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Virtual Delivery of A School-Based Child Sexual Abuse Prevention Program: A Pilot Study

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ABSTRACT

Universal child sexual abuse (CSA) prevention is a public health priority. The prevailing prevention strategy is school-based CSA prevention programming. School closures during the COVID-19 pandemic highlighted the need for flexible modes of delivery, including virtual programs. This pilot examined the virtual delivery of an evidence-based, school-based CSA prevention program, *Safe Touches*, designed to teach CSA-related knowledge and concepts. Using mixed methods, the pilot sought to determine the feasibility of the virtually delivered CSA prevention program. One school district that had previously received *Safe Touches* in-person participated. A total of 176 second grade students participated in the virtual workshop. Post-workshop survey responses from virtual ($N = 37$) and in-person workshops ($N = 60$) were compared descriptively. Mean item scores and response patterns from students who received the virtual workshop were nominally comparable to the student scores from the in-person workshop. Following the virtual workshop, one teacher notified the research team of a disclosure of CSA. Qualitative input from the facilitator and school staff was positive, indicating high student engagement. Results suggest the viability and feasibility of virtual school-based CSA preventive programs. Investment in virtual modes of delivery would ensure all students have access to CSA prevention programming in the future.



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The prevention of child sexual abuse (CSA) is a public health concern of considerable magnitude. In the U.S., it is estimated that 20–26% of girls and 5–8% of boys are victims of CSA prior to age 18 (Finkelhor et al., 2014; Fix et al., 2019). In 2019, more than 60,000 children were determined to be victims of sexual abuse, accounting for approximately 9% of all instances of substantiated child maltreatment (DHHS, 2022). Associated with life-long biopsychosocial consequences (Bebbington et al., 2009; Dube et al., 2005; Molnar et al., 2001; Noll, 2021; Noll et al., 2018), CSA confers a lifetime economic burden estimated to exceed \$9.3 billion (Letourneau et al., 2018). CSA is not limited to

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a particular gender, socioeconomic class, or racial group – all children can be at risk for victimization. Since the 1980s, the prevailing primary prevention strategy is school-based CSA prevention programming. The universal reach of the school system makes it a viable and cost-effective point of intervention (Wurtele, 2009), and several programs have demonstrated effectiveness in increasing children's knowledge of self-protection skills (Bright et al., 2022; Dale et al., 2016; Finkelhor, 2009; McElearney et al., 2021; Miller-Perrin & Wurtele, 1988; Tutty, 1997; Walsh et al., 2018; Weeks et al., 2021; White et al., 2018; Wurtele & Owens, 1997). Moreover, universal CSA prevention programs delivered in schools are linked with facilitating disclosures (i.e., a report to statewide hotlines; Finkelhor, 2007; Gibson & Leitenberg, 2000; Guastafarro et al., under review) – an essential step in stopping and preventing subsequent CSA. Given their reach, effectiveness, and association with disclosures of abuse, school-based programs are an essential aspect of CSA prevention.

In the Spring of 2020, schools were closed as an unequivocally necessary mitigation strategy for the spread of the COVID-19 virus. However, school closures also eliminated the infrastructure for the delivery of evidence-based CSA prevention programming to students, as well as precluded teachers or school staff – the most common reporters of suspected maltreatment to child protective service systems (Sedlak et al., 2010) – from identifying potential abuse or harm and handling disclosures. Compared to archival administrative data from the proceeding 5 years, the observed allegations and investigations in the New York City child protective service system were 29–52% lower than expected between March and May 2020 (Rapoport et al., 2021). Specifically, the number of reports expected from New York City educational personnel ranged from 1153 to 1815, but observed reports ranged from 352 to 822 ($p < .001$), yielding a total deficit of 7,783 reports during the three-month period. If extrapolated nationally, the deficit observed in New York City indicates approximately 276,293 allegations between March to May 2020 were unreported (Rapoport et al., 2021). This aligns with findings from a separate study using administrative data from Florida, in which as many as 212,500 allegations of maltreatment in the U.S. are estimated to have been unreported in March and April 2020 (Baron et al., 2020). The ubiquitous closure of schools was unprecedented and highlighted the need for flexibility in the mode of delivery for preventive education programs, specifically the option for virtual or remotely delivered programs. This paper, which we view as the first step in this line of research, presents a proof-of-concept pilot study designed to ascertain the feasibility of a virtually delivered school-based CSA prevention program.

