RESEARCH **A Factor Analysis of** Parenting Education Needs Assessment on Body Safety YaeBin Kim, PhD* *YaeBin Kim, Extension Specialist/Associate Professor, University of Nevada Reno Extension, 8050 Paradise Road, Suite #100, Las Vegas, NV 89123; (702) 257-5521; yaek@unr.edu

Abstract

One of the Western extension programs conducted a needs assessment to determine body safety parenting education needs and examine how well the survey items cluster together. A survey was collected from 482 parents/caregivers of young children in 2017. The recommendations of this study are: 1) Parenting education on body safety should focus on using topics of high interest to develop new parenting education programs or update an existing program; 2) Body safety should be delivered through the preferred delivery methods identified by parents/caregivers; 3) Different groups of participants showed different interest in different subscales.

A Factor Analysis of Parenting Education Needs Assessment on Body Safety

Young children are curious about everything, but specifically, many young children are interested in physical differences between boys and girls, where babies come from, and how babies are made. Although children ask a lot of those questions, many parents/caregivers feel uncomfortable or are overwhelmed about talking with their children about sexuality and reproduction. When parents hear sexuality development or sexuality education, they think of sexual activity and get very anxious (Goldman, 2011). However, most often young children are only interested in the body, pregnancy and babies, rather than the mechanics of sex.

According to Healthy Sexuality Development: A Guide for Early Childhood Educators and Families (Chrisman & Couchenour, 2002), "Children learn about sexuality and their developing bodies the same way they learn about everything else – through words, actions, interactions, and relationships." (pg. 3) Children can also learn about acceptable sexual behaviors

and sexuality through different media such as movie, TV, or video games and internet (Collins, et al., 2017; von Rosen, A. J., et al., 2017). Therefore, it is a great idea for parents to start talking about age-appropriate sexuality development early on to help children understand better about the body, and help them feel positive about their own bodies. Studies have confirmed that sexuality education is a lifelong learning that starts at birth (Kurtuncu, Akhan, Tanir, & Yildiz, 2015) and parents should be a child's first source of information about sexuality development. When they do start talking with their children, it is important that they are getting the right information, including healthy childhood sexual development as well as appropriate knowledge and skills for children at each age (National Sexual Violence Resource Center, 2013). However, many adults including parents/caregivers and early childhood educators are afraid of addressing this topic because of their own level of discomfort and the related stigma, so this can hinder children's normal interest in their bodies (Counterman & Kirkwood, 2013; Sciaraffa & Randolph, 2011; Stone, Ingham, & Gibbins, 2012). Because many people feel uncomfortable saying or hearing sexuality development or education, experts started calling this "body safety," or "body safety education."

Talking with children about childhood sexuality development and helping them understand it can also play a key role in preventing child sexual abuse (Gilgun & Gordon, 1986; Kandi et al., 2022). According to the recent Kids Count report (2022), total of 3,121,309 child abuse neglect victims were investigated across the United States (1 out of 1,000 children) in 2020. Moreover 41% of child abuse and neglect victims were children under 5 years old. In addition, 9% of children are sexually abused by the age of 18, and 20% of these children are abused before the age of 8. One in three girls and one in five boys is a victim of child sexual abuse (https://laurenskids. org/awareness/about-fags/facts-and-stats/). However, 30% of sexual abuse is never reported. Sexual abuse is a serious, but unfortunately common problem that affects both boys and girls (American Academy of Pediatrics, 2023). Research has consistently found children's exposure to sexual abuse was highly related to children's educational achievement in later adolescence and early adulthood (Bodena, Horwooda, & Fergusson, 2007; Oshima, Jonson-Reid, & Seay, 2014). Furthermore, studies have shown that children who have been sexually abused may experience negative outcomes across their lifespan, and may see ripple effects across generations (Whitaker et al., 2005).

