haer.76.3.w5042g23122n6703
- Garrity, J. M. (2010). A review of older, wiser, sexually smarter: 30 sex ed lessons for adults only. *American Journal of Sexuality Education*, 5(1), 88–95. https:// doi.org/10.1080/15546121003748814
- Grose, R. G., Grabe, S., & Kohfeldt, D. (2013). Sexual education, gender ideology, and youth sexual empowerment. *The Journal of Sex Research*, 51(7), 742–753. https://doi.org/10.1080/00224499.2013.809511
- Guse, K., Levine, D., Martins, S., Lira, A., Gaarde, J., Westmorland, W., et al. (2012). Interventions using new digital media to improve adolescent sexual health: A systematic review. *The Journal of Adolescent Health*, 51(6), 535–543. https://doi.org/10.1016/j.jadohealth. 2012.03.014
- International Planned Parenthood Federation (IPPF). (2008). Sexual rights: An IPPF declaration. London. https://www.ippf.org/sites/default/files/sexualright sippfdeclaration 1.pdf
- Johnston, J. (2017). Subscribing to sex edutainment. *Tele*vision & New Media, 18(1), 76–92. https://doi.org/10. 1177/1527476416644977
- Kaynak, Y., Kaya, C., & Aykaç, A. (2020). Youtube as a source of premature ejaculation. *Revista Internacional De Andrologia*, 18(2), 63–67. https://doi.org/10.1016/j. androl.2018.12.002
- Lasswell, H. (1948). The structure and function of communication in society. In L. Bryson (Ed.), *The communication of ideas. A series of addresses* (pp. 32–51). New York: Harper.
- Longhurst, R. (2009). YouTube: A new space for birth? *Feminist Review*, 93(1), 46–63. https://doi.org/10. 1057/fr.2009.22

- Lovelock, M. (2019). 'My coming out story': Lesbian, gay and bisexual youth identities on YouTube. *International Journal of Cultural Studies*, 22(1), 70–85. https://doi.org/10.1177/1367877917720237
- Magee, J. C., Bigelow, L., Dehaan, S., & Mustanski, B. S. (2012). Sexual health information seeking online: A mixed-methods study among lesbian, gay, bisexual, and transgender young people. *Health Education & Behavior*, 39(3), 276–289. https://doi.org/10.1177/ 1090198111401384
- Manduley, A. E., Mertens, A., Plante, I., & Sultana, A. (2018). The role of social media in sex education: Dispatches from queer, trans, and racialized communities. *Feminism & Psychology*, 28(1), 152–170. https:// doi.org/10.1177/0959353517717751
- Mangone, E. R., Lebrun, V., & Muessig, K. E. (2016). Mobile phone apps for the prevention of unintended pregnancy: A systematic review and content analysis. *JMIR mHealth and uHealth*, 4(1), e6. https://doi.org/ 10.2196/mhealth.4846
- Marques, S. S., Lin, J. S., Starling, M. S., Daquiz, A. G., Goldfarb, E. S., Garcia, K. C. R., et al. (2015). Sexuality education websites for adolescents: A frameworkbased content analysis. *Journal of Health Communication*, 20(11), 1310–1319. https://doi.org/10.1080/ 10810730.2015.1018621
- Masanet, M.-J., & Buckingham, D. (2015). Advice on life? Online fan forums as a space for peer-to-peer sex and relationships education. *Sex Education*, 15(5), 486–499. https://doi.org/10.1080/14681811.2014.934444
- McBean, S. (2014). Remediating affect: "Luclyn" and lesbian intimacy on YouTube. *Journal of Lesbian Studies*, 18(3), 282–297. https://doi.org/10.1080/10894160. 2014.896617
- Miller, B. (2017). YouTube as educator: A content analysis of issues, themes, and the educational value of transgendercreated online videos. *Social Media* + *Society*, 3(2), 1– 12. https://doi.org/10.1177/2056305117716271
- Miller, J. F. (2019). Youtube as a site of counternarratives to transnormativity. *Journal of Homosexuality*, 66(6), 815–837. https://doi.org/10.1080/00918369.2018. 1484629
- Mitchell, K. J., Ybarra, M. L., Korchmaros, J. D., & Kosciw, J. G. (2014). Accessing sexual health information online: Use, motivations and consequences for youth with different sexual orientations. *Health Education Research*, 29(1), 147–157. https://doi.org/10.1093/ her/cyt071
- Müller, C., Oosterhoff, P., & Chakkalackal, M. (2017). Digital pathways to sex education. *IDS Bulletin, 48* (1). https://doi.org/10.19088/1968-2017.106
- Mustanski, B., Greene, G. J., Ryan, D., & Whitton, S. W. (2015). Feasibility, acceptability, and initial efficacy of an online sexual health promotion program for LGBT youth: The Queer Sex Ed intervention. *Journal of Sex Research*, 52(2), 220–230. https://doi.org/10.1080/ 00224499.2013.867924
- Nguyen, L. H., Tran, B. X., Rocha, L. E. C., Nguyen, H. L. T., Yang, C., Latkin, C. A., et al. (2019). A systematic review

