

University of Alberta

PERSONAL SAFETY VOCABULARY
FOR CHILDREN WITH INTELLECTUAL DISABILITIES

by

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ABSTRACT

The purpose of this study was to identify and organize personal safety vocabulary that children with intellectual disabilities need to learn in order to report any type of child abuse. The primary focus was on the ideas of parents, educators, and investigators who were directly involved in child protection systems regarding the vocabulary items and groupings of the items.

Concept mapping of 3 main phases was utilized to identify and categorize the items. In phase one, three focus groups were interviewed to generate a parent list of 98 items, an educator list of 98 items, and an investigator list of 91 items. The focus groups then rated each of all the items in terms of relative importance. Consequently, a comprehensive list of 98 items was identified. In phase two, the focus groups sorted the items on the comprehensive list based on conceptual similarity. They also sorted the items on their own group lists. In phase three, the sort data was analyzed statistically to create concept maps. The comprehensive concept map displayed 8 categories of the 98 items: Understanding Child Abuse, Safety, Sexual abuse, Physical/Emotional Abuse and Neglect, General Descriptors of Child Abuse, Feelings (Emotions), Body Parts, and People.

Additionally, the parent concept map displayed 8 categories of the 98 items: Self-Protection, Child Abuse, Objects Used during Child Abuse, Feelings, Body Parts, Body Intrusion, People, and Places. The educator concept map displayed 8 categories of the 98 items: Understanding Child Abuse, Safety Plan, Sexual Abuse, Physical Abuse, Emotional Abuse and Neglect, Feelings (Emotions), Body Parts, and People. The investigator concept map displayed 7 Categories of the 91 items: Sexual Abuse, Objects

Used during Sexual Abuse, Physical Abuse, Feelings (Emotions), Body Parts, People, and Places.

The comprehensive map included categories of vocabulary words necessary to describe abusive behaviors, body parts, feelings, and perpetrators. It also included categories that addressed knowledge useful to understand child abuse concepts, avoid child abuse, and encourage child's disclosure. The comprehensive map was very similar to the educator map. The comprehensive map has implications for the development of abuse prevention programs.

DEDICATION

My lovely sister Ae-Ri and all children with disabilities who inspire me

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CHAPTER 1: INTRODUCTION

Vignette

Suk had special needs. One of his favorite things was to play a traditional drum. So he often went to a music classroom during the lunch break. One day, there was no one around the classroom and Suk saw snacks on the music teacher's desk. He started to eat the snacks. Then the music teacher came to the classroom and saw what he was doing. The teacher walked up to Suk and hit his head with a coffee mug that she was holding. Because she knew Suk had difficulties with verbal communication she thought the incident would be kept a secret. That night, Suk drew something describing what happened to him. The drawing included a picture of the classroom, a coffee mug, and his bleeding head.

Statement of the Problem

Child abuse is a serious problem among children with intellectual disabilities. A large number of researchers have repeatedly reported that these children are at a high risk for child abuse. As the severity of the problem is widely recognized, child abuse prevention is receiving increasing attention.

Literature has consistently shown that there is a strong relationship between intellectual disability and child abuse (e.g., Sullivan & Knutson, 1998, 2000; Verdugo, Bermejo, & Fuertes, 1995). For example, a recent large-scale study (Sullivan & Knutson, 2000) demonstrated that children with intellectual disabilities were abused or neglected at about 4 times the rate of children without disabilities. Specifically, the rate of sexual abuse was 4 times, physical and emotional abuse 3.8 times, and neglect 3.7 times as high for children with intellectual disabilities as for their peers without disabilities.

A number of researchers indicate that specific characteristics of children with intellectual disabilities are likely to be associated with an increased risk of child abuse (e.g., Sobsey, 1994c; Tharinger, Horton, & Millea, 1990; Watson, 1984). For example, the dependency of these children on others is likely to increase the necessity for interactions with caregivers, including some who may be abusive. The children are also often taught to comply with others' demands so that they are less likely to resist inappropriate requests (e.g., Sobsey & Varnhagen, 1991). Poor communication skills resulting from restricted personal safety vocabulary may also be an important factor. When children don't have the proper personal safety vocabulary necessary to describe child abuse, they are less likely to report the incident in a comprehensible way. Moreover, children who lack social skills are less likely to recognize inappropriate behaviours in their relationships with different people. Finally, children who have insufficient sexuality knowledge may regard abusive or inappropriate behaviours as acceptable. In addition to children's individual characteristics, other factors such as cultural attitudes and beliefs, as well as segregation in institutions help to account for a high risk of child abuse among children with intellectual disabilities (Sobsey, 1994c).

As professional awareness of the problem of child abuse expands, increased attention is being directed toward abuse prevention programs for children with intellectual disabilities. However, much of the research in this area has demonstrated that abuse prevention programs are effective in teaching adults with intellectual and developmental disabilities self-protection skills (e.g., Lumley, Miltenberger, Long, Rapp, & Roberts, 1998), decision-making skills (e.g., Khemka, Hickson, & Reynolds, 2005), social-sexual skills (e.g., Foxx, McMorrow, Storey, & Rogers, 1984), and knowledge regarding

sexuality (e.g., McDermott, Martin, Weinrich, & Kelly, 1999). There are relatively few studies to develop and evaluate such programs for the children.

Some of the research has found that individuals with intellectual disabilities often have difficulties reporting instances of abuse (Lee & Tang, 1999; Lumely et al., 1998; Miltenberger, Roberts, Ellingson, Galensky, Rapp, Long, & Lumley, 1999). The difficulties may be partly due to the lack of personal safety vocabulary necessary to report child abuse. However, little attention has been given to the development of abuse prevention programs for teaching personal safety vocabulary to children with intellectual disabilities.

Significant people who closely live and work with children with intellectual disabilities, because of their expertise or familiarity with these children, know the needs of the children well. Thus, they can help to identify and organize relevant skills and knowledge that should be addressed in an educational program for these children. However, few researchers have placed much emphasis on the ideas or concerns of such significant people in the development of abuse prevention programs (Foxx et al., 1984; Plaute, Westling, & Cizek, 2002).

Purpose Statement

The purpose of this study was to identify and organize personal safety vocabulary that children with intellectual disabilities need to learn in order to report any type of child abuse. The primary focus in the study was on the ideas of parents, educators, and investigators who were directly involved in child protection systems, regarding the vocabulary items and categories of the items.

The study was designed to answer the following questions:

1. What are personal safety vocabulary items that children with intellectual disabilities need to learn in order to report any incident involving sexual abuse, physical abuse, emotional abuse, and neglect as named by parents, educators, and investigators?

2. Into what categories are those vocabulary items organized by parents, educators, and investigators?

Definitions of Terms

Intellectual Disability

As used in the present study, the term intellectual disability is characterised by significantly subaverage intellectual functioning (IQ below 70-75), significant limitations in at least two of adaptive skill areas, and onset before the age of 18. Adaptive skill areas include basic skills demanded for daily life, including communication, self-care, home living, social skills, leisure, health and safety, self-direction, functional academics (reading, writing, basic math), and work. Children with intellectual disabilities often have other disabilities as well. Cerebral palsy, epilepsy, visual impairments, hearing loss, and emotional or behavioural difficulties are common among these children.

Generally, the number of individuals with intellectual disabilities is reported to be around 1% of the population (Taylor, Richards, & Brady, 2005). In the literature, the term intellectual disability is often used interchangeably with cognitive impairments, mental handicap, and mental retardation.

The definition of mental retardation adopted by the American Association on Mental Retardation (AAMR, 2002) includes the criteria for significant limitations both in intellectual functioning and in adaptive behaviours as expressed in conceptual, social and

practical adaptive skills. It also indicates that the disability should originate prior to age 18 years.

Child Abuse

Child abuse occurs when a parent, family member, guardian, caregiver, or other adult causes sexual, physical, emotional or psychological harm to a child, or places a child at serious risk of harm. Child abuse includes sexual abuse, physical abuse, emotional abuse, and neglect. Sexual abuse occurs when a child is used for sexual purposes by an adult or youth. Sexual abuse may range from inviting a child to touch or be touched sexually to sexual intercourse, to commercial exploitation through prostitution or the production of pornographic materials. Physical abuse is the deliberate application of force to any part of a child's body, which may result in a non-accidental injury. Examples of physical abuse include shaking, choking, hitting, biting, kicking, or burning a child or any other harmful or dangerous use of force. Emotional abuse is defined as behaviour in which a child's sense of self is attacked. It includes verbal threats and put-downs, socially isolating, or routinely making unreasonable demands on a child. Neglect is a lack of care by a child's parents or caregivers so that the child's physical, emotional, educational, or psychological needs are not met.

Concept Mapping

Concept mapping is a relatively new research method. It is a structured process that helps to conceptualize educational goals and objectives, needs, resources, or other dimensions which eventually constitute the elements of a program (Trochim, 1989a). The process involves having participants generate a list of items relevant to the topic being studied and then sort these items into piles based on conceptual similarity, analyzing the

data using multidimensional scaling and cluster analysis, and representing the list of items and its organization in a pictorial form, as a concept map.

Conclusion

Reporting is a critical means of preventing further child abuse. However, individuals with intellectual disabilities often have difficulties reporting experiences of being abused. This may be due to a lack of personal safety vocabulary necessary to describe the incidents.

Although there is a need for an abuse prevention program to teach personal safety vocabulary, little has been known about the vocabulary items that children with intellectual disabilities need. Moreover, significant people who are directly involved in the children's lives know the needs of the children well, yet research attention has rarely been given to their ideas or concerns in the development of abuse prevention programs. Results from this study will complement existing abuse prevention programs and provide a more complete list of personal safety vocabulary and its categorization that can be used as a framework for the development of an abuse prevention program. Specifically, the involvement of significant people in this study will help to develop a more relevant abuse prevention program.

The subsequent chapters of this thesis will be of the following format: In chapter 2, literature concerning incidence of child abuse among children with intellectual disabilities, child characteristics associated with a risk of child abuse, and abuse prevention programs is reviewed. Issues regarding the development of abuse prevention programs are also described. In chapter 3, a detailed description of the research method used in this study is provided. In chapter 4, the results are presented in the form of

concept maps. In chapter 5, a summary and discussion of the major aspects of the research study is presented. Implications for practice and future research are also included in this chapter.

CHAPTER 2: LITERATURE REVIEW

In this chapter, the literature in the area of child abuse of children with intellectual disabilities is reviewed in order to provide the foundation for the present study. First, a conception of the problem of child abuse is acquired through an overview of the incidence research. Second, literature documenting child characteristics associated with child abuse is explored. Third, the body of research on abuse prevention programs is reviewed. This is followed by a description of the issues regarding the development of such programs. Finally, implications of the existing literature for the present research are discussed.

Child Abuse of Children with Intellectual Disabilities

Incidence of Child Abuse of Children with Intellectual Disabilities

As professional and public awareness of the problem of child abuse expands, increased attention is being directed toward the issue of abuse of children with intellectual disabilities. Incidence research has consistently demonstrated a relationship between intellectual disability and child abuse.

Studies have reported overrepresentation of children with intellectual disabilities within abused or neglected samples. Gil (1970) conducted the first nationwide survey on child abuse (i.e., physical abuse) during 1967 and 1968 in the U.S. He found, from administering a questionnaire to social workers and probation officers that among 1,380 abused children reported in a representative sample of 39 cities and countries during 1967, about 8% of the children had intellectual disabilities. Furthermore, over 13% of the school-aged children in the abused sample attended special classes for children with disabilities or were in grades below their age level. Similarly, Trocmé and Wolfe (2001)

investigated prevalence estimates in a nationwide Canadian study. The researchers selected a representative sample of 7,672 child abuse cases reported in 1998 and asked child welfare workers who investigated the cases to complete a questionnaire. The results demonstrated that nearly half (45%) of child abuse cases were substantiated by the child welfare workers. It indicated that an estimated 9.7 cases of child abuse were substantiated per 1,000 children. In addition, at least one cognitive, physical, or emotional child functioning issue was reported in almost one-third (30%) of the substantiated cases of child abuse.

In another study, Sandgrund, Gaines, and Green (1974) investigated disability status among 90 abused or neglected children, as confirmed by a child welfare centre, and 30 non-abused children who were matched for age, sex and SES. The results indicated, from clinical interviews and standardized psychological tests (e.g., WISC), that 25% of the abused or neglected group was diagnosed with intellectual disabilities. Despite matching on relevant variables, the proportion of children with intellectual disabilities in the abused or neglected group was almost ten times higher than that of the control group. Likewise, other studies reported that a disproportionately high number of children with intellectual disabilities was included in sexually abused samples (Kvam, 2000; Shah, Holloway, & Valkil, 1982); physically abused samples (Bonnier, Nassogne, & Evrad, 1995; Ewing-Cobbs, Kramer, Parasad, Canales, Louis, Fletcher, Vellero, Landry, & Cheung, 1998; Johnson & Morse, 1968; Martin, 1972); and abused or neglected samples (Hawkins & Duncan, 1985; Morse, Sahler, & Friedman, 1970; Sawyer & Dubowitz, 1994).

Moreover, numerous investigators have provided the incidence estimates of child abuse within samples of children with intellectual disabilities. For example, Verdugo et

al. (1995) assessed child abuse among 445 children with intellectual disabilities who were attending different institutions in Spain. Through a questionnaire completed by professionals (i.e., doctors, social workers, psychologists), the researchers found that 11.5% of the children had been abused or neglected, while only 1.5% of a control group without disability had experienced child abuse. It was estimated that the rate of child abuse was about eight times higher among the children with intellectual disabilities than among children without disabilities. Their results also indicated that children with intellectual disabilities were subjected to all kinds of child abuse, including sexual, physical, and emotional abuse as well as neglect. Furthermore, most of the children were simultaneously subjected to more than one type of child abuse.

Ammerman, Van Hasselt, Hersen, McGonigle, and Lubetsky (1989) investigated incidence of child abuse among 150 children with intellectual and other disabilities who were hospitalized for psychiatric reasons. They identified, from reviews of the medical charts of the children with disabilities, that 39% of the sample had evidence or warranted suspicion of past or current child abuse. Of the abused or neglected cases, sexual abuse occurred in 36%, physical abuse occurred in 69%, and neglect occurred in 45%. Fifty-two percent of the abused or neglected children also experienced multiple forms of child abuse concurrently. The results from these studies were consistent with the results from other studies demonstrating the high occurrence of child abuse (i.e., sexual and physical abuse, neglect) among children with intellectual disabilities (Benedict, White, Wulff, & Hall, 1990; Buchanan & Oliver, 1979; Chamberlain, Rauh, Passer, McGrathe, & Burket, 1984); and children with intellectual and other disabilities (Ammerman, Hersen, Van Hasselt, Lubetsky, & Sieck, 1994; Cohen & Warren, 1987).

Recently, more accurate reports regarding the relationship between intellectual disability and child abuse were documented by Sullivan and Knutson (1998, 2000). A study by the researchers (2000) used an entire school-based population that included all 50,278 children attending schools during 1994 and 1995 school year in Omaha, Nebraska. Child abuse registry records, foster care records, law enforcement records, and school records were collected to obtain evidence of child abuse and information on disability status. The results showed that although the overall rate of child abuse was 11% in the entire population of children, almost one-fourth (22%) of the abused or neglected children had disabilities and nearly one-third (31%) of the children with disabilities had confirmed histories of child abuse compared to 9% of the children without disabilities. In addition, the children with intellectual disabilities were about 4.0 times more likely to be the victims of some type of child abuse than their peers without disabilities. Specifically, the children were 4.0 times as likely to be sexually abused, 3.8 times as likely to be physically abused, 3.8 times as likely to be emotionally abused, and 3.7 times as likely to be neglected as children without disabilities. The children with intellectual disabilities were also more likely to have experienced multiple forms of child abuse than the children without disabilities.

Overall, all the studies presented here suggest that there is a strong relationship between intellectual disability and child abuse. Some research indicates that children with intellectual disabilities are overrepresented in abused or neglected samples, while other studies report a particularly high incidence of child abuse among samples of children with intellectual disabilities. Furthermore, results of additional investigations indicate that children with intellectual disabilities are at high risk for all kinds of child abuse and often

experience multiple forms of child abuse. However, the causal relationship between intellectual disability and child abuse remains unclear. Child abuse can be the cause of intellectual disability, while intellectual disability appears to act in some way as a risk factor for child abuse. It also seems reasonable to think that the influence of third factors on both intellectual disability and child abuse may strengthen the association. Therefore, the results of the research must be interpreted cautiously with regard to causality of the relationship.

Characteristics of Victims, Perpetrators, and Perpetration

Gender of Victims

In recent years, research has examined the gender proportions for children with intellectual disabilities who are abused or neglected. Several investigators have indicated that there are more boys than girls among children with disabilities who are abused or neglected (Sobsey, Randall, & Parrila, 1997; Sullivan, Brookhouser, Scanlan, Knutson, & Schulte, 1991; Sullivan & Knutson, 2000). In a study of analysis of children with disabilities within an abused or neglected group, Sobsey et al. (1997) found that boys were more prevalent among abused or neglected children with disabilities, while boys and girls without disabilities were about equally victims of child abuse.

However, such findings cannot be interpreted to suggest that girls with intellectual disabilities are at lower risk for child abuse than boys with intellectual disabilities. Given the greater prevalence of intellectual disability among males (Taylor et al., 2005), it is likely that unequal gender proportion among children with intellectual disabilities who are abused or neglected may be due to the association between gender and disability.

Level of Intellectual Disability

Several investigators have explored a relationship between level of disability and degree of risk for child abuse. Some have found that children with mild disabilities are at a greater risk for child abuse than children with more severe disabilities (Ammerman et al., 1994; Ammerman et al., 1989; Benedict et al., 1990; Chamberlain et al., 1984). For example, Verdugo et al. (1995) found that 53% of abused or neglected children were diagnosed as having mild or moderate intellectual disabilities, while only 19% of non-abused children were diagnosed as having mild or moderate intellectual disabilities. Their findings also demonstrated that the less functionally impaired children were (e.g., walk, eat, undress) the more likely they were to be abused or neglected.