According to the Child Abuse Prevention and Treatment Act (US Department of Health and Human Services, 2010), parenting education is one effective way to provide activities designed to prevent or respond to child abuse and neglect. Parents need to teach their children about the risk of sexual abuse so that the child can recognize it when it happens, protect themselves as much as possible, and identify and access available sources of support available in the community. In addition, it is important for young children to understand a person's identity, gender, behaviors, values, and feelings about intimacy. However, many parents do not want to discuss sexual abuse or sexuality development with their young children because 1) the topic itself is too difficult to bring up with young children; 2) they do not want to scare their children; 3) they do not view child sexual abuse as a danger to their children; 4) or they feel their children are way too young for the topic (Deblinger, Thakkar-Kolar, Berry, & Schroeder, 2010). When parents/caregivers have more knowledge, comfort, and skill, they can better understand and support healthy childhood sexual development and protect their child from this form of abuse (Kandi, et al., 2022; Medora & Wilson, 1992; Stone, Ingham, & Gibbins, 2012). In one study, researchers evaluated a sex education program for parents of young children and found that it changed preschool mothers' teaching skills, comfort levels, and frequency of parent-child communication on the topic (Davis, Koblinksy, & Sugawara, 1986). The recent AAP report (2023) emphasized that young children can understands concepts about bodies, gender, and relationships and sexuality education is most effective when it starts before children develop sexual activity. Body safety education programs can help parents/caregivers learn about their role as crucial adults, and consider their strengths to support children's healthy and successful development.

Objective or Purpose

Body safety in early childhood is an area without extensive research and virtually no, or at best, very limited parenting education programs are readily available. The current research focuses on understanding parents/caregivers' perceived needs for body safety information to create or provide a parenting education program for parents of young children. The specific objectives of this needs assessment study were:

To identify parents/caregivers' expressed needs for information about body safety parenting education.
 To determine parents/caregivers' desired sources of information about body safety parenting education.
 To conduct factor analysis to examine how well the survey items cluster together and different groups are compared on different subscales.

Methods

Participants

 ${\sf U}$ f the parents/caregivers who completed the survey, almost 64 percent were mothers. Forty percent were between 30 and 40 years of age and no parents under 19 completed the survey. Almost 34 percent of respondents were Latino/Hispanic and 22 percent were Caucasian. Only 26 percent of parents/ caregivers were employed full-time. Nearly 50% of families had not moved last year and don't expect to move anytime soon. Half of the parents/caregivers used a language other than English and 73 percent of those spoke Spanish. Only 14.5 percent of parents/caregivers sent their children to full-day child care. Among 456 parents/caregivers who said they use a cell phone (94.6 percent), 91.6 percent of them were using smart phones. Among 445 parents/caregivers who said they can access the internet, 79.1 percent reported that they have Internet connection at home. About 42 percent of the participants received at least one social service and among them 68 percent were recipients of Medicaid (see Table 1).

Survey Content and Data Collection

The self-administered body safety parenting needs assessment survey was developed by parenting education Extension Specialist in one of the Western states (Nevada) and was based on previous research and literature on body safety (and reviewed by other professionals). The questionnaire (available in English and Spanish) consisted of 22 questions, divided into four parts: 1) a list of 17 potential body safety

parenting education topics (parents/caregivers were asked to check how interested they were in each topic from 1 = not at all interested to 5 = very interested); 2) eight preferred delivery methods for body safety parenting information; 3) demographic information about participants.

A convenience sampling method was used to collect surveys. Total respondents were 482 parents or legal guardians of young children birth to age five. All questionnaires were used for the data analysis, except for some demographic questions that were not answered by all participants. Questionnaires were distributed to passers-by or program participants (only 25% of survey participants) at 26 sites. The survey was approved by the IRB at the University of Nevada, Reno.

Data Analysis

Descriptive statistics were used to describe the characteristics of survey participants, rank order body safety items by mean, and rank order delivery methods by percent. To explore the underlying factor structure of the body safety data, an EFA consisting of principal axis factoring (PAF) with oblimin rotation was conducted. In addition, a one-way ANOVA and an individual T-Test were conducted to compare body safety topics among different groups of participants.

Results and Findings

Preferred Body Safety Parenting Education Topics

Parents/caregivers of children ages 0 to 5 were asked to rate their interest in 17 body safety parenting education topics on a scale of 1 to 5, with 1 indicating no interest to 5 indicating a great deal of interest. In addition, they were asked to identify other body safety topics of interest (open-ended question). Using average scores for each item, the topics appear in rank order in Table 2. It is noteworthy that the average rating for every item was over 3.5 and the ratings of most items were over 4, indicating high interest in all 17 topics (see Table 2).

