

ACCOMMODATING PEOPLE SAFETY CURRICULUM FOR DEAF
AND HARD OF HEARING STUDENTS

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Children with disabilities are three to four times more likely to be abused than their non-disabled peers due to the impact of challenges related to behavior, cognition, language, social skills, and communication skills. In September of 2018, the Council for Exceptional Children (CEC) specifically noted the need to establish maltreatment prevention and response curricula and promote research and advocacy surrounding maltreatment of children with disabilities. One common curriculum recommended is Kidpower®. While Kidpower® shows promise in increasing people safety skills and offers some basic accommodations for use with disabled populations, a complete accommodation plan for deaf or hard of hearing students has not been developed. The purpose of this study was to explore how Kidpower® curriculum could be accommodated to meet the unique needs of deaf and hard of hearing students from the perspective of the deaf education community, including deaf adults, deaf education teachers, deaf education teacher preparation faculty, and parents with deaf or hard of hearing children. A combination of focus groups and interviews were utilized to review lessons and homework from the Kidpower® curriculum. Participants gave feedback on obstacles and ideas for accommodations and modifications that would mediate the challenges. Data were inductively coded and analyzed for themes. Findings indicated the deaf education community believes the curriculum needs media components, language modifications and teaching strategies, enhanced visual information, and representation of people and situations related to the lives of deaf and hard of hearing children to be an effective curriculum for this population.

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ACCOMMODATING PEOPLE SAFETY CURRICULUM FOR DEAF AND HARD OF HEARING STUDENTS

Introduction

The Children's Bureau (2019), an office of the U.S. Department of Health and Human Services, reported over half a million child abuse cases and neglect in 2017, a 2.7% rise since 2013. Of those cases, about 8.6% involved child sexual abuse. These statistics only include cases that were conclusively substantiated (Children's Bureau, 2019), meaning statistics are plausibly higher than reported. In a meta-analysis, Jones and colleagues (2012) found children with disabilities were three to four times more likely to be abused than their non-disabled peers. This may be due to the impact of challenges related to behavior, cognition, language, social skills, and communication skills (Council for Exceptional Children [CEC], 2018).

Deaf or hard of hearing (DHH) children face particularly difficult challenges due to lack of access to language from birth. In 2016, 6,337 babies were diagnosed with hearing loss following a newborn hearing screening. However, 19.6% were lost to follow-up, meaning they were not enrolled in early intervention services (Centers for Disease Control [CDC], 2016). Participation in early intervention programs can support the achievement of age-appropriate language outcomes (Moeller, 2000; Yoshinaga-Itano, 2013). However, some children may not receive amplification or access to sign language before school enrollment in preschool or kindergarten without early intervention. Without amplification and access to sign language and/or speech and language therapy, language deprivation occurs, causing delayed language development (Humphries et al., 2016). Delayed language development puts DHH children at risk because they may not recognize, resist, or report maltreatment.

The purpose of this study is to gather stakeholder input related to accommodations

needed for DHH students to access a child safety curriculum that teaches children to recognize, resist, and report maltreatment.

Long-term Effects of Abuse

Research indicates long-term effects of abuse can be extensive and life-altering (Felitti et al., 1998). In 1998, Kaiser-Permanente, a healthcare company, published the first Adverse Childhood Experiences study. Researchers sent a survey to 17,000 members in California regarding their Adverse Childhood Experiences, current health status, and behaviors (Felitti et al., 1998). Adverse Childhood Experiences included abuse, household challenges, and neglect. One type of abuse measured was child sexual abuse. The Adverse Childhood Experiences study revealed a positive correlation between the number of Adverse Childhood Experiences and the risk of negative health and well-being (Felitti et al., 1998). The study's conceptual framework suggested that Adverse Childhood Experiences lead to disrupted neurodevelopment, which causes social, emotional, and cognitive impairment. As a result of social, emotional, and cognitive impairment, individuals engage in risky health-behaviors as a way of coping. Eventually, risky health-behaviors lead to disease, disability, and behavioral problems, ultimately leading to early death (Felitti et al., 1998).

Studies have been conducted to measure the developmental trajectories of children with and without disabilities that experience maltreatment. Results indicated maltreatment in children led to poor school attendance, academic performance, physical health, social difficulties, cognitive dysfunctions, and behavioral problems (Sullivan & Knutson, 2000; Font & Berger, 2015). Felitti and colleagues' (1998) framework suggests that preventing Adverse Childhood Experiences has the potential to promote positive health and well-being. As such, researchers have a responsibility to study prevention programs as a way to address poor outcomes.

Public Awareness and Advocacy

Since 2017, people in the United States have become more aware of sexual abuse and harassment. This is partially due to the #MeToo Movement, popularized by Alyssa Milano on Twitter. The goal of the #MeToo Movement is “to reframe and expand the global conversation around sexual violence to speak to the needs of a broader spectrum of survivors” (MeToo, 2018). Within the first 24 hours of Milano’s tweet, Twitter confirmed 1.7 million tweets included #MeToo, including 85 countries that each had at least 1000 tweets (Park, 2017). Facebook released analytics showing 12 million posts and reported 45% of Facebook users in the United States had a friend who posted using #metoo (Park, 2017). Since the beginning of the movement, many high-profile cases have been prosecuted, including Larry Nassar, the former doctor for the U.S.A. Gymnastics team (Connor, 2018). Awareness in the public sector has prompted governmental agencies, such as The Child Welfare Information Gateway, to provide guidance related to maltreatment prevention.

The Child Welfare Information Gateway, a service of the Children’s Bureau, released a bulletin for professionals in January of 2018 addressing the risk and prevention of maltreatment of children with disabilities. The bulletin called for a triangular approach to child maltreatment, including child-focused prevention, family-focused prevention, and community-level prevention. (CWIG, 2018). As governmental agencies began addressing the prevention of maltreatment, advocacy groups also began providing input regarding solutions.

In September of 2018, the CEC (2018) approved their Policy on the Prevention of and Response to Maltreatment. The CEC recommended building awareness and understanding, enhancing mechanisms for recognizing and reporting, and incorporating prevention and response strategies in everyday practice. The CEC specifically mentioned the need to establish

maltreatment prevention and response curricula and promote research and advocacy surrounding maltreatment of children with disabilities. While governmental agencies and advocacy groups for children with disabilities have focused on prevention strategies some nonprofits have focused on changing legislation to require the implementation of such strategies.

One national non-profit organization, Erin's Law, exists solely to support the passing of such legislation. Erin's Law, as an organization, has campaigned to pass legislation in all 50 states, advocating for mandated community-level, school-level, and child-level prevention programming (Erin's Law, 2018). Other non-profit organizations have also supported the efforts to pass such laws, and as a result, legislation has been passed in 35 states and is pending in 13 states. If legislation is currently mandating prevention programming, and non-profits will continue to lobby for mandated prevention programming in all 50 states, researchers have a responsibility to determine programs' effectiveness.

Evaluations of Child Sexual Abuse Program Effectiveness

Walsh and colleagues (2018) conducted a systematic review and meta-analysis of school-based education programs to prevent CSA. They located 24 studies with 5,802 participants. The meta-analysis showed child self-protective skills and applied knowledge increased in the intervention groups, and the new skills and knowledge were retained at six months. Additionally, there were no harmful effects, such as increased depression or anxiety (Walsh et al., 2018). Only one study (Lee & Tang, 1998) out of the 24 specifically included students with disabilities (SWD). Disaggregated outcomes for SWD were not included in other studies (Walsh et al., 2018).

This is problematic because schools have a legal responsibility under the Individuals with Disabilities Improvement Act of 2004 to provide accessible SWD instruction. Without including

disaggregated SWD data in the evaluation of child sexual abuse prevention programs, schools cannot know the extent to which a program is effective and accessible for SWD.

Systematic literature reviews have been conducted in the past that targeted sexual abuse prevention programs for individuals with intellectual disability (Doughty & Kane, 2010; Kim, 2010; Lumley & Miltenberger, 1997). Many of these programs were designed for individuals over 21 years old. Due to a gap in systematic literature reviews targeting students under 21 with disabilities other than intellectual disabilities, I conducted a systematic review of evaluations of child sexual abuse prevention programs that included outcome data for SWD of any kind (Johnson, 2019). I located 11 studies representing 353 SWD. Two of those were follow-up studies to measure retention, and one of them provided broad context for a case study included. Of the eight remaining studies, five of them included participants with intellectual disabilities only. Other populations included were students with learning disabilities ($n=4$; Dryden et al., 2014; Llewellyn & McLaughlin, 1987), students with autism ($n=5$; Dryden et al., 2014; Kenny et al., 2013), and students with speech and language disabilities ($n=1$; Dryden et al., 2014). No studies reported inclusion of DHH students.

Child Sexual Abuse Prevention Recommendations for Deaf and Hard of Hearing Students

Since no studies were found that included outcome data for DHH students, I conducted a literature review to examine recommendations for child sexual abuse prevention programs for DHH students (Johnson, 2018). The searches yielded four articles that gave recommendations for parent education, strategies for children, and community involvement (Embry & Grossman, 2006; LaBarre, 1998; Sebald, 2008; Yu et al., 2017). Three out of four articles emphasized the importance of educating and training parents, teachers, and the community about the need for linguistically and culturally appropriate communication (Embry & Grossman, 2006; Sebald,

2008; Yu et al., 2017). Along with that, these three articles communicated a high need for access to interpreting services. Two out of four brought attention to the importance of knowing the deaf community (Sebald, 2008; Yu et al., 2017). Two others focused on the need to educate children about sex and their bodies (LaBarre, 1998; Sebald, 2008). No recommendations were made for specific programs. Overall, there was a paucity of information about how to teach safety skills and knowledge to DHH students. While there is little guidance in the literature, one parent organization has taken the lead in addressing the gap.

The Motion to Address Safety for Students with Disabilities

Hands & Voices, a parent advocacy group for DHH children, began an initiative, O.U.R. Children's Safety Project (i.e., Observe, Understand, Respond), to address maltreatment of DHH children (Hands & Voices, n.d.). This initiative gained the CEC's attention, and the CEC began a Workgroup to address the safety of SWD. In 2014, Hands & Voices, the CEC Division of Communicative Disabilities and Deafness, the CEC Interdivisional Caucus (IDC), and Kidpower® Teenpower Fullpower International (Kidpower®) supported a "Safety Motion" to include safety statements and objectives in the Individual Education Plan (IEP) and Individual Family Service Plan (IFSP) for all SWD (Division for Communication, Language, and Deaf/Hard of Hearing, n.d.).

Over the next five years, 12 more CEC divisions have voted to support the Safety Motion in addition to the CEC Board of Directors and the Association of College Educators – Deaf and Hard of Hearing. The Safety Motion includes a link to the CEC/IDC IFSP and IEP Safety Checklist, which outlines protective factors and risk factors of child maltreatment. For each risk factor, recommendations for goals and objectives are given, and resources are provided to assist in implementation. Many of those resources are from Kidpower®, so it is necessary to determine

the effectiveness and accessibility of the Kidpower® curriculum.

The Effectiveness of Kidpower® Curriculum

Kidpower® was founded 30 years to teaching people safety skills to children and adults. The organization is a non-profit that operates worldwide and has served more than five million children, teens, and adults through workshops and resources. One peer-reviewed article and four evaluations funded by foundations are available to demonstrate effectiveness, though only one study includes disability as a defining characteristic of participant selection.

Peer-Reviewed Evaluation

Brenick and colleagues (2014) evaluated the effectiveness of using the Kidpower® Everyday Safety Skills Program (ESSP) to improve four safety competencies (i.e., boundary-setting, stranger safety, help-seeking, maintaining calmness and confidence). The researchers utilized a quasi-experimental design with 238 third grade students in three schools ($n = 128$) received the intervention, and students in two schools ($n = 110$) received instruction as usual. Students in the intervention group participated in a two-hour ESSP workshop, ten 15-minute booster lessons over three months, and ten homework lessons. Researchers administered a pre-training survey, a post-workshop survey, and a three-month post-workshop survey to assess the effectiveness. Results indicated a statistically significant difference in the pre-test and immediate post-test and no significant difference between the immediate post-test and three-month post-test. Group membership (i.e., intervention vs. control) explained 57% of variance among the groups regarding their overall score on the survey (Brenick et al., 2014).

Foundation-Funded Evaluations

Kidpower® of Colorado Springs contracted with JVA Consulting, LLC (2009) to

evaluate outcomes of the Personal Safety Skills (PSS) Project for individuals with developmental disabilities over the course of three years. Parent and teacher training was also offered. Students received two, two-hour training sessions. Parents received a two-hour training. School personnel participated in an in-service training, and teachers received a two-hour, individualized, follow-up coaching session. A total of 104 students and 109 adults participated in the PSS Project. Teachers ($n = 23$) and parents ($n = 50$) completed surveys to measure outcomes. Results indicated (a) teachers' knowledge of child protection skills increased, (b) parents' perceptions of the program were positive, (c) parents' knowledge of child protective skills was high, (d) students' performance of safety skills improved as rated by teachers, (e) the two skills that were demonstrated best by students were persisting in asking for help and stopping unwanted touch, and (f) increased knowledge of personal safety (JVA Consulting, LLC, 2009).

A university researcher in Quebec, Sylviane Raymond (2007), worked with Kidpower® Montreal to conduct a program evaluation of the Kidpower® Daycare Project. The study utilized a quasi-experimental design, and participants included 130 four and five-year-old children who attended a local daycare. The evaluation measured the implementation fidelity of the program and outcomes. Questionnaires and phone interviews were utilized to collect data pre-intervention and at three points after the intervention, including immediately after intervention, one-month post-intervention, and three-months post-intervention. Results indicated a positive effect over time (Raymond, 2007). This study, as represented here, should be interpreted with caution as the original study is in French and was translated using automatic translation software.

Kidpower® New Zealand hired Evaluation & Auditing Services Ltd. (2005) to conduct an evaluation of one-hour Kidpower® Safety Sessions with 8 to 12-year-old children. The evaluation was funded by a grant received from The Todd Foundation. Participants included 845

children and 32 teachers. Questionnaires were given immediately after the training and at three months post-training. There were four main findings, (a) students' confidence was increased, and anxiety was decreased, (b) after three months, teachers agreed the training had helped students manage safety issues, (c) children retained safety skills immediately after the training and at three months post-training, and (d) after three months, children reported feeling safer (Evaluation & Auditing Services, Ltd., 2005).

Kidpower® engaged LaFrance Associates (2004) to evaluate their Everyday Safety Training and Kidpower® Parent-Child Workshops with children ages three to five. The evaluation was funded by a grant received from the Lucile Packard Foundation for Children's Health. Participants included 550 children, 106 parents, and 25 Head Start teachers. Teachers and parents completed surveys to demonstrate outcomes between three and nine months post-training. The Everyday Safety Training indicated that 96% of caregivers reported increased knowledge and skills, and 90.5% retained the knowledge and skills. The Kidpower® Parent-Child Workshops showed that 93.4% of parents reported increased knowledge and skills, and 100% retained it. Results for the children receiving training indicated 86.6% demonstrated a noticeable increase in their understanding and application of self-esteem and self-protection skills. 82.6% of children retained those skills past three months (LaFrance Associates, 2004).

While there is some evidence that the Kidpower® curriculum is effective, rigorous research is needed to solidly establish effectiveness, especially for SWD who have not been included in previous safety research, such as DHH students.

Theoretical Framework

Providing a people safety curriculum that is accessible for DHH children requires that we evaluate the Kidpower® curriculum through the lens of deaf people and scholars, and thus, deaf

pedagogy. In deaf education, pedagogy has historically been criticized by deaf scholars and deaf teachers of the deaf for its ableist nature. The medical model of deafness, to which most school systems subscribe, views deafness as a deficit, rather than as a social and cultural phenomenon (De Clerck, 2018). To combat the perpetuation of hearing people making ableist recommendations for pedagogy, the responses from participants will be analyzed through the lens of a deaf scholar's recent contribution to deaf pedagogy.

In order to conceptualize the role of the Kidpower® curriculum in supporting the learning needs of DHH children, I drew on Skyer's (2020) five propositions for deaf pedagogy, which have a foundation in Vygotsky's *The Fundamentals of Defectology: Abnormal Psychology and Learning Disabilities* (1993). Skyer's (2020) five propositions combine Vygotsky's work with what we now know about deaf development and give researchers and practitioners five theoretical arguments about how we should educate DHH students.

Proposition 1: The Biosocial Proposition

Skyer's (2020) first proposition is the biosocial proposition. This proposition posits that the child's body, mind, and social environment cannot be separated and interdependent. For example, deafness, the way the child processes information in the brain, and the social environment within which they live and go to school must all be considered when designing curriculum. The Kidpower® curriculum was designed with hearing children in mind, so we must critically examine whether all the aspects of the DHH child's biosocial existence are represented.

Proposition 2: The Sensory Delimitation-and-Consciousness Proposition

The second proposition is the sensory delimitation-and-consciousness proposition. Skyer (2020) proposes that consciousness is developed when children have access to discourses, including communication and subsequently language, and that when children do not have full

access to discourse, they experience language deprivation, which limits the development of consciousness. The key to this proposition is to give children access to language in ways that connect them with those in their scholastic environment and society. The Kidpower® curriculum was written in English and has been translated to many other spoken languages. The curriculum is not available in any signed language or designed for learners who have visual-spatial strengths (Young & Temple, 2014), which raises concerns about whether DHH children will be able to easily access the discourse of the curriculum.

Proposition 3: The Adapted Tools Proposition

The third proposition is the adapted tools proposition, which means teachers are to make knowledge available in ways that utilize the strengths of DHH students and stay within the bounds of the deaf child's sensory milieu (e.g., pictures, sign language, gestures) instead of requiring them to rely on sound and speech for knowledge acquisition. This proposition proposes that teachers provide information in multiple ways, thereby allowing students to receive information in ways that work best for them. The Kidpower® curriculum provides pictures, gestures, and print, but need to be evaluated for quality, as it relates to being optimized for the DHH child.