In contrast, other studies have shown that children with more severe disabilities were at a greater risk for child abuse (Beckman, 1983; Rusch, Hall, & Griffin, 1986). Zirpoli, Snell, and Loyd (1987) compared the characteristics of abused and non-abused clients in residential training centers for individuals with intellectual disabilities. The findings indicated that while there was almost no difference in the number of abused and non-abused clients rated as having mild and moderate intellectual disabilities, there were three times as many abused clients rated as having severe intellectual disabilities as non-abused clients. Likewise, Kvam (2000) examined incidence of sexual abuse in Norway and reported that the percentage of sexual abuse of children with disabilities was likely to increase with the level of disability.

Considering the mixed results of these studies, it is impossible to make a general statement about the relationship of severity of intellectual disability to child abuse. Interestingly, while the effect of severity of disability was reversed in one group of

studies compared to the others, both groups of the studies found an association between severity of disability and degree of risk. This may suggest that severity of disability is a significant variable but that it interacts with environmental characteristics to increase risk in some settings and decrease it in others.

Relationship of Victims to Perpetrators

Contrary to the notion that most children with intellectual disabilities are abused or neglected by strangers, research has demonstrated clearly that most perpetrators are familiar persons in the children's environment, including parents (Ammerman et al., 1989; Chamberlain et al., 1984; Sullivan, et al., 1991), immediate and extended family members (Balogh, Bretherton, Whibley, Berney, Graham, Richold, Worsley, & Firth, 2001; Mansell, Sobsey, & Moskal, 1998; Sullivan & Knutson, 1998, 2000), and disability-based service providers (Kvam, 2004; Sobsey & Varnhagen, 1991). In a study, Sobsey and Doe (1991) found that 44% of the perpetrators in 166 cases of sexual abuse or sexual assault were people who came in contact with the victim primarily through special services for individuals with disabilities. Many were paid caregivers (27.7%) and another 16.8% were members of the victims' natural family. Only 8.2% were strangers.

Characteristics of Perpetration

The location and the temporal pattern of child abuse have been analyzed in incidence studies. It has been documented that child abuse of children with disabilities often occurred in their own homes or perpetrators' homes (Knutson & Sullivan, 1993; Kvam, 2004; Sobsey & Varnhagen, 1991; Sullivan & Knutson, 1998). In a study of children with disabilities who were referred to the Center for Abused Handicapped Children, Sullivan et al. (1991) found that the most frequent sites at which children were abused

were the child's home (50.2%), school (28.7%), the perpetrator's home (6.3%), and other sites (8.1%). The study also analyzed the duration of abusive events. The results indicated that 82.6% of sexually abused children and 92.6% of physically abused children were known to be victimized on more than a single occasion and that abusive episodes tended to recur over somewhat longer time period.

Mansell et al. (1998) also indicated that most of the children with intellectual and developmental disabilities experienced multiple episodes of child abuse over more than one month. Similarly, other investigators concluded that child abuse was likely to occur repeatedly over protracted periods of time (Chamberlain et al., 1984; Hershkowitz, Lamb, & Horowitz, 2007; Knutson & Sullivan, 1993; Kvam, 2004; Sullivan & Knutson, 2000).

In summary, all children with intellectual disabilities, regardless of gender and degree of disability, are vulnerable to child abuse. Like children without disabilities, they are more likely to be abused or neglected by close acquaintances or relatives. Child abuse also tends to recur over a long period of time. However, the review of the incidence studies shows that children with intellectual disabilities are at a greater risk for child abuse than their peers without disabilities.

There are multiple factors to account for why children with intellectual disabilities are more vulnerable to child abuse (e.g., Sobsey, 1994c; Watson, 1984). In the next section, the specific child characteristics associated with the heightened risk are reviewed in detail.

Specific Child Characteristics Associated with Child Abuse

It has been suggested that specific characteristics of children with intellectual disabilities may be associated with an increased risk for child abuse (Andrew & Veronen,

1993; Sobsey, 1994a, 1994c; Tharinger et al., 1990; Watson, 1994). These characteristics include dependency, overcompliance, poor communication skills, poor social skills, and lack of sexuality knowledge. However, these characteristics are not necessarily inherent traits of the children or direct results of intellectual disability (Sobsey, 1994c). In fact, many of the characteristics result from life experience or lack of appropriate education.

Dependency

Researchers have noted that high levels of dependency on others make children with intellectual disabilities susceptible to child abuse (Andrews & Veronen, 1993; Briggs, 1995; O'Day, 1983; Schwier & Hingsberger, 2000; Sobsey, 1994c; Sundram & Stavis, 1994; Watson, 1984). Children with intellectual disabilities are not often taught independent skills such as self-care skills, domestic skills, and community skills. As a result, these children are more likely to be dependent on caregivers for activities of daily living and intimate care. Sometimes, having a disability increases the dependency on caregivers or others. This dependency creates the necessity for intensive interaction with caregivers, including some who may be abusive (Sobsey, 1994c). When the caregivers are abusive, the interactions are readily exploited. In a study analyzing abuse among individuals with developmental disabilities, Nosek, Howland, and Hughes (2001) found that sexual and physical abuse frequently took place while performing some types of assistance related to personal care including bathing, toileting, and feeding.

Sometimes, the assistance itself makes children with intellectual disabilities more vulnerable to child abuse because assistance affects feelings of ownership of one's body and sense of personal space. When assistance is frequently provided to children with intellectual disabilities, they may perceive that their body belongs to anyone who wants

to touch it. They may also exhibit confusion with boundaries, particularly a right to govern their own body and body parts (Monahan & Lurie, 2003). The failure to establish boundaries of personal space renders children with intellectual disabilities unable to recognize early signs of intrusive behaviour by others.

Overcompliance

It has been suggested that overcompliance with direction given by any adult may amplify opportunities for child abuse (Briggs, 1995; Schwier & Hingsburger, 2000; Sobsey, 1994b, 1994c; Sobsey & Varnhagen, 1991; Tharinger et al., 1990; Watson, 1984). Unfortunately, children with intellectual disabilities are frequently taught to obey whoever commands them and whatever command is given (Sobsey, 1994c). As a result of this compliance training, they may think that they have no right to refuse adults' inappropriate demands, and they may comply with requests that result in child abuse (Watson, 1984).

Moreover, since compliance is often viewed as consent, the chance of prosecution of a perpetrator would be reduced (Sobsey, 1994b). In turn, the lack of consequences for perpetration almost ensures repeated victimization.

Poor Communication Skills

It has been documented in the literature that children who have poor communication skills are more vulnerable to child abuse (Knutson & Sullivan, 1993; Rusch et al., 1986; Sullivan et al., 1991; Sullivan & Knutson, 2000). Children with intellectual disabilities often have communication problems. For instance, they may not possess personal safety vocabulary necessary to describe the experiences of being abused or neglected (Alyott, 1995; Oosterhoorn & Kendrick, 2001; Petersilia, 2000; Westcott & Jones, 1999). Several

studies have shown that individuals with disabilities have difficulties labelling body parts (Bermen, Harris, Enright, Gilpin, Cathers, & Bukovy, 1999; Timmers, Ducharme, & Jacob, 1981; Valenti-Hein, 2002) and feelings (Oseroff, Oseroff, Westling, & Gessner, 1999; Sullivan & Scanlan, 1987).

When children with intellectual disabilities do not have the proper vocabulary, they are unlikely to tell adults about instances of child abuse in a comprehensible way.

Hershkowitz et al. (2007) found that children with disabilities were more likely to fail to report child abuse than their peers without disabilities. Without children's disclosures, child abuse may remain unrecognized or uninterrupted. This reduces the likelihood that perpetrators will be arrested and prosecuted.

Poor Social Skills

Poor social skills may increase the potential for child abuse (Sobsey, 1994b; Watson, 1984). Numerous studies have indicated that limited social skills increase the likelihood of victimization (Doren, Ballis, & Benz, 1996; Rusch et al., 1986; Sobsey & Varnhagen, 1991; Wilson, Seaman, & Nettelbeck, 1996; Zirpoli et al., 1987). Children with intellectual disabilities often have few opportunities to learn social skills. For example, they are less likely to participate in clubs, teams, and parties (Krauss, Seltzer, & Goodman, 1992; McAndrew, 1979; Zetlin & Murtaugh, 1988). Social-skills instruction is also seldom structured and usually of a short duration (Sacks, Tierney-Rusell, Hirsch, & Paraden, 1992 as cited in Doren et al., 1996). Due to their limited social and educational opportunities, the children may have a lack of knowledge of appropriate and inappropriate behaviours in their relationships with different people. Consequently, they

are at a high risk for being manipulated into child abuse, because they do not even realize it is wrong.

In addition, the poor social skills of children with intellectual disabilities may interfere with the establishment of interpersonal relationships or friendships. The absence of such relationships makes them be isolated socially. Perpetrators tend to seek out the isolated children who are unable to get protection from friends or community.

In some cases, children with disabilities may understand that they are being abused, but they may simply allow themselves to be exploited if they feel the alternative is isolation or loneliness (Sobsey & Mansell, 1997).

Lack of Sexuality Knowledge

A number of researchers have pointed out that limited education about sexuality may result in an increased vulnerability to child abuse (Senn, 1988; Sobsey & Mansell, 1990; Sobsey & Varnhagen 1991; Tang & Lee, 1999; Tharinger et al., 1990). Nevertheless, children with disabilities are often excluded from sexuality education (Blum, Resnick, Nelson, & Germain, 1991; Stromsness, 1993). As a result, individuals with intellectual disabilities have limited sexual knowledge (Galea, Butler, Iacono & Leighton, 2004; McCabe & Cummins, 1996; Plaute, Westling, & Cizek, 2002).

There are two possible reasons to account for why the lack of sexual knowledge increases the risk for child abuse. First, knowing about and understanding sexuality is essential to recognize a potentially dangerous situation. A study by McCabe and Cummins (1996) found that individuals with intellectual disabilities had less knowledge about sexuality but expressed more positive feelings regarding sexual interaction typically considered abusive and exploitive, compared to a control group without

disability. Second, child abuse can be rationalized by perpetrators as a form of sexuality education. Sobsey (1994b) found that individuals with intellectual disabilities who were abused were frequently told by the perpetrators that they had to undergo this as part of their sexuality education when they were being abused.

In conclusion, several characteristics of children with intellectual disabilities may place them at a high risk for child abuse, including dependency, overcompliance, a restricted personal safety vocabulary, poor social skills, and lack of sexuality knowledge. However, the characteristics identified here do not imply that the children are responsible for their own child abuse, nor do they imply that prevention efforts should be aimed solely at altering these characteristics. Rather, a greater understanding of these characteristics provides information useful to the development of abuse prevention programs for this population, as one component of multiple approaches to child abuse prevention. The following section provides a detailed description of abuse prevention programs for children with intellectual disabilities.

Abuse Prevention Programs for Children with Intellectual Disabilities

Abuse prevention programs aim to reduce the risk of child abuse by teaching prevention skills and knowledge to children with intellectual disabilities. Although there is a clear need for such programs for these children, there are relatively few studies on teaching abuse prevention skills to this population. This section reviews research on the programs for children as well as adults with intellectual and developmental disabilities. The programs for the adults may provide implications for research with children with intellectual disabilities.

Self-Protection Skills Programs

The goal of self-protection programs is to teach individuals with intellectual disabilities to identify a potentially dangerous situation, to respond safely to the situation by verbally refusing and/or leaving the situation, and to report the situation (Lumley & Miltenberger, 1997). There are a very small number of studies on teaching self-protection skills to children with intellectual and developmental disabilities. Lee and Tang (1998) used the Behavioral Skills Training Program designed for children without disabilities to teach Chinese children with intellectual disabilities self-protection skills. In the program, the children were taught body ownership (i.e., we are the bosses of our bodies), the locations of private body parts, discrimination between appropriate and inappropriate behaviors (e.g., it is not okay to touch others' private parts), and who is responsible for child abuse (i.e., other people's inappropriate touching is never the child's fault). They were also taught to say 'No' in response to sexual advances, escape from the situation, and report the incident. Instruction, modeling, role plays, shaping, reinforcement, and feedback were employed to teach the skills. The children's knowledge and skills were assessed using the Personal Safety Questionnaire (PSQ) and the What If Situation Test (WIST). The PSQ indicated that children who participated in the training program demonstrated better understandings of sexual abuse concepts (e.g., being boss of one's own body, touching an adult's private parts is wrong) than a control group at posttraining and at a 2-month follow-up. The WIST, in which vignettes describing appropriate and inappropriate touching behaviors were verbally presented and questions were asked (i.e., what would you do if you were in the situation?), demonstrated that the training group evidenced a significant increase in the recognition of appropriate and inappropriate touches, compared

with the control group. Moreover, upon identifying the inappropriate touches, the children in the training group were more likely to verbally describe appropriate responses to the situation (i.e., saying “No,” leaving the situation, and reporting the incident) as compared to those in the control group. These improvements in the training group were also apparent at a 2-month follow-up assessment. On a closer examination of the specific skills, however, the results indicate that children who participated in the program received relatively low scores in reporting skills (i.e., telling about incidents).

In a similar study, Warzak and Page (1990) taught children with developmental disabilities to say ‘No’ to an abusive lure and leave the situation through instruction, modeling, role plays, feedback, and reinforcement. The participants’ skills were assessed using role play, in which potentially abusive behaviors were simulated and the participants’ responses to the situations were recorded. The results showed that training was effective in teaching refusal skills to the children.

More research attention has been directed toward self-protection skills programs for adults with intellectual disabilities. Lumley et al. (1998) developed a self-protection program to prevent abuse by caregivers. The program taught adults with intellectual disabilities the locations and names of private body parts, knowledge of appropriate and inappropriate types of sexual activities and relationships (e.g., it is not okay to have a sexual relationship with service providers), characteristics of abuse situations (e.g., perpetrators often use bribes or threats to lure individuals or keep the incident a secret), and how to verbally and physically refuse abusive lures, and to report the incidents. Instruction, modeling, role plays, social reinforcement, and feedback were used to teach these skills. A knowledge measure showed that the participants improved in their

knowledge of abuse concepts following training. Assessment, consisting of verbal reports (i.e., participants' verbal descriptions of what they would do in abusive situations) and role plays, also indicated that the participants demonstrated an increase in their self-protection skills following training and at a 1-month follow-up. However, in situ assessment in which the participants were not aware that potentially abusive situations were staged showed that they could not fully generalize their skills and that none of the participants were able to report the incidents.

Miltenberger et al. (1999) came to a similar conclusion after conducting a study in which adults with intellectual disabilities were taught self-protection skills. The content of their program included concepts of abuse, discriminating sexual abuse from appropriate behaviors, verbal and physical refusal skills, and reporting skills. Instruction, modeling, role plays, reinforcement, and feedback were utilized to teach the skills. Role play assessment showed that the program was successful in teaching self-protection skills, while in situ assessment indicated that generalization of the skills occurred after further training took place in natural settings and that the participants often had difficulty with reporting skills.

In a similar study, Haseltine and Miltenberger (1990) employed a commercially available self-protection program to teach adults with intellectual disabilities identification of body parts, the names of private body parts, discrimination between good and bad touches, verbal refusal, physical escape, and reporting. Instruction, modeling, role plays, reinforcement, and feedback were used to teach the skills. A film "Child Molestations: When to say NO" was also presented. In situ assessment, in which a confederate presented an abduction lure (e.g., offering a ride) rather than an abuse lure,

showed that the skills were generalized into real settings at posttraining and at a one- and six-month follow-up, although some of the participants needed additional feedback to perform reporting skills.

To date, there has been one study on teaching self-protection skills to children with intellectual disabilities. Although the self-protection program used in the study was for children without disabilities, it was found to be effective in improving the self-protection skills of children with intellectual disabilities. However, like adults with intellectual disabilities who participated in such programs, the children had difficulties with reporting skills. Because adoption of programs designed for children without disabilities may not address the needs of children with intellectual disabilities, future research should be conducted on the development and evaluation of self-protection programs for these children.

Decision-Making Skills Programs

Children with intellectual disabilities have often been taught to obey others in order to meet their needs. This is likely to make them much more vulnerable to child abuse (e.g., Sobsey, 1994c; Watson, 1984). Recently, decision-making skills programs have been developed to teach individuals with intellectual disabilities to identify harm in abusive situations and make an independent decision to minimize the risk.

A program designed by Khemka and colleagues (2005) taught adults with intellectual disabilities different types of abuse (i.e., sexual, physical, emotional abuse), discrimination between healthy and abusive relationships, feelings or emotions associated with the relationships, strategies for stopping and reporting abuse, positive stress management, and coping strategies. A four-step decision-making process (i.e., problem

identification, generation of alternative choices, consequence evaluation, and selection of the best course of action) was also addressed in the program. Instruction, modeling, role plays, and discussion were employed to teach the skills. The participants' skills were assessed using the Knowledge of Abuse Concept Scale (KACS) and the Self-Decision Making Scale (SDMS). The knowledge measure indicated that the adults who participated in the program demonstrated significantly greater knowledge of abuse issues than did those of a control group. Furthermore, the SDMS, in which vignettes describing sexual, physical, and emotional abuse were verbally presented and questions were asked, showed that the training group significantly improved in their ability to identify problems in abusive situations and to make decisions to handle the situations, compared with the control group.

In a similar study, Khemka (2000) conducted two decision-making skills programs, including a traditional decision-making program and an integrated cognitive and motivational program. The traditional decision-making program taught a cognitive decision-making strategy (i.e., problem identification, definition of problem, alternative choice generation, consequence evaluation) to adults with intellectual disabilities. The integrated cognitive and motivational program taught the cognitive strategy with an added emphasis on motivation. The participants' skills were assessed using verbal reports, in which verbal vignettes and video clips portraying sexual, physical, and emotional abuse were presented. The results indicated that the participants in both programs increased their decision-making skills relative to a control group.

In summary, several researchers have demonstrated that decision-making programs are successful in teaching adults with intellectual disabilities decision-making skills. From

this information, it seems likely that children with intellectual disabilities are capable of acquiring decision-making skills. Additional research should be conducted to develop and evaluate such programs for these children.

