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Moving school-based CSA prevention education online: Advantages and challenges of the “new normal”

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ABSTRACT

One of the many outcomes of the COVID-19 pandemic was a shift in the delivery of elementary (primary) education. Schools transitioned swiftly to e-learning and prioritized education that was already or could be easily adapted to virtual formats. Given the paucity of online content available, it is not likely that child sexual abuse (CSA) prevention education was prioritized.

Given that CSA prevention education has demonstrated success in increasing knowledge, protective behaviors, and disclosures, and the potential long-term need for e-learning options, there is a demand for an exploration of how CSA prevention can be implemented using e-learning strategies. In the current discussion, we explore how school-based CSA prevention education could be implemented in a “new normal” context of e-learning. We first present the existing e-learning content for CSA prevention education. We then describe how best practices for prevention education can be applied to e-learning. Finally, we present considerations for the use of e-learning specifically for CSA prevention education.

In short, implementing CSA prevention programs through e-learning offers many affordances for program accessibility and reach, flexibility in implementation and opportunities for greater exposure to content, and a wide range of ways to demonstrate effective skills and engage children in cycles of practice and feedback. E-learning, may also, however, limit important conversations between children and trained instructors that lead to disclosures.

The extant literature leaves us unsure as to whether implementing CSA prevention programs through e-learning will result in better or worse outcomes for children. However, given the increasing demand for e-learning options, and the promise of some new e-learning programs, further research on the effectiveness of e-learning CSA prevention programs is warranted.

Child sexual abuse (CSA) prevention education programs are currently mandated for use in K-12 (approximately ages 5–18) classrooms by 27 US states 1 and recommended by international guidelines for sexuality education (Ecker & Kirby, 2009; Women & UNICEF, 2018). Many of these programs have demonstrated success in increasing students’ knowledge of how to respond to potentially victimizing situations (e.g., identifying abuse), self-protective factors (e.g., building confidence to distinguish safe and unsafe

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1 An additional 8 US states recommend or allow CSA prevention education in classrooms.

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touching) and how to disclose (i.e., reporting maltreatment to safe, reliable adults) if they've been victimized (see for review Walsh et al., 2018). Further, some studies have found increases in disclosures after receipt of prevention education (Finkelhor & Dziuba-Leatherman, 1995; Gibson & Leitenberg, 2000; Oldfield et al., 1996). Explanations for what prompted disclosure have specifically identified presentations at school (McElvaney, 2015; McGill & McElvaney, 2022). These programs are most often designed to be delivered in-person and use group learning in classrooms, skill-building activities, reinforcement materials, and collaborative activities (Walsh et al., 2018). Overall, the evidence supports the implementation of these programs and underscores their importance as one part of a comprehensive prevention ecology (Letourneau et al., 2017; Madigan et al., 2018; Walsh et al., 2018).

At the start of the 2020–2021 academic year, 88 % of US parents reported that the way their child attended school changed because of COVID-19; Most (66 %) reported their child’s classes moved exclusively to online learning (Population Reference Bureau analysis of the U.S. Census Bureau, 2021). By the start of the following academic year (2021-2022), most parents still reported that their child received instruction at home with e-learning materials. For many schools, this unforeseen change in instruction meant that priorities were placed first on setting up infrastructure for e-learning and then providing instruction for core subjects and requirements for grade promotion and graduation (Lennox et al., 2021). Requirements for subjects for which e-learning was more challenging (e.g., physical education, music, art) were often tempered (UNESCO et al., 2020).

Although empirical data are not yet available, we suspect that CSA prevention education has not been implemented widely in e-learning. Given the importance of CSA prevention education, the demonstrated success in increasing knowledge and disclosures, and the potential long-term need for e-learning options, an exploration of how CSA prevention can be implemented using e-learning strategies is warranted. In the current discussion, we first summarize the few e-learning CSA prevention education programs presently available. We then review key factors for successful CSA prevention education and explore how those factors might be adapted to e-learning contexts. Finally, we consider features of e-learning that could improve, or compromise, the delivery of CSA prevention education.

1. Current CSA prevention education

A primary barrier to implementation is likely the availability of evidence-based online prevention programs. Of the child-focused, school-based CSA primary prevention programs listed in the California Evidence-Based Clearinghouse for Child Welfare, all are designed to be delivered in-person. In addition, all the 24 randomized control trials of CSA prevention programs that were included in the most recent Cochrane review were implemented face-to-face on school campuses (Walsh et al., 2015). Similar findings were reported in a review of CSA prevention programs implemented in China (Zhang et al., 2021), and only two e-learning interventions were found in a review of CSA prevention programs implemented in South Korea (Shin et al., 2019; Zhang et al., 2021).