Proposition 4: The Multimodal [Polyglossia] Proposition

The fourth proposition is the multimodal [polyglossia] proposition, which proposes the development of multiple modalities within the deaf child's sensory milieu (i.e., written, signed, pictorial, gestural, etc.) that are not only necessary but unavoidable. While deaf education researchers and practitioners disagree on what exactly that looks like in practice, most agree that at least sign and/or spoken language and written language are necessary. However, when learning new information, such as the safety skills in the Kidpower® curriculum, the availability

of multimodal information must be purposeful and high quality.

Proposition 5: The Conflict Proposition

The fifth proposition is the conflict proposition. The conflict in the proposition refers to ideological disagreements among teachers and parents about the value of deaf ontology and epistemology. Teachers and parents who place value on deafness nurture the development of consciousness using sign language, gestures, and other visual supports. Instead, those who make decisions based on their hearing values devalue deaf people and their axiological stance by not providing access to sign language and visual tools. The emphasis of Proposition 5 is that sign language leads to the establishment of consciousness in DHH children, and by devaluing it, DHH children are harmed. In this study, teachers, parents, and faculty who are hearing will be interviewed. When analyzing data, it is vital that researchers are aware of ideological differences, so they can recognize instances where hearing participants devalue deaf people and their stance on educating DHH children.

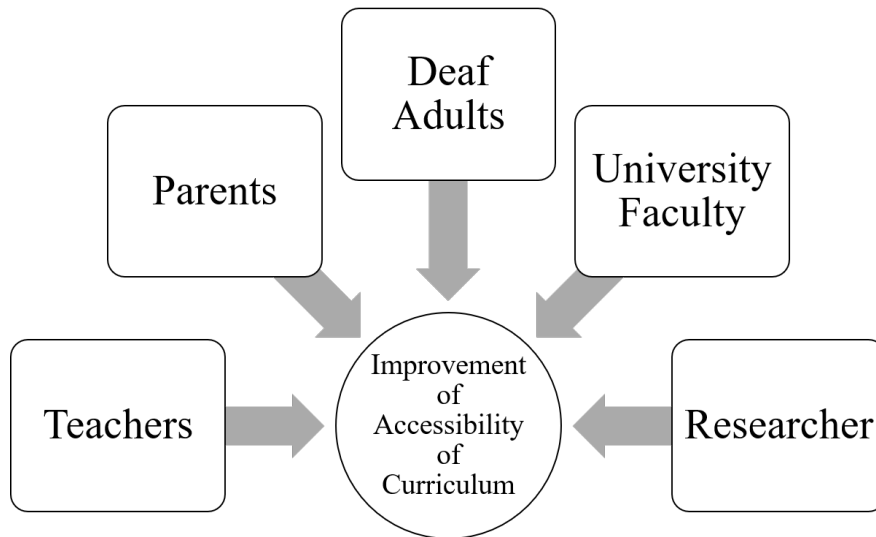
The Community-Based Participatory Approach

This study was based on the community-based participatory research (CBPR) approach, as shown in Figure 1, where community members, practitioners, and researchers contribute their experiences and expertise to improving health outcomes (Israel et al., 2010). Community, in this context, was defined as “stakeholders involved in the education of DHH students.” Stakeholders included DHH adults, parents and teachers of DHH students and university faculty in deaf education teacher preparation programs. While CBPR has primarily been utilized in low-income communities and communities of color (Israel et al., 2010), DHH students have also experienced social marginalization and communication barriers that limit health literacy and outcomes (McKee et al., 2015). By including community partners in this research, the deaf education

community was given a voice, and co-learning emerged among stakeholders related to improving accessibility of curriculum, which will eventually lead to benefits for all partners (Israel et al., 2003).

Figure 1

Community-Based Participatory Research Approach Theoretical Model



Research Questions

Input from the deaf education community regarding the accessibility of the Kidpower® curriculum was a vital part of aligning this research with the community-based participatory research approach. While Kidpower® shows promise in increasing people safety skills and offers some basic accommodations for use with disabled populations, a complete plan of accommodation for DHH students has not been developed. Due to the unique communication and language needs of DHH students, the development of such a plan is warranted, and gathering stakeholder perspectives was the first step in the process.

Therefore, the purpose of this study was to explore how the Kidpower® curriculum could

be accommodated to meet the unique needs of DHH students from the perspective of the deaf education community. The study answered the following research questions:

1. What accommodations need to be made to the existing Kidpower® curriculum to make it accessible for DHH students?
2. How can teachers adapt roleplays within the Kidpower® curriculum, so they are applicable to real-life situations DHH students encounter?

Method

This study utilized a series of focus groups and interviews to elicit stakeholder input regarding the accessibility of the Kidpower® curriculum for DHH students. The study was a multiple-category design (see Table 1), including focus groups with teachers and parents and interviews with DHH adults and university faculty. Due to the pandemic, parents were difficult to schedule as a focus group, so one focus group and two interviews were utilized to collect data.

Participants

Purposive, segmented, homogenous sampling was utilized to select parents, teachers, university faculty, and DHH adults (Etikan et al., 2016; Krueger & Casey, 2014). Focus groups were segmented by role due to the possibility that authority and power differences would cause some participants to feel uncomfortable and choose not to participate if groups were mixed (Morgan & Krueger, 1993). Low numbers of participants were used for the focus groups and interviews due to the complexity of the topic and because the population is low-incidence (Krueger & Casey, 2014). Participants for university faculty interviews met the following requirements: (a) faculty in a teacher preparation program, (b) at least five years of experience working with DHH students, and (c) able to interview via Zoom. Participants for the teacher focus group met the following requirements: (a) DHH certified teacher currently working with DHH students or DHH certified supervisor/instructional specialist of a program that serves DHH

students, (b) able to meet for the focus group via Zoom. Participants for the parent focus group met the following requirements: (a) parent of a DHH student who is being served through an IFSP or IEP, and (b) able to meet for the focus group or interview via Zoom. Participants for DHH adult interviews met the following requirements: (a) identify as deaf or hard of hearing and (b) able to interview via Zoom with or without an interpreter.

Table 1

Multiple-Category Design

	Number of Groups (0=1 group)
Audience 1 (DHH adults)	0
Audience 2 (teachers)	0
Audience 3 (parents)	0
Audience 4 (faculty)	0

Note: Table adapted from Krueger & Casey (2014).

Recruitment

Participants for the university faculty interviews were recruited through (a) Twitter using the hashtags #deafed and #phdchat, (b) through a variety of Facebook professional groups related to deaf education, (c) through direct emails, and (d) through word of mouth from other participants. Participants for the DHH adult interviews were recruited through (a) word of mouth, (b) Twitter using the hashtag #Deaf #Deafculture #deaftwitter #ASL #LSLS, and #hardofhearing, and (c) Facebook. Participants for the teacher focus group were recruited by sending information through (a) an email sent to Texas Regional Day School Program for the Deaf supervisors, (b) Twitter using the hashtags #Deaf #Deafculture #deaftwitter #ASL #LSLS, and #hardofhearing, and (c) Facebook in the groups “Texas Deaf Ed Teachers,” “The Radical Middle in Deaf Education,” “Teachers of the Deaf and Hard of Hearing” and “Teachers for the Deaf and HoH.” Participants for the parent focus group were recruited through the Texas Hands

& Voices Facebook pages and word of mouth. The recruitment email can be seen in Appendix A.

Recruitment was open until 8 participants were located for each participant group. Participants were prompted to click a link that navigated to a Qualtrics survey. The survey served as a screener, available for preview in Appendix B. Participants were over-recruited by 2 to account for no-shows and scheduling problems (Morgan, 1997).

Description of Participants

Participants were all stakeholders from the deaf education community from across the United States. The DHH adults in the study utilized a variety of hearing technologies and communication modalities. One participant used ASL for expressive and receptive communication, while one used an interpreter for receptive communication, but signed and voiced expressively. Two other participants receptively used Spoken English and expressively used both signed and Spoken English. Two participants used Spoken English for both receptive and expressive communication. Use of technology included hearing aids and cochlear implants. Educational experiences included both local public schools and state schools for the deaf, and family experiences included parents who signed and those who did not. Sixty-six percent of the participants spoke of the deaf community as a member of it, while 33% spoke of the deaf community from an outsider's perspective.

The parents in the study had children in all age ranges, early childhood through transition-aged, and some had multiple roles within the community working as interpreters or teachers of the deaf. Some parents' children were attending schools for the deaf, while others were attending local public schools. DHH children utilized a variety of communication modalities and hearing technologies.

Faculty in the study were experts who have previously taught as K-12 teachers of the deaf and currently taught in deaf education teacher preparation programs in addition to studying a variety of educational topics related to DHH students. They also represented multiple deaf education philosophies, with their respective programs offering Comprehensive, Bilingual\Bicultural, and Listening and Spoken Language emphasis.

Teachers of the deaf represented multiple states and deaf education philosophies. All teachers except one were currently employed by school districts for the following year. The focus group took place in the summer and one teacher had retired at the end of the school year. Some teachers represented multiple roles in the community, including parenting a DHH child. Teachers served DHH students and deaf+ students (i.e., DHH students that have another disability, such as autism spectrum disorder or intellectual disability).

Research Team

The research team consisted of a primary researcher, moderator/interviewer, a notetaker, a secondary coder, and a peer debriefer.

Moderator/Interviewer/Researcher

The primary researcher served as the moderator and interviewer for all groups since it is common in social science research for the moderator to be the primary researcher (Smithson, 2008). The role of the moderator was to gain informed consent from all participants. The moderator also facilitated discussion between focus group participants and individual participants being interviewed by following a structured questioning route (Krueger & Casey, 2014; see Appendix C-F). The moderator was responsible for helping resolve conflict and noticing and addressing any discomfort experienced by participants (Smithson, 2008). In addition, the moderator stopped after each section to do member checks by summarizing what

was discussed. Because deaf education is a small and tight knit profession, another researcher gained consent from any participants the moderator knew personally. At the conclusion of focus groups and interviews, the moderator was responsible for the analysis.

Note-Taker

The note-taker was a doctoral student studying research, measurement, and statistics. Prior to the focus groups, the primary researcher met with the note-taker to discuss roles and responsibilities. The note-taker's primary role during the focus groups was to document any parts of the discussion that might not have been clear on the recording, including any gestures or signs used during the focus groups. The note-taker was not seen on the Zoom call and sent notes to the primary researcher to review following the focus groups (Liamputtong, 2011; Powell & Single, 1996). A note-taker was not utilized for interviews since there was only one participant, but the interviewer took notes regarding main ideas and any gestures or signs used.

Secondary Coder

The secondary coder was a doctoral candidate in educational psychology with experience as a general education teacher. The coder studies psychosocial aspects of giftedness and has a background in curriculum accommodations and supports. The coder coded 30% of the codes into categories using the codebook, which contained operational definitions for each category. The secondary coder then met with the primary researcher to compare categorizations and discuss disagreements.

Peer Debriefers

The peer debriefer was a professional with a Ph.D. in Special Education with experience in curriculum design and specialized support. The peer debriefer provided feedback at three

different points in the analysis process. They examined transcripts and the in-vivo codes taken directly from the dialogue. Then, they debriefed how codes were put into categories by the researcher. Finally, they debriefed themes and findings.

Researcher Positionality

During the study, I served as the main researcher. I have hearing privilege and do not consider myself to be part of the deaf community. I cannot understand the impact of language deprivation due to personal experience, and I rely on my DHH colleagues and friends to help me understand, as an outsider, the long-term emotional impacts of lack of access to language from birth. I am highly invested in the safety and success of DHH children due to my prior experiences working as a teacher of the deaf in the public school system. I worked in deaf education in several different capacities for nine years before moving from K-12 education to work in higher education. As a deaf education teacher in the K-12 classroom, I had several students who had been abused and were not able to communicate what had happened effectively. At the time, I was not able to find a curriculum that I felt was appropriate to teach my students people safety skills, specifically the language of resisting and reporting abuse.

I was introduced to Kidpower® International through a colleague after joining the ACE-DHH Child Maltreatment Workgroup. Through discussions with Kidpower® International about my interest in their curriculum, we negotiated an agreement where I would independently conduct research related to using their curriculum with DHH students in exchange for ongoing training, consultation, and starter materials. I have complete independence regarding the methods of any research related to the curriculum, and Kidpower® International does not influence the study's outcomes.

During the study, I was a doctoral candidate at the University of North Texas.

Data Collection

Due to Covid-19 and university restrictions governing face-to-face research, all focus groups and interviews were conducted virtually through Zoom. DHH participants had the option to request an American Sign Language (ASL) interpreter for expressive and/or receptive communication. The interpreter held a Board for Evaluation of Interpreters Master level certification and met with the primary researcher prior to the interviews to discuss key concepts and goals. Each focus group lasted approximately 1 hour (Liamputtong, 2011), while interviews varied between 20 minutes and 1 hour. Participants in focus groups were able to see each other and communicate through voice chat (Liamputtong, 2011).

The Zoom audio-recording feature was utilized to record the focus groups and interviews. In the case of an interpreter being used for communication, the interpreter's voice was audio-recorded.

Pre-Meeting Activity

Participant consent was established virtually using DocuSign. All participants received a materials packet via email prior to attending the focus group or interview. Participants were randomly assigned a lesson from *Kidpower® Teaching Book #5: Be Safe With Touching, Teasing, and Play*. This teaching book was chosen because the skills most closely align with child abuse prevention. The four lessons include: (a) Safety Rules About Touch, Teasing, and Play, (b) Understanding About Choices, (c) Safety Rules About Private Areas, and (c) Protecting Our Personal Boundaries. In addition, DHH adults and parents received a homework assignment from *10 Bilingual People Safety Assignments* titled *Stopping Unwanted Touch and Teasing* that aligned with the content in *Kidpower® Teaching Book #5*. The lessons were randomly assigned so that an individual from each participant group reviewed each of the lessons. By allowing

participants to review the curriculum prior to the focus group or interview, time was spent on discussion rather than reviewing materials.

Pre-Discussion Activities

When participants arrived for virtual focus groups, they were welcomed by the moderator. Prior to starting the focus groups or interviews, the moderator read a summary of the consent, and participants were asked if they had questions.

Discussion

A structured interview guide with high moderator involvement was utilized because there was a pre-existing agenda for the focus groups and interviews (Morgan, 1997). The moderator followed a questioning route based on recommendations by Krueger and Casey (2014). Questions were categorized by opening, introductory, transition, key, and ending. Interview questioning routes did not include transition questions. The interviewer asked broad questions first and proceeded to more specific questions (Krueger & Casey, 2014).

- *Opening questions.* The focus groups and interviews all began with the moderator introducing herself, stating the group's purpose, and inviting the participant/s to introduce themselves. The moderator then shared the introductory question, which varied based on the group. DHH adults, parents, and faculty participants were asked about their top safety concern for DHH students, while teachers were asked about their experience with accommodating general curriculums. The questioning route then moved into the transition phase.

- *Transition question.* The moderator inquired about general benefits and obstacles encountered when implementing a curriculum at school or home that was not intended for DHH students.

- *Key questions.* Participants referenced the e-mailed materials, which consisted of

copies of a lesson and/or homework from the Kidpower® curriculum. Depending on the group of the stakeholder, they were asked different questions related to what benefits and obstacles they would encounter with implementation. None of the participants had encountered the curriculum previously. Participants were subsequently asked what solutions they could think of to resolve any obstacles they identified. Finally, participants discussed how the roleplays central to the curriculum, could be expanded to topics specific to DHH students (e.g., visiting the audiologist, hearing aid boundaries with friends).

- *Ending question.* The focus groups and interviews concluded by giving participants a chance to share anything they had left unsaid or wanted to add.

The focus group and interview questioning routes are available in Appendix C. Stimulus packets are available as an attachment.

Incentives

At the conclusion of each focus group and interview, participants were compensated for their time and efforts, as is customary in focus group research (Krueger & Casey, 2014). Each participant received a \$20 gift card from Amazon to the email they specified.

Data Analysis

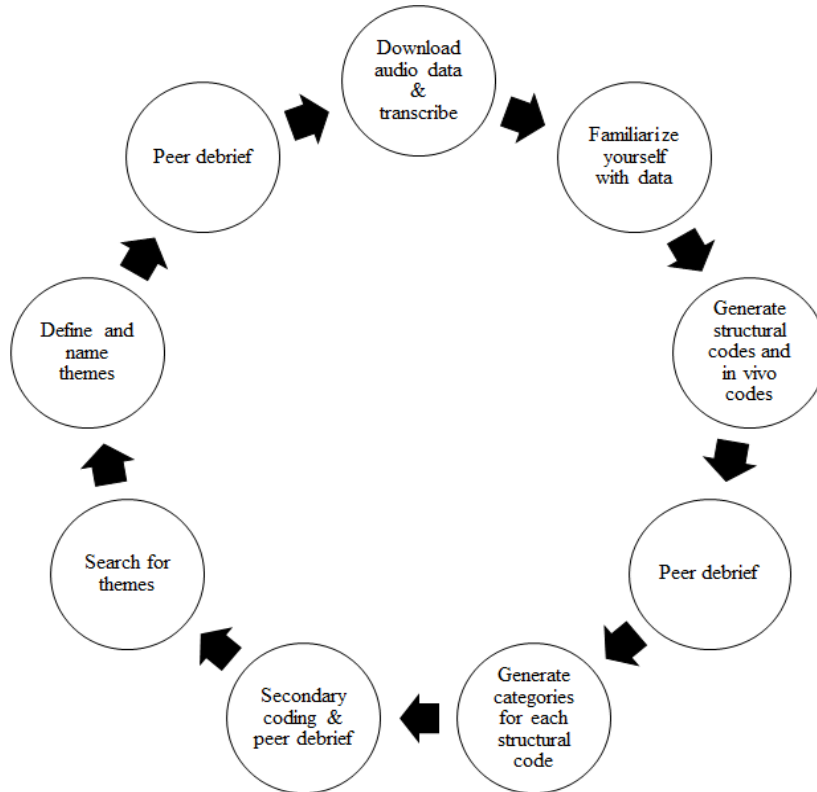
Data collected during each focus group and interview were analyzed using an inductive analytical framework, as seen in Figure 2.