School-based CSA prevention programs

The school environment is an ideal setting for prevention programming for three main reasons. First, schools serve children across every racial, ethnic, and

socioeconomic status, which allows school-based prevention programs to be delivered universally, reducing the stigmatization of children or families deemed at-risk (Wurtele, 2009). Second, preventive programs use the same social cognitive learning theory principles as used by classroom teachers (Walsh et al., 2018), following a paradigm of instruction, modeling, rehearsal, reinforcement, and feedback (Wurtele et al., 1987). A consistent learning approach maximizes a student's attention and potential success. Finally, teachers and other school staff have frequent and continued contact with children and are trained in identifying signs of abuse, positioning these adults to recognize and report instances of abuse.

Generally, school-based CSA prevention programs provide children with personal safety skills, knowledge to identify boundary violations and unwanted forms of touch or contact, how to refuse approaches or invitations effectively and increase the necessary agency and resources to get help (Finkelhor, 2009; Walsh et al., 2016; Wurtele, 2009; Wurtele & Kenny, 2012). Several programs have demonstrated effectiveness (Bright et al., 2022; Dale et al., 2016; McElearney et al., 2021; Tutty, 1992; Tutty et al., 2020; Weeks et al., 2021; White et al., 2018; Wurtele, 1990; Wurtele & Owens, 1997), including *Safe Touches: Personal Safety Training for Children* (henceforth referred to as *Safe Touches*; Pulido et al., 2015), which is the subject of the current study.

Developed by The New York Society for the Prevention of Cruelty to Children (NYSPCC), *Safe Touches* is designed to teach children in kindergarten through 3rd grade concepts related to the prevention of sexual abuse, including how to identify private parts of the body, the difference between safe and not-safe touches, and the distinction between secrets and surprises (Holloway & Pulido, 2018). Delivered in a single in-person 50-minute workshop in the classroom, two trained facilitators use racially diverse puppets to help children learn and practice four body safety steps: to trust their feelings, try to say no, try to walk away, and tell an adult. Rated as evidence-based by the California Evidence-Based Clearinghouse, *Safe Touches* has demonstrated a significant effect on children's CSA-related knowledge (Holloway & Pulido, 2018; Pulido et al., 2015; Guastafarro et al., 2022a, 2022b). In a cluster randomized trial conducted among 437 second and third graders in the New York City public school system, children increased their knowledge of abuse prevention concepts, with the greatest gains observed among second graders compared to third graders (Pulido et al., 2015). Gains were maintained at one-month post-workshop (Holloway & Pulido, 2018). In a quasi-experimental implementation study (N = 2,029) conducted across five counties in a mid-Atlantic state, second graders significantly increased their CSA-related knowledge after participating in the *Safe Touches* workshop, and gains were maintained 6- and 12-months post-workshop (Guastafarro et al., 2022a). Taken together, empirical studies demonstrate that *Safe Touches* is efficacious

and can be implemented widely to increase CSA-related knowledge; however, implementation had been limited to in-person workshops only.

Virtually delivered child-focused preventive education

Prior to the COVID-19 pandemic, few evidence-based, child-focused, or school-based preventive programs had broached the virtual delivery modality. It is likely that the challenge of recreating the role-playing or interactive elements found in most child-focused prevention programs for the virtual environment was daunting. However, this challenge was acutely confronted in the school closures of Spring 2020, and while many programs were not offered at all, some did their best to adapt to virtual delivery. An in-person pre-kindergarten prevention program, “Safety City,” altered the presentation format to educational videos posted on social media and local coalition webpages (Seegert et al., 2021). This strategy allowed for the possibility of involving more children in the home, the indefinite availability of the videos, and the ability for repeated viewings, thus providing the opportunity for reinforced learning. Following the quick transition to virtual delivery, the Safety City team reflected that with more planning, an interactive videoconferencing platform – such as Zoom – would closely approximate the in-person programming.