Social Skills Programs

Since social skills training (e.g., friendships, self-management skills) is a large and complex area beyond what can be covered in abuse prevention programs, studies dealing exclusively with social skills programs are not discussed in this section. Rather, this section focuses on social-sexual skills programs to teach what to say and how to behave in sexual relationships. Children with intellectual disabilities may benefit from improved social-sexual skills in that the skills help them to avoid being manipulated into inappropriate relationships and to develop meaningful social and sexual relationships in an acceptable manner.

Foxx et al. (1984) taught adults with intellectual disabilities six social-sexual skills, including delivering and accepting compliments, engaging in social interactions, being polite, giving and accepting criticism, dealing with social confrontation, and asking questions and giving answers. A board game, *Sorry*, and a specially designed card deck were used to teach the skills. Each time participants moved a game piece, the game cards describing male-female interactions or referents to sexual behaviors were verbally presented. The participants were then asked what they should do in the situations. Feedback and reinforcement were provided as needed. The participants' skills were assessed using response scores to the game questions. The results indicated that the adults with intellectual disabilities demonstrated an increase in social-sexual skills following training. An important feature of this program was that the social-sexual skills in the

program were identified through observations of social interaction, interviews with service providers who worked with individuals with disabilities, and literature review. This helped to ensure that the program included relevant and functional skills that the participants needed in their everyday lives.

Valenti-Hein, Yarnold, and Mueser (1994) developed a dating-skills program. In the program, adults with intellectual disabilities were taught initiating, maintaining and ending conversations, listening, recognizing and expressing emotions, identifying similarities between oneself and others, giving and receiving compliments, asking for a date, dealing with rejection, compromising, resisting persuasion, sexual functioning, and birth control. Discussion, modeling, role plays, and feedback were employed to teach the skills. Assessments, consisting of the series of game questions used in Foxx et al.'s study (1984) and role plays, demonstrated that the participants in the training group significantly improved their dating skills at posttraining and at a 2-month follow-up, compared to a control group. Similarly, other researchers taught dating skills to adults with intellectual disabilities (Lindsay, Bellshaw, Culross, Staines, & Michie, 1992; Mueser, Valeti-Hein, & Yanold, 1987) and developmental disabilities (Green, 1983). However, aside from Mueser et al.'s study (1987) demonstrating the effectiveness of a dating-skills program, the other studies did not provide evaluation data.

To date, research attention has been directed toward the development of social-sexual skills programs for adults with intellectual disabilities. The studies in this area indicated that these adults demonstrated an increase in social-sexual skills following the programs. Again, it appears there is a need for the development and evaluation of the programs for children with intellectual disabilities.

Sexuality Education Programs

Several researchers indicate that sexuality education has a role to play in decreasing the risk of being abused or neglected (Sobsey, 1994b; Sobsey & Mansell, 1990; Wilgosh, 1990). Since the 1980s, a number of sexuality education programs have been developed.

Penny and Chataway (1982) employed a sexuality education program developed by the Family Planning Association to teach sexuality information to children and adults with intellectual disabilities. In the program, the participants were taught body parts, reproduction, relationships, male and female roles, parenting, contraception, and sexually transmitted diseases (STDs). Instruction and discussion were utilized to teach the information. The participants' sexual knowledge was assessed using the Sexual Vocabulary Test, in which the participants were asked to explain words related to the body and sexual expression. The results indicated that the participants' knowledge was increased following training and at a 2-month follow-up.

Garwood and McCabe (2000) used the Co-Care program and the Family Planning Victoria program (FPV) to teach sexuality information to children and adults with intellectual disabilities. The Co-Care program covered feelings, body language, social skills, the human life cycle, puberty, body awareness, private and public behavior, sexual relationships, conception, pregnancy and childbirth, contraception, menstruation, and protective behaviors. The FPV program included self-awareness, feelings, body awareness, non-private and private body parts, public and private behaviors, relationships, protective behaviors, sexual relationships, contraception, and AIDS. The participants' knowledge was assessed using the Sexuality Knowledge, Experience, Feelings and Needs Scale for People with Intellectual Disability (Sex Ken-ID). The

results showed that the participants in the programs increased their sexual knowledge at posttraining. The results from these studies were consistent with the results from other studies demonstrating the effectiveness of sexuality education on adults with intellectual and developmental disabilities (Caspar & Glidden, 2001; Lindsay et al., 1992; McDermott et al., 1999; Robinson, 1984).

Recently, a more comprehensive sexuality education program was developed for adults with intellectual disabilities, their parents, and their service providers (Plaute et al., 2002). The researchers interviewed a group of individuals with disabilities, residential staff who worked with them, and their parents. During the interview, the participants identified and organized relevant and valuable sexual knowledge that should be included in the program. The content of the program included the names of body parts and their functions, hygiene, relationships (e.g., love, marriage), sexual behavior (e.g., masturbation), childbirth, contraception, pregnancy, STDs, and sexual abuse. Group activities (e.g., a visit to hospitals to observe newborn babies, having a “singles” party) were also included to increase an understanding of sexuality. Although the researchers reported that adults with intellectual disabilities increased their sexual knowledge following training, they did not provide systematic evaluation data.

In summary, there are several sexuality education programs for children and adults with intellectual and developmental disabilities. The programs were found to be successful in increasing the sexual knowledge of these children and adults. Specifically, Plaute et al.’s study provided a good example of how to develop an abuse prevention program to address the needs of individuals with intellectual disabilities.

As abuse prevention programs for children with intellectual disabilities have received increasing attention, commercial abuse prevention programs have also become available. Although the effectiveness of these programs has not been evaluated, a review of the programs may provide researchers and educators with a better understanding as to abuse prevention programs. The next section describes commercially available abuse prevention programs for children with disabilities.

A Review of Commercial Child Abuse Prevention Programs

Several commercial child abuse prevention programs are recommended for use with children with disabilities by the Sexuality Information Education Centre of the United States (SIECUS) or the Alberta Committee of Citizens with Disabilities (ACCD). The programs are 'Child Sexual Abuse Curriculum for the Developmentally Disabled' (Rapport, Burkhardt, & Rotatori, 1997), 'The Circles: Stop Abuse' (Champagne & Walker-Hirsch, 1986), 'Developing Personal Safety Skills in Children with Disabilities' (Briggs, 1995), and 'Preventing Sexual Abuse: Curriculum Guides' (Plummer, 1984).

These programs generally include several common topics. First, body parts are among the key topics included in the programs. For example, the Child Sexual Abuse Curriculum for the Developmentally Disabled (Rapport, et al., 1997) teaches names of non-private body parts (e.g., ears, eyes). The program also offers a detailed definition of private body parts (i.e., private body parts are the parts which are covered by bathing suits) and teaches the names of private parts (e.g., penis, vagina, breasts, buttocks). Although it is critical to teach the correct biological names for body parts, it may also be necessary to use children's own crude expressions to ensure that they understand (Briggs, 1995).

Second, the programs cover knowledge of appropriate and inappropriate touching behaviours. The Circles: Stop Abuse (Champagne & Walker-Hirsch, 1986) is one of the programs which teaches about different types of touching behaviours. The program uses six colored circles to assist in teaching about touches: the private circle, the hug circle, the far away hug circle, the handshake circle, the wave circle, and the stranger circle. The circles each have their own rules for touching behaviours in relationships with different people. If the rules are broken, this is identified as a potentially dangerous situation.

Third, the programs include education about feelings. For instance, a program designed by Briggs (1995) teaches how to label different feelings through the use of a 'feeling box.' The box contains materials of different textures or substances. When children touch each of the objects in the box, they are given labels to describe how they feel. In addition, the program teaches feelings using pictures of people's faces that illustrate different facial expressions. Through these exercises, children learn to identify different feelings associated with appropriate behaviours and with child abuse.

Finally, self-protection is an integral topic of the prevention programs. That is, the programs teach that children should verbally and physically refuse attempted or actual child abuse and that they should tell trusted someone about the incident. For example, the Preventing Sexual Abuse: Curriculum Guides (Plummer, 1984) teach children to say "No" to inappropriate or unwanted touches by using a variety of role plays.

Overall, commercially available abuse prevention programs cover a range of skills and knowledge, such as body parts, between appropriate and inappropriate behaviours, feelings, and self-protection skills. However, there is little information about how such programs are developed. In addition, there appears to be a lack of the programs for

teaching children decision-making skills, social-sexual skills, and sexuality knowledge. It indicates that more attention should be paid to the development of research-based these programs. The next section discusses several issues to be considered in order to develop effective and quality abuse prevention programs.

Designing Abuse Prevention Programs

In order for an effective and relevant abuse prevention program to be developed, three design issues need to be taken into account: (1) identifying the program content, (2) organizing the content, and (3) cultural sensitivity. A detailed description of each issue is provided below.

Identification of Program Content

Making decisions about what to teach is one of the most important tasks of program development. Tang and Lee (1999) note that the content of abuse prevention programs should address the needs of children with intellectual disabilities. In other words, the programs should include knowledge and skills that are relevant and important to these children. Two methods for the identification of relevant skills are often suggested in the literature, including an ecological inventory approach and interviews (Snell & Brown, 2006; Taylor et al., 2005).

An ecological approach is a method to determine skills by evaluating environments of children with intellectual disabilities. That is, in the ecological approach, environments that children with intellectual disabilities currently encounter and are expected to participate in are examined. Skills that are frequently demanded in those settings are then determined by observing their peers without disabilities in the same settings. The skills obtained from observational data are included within a program. Although the ecological

approach is a useful way to determine relevant skills for children, however, it is not always possible to identify skills through the ecological approach. For example, an abusive situation is unlikely to occur in the presence of an observer. In addition, allowing children to be in such a dangerous situation may be unethical. Thus, the ecological approach may be inappropriate to identify abuse prevention skills.

The other method is to conduct interviews with significant people who are directly involved in children's lives. Significant people who closely live and work with children with intellectual disabilities, because of their expertise and familiarity with the children, know what type of information the children need. Therefore, their input is critical and valuable in identifying skills that are relevant and functional to the children.

Content Organization

Another challenging task is to organize the numerous skills identified for teaching. Organizing content is necessary for several reasons. First, because instructional time allocated per day or week is limited, a number of new skills cannot be sufficiently addressed in a single instructional lesson. Second, because children with intellectual disabilities often have difficulties maintaining attention over time, it is effective to teach skills through different lessons. Finally, when skills and knowledge are presented in groupings rather than in random order, this facilitates the acquisition of the skills of children with intellectual disabilities (Beirne-Smith, Patton, & Kim, 2006). Therefore, skills and knowledge should be organized into categories and a program should be constructed with different instructional lessons to address these categories.

The content of a program can be organized in a variety of ways by different people. Because they have different ideas, a structure that one person views as working very well

may be seen by another as a disaster. Thus, the task of content organization should be done by a group of multiple people. They can include parents, teachers, and other significant people who know children well. In a study by Plaute et al. (2002), for instance, the task of grouping was performed by individuals with disabilities, their parents, and their service providers.

Cultural Sensitivity

As school populations are becoming increasingly multicultural, a challenge lies in how to develop culturally sensitive and relevant abuse prevention programs. Each ethnic group has its own cultural constraints and expectations. The different cultural values and customs affect how children interpret, define, and regulate child abuse issues and sexuality. Thus, abuse prevention programs should be able to address the diverse needs of children from different racial and ethnic groups. The ideas and concerns of immigrant and minority communities can be useful in the development of culturally relevant programs.

Synthesis

Over the past decades, it has become increasingly clear that child abuse is a serious problem among children with intellectual disabilities. Research on the incidence of child abuse leaves no doubt that these children are at a greater risk for child abuse (e.g., Sullivan and Knutson, 1998, 2000). Moreover, available data on child abuse demonstrates that both boys and girls with disabilities are subjected to all kinds of child abuse, that they are more likely to be abused by people who are close to them, and that they tend to be victims of multiple episodes of child abuse over protracted periods of time.

A number of investigators have highlighted the specific characteristics of children with intellectual disabilities that may place them at a high risk for child abuse, including life-long dependency (e.g., Sobsey, 1994c; Watson, 1984), overcompliance (e.g., Sobsey & Varnhagen, 1991), a restricted personal-safety vocabulary (e.g., Petersilia, 2000), poor social skills (e.g., Watson, 1984), and a lack of knowledge regarding sexuality (e.g., Sobsey & Mansell, 1990; Tharinger et al., 1990).

Despite the fact that our understanding of child abuse has increased considerably, there is little research on abuse prevention programs for children with intellectual disabilities, as one of multiple approaches to reduce a high risk of child abuse. The majority of the studies presented here indicate that such programs are effective to teach adults with intellectual and developmental disabilities self-protection skills (e.g., Lumely et al., 1998), decision-making skills (Khemka, 2000), social-sexual skills (e.g., Foxx et al., 1982), and skills related to sexuality (e.g., Caspar & Glidden, 2001; Penny & Chataway, 1982). Future research should be conducted to develop and evaluate such programs for teaching these skills to the children.

Some studies have shown that individuals with intellectual disabilities often have difficulties making a factual report (Haseltine & Miltenberger, 1990; Lee & Tang, 1998; Lumely et al., 1998; Miltenberger et al., 1999). This may be in part due to a lack of personal safety vocabulary necessary to report child abuse. Although existing abuse prevention programs have attempted to teach to label body parts (e.g., Haseltine & Miltenberger, 1990; Lee & Tang, 1998; Lindsay, et al., 1992; Penny & Chataway, 1982), and feelings (e.g., Garwood & McCabe, 2000), little is known about the personal safety

vocabulary that children with intellectual disabilities need in order to develop accurate reporting skills.

In the development of abuse prevention programs, one of the most important tasks is to identify and categorize skills and knowledge that are relevant and important to children with intellectual disabilities. Parents, teachers, and any other people who regularly interact with children with intellectual disabilities can provide useful and meaningful information in identifying and organizing skills, because of their expertise and familiarity with the children. To date, however, only two studies have reported attempts to include such significant people in the development of abuse prevention programs (Foxx et al., 1984; Plaute et al., 2002).

CHAPTER 3: METHOD

In this chapter, a detailed description of the research method used in the present study is provided. First, the rationale for the selection of concept mapping for the study and a detailed description of concept mapping are presented. Second, the actual procedures employed in the study are described, including the characteristics of participants, the specific concept mapping process, and the strategies used for establishing trustworthiness and validity. Third, ethical considerations in the study are presented.

Ethical approval to conduct the research was obtained from the Faculties of Education, Extension, and Augustana Research Ethics Board (EEA REB) at the University of Alberta.

Concept Mapping Methodology

Rationale for Choosing Concept Mapping

The present study was undertaken to identify personal safety vocabulary items necessary to report any type of child abuse and to organize these vocabulary items into conceptual categories. Specifically, an emphasis in the study was placed on the ideas of significant people who were directly involved in children's protection regarding the items and groupings of the items.

Concept mapping (Trochim, 1989a) was chosen as an appropriate research method for addressing the research problem for three reasons. First, concept mapping is a research method designed to provide a framework for program development. As already mentioned, decisions about program content and content organization are part of important tasks in the development of abuse prevention programs. Concept mapping provides a systematic and structured process to facilitate the identification of skills and

items to be included in a program and their structural relationships to one another (Shern, Trochim, & LaComb, 1995). That is, through the concept mapping process of three phases, a list of items is identified and conceptual categories of the items are determined. Therefore, concept mapping was well suited to the present study, in which the researcher was seeking to identify a list of personal safety vocabulary, and to organize the list.

Second, concept mapping helps to minimize the researcher bias that may impact on research findings. Jackson and Trochim (2002) state that concept mapping is appropriate when a researcher doesn't want to impose his or her preconceptions on a research study. In concept mapping, participants generate items to be included in a program. They also organize the intact items into piles. Then the sort data are statistically analyzed to produce a range of cluster or categorical solutions and the researcher chooses an appropriate categorical solution from among the different solutions. Because the researcher's role is limited to determining an optimal categorical solution rather than creating categories of items, the potential bias introduced by the researcher is minimized. This helps to ensure that the research results (i.e., the concept map) are a good representation of the participants' ideas and concerns.

Third, concept mapping has practical utility. In the concept mapping process, research findings (i.e., a list of items, categories of the items) are represented in a graphic form that can be understood easily. The visual display can facilitate effective and meaningful use of the findings for the development or revision of abuse prevention programs.

Overview of Concept Mapping

A Concept Mapping Process

There are different types of research methods that share the name “concept mapping” (Jackson & Trochim, 2002). Although all of them are similar in that they result in a picture of participants’ ideas, the type of concept mapping under consideration in the present study refers to a methodological alternative introduced by Trochim (1989a).

According to his definition, concept mapping is “a structured conceptualization process which can be used by groups to develop a conceptual framework which can guide evaluating or planning” (1989a, p.1). In other words, it is a research method that is designed to help program developers to identify skills or items and their categorization. Concept mapping entails a series of three major phases: (1) generating ideas or items regarding a particular topic, (2) sorting the items into groups of conceptually similar items, and (3) conducting multidimensional scaling and cluster analysis. Because concept mapping is a relatively new research method, a detailed description of each phase is provided below.

Generation of items. Concept mapping begins with the generation of a list of ideas or items in response to a specific question reflecting the topic being studied. There are several ways in which items can be generated, including self-administered questionnaires (e.g., Kunkei & Newsom, 1996), individual interviews (e.g., Paulson & Everall, 2003), and focus group interviews (e.g., Causineau, Goldstein, & Franko, 2004). Because focus group interviews have several potential advantages, however, they have been employed frequently in concept mapping research (Biegel, Johnsen, & Shafran, 1997; Burke, O’Campo, Peak, Gielen, McDonnell, & Trochim, 2005; Cousineau et al., 2004;

Heinonen, Volin, Zevon, Uutela, Barrick, & Ruutu, 2005; Shern et al., 1995). One benefit is that focus group interviews are a reasonable way to obtain a great deal of data on the topic of interest in a limited period of time (Morgan, 1997). Focus group interviews encourage not only interaction between an interviewer and participants but also discussion among the participants themselves. The open exchange of ideas among participants creates opportunities to think of novel items beyond their own original responses, resulting in a synergistic effect.