When the focus groups and interviews concluded, the audio data was downloaded into Otter.ai, a software that has that capability of providing auto-transcription. Audio data was automatically transcribed and then checked for accuracy. Edits were made as needed. For example, the word “deaf” is often automatically transcribed as “death.” Additionally, automatic transcription softwares are not generally inclusive of different accents, so the transcriptions of

one oral deaf adult contained many errors.

Figure 2

Analytical Framework for Evaluation of Inductive Data



Note. Adapted from Braun & Clarke (2006).

After familiarizing myself with the transcript, I inductively coded each transcript using structural coding for key information (Saldaña, 2021). Structural codes included Research Question 1, Research Question 2, Top Concerns, Benefits, Obstacles, Personal Stories, Homework Experiences, and General Curriculum. Following the first level of coding, I coded each piece of text structurally coded using in vivo codes. Then, the peer debriefer reviewed 30% of the in vivo codes under each structural code and provided feedback.

When structural and in vivo codes were finalized, I inductively coded the in vivo codes for each structural code into categories (Saldaña, 2021). Throughout this process, I kept

analytical memos of patterns and themes I was beginning to recognize in the data (Braun & Clarke, 2006; Saldaña, 2021). After categorizing codes for each group of participants, the second coder coded 30% of the in vivo codes into categories (Braun & Clarke, 2006; Saldaña, 2021). Categories from the researcher and secondary coder were compared (Saldaña, 2021).

The parent categories had 100% agreement. The faculty categories had 92% agreement. Disagreements for the faculty categories all had one category in common, and the secondary coder had added another category for consideration. Following the discussion, agreement was 100%. The teacher categories had 72% agreement. Again, disagreements for teacher categories often had a category in common, and the secondary coder recommended a second code. A few disagreements were related to the tension between a language accommodation versus a content addition or change. Following the discussion, agreement was 100%. The DHH adult categories had 78% agreement. Seven out of eight disagreements had a category or two in common, and the secondary coder recommended a second or third code after discussion agreement was 100%.

Table 2

Coding Process Example

Original text	“I think if you're if you're doing the pictures or the videos, having them captioned and voiceover in English and or Spanish or whatever chosen language so that the parents aren't just playing a video and walking away. They're actively participating and maybe in with watching the sign and hearing it, maybe then they're picking up. Maybe when you do the videos you do like, like six or so like, here's some of the main signs you can pick up and just explicitly teach those before. So those are the signs that the parents are walking away with that are key for safety for that particular lesson.”
Structural Code	Research Question 1
In Vivo Code	“having them [videos] captioned and voiceover in English and or Spanish or whatever chosen language so that the parents aren't just playing a video and walking away”
Category	Media
Theme	Media Components

Note. Further data display examples available in Appendix G.

Following the second coder's meeting, I met with the peer debriefer to discuss how codes were put into categories (Braun & Clarke, 2006; Saldaña, 2021). The peer debriefer reviewed 30% of the codes. Throughout the process, I kept analytical memos to document the formation of ideas and emergence of themes (Braun & Clarke, 2006; Saldaña, 2021).

When categories were confirmed, I built data displays by case and structural code to see if themes emerged across participant groups (Saldaña, 2021). Then, I wrote in-depth analytical memos to document the emerging findings, including quotes to support those findings, my thoughts about the findings, and any links to theory (Saldaña, 2021). The peer debriefer reviewed proposed themes and analytical memos to confirm the findings. Table 2 shows an example of the coding process.

Member Checks

Member checks were conducted at two points during the study. During the interviews and focus groups, the main researcher stopped after each question to summarize what was said by the participants. This provided participants the opportunity to clarify or expand upon their ideas in the moment, rather than waiting to the end of the study.

Following the identification of themes, member checks were conducted again. The researcher contacted each participant via email and sent a chart that summarized the themes. Participants were asked to communicate whether the themes in the chart represented their input and if not, to give feedback regarding what was missing or misrepresented. Forty percent of the participants responded to the email and 100% communicated they agreed with the themes. Each participant group was represented in the feedback.

Trustworthiness

Consistent with post-positivism, trustworthiness was addressed through credibility,

transferability, dependability, and confirmability (Lincoln & Guba, 1986). Trustworthiness was addressed throughout the research process. Credibility was established through engaging in member checks during the focus groups and interviews. Transferability was addressed by providing in-depth information about the researcher as instrument and the processes that were followed to develop findings (Morrow, 2005). Dependability was established by engaging feedback from a second coder, while confirmability was established by allowing a peer debriefer to provide feedback about the final themes. Further trustworthiness was established by engaging in member checks with 40% of participants, representing each participant group. I also provided a description of researcher positionality under “Research Team” to provide transparency as to the interest of the primary researcher.

Findings

Question 1: What Accommodations Need to be Made to the Existing Kidpower® Curriculum to Make it Accessible for DHH Students?

A thematic analysis of the recommended accommodations identified three themes, media components (Theme 1), language (Theme 2), and improved visual information (Theme 3). Table 3 shows the three themes and sub-themes, with quotations showing examples of the analyzed material and the connection with Skyer’s (2020) five propositions.

Media Components

DHH adults, parents, teachers, and faculty all emphasized the need for the addition of media components to support comprehension. The curriculum is currently presented in English with static pictures and does not provide knowledge in ways that are most accessible to DHH students and their strengths as it relates to modality. Teachers highlighted that the curriculum must use modalities and tools that utilize the students’ strengths to access content, rather than

forcing them to adapt to a curriculum that is created with hearing students in mind. One teacher said they recommended “videos giving the kids an opportunity to see it in action before you're like, ‘okay, now you're gonna practice and role model through it’.” Five DHH adults recommended various ways of utilizing videos of deaf adults and deaf children engaging in the roleplays. One DHH adult recommended Kidpower® “bring in a Certified Deaf Interpreter to teach basics [of safety] and do roleplay in a more visual communication style.” Another recommended “more access to signing so they can visualize and so they perceive it as accessible and inclusive of them.” Parents wanted to see “video with animation to see the acting out” and “virtual activities.” Overall, faculty recommended making videos showing the skills and roleplays using multiple modalities, with multicultural deaf actors, and a variety of hearing technologies. One faculty participant summed up the data well:

Some sort of online component where there's like, videos of deaf individuals in multiple modalities...deaf individuals who are playing out these scenarios in ASL, in cued speech, and you know, in all of the Signed English, you know, or in all, you know, captioned materials. I think if students saw these scenarios play out, like, with actors, using their language modality that would make this like, the most, everybody would want it, because a teacher could show the scenario, and then build language off of that in the classroom setting, and then apply these strategies because it will have, you know, they will have activated and built on their students' background knowledge and provided something as a speaking point, you know, like doing the field trip first kind of thing.

Language

All participant groups also expressed that the language used in the curriculum would need to be addressed before students could access the content. The researcher identified two sub-themes: language modification and teacher strategies. Though the research question was specifically about accommodations (i.e., changes to how children access the content), only five brief statements were made by participants that referred to accommodations. Most referred to modifications.

Table 3

Suggested Accommodations to Existing Kidpower® Curriculum to Make it Accessible for DHH Students

Themes	Quotes from Interviews and Focus Groups	Connection with Skyer’s (2020) Propositions				
1. Media components	<ul style="list-style-type: none"> • DHH adult: “create a set of videos that goes along with this, make the videos at different levels (language), put a QR code on the paper so students can access videos.” • Faculty: “online component with videos of deaf individuals in multiple modalities playing out these scenarios.” • Parents: “video with animation to see the acting out” • Teacher: “videos giving the kids an opportunity to see it in action before you're like okay, now you're gonna practice and role model through it” 	<p>Proposition 3 Proposition 4</p>				
2. Language	<table border="1"> <tr> <td data-bbox="397 740 620 764">Teacher Strategies</td> <td data-bbox="661 708 2158 805"> <ul style="list-style-type: none"> • Teacher: “finding a way to explain some of those emotions might be good to like look into just because a lot of the students that I have don't have families that sign” • Faculty: “Be careful of ‘tell’ being associated with ‘tattling’ due to the sign” </td> </tr> <tr> <td data-bbox="397 935 553 959">Modification</td> <td data-bbox="661 829 2158 1065"> <ul style="list-style-type: none"> • DHH adult: “make more visual, avoid using metaphors, avoid foreign languages, use more of a literal language, keep it concrete” • Faculty: “opportunities for differentiation of the, like linguistic features of those stories. So here's how to simplify the same concept in lower syntax, and here's how to make it in more complex language structures” • Parent: “more concrete questions, less abstract questions” • Teacher: “it would be nice to have like three levels of the same lesson. So one level where the language is what it was, and one where it's like language with pictorial support, and then one where it's just pictures, making multiple levels” </td> </tr> </table>	Teacher Strategies	<ul style="list-style-type: none"> • Teacher: “finding a way to explain some of those emotions might be good to like look into just because a lot of the students that I have don't have families that sign” • Faculty: “Be careful of ‘tell’ being associated with ‘tattling’ due to the sign” 	Modification	<ul style="list-style-type: none"> • DHH adult: “make more visual, avoid using metaphors, avoid foreign languages, use more of a literal language, keep it concrete” • Faculty: “opportunities for differentiation of the, like linguistic features of those stories. So here's how to simplify the same concept in lower syntax, and here's how to make it in more complex language structures” • Parent: “more concrete questions, less abstract questions” • Teacher: “it would be nice to have like three levels of the same lesson. So one level where the language is what it was, and one where it's like language with pictorial support, and then one where it's just pictures, making multiple levels” 	<p>Proposition 2</p>
Teacher Strategies	<ul style="list-style-type: none"> • Teacher: “finding a way to explain some of those emotions might be good to like look into just because a lot of the students that I have don't have families that sign” • Faculty: “Be careful of ‘tell’ being associated with ‘tattling’ due to the sign” 					
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3. Improved visual information	<ul style="list-style-type: none"> • DHH adult: “use pictures instead of the English questions, show two pictures, one right and one wrong, they choose the right one.” • Faculty: “make it look like the characters and pictures were signing, hearing aid or cochlear implant on the kids, cultural objects (ex: ""I love you"" sign on wall)” • Parent: “visual cue, like a check (on the page) ... would say they've given consent” • Teacher: “having real life pictures, even just Boardmaker pictures, with more facial expressions and color” 	<p>Proposition 2 Proposition 3 Proposition 4</p>				

Modification

In this study, “modification” is defined as changes to what a child learns, including simplified language and curriculum adaptation. While some DHH students can read and comprehend English on grade level, many cannot access the content due to language delays resulting from language deprivation. While DHH adults were the only group to talk in terms of “language deprivation,” all groups gave examples of how the curriculum's language would have to be simplified due to communication challenges and language delays across the population.

Participants gave multiple recommendations for modifying the curriculum. A faculty member stated, "the sentences throughout it are ... two and three lines long with multiple complex or dependent clauses. Language structure of those sentences is going to be so complex that it's not going to be accessible for them alone." The participant recommended “making sure that it's fully accessible...[so children are] not being distracted by complex English structures, omitting euphemisms, using more explicit language.” A DHH adult was concerned about “language access” and said one solution was “avoiding metaphors, avoiding foreign languages, using more of a literal language [to] keep it concrete.” One parent cited “vocabulary” as an obstacle and another that “it [the curriculum] ran on and it was incredibly wordy.” They recommended “more concrete questions and less abstract questions” for the homework.

Faculty and teachers of the deaf specifically called for language modification of materials that would allow access at multiple levels of language proficiency. Teachers and faculty in teacher preparation programs likely have the most experience with the varying levels of language deprivation that occur in DHH children. Participants from both groups have likely experienced teaching a class of students who have different levels of language proficiency, and this may be why these two groups in particular made so many recommendations about differentiating the

levels of language access. One faculty participant said, the curriculum needs “opportunities for differentiation of the, like linguistic features of those stories. So here's how to simplify the same concept in lower syntax, and here's how to make it in more complex language structures.” Some will not be able to access the English at all and benefit from picture representations only. A teacher said:

It would be nice to have like three levels of the same lesson. So one level where the language is what it was, and one where it's like language with pictorial support, and then one where it's just pictures, making multiple levels.

Teachers and faculty recommended these modified resources be pre-created and available as part of the curriculum rather than having to create it themselves due to time restraints. Overall, all the participant groups identified many obstacles for language access and many solutions for language modification.

Teaching Strategies

All groups also gave recommendations for teaching strategies to address language concerns. While modification of the curriculum provides accessibility, teaching strategies help children best learn the information. Pre-teaching vocabulary was discussed by faculty and teachers. Teachers shared they would need to pre-teach vocabulary, specifically about feelings. One teacher said they would need “to do a whole other lesson before this [curriculum] about the emotions.” One faculty participant said teachers would need to provide “operational definitions for words like ‘frustrated’ and ‘affection’, while another noted additional instruction would be required to establish “background knowledge related to vocabulary.”

Teachers and faculty also recommended a developmental checklist be included with the curriculum to progress monitor over time:

A checklist of what skills they need to build to and it can follow them [to the next

teacher] and you know, so you've got that the next year and you're not having to start from square one, and you can see what safety skills have they already built on.

Another participant recommended a “list of ... the skills ... or understanding the student may need before going into that lesson and kind of having a baseline.” Similarly, a faculty member proposed a “crosswalk to a tag or a tassel, like something that the educator could say, like, ‘Oh, you need like, syntactical comprehension at this level to use this social story.’”

Finally, participants shared many considerations for presenting the curriculum in ASL and recommended deaf adults, particularly ASL specialists, be involved in determining how the curriculum would be signed. Some specific concerns mentioned were appropriate terminology for parts of the body, how to sign “stop or I’ll tell,” clarifying references to “safety rules,” and the tendency for “tell” to be associated with “tattle” due to the sign. One faculty participant recommended media be used to help DHH children learn the non-manual markers involved in communicating boundaries: “Videos will become important, because they could, you know, teacher could stop the video and say, ‘Look, you know, look at his eyebrows, look at their face, like, look how their face looks. Now, let's just copy that face.’” Overall, teachers and faculty believe linguistic guidance will be necessary for the curriculum to be implemented with fidelity.

Improved Visual Information

All four participant groups noticed visual benefits of the curriculum, but also gave extensive lists of obstacles. In this context, “visual information” refers to static information, such as pictures and layout. Faculty were concerned the “visuals might be a little bit too crude in terms of having children, particularly those that [have low language abilities] to understand exactly what is happening.” Teachers noted the “pictures are flat” and have “limited facial expressions.” Parents thought there needed to be “one concept per page” or “less words on a

page.” DHH adults noted the “pictures are unclear.” Participant groups had recommendations to address most of their stated obstacles.

One central request was that characters be representative of DHH children and their culture and language. One faculty member suggested, “make it look like the characters and pictures were signing, [put a] hearing aid or cochlear implant on the kids, [include] cultural objects like an “I love you” sign on the wall.” A DHH adult recommended creators “incorporate the ASL in the graphics” while another to “use pictures instead of terminology.”

Participants also had ideas for visual features that would improve comprehension and the ability to interact with the text, such as color coding, symbols, and inclusion of pictures in questions on the homework. One DHH adult recommended, “use pictures instead of the English questions, show two pictures, one right and one wrong, they choose the right one.” A teacher recommended, “having real life pictures, even just Boardmaker® pictures with more facial expressions and color.” Two parents wanted to see more visual cues, one recommending “a check [that] would say they’ve given consent.” Others recommended a visual cue on the homework that would “reference the character from the story” where they learned the skill at school and another that “color coding of appropriate and inappropriate” throughout the curriculum would be helpful.

Question 2: How can Teachers Adapt Roleplays Within the Kidpower® Curriculum so They are Applicable to Real-Life Situations Deaf and Hard of Hearing Students Encounter?

A thematic analysis of roleplay adaptations identified two themes, include people who interact with DHH children (Theme 1), and include situations DHH children experience (Theme 2). After the themes were established, sub-themes were identified. Table 4 shows both themes and their sub-themes with quotations showing examples of the analyzed material and the connection with Skyer’s five propositions.

Table 4

Ways Teachers Can Adapt Roleplays within the Kidpower® Curriculum

	Themes	Quotes from Interviews and Focus Groups	Connection with Skyer’s (2020) Propositions
1. Include People Who Interact with DHH Children	People who do not sign	“staff in schools that don't sign” (faculty)	Proposition 1
	People at schools for the deaf	“dorm staff because they have access to kids who are taking showers” (DHH adult)	
	People who sign	“people who are fluent in sign aren't necessarily safe” (parent)	
2. Include situations DHH children experience	Environment-related	“access to peer's rooms at school for the deaf; secluded areas at a school for the deaf” (DHH adult)	Proposition 1
	Communication-related	“the deaf and hard of hearing kids would go to a stranger who could sign and the majority of them did because they're used to people who know how to sign being the safe ones” (teacher)	
	Boundary-related	“setting boundaries with therapist or provider if you are uncomfortable” (parent)	

Include People Who Interact With Deaf and Hard of Hearing Students

Sub-themes of “Include People Who Interact With DHH Students” (Theme 1) included people who do not sign, people at schools for the deaf, and people who sign, and each of those sub-themes have categories.

Include People Who Do Not Sign

The sub-theme “Include people who do not sign” was broken down into categories including law enforcement, staff in schools, providers, and people online. Across all four groups, participants wanted students to experience roleplays that helped them navigate safety situations that included a communication mismatch.