A handful of e-learning CSA prevention programs do exist (Jones et al., 2020; Kim et al., 2018; Moon et al., 2017; Müller et al., 2014). One program, “Cool and Safe”, is a web-based program delivered asynchronously. Although it can be completed by children independent of adult instruction, it is intended for use in school or family contexts. In the only published evaluation that we could identify, 286 children ages 8–11 years completed the program in classrooms using headphones and individual computers (Müller et al., 2014). Another program, “Sexual Abuse: What Should I do?” is also implemented asynchronously either using a mobile app or on a home computer (Moon et al., 2017). A third program is a hybrid program designed for use by individuals or in classes. It includes a recording of a puppet show available as an on-demand video, and game-like quizzes to engage children in repeated concept learning (Kim et al., 2018). Finally, Orbit is an e-learning serious game for CSA prevention. It is designed to be played at least weekly over a period of 5–10 weeks alongside other classroom activities that form a program of extended learning to reinforce the game’s key messages (Jones et al., 2020). All four studies found programs to improve knowledge and safe behaviors, with effect sizes similar to findings of in-person studies.

There is also a reasonable amount of multi-media CSA prevention content available for curation to asynchronous e-learning. The Committee for Children, for example, has publicly available “how-to...” guides and videos. Known as the Hot Chocolate Talks, these resources educate parents about the importance of talking with their children about child sexual abuse, and importantly, model strategies for doing so. The Barbara Sinatra Children’s Center similarly has created videos for e-learning. They developed sequences of animated videos for youth in grades K-12 (typically ages 5–18 years) and made them available for streaming, downloading, or sharing on their website (https://fightchildabuse.org). In addition, they partner with organizations such as the Boy Scouts of America to create agency-specific videos for internal use. The National Center for Missing and Exploited Children (NCMEC) created a package of prevention education for online safety available via their NetSmartz platform that includes both in-person presentations for adults and two animated video series for children and youth (https://www.missingkids.org/netsmartz).

2. Adapting characteristics of effective CSA prevention education to E-learning

Decades of research on school-based prevention education (including and beyond CSA prevention) have yielded best practices (Gaffney, Farrington, et al., 2019; Gaffney, Ttofi, & Farrington, 2019; Kenny & Wurtele, 2012; Nation et al., 2003). To start, effective programs are outlined using logic models and are based on the latest research (Fraser & Galinsky, 2010). Effective programs are developmentally appropriate in their content, delivery length, and delivery frequency (Onrust et al., 2016). Effective programs are positively framed, avoid scare tactics, and use varied methods to convey information such as group learning, skill-building activities, reinforcement materials, role-play, and collaborative activities (Gubbels et al., 2021; Lemaigne et al., 2017). They use a multi-level ecological approach with educational components for children, parents, teachers/staff, school administration, and the community (Gaffney et al., 2021; Kenny & Wurtele, 2012). Instructors for effective programs are well-trained in CSA prevention and serve as role
models for best practices in staying safe. Finally, effective programs are continuously improved through an iterative process of implementation, evaluation, and refinement. Suggestions for how these best practices can be applied to the creation and use of e-learning programs for CSA prevention education are outlined in Table 1.

3. Considerations for CSA prevention education in E-learning context

There are some features of e-learning for which we can only speculate how they could improve or compromise the delivery of CSA prevention education (Table 2).

3.1. Program accessibility and reach balanced with adaptation and fidelity

E-learning will extend the reach of CSA prevention beyond the classroom but will then be limited to children with access to a computer or smart device, and high-speed internet with sufficient bandwidth to facilitate video streaming and/or video conferencing. In 2021, approximately 1-in-10 US households with children reported not having a computer or digital device and internet available for educational purposes (Population Reference Bureau analysis of the U.S. Census Bureau, 2021). This is similar in the UK (Coleman, 2021). Not surprisingly, youth living in low-income households were less likely than their peers to have access to a computer and internet. Low-income youth also tend to demonstrate less knowledge of CSA risk (Holloway & Pulido, 2018), suggesting that providing prevention education through e-learning could compound already existing disparities. Additionally, an increased ratio between implementers and students may impede children's access to a trustworthy adult, thus creating a barrier for children to ask personal questions, discuss sensitive material, and report their abuse.