As can be seen in the table 2, parents reported the greatest interest in learning how to teach children to report unwanted touch. Items ranked 2 through 16 all received scores higher than 4, indicating considerable interest. Parents showed comparatively less interest in connecting with other parents to talk about childhood sexual development and child sexual abuse prevention. Only a few parents identified other topics of interest such as sexual orientation, transgender and LGBTQ issues, what to watch and not watch on TV or Internet, how to know when their children have a problem, how to teach children to tell parents or grown-ups when something happens, and parents as the people who teach their children about this topic.

Preferred Delivery Methods for Parenting Information

Parents also indicated several preferences for receiving body safety information. As can be seen in Figure 1, the largest percentage wanted to get information through brochures/booklets, while radio was the least popular delivery method. It is noteworthy that 45 percent preferred to receive parenting education electronically and 40 percent wanted to attend workshops or meetings (see Figure 1).

Factor Analysis of Body Safety Parenting Education Topics

The inter-item Pearson correlations were conducted and the items displayed inter-item correlations between r=.31 to r=.87. All the items displayed significant inter-item correlation coefficients at p<0.01 level. Multicollinearity is not a problem for this data, so there is no need to consider eliminating any questions at this stage (Determinant + 1.462E-7). The suitability of the data for factor analysis was assessed prior to the analysis. The Kaiser-Meyer-Oklin was 0.94, which falls into the range of being superb, so factor analysis is appropriate for this data (Kaiser, 194). Furthermore, Barlett's test of sphericity (Barlett, 1954) reached statistical signifi-

cance, supporting the factorability of the correlation matrix. Furthermore, the EFA revealed the presence of three factors with eigenvalues exceeding Kaiser's (1974) criteria of one. These factors explained 75.7% of the variance (32.3, 22.8, and 20.5%, respectively). The sample was shown to be sufficiently large (N = 482) (Costello & Osborne, 2005) and inspection of the scree plot showed an elbow break after the third factor. Table 3 shows the factor structure of the 17 body safety items tested. The first factor, understanding human sexuality, consisted of eight items. The second factor, preventing and reporting sexual abuse, consisted of five items. The last four items constituted learning about body boundaries factor. These three factors showed satisfactory internal consistency (see table 2). Understanding human sexuality displayed the lowest average score (M = 4.22), and learning about body boundaries displayed the highest average score (M = 4.58). However, all three items showed high average scores, reflecting parents' high interest in all three subscales.

A Closer Look

All three subscales were compared among survey participants with different characteristics (parents' age, Ethnicity, moving, native English speaker, using internet to search for parenting information, local areas). Parents aged 20 to 29 seemed to be more interested in learning about body boundaries (F = 4.55, p < .01) and parents aged 40 to 49 seemed to be more interested in understanding human sexuality (F = 3.66, p < .05). Hispanic parents were interested in all three subscales compared to non-Hispanic parents (t = 4.75, p < .001; t = 3.28, p < 01; t = 3.97, p < .001). Native English speakers (regardless of their ethnicity) were interested in all three subscales (t = 6.06, p < .001; t = 3.14, p < .01; t = 3.02, p < .001). Our organization is currently delivering several parenting workshops throughout the area where the needs assessment was conducted, so a separate question about attending workshops was asked. Sixty-six percent of parents/caregivers showed interest in attending parenting workshops if available, although 40% of parents chose workshops as a preferred delivery method in the previous question. Among parents who showed interest in attending parenting workshops in the future, 50% of parents wanted to attend the workshop with 5-7 people, 46% wanted their children to be with them and learn together during the class, and 77% of parents preferred weekdays. A large majority (63%) of parents did not care about the instructor's ethnicity or language, while 29% wanted an instructor who spoke the same native language they did (mostly Spanish).

Summary and Discussion

Overall, parents/caregivers showed high interest in all 17 proposed body safety parenting topics and among three factors, participants showed the highest interest in learning about body boundaries subscale. A few differences were found when comparing responses from people with different family characteristics. This needs assessment study revealed that more parents/caregivers of young children in this study preferred to receive body safety parenting information through brochures/booklets, email, or workshops. Community programs need to make decisions about how best to deliver body safety parenting information, taking into consideration available resources and relative value. It is also necessary to understand demographic differences among parents with regard to which delivery methods they prefer to use for body safety information.

These findings will be used to develop or start a parenting education program and help other agencies understand the reasons for concerns about body safety. Child sexual abuse is prevalent in our society across different races, genders and socioeconomic statuses, so parents/caregivers want to acknowledge it and learn more about it. Parents/caregivers wanted to learn about this topic through various channels such as booklet, workshops and emails. It is important to understand program participants in the community before developing resources. When providing a workshop, the instructor must take into consideration participants' preferences regarding program delivery.