- *Law enforcement.* Law enforcement was a concern of DHH adults, faculty, and teachers. One teacher told a story about a student who had been involved in a physical fight at school and had been sent to the office. An interpreter had not been provided for that student to communicate with the Student Resource Officer or law enforcement, and the student did not request one. The teacher went on to say:

With the group that I work with, the law is a big, big concern for me and how they're treated. So it's definitely, for the high schoolers, something that would be a good roleplay situation for them to advocate for themselves.

- *Providers.* Another concern was providers, such as audiologists, speech language pathologists, doctors, therapists, and counselors because there are many instances where they are alone with children. One parent said:

There's a lot of behind closed doors, maybe to speech therapy, or an audiology booth, or where it's really just the child and the doctor. And so the broken arm scenario [in the curriculum], in regards of touch is okay, I guess. But it could be taken in a different way. Or it could be portrayed a little bit differently. Because those private one-on-one closed door sessions, our children, even therapists, behavioral counselors, social emotional learning therapists, that kind of thing. I feel like that one-on-one, our kids should be able to advocate earlier on.

- *General education teachers.* Teachers, both in general education settings and deaf education settings, were mentioned in interviews with all four groups. Teachers that do not sign were specifically referenced regarding their role in providing accommodations with the concern that when they do not provide those accommodations, safety problems are created. One DHH adult recounted her own experience in school:

For example, if a teacher like turns away, they can't, the student can't hear or read lips of the teacher. That's some obstacle is that you don't get all the information if there's no information can be seen from either their face and front or their ears don't work.

- *People online.* Teachers and faculty specifically mentioned people online as potential safety problems they felt were underrepresented in the curriculum. One teacher spoke from her own experiences:

I think a lot of what we see with middle school and high school social media, like our kids don't understand that just because you know someone or you've seen them doesn't mean they're your friend. So social media is a big thing of just because they follow you and like you on Instagram doesn't mean that you know them and that they're a safe person to talk to. And just because you see them in the hallway or you had a class with them in sixth grade doesn't mean they're your friend. Like, you need to know their name and you need to know about them for them to really be your friend.

Include People at Schools for the Deaf

The sub-theme “Include people at schools for the deaf” was broken down into categories including staff and peers.

- *Staff.* Faculty and DHH adults were particularly adamant that due to the residential situation at schools for the deaf, roleplays with various staff members were vital. Both faculty and DHH adults pulled from their own experiences attending or working at schools for the deaf and highlighted people and relationships they found particularly high risk. Both DHH adults and faculty had concerns about DHH children knowing people safety skills in interactions with dorm staff. One DHH adult specifically mentioned “dorm staff because they have access to kids who

are taking showers.”

- *Peers.* Participants were also concerned with peer interactions at schools for the deaf.

Because of the residential situation, children have access to younger and older peers that would not otherwise occur in a hearing public school. A DHH adult and former teacher at a residential school for the deaf said:

For another kid to come into one's room ... or to go off into a secluded area, you know, that type of thing. There's a little there's a lot more opportunity, I'd say, at the school for the deaf in a dorm type setting, than our kids would have typically.

- *People who sign.* Parents and teachers were concerned about people who could sign being automatically trusted by children. They were concerned that DHH children do not seem to understand that just because someone signs does not mean they are a safe person. One parent said:

Really, you know, that person that they can, they can effectively communicate with them that they're most likely to let their guard down with is going to be, um, you know, or that that person who unconditionally accepts them because feeling a part of and accepted is challenging.

- *Peers in-person and online.* Trusting people who sign also extends to peers, even those only communicated with in the online environment. A faculty participant spoke about DHH online friends when she said, "that's how so many kids who are deaf, in particular, connect with other kids like them ... I think more [roleplays] in the online space would be helpful.”

- *Strangers.* Concerns about people who can sign also extended to strangers who sign. Teachers and parents were both concerns about the level of trust DHH children seem to show towards strangers who sign to them. One teacher shared an experience:

We were doing a stranger danger kind of thing. And our counselor had the thought of seeing if our, the deaf and hard of hearing kids would go to a stranger who could sign and the majority of them did because they're used to people who know how to sign being the safe ones.

- *One-on-one service providers.* Parents and faculty alike had concerns about the amount of time DHH children spend alone with service providers, like audiologists and speech pathologists. A faculty participant was particularly concerned about how much DHH children are alone with an adult receiving educational services when that is rarely the case for hearing children. The participant said:

How often are systems of support, like itinerant teaching services, result in children being alone with a teacher in a school environment where we have portrayed that you are safe and secure, but that is could be like a mixed message. Because then in many other contexts, it would be wholly inappropriate to be alone with an adult who you are reliant on to make your wants and needs and safety known ... I think as a whole, I just worry about like, is the system we've set up to serve and support also sending a mixed message about like, what are healthy, reasonable situations for kids to be in?

- *Teachers and interpreters.* Teachers and interpreters were mentioned repeatedly as groups that should be represented in roleplays since they, so often, are the child's only way of communicating with other people at school and sometimes, even their own parents. Several participants mentioned their discomfort with even saying aloud that people in these roles could be perpetrators. One faculty participant said:

I'm also struggling a little bit here ... because I don't want to portray or imagine that like, these very people who have dedicated their lives to support and serve these deaf children are the perpetrators, but I want to be pretty like realistic too. That's what we have to cover all bases, right? Like, right.

At the end of the statement, the tone and body language of the participant indicated they were coaching and reassuring themselves that they were doing the right thing by mentioning these roles as concerning. There were concerns among other participants that interpreters are often the child's only access to reporting and that there must be a back-up plan for students to report when their interpreter is the perpetrator or when they do not trust the interpreter to maintain confidentiality.

Include Situations DHH Children Experience

Sub-themes of “Include situations DHH children experience” (theme 2) included environment-related situations, communication-related situations, and boundary-related situations.

Environment-Related Situations

Across groups, participants shared many concerns related to how DHH children experience unique situations that hearing children typically do not experience.

- *Physical safety.* One category, physical safety, was not specifically related to “people safety,” but was repeatedly shared as a safety concern. Faculty and DHH adults extensively discussed concerns about active shooter safety, fires, and severe weather since DHH children are often unable to hear alarms and automated instructions given over a speaker system in a school or other public place. DHH adults shared concerns about street safety, noting the need for children to learn to walk safely on the street with and without sidewalks, and knowing which way to walk on the street since children may be unable to hear cars and honking. One DHH adult also mentioned safety at home while sleeping. She shared that she is often concerned that she would not be able to hear if someone broke in and would not know what to do in that circumstance.

- *One-on-one environment.* Participants from all four groups expressed concern about environments where a child is one-on-one with an adult. Some situations mentioned were audiological management, speech therapy, and other instructional services and evaluations at school. One faculty participant shared her perspective as both a mother of a hearing child and former teacher of the deaf:

I mean, I can't imagine a situation where my [hearing] son would be alone. I mean, I'm

always there. But in an audiology booth, or, you know, doing listening checks with an itinerant teacher. I mean, there's these one-on-one situations that occur very frequently, that just would never occur with another. So when you think about health, and touch for health and safety, is that it's very broad, right. And I think we also have to think about it specifically with kids that are mainstreamed, which is most our kiddos, of course. We're always sending them off with strangers in schools, like oh, all of a sudden, you need a PT eval, you've never met the PT. But here she comes, and she's going to take you out of the classroom.

An uncommon environment one faculty participant emphasized was transportation. In the Northeast, there is a large program whose students ride to school in a taxi with an adult supervisor to and from school. The participant was particularly concerned about DHH children being safe in these one-on-one situations.

- *Residential environment.* In alignment with concerns about staff at residential schools, participants were concerned about situations that could occur in residential environments that students may not be prepared to address. In particular, faculty were concerned about bathrooms, bedrooms, and locker rooms in residential schools, while DHH adults named “access to peers’ rooms” and “secluded areas at a school for the deaf” as safety concerns.

- *Extracurricular environment.* Participants from all four groups mentioned a variety of extracurricular environments they believed should be included in roleplays. One DHH adult shared her personal experience as a child participating in extracurricular sports activities:

So there's I think, sporting events. I mean I grew up playing a lot of sports, and I think that was one a weakness of mine was it wasn't really addressed of some of those fine details of touching or not, because it was just sort of enveloped of the sporting field.

Both a teacher and a parent mentioned deaf and hearing camps. The concern about deaf camps aligned with the parent being concerned about her child trusting anyone who can sign. There were also concerns about online spaces. Since the beginning of the Covid-19 pandemic, many clubs have moved online, and children have had increased access to the Internet. In alignment with concerns about people online were concerns about the Internet as an environment

where children go to learn and interact, sometimes receiving no instruction about the rules or expectations of the space.

Communication-Related Situations

The sub-theme “communication-related situations was broken down into four categories including communication mismatch, misunderstanding and assumptions, reporting scenarios, and advocating for accommodations. Across all four groups, participants wanted students to experience roleplays that helped them navigate safety situations related to communication challenges.

- *Communication mismatch.* Communication mismatch occurs when the DHH child uses sign language and adults, or peers, do not. One faculty participant suggested: “if we looked at every single one of those [existing Kidpower® roleplays] and thought, ‘How would it be different if you were relying on someone else to communicate that?’” A parent recommended “roleplays where they [the child] are the only deaf child in the family; roleplays where mom kind of signs and dad fingerspells.” In both statements, the participants 2343 concerned about what a DHH child would do if they could not directly and fluently communicate with their communication partner when there is a safety problem.

- *Misunderstandings and assumptions.* Participants from all four groups raised concerns about misunderstandings that occur due to not being able to hear and assumptions that are made about situations in which there is not a communication mismatch. One DHH adult described a situation that might happen between a deaf person and a hearing person if the deaf person is not looking during communication:

If the deaf person's not looking for example, and someone [hearing person] says “No,” and they're [hearing person] like, “Well, I said, No!” ... “Oh, I [deaf person] totally did it [because I didn't see they said no].” That [deaf] person needs to see it.

While the DHH adult was referring to consent between older teens or adults, this is also a safety problem that could occur among younger children when playing together or giving and receiving consent for different kinds of touch, such as hugs. Teachers and parents both shared concerns about assumptions of safety that DHH children make in situations where there is not a communication mismatch.

- *Reporting scenarios.* Faculty and parents were concerned that while the curriculum taught students to report safety problems, it did not give them the “language to use to report” or address various scenarios that may occur for a DHH child that would not occur in the general population. One faculty participant shared the concern, “When the person you trust and are reliant on is potentially the perpetrator or the harmer what alternatives do you have?” Another faculty participant had strong concerns about children understanding and being able to fluently use the language required for safety during the entire process of an incident and gave a list of important questions to consider:

So we know that whether students use listening [and spoken] language or whether they use ASL that most of them are in some kind of speech and language therapy. So how do we work on either the articulation of the words, or the signs themselves and then also the language structures? So like, what is it that you need to be able to sign in order to respond to this situation? What do you sign to that person [the offender]? And then what do you sign to the person later [to report]? Or what do you say to that person [to report]? ... So giving them opportunities to practice that language is going to be really important so that it's part of their language and that they're able to use it and in a situation if it's needed, and then also, what do you do if you're in a situation where you're a signing student, and you're with adults that don't sign? Like how do you then communicate? So is it that you need to like, ask like, “Let's find an interpreter.,” do you need to say like, “Let's talk to my teacher who can sign and make sure that you understand this?” Um, do we, do I draw a picture for you? Do I like act it out for you? How do I communicate this to somebody who does not know sign language and know that they're going to understand what I'm saying so that it doesn't just get brushed off or misunderstood? I think is really important and even with the kids who use spoken language, if their language is not clear, what are the ways that we make sure that you understand what I'm saying and that you're not misunderstanding because either my language or my speech isn't clear.

- *Advocating for accommodations.* All four participant groups brought concerns about

how not advocating for accommodations can lead to potential safety problems. Teachers, in particular, were concerned about consent and safety in medical situations. One teacher referred to the frequency that she, as a parent, has been denied a Certified Deaf Interpreter for her own child. She said it is important for DHH children to understand “what a doctor’s office says is not always right.” Another teacher, who is also a child of a deaf adult (CODA), shared concerns that children are not taught that “they have the right to consent to medical procedures and what consent looks like” for them. DHH adults shared a variety of scenarios that can lead to safety problems if children do not advocate for their accommodations. Two DHH adults mentioned “noisy environments where it is difficult to communicate” as a safety risk. A DHH adult cited “requesting an interpreter when there is legal trouble” as an important skill to role-play, while a parent and a DHH adult mentioned the communication behaviors of the person speaking or interpreting as a potential risk. The DHH adult said, “advocating for their ... right to clearly understand what’s being presented in the class ... if the teacher is, you know, standing with their back to them, or you know, the interpreters in the wrong spot.” One safety skill mentioned by a DHH adult was “how to deal with discrimination.” While the curriculum addresses some skills that could be helpful when dealing with discrimination, the participant thought roleplays directly applicable to DHH children would be helpful.

Boundary-Related Situations

The sub-theme “boundary-related situations” was broken down into three categories including setting touch boundaries, setting general boundaries with staff, and touch in deaf culture. Across all four groups, participants wanted students to experience roleplays that helped them navigate safety situations related to boundary-related situations.

- *Setting touch boundaries.* Faculty, teachers, and DHH adults shared concerns about

touch boundaries specifically related to the situations and people DHH children encounter in their daily lives. Participants wanted roleplays designed to teach DHH children the kind of touch associated with different kinds of providers they visit alone and peer situations they deal with as a result of wearing hearing devices. For example, one faculty participant shared:

We need to talk about healthy boundaries with therapists and teachers and audiologists, ... I think definitely, like, an add on social story could be about, you know, the kind of touch that an audiologist will do, the kind of touch that an itinerant teacher would do, which should be none or high five, or whatever. So maybe just depicting that, like really specific. I think one could be, I think a lot about like listening, hearing assistive technology. And so what if a boundary setting is reasonable like who gets to touch your equipment and your devices and who doesn't? Seems like a good "close to the heart" explanation for some kids. And I would imagine something parallel with an interpreter.

A DHH adult spoke from her own experiences and concerns for DHH children. "We need to teach our kids that even though we're as expressive as we are [the deaf community], we still have the right to say no." Another DHH adult shared a similar concern, "if someone says no, it's no first and then find out why later," pointing out that sometimes the DHH person can be the one who is not respecting other people's boundaries. One faculty participant reiterated the need for addressing both roles when they said, "[the curriculum needs] good focus on both sides of the coin, being the person that's doing the touching that the person doesn't want, and then on the other side of it."

- *Settings general boundaries with staff.* Parents and faculty shared concerns that DHH children need practice setting boundaries with staff. Faculty participants were concerned about setting boundaries with interpreters and whether DHH children really understand the role and ethical responsibilities of an interpreter. For example, one faculty participant thought it was very important for DHH children to know how to set boundaries with interpreters and how to request a different interpreter if they are uncomfortable. Parents had similar concerns, but focused primarily on other providers, such as therapists. One parent questioned, "How do you advocate

when it's just you and your, you know, licensed whoever, that's helping you as a small child?" The curriculum does teach skills for advocating with adults, but participants wanted roleplays that had more explicit and applicable meaning to the children.

- *Touch in deaf culture.* A common concern among DHH adults, teachers, and faculty participants was the role of touch and expression in deaf culture. One DHH adult explained, "Sometimes hearing people can view the emotions or the facial expressions as aggressive because they're [deaf people] using big hand signs and using lots of signing space." Children need to learn "what is appropriate and inappropriate in each community [deaf community and hearing community]." Teachers discussed in the focus group that they often teach children appropriate ways to tap for attention, a common way to get attention in deaf culture. One teacher explained, "We have to teach, like, what is, like, the right level of strength." Another said, ".we had to teach them where they could tap their teachers and where they could tap their friends or us." One DHH adult cautioned that there are "differences in touching in the deaf [signing] community ... and oral deaf community" that need to be taught to DHH children. Along the same line of thought regarding community differences, another DHH adult cautioned, "if you're going to go with touch [to get attention], be sensitive and aware that perhaps they're [your communication partner] not, they might not like that touch."

Discussion

The aim of this study was to gain stakeholder input regarding how the Kidpower® curriculum could be accommodated to meet the unique needs of DHH children. Statistics reveal a critical need for prevention efforts (Children's Bureau, 2019; Jones et al., 2012) and advocacy organizations like the CEC (2018) and Hands & Voices (n.d.) have taken critical steps in raising awareness regarding child maltreatment in DHH children. While there is peer-reviewed evidence

Kidpower® curriculum is effective with hearing children (Brenick et al., 2014), researchers and practitioners cannot assume the curriculum is equally effective for DHH children as they were not included in the sample.

Findings indicate that without modifying the curriculum, there are significant obstacles to implementing the curriculum with DHH children, but participants find potential modification of the curriculum hopeful. One faculty member said:

I'm just super happy that this is being done. Um, you know, any resource in a teacher preparation kind of situation, any resource that I can show my students to say, hey, look, hey, there's a thing out there, you know, after we kind of talked about this, in our coursework, I can say, here's the thing, here's a tool, here's another resource for you to use, you know, in the classroom setting that works with this population that has tips that has things for you to make sure that you're keeping your kids safe, I think is amazing.

The themes in the findings point to four areas that stakeholders believe must be addressed to make the curriculum accessible to and effective for DHH children: (a) inclusion of media components (b) language modification and teaching strategies, (c) improvement of visual information, and (d) inclusion of people and situations DHH children uniquely interact with in their world that need to be represented in the curriculum.

The themes from the findings align with Skyer's (2020) five propositions for deaf pedagogy, address obstacles to safety previously identified by the CEC (i.e., behavior, cognition, language, and communication; 2018), and align with previous recommendations for effective prevention strategies for DHH learners (Embry & Grossman, 2006; Sebald, 2008; Yu et al., 2017). These alignments offer credibility to the participants' statements and the concerns of the CEC (2018), while providing evidence of the validity of Skyer's propositions for deaf pedagogy.