of eHealth interventions addressing HIV/STI prevention among men who have sex with men. *AIDS and Behavior*; *23*(9), 2253–2272. https://doi.org/10.1007/s10461-019-02626-1

- Ortiz-Martinez, Y., Ali-Salloum, W., González-Ferreira, F., & Molinas-Argüello, J. (2017). Hiv videos on YouTube: Helpful or harmful? *Sexually Transmitted Infections*, 93(7), 481. https://doi.org/10.1136/ sextrans-2017-053197
- Paul, J., Boraas, C. M., Duvet, M., & Chang, J. C. (2017). Youtube and the single-rod contraceptive implant: A content analysis. *The Journal of Family Planning and Reproductive Health Care*, 43(3), 195–200. https://doi. org/10.1136/jfprhc-2016-101593
- Randall, J., & Langlais, M. (2020). Social media and adolescent sexual socialization. In A. D. Lykins (Ed.), *Encyclopedia of sexuality and gender* (pp. 1–10). Cham, Switzerland: Springer International Publishing; Imprint: Springer. https://doi.org/10.1007/978-3-319-59531-3 29-1
- Ribeiro, M. H., Blackburn, J., Bradlyn, B., de Cristofaro, E., Stringhini, G., Long, S., et al. (2020). *The evolution* of the manosphere across the Web. https://arxiv.org/ pdf/2001.07600
- Schulz, D., van der Woud, A., & Westhof, J. (2020). The best indycaster project: Analysing and understanding meaningful YouTube content, dialogue and commitment as part of responsible management education. *The International Journal of Management Education*, 18(1), 100335. https://doi.org/10.1016/j.ijme.2019. 100335
- Simon, L., & Daneback, K. (2013). Adolescents' use of the internet for sex education: A thematic and critical review of the literature. *International Journal of Sexual Health*, 25(4), 305–319. https://doi.org/10.1080/ 19317611.2013.823899
- Todaro, E., Silvaggi, M., Aversa, F., Rossi, V., Nimbi, F. M., Rossi, R., et al. (2018). Are social media a problem or a tool? New strategies for sexual education. *Sexol*ogies, 27(3), e67–e70. https://doi.org/10.1016/j.sexol. 2018.05.006
- UNESCO. (2018). International technical guidance on sexuality education: an evidence-informed approach (Rev. ed). https://unesdoc.unesco.org/ark:/48223/ pf0000260770
- Whiteley, L. B., Mello, J., Hunt, O., & Brown, L. K. (2012). A review of sexual health web sites for adolescents. *Clinical Pediatrics*, 51(3), 209–213. https://doi. org/10.1177/0009922811423311
- WHO (World Health Organization) & Bundeszentrale für gesundheitliche Aufklärung (BZgA). (2010). Standards for sexuality education in Europe: A framework for policy makers, educational and health authorities and specialists. Federal Centre for Health Education, BZgA.
- World Association for Sexual Health (WAS). (2014) Declaration of sexual rights. https://worldsexualhealth.net/ wp-content/uploads/2013/08/Declaration-of-Sexual-Rights-2014-plain-text.pdf