Limitations and Conclusion

While this study has a number of strengths, several limitations should be considered when interpreting study results. Though the survey sample consisted of 482 individuals across a major metropolitan area in one of the western states, the information provided by these respondents only represents their perspectives and may not entirely reflect or provide a complete picture of the body safety parenting education concerns and needs of community members across states. In addition, convenience sampling was used in administering the survey, so the characteristics of the sample might be different from that of the population. Therefore, these results cannot necessarily be generalized to the overall population. For example, over 50% of parents in this sample did not work and the children were not in more than part time care. Parents/caregivers of young children who work full time may want the information in another format, such as through their child care providers. The information gathered relied on self-reports from respondents, which may be subject to inconsistencies or inaccuracies, a limitation in all self-report methodology. Additionally, respondents were not required to answer any questions on the survey, therefore not all respondents responded to all questions. Finally, only seven percent of participants answered that they preferred to receive body safety parenting information through radio. This may be because the radio option was not specified (e.g., radio talk show, podcast, radio app, etc.), so future research needs to specify the radio option.

The findings from this study may provide a starting point for reaching out to parents/caregivers of young children, helping them teach their own children about body safety topics. This study is promising in a sense that many parents/caregivers regardless of their family characteristics were highly interested in most of the body safety topics, considering the fact that parents/caregivers usually do not express it publicly in the past.

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Figure 1

Preferred Delivery Methods for Parenting Information about Body Safety

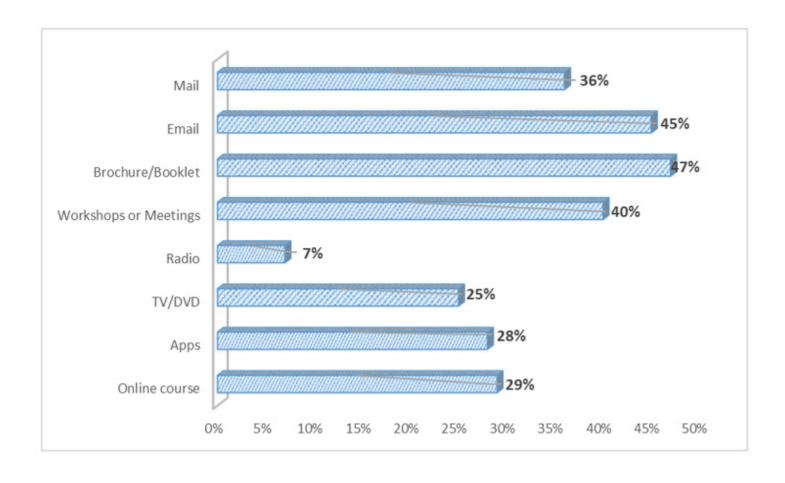


Table 1

Demographic Characteristics of Survey Participants (N=482)		
Characteristics	N	Percent
Relationship to Child		
Mother	307	63.7%
Father	30	6.2%
Other (grandparents, uncle and aunt)	30	6.2%
Both parents	7	1.5%
Did not respond	108	22.4%
Parents/ caregivers' age		
20 - 29	128	26.6%
30 - 39	226	46.9%
40 - 49	64	13.3%
50 or older	31	6.4%
Ethnicity		
African American	87	18.0%
Asian/ Pacific Islander	48	10.0%
Latino/ Hispanic	163	33.8%
White/ Caucasian	107	22.2%
Biracial	37	7.7%
Other	12	2.5%
Work status		
Full-time home maker	221	45.9%
Job from home	26	5.4%
Looking for a job	39	8.1%

Part-time (< 20 hrs.)	42	8.7%
Full-time	125	25.9%
Cell phone use	456	94.6%
Smartphone use	418 (out of 456)	91.6%
Internet access*	445	92.3%
Home	360 (out of 445)	79.1%
Friend's home	14	3.1%
At work	41	9.0%
At the library	38	8.4%
Child's internet use		
Yes, with supervision	309	64.1%
Yes, unsupervised	12	2.5%
No	124	25.7%
Online parenting information		
Yes	355	73.6%
No	93	19.3%
Marital status		
Single/ never married	79	16.4%
Divorced or separated	29	6.0%
Married or living with a partner	347	72.0%
Widowed	5	1.0%
Frequency of moving last year		
One time	143	29.7%
Several times	13	2.7%
No, but I expect to move in the next year	57	11.8%