Second, the use of focus group interviews enables one to provide additional information about significant similarities and differences in research findings among separate focus groups (Johnsen, Biegel, & Shafran, 2000; Morgan, 1997). A critique of concept mapping is that subgroup differences are often obscured while developing a comprehensive (more complete) concept map from all aggregated data (Bedi, 2004). However, employing focus group interviews in concept mapping research allows for between-group comparisons. After separate focus groups categorized by characteristics (e.g., gender, age, occupation) are interviewed, all items generated by the focus groups are combined, sorted, and analyzed to create a comprehensive concept map that displays a comprehensive list of items and categories of the items. In addition to the main result, each focus group independently sorts its own group list of items. The sort data are analyzed to create a group concept map that displays the group list of items and categories of the items. The group concept maps then allow for identifying common ideas that the separate focus groups share as well as ideas that are unique to single focus group.

Third, focus group interviews are socially oriented (Marshall & Rossman, 1999). Because participants in focus group interviews are influencing and influenced by others

just as they are in real life, focus group interviews present a natural environment that helps participants feel comfortable.

With respect to the number of participants who can be involved in the item-generation phase, Trochim (1989a) states that although there is no strict limit, a total of 10 to 20 participants is manageable and ensures that a variety of ideas or items are adequately considered. If focus group interviews are utilized as an item-generation strategy, it is preferable for each focus group to consist of 4 to 6 participants (Krueger & Casey, 2000). The small focus groups make it easier to arrange for participants to get together for interviews (Krueger & Casey, 2000; Trochim, 1989a). In addition, participants frequently feel more comfortable in small focus groups (Krueger & Casey, 2000).

Theoretically, there is no limit to the number of items which can be generated. Because a large number of items impose serious practical constraints on statistical analysis of the data, however, Trochim (1989a) limits the number of items to one hundred or less. The Concept System computer program (Trochim, 1987) also recommends no more than 98 items. If the initial list of items exceeds this number, the list needs to be reduced. There are several ways in which this can be accomplished. Duplicate items can be eliminated (e.g., Kunkei & Newsome, 1996; Heinonen et al., 2005), similar items (i.e., redundancies) can be grouped together under the one number (Burke et al., 2005), or items can be chosen to represent a set of related items (Trochim, 1989a). Reduction decisions can be made either by a group of participants or by two or more researchers (Jackson & Trochim, 2002).

Sorting of items. This phase involves having participants sort items on the list into piles based on conceptual similarity. To conduct this phase, each item on the list is printed on

an individual card and identical packets of cards representing the list of items are given to participants. They are then asked to sort the cards into piles of conceptually similar items. Although there is no limit to the number of piles that participants can create, there are several restrictions placed on the sorting task: (a) Each item can only be placed in one pile (i.e., an item cannot be placed in two piles simultaneously), (b) All items cannot be placed in a single pile, and (c) Every item cannot be put into its own pile, although some items may be sorted by themselves (i.e., generally the piles should contain two or more items. however, there may be some cases where a particular item will not fit into any groups with other items and thus becomes its own group).

Aside from these conditions, each participant makes his or her own judgments about how many categories are created and what each category contains. If participants perceive that there are several different ways to sort the items, they are instructed to select the most sensible arrangement (Trochim, 1989a).

It is not essential that the same participants who generated the items take part in the sorting task. However, it is suggested that the same participants perform this task (Jackson & Trochim, 2002; Trochim, 1989a).

Application of statistical analyses. During this phase, two statistical techniques of multidimensional scaling (MDS) and hierarchical cluster analysis (hCA) are performed on the data. First, a two-dimensional non-metric MDS is applied to the sorted data to spatially represent similarity judgments inherent in participants' sorting. Non-metric multidimensional scaling (nMDS) is a statistical method which takes a similarity matrix (i.e., a table of numbers that indicate similarities among items judged by participants) and graphically displays the relationships among these items in the matrix (Fitzgerald &

Hubert, 1987). The results of nMDS analysis consist of a spatial configuration or a point map. Kruskal and Wish (1978) describe the purpose of such an analysis:

Multidimensional scaling, then, refers to a class of techniques. These techniques use proximities among any kind of objects as input. A proximity is a number which indicates how similar or how different two objects are or are perceived to be, or any measures of this kind. The chief output is a spatial representation, consisting of a geometric configuration of points, as on a map. Each point in the configuration corresponds to one of the objects. This configuration reflects the "hidden structure" in the data and often makes the data much easier to comprehend. (p. 7)

The statistical analysis of nMDS begins with construction of a similarity matrix. First, the results of sorting task for each participant are placed into a data matrix that has many rows and columns as there are items (Trochim, 1989a). All values of this matrix are either "0" or "1." A "1" indicates that the two items corresponding to that particular row and column were sorted together in a pile by the particular participant. A "0" indicates that they were not sorted together. This individual matrix is termed a binary similarity matrix (BSM). The diagonals of the BSM are all equal to 1 because an item is always considered to be sorted into the same pile as itself (Trochim, 1989a). Second, all the individual matrices (i.e., BSMs) are summed together to obtain a combined group similarity matrix (GSM). This GSM also has as many rows and columns as there are items (Trochim, 1989a). The value in the group matrix for any pair of items indicates how many participants placed that pair of items together in a pile (Trochim, 1989a). Consequently, each individual cell in this matrix can range in value from 0 to the total number of participants. Values along the diagonal of the GSM are equal to the total number of

participants. This final group similarity matrix (GSM) is referred to as a similarity matrix in that the values (or numbers) in the matrix indicate the strength or degree of similarity between each pair of items (i.e., how similar two items are perceived to be). A high value in this matrix indicates that many of the participants put that pair of items together in the same pile and implies that the items are perceived as conceptually similar in some way. A low value indicates that the item pair was less often put together in the same pile and implies that they are perceived as conceptually less consistent.

Once the GSM is completed, nMDS takes the table of similarities (i.e., GSM) and iteratively arranges the items as points on a map in any number of dimensions, resulting in a point map. Items which are more often sorted together are placed closer to each other on the map, while those which are less often sorted together are placed farther apart. Therefore, the distance between items on the map usually represents their conceptual similarity. Items that are closer to each other on the map are more conceptually similar than items that are more distant from one another.

When multidimensional scaling analysis is conducted, a researcher should specify how many dimensions the set of points is to be fit into. The researcher can ask for any number of solutions from 1 to $N-1$ dimensions. If a one-dimensional solution is requested, however, all of the points will be arranged along a single line. It is also difficult to graph and interpret solutions which are higher than 3 or more dimensions. It is suggested that a two-dimensional solution is accepted, especially when coupled with cluster analysis (Trochim, 1989a). For example, Kruskal and Wish (1978) state that:

Since it is generally easier to work with two-dimensional configurations than with those involving more dimensions, ease of use considerations are also important for

decisions about dimensionality. For example, when an MDS configuration is desired primarily as the foundation on which to display clustering results, then a two-dimensional configuration is far more useful than one involving 3 or more dimensions. (p. 58)

Therefore, in concept mapping, a two-dimensional MDS is usually used to arrange items into a two-dimensional plot (i.e., an X-Y graph).

A statistic termed a stress value can be used to judge the adequacy of the two dimensional solution. The stress value is an overall index of the stability of the MDS solution. In other words, the stress value represents the extent to which original similarities perceived by participants match spatial distances on the MDS configuration (i.e., the point map). The stress value ranges from 0 (perfectly stable) to 1 (perfectly unstable). A lower stress value means that there is a greater correspondence between similarity judgements and the point map. According to meta-analysis by Trochim (1993), across 33 concept-mapping studies, the average stress value was 0.29 ($SD = 0.04$). Generally, a stress value of approximately .30 is considered to be acceptable in the literature (e.g., Paulson & Edwards, 1997; Paulson & Everall, 2003).

The second statistical technique is hierarchical cluster analysis (hCA). This analysis uses the X-Y multidimensional scaling coordinate values for each point as input to organize individual items on the point map into clusters or categories of conceptually similar items. Although there are several hierarchical clustering methods (Borgen & Barnett, 1987), concept mapping uses Ward's algorithm. Trochim (1989a) found that it gave more sensible and interpretable solutions than other algorithms. Ward's algorithm is designed to minimize the variation within categories at each stage of grouping (Borgen &

Barnett, 1987). In other words, the clustering method begins by considering each item to be its own category (i.e., an N-cluster solution), and then continues to merge the two categories with the smallest distance values in successive steps until all of the items are in a single category. Thus, in general, the items within a category are considered that the items were more often sorted together with other items in that category and were less often sorted with items in other categories, suggesting that items within the category are more conceptually similar to each other than they are to items in other categories.

Because Ward's hierarchical clustering analysis gives as many possible cluster or categorical solutions as there are items, the key task in this step is to select an optimal categorical solution. Unfortunately, there is no sensible mathematical criterion by which an appropriate categorization system can be determined. Essentially, a researcher must use discretion in examining different categorical solutions to decide on which makes sense for the case at hand (Trochim, 1989a). Nevertheless, a few loose guidelines have been suggested. First, as suggested by Trochim (1989a), a researcher begins by looking at a range of categorical solutions from about 20 to 3 categories, assuming a list of no more than one hundred items, and attempts to decide whether a particular grouping makes sense. In general, it is ideal to select a categorical solution in which the items within each category conceptually fit together and the categories include sensible topics (Trochim, 1987). Because a categorical solution that does not yield the substantive interpretability is not considered very functional or valuable, decisions about the interpretability should not be sacrificed (Bedi, 2004).

Second, bridging values for items and clusters can be used to assist in selecting an appropriate categorical solution. The bridging value is a statistic ranging from 0 to 1. A

bridging value for an item indicates whether the item was sorted often with other items that are close to it on a point map. A low bridging value means that an item was more likely to be sorted with other items that are close to it on the map, implying that the item is conceptually similar to items that are close to it. A high bridging value means that an item was more likely to be sorted with items in various places on the map, implying that the item may not be very highly related to items that are fairly close to it (Trochim, 1987). A cluster bridging value for a category can also be calculated by averaging bridging values of all items in the particular category. A cluster bridging value indicates whether the items within a category were frequently sorted together. A low cluster bridging value means that items within a category were more often sorted together, suggesting that items within the category are more likely to be conceptually similar. A high cluster bridging value means that items within a category were frequently sorted with items belonging to other categories, suggesting that items within the category are less likely to be conceptually consistent. Because a cluster bridging value indicates how cohesive items within a particular category are, the cluster bridging values are useful for evaluating a range of categorical solutions and for determining a final solution. The goal is to identify a categorical solution that yields many categories with low bridging values. A recent concept mapping study (Bedi, 2004) used mean cluster bridging values for different categorical solutions (i.e., averaging individual cluster bridging values of all categories contained within a categorical solution) to determine an appropriate categorization system.

Once a decision is made regarding a categorical solution, the final step in the analysis is to label categories within the selected categorical solution. It is recommended that the

same participants who generated and sorted the items together complete this labelling process (Trochim, 1989a). However, using the same participants is not always feasible or practical. In these circumstances, participants are asked to give names to piles that they created in the sorting task. Then the names provided by the participants are examined to determine final labels that seem to best describe the items in the categories. Once all categories are labelled, a concept map is constructed. The concept map graphically displays a list of items and categories of the items.

The Concept System Computer Program

Because of the inconvenience of using general-purpose programs (e.g., a word processing program, a statistics program) for implementing a concept mapping process, the Concept System software program has been designed. The program is interactive and has separate menu-selected options for entering the generated items, printing decks of sort cards, entering sort data, conducting statistical analyses, and graphing the results. The latest software program (at version 1.75) has a potential advantage in that it improves graphical capabilities, but the purchase of a license to use it is costly.

Concept Mapping in Program Development Research

Concept mapping has been utilized as a research method for program development research in a variety of disciplines. Examples from the professional literature are presented below to illustrate the potential applicability of concept mapping for research of this type. Trochim (1989b) summarized five projects to illustrate the use of concept mapping for program development. In one project, concept mapping was used to develop a training program for daycare providers who had taught music and art activities to preschool children. The daycare providers generated skills and issues that they wished to

be addressed in the training program and sorted the skills into groups. Statistical analyses were applied to the sort data and consequently six categories were identified. The categories and individual skills within each category provided a framework to design the training program for daycare providers. Similarly, another project used concept mapping to design a training program for volunteers who worked on a one-to-one basis with deinstitutionalized mental patients. In this project, the Advocacy Committee of the Board generated and organized knowledge that needed to be included in the training program. The data was statistically analyzed to identify 10 categories. The training program was then designed to address the 10 categories.

More recently, Cousineau et al. (2004) utilized concept mapping as a research method for a study in which they were seeking to identify content and structure of an internet-based nutrition education program. Focus groups generated and categorized knowledge and skills to be included in the nutrition program. The sort data was statistically analyzed to identify 6 categories. The nutrition program was then constructed with different instructional lessons to address these categories.

The Reliability and Validity of Concept Mapping Research

Because of the growing interest in and use of concept mapping as a research method, it is increasingly important to consider the reliability and validity of concept mapping research. Reliability can be defined as the degree to which a concept map (or the final results) is repeatable. In other words, the reliability refers to the extent to which the same group creates the same concept map on multiple occasions or the extent to which several equivalent groups independently produce the same concept maps (Trochim, 1989b). The concept of reliability in its traditional sense, however, seems to be inappropriate when

applied to concept mapping research that explores the ideas, perspectives, and experiences of people. Because people have different ideas, and their ideas can also be changed over time, it is not reasonable to expect that replication of an entire study will yield the same results. Riger (1999) argues that the traditional ideas about reliability should be reexamined for concept mapping research, when its focus is on the ideas or experiences of participants.

Validity is understood as how accurately a concept map represents reality (Trochim, 1989b). More specifically, it refers to the extent to which a concept map accurately reflects participants' ideas of the topic being studied. The validity of concept mapping research is inherent in a concept mapping process in some form. After participants generate a list of items and sort the items into piles based on conceptual similarity, the analysis of the sort data is conducted by statistical techniques, not by a researcher. In other words, multidimensional scaling is first applied to the sort data to construct a point map representing spatial distances of how the items are related (i.e., conceptual similarities among the items). Next, cluster analysis organizes the items on the map into conceptual categories on the basis of the quantifiable information (i.e., the distance values between items on the point map). This results in the production of a range of categorical solutions. A researcher then makes a decision about whether each of the categorical solutions seems substantively interpretable and functional. This helps to minimize bias introduced when a researcher creates a categorization system after primary consideration of the sort data obtained from participants. Thus, it ensures that the concept map (the final results) is a good representation of participants' ideas.

In addition, member checking is often used to establish the validity of concept mapping studies. This is a procedure in which participants in the study are asked to verify if a concept map (the final results) corresponds to their ideas or at least seems reasonable to them. It adds validity to concept mapping research by having participants react to a concept map displaying individual items and categories of the items. Several researchers have used member checking in their studies (Bedi, 2004; Knish, 1994; Ludwig, 1996).

Procedures

Generation of Items

Participants

The participants in this study were parents, educators, child welfare workers, and police officers. Because these participants are directly involved in child protection systems (Orelove, Hollahan, & Myles, 2000), they can provide critical and meaningful information on personal safety vocabulary. Moreover, including different types of participants helps to ensure that a wide range of ideas are adequately considered.

Four kinds of participants were recruited through agencies, such as the Alberta Association of Community Living, the Edmonton Police Service, and various local community agencies. They were included in the present study if they met the following criteria: (a) Parents who have children under the age of 18 and have responsibility for their direct care, (b) Educators who have experience teaching and/or developing child abuse prevention programs for children under the age of 18 (e.g., assertiveness skills, basic sex education, CIRCLE, The C.A.R.E. kit), and (c) Child welfare workers and police officers who have experience investigating allegations of child abuse of children under the age of 18 (i.e., sexual abuse, physical abuse, emotional abuse, or neglect).

Participants from different ethnic groups or who had experience with minority ethnic children were chosen whenever possible. However, specific experience with children with intellectual disabilities was not a criterion for participation in this study. Because child abuse is not just a disability-related problem, but rather a serious problem for all children with and without disabilities, it is likely that personal safety vocabulary that children without disabilities need to learn has relevance for children with intellectual disabilities.

A total of 16 participants were involved in this study, including 4 parents, 5 educators, 2 child welfare workers, and 5 police officers. Considering that 10-20 participants are typically involved in concept mapping studies (Trochim, 1989a), including 16 participants in the present study seemed adequate according to the informal conventions of this research method.

The parents in the study were all mothers. One mother had a child with Down syndrome and the other 3 mothers had 5 children without disabilities. The mean age of the children was 10.8 with the range from 9 to 18 years. Five of the children were Caucasian and one child was Asian. None of the children had experienced any known instances of child abuse.

There were 2 educators who had experience teaching and developing child abuse prevention programs and 3 educators who had experience teaching the programs to children with and without disabilities from kindergarten to grade 12. The ethnicity of their students was Caucasian, Asian, Aboriginal, and African. The types of disabilities among the students included intellectual disability, learning disability, physical disability, behavioural disorder, autism, and attention deficit hyperactivity disorder.

Two child welfare workers and 5 police officers had experience investigating child abuse of children with and without disabilities with an age range from 0 to 18 years. The children involved in these investigations were Caucasian, Asian, Aboriginal, and African. The types of disabilities among these children included intellectual disability, learning disability, physical disability, hearing disorder, behavioural disorder, attention deficit hyperactivity disorder, and fetal alcohol spectrum disorder. Additional demographic data about the participants is presented in Table 1.