Though the arrival of COVID-19 highlighted the need for virtually delivered programs, the utility of a virtual delivery mode is not specific to the circumstances of the pandemic. Virtually delivered preventative education programs may offer an alternative solution to implementation and dissemination goals that is efficient and thereby cost-effective and scalable. This includes to rural areas, which are often underserved for health and mental health services, yet comprise two-thirds of U.S. counties (Hoeft et al., 2018). For example, child-focused virtual educational programs are often viewed simultaneously by parents and siblings (Seegert et al., 2021). This is notable as parental involvement in education is connected to improved early childhood learning (see, Ma et al., 2016). School-based interventions require locally-based facilitators, often more than one, to travel to each classroom. A virtually delivered program reduces travel resources allowing facilitators to reach more students in a shorter period of time, simultaneously reducing the cost of implementation while increasing program reach. Of course, virtually delivered programs require availability of technology. While access is not ubiquitous, the increasing availability of technology makes the provision of virtually delivered services a viable option. Data from the Pew Research Center (2019) suggests 73% of homes have high-speed internet available (56% among low-income families), and 17% of those who do not have internet access at home have access to a smartphone. Indeed, in 2019 the U.S. Census Bureau estimates 95% of children under 18 have home internet access (National Center for Education Statistics, 2022).

Current study

The COVID-19 pandemic highlighted an important gap in prevention education regarding the need for virtually delivered programs, to continue providing critical education to children. Beyond the logistics of shifting evidence-based, in-person programs to virtual delivery, it is essential to ascertain the efficacy of these now virtually delivered programs. The first goal of the current study was to assess the feasibility of delivering *Safe Touches* in second grade classrooms via interactive video conferencing technology (e.g., Zoom; Zoom video Communications Inc, 2021). Leveraging previously collected data from the in-person delivery of *Safe Touches* in the same school district two years prior, we used this pilot study as an opportunity to explore the level of knowledge gained through the virtual workshop. Functioning as a proof-of-concept study, we compared students' self-reported CSA-related knowledge immediately after the virtual *Safe Touches* workshop to knowledge reported immediately after the in-person workshop. The objective was not to demonstrate efficacy but rather to indicate the viability of this approach before committing resources to a more robust evaluation. Secondarily, we sought to explore the acceptability of the virtually delivered program using qualitative input from the facilitator as well as the participating classroom teachers and counselors. Results presented here can be used to inform the development, implementation, and evaluation of virtually delivered school-based CSA prevention programs.

Method

Participants

One school district, comprised of three elementary schools, in a mid-Atlantic state was invited to participate in the pilot study. The district was selected for two reasons: prior receipt of the *Safe Touches* workshop in-person and continued interest in implementing the workshop. Second graders who participated had not previously received the *Safe Touches* workshop. A total of 176 second graders received the virtual workshop in late May or early June of 2021. Of those who received the virtual workshop, 37 students participated in the research (i.e., completed the CSA knowledge survey). Most students (76%) were 8 years old ($M = 7.8$; $SD = 0.46$; Range 7–9), primarily reported being White (92%), and identified as female (51%).

Experimental procedures

All procedures were approved by the Pennsylvania State University Institutional Review Board. The *Safe Touches* workshops were facilitated by one trained facilitator housed within a Child Advocacy Center. Following the

district's standard operating procedures, the schools sent an e-mail to parents notifying them that their students would be participating in the *Safe Touches* workshop. If the parent did not wish for their child to participate in the workshop, they could opt-out. Separately, parents were informed about the corresponding research opportunity via e-mail sent by counselors on behalf of the principal investigator. The e-mail explained the purpose and confidentiality procedures for the survey and contained a REDCap (Harris et al., 2009) survey link through which parents indicated whether or not they agreed to allow their child to participate in the research. Following the workshop, students with parent permission were asked if they wished to participate in the study. Students who assented were then provided with a REDCap link to the survey and, with counselor supervision, completed the survey in class.

Intervention: Safe touches

Adaption for virtual delivery. In 2020, the NYSPCC adapted the *Safe Touches* workshop for virtual delivery while maintaining care for the fidelity of the model. Therefore, the modifications made to the workshop script only reflected superficial changes in delivery format to the online environment (i.e., requiring only one facilitator, delivering all of the interactive dialogue), and not substantive modifications to the scenes or content. For example, a facilitator may ask students: “*How have you been talking to your teachers and school counselor now that you are learning from home?*” and reminding students: “*You can always tell your teacher during eLearning or message your school counselor if you need to talk.*” Additionally, a section of the script that provides tips to the facilitators, was updated with instructions on when to show the skit videos, cues for when the facilitators should unmute the participating children, and general help to successfully facilitate *Safe Touches* in a virtual format. Digital versions of all other relevant materials were developed including: posters used to identify private parts on the body (e.g., areas under a bathing suit); activity booklets sent home with each student; electronic letters of notification for parents and teachers; and follow-up teacher evaluations. The training protocol was revised to train facilitators previously certified to deliver *Safe Touches* in-person in the new virtual protocol, and a checklist was developed to monitor program fidelity.