Accommodations and Modifications for Accessibility

When asked about how to make the curriculum accessible, participants' statements returned three themes. Two of those themes (i.e., language modification and teaching strategies

and improved visual information) align with Skyer's (2020) second proposition, the sensory delimitation-and-consciousness proposition. The themes also correspond with the CEC (2018) concerns and previous recommendations for linguistically and culturally appropriate communication in the context of sexual abuse prevention programs for DHH students (Embry & Grossman, 2006; Sebald, 2008; Yu et al., 2017).

According to Skyer (2020), all discourse must be accessible and able to be understood by the student for students to fully develop consciousness, a key concern of the CEC (2018) in their position statement. Without addressing the complexity of the language in the Kidpower® curriculum and the individualized language needs of DHH students (i.e., language modification and teaching strategies), the curriculum will not be fully accessible or fully understood. Lack of accessibility and understanding limit the development of knowledge, which may affect acquisition of people safety skills, leaving parents and teachers with a false sense of security that students have improved knowledge because they have gone through the curriculum. By adapting the Kidpower® curriculum with multiple language levels and modalities of language access in mind, teachers will be able to take advantage of the linguistic strengths of the child, rather than trying to mold the language of the child to fit the language of the curriculum.

Two themes, "media components" and "improve visual information" correspond with Skyer's (2020) third proposition for deaf pedagogy, the adapted tools proposition. Participants communicated through their statements that modalities and tools used to teach safety must allow students to learn within the bounds of their sensory milieu (e.g., pictures, sign language, gestures). As a whole, participants wanted to see the Kidpower® content represented visually through media and pictures in ways that are representative of DHH students and how they learn and communicate (e.g., deaf actors, multiple modalities, rich visual information, various hearing

technologies, various races and ethnicities).

The theme “improve visual information” also corresponds with Skyer’s (2020) third (i.e., adapted tools) and fourth (i.e., multimodal) propositions for deaf pedagogy. If visual information is the foundation for DHH children to fully develop consciousness (i.e., second proposition), all discourse must be accessible and able to be understood by the student. That includes written communication, which is used extensively to communicate content in the social stories and comic strips of the Kidpower® curriculum. It is often difficult for DHH children to understand written communication without other visual modalities in the primary years due to language deprivation. Providing DHH children with multiple modalities to access the curriculum is necessary (i.e., fourth proposition) so they can fully understand the content (i.e., second proposition). By improving the visual information in the Kidpower® curriculum, along with adding media components, DHH children will have access to multiple modalities (i.e., written communication, sign language, gestures, and pictures) which will improve comprehension, cognition, and subsequently safety skills (Easterbrooks & Stoner, 2006; Starosky & Pereira, 2013). By providing information in multiple, visual ways, DHH children will learn about safety in ways that are best for them (i.e., proposition 3) and feel empowered in the world (Hauser et al., 2010).

Applicability of the Curriculum

Both themes from research question 2 (i.e., including people and situations from the DHH child’s experience), correspond with Skyer’s (2020) first proposition, the biosocial proposition (i.e., the deaf child’s body, mind, and their social environment cannot be separated). The themes also correspond with previous recommendations that content must be developed with the deaf community (Sebald, 2008; Yu et al., 2017) and culturally appropriate communication in

mind (Embry & Grossman, 2006; Sebald, 2008; Yu et al., 2017).

The people and situations DHH children interact with and experience as a result of being DHH are vital to providing children with skills for safety in the environments in which they live, work, and play. While there are social stories and roleplays in the Kidpower® curriculum that could be easily adapted, it is important for teachers to know where to locate the content and how to adapt it with ease. For example, there is currently a social story and roleplay in the Kidpower® curriculum about touch for health and safety. One social story used in the Kidpower® curriculum is about a dentist who must be able to touch your teeth and mouth for health and safety, given that the touch is not a secret (Van der Zande, I., 2016). This content could be adapted to teach DHH children the boundaries of an audiologist or speech therapist and discuss places on the body those providers may touch, given that the touch is not a secret. However, this would involve additional illustrations as the visual content must match the knowledge in order to be fully understood. Some social stories and roleplays will need to be added because there are not aligning roleplays or social stories already in the curriculum. For example, there are currently no social stories or roleplays that depict a residential living situation. This particular location must be represented given the instances of abuse that have historically occurred in these locations (Sullivan et al., 1987, Vernon & Miller, 2002). Overall, DHH children need to be able to see their life represented in the social environment of the curriculum for them to best integrate the information into their everyday lives.

Influence of Deaf Education Philosophy on Participant Feedback

An interesting finding was regardless of communication philosophy, faculty, parents, DHH adults, and teachers had very similar concerns and recommendations. There has historically been a chasm between those who believe in listening and spoken language, total

communication, and bilingual-bicultural philosophies (Lane, 2003; Winefield, 1987). The statements from participants in this study suggest that in this group of stakeholders, difference in philosophy is primarily related to modality, not teaching methods and strategies. Participants, as a whole, were sensitive to the fact that the modality they were most comfortable with was not the only modality utilized by DHH children, often recommending that multiple modalities be offered through print and media.

This finding suggests that curriculums accommodated for DHH children can be inclusive of all modalities without creating separate curricula for individual modalities. While there were recommendations specific to ASL, the recommendations were not about how to teach the content, but rather how to sign the content in a way that is culturally appropriate and informed by deaf adults, aligning with the recommendations from previous authors (Embry & Grossman, 2006; Sebald, 2008; Yu et al., 2017).

This finding also highlights that Skyer's propositions do not solely apply to DHH children who sign, but to all DHH children. While there may be disagreements about which modalities are appropriate for DHH children, evidence from this study suggests that across philosophies there is agreement that children (1) need full access to discourse, (2) need adapted tools that are visual in nature, (3) benefit from multiple modalities, and (4) that their mind, body, and social environment cannot be separated.

Implications for Practice

Modifying Curricula

The findings of this study highlight a common problem in deaf education: the absence of accessible curricula for DHH students. During the beginning of the teacher focus group, teachers shared that much of their time is spent modifying existing curricula so their students can access

the language and content. When discussing the ways they modify general education curricula, they cited the need to modify language, provide background knowledge, change visuals and teaching strategies, and add accommodations such as captions and ASL interpretation. Their feedback about general education curricula, and the Kidpower® curriculum, provides a preliminary look into practices for modifying existing curriculums for DHH children. English text with accompanying pictures seems to be standard for textbooks and materials once children are expected to read to learn. Recommendations from this study may be used as a guided for modifying curricula that are primarily presented in written language and pictures. By incorporating media, improving visual content, modifying the language, and incorporating people and situations common to DHH children, teachers can provide students with access that is based on deaf pedagogy and theory (Easterbrooks & Stoner, 2006; Skyer, 2020; Starosky & Pereira, 2013).

In addition to being used to modify curricula in deaf education, the concepts from this study could be used to provide access for all students through universal design for learning (UDL). Ok et al. (2017) conducted a systematic review of research related to UDL in pre-K to grade 12 classrooms. The results indicated UDL-based instruction has the potential to increase access to general education curriculum, in addition to improving academic and social outcomes. The themes from this study align with UDL guidelines, as they provide multiple means of representation (CAST, 2018). For example, one strategy for providing multiple means of representation is to provide options for language and symbols (CAST, 2018). The purpose of media components, enhanced visual information, and language modification and teaching strategies is to provide the options that best meet the linguistic needs of learners. In this study, the need was for multimodal, visual language and input, but the same could be applied to any

oral language a student uses in the classroom. The themes also provide multiple means of action and expression (CAST, 2018). For example, one strategy for providing multiple means of action and expression is to provide options for expression and communication (CAST, 2018). Media components, language teaching strategies, and inclusive role plays give students a tool to express themselves in the way that is best for them, whether that is recording a signed video, drawing comic strips, or acting out their learning through role plays.

Culturally and Linguistically Responsive Teaching

The findings also point to the importance of cultural and linguistic inclusion in the classroom and in curricula utilized in public schools, regardless of topic or disability. Across all participant groups, there was a focus on providing access to DHH students in ways that were culturally appropriate and that corresponded with their linguistic needs. Specifically, participants wanted to see DHH students visually represented in the curriculum, ASL integrated through media and pictures, and role plays to be inclusive of DHH students' everyday lives. In addition, all participant groups emphasized the importance of teaching DHH children what was acceptable in hearing culture compared to deaf culture. One deaf participant went further to emphasize the difference in deaf culture (i.e., use ASL) and oral deaf culture (i.e., use spoken English).

The participants' emphasis on linguistically responsive teaching was intertwined in every theme. Lucas and Villegas's (2011) Linguistically Responsive Teaching conceptual framework outlines the characteristics of teachers who are linguistically responsive. Orientations of linguistically responsive teachers include those who have sociolinguistic consciousness, value for linguistic diversity, and inclination to advocate for English Language Learner students. They also have a set of knowledge and skills including learning about students' language backgrounds and experiences, identifying the language demands of classroom tasks, applying key principles

of second language learning, and scaffolding instruction to promote language learning. These principles may not always map perfectly onto deaf pedagogy due to the prevalence of language deprivation, meaning that many DHH students have not mastered their L1. However, the data showed that all participant groups in the study held these values and that those values could be implemented by making changes to the curriculum that are outlined in this study.

Implementing the Kidpower Curriculum

Since the Kidpower® curriculum is readily available to purchase online, teachers can begin using the curriculum and modifying the curriculum, to the extent they have available resources, so students have access to people safety instruction as soon as possible. Creating videos is somewhat commonplace in deaf education programs, especially since the beginning of the Covid-19 pandemic, so programs could use equipment and routines already in place to create roleplay videos to go with the curriculum. Videos could be shared in a common location online as they are created. While putting the responsibility of modification on teachers is not ideal due to lack of resources, this would give DHH children access to the curriculum ahead of any formal release of modified material by Kidpower® International.

Recommendations for Future Research

Effectiveness of Kidpower® Curriculum

This study was the first step in the process of determining if the Kidpower® curriculum could be effective for DHH learners. With the stakeholder input from this study, researchers, in collaboration with Kidpower® International, can begin the process of modifying the curriculum. The process should involve Kidpower® staff, deaf education experts, ASL specialists, and a variety of deaf adults and children. Following modification, the curriculum should be piloted and revised, as necessary. Then, the curriculum could be implemented, and effectiveness could be

measured through single case studies. Including DHH students in future research related to the Kidpower® curricula would be a positive step towards including DHH students. However, even with representative inclusion of DHH students in a research sample, the effectiveness of the curriculum with DHH children would have little effect on the outcome of the study due to the low incidence of being DHH. For this reason, single case studies will be a better way to determine effectiveness for DHH students. To become an evidence-based curriculum, multiple researchers across multiple locations will be required.

Representation

This participants of this study emphasized the importance of representation repeatedly in their statements, but representation is not typically considered part of modifying the curriculum in Special Education. Accommodations and modifications of curricula typically focus on changing what students are expected to learn and how they access the content. Future research should evaluate the academic and psychosocial benefits of including representation in the process of modifying curricula.

Advantages and Limitations

Engaging key stakeholders in the process of accommodating the Kidpower® curriculum for DHH students was necessary because the input will improve the quality of the accommodations and increase buy-in from the deaf education community when the curriculum is piloted and subsequently implemented. DHH students have a wide range of communication modalities and abilities, so it was important to have multiple stakeholders in a variety of roles provide input based on the section of the population with which they have expertise. Input from DHH adults and parents provided insight as to how the curriculum could be implemented at home when parents are both able and unable to effectively communicate with their children.

Additionally, development of any curriculum is an extensive and expensive process. By adapting the existing Kidpower® curriculum, resources will be available for teachers and parents sooner than if a curriculum was created from scratch.

Several limitations of the research design must be acknowledged. DHH people are a low-incidence population. Because of this, there were limited numbers of potential participants. To address this limitation, only 6 participants per group were utilized in focus groups and interviews, apart from the faculty group, which included 7. Due to the limited number of participants, it is possible that the findings do not represent the larger collective of DHH adults, parents, faculty, and teachers. However, among the 6 participants in each group, there were no outliers in terms of the content of their statements. Participants' beliefs and recommendations aligned within groups and across groups, leaving researchers involved in the study to believe saturation was achieved.

Interviews and focus groups were conducted virtually due to Covid-19 and that brought its own set of limitations and issues. Scheduling parents was particularly challenging. Several expressed difficulties with scheduling due to working full time from home and having their children at home due to virtual learning requirements. Because of scheduling conflicts, two parents were interviewed, while the other four attended a focus group. During the parent focus group there were some technical issues with one parent's computer that affected the quality of the Zoom recording. The moderator asked for clarification once the technical issues were resolved. Another parent was observed driving half-way through the interview. Though no difference was noticed in the participation level of the participant compared to others, focus and safety was a concern. Additionally, a parent that was interviewed had her child present during virtual learning and had conversation throughout the interview with the child about their work.

This resulted in an incident report being filed with the Institutional Review Board since children were not approved to be recorded as part of the study. In the future it would benefit researchers to communicate expectations with participants regarding who is present and what activity occurs during a virtual focus group or interview.

Conclusion

The findings in this study provided recommendations for adapting the Kidpower® curriculum for DHH children, which is a notable start towards establishing a maltreatment prevention and response curriculum for DHH children (CEC, 2018). Given the recommendations by stakeholders, the next step is to begin the process of adapting the Kidpower® curriculum in collaboration with Kidpower® International. Following the completion of adaptations, the curriculum must be piloted with DHH children, their teachers, and parents and go through an iterative process of revision. When the adapted curriculum is ready to be used, future research should include a series of single case studies may be utilized to establish the curriculum as an evidence-based intervention for DHH children. Researchers and school collaboration will be needed across the country to aid in the research process.

As a field, we must begin prioritizing the teaching of people safety skills in a systematic way to address the rising numbers of abuse and neglect among DHH children. With raised awareness of abuse and neglect due to the #MeToo movement, increasing legislative requirements, and a CEC (2018) position statement, we can no longer claim we do not know there is a problem. As such, we have a responsibility to provide accessible, effective instruction that protects DHH children from maltreatment. By implementing the recommendations from stakeholders, the Kidpower® curriculum has the potential to be a resource that can be used nationwide to support the development of safety skills in DHH children at school and at home.

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APPENDIX A
ACCOMMODATING PEOPLE SAFETY CURRICULUM FOR STUDENTS WHO ARE
DEAF OR HARD OF HEARING SEEKING FOCUS GROUP AND INTERVIEW
PARTICIPANTS

Hello! We are currently conducting a research study to explore how Kidpower® curriculum can be accommodated to meet the unique needs of students who are deaf or hard of hearing, from the perspective of the deaf education community. We are seeking adults, 18 years or older, that are hearing, deaf, or hard of hearing to participate in a focus group or interview!

If you are interested in participating and are a/an:

- teacher for children who are deaf or hard of hearing,
- parent with a child who is deaf or hard of hearing,
- adult who is deaf or hard of hearing, or
- faculty who work in deaf education teacher preparation programs

Then, please complete this online form

https://unt.az1.qualtrics.com/jfe/form/SV_39OD5x13vBiGVz7

or email us at: Jennifer.Johnson@unt.edu for more information

We estimate the focus group or interview will take less than 60 minutes. For those in a focus group, when we have enough participants for a focus group, we will contact you to schedule a day and time that works best for you and the group.

Your input is very important to us and will be kept strictly confidential (used only for the purposes of research). Detailed information regarding the study and confidentiality can be found in the first page of the survey (letter of consent).

This study has been approved for human subject participation by the Institutional Review Board at the University of North Texas (#)

If you have any questions please email us at Jennifer.Johnson@unt.edu. We appreciate your time and your consideration. Have a wonderful day.

Best,

Jennifer A.L. Johnson, M.S.
College of Education
University of North Texas

Melissa N. Savage, PhD
College of Education
University of North Texas

APPENDIX B
SCREENER

1. Which statement describes you?
 - a. I am a university professor who works in a teacher education program. (survey logic sends to faculty strand)
 - b. I am currently deaf education teacher or deaf education supervisor certified in deaf education. (survey logic sends to teacher/supervisor strand)
 - c. I am a parent of a child who is deaf or hard of hearing. (survey logic sends to parent strand)
 - d. I am a Deaf adult who is not a teacher or university faculty.
 - e. None of the Above (survey logic sends to end of survey)

Faculty Strand

2. Do you have at least five years of experience working with students who are DHH?
 - a. yes
 - b. no
3. Will you be attending the 2020 American College Educators – Deaf and Hard of Hearing conference?
4. Please enter your email address:
5. Please enter your phone number:

Teacher/Supervisor Strand

6. Do you have at least five years of experience working with students who are DHH?
 - a. yes
 - b. no
7. Will you be attending the 2020 Texas Statewide Conference on the Education of the Deaf?
8. Please enter your email address:
9. Please enter your phone number:

Parent Strand

10. Are you a parent of a student who is deaf or hard of hearing?
11. Is your child being served through an IFSP or IEP?
12. Are you local to North Texas or able to travel at one's own cost?
13. Please enter your email address:
14. Please enter your phone number:

Deaf Adult Strand

15. Do you identify as Deaf or hard of hearing
16. Do you use American Sign Language to communicate?
17. Do you use spoken English to communicate?
18. Do you use a combination of spoken English and sign language to communicate?
19. Are you local to North Texas or able to travel at one's own cost?
20. Please enter your email address:
21. Please enter your text number if available:

APPENDIX C

INTERVIEW QUESTIONING ROUTE: DEAF OR HARD OF HEARING ADULTS

Thank you for participating in the interview today. We appreciate your willingness, your time, and your effort helping us develop curriculum that is accessible for children who are deaf or hard of hearing. The Kidpower® curriculum was chosen because it has been recommended by the Council for Exceptional Children, but has not yet been accommodated for students who are deaf or hard of hearing. As we mentioned before, the goal of this research is to explore how Kidpower® curriculum can be accommodated to meet the unique needs of students who are deaf or hard of hearing, from the perspective of the deaf education community, and that's includes you as a deaf or hard of hearing adult.