At a pedagogical level, e-learning may demand that content is broken up or modularized to enable its use for students with varying internet quality and hardware (Mayer, 2019). It may demand greater collaboration with support agencies such as helplines to facilitate disclosure and providing clearer links to these co-curricular services for program participants (Mathieu et al., 2021). Greater geographical reach would be welcomed, and may even extend beyond state or national borders, meaning that the prevention content must be tailored for different audiences, prevailing laws and policies, and cultural acceptability of CSA prevention materials and resources (Radford et al., 2020). Some tailoring of content (e.g., to key messages) and approaches (e.g., delivery) presents challenges to program fidelity and may mean that previously established evidence of effectiveness no longer holds. In sum, implementing prevention programs through e-learning offers many affordances for program accessibility, and program reach, but requires cognizance of the disparities in access, potential strain on teacher-student communication, and compromised program fidelity.

3.2. Time and content

Some prevention programs are presented in single sessions (Walsh et al., 2018) but many use multiple sessions over several weeks (e.g., Walsh et al., 2018). Much of the literature supports more frequent and shorter sessions compared to fewer and longer sessions to improve acquisition and retention of knowledge and skills (Kenny & Wurtele, 2012). However, programs are typically competing for limited classroom time and thus are often reduced to the shortest amount of time necessary to cover material.

| Characteristics of effective CSA prevention education programs | Applied to e-learning, this may look like: |
|---------------------------------------------------------------|------------------------------------------------------------------|
| Include a whole school approach including multi-component interventions | Incorporate aspects of content in other e-learning subjects and on classroom/school home pages |
| Have varied teaching methods (pedagogies) including active skill-based learning, psychosocial focus, and social-norms approach to risk prevention | Use games, live discussion, animations and text, videos, and examples using platforms and technologies most familiar to children |
| Use developmental sequencing of content (curriculum) which is appropriate to students' age, maturity, and ability (addressing students with diverse needs), inclusive of difference, socially relevant, and culturally relevant | Tailor content for different audiences, prevailing laws and policies, and cultural acceptability of CSA prevention materials and resources |
| Have a “theory of change” for the program, that identifies the desired short-, medium-, and long-term program outcomes and backwards maps to program components, conditions, and contexts that will create the desired change | Incorporate e-learning components in theory of change |
| Are based on the best available evidence | Include evidence on best practices for e-learning |
| Have clear goals and outcomes | Incorporate goals specific to e-learning such as completion of activities, quizzes, and discussion |
| Are of adequate length and intensity | Design sessions to be developmentally appropriate length, and modularize session content accordingly |
| Are positively framed, avoiding scare tactics or confrontational strategies | Positively frame content, avoid scare tactics |
| Include effective monitoring and evaluation of both process (i.e., implementation) and outcomes | Monitor student/instructor login and web activity |
| Support from school leadership teams and relevant authorities | Automate pre-post surveys |
| Engage communities, parents, and students | Actively engage school leadership beyond teachers |
| Involve well-trained teachers and highly engaging trustworthy facilitators who can act as positive role models in use of digital technologies, the internet, and mobile devices, and can model safe practices while they are working with students | Seek student and parent input in the design of virtual programming |

Do not create a “stand alone” program but instead one that requires interaction between students and teachers, preferably synchronous/live.
Table 2
Factors to consider in the implementation of e-learning.

|                             | Classroom-based learning                                                                 | E-learning                                                                                   |
|-----------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Access                      | • Limited to students present in classroom                                                | • No limit of geography                                                                      |
|                             | • No requirements of internet or related equipment                                        | • Can access more children                                                                  |
|                             | • Some prevention programs are presented in single sessions but many use multiple sessions over several weeks | • Content must be tailored for different audiences, prevailing laws and policies, and cultural acceptability of CSA prevention materials and resources |
|                             |                                                                                         | • Limited by students’ access to internet and related equipment                               |
| Time                        | • Best practices include role-playing, modeling, practice via active participation, problem solving, and rehearsal, use of videos and small group discussions | • Offers flexibility in the packaging of content to fit time available                        |
|                             | • Expectation is that discussing CSA and offering a resource for reporting will encourage or facilitate disclosures | • May extend the amount of time students spend with the material.                             |
|                             | • Instructors can visually observe students’ behaviors                                    | • Asynchronous learning may make it more difficult for children to engage or stay engaged     |
|                             | • Can be tailored for a group (e.g., classroom), but not individual                       | • Best practices for learning by doing becomes more difficult                                |
|                             |                                                                                         | • Anonymous group discussions in e-learning settings tend to be more egalitarian              |
|                             |                                                                                         | • E-learning that includes an adult monitor or teacher could offer the same opportunities for and likelihood of disclosing CSA |
|                             |                                                                                         | • Instructors may not be able to observe students’ behaviors                                 |
|                             |                                                                                         | • Allows children, parents, and/or teachers to customize learning formats and timing of the lessons to best suit the developmental needs of the child/age group and enhance interest, engagement, and knowledge retention. |
|                             |                                                                                         | • E-learning puts more onus on parents to engage with children in their learning             |
|                             |                                                                                         | • Learning about CSA at home may stimulate difficult but necessary discussions with parents OR it may also be viewed as an invasion of privacy |