To accommodate the hallmark of the *Safe Touches* workshop – the puppet-based skits – a videographer was hired to film two facilitators from The NYSPCC training team delivering the skits. The skits were then edited into one video file (<7 minutes in total duration) with intentional pauses to allow facilitators to engage with students and answer questions throughout each recorded skit. The workshop, including the recorded skits and the engagement with students, is 45–50 minutes in duration, the same as in-person delivery. Unique to the virtual adaptation of *Safe Touches*, facilitators also filmed an

additional follow-up skit for classroom teachers to show to students one week after the initial workshop. This two-minute skit was designed to reinforce the workshop learning objectives and provide opportunities for students to ask additional questions.

Workshop delivery. The in-person workshop relies on two facilitators to use puppets to act out scenes teaching body safety rules, then discussing those scenes interactively with the children. In contrast, the virtual workshop uses a hybrid model of a live (virtual) instructor interspersed with prerecorded puppet scenes to teach the body safety skills. Still, in a single 50-minute interactive workshop, one facilitator alternates between live discussion and shared video segments to explain, model, and practice the body safety skills with students. There is flexibility for the workshop to be delivered in one of three delivery configurations: (1) the students, teacher, and counselor are all in the classroom, and the facilitator joins via Zoom, (2) some of the students and a teacher/counselor are in class while others are logged in remotely, and the facilitator joins via Zoom, or (3) the students, teacher, counselor, and facilitator all log in via Zoom (or equivalent). All workshops in this pilot study were delivered in the configuration where the students were in the classroom with a teacher and counselor, and the facilitator joined via Zoom version 5.6.5 (Zoom Video Communications Inc, 2021) to deliver the workshop.

Facilitator training. The facilitator was previously trained to deliver the workshop in-person and had over 2 years of experience implementing the in-person *Safe Touches* curriculum. The NYSPCC training team held a virtual training for the facilitator, during which they reviewed changes to the facilitator script and demonstrated how to use the videos. The facilitator observed two workshops delivered by the NYSPCC team and subsequently submitted two practice videos for fidelity monitoring prior to implementation.

Measures

The brief student survey was comprised of three demographic questions (e.g., age, gender, race) and eight questions rated on a three-point scale of true (2), in-between (1), or false (0). One question functioned as a practice question (i.e., “Cats are better than dogs”) to ensure the student understood the response item. Another item functioned as an assessment of the school environment (i.e., “My school is a happy and safe place to be”). The remaining six items were focused on CSA-related knowledge and were adapted from the Children’s Knowledge of Abuse Questionnaire (CKAQ; Tutty, 1995; Guastaferrero et al., 2022b). A higher score indicates a greater level of knowledge, with items 2 and 6 reversed coded. For the present analysis, results are presented as the percentage of students who answered the item correctly. As such, the item-level responses to the modified CKAQ were re-coded to reflect a correct or incorrect response, with “in-between” coded as incorrect.

We also collected anecdotal feedback from teachers and counselors regarding their perceptions of student engagement and program delivery. The facilitator participated in a short debrief interview with the lead author to inform future training and implementation activities. The qualitative interview was transcribed by a research assistant and reviewed by the research team. De-identified illustrative comments are included in the results section.

Analytic plan

Data were collected using REDCap electronic data capture tools (Harris et al., 2009) and analyzed using SAS v 9.4 (SAS Institute Inc, 2013). Results from the child survey are presented in two ways: the frequency of response endorsement and the item mean score. Data previously collected in this school district during in-person delivery (see Guastafarro et al., 2022b) are presented by way of comparison; however, no statistical tests were conducted between in-person and virtual post-workshop means due to sample size limitations. The objective of comparing responses immediately post virtual and in-person workshops was to indicate if this modality produced similar post-workshop scores as the in-person workshop. Qualitative input from the school staff (teachers and counselors) and facilitator are presented as anecdotes.

Results

The virtual *Safe Touches* workshop was delivered across 10 classrooms in three elementary schools within one district, reaching 176 second grade students. Though only 37 of these children participated in the corresponding research, all students in the classroom received parent permission to participate in the *Safe Touches* workshop.