Table 1

Demographic Summary of Participants

Characteristics	Parents	Educators	Child welfare workers	Police officers
Age	M=46 (42-50 years)	M=34.8 (28-49 years)	M=39 (38-40 years)	M=42.8 (39-51 years)
Gender				
Male	0	0	0	3
Female	4	5	2	2
Ethnicity				
Caucasian	3	4	2	5
Asian	1	0	0	0
Aboriginal	0	1	0	0
Years of service	N/A	M=4.4 (1-8 years)	M=14 (13-15 years)	M=17.4 (11-20 years)

Focus Group Interviews

Focus group interviews were chosen as the item-generation method for this study. The use of separate focus groups enabled the creation of group concept maps as well as a comprehensive concept map. The individual group concept maps allowed for making

between-group comparisons. Although the ultimate goal of this study was to develop a more complete concept map, comparisons of the group concept maps provided interesting information about commonalities and differences between focus groups regarding personal safety vocabulary items and categories of the items.

Three separate focus groups were formed with parents, educators, and investigators. Because the roles of both child welfare workers and police officers in child protection systems were to investigate complaints of child abuse, an investigator focus group composed of them was considered homogeneous.

Two-hour meeting schedules were set at the convenience of the participants of each focus group. Each meeting was composed of a one-hour focus group interview, a short break, and a 30-minute sorting task. All the meetings were conducted either in a room located in the Department of Educational Psychology at the University of Alberta or at a local community agency. When participants arrived at the meeting location, written consent forms (Appendix A) were signed and demographic information questionnaires (Appendix B) were completed.

Focus group interviews were semi-structured (Appendix C). Each focus group interview began with small talk to help the participants feel comfortable. Following this small talk, an overview of issue of child abuse and disability and the purpose of the present research were introduced. The participants were then asked to respond to a key question: "Please generate personal safety vocabulary items that children with intellectual disabilities need to learn in order to report or describe any type of child abuse." To assist the participants in understanding, the definitions of child abuse and intellectual disability used in this study were also provided in written form. The participants were given several

minutes to collect their ideas and were asked to discuss vocabulary items. Because informal language may assist in children's understandings of standard vocabulary words, it was allowed to generate informal or colloquial words. As the participants generated the items, they were recorded and numbered on a board so that the participants could see a list of the items. During this process, probe questions were asked whenever clarification of any unfamiliar (e.g., informal language) or unclear items was necessary. The context or meanings of the items were noted by inserting appropriate word(s) in brackets so that all the participants could understand what was meant by a given item. The items were also entered into a computer program (MS-Word) by a research assistant who signed a confidentiality agreement (Appendix D). This helped to prepare for the sorting session which was conducted in conjunction with the focus group interviews.

Each focus group was not limited on the number of vocabulary items they could generate. Consequently, the parent focus group generated 128 items, the educator focus group generated 107 items, and the investigator group generated 102 items (Appendix E). However, because the Concept System program (Trochim, 1987) had computational constraints, the participants within each focus group worked together to reduce their list to 98 items or less. First, each focus group examined its own group list to eliminate any essentially duplicate items (literal linguistic repetitions). None of the group lists had any duplicate items. Second, each focus group identified redundant items in the group list. That is, the participants within each focus group determined if there were any different words referring to the same or very similar things. Each set of identified redundant items was then put together under a single number on the group list. For example, the educator focus group decided that "vagina" and "vulva" indicated a very similar body part so the

two items were placed together under the number 97 on the educator list. This process reduced the parent list to 100 items, the educator list to 103 items, and the investigator list to 91 items. Finally, because both the parent list and the educator list still had 100 or more items, the parent focus group and the educator focus group were separately asked to judge the relative importance of the items on their group lists to eliminate the least important items. The parents and the educators eliminated 2 items (i.e., ‘fuck’, ‘flash’) and 5 items (i.e., ‘belly button,’ ‘coincident,’ ‘ears,’ ‘gossip,’ ‘swear’) respectively. Consequently, the parents list of 98 items and the educator list of 98 items were both completed.

Before concluding the focus group interviews, the focus groups were asked to review their group lists. All the focus groups were satisfied with their own lists. The focus group interviews each lasted approximately one hour. Following the focus group interviews, the participants were given a coffee break.

Upon completion of the focus group interviews, the individual lists were examined for editing considerations. First, items in different grammatical forms were all translated into the same forms for consistency (e.g., the present tense). For example, “kissing” was translated into “kiss.” Second, informal language was translated into synonymous formal or standard language using the Merriam-Webster Online Dictionary (May, 2007) and NTC’s Dictionary of American Slang and Colloquial Expressions (Spears, 2000). In cases where informal language was not found in the dictionaries, synonyms provided by the participants were used to translate them. The synonymous standard words were recorded in brackets and italics besides the informal words on the group lists.

Once the three group lists were obtained, all the items from the three lists were compiled into a comprehensive list. For informal words on the group lists, their synonymous standard words were included in the comprehensive list and an additional list of informal words was made. Because the goal of a program for teaching personal safety vocabulary is to develop accurate reporting skills in children, it is absolutely critical to teach the children standard language that a broad range of people can understand. Any duplicate items (literal linguistic repetition) were listed once. Because the terms “people,” “person,” and “adult” could be used interchangeably, they were also considered duplicate items. For example, ‘trusted person’ and ‘trusted adult’ were listed once. The redundant items (i.e., any different words referring to the same or very similar things) identified by each focus group were listed separately, because there were differences in the redundant items identified by the three focus groups. For example, the parents identified ‘hit,’ ‘slap,’ and ‘spank’ as redundant items, but the educators did not. Consequently, 226 items were included in the comprehensive list (Appendix F). Thirty-four of the 226 items (15.0%) were ones generated by two of the three focus groups and 19 of the 226 items (8.41%) were ones generated by all of the three focus groups.

Two methods were used to reduce the comprehensive list. First, redundant items were identified. The author and another researcher, drawing on the expertise independently judged the items for redundancies. Two sets of redundant items identified by the researchers were developed and compared. Discrepancies were then resolved through discussion and consensus. The process resulted in the comprehensive list of 205 items. Second, the participants in the focus groups rated the importance of each of these 205 items. For this rating task, the 205 items were listed in a questionnaire format. The

participants were then asked to rate each item on a 5-point Likert-type scale in terms of how important they perceived it to be, in which “1” denoted the least important and “5” denoted the most important (Appendix G). They were directed to make a relative judgment of the importance of each to all the other items on the questionnaire. Sixteen questionnaires were sent out and 14 participants (87.5% response rate) returned completed questionnaires. The rating values were then averaged across the 14 participants for each item (Appendix H). Because the mean rating of each item indicated the relative importance of the particular item, the 98 items that received the highest average rating values (ranging in score from 3.43 to 5) were retained in the comprehensive list.

Structuring of Items

The three separate focus groups participated in two sorting sessions (i.e., sorting their own group lists and the comprehensive list). The sorted data produced by having each separate focus group sort its own group list was used to create group concept maps. The sorted data produced by having all the focus groups sort the comprehensive list was used to create a comprehensive concept map.

Sorting of The Group Lists.

Following a coffee break, the participants in each focus group were given an envelope containing their group list of items printed on individual slips of paper along with sorting instructions (Appendix I). The participants were then asked to individually sort the items into conceptually similar piles. The only restrictions placed on the sorting were that (a) each item could be placed only in one pile, (b) all items could not be put in a single pile, and (c) each item could not be placed in its own pile (although some items could be

placed alone in their own piles). When participants perceived that several sort possibilities existed, they were instructed to select the arrangement that seemed most sensible to them. Once the participants had sorted their items into piles, they were asked to give each of their piles a name that they thought most accurately represented the items in that pile. This session lasted approximately 30 minutes.

The parents sorted the list of 98 items into a range of 6 to 7 piles, the educators sorted the list of 98 items into a range of 8 to 14 piles, and the investigators sorted the list of 91 items into a range of 5 to 14 piles.

Sorting of The Comprehensive List.

Sixteen participants who took part in the focus group interviews were given an envelope by mail or in person within 7 weeks following the focus group interviews. This envelope contained the comprehensive list of 98 items placed on slips of paper, sorting instructions, and a stamped return envelope. The participants were asked to sort the items into piles and to name the piles. The restriction described in Appendix I was identically applied to this sorting task of the comprehensive list. Fourteen out of the 16 participants (87.5% response rate) returned the completed task. They sorted the comprehensive list of 98 items into a range of 4 to 14 piles.

Data Analysis

Upon completion of the sorting tasks by the focus groups, the Concept System computer program (version 1; Trochim, 1987) was utilized to perform statistical analyses and to construct concept maps. First, the card-sorting groupings were entered into the computer program. Second, an individual matrix was computed for the sort data compiled by each participant. All the individual matrices were then combined to obtain a group

similarity matrix. Third, a two-dimensional nMDS was conducted with the data from the group similarity matrix. Finally, a hierarchical cluster analysis was performed on the nMDS configurations.

Following the nMDS and hCA, the most appropriate categorical solutions for the comprehensive list and the three group lists were determined. Categories within the final categorical solutions were then labelled by the author. The sets of sort data (i.e., sorting of the comprehensive list and the individual lists) were analyzed in the same way but independently of each other.

Once the data analysis was completed, a verification questionnaire (Appendix J) was sent out to all participants who took part in the focus group interviews within 5 months after the initial interviews. The questionnaire included a comprehensive concept map and a group concept map, brief descriptions of each category and the items comprising of each category, and open-ended questions. In the questionnaire, the participants were asked to indicate if the concept maps made sense and to make comments on the concept maps.

Trustworthiness and Validity

Trustworthiness and validity in the present study were established in several ways. First, the study employed two criteria in determining an optimal categorical solution. When the sort data obtained from participants were analyzed statistically to produce a certain range of categorical solutions, the author evaluated these categorical solutions. She then made a decision about whether or not each of the solutions was interpretable and functional. In addition, individual cluster bridging values and mean cluster bridging values for different category solutions were examined. Because a cluster bridging value

for a category is an indicator of the overall conceptual similarity of the particular category, a categorical solution that yielded many categories with low bridging values was considered as appropriate and functional. Using both the author's judgement and statistics helped to ensure that the concept maps accurately represented the participants' ideas regarding organization of the items.

Second, the participants were invited to review the concept maps that displayed the lists of items and categories of the items. Verification questionnaires were sent out to all the participants who took part in the focus group interviews. In the questionnaire, they judged whether or not the comprehensive concept map and their group concept map made sense to them and provided commentaries on the concept maps.

This study also employed other means of establishing validity: (a) at the end of the focus group interview, the participants had opportunities to review their group lists of items, (b) the original participants who generated items also took part in the rating task to determine items to be included in the comprehensive list, and (c) the participants played an integral role in labelling categories within a final categorical solution.

Ethical Considerations

The participants were recruited through agencies, such as the Alberta Association for Community Living, the Edmonton Police Service, and the Alberta Teachers' Association. Recruitment information was given to the agencies and they forwarded the information to their members or employees. Potential participants initiated the first contact either directly with the researcher or with the agencies. Once participants indicated their wish to participate in the study, they were given a detailed description of the research through information and consent letters. They were also informed that participation was totally

voluntary and that they had a right to withdraw at any point during the study. Written informed consent was obtained from all participants prior to beginning the focus group interviews.

Protection of privacy and confidentiality was ensured by not identifying participants by their names or other personal information in any reports. Participants were also asked to keep confidential what they heard during focus group interviews. Research assistants engaged in focus group interviews signed an oath of confidentiality.

All data records collected were coded and stored in a locked secure location that only the author has access to. These records will be destroyed after 5 years.

Participation in this study could benefit the participants. They may have obtained new ideas or information about child abuse issues and abuse prevention programs.

Furthermore, participation in the study might have helped participants to educate their children, colleagues, and the community about abuse prevention skills and/or personal safety vocabulary items.

Although there were no unusual risks to participants in the study, they might have been reminded of unpleasant memories relating to child abuse or violence. In case this might have occurred the researcher sought out the names of agencies who could provide these participants with professional help.

CHAPTER 4: RESULTS

In this chapter, the results obtained from the concept mapping process are provided. First, the personal safety vocabulary items derived from the focus group interviews are given. Second, the results of multidimensional scaling and cluster analysis are presented. In the section, the rationale for selecting final cluster/categorical solutions, a brief description of categories and items comprising the categories, and concept maps are also included. A comprehensive (more complete) concept map, the main result of this study, graphically shows a comprehensive list of personal safety vocabulary items and categories of the items. Three group concept maps for parents, educators and investigators are the secondary results of this study. Finally, feedback from the participants regarding the concept maps is described.

Lists of Personal Safety Vocabulary

In this section, the results obtained from focus group interviews are provided, including the comprehensive list and three group lists.

The Comprehensive List

Once every focus group interview was completed, all the items on the three group lists were compiled into a comprehensive list. In this process, any duplicate items (literal linguistic repetition) were listed only once and redundant words indicating the same or very similar things were combined under one number. This resulted in a total of 205 items. Then 14 out of the 16 participants (87.5% response rate) who took part in the focus group interviews rated each of the 205 items in terms of their relative importance. Consequently, the 98 items with the highest ratings were remained in the comprehensive list. Eliminated items were generally related to various topics (e.g., feelings, people).

Interestingly, vocabulary words related to places were all eliminated. The average rating of importance given to the 205 items was 3.39 with a range from 1.50 to 5.00 scores, while the average rating of importance for the items on the comprehensive list was 4.07 with a range from 3.43 to 5.00 scores. The comprehensive list of personal safety vocabulary is presented Table 2. Information indicating which focus groups originally generated the items, the average ratings of importance of the items, and their bridging values are also summarized in Table 2.

Table 2

The Comprehensive List of 98 Personal Safety Vocabulary Items

Personal Safety Vocabulary	Focus Groups	Bridging Value	Rating Score
1. abuse	E	0.46	4.07
2. alone	P, E	0.87	3.57
3. angry	I	0.68	3.71
4. anus	E, I	0.10	3.93
5. appropriate	E	0.75	3.43
6. babysitter	I	0.01	3.57
7. bad person	P, I	0.10	4.07
8. bad touch	E, I	0.29	4.71
9. bad words	E	0.40	4.57
10. big person	P	0.01	3.64
11. breasts	P, E, I	0.10	4.57
12. bribe, money, sweets, treats	P, E	0.37	4.43
13. bully	E	0.81	3.71
14. burn	E	0.29	3.71
15. buttocks	P, E, I	0.10	4.64
16. camera, take pictures	P, I	0.27	4.00
17. caring adult	E	0.00	4.00
18. choke	P, I	0.20	3.79
19. control	E	0.36	3.64

20. cry	P	0.48	3.79
21. (offender's name) did that thing	I	0.85	4.00
22. don't like (offender's name/description of episode)	E	0.78	4.29
23. expose	E	0.40	3.93
24. family violence	E	0.33	3.57
25. feelings	E	0.50	4.57
26. finger	E, I	0.12	3.43
27. fondle	E	0.27	3.79
28. force	P, E	0.29	3.93
29. friend	P, E, I	0.00	4.21
30. go away	P	0.57	3.43
31. good person	P	0.00	4.00
32. good touch	E, I	0.77	4.50
33. grab	P	0.24	4.14
34. grown-up	E	0.07	3.57
35. hand	P, E, I	0.12	3.57
36. hit, slap, spank	P, E, I	0.28	4.64
37. hold down, restrain, tie	P	0.31	4.36
38. hug	P	0.47	4.21
39. hurt, pain	P, E, I	0.81	3.86
40. in me	P	0.65	4.21
41. inside	P	0.67	4.21
42. intercourse	P	0.32	3.79
43. kick	P	0.20	4.00
44. kiss	P, E, I	0.33	4.43
45. knife	P	0.62	3.57
46. lick	P, I	0.38	3.79
47. lips	P, E, I	0.12	3.71
48. lock, isolate	P, E	0.27	3.43
49. love	P, E, I	0.50	4.14
50. made me feel	P	0.52	4.36
51. man	P	0.13	3.57
52. masturbation	I	0.33	3.93
53. mean	P, E, I	1.00	3.79

54. mouth	P, E, I	0.12	4.07
55. naked, take off	P	0.30	4.64
56. name-calling	E	0.36	3.79
57. nice person	P	0.00	3.79
58. nipple	E, I	0.10	4.21
59. no	E	0.81	4.43
60. no clothes	E	0.32	4.36
61. no food	E	0.28	3.43
62. not my fault	E	0.71	4.21
63. (offender's name/description of episode) not nice	I	0.66	3.86
64. on me	P	0.61	3.93
65. oral sex	I	0.32	3.50
66. penis	P, E, I	0.10	4.79
67. (phone number) (e.g., 1-800-387-5437)	E	0.73	3.86
68. police	E	0.21	4.64
69. pornography, porno magazine	E, I	0.27	3.86
70. privacy	E	0.86	3.93
71. private parts	I	0.10	4.86
72. protect	E	0.63	3.79
73. punch	E, I	0.20	4.00
74. punishment	E	0.40	3.43
75. push	P, E	0.22	3.64
76. rub	P, I	0.27	4.07
77. sad	P, E, I	0.44	4.43
78. scared, afraid	P, E, I	0.44	4.71
79. secret, don't tell	P, E	0.64	5.00
80. sex	P, E, I	0.32	4.50
81. shake	P, E	0.24	3.71
82. stop	P, E	0.81	4.57
83. stranger	P, E	0.07	4.71
84. suck	P, I	0.26	4.00
85. talk, tell	E	0.63	4.79
86. threaten, I'll (offender's name) kill	P, E	0.81	4.36
87. tickle	E, I	0.31	3.71

88. tongue	P, E, I	0.12	4.21
89. touch	E	0.36	4.36
90. touch (private parts)	P, I	0.32	4.86
91. trick	E	0.48	3.57
92. trust	E	0.84	3.50
93. trusted person/adult, safe people	P, E	0.00	4.36
94. tummy	E	0.12	3.64
95. uncomfortable	E	0.63	4.36
96. vagina, vulva	P, E, I	0.10	4.93
97. video	P	0.27	3.92
98. yell, shout	P, E	0.45	3.79

Note. The words and phrases in brackets are not actually part of the items to be taught to the children. These words can be filled in with a specific thing (e.g., a person's name) by the children. P, E, and I are initials for the parent focus group, the educator focus group, and the investigator focus group, respectively.

As seen above, there was variability in the rated importance of the 98 items on the comprehensive list. For example, '79. secret, don't tell' received the highest rating score of 5.00 by the participants in the study, while such items as '5. appropriate,' '26. finger,' '30. go away,' '48. lock, isolate' '61. no food,' and '74. punishment' received the lowest rating score of 3.43.