As mentioned in the consent form, this interview will be audiotaped, so the discussion can be transcribed. Your name and any identifying information will not be included in the transcriptions. You may refuse to answer any questions during the interview and you may withdraw from the study at any time.

Introductory Questions

1. *Say:* I want to start by asking you what you believe is the top safety concern for children who are deaf or hard of hearing.

Key Questions

1. *Say:* The Kidpower® curriculum that you received prior to our discussion today addresses many safety issues by doing activities, roleplays, and discussions at school. When you look at the lesson materials, what are some benefits and obstacles you think children who are deaf or hard of hearing may encounter they participate in the lesson.
2. *Say:* Another part of the curriculum is the homework portion. After students learn about the safety skill at school, they are given homework to do with their parents. This is a copy of the homework included as part of a safety program called Kidpower®. This is the same packet you received in your email to review prior to today. What benefits and obstacles would you have experienced by doing this homework with your parents when you were in school?
3. *Say:* Now that you have identified the obstacles you might have faced, do you have any solutions or suggestions you might give a teacher on how he or she can change this homework to address the obstacles you identified?
4. *Say:* Can you think of safety concerns specific to being deaf or hard of hearing that should be taught and discussed with children?

End Questions

1. I want to close out time together by giving you the opportunity to share anything you've left unsaid so far or anything you'd like to add.

Thank you for taking the time to participate in the interview and this research study. We truly value your comments and appreciate that you shared your perspectives about the curriculum. To

show appreciation for your time, we are going to be emailing you a \$20 gift card. Can you confirm your email address please?

Possible probing questions (Krueger & Casey, 2000, p. 110)

- Would you explain further?
- Would you give me an example of what you mean?
- Would you say more?
- Tell us more.
- Say more.
- Is there anything else?
- Please describe what you mean.
- I don't understand.

APPENDIX D

FOCUS GROUP QUESTIONING ROUTE: PARENTS

Thank you everyone for participating in the focus group session today. We appreciate your willingness, your time, and your effort helping us develop curriculum that is feasible for parents to use at home. The Kidpower® curriculum was chosen because it has been recommended by the Council for Exceptional Children, but has not yet been accommodated for students who are deaf or hard of hearing. As we mentioned before, the goal of this research is to explore how Kidpower® curriculum can be accommodated to meet the unique needs of students who are deaf or hard of hearing, from the perspective of the deaf education community, and that's includes you, the parent.

As mentioned in the consent form, this focus group discussion will be audiotaped, so the discussion can be transcribed. Your name and any identifying information will not be included in the transcriptions. You may refuse to answer any questions during the focus group session and you may withdraw from the study at any time.

Before we begin discussing the show as a whole group, we would like you to take a few minutes to gather your thoughts about the materials packet you received prior to the meeting today.

Opening Questions

1. Role of Moderator

I am here to ask questions and facilitate your conversation, but we are here to learn from you.

2. Purpose

The purpose of the focus group is to hear your ideas for accommodating a safety curriculum for students who are deaf or hard of hearing.

3. Ground Rules

- a. One person speaks at a time
- b. Avoid side conversations because the microphone can only record one person at a time
- c. Everyone participants with no one person dominating the discussion

4. Get to Know Each Other

Tell us your name, how old your child is, what kind of communication they use, and what you like to do for fun

Introductory Questions

1. *Say:* What is the top safety concerns you have for your child? Take a few minutes to write down your thoughts. Then we will go down the list of participants so you can all share.

(Wait 3 minutes.)

Transition Question

1. *Say:* What has been your experience with homework and your child? What are some benefits and obstacles you encounter when you do homework with them? Take two minutes to write down some of your thoughts and then we will share.

(Wait for approximately two minutes or until it is clear participants are finished brainstorming. Allow sharing.)

Key Questions

1. *Say:* Get out your copy of the homework included as part of a safety program called Kidpower®. This is the packet you received in your email to review prior to today. Children will learn a skill at school and then bring home this homework to extend their learning. Take 3 minutes to write down some of your thoughts about the benefits and obstacles you would experience doing this homework with your child.”
2. *Say:* Now that you have identified the obstacles you might face, what are some solutions or suggestions you might give a teacher on how he or she can change this homework to address the obstacles you identified?
3. *Say:* Can you think of safety concerns specific to being deaf or hard of hearing that could be discussed by doing this homework?

End Questions

1. I want to close out time together by giving you the opportunity to share anything you’ve left unsaid so far or anything you’d like to add. We’ll go around the circle to give everyone a chance to speak.

Thank you for taking the time to participate in the focus group session and this research study. We truly value your comments and appreciate that you shared your perspectives about the curriculum. To show appreciation for your time, we will email a \$20 gift card.

Possible probing questions (Krueger & Casey, 2000, p. 110)

- Would you explain further?
- Would you give me an example of what you mean?
- Would you say more?
- Tell us more.
- Say more.
- Is there anything else?
- Please describe what you mean.
- I don’t understand.

APPENDIX E

INTERVIEW QUESTIONING ROUTE: FACULTY

Thank you for participating in this interview today. We appreciate your willingness, your time, and your effort helping us develop curriculum that is accessible for children who are deaf or hard of hearing. The Kidpower® curriculum was chosen because it has been recommended by the Council for Exceptional Children, but has not yet been accommodated for students who are deaf or hard of hearing. As we mentioned before, the goal of this research is to explore how Kidpower® curriculum can be accommodated to meet the unique needs of students who are deaf or hard of hearing, from the perspective of the deaf education community, and that's includes you, the faculty preparing pre-service teachers of the deaf.

As mentioned in the consent form, this interview will be audiotaped, so the discussion can be transcribed. Your name and any identifying information will not be included in the transcriptions. You may refuse to answer any questions during the interview and you may withdraw from the study at any time.

Introductory Questions

1. *Say:* I want to start by asking you what you believe is the top safety concern for children who are deaf or hard of hearing.

Key Questions

1. *Say:* This is a lesson included in the Kidpower® Teaching Book #5 called “Be Safe with Touch, Teasing, and Play: How to Set Boundaries with People You Know.” This is the same lesson you received in email to review prior to today. When you look at the lesson materials, what are some benefits and obstacles you think children who are deaf or hard of hearing may encounter they participate in the lesson?”
2. *Say:* Now that you have identified the benefits and obstacles they might face, what are some solutions or suggestions you might give a teacher on how he or she can accommodate this lesson for make it more effective for students who are deaf or hard of hearing?
3. *Say:* How could this lesson be extended to specifically address issues students who are deaf or hard of hearing face?

End Questions

1. I want to close out time together by giving you the opportunity to share anything you've left unsaid so far or anything you'd like to add.

Thank you for taking the time to participate in the interview and this research study. We truly value your comments and appreciate that you shared your perspectives about the curriculum. To show appreciation for your time, we will be emailing you a \$20 gift card. Can you confirm your email address?

Possible probing questions (Krueger & Casey, 2000, p. 110)

- Would you explain further?

- Would you give me an example of what you mean?
- Would you say more?
- Tell us more.
- Say more.
- Is there anything else?
- Please describe what you mean.
- I don't understand.

APPENDIX F

FOCUS GROUP QUESTIONING ROUTE: TEACHERS

Thank you everyone for participating in the focus group session today. We appreciate your willingness, your time, and your effort helping us develop curriculum that is feasible for parents to use at home. The Kidpower® curriculum was chosen because it has been recommended by the Council for Exceptional Children, but has not yet been accommodated for students who are deaf or hard of hearing. As we mentioned before, the goal of this research is to explore how Kidpower® curriculum can be accommodated to meet the unique needs of students who are deaf or hard of hearing, from the perspective of the deaf education community, and that's includes you, the teachers.

As mentioned in the consent form, this focus group discussion will be audiotaped, so the discussion can be transcribed. Your name and any identifying information will not be included in the transcriptions. You may refuse to answer any questions during the focus group session and you may withdraw from the study at any time.

Before we begin discussing the show as a whole group, we would like you to take a few minutes to gather your thoughts about the materials packet you received prior to the meeting today.

Introductory Questions

1. *Say:* Let's start by getting to know each other. Tell us your name, where you work, the grade levels you work with, and what you like to do for fun?

Transition Question

1. *Say:* When you have used curriculums that haven't been accommodated for students who are deaf or hard of hearing, what are some of the benefits and obstacles you have faced? Take two minutes to write down some of your thoughts and then we will share.

(Wait for approximately two minutes or until it is clear participants are finished brainstorming. Popcorn sharing.)

Key Questions

1. *Say:* Let's get out the lesson from the Kidpower® Teaching Book #5 called "Be Safe with Touch, Teasing, and Play: How to Set Boundaries with People You Know." This is the same lesson you received in email to review prior to today. Take 3 minutes to jot down your thoughts about the benefits and obstacles you would experience using this lesson with students who are deaf or hard of hearing."
2. *Say:* Now that you have identified the benefits and obstacles you might face, what are some solutions or suggestions you might give a teacher on how he or she can accommodate this lesson for make it more effective for students who are deaf or hard of hearing?
3. How could this lesson be extended to specifically address issues students who are deaf or hard of hearing face? (*Share*)

End Questions

1. I want to close out time together by giving you the opportunity to share anything you've left unsaid so far or anything you'd like to add. We'll go around the circle to give everyone a chance to speak.

Thank you for taking the time to participate in the focus group session and this research study. We truly value your comments and appreciate that you shared your perspectives about the curriculum. To show appreciation for your time, we will email you a \$20 gift card.

Possible probing questions (Krueger & Casey, 2000, p. 110)

- Would you explain further?
- Would you give me an example of what you mean?
- Would you say more?
- Tell us more.
- Say more.
- Is there anything else?
- Please describe what you mean.
- I don't understand.

APPENDIX G
DATA DISPLAY SAMPLES

This is an example of sorting codes into categories. The structural code for this data is Research Question 1. The participant group is teachers.

Media	Language Strategies	Parent & Community Resources
it would be really cool if they had DVDs already made of the roleplay	come up with three different things, to go with those words or to rephrase those words"" (referencing hand signals)"	do it multiple groups or if we just did it one on one with them with the parents or at least if we had an interpreter there to help
having them captioned and voiceover in English and or Spanish or whatever chosen language so that the parents aren't just playing a video and walking away	we need to be very explicit, sometimes because our kids are very literal	teach the parents some of the signs
videos and pictures would be the big thing	but some, like build up lessons for, you know, what does this vocabulary mean? What are different feelings?	mentorship program would be amazing where you pair a deaf adult with that family

This is an example of how the themes across participant groups were identified for the structural code Research Question 1.

Parents	Faculty	Teachers	Deaf Adults
RQ1: Media	RQ1: Pictorial Inclusion	RQ1: Media	RQ1: Language/Communication
RQ1: Presentation	RQ1: Differentiation for Language Levels	RQ1: Language Strategies	RQ1: Visual
RQ1: Language	RQ1: Video/Media Elements	RQ1: Parent & Community Resources	RQ1: Culturally Inclusive
RQ1: Parent Resources	RQ1: General Strategies for Teaching	RQ1: Visuals	RQ1: Video/Media
	RQ1: Language Considerations	RQ1: Differentiation	RQ1: Teaching Strategies
	RQ1: Vocabulary	RQ1: Content	RQ1: Content
	RQ1: Presentation Format		RQ1: Training/Teacher Considerations
	RQ1: Content Suggestions		
	RQ1: Communication Repair		
	RQ1: Sign Language Concerns & Recommendations		
	RQ1: Training		

This is an example of comparing the in vivo codes across the media categories for all participant groups to verify the theme “media components.”

Deaf Adults	Faculty	Parents	Teachers
offer prerecorded demo and live demo	create videos to go with them that would have the ASL along with the English	video with animation to see the acting out	it would be really cool if they had DVDs already made of the roleplay
"instead of homework assignment, make it a zoom meeting to talk and work it through ",group demonstration meeting for parents	"some model, like ASL videos, that a teacher could go and watch, to copy"	virtual activity for safe vs. not safe story	videos giving the kids an opportunity to see it in action before you're like okay, now you're gonna practice and role model through it
"media, like little video clips with either deaf interpreter, or a deaf media that has captions"	have little kids sign the things that you want the kids to sign,video actors are multicultural,video actors have different kinds of hearing technology,video actors are deaf	virtual activity where they move their characters to sort good and bad	videos and pictures would be the big thing
use a film of a CDI because it's more cost effective,use pictures instead of terminology,make sure to clarify that touch is seen differently in Deaf Culture and can be seen as offensive in the hearing community	videos	video component	she could teach a few signs, you know, bad touch or don't touch "" (using phone app)

APPENDIX H

CHILD SEXUAL ABUSE PREVENTION PROGRAMS FOR STUDENTS WITH
DISABILITIES: A SYSTEMATIC LITERATURE REVIEW

Abstract

Child sexual abuse prevention programming is now a school requirement in most states in the U.S. While there have been reviews of child sexual abuse prevention programming for the general population, reviews have not addressed outcomes of these programs for students with disabilities. A systematic review of literature was conducted, using PRISMA guidelines, to determine methodological rigor, intervention content, intervention methods, and program outcomes. Eleven articles fit the inclusion criteria, and analysis indicated a wide range of methodological rigor and methods, as well as positive outcomes. The review revealed a need for further study of child sexual abuse prevention programming for students with disabilities.

Keywords: child sexual abuse, abuse prevention programs, school prevention programs, students with disabilities, systematic literature review, literature review

Introduction

The Centers for Disease Control and Prevention (CDC) defines child abuse as “any act or series of acts of commission or omission by a parent or other caregiver that result in harm, potential for harm, or threat of harm to a child.” Acts of commission include physical, sexual, and psychological abuse, while acts of omission include physical, emotional, medical, dental or educational neglect, as well as inadequate supervision and exposure to violent crimes. The U.S. Department of Health and Human Services (2017; DHHS) reports there were approximately 674,000 substantiated child victims of abuse and neglect in 2017. This was a 2.7% increase from the 2013 report and does not include unreported cases. Sexual abuse was present in 8.6% of those cases, which is a total of 58,114 children. Felitti and colleagues (1998) found that Adverse Childhood Experiences, such as child abuse, are positively correlated with risk of negative wellbeing and poor health. Risky behaviors that emerge from negative wellbeing and poor health may lead to disability, disease, and behavioral problems across the lifespan. This is even more

likely for students with disabilities.

Jones and colleagues (2012) conducted a meta-analysis of prevalence of violence against students with disabilities. Their research indicated students with disabilities were three to four times more likely to be victims of violence than their non-disabled peers, and this may be due to challenges related to behavior, cognition, social skills, language, and communication (CEC, 2018). To support addressing this problem, Child Welfare Information Gateway (2018), a service of DHHS, released a bulletin for professionals on the risk and prevention of maltreatment of students with disabilities. They called for community-level, family-focused, and child-focused prevention efforts. The Council for Exceptional Children (2018; CEC) has also called for schools to address child maltreatment by including safety goals and objectives in the Individual Education Plan and Individual Family Service Plan due to the detrimental effects of trauma on academic, social, and behavioral domains (Sullivan & Knutson, 2000; Font & Berger, 2015).

Sexual abuse prevention has become a policy issue in the past decade, in part due to advocacy by a nonprofit named Erin's Law. The organization Erin's Law, along with other nonprofits, community organizations, and lawmakers, seeks to support the passing of legislation that would require all public schools in each state to implement a prevention-oriented child sexual abuse program (Erin's Law, 2019). Public schools have been targeted as implementers of sexual abuse prevention because all children in the United States have access to public schools regardless of race, ethnicity, disability, or socioeconomic status. By implementing in schools, states can reach the maximum number of children and monitor progress of implementation through existing accountability systems. The law, named "Erin's Law" in most states, has passed in 35 states, and is pending in 13. While worded differently across states, the requirements of most laws include prevention programming for three groups of stakeholders including students,

school personnel, and parents or guardians. Students are to be taught age-appropriate techniques to recognize abuse and tell a trusted adult, reducing exposure to abuse and subsequently limiting the long-term outcomes of abuse. School personnel are to be taught to recognize and report abuse so students can receive intervention and support prior to the development of unhealthy coping mechanisms. Finally, parents or guardians are to be taught the warning signs and receive information regarding assistance to support sexually abused children (Erin's Law, 2019) so families can support their children once abuse is discovered. Schools are responsible for requirements related to students and school personnel.

In order to meet the requirements of the new law, schools need access to quality curriculum whose effectiveness is supported by research. Using evidence-based programs ensures states implement programs that comply with the intent of the prevention law, to effectively educate about and prevent abuse. In the absence of evidence-based programs, evidence-based strategies to teach content could prove vital. The CEC in collaboration with the CEEDAR Center developed a list of High Leverage Practices that are fundamental in educating students with disabilities (McCleskey et al., 2017). While evaluating the effectiveness of entire programs may take years, school districts can begin to evaluate existing programs through an internal audit of the extent to which High Leverage Practices are present in the program.

Aim of Review

The requirement of a child-focused curriculum to address sexual abuse prevention calls for evaluation of existing child sexual abuse prevention programs. Literature reviews have been published focusing on the evaluation of school-based abuse prevention programs for general education students (Davis & Gidycz, 2000; Topping & Barron, 2009; Walsh et al., 2018).