CSA-related knowledge

Table 1 presents the frequency of response endorsement for the six CSA-related items (items 2–7) and the mean item response immediately post-workshop for students who participated in the workshop virtually ($N = 37$) and previously in-person ($N = 60$). Overall, mean scores on each item were nominally higher among students who received the workshop virtually compared to those who received the workshop in-person. However, the patterns of endorsement indicate comparable levels of knowledge. For example, the greatest proportion of students endorsed false (the correct response) for item 2, which asks if “You have to let grown-ups touch you whether you like it or not.” Similar patterns are found on all other items, with the notable exception of item 7, “Someone you know, even a relative, might want to touch your private parts in a way that feels confusing.” There was more

Table 1. Comparing CSA-related knowledge item responses and means immediate post virtual and in-person workshops.

CSA Questions	Virtual (N = 37)				In-person (N = 60)			
	False	In-between	True	Mean (SD)	False	In-between	True	Mean (SD)
1. Cats are better than dogs.	8	22	7	0.97 (0.64)	30	21	8	0.63 (0.72)
2. You have to let grown-ups touch you whether you like it or not.*	27	6	4	1.62 (0.68)	39	0	6	1.56 (0.68)
3. You can trust your feelings about whether a touch is good or bad.	0	4	33	1.89 (0.31)	7	3	49	1.71 (0.67)
4. It's OK to say "NO" and move away if someone touches you in a way that you don't like.	1	0	35	1.94 (0.33)	5	1	51	1.81 (0.58)
5. A pat on the back from a teacher you like after you have done a good job at school is a safe touch.	1	1	34	1.92 (0.37)	2	6	51	1.83 (0.46)
6. You always have to keep secrets.*	35	1	0	1.97 (0.17)	50	8	0	1.86 (0.35)
7. Someone you know, even a relative, might want to touch your private parts in a way that feels confusing.	5	1	30	1.69 (0.71)	19	10	29	1.17 (0.90)
8. My school is a happy and safe place to be.	1	9	26	1.69 (0.52)	3	5	51	1.81 (0.51)

*Items 2 and 6 were reverse coded for the mean score calculation; higher scores indicate more knowledge.

variability in response endorsement among students who received the workshop in-person than those who received the workshop virtually. Notably, 81% of the students who received the virtual workshop indicated that item 7 was true (correct), whereas 48% of the students who participated in-person indicated the item was true. Overall, a lower proportion of students endorsed the in-between option following the virtual workshop compared to the in-person workshop.

Qualitative input

The feedback from school personnel, including teachers and counselors, was overwhelmingly positive: *“I’m very pleased with how things worked out today. Until next year!”* The counselors and teachers were pleased with the format despite minimal technological challenges, most notably audio issues. The school staff also commented on student engagement: *“Our students enjoyed it just as much as they did in person two years ago.”* No adverse events were reported. The month after implementation, the study team received an e-mail from a teacher indicating that one student made a disclosure (i.e., a report to the statewide hotline) following the workshop. This teacher spoke highly about the virtual program and said, *“the workshop helped a child in [her] classroom with a disclosure.”*

Similarly, feedback from the *Safe Touches* facilitator was mainly positive. When asked about training and preparation, the facilitator said that overall she *“felt prepared to do it. I think [The NYSPCC] did a great job with the videos.”* Where she felt less prepared was *“really just the technology is the only thing that [she] felt ill-prepared for even though it worked out in the end.”* Though the facilitator was used to the in-person script, she shared that she spent “lots” of time reviewing the skits and practicing it at home with her child:

Once I started doing it, it all came back, but . . . I wanted to make sure to keep the integrity of the workshop, and I was doing what I needed to do . . . I didn’t want the kids to feel like ‘um, she doesn’t know what she’s doing.

The facilitator remarked how engaged the students were:

With the kids being as engaged as they were was a surprise because it was the end of the year and they were kind of done. And then here we are in a Zoom. We’re not even in person, and the puppets captivate them [the entire workshop].

She went on to say:

I had one class that seemed a little kind of bored, but they were doing everything that I asked, and they actually did have a lot of good questions at the end. I think they were just a more reserved class, but overall, I thought that they interacted with the material well.

The facilitator conveyed that a contributing factor to her success with delivering the program virtually was the engagement of the school staff. First, the facilitator explained why she had to rely on the counselors:

I couldn't really see the kids and really couldn't hear them. So that was kind of a downfall. I couldn't tell really who was speaking because of course they had their masks on as well. I felt like I didn't have a good full view of the class.