The comprehensive list included 54 items (55.1% of the list) that were generated by a single focus group, consisting of 29 items by the educators, 18 items by the parents, and 7 items by the investigators. It also included 27 items (27.6% of the list) that were generated by two focus groups. These consisted of 12 items generated by the parents and the educators, 8 items generated by the educators and the investigators, and 7 items generated by the parents and the investigators. The remaining 17 items (17.3% of the list)

were generated by all three of the focus groups. These items included '11. breasts,' '15. buttocks,' '29. friend,' '35. hand,' '36. hit, slap, spank,' '39. hurt, pain,' '44. kiss,' '47. lips,' '49. love,' '53. mean,' '54. mouth,' '66. penis,' '77. sad,' '78. scared, afraid,' '80. sex,' '88. tongue,' and '96. vagina, vulva.'

Nine items on the comprehensive list had synonymous informal or coarse language alternatives that were generated by the parent focus group and the investigator focus group. A list of the informal language alternatives is shown in Table 3.

Table 3

A List of Informal Language

Formal Language	Informal Language
Anus	bum hole, butt hole
Breasts	boob, tit
Buttocks	ass, bum
Masturbation	eat out, jerk off, jack off, whack off
oral sex	blowjob
Penis	prick, dick, weenie, winkie, cock, peanut, chuksie, boy parts, pee
Sex	adult stuff, poke, up and down, fuck, hump
Vagina	doodoo, flower, spoon
Vulva	cunt, pussy

The Parent List

The parent focus group generated a total of 128 items. After putting together redundant words (i.e., different words indicating the same or very similar things) under one number, the parent list was reduced to 100 items. The parents then eliminated the 2 least important items (i.e., 'fuck,' 'flash'). As a result, the parent list of 98 personal safety vocabulary items was determined. The parent list is presented in Table 4.

Table 4

The Parent List of 98 Personal Safety Vocabulary Items

Personal Safety Vocabulary	Bridging Value
1. alone	0.32
2. arm	0.08
3. aunt	0.05
4. back	0.08
5. bad person	0.05
6. basement	0.00
7. bathroom	0.00
8. bed	0.00
9. big person	0.05
10. blond hair	0.05
11. breasts, <i>boob (breasts)</i>	0.08
12. bribe, money, sweets, treats	0.44
13. brother	0.05
14. brown hair	0.05
15. <i>bum, ass (buttocks)</i>	0.08
16. car	0.00
17. choke	0.16
18. close door	0.16
19. cry	0.29
20. dad	0.05
21. dark	0.47

22. dirty	0.29
23. don't love, hate	0.33
24. ears	0.08
25. face, cheek	0.08
26. fat person	0.05
27. floor	0.00
28. force	0.16
29. friend	0.05
30. go away	0.96
31. good person	0.05
32. grab	0.16
33. gun	0.64
34. gym	0.00
35. hair	0.08
36. hand	0.08
37. hang	0.16
38. here	0.08
39. hold down, restrain, tie	0.16
40. home	0.00
41. hug	0.16
42. hungry	0.29
43. hurt, pain	0.29
44. I	0.51
45. I'll show you	0.96
46. in me	1.00
47. inside	0.00
48. kick	0.16
49. kiss	0.16
50. knife	0.64
51. leg	0.08
52. lick, suck	0.16
53. lock	0.16
54. love	0.56
55. made me feel	0.29

56. man	0.05
57. mean	0.56
58. mom	0.05
59. mouth, lips	0.08
60. neighbour	0.05
61. nose	0.08
62. on me	1.00
63. outside	0.00
64. park	0.00
65. pee (<i>urine</i>)	0.08
66. penis, <i>prick, dick, weenie, winkie, cock (penis)</i>	0.08
67. poo (<i>feces</i>)	0.08
68. pull	0.16
69. push	0.16
70. rope	0.64
71. rub, pat	0.16
72. sad	0.29
73. scared	0.29
74. school	0.00
75. secret, don't tell	0.44
76. sex, intercourse	0.16
77. shake	0.16
78. shout	0.16
79. sister	0.05
80. slap, hit, spank	0.16
81. sofa	0.00
82. squeeze	0.16
83. stick	0.64
84. stop	0.96
85. stranger	0.05
86. strong	0.87
87. take off, naked	0.16
88. take pictures, camera	0.31
89. tall person	0.05

90. threaten, I'll (offender's name) kill	0.40
91. tongue	0.08
92. touch (private parts)	0.16
93. trusted person, nice person	0.05
94. uncle	0.05
95. upstairs	0.00
96. vagina, <i>cunt</i> , <i>pussy</i> (<i>vulva</i>)	0.08
97. video	0.31
98. woman	0.05

Note. The words and phrases in brackets are not actually part of the items to be taught to the children. These words can be filled in with a specific thing (e.g., a person's name) by the children. The words in italics are informal language. The words in brackets and italics are synonymous standard words of the informal language.

The Educator List

The educator focus group generated a total of 107 items. After identifying redundant items, the educator list was reduced to 103 items. The educators then eliminated the 5 least important items (i.e., 'belly button,' 'coincident,' 'ears,' 'gossip,' 'swear').

Consequently, the educator list of 98 personal safety vocabulary items was determined.

The educator list is presented in Table 5.

Table 5

The Educator List of 98 Personal Safety Vocabulary Items

Personal Safety Vocabulary	Bridging Value
1. abuse	0.62
2. afraid, scared	0.13
3. alone	0.25
4. anus	0.00
5. appropriate	0.69
6. attack	0.24

7. bad touch	0.72
8. bad words	0.44
9. betray	0.13
10. boundaries	0.43
11. breasts	0.00
12. bribe	0.55
13. bully	0.50
14. burn	0.24
15. buttocks	0.00
16. caring adult	0.08
17. confusion	0.13
18. consent	0.71
19. control	0.81
20. cope	0.67
21. counsellor	0.08
22. creepy	0.13
23. disappointed	0.13
24. discipline	0.70
25. don't like (offender's name/description of episode)	0.13
26. embarrass	0.13
27. expose	0.44
28. fair trade	0.72
29. family	0.08
30. family violence	0.56
31. feelings	0.67
32. finger	0.00
33. fondle	0.44
34. force	0.54
35. friend	0.08
36. good touch	0.87
37. grown-up	0.08
38. gut feeling	0.44
39. hand	0.00
40. happy	0.13

41. hit	0.24
42. hurt	0.25
43. ignore	0.38
44. kiss	0.44
45. lips	0.00
46. listen	0.66
47. lock, isolate	0.36
48. love	0.13
49. loyalty	0.72
50. mean	1.00
51. mouth	0.00
52. name-calling	0.39
53. nipple	0.00
54. no	0.38
55. no clothes	0.33
56. no food	0.33
57. no healthcare	0.33
58. no school	0.38
59. not my fault	0.70
60. penis	0.00
61. personal space	0.43
62. (phone number) (e.g.,1-800-387-5437)	0.59
63. police	0.08
64. pornography	0.44
65. power	0.89
66. privacy	0.67
67. protect	0.42
68. punch	0.24
69. punishment	0.57
70. push	0.24
71. put-down	0.39
72. responsibility	0.70
73. sad	0.13
74. safe people	0.08

75. safety plan	0.38
76. secret	0.55
77. self-esteem	0.67
78. sex	0.44
79. shake	0.24
80. shame	0.13
81. slap	0.24
82. spank	0.24
83. stop	0.38
84. stranger	0.08
85. surprise	0.77
86. talk, tell	0.41
87. tease	0.39
88. threaten	0.81
89. tickle	0.44
90. tongue	0.00
91. touch	0.44
92. trick	0.70
93. trust	0.88
94. trusted adult	0.08
95. tummy	0.00
96. uncomfortable	0.13
97. vagina, vulva	0.00
98. yell	0.39

Note. The words and phrases in brackets are not actually part of the items to be taught to the children. These words can be filled in with a specific thing (e.g., a person's name) by the children.

The Investigator List

The investigator focus group generated a total of 102 items. After redundant items were identified, the investigator list of 91 items was identified. The investigator list is presented in Table 6.

Table 6

The Investigator List of 91 Personal Safety Vocabulary Items

Personal Safety Vocabulary	Bridging Values
1. <i>adult stuff (sex)</i>	0.15
2. angry	0.03
3. animal	0.26
4. <i>ass (buttocks)</i>	0.00
5. aunt's home	0.00
6. babysitter	0.10
7. bad person	0.02
8. bad touch	0.26
9. bathroom	0.01
10. bath tub	0.01
11. bed	0.01
12. <i>blowjob (oral sex)</i>	0.12
13. <i>boob (breasts)</i>	0.00
14. bother	0.84
15. <i>boy pee (semen)</i>	0.35
16. breasts	0.00
17. <i>bum (buttocks)</i>	0.00
18. <i>bum hole (anus)</i>	0.00
19. bus	0.00
20. <i>butt hole (anus)</i>	0.00
21. camera	0.22
22. car	0.00
23. choke	0.33
24. church	0.00
25. closet	0.01
26. computer	0.22
27. concerned	0.03
28. <i>cum (semen)</i>	0.35
29. dad	0.02
30. (offender's name) did that thing	0.15

31. <i>doodoo (vagina)</i>	0.00
32. <i>eat out (masturbation)</i>	0.12
33. eye	0.04
34. finger	0.04
35. foster dad	0.02
36. foster home	0.00
37. friend	0.02
38. <i>fuck (sex)</i>	0.11
39. funny	0.03
40. game	0.34
41. giggle	0.10
42. good touch	0.55
43. grandma	0.02
44. grandpa	0.02
45. gross	0.03
46. group home	0.00
47. group sex	0.32
48. hand	0.04
49. happy	0.03
50. hit	0.33
51. home	0.00
52. hospital	0.00
53. <i>hump (sex)</i>	0.11
54. hurt	0.27
55. <i>jerk off, jack off, whack off (masturbation)</i>	0.16
56. kiss	0.12
57. laugh	0.10
58. lick	0.12
59. lips	0.04
60. love	0.03
61. mad	0.03
62. mean	0.21
63. mess with	0.15
64. <i>milk (semen)</i>	0.35

65. mouth	0.04
66. nipple	0.00
67. (offender's name/description of episode) not nice	1.00
68. object	0.53
69. private parts	0.00
70. penis, <i>peanut, chuksie, boy parts, cock, dick, pee (penis)</i>	0.01
71. porno magazine	0.22
72. pornography	0.22
73. <i>poke (sex)</i>	0.12
74. punch	0.33
75. rub	0.12
76. sad	0.03
77. scared	0.03
78. sex	0.15
79. slap	0.33
80. step dad	0.02
81. suck	0.12
82. tickle	0.12
83. <i>tit (breasts)</i>	0.00
84. tongue	0.04
85. touch (private parts)	0.82
86. truth or dare	0.39
87. uncle	0.02
88. <i>up and down (sex)</i>	0.11
89. <i>vagina, flower, spoon (vagina), cunt, pussy (vulva)</i>	0.00
90. <i>white pee (semen)</i>	0.35
91. yucky	0.03

Note. The words and phrases in brackets are not actually part of the items to be taught to the children. These words can be filled in with a specific thing (e.g., a person's name) by the children. The words in italics are informal language. The words in brackets and italics are synonymous standard words of the informal language.

Categories of Personal Safety Vocabulary

In this section, the results of multidimensional scaling and cluster analysis are provided. Stress values for a two-dimensional solution, point maps, a brief description of selected categorical solutions, and concept maps are also presented.

Multidimensional Scaling and Cluster Analysis

The Concept System (Trochim, 1987), a computer software program was used to analyze the 4 sets of sort data (i.e., sort data of the comprehensive list, the parent list, the educator list, and the investigator list). First, the computer program performed a two-dimensional nMDS on the sort data. This nMDS resulted in the production of point maps. The comprehensive point map is presented Figure 1. Three group point maps are plotted in Figure 2 (the parent point map), Figure 3 (the educator point map), and Figure 4 (the investigator point map). In these figures, each item is presented by a point with the number beside it identifying the item. The distance between the items indicates their conceptual similarity, as judged by the participants in this study. That is, items that were sorted together by many participants appear closer to each other on the map. For example, on the comprehensive point map (see Figure 1) item #76 (rub) and item #84 (suck) are conceptually more similar to each other than they are to item #30 (go away) which is located directly across from #76 and #84.

In addition, the computer program calculated a stress value for each of the four point maps. The stress value for the nMDS was 0.2109 for the comprehensive point map, 0.2261 for the parent point map, 0.2672 for the educator point map, and 0.2219 for the investigator point map. These stress values were below the average stress value across 33 studies (Trochim, 1993) and ones considered to be acceptably stable.

Figure 3. The Educator Point Map

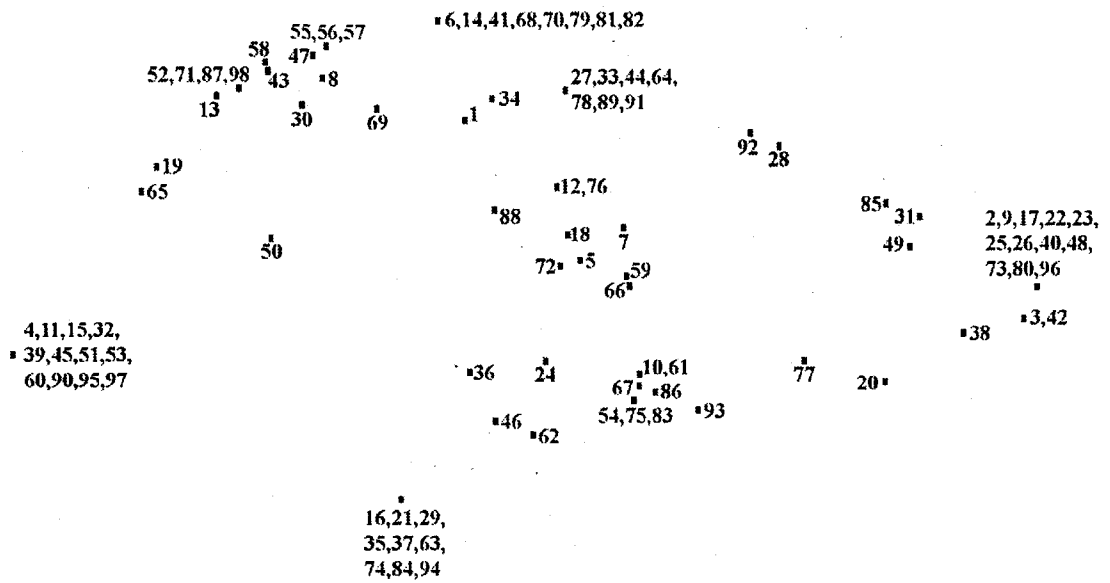
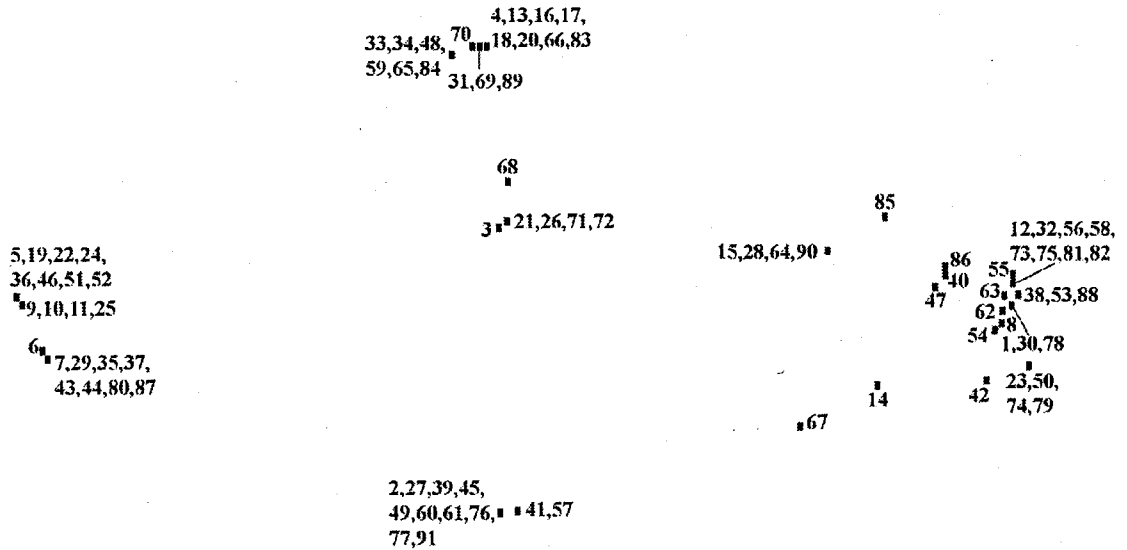


Figure 4. The Investigator Point Map



Second, the computer program conducted a hierarchical cluster analysis on the MDS configuration. The program was set to initially generate a cluster or categorical solution that placed an average of one-twentieth of the total number of items into each category (e.g., there would be an average of 5 items placed in each of 20 categories if the list consisted of 100 items), then sequentially combined two categories until all items were in one category. As a result, many possible categorical solutions were produced. The present study employed two strategies in helping to determine an optimal categorical solution. First, the author used her discretion to determine which groupings were most interpretable and sensible. A range of cluster solutions (i.e., 19- or 18- to 3-clusters) was carefully examined and a decision was made about whether or not the items in each category were conceptually similar (i.e., items fit together into one category) and whether the categories covered substantive and distinctive topics. Second, bridging values, as computed by the Concept System, were used to assist in determining the appropriate number of clusters or categories. Because a low cluster bridging value indicates that items in a category are more likely to be conceptually similar, a categorical solution that yields many categories with low cluster bridging values is considered appropriate. Thus, particular attention in this study was paid to the mean cluster bridging values (i.e., averaging individual cluster bridging values of all categories contained within a cluster solution) and individual cluster bridging values for categories in different cluster solutions.