An e-learning format offers flexibility in the packaging of content to fit time available. If taught asynchronously or in blended mode, e-learning may extend the amount of time students spend with the material. Any portion of the lesson that could be completed asynchronously (e.g., learning safety terminology) could be completed or repeated as homework offering the additional potential benefit of exposing parents to program messages (to the extent that parents are involved in homework). This mixed approach may be more advantageous for older children and youth than younger ones for whom synchronous learning is likely to be more effective (Lee et al., 2013). However, even for older children, asynchronous learning may make it more difficult for them to engage or stay engaged in the lessons as they are separated from the ecosystem of social and cognitive supports, they have face-to-face in classrooms. Another challenge for e-learning in CSA prevention programs will be finding ways to condense content and enable interactions with content to promote maximum engagement relative to time. In sum, children may be able to spend more time with prevention content when implemented through e-learning compared to face-to-face. However, without a teacher to encourage participation, this extended time may not translate to improved learning.

3.3. Use of interactive and skills-based learning

Many CSA prevention programs designed to be implemented in the classroom use best practices for behavioral skills learning such as role-playing, modeling, practice via active participation, problem solving, and rehearsal (Blumberg et al., 1991; Cecen-Erogul & Kaf Hasirci, 2013; Chen et al., 2012; Daigneault et al., 2012). Although not impossible to do with e-learning, the execution would undoubtedly be different from in-person. Learning skills to recognize, react, and report safe and unsafe situations is unlikely to be effective via live video recording of previously in-person lessons that children will watch passively. In this respect, children need to learn by doing. When designing an e-learning program, creators should be sure to harness a wide range of persuasive role models in the form of characters and/or animations who can demonstrate effective skills and engage children in cycles of practice and feedback. Other common practices in CSA prevention programs include use of videos and small group discussions (Blumberg et al., 1991; Cecen-Erogul & Kaf Hasirci, 2013; Daigneault et al., 2012; Tutty, 1997). Researchers have found that compared to group discussions face-to-face, anonymous group discussions in e-learning settings tend to be more egalitarian (Jong et al., 2012). That is, students in anonymous discussions in e-learning settings tend to collaborate proportionately whereas in-person there tends to be more activity from one or two students than all others in the group. This option – online discussion- may be particularly appealing for children with preference for written (as opposed to spoken) language and may only work for children with a certain level of written language skills. For example,
online discussion is likely to work better for children in grades 5 and higher compared to children in lower grades.

In theory, an option for anonymity in e-learning could facilitate more honest discussions among youth. However, studies suggest that promised anonymity does not necessarily reduce participants' lean toward socially desirable responses (Leikes et al., 2012). Anonymity could also encourage students to be deceptive. Approximately 37% of youth 14–19 years of age report engaging in deception while online (Caspi & Gorsky, 2006). This makes it difficult for program facilitators and teachers to gauge student learning. Well-designed e-learning interactive quizzes, modelled after those used in broader online safety education may be a useful addendum for e-learning programs. When linked to data dashboards accessible to instructors, these offer anonymity for children and youth, while also enabling instructor feedback.

In sum, e-learning may eliminate interactive activities and behavioral skills learning, key components of successful prevention education, but advancing technology may also afford new options not possible with face-to-face learning.

3.4. Impact on disclosures

E-learning will physically separate the trained instructor from the children, which may limit conversations that lead to disclosures or observations of students' feelings of distress. Having an option for discussing sensitive topics using text, a mode of communication often used by youth, may increase the likelihood of engaging in those conversations. Part of the logic model for school-based programs is that discussing CSA and offering a resource for reporting will encourage or facilitate disclosures. Several studies, including a recent meta-analysis, support this notion (Brennan & McElvaney, 2020). In a qualitative meta-analysis, Brennan and McElvaney (2020) found six themes of what factors facilitate disclosures: understanding wrongness of the experience, desiring action or response to the experience, expecting to be believed, being asked, having difficulty coping with the experience, and having access to a trusted person. To our knowledge, there is no literature to support that communicating online (either in video chat or words alone) would increase or decrease likelihood of disclosures or help seeking behavior. What appears most important for disclosures is that the opportunity to make the disclosure exists, and that youth feeling safe and believed (Morrison et al., 2018; Ungar et al., 2009). Moreover, youth often disclose when an adult notices signs and impact of abuse and are asked (Allnock & Miller, 2013). To the extent that e-learning sessions preclude instructors from fully observing youth behavior and establishing strong rapport with students, this may reduce disclosure opportunities.