No, and I don't expect to move	240	49.8%
Child care		
No	247	51.2%
Part-day	124	25.7%
Full-day	70	14.5%
Programs*		
Head Start	195	67.0%
School district Pre-K	31	10.7%
Other child care centers	26	9.0%
Family care programs	9	3.1%
After-school care	9	3.1%
Other family members or friends	86	29.7%
Boy or a girl		
Boy	138	28.6%
Girl	168	34.9%
Boy and a girl of different ages	107	22.2%
Did not respond	69	14.3%
Number of children		
One child	131	27.2%
Two children	182	37.8%
More than three Children	137	28.4%
Did not respond	32	6.6%
Social service recipients*	204	42.3%
Medicaid	138	67.6%
TANF	11	5.4%
SNAP	83	40.7%
Early Intervention	8	3.9%
Women, Infants and Children (WIC)	97	47.5%
Child Subsidy	8	3.9%
Other	5	2.5%

^{*}Questions could have more than one answer.

Table 2

Rankings of Body Safety Parenting Education Topics

Ranking	Topics of Possible Interest	Average
1	Learn how to teach my child to report unwanted touch	4.70
2	Learn about the signs of possible child sexual abuse	4.69
3	Learn how to protect my child from sexual abuse	4.68
4	Learn to explain the differences between wanted and unwanted touch; how to say "no" to unwanted touch	4.65
5	Learn how to report suspicions of child sexual abuse	4.59
6	Learn to teach my child about privacy and when behaviors are appropriate and not appropriate	4.54
7	Learn about healthy childhood sexual development stages	4.50
8	Find out how to have open conversations with my child about body boundaries and safety	4.45
9	Learn how to answer my child's questions about human sexuality (e.g., where do babies come from)	4.43
10	Find out what community resources are available for families who have concerns and questions about child sexual abuse	4.41
11	Learn how to respond to my child's curiosity about others' bodies, including their own	4.36
12	Learn when to start talking about human sexuality with my child	4.35
13	Find out about children's books that can help my child understand about gender identity, their bodies, where babies come from and other human sexuality age appropriate topics	4.26
14	Learn how to teach my child correct names for human body parts, including private body parts	4.23
15	Get tips on helping my child understand the difference between a boy's and girl's body	4.17
16	Learn fun ways to share educational toys and books related to human sexuality with my child	4.12
17	Connect with other parents to talk about childhood sexual development and child sexual abuse prevention	3.81

Table 3

Factor Analysis Body Safety Needs Constructs.

		Factor Loading		
Item	1	2	3	
Factor 1: Understanding Human Sexuality (α = .68)				
11. Get tips on helping my child understand the difference	.80			
between a boy's and girl's body.	.00			
10. Learn how to teach my child correct names for human body				
parts, including private body parts	.79			
8. Learn fun ways to share educational toys and books related to	.77			
human sexuality with my child.	.11			
6. Connect with other parents to talk about childhood sexual	70			
development child sexual abuse prevention.	.73			
7. Learn when to start talking about human sexuality with my	.72			
child.	.12			
14. Find out about children's books that can help my child				
understand about gender identify, their bodies, where babies	.71			
come from and other human sexuality age appropriate topics.				
12. Learn how to respond to my child's curiosity about others' bodies, including their own.				
9. Learn how to answer my child's questions about human	.66			
sexuality (e.g., where do babies come from).				

Factor 2: Preventing and Reporting Sexual Abuse (α = .82)		
Learn how to protect my child from sexual abuse.	.87	
Learn about the signs of possible child sexual abuse.	.85	
3. Learn how to report suspicions of child sexual abuse.	.84	
4. Find out what community resources are available for families	70	
.70 who have concerns and questions about child sexual abuse.		
5. Learn about healthy childhood sexual developmental stages.	.58	
Factor 3: Learning about Body Boundaries (α = .85)		
16. Learn to explain the differences between wanted and	.80	
unwanted touch: how to say "no" to unwanted touch.		
17. Learn how to teach my child to report unwanted touch.		
15. Learn to teach my child about privacy and when behaviors are		
appropriate and not appropriate.		
13. Find out how to have open conversations with my child about		
body boundaries and safety.		

Note. Double-loaded items are denoted in bold font.