Once a final solution was selected, names for the categories were decided. The titles that the participants provided for each pile they created in the sorting tasks were taken

into consideration. Each category was then given a label best representing the central content of its items.

Categories of The Comprehensive List

Cluster Solutions

Cluster solutions from 19- to 3-clusters were generated by the Concept System program. The categorical solutions were examined and compared successively (in decreasing order), with a judgment made about whether the groupings seemed appropriate and functional. In examining interpretability starting with a 19-cluster solution, it was apparent that cluster solutions from 19 to 12 had some categories that overlapped conceptually. For example, in a 13-cluster solution, both category #10 and category #11 included items related to safety. Because these cluster solutions split some conceptually similar items into different categories, they were deemed undesirable.

Next, 11- and 10-cluster solutions were examined. These solutions still had some categories that overlapped conceptually. For example, in the 10-cluster solution, both category #5 and category #6 included items related to sexual touching behaviours. The mean cluster bridging value was 0.47 for the 11-cluster solution and 0.46 for the 10-cluster solution. An examination of a 9-cluster solution was then conducted. This solution still had two separate categories (category #4 and category #5) related to sexual behaviours. The mean cluster bridging value for the 9-cluster solution was 0.43.

An 8-cluster solution merged the two categories in the 9-cluster solution (category #4 and category #5) into one category. That is, category #4 in the 8-cluster solution included all the items related to sexual behaviours. The merge seemed reasonable. Moreover, it seemed that the items within each category fit together conceptually and that the

categories covered different topics or knowledge. The mean cluster bridging value for the 8-cluster solution was 0.44. It still remained low, comparing to the mean bridging value for the 9-cluster solution (0.43). The individual cluster bridging value for category #4 (0.36), which merged the two categories in the 9-cluster solution also remained similar to the bridging values for the separate two categories (0.28 for category #4 and 0.42 for category #5).

Comparison of the 8-cluster and 7-cluster solutions revealed that category #1 in the 7-cluster solution contained all the items related to child abuse concepts and general descriptors of child abuse. This category seemed too broad in scope. Although the 7-cluster solution had a smaller mean cluster bridging value (0.40) than did the 8-cluster solution (0.44), the solution was deemed less interpretable than the 8-cluster solution. The cluster solutions from 6 to 3 appeared to have some categories that needed to be split into separate categories. For example, in the 6-cluster solution, category #4 included items related to feelings and safety. Therefore, the 8-categorical solution was chosen as being more appropriate and functional than the other cluster solutions.

Final labels for the 8 categories were decided to reflect the central content of the items within each category after careful consideration of the titles provided by the participants in the sorting task (Appendix K). The selected category labels, the constituent items, and bridging values of the items and the categories are presented in Table 7. The comprehensive concept map displaying the comprehensive list of 98 items and categories of the items is presented in Figure 5.

Table 7

Category Items and Bridging Values for 8 Categories of The Comprehensive List

Category	Items	Bridging Value
Understanding	1. abuse	0.46
Child Abuse	12. bribe, money, sweets, treats	0.37
	91. trick	0.48
	39. hurt, pain	0.81
	79. secret, don't tell	0.64
	5. appropriate	0.75
	32. good touch	0.77
	70. privacy	0.86
	Cluster Bridging Value	0.64
Safety	25. feelings	0.50
	62. not my fault	0.71
	59. no	0.81
	82. stop	0.81
	30. go away	0.57
	85. talk, tell	0.63
	92. trust	0.84
	67. (phone number) (e.g., 1-800-387-5437)	0.73
72. protect	0.63	
Cluster Bridging Value	0.69	
Sexual Abuse	8. bad touch	0.29
	60. no clothes	0.32
	55. naked, take off	0.30
	69. pornography, porno magazine	0.27
	16. camera, take pictures	0.27
	97. video	0.27
	27. fondle	0.27
	76. rub	0.27
84. suck	0.26	
87. tickle	0.31	

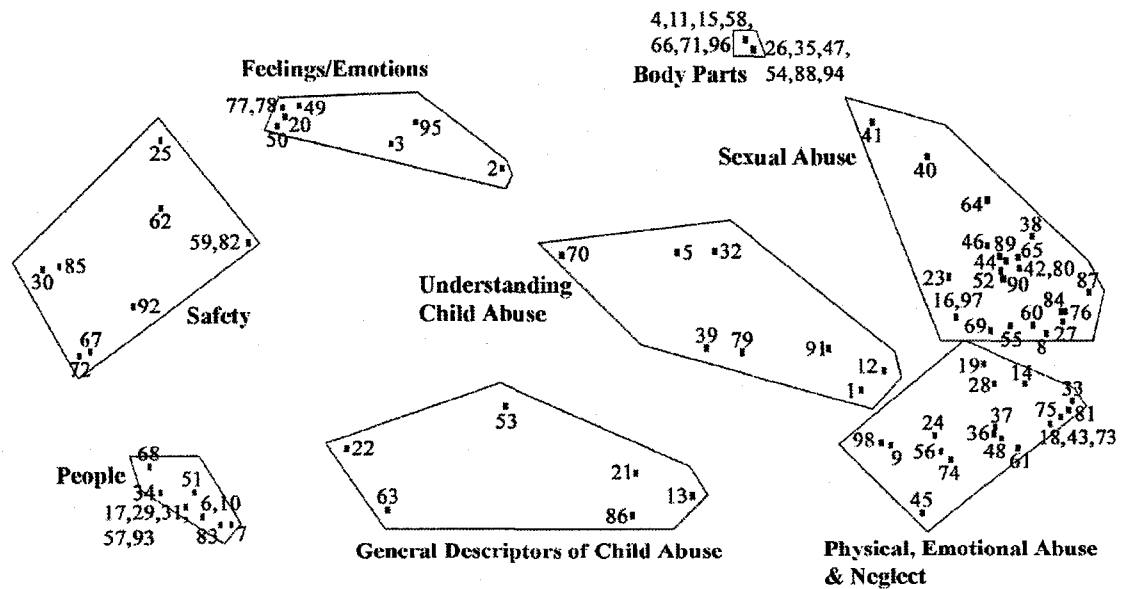
	23. expose	0.40
	42. intercourse	0.32
	80. sex	0.32
	52. masturbation	0.33
	90. touch (private parts)	0.32
	38. hug	0.47
	44. kiss	0.33
	89. touch	0.36
	65. oral sex	0.32
	46. lick	0.38
	40. in me	0.65
	41. inside	0.67
	64. on me	0.61
	Cluster Bridging Value	0.36
Physical,	9. bad words	0.40
Emotional Abuse	98. yell, shout	0.45
and Neglect	24. family violence	0.33
	56. name-calling	0.36
	74. punishment	0.40
	45. knife	0.62
	14. burn	0.29
	28. force	0.29
	19. control	0.36
	18. choke	0.20
	43. kick	0.20
	73. punch	0.20
	33. grab	0.24
	75. push	0.22
	81. shake	0.24
	36. hit, slap, spank	0.28
	37. hold down, restrain, tie	0.31
	48. lock, isolate	0.27
	61. no food	0.28
	Cluster Bridging Value	0.31

General	13. bully	0.81
Descriptors	86. threaten, I'll (offender's name) kill	0.81
of Child Abuse	21. (offender's name) did that thing	0.85
	22. don't like (offender's name/description of episode)	0.78
	63. (offender's name/description of episode) not nice	0.66
	53. mean	1.00
	Cluster Bridging Value	0.82
Feelings	2. alone	0.87
(Emotions)	3. angry	0.68
	95. uncomfortable	0.63
	20. cry	0.48
	77. sad	0.44
	78. scared, afraid	0.44
	49. love	0.50
	50. made me feel	0.52
	Cluster Bridging Value	0.57
Body Parts	4. anus	0.10
	71. private parts	0.10
	96. vagina, vulva	0.10
	58. nipple	0.10
	66. penis	0.10
	11. breasts	0.10
	15. buttocks	0.12
	26. finger	0.12
	88. tongue	0.12
	94. tummy	0.12
	47. lips	0.12
	54. mouth	0.12
	35. hand	0.12
	Cluster Bridging Value	0.11
People	6. babysitter	0.01
	10. big person	0.01
	7. bad person	0.10
	83. stranger	0.07

17. caring adult	0.00
57. nice person	0.00
93. trusted person/adult, safe people	0.00
29. friend	0.00
31. good person	0.00
34. grown-up	0.07
51. man	0.13
68. police	0.21
Cluster Bridging Value	0.05

Note. The words and phrases in brackets are not actually part of the items to be taught to the children. These words can be filled in with a specific thing (e.g., a person's name) by the children.

Figure 5. The Comprehensive Concept Map



As seen above, the comprehensive concept map included 8 categories of the 98 personal safety vocabulary items: Understanding Child Abuse, Safety, Sexual Abuse, Physical/Emotional Abuse and Neglect, General Descriptors of Child Abuse, Feelings (Emotions), Body Parts, and People. An examination of the cluster bridging values indicated that the category of 'People' had the lowest bridging value, suggesting that the items within this category were more frequently sorted with items within the category than with items in any other categories. The category of 'General Descriptors of Child Abuse' had the highest cluster bridging value, suggesting that the items within this category were often sorted with items within other categories.

The average rating of importance of each of the 8 categories was calculated based on scores that the participants provided in the rating task. The category of 'Body Parts' received the highest importance score of 4.20. The category of 'Physical, Emotional Abuse and Neglect' received the lowest importance score of 3.85. This is presented in Table 8.

Table 8

Rated Importance of Each Category in The Comprehensive Concept Map

Category	Rating of Importance
Understanding Child Abuse	4.10
Safety	4.13
Sexual Abuse	4.12
Physical, Emotional Abuse and Neglect	3.85
General Descriptors of Child Abuse	4.00
Feelings (Emotions)	4.13
Body Parts	4.20
People	4.01
<i>Average</i>	<i>4.07</i>

Description of The 8 Categories of The Comprehensive List

Understanding child abuse. This category contained words necessary to understand basic concepts of child abuse, including '1. abuse,' '5. appropriate,' '12. bribe, money, sweets, treats,' '32. good touch,' '39. hurt, pain,' '70. privacy,' '79. secret, don't tell,' and '91. trick.'

Safety. This category contained words necessary to respond safely to and cope with child abuse, including '25. feelings,' '30. go away,' '59. no,' '62. not my fault,' '67. (phone number),' '72. protect,' '82. stop,' '85. talk, tell,' and '92. trust.'

Sexual abuse. This category contained words necessary to report sexual abuse, including '8. bad touch,' '16. camera, take pictures,' '23. expose,' '27. fondle,' '38. hug,' '40. in me,' '41. inside,' '42. intercourse,' '44. kiss,' '46. lick,' '52. masturbation,' '55. naked, take off,' '60. no clothes,' '64. on me,' '65. oral sex,' '69. pornography, porno magazine,' '76. rub,' '80. sex,' '84. suck,' '87. tickle,' '89. touch,' '90. touch (private parts),' and '97. video.'

Physical, emotional abuse and neglect. This category contained words necessary to report physical and emotional abuse as well as neglect, including '9. bad words,' '14. burn,' '18. choke,' '19. control,' '24. family violence,' '28. force,' '33. grab,' '36. hit, slap, spank,' '37. hold down, restrain, tie,' '43. kick,' '45. knife,' '48. lock, isolate,' '56. name-calling,' '61. no food,' '73. punch,' '74. punishment,' '75. push,' '81. shake,' and '98. yell, shout.'

General descriptors of child abuse. This category contained words that could be used to report child abuse in non-specific ways, including '13. bully,' '21. did that thing,' '22. don't like,' '53. mean,' '63. not nice,' and '86. threaten, I'll kill.'

Feelings (Emotions). This category contained words necessary to label emotions, including '2. alone,' '3. angry,' '20. cry,' '49. love,' '50. made me feel,' '77. sad,' '78. scared, afraid,' and '95. uncomfortable.'

Body parts. This category contained the names of body parts, including '4. anus,' '11. breasts,' '15. buttocks,' '26. finger,' '35. hand,' '47. lips,' '54. mouth,' '58. nipple,' '66. penis,' '71. private parts,' '88. tongue,' '94. tummy,' and '96. vagina, vulva.'

People. This category contained words necessary to describe people who might play some role in child abuse incidents or in child protection, including '6. babysitter,' '7. bad person,' '10. big person,' '17. caring adult,' '29. friend,' '31. good person,' '34. grown-up,' '51. man,' '57. nice person,' '68. police,' '83. stranger,' and '93. trusted person/adult, safe people.'

Categories of The Parent List

Cluster Solutions

The computer program produced cluster solutions ranging from 19- to 3-clusters. The various cluster solutions were examined in sequence to decide an appropriate categorical solution. It was started by examining from a 19-cluster solution to an 11-cluster solution. The examinations revealed that these cluster solutions were undesirable, because they split some conceptually similar items into different categories. For example, in the 11-cluster solution, both category #10 and category #11 included words to describe people.

Next, a 10-cluster solution was examined. In this solution, category #1 and category #3 included some items related to sexual touching behaviours. The split did not seem reasonable. The mean cluster bridging value for the 10-cluster solution was 0.44. A 9-cluster solution appeared that some items related to sexual behaviours were still separated

into two categories (category #1 and category #2). This cluster solution had a mean cluster bridging value of 0.41.

An examination of an 8-cluster solution was then conducted. This cluster solution merged the two categories in the 9-cluster solution (category #1, category #2) into one category. That is, category #1 in the 8-cluster solution included all items related to sexual behaviours. This merge was deemed desirable. It also appeared that categories had conceptually similar items. The mean cluster bridging value for the 8-cluster solution was 0.42. It still remained low, comparing to the mean value for the 9-cluster solution (0.41). In addition, the individual cluster bridging value of category #1 (0.23) that combined the two categories in the 9-cluster solution remained low, compared to the bridging values for the separate categories (0.37 for category #1 and 0.20 for category #2).

In a 7-cluster solution, all the items related to self-protection and harmful objects were included in one category. It seemed that these items did not conceptually fit together. Although the mean cluster bridging value of the 7-cluster solution (0.37) was smaller than the mean values for other cluster solutions from 10- to 8-clusters, this cluster solution was not deemed appropriate. Cluster solutions from 6 to 3 appeared to contain some categories that need to be split into separate groups. Thus, the 8-cluster solution was chosen as the final categorical solution.

Names for the 8 categories were determined after consideration of the titles provided by the parents in the sorting task (Appendix K). The category labels, the constituent items, and bridging values of the items and the categories are presented in Table 9. The parent concept map that illustrates the parent list and its categorization is presented in Figure 6.

Table 9

Category Items and Bridging Values for 8 Categories of The Parent List

Category	Items	Bridging Value
Self-Protection	30. go away	0.96
	45. I'll show you	0.96
	84. stop	0.96
	Cluster Bridging Value	0.96
Child Abuse	1. alone	0.32
	23. don't love, hate	0.33
	88. take pictures, camera	0.31
	97. video	0.31
	54. love	0.56
	12. bribe, money, sweets, treats	0.44
	75. secret, don't tell	0.44
	90. threaten, I'll (offender's name) kill	0.40
	17. choke	0.16
	87. take off, naked	0.16
	92. touch (private parts)	0.16
	80. slap, hit, spank	0.16
	82. squeeze	0.16
	77. shake	0.16
	78. shout	0.16
	71. rub, pat	0.16
	76. sex, intercourse	0.16
	68. pull	0.16
	69. push	0.16
	52. lick, suck	0.16
53. lock	0.16	
48. kick	0.16	
49. kiss	0.16	
39. hold down, restrain, tie	0.16	
41. hug	0.16	

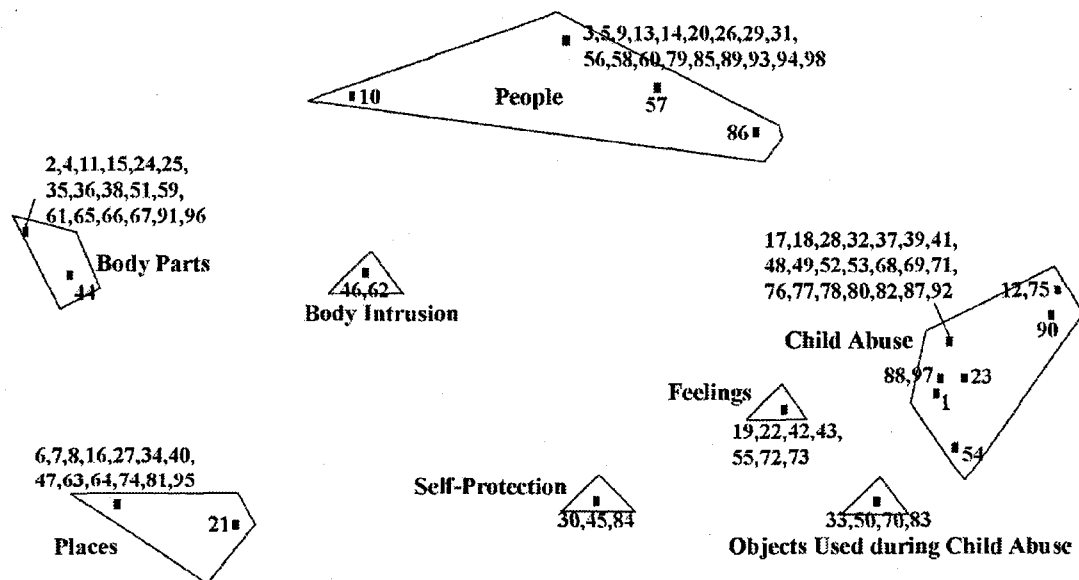
	32. grab	0.16
	37. hang	0.16
	18. close door	0.16
	28. force	0.16
	Cluster Bridging Value	0.23
Objects Used during	33. gun	0.64
Child Abuse	70. rope	0.64
	83. stick	0.64
	50. knife	0.64
	Cluster Bridging Value	0.64
Feelings	19. cry	0.29
	72. sad	0.29
	73. scared	0.29
	43. hurt, pain	0.29
	55. made me feel	0.29
	22. dirty	0.29
	42. hungry	0.29
	Cluster Bridging Value	0.29
Body Parts	2. arm	0.08
	91. tongue	0.08
	96. vagina, cunt, pussy (vulva)	0.08
	66. penis, prick, dick, weenie, winkie, cock (penis)	0.08
	67. poo (feces)	0.08
	65. pee (urine)	0.08
	59. mouth, lips	0.08
	61. nose	0.08
	51. leg	0.08
	36. hand	0.08
	38. here	0.08
	25. face, cheek	0.08
	35. hair	0.08
	15. bum, ass (buttocks)	0.08
	24. ears	0.08
	4. back	0.08

	11. breasts, boob (<i>breasts</i>)	0.08
	44. I	0.51
	Cluster Bridging Value	0.10
Body Intrusion	46. in me	1.00
	62. on me	1.00
	Cluster Bridging Value	1.00
People	3. aunt	0.05
	94. uncle	0.05
	98. woman	0.05
	89. tall person	0.05
	93. trusted person, nice person	0.05
	79. sister	0.05
	85. stranger	0.05
	58. mom	0.05
	60. neighbour	0.05
	31. good person	0.05
	56. man	0.05
	26. fat person	0.05
	29. friend	0.05
	14. brown hair	0.05
	20. dad	0.05
	9. big person	0.05
	13. brother	0.05
	5. bad person	0.05
	10. blond hair	0.72
	57. mean	0.56
	86. strong	0.87
	Cluster Bridging Value	0.14
Places	6. basement	0.00
	81. sofa	0.00
	95. upstairs	0.00
	64. park	0.00
	74. school	0.00
	47. inside	0.00

63. outside	0.00
34. gym	0.00
40. home	0.00
16. car	0.00
27. floor	0.00
7. bathroom	0.00
8. bed	0.00
21. dark	0.47
Cluster Bridging Value	0.03

Note. The words and phrases in brackets are not actually part of the items to be taught to the children. These words can be filled in with a specific thing (e.g., a person's name) by the children. The words in italics are informal language. The words in brackets and italics are synonymous standard words of the informal language.