3.5. Monitoring students for distress

Another important component of CSA prevention education is the ability to monitor children and youth for distress, and for fatigue or restlessness that may indicate the need to alter pace, format, or sequence in lessons. Discussion of polarizing, controversial, and sensitive topics, regardless of experiences of victimization, can be stressful for youth (Sætra, 2021), although there is evidence that exposure to in-person CSA prevention education, specifically, does not increase or decrease students anxiety or fear (Walsh et al., 2015, 2018). Unless explicitly required by the implementer, e-learning affords youth the option to not be seen at all. When youth are not visible to implementers, their non-verbal reactions to material may be difficult to observe. In contrast, many e-learning platforms and video conferencing software allow for private “reactions” to questions posed by the instructor. This option would allow instructors to do regular “check-ins” with individual students to gauge their feelings of discomfort or distress. The use of e-learning tools to tap into learners’ affect could be built into program delivery platforms, and child-friendly rating scales may assist. Sætra (2021), although not referring specifically to CSA prevention education, finds that productive learning with sensitive topics, whether online or offline, has three core elements: (i) good social relationships; (ii) well-established norms for social interaction; and (iii) skillful facilitation.

3.6. Developmental appropriateness of e-learning

Early, consistent, and frequent exposure to information about childhood dangers is most effective in providing students with sustainable self-protective knowledge and skills (Kenny & Wurtele, 2012; Manheim et al., 2019). Program developers must acknowledge students' cognitive and learning abilities as well as their relationships with peers and adults to create developmentally appropriate material for their intended audiences. Younger children will best understand concrete concepts that are provided in short and frequent lessons, with opportunities to revisit concepts incidentally if these can be integrated into everyday classroom life. Education for teenagers can be more abstract and emphasize age-specific risks such as the increased likelihood of human trafficking and dating violence (Kenny et al., 2008). By using various formats such as role play, group discussions, games, and videos, and breaking learning down into manageable sized pieces such as modules, lessons, or chapters (Mayer, 2019). E-learning CSA prevention platforms can allow children, parents, and/or teachers to customize learning formats and timing of the lessons to best suit the developmental needs of the child/age group and enhance interest, engagement, and knowledge retention. Use of techniques such as narration, animation, instructional clips, hypertext, illustrations, infographics, educational games, and simulations could also improve engagement and learning outcomes.

3.7. Parental involvement

Parental involvement in CSA prevention education is an important component to program success (Foster, 2017). Despite parental support for CSA prevention education programs, research regarding parent involvement in CSA curriculum is limited (Rudolph et al., 2018; Walsh & Brandon, 2012). This may be due to the paucity of programs that actively involve parents in child-focused programs.
(Wurtele & Kenny, 2010). Keaton and Gilbert (2020) describe how e-learning has placed more responsibility on parents to engage with their child which will, in turn, contribute to their child’s successes as an e-learning student.

E-learning formats of CSA prevention can assist in engaging parents, guardians, or other support individuals in their children’s education of the topic. This engagement can (1) improve previously reported parent knowledge deficits such as the rates of CSA, perpetrators involved, risk factors, and signs and symptoms associated with this type of maltreatment and (2) better prepare parents to teach their children about CSA. Yet it cannot be assumed that all parents have resources to manage learning at home or are able to comfortably navigate technologies needed to do so. Both under- and over-involved parents, however, could act as a hindrance to their child’s learning (Keaton & Gilbert, 2020; Yang et al., 2022). Additionally, although the proximity to parents while receiving an e-learning CSA prevention curriculum may stimulate difficult but necessary discussions, it may also be viewed as an invasion of privacy, especially by older students. Parents can help children engage in e-learning, but how children perceive the support is likely to determine its effects (Yang et al., 2022).

4. Conclusion

What is apparent at this stage of the global COVID-19 pandemic is that options for virtual learning for all topics, and particularly those that may be overlooked like prevention education, are needed. The limited literature on CSA prevention programs delivered virtually leaves us unsure as to whether implementing these programs will result in better or worse outcomes for children. Because of the mixed literature, we conclude that, when possible, virtual instruction for prevention education should supplement, not replace, in-person instruction. Developers aiming to move e-learning CSA prevention education to e-learning will need to carefully consider how to combine best practices of prevention education with principles of instructional design.

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