Reviews have shown that programming for general education students is effective in increasing

self-protective skills and knowledge without harmful effects and with good maintenance. Literature reviews have also been published that focus specifically on sexual abuse prevention for people with intellectual disabilities (Doughty & Kane, 2010; Kim, 2010). Reviews have found that abuse prevention interventions and programs are effective with people with intellectual disabilities, but primarily focused on adults with intellectual disabilities rather than students. No reviews were found that focus on students with disabilities. In accordance with the Individuals with Disabilities Improvement Act of 2004 (IDEA), schools must provide accessible instruction for students with disabilities and this includes access to any programs provided to students served in general education. Just as academic curriculums and interventions are evaluated for use with children with all different types of disabilities, functional curriculums should also be evaluated. The government has set rigorous standards for interventions, through the What Works Clearinghouse, to ensure students are receiving instruction in ways that provide them the maximum possibility for success. Behavioral interventions, including social skills curriculums, are included in their list of evidence-based curriculums. By including functional skills curriculums in the What Works Clearinghouse, a precedent has been set that functional skills curriculums should also be evidence-based. The research questions for this review are as follows:

1. What child abuse prevention programs or interventions have been evaluated for effectiveness with students with disabilities?
2. What content and methods do child abuse prevention programs or interventions use that have been effective with students with disabilities?
3. What is the level of quality of the studies located?
4. What are the outcomes of the programs?

Method

Article Selection Procedures

A comprehensive literature search was conducted using the EBSCOhost interface including the following electronic databases: Education Source, Academic Search Complete, ERIC, PsychArticles, Psychology and Behavioral Sciences Collection, PsychINFO, SocINDEX with Full Text, Professional Development Collection, and Teacher Reference Center. Keywords were selected based on commonly used phrases in child abuse prevention literature. Disability-related keywords were chosen so that IDEA disability categories were included. Key words and combinations were as follows: *child sexual abuse or personal safety skills or body safety or sexual abuse prevention or safe touch or self-protection AND curriculum or program or intervention or training AND disabled or disability* (i.e. intellectual disability and learning disability) *or impaired or impairment* (i.e. visual impairment, orthopedic impairment, language impairment, and speech impairment) *or deaf or hard of hearing or communication disorder or autism. Child sexual abuse or personal safety skills or body safety or sexual abuse prevention or safe touch or self-protection and curriculum or program or intervention or training* were required to be found in the abstract since they are central to the topic. Since the search was not only for programs specifically targeting students with disabilities, but also those that included them among the non-disabled population, *disabled or disability or impaired or impairment or deaf or hard of hearing or communication disorder or autism* was able to be found in the full text. The search was restricted to peer-reviewed articles since the interest of the literature review is evidence-based programming. The initial search yielded 405 articles. Out of those, 207 were duplicates. A PRISMA Flow Diagram can be found in Appendix A.

Inclusion and Exclusion Criteria

Studies in this review met the following criteria: (a) an empirical evaluation of a sexual abuse prevention program or intervention conducted in any setting, where empirical is defined as a study that uses single-case, quasi-experimental, or experimental design, (b) at least one participant has a disability and the scores for students with disabilities are reported, (c) intervention or program is preventative, not reactive to abuse that has already occurred, (d) published in English, (e) peer-reviewed and (f) included children ages 18 and under, since child abuse prevention in the general population focuses on minors.

Using the inclusion criteria, 198 articles were reviewed at the abstract level. If there was not a clear reason for exclusion, the article was marked for full review. For those articles included at this stage, a screening of the reference lists of each article was completed. Articles (n = 15) were identified by title for further review and based on abstract screenings, six articles were included. Next, a forward search was conducted using Google Scholar for each included article (Gough et al., 2017). Forward searches yielded a total of 95 articles whose abstracts were screened. Three articles were included from forward searches.

After articles were included based on the abstract, the full-text articles were assessed for eligibility. At this phase 24 more articles were excluded leaving 11 articles for the review (Dryden et al., 2014; Dryden et al., 2017; Fisher & Field, 1985; Kenny et al., 2013; Kenny et al., 2012; Lee et al., 1998; Lee et al., 2001; Lee & Tang, 1998; Llewellyn & McLaughlin, 1986; Thomas et al., 2018).

Intervention Content and Methods

Content analysis of intervention content and methods were conducted according to the process described by Zhang & Wildemuth (2009). Their method includes becoming familiar with

the data, developing categories and a coding scheme, and recognizing patterns in the data. The unit of analysis was identified as intervention content or methods. When patterns were recognized, codes were assigned starting with the first article. All the individual content topics and methods included in the intervention were listed. When there was an overlap in topic between the articles, the previously created code was utilized. This process was continued with the rest of the articles until there was a list of codes for each article.

Codes were then evaluated for overlap. Several codes were found to have similar meanings and were combined. For example, “travel safety,” “home safety,” “inappropriate touching by familiar non-romantic partner,” “authority figures,” “rides,” “lost in store,” and “appropriate vs. inappropriate situations” were all listed separately. However, they could all be included in the code “appropriate vs. inappropriate situations across settings and people” because they all referred to recognizing appropriate interactions in different places and with different people.

Following inductive content analysis, it was realized that all the data could be categorized into the 3R model, “Recognize,” “Respond,” and “Report,” as described by Wurtele (2008). The 3R model describes the three most important aspects of child abuse prevention. Method-related data was inductively coded into three categories including “tools,” “strategies,” and “methods.” Tools were defined as materials used during intervention and included slides, scripts, pictures, coloring handouts, puppets, posters, story cards, and videos. Strategies were defined as actions used to practice content learned. Methods were defined as ways interventionists conveyed content.

Since there was only one coder, trustworthiness was addressed by revisiting codes one week after the initial coding. Articles were individually reviewed again for intervention content

and methods and cross-referenced with the original coding. For content-related codes, I found one code that was omitted from identification in the Fisher & Field (1985) article, “keep on telling.” The intra-rater agreement between the first and second analysis was 98.6%. For method-related codes, the intra-rater agreement between the first and second analysis was 100%.

Study Quality

Studies that are experimental or quasi-experimental in nature were evaluated using the Quality Indicators for Group Experimental and Quasi-Experimental Research Articles and Reports (Gersten et al., 2005). This tool includes 10 Essential Quality Indicators and eight Desirable Quality Indicators. To be considered an acceptable study, all but one Essential Quality Indicator must be met and at least one Desirable Quality Indicator must be met. Single-case studies were evaluated using the What Works Clearinghouse standards described by Kratochwill and colleagues (2013).

Outcomes

Outcomes were evaluated based on growth in knowledge or skills as reported in each study’s results. Maintenance of gains and measurement of harmful effects were also considered.

Results

Study Descriptions

Two quasi-experimental, one single-case design, one case study, and four randomized controlled trials (RCT) were included, representing 353 student with disabilities (SWD). Two articles were follow-up studies (Dryden et al., 2017; Lee et al., 2001) and one is the RCT that provides context for the case study (Kenny et al., 2012). The review focused on the eight main

studies and referred to the three aforementioned for additional evidence of quality and implementation.

Four studies were conducted in the United States (Dryden et al., 2017; Fisher & Field, 1985; Kenny et al., 2013; Llewellyn & McLaughlin, 1986), while four took place in other countries, including the UK (Lee et al., 1998), China (Lee & Tang, 1998), India (Thomas et al., 2018), and South Korea (Kim, 2016).

Only three out of eight studies included students with disabilities other than intellectual disability, representing approximately 3% of the overall samples ($n=10$; Dryden et al., 2014; Kenny et al., 2013; Llewellyn & McLaughlin, 1986). Other disabilities included in the studies included students with learning disabilities ($n=4$; Dryden, Desmarais, & Arsenault, 2014; Llewellyn & McLaughlin, 1987), students with autism ($n=5$; Dryden et al., 2014; Kenny et al., 2013), and students with speech and language disabilities ($n=1$; Dryden et al., 2014). No studies reported inclusion of students who are deaf or hard of hearing.

Intervention Content

Results of the analysis for intervention content were divided into three categories: recognizing, resisting, and reporting, found in Table H.1. It should be noted that intervention content was determined based on what was reported in the article itself, not on content analysis of the actual curriculum documents.

Recognizing

All studies included in the analysis reported the intervention included content to teach children to recognize appropriate and inappropriate situations across places and people. Emphasis was particularly placed on understanding boundaries with familiar authority figures.

Table H.1

Summary of the Intervention Content for Recognizing, Resisting and Reporting

	Recognizing								Resisting						Reporting						
	Bullying	Feelings	Discriminating relationships	Private areas	Protecting Information	Touch for health/safety	Recognizing manipulation	Appropriate vs. Inappropriate	Body Ownership	Verbal boundary	Physical boundary	Safe distance	Physical self-defense	Stranger precautions	Physical escape	Advocacy	Self-determination	General reporting	Who to tell	Keep on telling	Never child's fault
Dryden et al. (2014)	X	X					X	X	X	X	X	X			X	X	X				
Fisher & Field (1985)			X	X	X		X	X	X					X			X	X	X		
Kenny et al. (2013)				X	X	X	X	X	X	X	X			X	X		X	X	X	X	
Kim (2016)				X			X	X	X	X				X			X				
Lee et al. (1998)	X	X				X		X		X				X			X				
Lee & Tang (1998)				X		X		X	X					X			X	X			X
Llewellyn & McLaughlin (1986)								X					X								
Thomas et al. (2018)				X		X	X	X	X	X				X			X	X			X

Five studies included education about naming and learning boundaries for private areas (Fisher & Field, 1985; Kenny et al., 2013; Lee & Tang, 1998; Thomas et al., 2018; Kim, 2016) and five focused on recognizing manipulation, such as bribes, gifts, kindness, secrets, and favors (Dryden et al., 2014; Fisher & Field, 1985; Kenny et al., 2013; Thomas et al., 2018; Kim, 2016). A little more than half addressed the difference in harmful touch and touch for health and safety (Kenny et al., 2013; Lee et al., 1998; Lee & Tang, 1998; Thomas et al., 2018) and body ownership (Kenny et al., 2013; Lee & Tang, 1998; Thomas et al., 2018; Kim, 2016).

Less commonly included topics included bullying, feelings, discriminating relationships (i.e., family vs. friends vs. strangers), and protecting information. The exclusion of bullying from child sexual abuse prevention curricula is understandable, as many schools now have programs specific to bullying prevention. However, topics such as discriminating relationships, protecting personal information, and knowing how to identify and communicate feelings are all intricately involved in safety with both familiar adults and strangers.

All three studies rated “acceptable” addressed recognizing manipulation and appropriate versus inappropriate situations across settings and people (Dryden et al., 2014; Kenny et al., 2013; Kim, 2016).

Resisting

Analysis of intervention content seems to indicate less emphasis on resisting abuse than recognizing abuse. All but one of the interventions included verbal boundaries, such as saying “No!” or “Stop!” with a loud voice, and five out of seven included strategies for physical escape from a harmful situation, such as running away. However, less than half of studies included content about physical boundaries (Dryden et al., 2014; Kenny et al., 2013; Kim, 2016) and stranger precautions (Fisher & Field, 1985; Kenny et al., 2013; Llewellyn & McLaughlin, 1986),

and only one included content regarding safe distance, physical self-defense, advocacy, and self-determination (Dryden et al., 2014). Results of the analysis showed fewer topics addressed related to resisting abuse than recognizing it, with the exception of the intervention reported by Dryden and colleagues (2014).

All three studies rated “acceptable” addressed verbal and physical boundaries (Dryden et al., 2014; Kenny et al., 2013; Kim, 2016).

Reporting

Analysis of reporting content showed the majority of interventions addressed reporting of abuse in some way. However, the content details were not reported in several articles (Dryden et al., 2014; Lee et al., 1998; Kim, 2016). When content details were reported, content including to whom abuse should be reported was present in all four articles (Fisher & Field, 1985; Kenny et al., 2013; Lee & Tang, 1998; Thomas et al., 2018). Less frequently included in descriptions of reporting were the concepts of repeated reporting and self-blame.

All three quality studies addressed reporting (Dryden et al., 2014; Kenny et al., 2013; Kim, 2016), though Kenny and colleagues (2013) specifically reported including concepts such as to whom to report abuse, repeated reporting, and self-blame.

Intervention Methods

A variety of tools, strategies, and methods were utilized in the interventions reviewed, shown in Table H.2. The most common tool used was pictures (Fisher & Field, 1985; Kenny et al., 2013; Lee et al., 1998; Llewellyn & McLaughlin, 1986; Thomas et al., 2018), followed by scripts (Fisher & Field, 1985; Kenny et al., 2013; Lee & Tang, 1998).

Table H.2

Summary of Intervention Tools, Strategies, and Methods

Study	Tools								Strategies						Methods			
	Slides	Scripts	Pictures	Coloring handout	Puppets	Posters	Story cards	Video	Prompts	Frequent feedback	Positive Reinforc.	Behavioral practice	Active role play	Computer role play	Discussion	Stories or scenario	Modeling	Instruction (NS)
Dryden et al. (2014)														X	X			
Fisher & Field (1985)	X	X	X										X					
Kenny et al. (2013)		X	X	X	X				X	X	X	X	X		X		X	
Kim (2016)	X			X		X	X			X		X		X		X		
Lee et al. (1998)											X	X	X		X			
Lee & Tang (1998)		X	X							X	X	X				X	X	
Llewellyn & McLaughlin (1986)			X					X				X				X		
Thomas et al. (2018)			X					X			X	X			X	X	X	

Note. NS=type not specified but term used

Interventionists used a variety of strategies to assist children in mastering content including prompts, frequent feedback, positive reinforcement, behavioral practice, active role play, and computer role play. The number of studies that included active role play was double that of any other strategy used. Frequent feedback, positive reinforcement, and behavioral practice were each reported three times across five studies showing researchers are utilizing strategies from Applied Behavior Analysis to help children learn safety skills (Alberto & Troutman, 2009; Kenny et al., 2013; Lee et al., 1998; Lee & Tang, 1998; Thomas et al., 2018; Kim, 2016).

Four methods of teaching were found across the studies including discussion, stories or scenarios, modeling, and instruction (i.e., no details given). The most common method was modeling, which was present in five studies (Kenny et al., 2013; Lee & Tang, 1998; Llewellyn & McLaughlin, 1986; Thomas et al., 2018; Kim, 2016). Discussions and stories or scenarios were used slightly less often, reported three times each across five studies.

Tools, strategies, and methods used by studies deemed “acceptable” included scripts, pictures, coloring handouts, puppets, prompts, frequent feedback, positive reinforcement, behavioral practice, active role play, discussion, stories or scenarios, and modeling (Dryden et al., 2014; Kenny et al., 2013; Kim, 2016).

Study Quality

Group Design

A summary of the methodological rigor of the quasi-experimental and experimental group design studies is found in Appendix B. Gerston and colleagues (2005) did not design the indicators to be “yes/no” standards, but instead a way to weigh strengths and weaknesses of an article within a set of domains. Due to this approach of evaluation, a more detailed summary

table is provided as supplemental material.

Quality Indicators for Describing Participants

All quasi-experimental and experimental group design studies provided sufficient information to confirm whether the participants demonstrated a disability, as well as characteristics of participants that increased the likelihood of comparability across conditions. All studies also provided information regarding the interventionist and the kind of training received prior to the intervention.

Quality Indicators for Implementation of the Intervention and Description of Comparison Conditions

Interventions for all studies were clearly described. In studies that used published curriculum, broad descriptions were used (Dryden et al., 2014, 2017; Llewellyn & McLaughlin, 1986). Fidelity of implementation was not described or assessed in five studies (Fisher & Field, 1985; Lee et al., 1998, 2001; Lee & Tang, 1998; Llewellyn & McLaughlin, 1986; Thomas et al., 2018). In the two group studies that addressed fidelity of implementation, data were self-reported (Dryden et al., 2014, 2017; Kenny et al., 2013). The nature of services provided in the comparison condition were described in all but one study (Lee et al., 2001). Most comparison groups received no intervention, while two received an alternative program or teaching method (Lee & Tang, 1998; Thomas et al., 2018).

Quality Indicators for Outcome Measures

Outcome measures varied among the group studies as seen in Table 1. Researchers utilized a variety a types of data collection including interviews, questionnaires, role plays, activities, and in-situ observations. Outcome measures were categorized according to outcome measures reported by Walsh and colleagues (2015) in their review of school-based education

programs for the prevention of child sexual abuse. All studies, except Thomas and colleagues (2018), used multiple measures to evaluate outcomes, and six out of seven studies used either vignette-based measurement, role play, or in-situ observations, indicating the importance of utilizing real-world application in assessment of outcomes. Capturing the intervention's effect must be measured at an appropriate time as well (Gerston et al, 2005). All group studies measured outcomes within one week of the intervention.

Quality Indicators for Data Analysis

Researchers used a variety of analyses to determine group differences including ANOVA, MANOVA, MANCOVA, correlations, and t-tests. While data analysis techniques were appropriately linked to key research questions and units of analysis, seven out of eight studies did not report effect size calculations (Dryden et al., 2014, 2017; Fisher & Field, 1986; Lee et al., 2001; Lee & Tang, 1998; Llewellyn & McLaughlin, 1986; Thomas et al., 2018). While effect size was less commonly reported in the 1980s and 1990s, effect size has become the standard in educational research in the 21st century (Henson, Hull, & Williams, 2010).

Overall Evaluation of Group Design Studies

To qualify as an “acceptable” research study, all but one of the Essential Quality Indicators must be met in addition to one of the Desirable Quality Indicators. After considering all of the evidence, two studies met the guideline for the Essential Quality Indicators (Dryden et al., 2014, 2017; Kenny et al., 2012, 2013). Those two studies were evaluated based on the Desirable Quality Indicators. Both studies captured the intervention's effect beyond an immediate posttest by including follow up measures, so both studies can be deemed “acceptable” according to the “essential” and “desirable.”

Quality Indicators for Group Experimental and Quasi-Experimental Research Articles and Reports

Though the other five studies did not meet the standards, most of them were published before the standards were published in 2005 (Fisher & Field, 1985; Lee et al., 1998, 2001; Lee & Tang, 1998, Llewellyn & McGaughlin, 1986), and Gerston's standards are also considered quite conservative.