The facilitator said, "*These counselors were wonderful – not everyone is like that in every district.*" In particular:

They were just right on it. You know, they were calling on the kids; they were engaged with the material as well. So, they were, you know, when we were doing the safety tools, they were, you know, leading the kids so that I knew the kids were actually getting it.

The facilitator also explained that the school staff was instrumental in addressing student questions.

Ultimately, the facilitator said she would "absolutely" deliver *Safe Touches* virtually again; though, she said she would always prefer to be in-person. Upon hearing that the schools were interested in implementing the workshop in the next school year, the facilitator said: "*I love that they're already talking about next year. Because obviously if they felt [the virtual] wasn't good, they wouldn't already be interested in next year.*"

Discussion

The important and effective mitigation strategy of closing elementary schools, while estimated to have decreased transmission rates of COVID-19 by 15% (Bayham & Fenichel, 2020), also eliminated the infrastructure for child-focused CSA intervention and prevention efforts. School closures hindered reports of maltreatment to statewide protection systems among the most common reporters, teachers and school staff. The pandemic put a critical spotlight on the need for virtual delivery options for preventative education programs, specifically focused on CSA. In this pilot study, we used the *Safe Touches* curriculum that was adapted for virtual delivery and implemented it in one school district in a mid-Atlantic state that had participated in in-person workshops in prior academic years. Viewed as a proof-of-concept study, the findings presented here suggest the viability of virtual delivery of *Safe Touches*.

The goal was to examine the feasibility of virtual delivery in two ways. First, we leveraged child-level data from prior in-person workshop delivery to compare item-level means between the virtual and in-person workshops. Survey data suggest a similar level of knowledge acquisition between the two delivery modalities. The patterns of item endorsement between virtual and in-person workshops indicate comparable levels of knowledge. The goal of this pilot study was not to demonstrate efficacy of the virtual workshop but rather

to test data collection procedures and level of knowledge post-workshop. We successfully obtained data from 37 students with parent permission and demonstrated a level of knowledge among students who received the workshop virtually compared to students who previously received the in-person workshop. Second, we collected qualitative, anecdotal data from the facilitator and school staff related to the format of the workshop, student engagement, and overall implementation. The feedback was overwhelmingly positive, and the school district expressed interest in scheduling future programming at the end of the pilot study. It was noted by the facilitator that school staff were exceptionally engaged in the virtual workshops. Future implementation research may consider the readiness of school staff to provide CSA prevention education as a potential mediator or moderator of program effects. Beyond knowledge gains and positive impact from the school staff, perhaps one of the most compelling factors for virtual delivery is the disclosure received by school staff in the month following the *Safe Touches* workshop. In our prior research, in which the in-person *Safe Touches* workshop was delivered to 14,235 second graders, we received 29 disclosures during or immediately following the workshop (Guastafarro et al., 2022a). The one report made to school personnel following the virtual workshop suggests that the *Safe Touches* virtual workshop delivery may similarly facilitate disclosures. Future research should continue to explore post-workshop disclosures.

Findings from this small pilot study are encouraging but not without limitation. Notably, the study did not include either a pre-workshop assessment or a control group. This limits our ability to ascertain the starting level of knowledge or if the workshop produced an increase in knowledge. A second limitation is the small and fairly heterogeneous sample. Though the inclusion of previously collected data from an in-person workshop is a strength of the study, implementing in only one district limits the generalizability and representability of the findings. A larger, more representative sample will be an important next step in this line of research. Finally, the workshops in the pilot study were delivered by a facilitator via Zoom to students physically present in the classroom with a teacher and counselor. It remains unknown if knowledge gains are similar in other delivery configurations (e.g., some students in class with a teacher while others logged in remotely or all participants logged in remotely).

The COVID-19 pandemic was the impetus for the transition to a virtual delivery format, but the need for virtual programming extends beyond the context of a global pandemic. If the evidence-based, universal school-based CSA prevention programs are effective and available in a virtual format, the efficiency of the program may be drastically improved. The removal of facilitator travel and the use of only one facilitator per program may offer a cost-effective and scalable prevention strategy, increasing the reach of these programs and reducing access barriers to urban, suburban, and rural areas.

Federal or state funds supporting preventative education programs may be stretched farther to reach more children. The more children these programs are made available to, the greater the likelihood we will achieve public health impact and see a reduction in rates of CSA.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Ethical Standards and Informed Consent

All procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation at The Pennsylvania State University and with the Helsinki Declaration of 1975, as revised in 2000. Informed consent was obtained from all patients for being included in the study.”

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