Single Case Design

One article included in the review utilized a single-case design (Kim, 2016) and was evaluated using the criteria from the What Works Clearinghouse. Kim (2016) used a concurrent multiple probe across participant design. Three participants were selected, and their disability was confirmed by both IQ and adaptive behavior testing. The independent variable was role-play or in-situ situations. The study had 3 points per phase, including the baseline phase. The intervention involved more than one assessor. Inter-rater reliability was calculated across 33% of sessions and reported at 100% reliability. Three probes were measured at the conclusion of the intervention and three more were measured 10 weeks later at three different locations. Visual analysis showed three demonstrations of effect across three participants. Statistical analysis procedures were not provided other than the mean. Procedural integrity was reported at 97.3% and social validity was measured with a questionnaire. It is likely the Kim (2016) study would meet standards with reservation according to the What Works Clearinghouse criteria because there were not at least 5 data points per phase, a requirement for a study to meet standard. For the purposes of this review, the Kim (2016) study is considered "acceptable."

Outcomes

Results across all studies included in the review indicated either growth in knowledge or skills. Only one study, Fisher and Field (1985), included measurement of both knowledge and

skills. Maintenance of gains was reported in all but two studies (Fisher & Fielder, 1985; Thomas et al., 2018) and maintained in all but one study (Kenny et al., 2013). It should be noted that although Kenny and colleagues' (2013) study had mixed results that did not maintain, there was only one participant. Harmful effects were measured in two studies (Kim, 2016; Lee and Tang, 1998) and in both studies no harmful effects were reported. A summary of measures and outcomes can be viewed in Tables 3 and 4.

Discussion

This systematic review identified, evaluated, and analyzed the existing research that examined the use of a child sexual abuse prevention program with students with disabilities. It is the first review to include all disabilities in the inclusion criteria and by doing so has highlighted a problematic gap in the literature. The number and age of the studies included, without considering outcomes, is cause for concern. Since most states are now requiring prevention programming, recent and inclusive research is needed to ensure students with disabilities are receiving accessible instruction, as is the intent of IDEA and the purpose of providing such instruction in public schools.

There were only 8 separate program evaluations that met the inclusion criteria and half of those were conducted over 20 years ago. The past 20 years has seen giant leaps in technology and technology policy that could not have been addressed in programming because the threats did not exist at the time the program was developed and implemented (Culp, Honey, & Mandinach, 2005). Improvements in technology and the safety threats that arise with those improvements, such as virtual grooming and catfishing (i.e., pretending to be someone you are not), are significant threats to children that need to be addressed within preventative programming (Machimbarrena et al., 2018).

Table H.3

Outcome Constructs, Measures, and Formats

Study	Construct	Outcome Measures	Format
Dryden et al. (2014)	knowledge, retention of knowledge	IMPACT: Ability evaluation Adaptation of Wehmeyer's Self Determination Scale and Schwarzer and Jerusalem's Generalized Self-Efficacy scale	questionnaire-based
Fisher & Field (1985)	knowledge, skills	curriculum-based pre-test and post-test, observations of behavior	vignette-based, activity-based, role-play or in-situ
Kenny et al. (2013)	knowledge, retention of knowledge	"What-If" Situations Test, Child Knowledge of Car, Traffic, Fire, and Gun Safety, Genital Body Parts Knowledge, Personal Safety Questionnaire, Good touch/Bad touch, Child Safety Quiz, Communication, Assertiveness, and Relationship Questionnaire, Injury Risk Behavior, Child's History of Injury	questionnaire-based, vignette-based
Kim (2016)	skills, retention of skills	observations of behavior	role-play and in-situ
Lee et al. (1998)	knowledge, harm, retention of knowledge	curriculum-based pre-test and post-test, interviews	questionnaire-based, vignette-based
Lee & Tang (1998)	knowledge, harm	"What-If" Situation Test Personal Safety Questionnaire 12-item Fear Assessment Thermometer Scale	questionnaire-based, vignette-based
Llewellyn & McLaughlin (1986)	skills	curriculum-based pre-test and post-test	role play or in-situ
Thomas et al. (2018)	knowledge	"What-If" Situations Test, Personal Safety Questionnaire	vignette-based

Table H.4

Outcomes of Studies of Child Sexual Abuse Prevention Programs

Study	Knowledge Gains	Skill Gains	Maintenance of Gains	Negative Effects
Dryden et al. (2014)	YES	-	YES, 1 year	-
Fisher & Field (1985)	YES	YES	-	-
Kenny et al. (2013)	MIXED	-	NO	-
Kim (2016)		YES	YES, 10 weeks	NO
Lee et al. (2001)	YES	-	YES, 15 weeks	-
Lee & Tang (1998)	YES	-	YES, 2 months*	NO
Llewellyn & McLaughlin (1986)		YES	YES, 3 weeks	-
Thomas et al. (2018)	YES	-	-	-

Note. *except for two measures: appropriate request recognition and describing a behavioral response of removing self from the situation; YES indicates statistically significant changes; MIXED indicates some measures showed statistically significant changes and some did not; NO indicates there were no statistically significant results.

While the methods used by programs implemented over 20 years ago may still be effective, program content would require redevelopment and further evaluation for effectiveness.

Standards for evaluation have also become more rigorous in the past 20 years, such as requiring effect sizes (Henson, Hull, & Williams, 2010). While most studies reported statistically significant results, there is not enough information to determine the practical significance of the effectiveness of the programs that did not include effect size.

Content, Methods, and Strategies

Wurtele’s (2018) 3Rs of safety prevention, including recognizing, resisting, and reporting, were included in all eight of the studies reviewed. The details of how those the topics were addressed in each study varied. However, all studies contained components of High Leverage Practices that may have increased the effectiveness of the interventions.

All studies included recognizing appropriate and inappropriate situations across places and people and most included setting verbal boundaries. Both skills align with teaching social behaviors, a High Leverage Practice for social emotional learning (McCleskey et al., 2017). This alignment provides educators with evidence regarding how child sexual abuse prevention fits into the curriculum for students with disabilities.

Active role play was the most used strategy for skill practice. Active role play aligns with the recommendation to use “strategies that promote active student engagement” (McCleskey et al., 2017). Kim (2016) found that participants in her study did not make gains in knowledge or skills until role plays were introduced, suggesting that role play may have an important role in solidifying safety skill development in students with disabilities. Though used less frequently in the programs evaluated, positive reinforcement and feedback were also utilized, which aligns with the CEC’s recommendation to “provide positive and constructive feedback to guide students’ learning and behavior” (McCleskey et al., 2017). This practice is recommended for both instruction and social emotional learning.

Among different methods used, modeling was the most common. Modeling aligns with the CECs High Leverage Practice that recommends using explicit instruction (McCleskey et al., 2017). Maintenance of learning was also addressed in five of the studies, which aligns with the CEC’s recommendation to “teach students to maintain and generalize new learning across time and settings” (McCleskey et al., 2017).

Overall, the content, methods, and strategies used in the studies align with High Leverage Practices, which may explain the overall effectiveness of the studies.

Outcomes

The outcomes of the programs evaluated were generally positive based on the statistical

information provided, demonstrating that students with intellectual disabilities can learn safety knowledge and skills when provided with accessible programming. However, due to limitations in the inclusion of other disabilities in the sample, no conclusions can be made about students with other disabilities. Prevalence of sexual abuse among children with intellectual disabilities (14.5%; 95% CI 7.1-24.0) is not statistically significantly more than any other disability (13.7% 95% CI 9.2-18.9), meaning children are not more likely to be abused if they have an intellectual disability as compared to other types of disabilities (Jones et al., 2000). Therefore, evaluations should be conducted with students with a range of different disabilities as participants.

Limitations

This literature review has several limitations. One limitation of the review process was the use of a single reviewer instead of a team of reviewers. Intra-rater reliability was utilized during the coding process to limit bias as much as possible. Limiting the search to articles written in the English-language has the potential to limit findings. This seems to be particularly more likely because several of the studies found occurred in countries where English is not the dominant language, including China, India, and Korea.

Publication bias is also a concern in this review. It is possible that studies that did not show statistically significant results, and thus difficult to get published, could have contributed to the knowledge base, especially since so few studies have been published overall. Most likely due to limitations in the length of journal publications, descriptions of the intervention were often brief, which can make programs that are not published difficult to replicate.

Finally, there is a lack of data for populations other than those with intellectual disabilities. While this gives researchers a clear direction for the future, it does not give enough information to draw firm conclusions about effectiveness of certain programs.

Conclusion

Overall, the literature review reveals a need for further research into the effectiveness of child sexual abuse prevention programs for students with disabilities. It would be fiscally responsible and practical to accommodate existing programs for use with students with disabilities. When choosing existing programs to accommodate, researchers should evaluate the theoretical basis of programs, consider their use of High Leverage Practices, and involve stakeholders in the process of accommodation to improve social validity. Although this review did not include enough evidence to support overall effectiveness of child sexual abuse prevention programs for students with disabilities, it did substantiate the need for additional studies and provide recommendations for accommodating future programs prior to implementation.

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* = Studies included in the review.

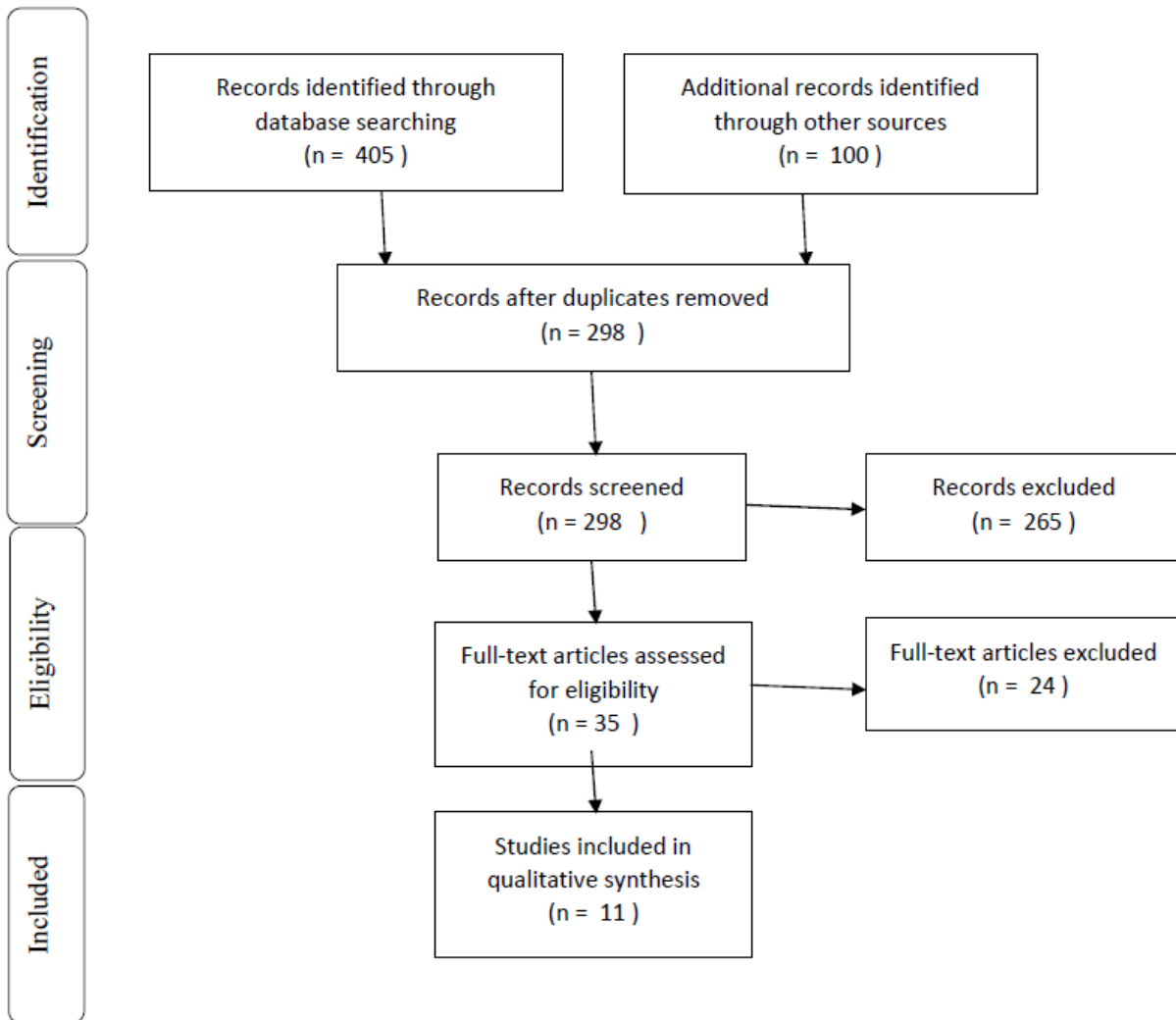
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APPENDIX I
PRISMA 2009 FLOW DIAGRAM



APPENDIX J

SUPPLEMENTAL MATERIAL: METHODOLOGICAL QUALITY SUMMARY FOR
QUASI-EXPERIMENTAL AND EXPERIMENTAL STUDIES

Author (date)	Describing Participants	Intervention and Comparison Condition	Outcome Measures	Data Analysis
Dryden et al. (2014; 2017)	<ul style="list-style-type: none"> Students were selected based on the amount of time in general education setting and based on IDEA categories Extensive demographics given; attendance, disability category, and disability severity were all statistically similar across groups Two instructors were utilized; one to coach and one to role play the untrustworthy individual 	<ul style="list-style-type: none"> Weekly content outline given Fidelity was recorded after each session by program staff Comparison group did not receive intervention 	<ul style="list-style-type: none"> Interview Questionnaire utilized but adapted to meet needs of students Pre and post-tests, as well as follow up testing 	<ul style="list-style-type: none"> MANCOVA and t-tests for initial analysis Paired samples t-test for follow-up study <i>No effect size reported</i>
Fisher & Field (1985)	<ul style="list-style-type: none"> Diagnoses made by multidisciplinary team according to P.L. 94-142; levels of ID reported as was appropriate in 1985 IQ scores used to show there was no statistically significant difference in treatment and control group Five teachers were given a two-day workshop 	<ul style="list-style-type: none"> Names of units as well as descriptions of what teaching methods are used; examples provided <i>No fidelity of implementation described or assessed</i> Comparison group did not receive a program 	<ul style="list-style-type: none"> Used a variety of measures and modes including role play, classifying, and in-situ Pre and post- tests Test-retest reliability 3-5 days after post-testing Pretests given by blind examiner 	<ul style="list-style-type: none"> ANOVA and t-tests to show differences between groups <i>No effect size reported</i>
Kenny et al. (2013); Kenny et al. (2012)	<ul style="list-style-type: none"> Qualified as student with ASD under IDEA Participants in both groups were Latino preschoolers; participants were given pre and post-tests in their preferred language Group leaders received 8 hours of face-to-face instruction; interventionists met with program director regularly 	<ul style="list-style-type: none"> In-depth description of intervention given Group leaders completed checklists for each session; 94% fidelity based on self-reports Control group received no intervention 	<ul style="list-style-type: none"> Multiple measured utilized Tests given immediately following intervention and at three months follow-up 	<ul style="list-style-type: none"> ANOVA and t-tests were used for main study and effect sizes were reported Thick descriptions were given for the case study
Lee et al. (1998; 2001)	<ul style="list-style-type: none"> British Ability Scale used to measure IQ and all students attended a special school for children with ID Students in both groups were interviewed about authority figures and knowledge of personal safety; analyses found no differences between comparison groups Researcher conducted interviews; computer ran intervention after introduction by teacher/researcher 	<ul style="list-style-type: none"> Details about intervention provided as well as anecdotes <i>Fidelity of implementation not described or assessed</i> <i>Nature of services provided in comparison condition not described.</i> 	<ul style="list-style-type: none"> Three skills measured by interview Post-interview given immediately after intervention and 15 weeks later 	<ul style="list-style-type: none"> MANOVA and ANOVA were used <i>No effect size reported</i>

Author (date)	Describing Participants	Intervention and Comparison Condition	Outcome Measures	Data Analysis
Lee & Tang (1998)	<ul style="list-style-type: none"> Raven's Standard Progressive Matrices utilized; assessed by qualified educational psychologists before admission to school Utilized inclusion/exclusion criteria; schools were randomly assigned to control or intervention First author implemented intervention and followed script 	<ul style="list-style-type: none"> Steps of program and description given for both groups <i>No fidelity measures reported</i> Comparison group received the Attention Control Program 	<ul style="list-style-type: none"> Utilized three outcome measures validated previously Tested immediately following intervention and included follow up measure 	<ul style="list-style-type: none"> Utilized MANOVA, ANOVA, correlations <i>No effect size reported</i>
Llewellyn & McLaughlin (1986)	<ul style="list-style-type: none"> Wechsler Intelligence Scale for Children – Revised used to identify students with ID and LD; 5 male, 5 female; 13-15 yrs No information given on control group except that they are same aged and in general education classes. Author was given a two-day workshop on implementing the intervention 	<ul style="list-style-type: none"> Broad descriptions given. <i>No fidelity measure reported.</i> Comparison group did the same intervention 	<ul style="list-style-type: none"> One measure was used from the curriculum Lacks a follow-up measure 	<ul style="list-style-type: none"> More data needed <i>No effect size reported</i>
Thomas et al. (2018)	<ul style="list-style-type: none"> Met diagnoses per DSM V and per qualified educational psychologists; Article reports disparity in gender and severity of ID between groups but continuity between age, urban home, and nuclear family Researcher implemented intervention; parents were co-therapists; all parents were mothers and all but one was from a nuclear family 	<ul style="list-style-type: none"> Steps for instruction and content described <i>No fidelity measures reported</i> In comparison groups, teachers taught content using lecture and received detailed instructions 	<ul style="list-style-type: none"> Two previously validated tests were utilized Outcomes measured one week post intervention Lacks a follow-up measure 	<ul style="list-style-type: none"> T-tests and correlations <i>No effect size reported</i>