Figure 6. The Parent Concept Map



Description of The 8 Categories of The Parent List

The parent concept map included 8 categories of the 98 items: Self-Protection, Child Abuse, Objects Used during Child Abuse, Feelings, Body Parts, Body Intrusion, People, and Places.

Self-protection. This category contained words necessary to respond safely to child abuse, including '30. go away,' '45. I'll show you (e.g., a child tries to show what happened to him/her),' and '84. stop.'

Child abuse. This category contained words necessary to understand basic concepts of child abuse, including '12. bribe, money, sweets, treats,' '75. secret, don't tell,' and '90. threaten, I'll kill.' It also contained words necessary to report sexual, physical, and emotional abuse, including '1. alone,' '17. choke,' '18. close door,' '23. don't love, hate,' '28. force,' '32. grab,' '37. hang,' '39. hold down, restrain, tie,' '41. hug,' '48. kick,' '49. kiss,' '52. lick, suck,' '53. lock,' '54. love,' '68. pull,' '69. push,' '71. rub, pat,' '76. sex, intercourse,' '77. shake,' '78. shout,' '80. slap, hit, spank,' '82. squeeze,' '87. take off, naked,' '88. take pictures, camera,' '92. touch (private parts),' and '97. video.'

Objects used during child abuse. This category contained the names of harmful objects or tools that might be used during child abuse, including '33. gun,' '50. knife,' '70. rope,' and '83. stick.'

Feelings. This category contained words necessary to label emotions, such as '19. cry,' '22. dirty,' '42. hungry,' '43. hurt, pain,' '55. made me feel,' '72. sad,' and '73. scared.'

Body parts. This category contained the names of body parts, including '2. arm,' '4. back,' '11. breasts, boob,' '15. bum, ass,' '24. ears,' '25. face, cheek,' '35. hair,' '36.

hand,' '38. here,' '44. I,' '51. leg,' '59. mouth, lips,' '61. nose,' '65. pee,' '66. penis,' '67. poo,' '91. tongue,' and '96. vagina.'

Body intrusion. This category contained words necessary to describe something that happened to one's body during child abuse, including '46. in me' and '62. on me.'

People. This category contained words necessary to describe people who might play some role in child abuse incidents or in child protection, including '3. aunt,' '5. bad person,' '9. big person,' '10. blond hair,' '13. brother,' '14. brown hair,' '20. dad,' '26. fat person,' '29. friend,' '31. good person,' '56. man,' '57. mean,' '58. mom,' '60. neighbour,' '79. sister,' '85. stranger,' '86. strong,' '89. tall person,' '93. trusted person, nice person,' '94. uncle,' and '98. woman.'

Places. This category contained words necessary to report locations, including '6. basement,' '7. bathroom,' '8. bed,' '16. car,' '21. dark,' '27. floor,' '34. gym,' '40. home,' '47. inside,' '63. outside,' '64. park,' '74. school,' '81. sofa,' and '95. upstairs.'

Categories of The Educator List

Cluster Solutions

The computer program produced cluster solutions ranging from 19- to 3-clusters. The various cluster solutions were examined and compared in sequence to determine an optimal cluster solution. The processes of examining a 19-cluster solution to a 12-cluster solution revealed that some categories in these solutions overlapped conceptually. Next, 11- and 10-cluster solutions were examined. These cluster solutions still contained some categories that overlapped conceptually. For example, in the 10-cluster solution, some items within both category #6 and category #7 were related to characteristics of child

abuse situations. The mean cluster bridging values were 0.44 for the 11-cluster solution and 0.42 for the 10-cluster solution.

In a 9-cluster solution, the two categories in the 10-cluster solution (category #6 and category #7) were still separated. The split seemed undesirable. The mean cluster bridging value for the 9-cluster solution was 0.38.

Comparison of the 9-cluster and 8-solution revealed that the 8-cluster solution merged the two categories in the 9-cluster solution into one category. That is, category #5 in the 8-cluster solution included all items related to characteristics of child abuse situations. The merge seemed reasonable. The items within each category also appeared to fit together conceptually. The 8-cluster solution had a mean cluster bridging value of 0.34. This was smaller than the mean cluster bridging values for other cluster solutions from 11- to 9-clusters.

Next, a 7-cluster solution was examined. In this cluster solution, category #1 contained all of the items related to physical and sexual abuse. This was deemed to be too broad in scope. Although the mean cluster bridging value for the 7-cluster solution was 0.34, the 7-cluster solution seemed less functional and interpretable. For the cluster solutions from 6-to 3-clusters, it appeared that some categories could be split into separate groupings. Therefore, the 8-cluster solution was selected as the final categorical solution.

Categories were named to reflect content of the items comprising the categories, after careful consideration of the titles provided by the educators in the sorting task (Appendix K). The selected category labels, the constituent items, and bridging values of the items and the categories are presented in Table 10. The educator concept map that illustrates the educator list and its categorization is presented in Figure 7.

Table 10

Category Items and Bridging Values for 8 Categories of The Educator List

Category	Items	Bridging Value
Understanding	5. appropriate	0.69
Child Abuse	72. responsibility	0.70
	7. bad touch	0.72
	18. consent	0.71
	59. not my fault	0.70
	66. privacy	0.67
	12. bribe	0.55
	76. secret	0.55
	88. threaten	0.81
	28. fair trade	0.72
	92. trick	0.70
	31. feelings	0.67
	85. surprise	0.77
	49. loyalty	0.72
	Cluster Bridging Value	0.69
Safety Plan	10. boundaries	0.43
	61. personal space	0.43
	67. protect	0.42
	86. talk, tell	0.41
	54. no	0.38
	75. safety plan	0.38
	83. stop	0.38
	93. trust	0.88
	24. discipline	0.70
	36. good touch	0.87
	46. listen	0.66
	62. (phone number) (e.g., 1-800-387-5437)	0.59
20. cope	0.67	
77. self-esteem	0.67	

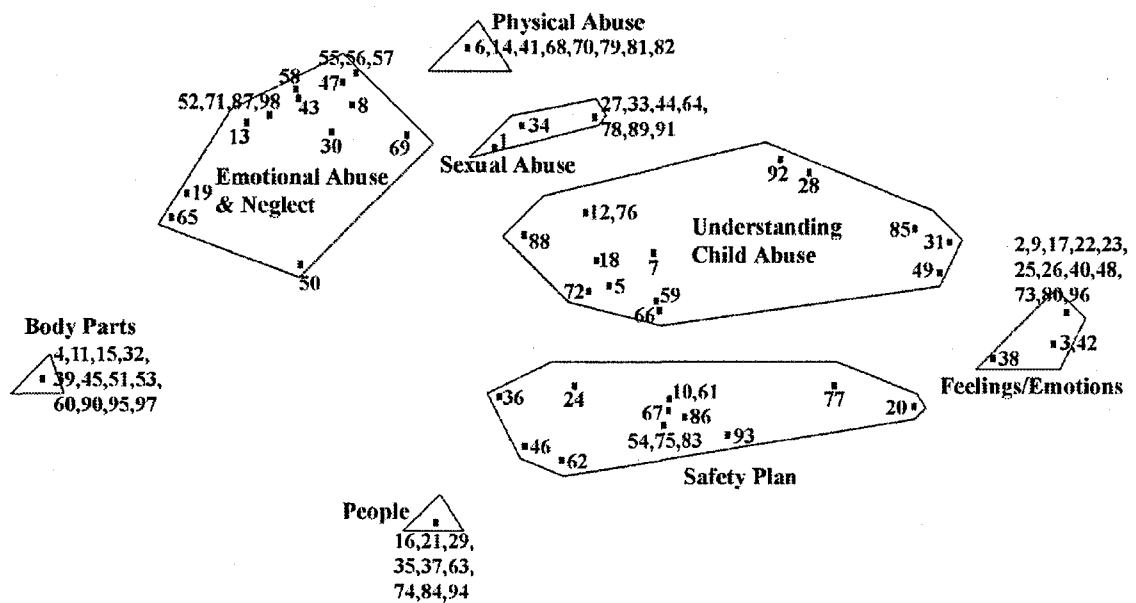
		Cluster Bridging Value	0.56
Sexual Abuse	1. abuse		0.62
	34. force		0.54
	27. expose		0.44
	89. tickle		0.44
	91. touch		0.44
	64. pornography		0.44
	78. sex		0.44
	33. fondle		0.44
	44. kiss		0.44
		Cluster Bridging Value	0.47
Physical Abuse	6. attack		0.24
	81. slap		0.24
	82. spank		0.24
	70. push		0.24
	79. shake		0.24
	41. hit		0.24
	68. punch		0.24
	14. burn		0.24
		Cluster Bridging Value	0.24
Emotional Abuse and Neglect	8. bad words		0.44
	30. family violence		0.56
	69. punishment		0.57
	13. bully		0.50
	52. name-calling		0.39
	87. tease		0.39
	98. yell		0.39
	71. put-down		0.39
	43. ignore		0.38
	58. no school		0.38
	47. lock, isolate		0.36
	55. no clothes		0.33
	56. no food		0.33
	57. no healthcare		0.33

	19. control	0.81
	65. power	0.89
	50. mean	1.00
	Cluster Bridging Value	0.50
Feelings (Emotions)	2. afraid, scared	0.13
	80. shame	0.13
	96. uncomfortable	0.13
	48. love	0.13
	73. sad	0.13
	26. embarrass	0.13
	40. happy	0.13
	23. disappointed	0.13
	25. don't like (offender's name/description of episode)	0.13
	17. confusion	0.13
	22. creepy	0.13
	9. betray	0.13
	3. alone	0.25
	42. hurt	0.25
	38. gut feeling	0.44
	Cluster Bridging Value	0.16
Body Parts	4. anus	0.00
	95. tummy	0.00
	97. vagina, vulva	0.00
	60. penis	0.00
	90. tongue	0.00
	51. mouth	0.00
	53. nipple	0.00
	39. hand	0.00
	45. lips	0.00
	15. buttocks	0.00
	32. finger	0.00
	11. breasts	0.00
	Cluster Bridging Value	0.00

People	16. caring adult	0.08
	84. stranger	0.08
	94. trusted adult	0.08
	63. police	0.08
	74. safe people	0.08
	35. friend	0.08
	37. grown-up	0.08
	21. counsellor	0.08
	29. family	0.08
	Cluster Bridging Value	0.08

Note. The words and phrases in brackets are not actually part of the items to be taught to the children. These words can be filled in with a specific thing (e.g., a person's name) by the children.

Figure 7. The Educator Concept Map



Description of The 8 Categories of The Educator List

The educator concept map included 8 categories of 98 items: Understanding Child Abuse, Safety Plan, Sexual Abuse, Physical Abuse, Emotional Abuse and Neglect, Feelings (Emotions), Body Parts, and People.

Understanding child abuse. This category contained words necessary to understand basic concepts of child abuse, including '5. appropriate,' '7. bad touch,' '12. bribe,' '18. consent,' '28. fair trade,' '31. feelings,' '49. loyalty,' '59. not my fault,' '66. privacy,' '72. responsibility,' '76. secret,' '85. surprise,' '88. threaten,' and '92. trick.'

Safety plan. This category contained words necessary to respond safely to and cope with child abuse, including '10. boundaries,' '20. cope,' '24. discipline,' '36. good touch,' '46. listen,' '54. no,' '61. personal space,' '62. (phone number),' '67. protect,' '75. safety plan,' '77. self-esteem,' '83. stop,' '86. talk, tell,' and '93. trust.'

Sexual abuse. This category contained words necessary to report sexual abuse, including '1. abuse,' '27. expose,' '33. fondle,' '34. force,' '44. kiss,' '64. pornography,' '78. sex,' '89. tickle,' and '91. touch.'

Physical abuse. This category contained words necessary to report physical abuse, including '6. attack,' '14. burn,' '41. hit,' '68. punch,' '70. push,' '79. shake,' '81. slap,' and '82. spank.'

Emotional abuse and neglect. This category contained words necessary to report emotional abuse and neglect, including '8. bad words,' '13. bully,' '19. control,' '30. family violence,' '43. ignore,' '47. lock, isolate,' '50. mean,' '52. name-calling,' '55. no clothes,' '56. no food,' '57. no healthcare,' '58. no school,' '65. power,' '69. punishment,' '71. put-down,' '87. tease,' and '98. yell.'

Feelings (Emotions). This category contained words necessary to label emotions, including '2. afraid, scared,' '3. alone,' '9. betray,' '17. confusion,' '22. creepy,' '23. disappointed,' '25. don't like,' '26. embarrass,' '38. gut feeling,' '40. happy,' '42. hurt,' '48. love,' '73. sad,' '80. shame,' and '96. uncomfortable.'

Body parts. This category contained the names of body parts, including '4. anus,' '11. breasts,' '15. buttocks,' '32. finger,' '39. hand,' '45. lips,' '51. mouth,' '53. nipple,' '60. penis,' '90. tongue,' '95. tummy,' and '97. vagina, vulva.'

People. This category contained words necessary to describe people who might play some role in child abuse incidents or in child protection, including '16. caring adult,' '21. counsellor,' '29. family,' '35. friend,' '37. grown-up,' '63. police,' '74. safe people,' '84. stranger,' and '94. trusted adult.'

Categories of The Investigator List

Cluster Solutions

The Concept System program produced cluster solutions ranging from 18- to 3-cluster solutions. The various cluster solutions were examined and compared sequentially to determine an appropriate categorical solution. The process started by examining from an 18-cluster solution to an 11-cluster solution. The examinations revealed that some categories in the cluster solutions overlapped conceptually. For example, in the 11-cluster solution, category #1, category #2, and category #3 all had some items related to sexual touching behaviours.

Next, 10- and 9-cluster solutions were examined. These cluster solutions still split some items related to sexual behaviours into different categories. These splits seemed

unreasonable. The mean cluster bridging value was 0.26 for the 10-cluster solution and 0.25 for the 9-cluster solution.

An examination of an 8-cluster solution was then conducted. In the 8-cluster solution, some items in category #1 and category #2 appeared to be related to sexual behaviours. The split still seemed undesirable. The mean cluster bridging value for the 8-cluster solution was 0.19.

A 7-cluster solution merged the two categories in the 8-cluster solution (category #1, category #2) into one category. That is, category #1 in the 7-cluster solution included all the items related to sexual behaviours. This merge seemed reasonable. It also appeared that each category within this cluster solution contain conceptually similar items. The mean cluster bridging value for the 7-cluster solution was 0.16. This mean value was smaller than the mean values for other cluster solutions from 10- to 8-clusters.

Comparison of the 7-cluster and 6-cluster solutions revealed that the 6-cluster solution merged items related to places and people into one category. The category appeared to be too broad in scope. The mean cluster bridging value for the 6-cluster solution (0.19) was larger than the mean cluster bridging value for the 7-cluster solution. The cluster solutions from 5 to 3 appeared to contain some categories that needed to be split into separate groups. Therefore, the 7-cluster solution was selected as being appropriate and functional.

In determining labels for the categories, the titles that the investigators provided in the sorting task were carefully examined (Appendix K). Labels for the 7 categories were determined to best represent the sets of items included in the categories. The selected category labels, the constituent items, and bridging values of the items and the categories

are presented in Table 11. The investigator concept map that illustrates the investigator list and its categorization is presented in Figure 8.

Table 11

Category items and Bridging Values for 7 Categories of The Investigator List

Category	Items	Bridging Value
Sexual Abuse	1. <i>adult stuff (sex)</i>	0.15
	30. (offender's name) did that thing	0.15
	78. sex	0.15
	62. mean	0.21
	8. bad touch	0.26
	54. hurt	0.27
	12. <i>blowjob (oral sex)</i>	0.12
	81. suck	0.12
	82. tickle	0.12
	73. <i>poke (sex)</i>	0.12
	75. rub	0.12
	56. kiss	0.12
	58. lick	0.12
	32. <i>eat out (masturbation)</i>	0.12
	55. <i>jerk off, jack off, whack off (masturbation)</i>	0.16
	38. <i>fuck (sex)</i>	0.11
	53. <i>hump (sex)</i>	0.11
	88. <i>up and down (sex)</i>	0.11
	63. mess with	0.15
	40. game	0.34
86. truth or dare	0.39	
47. group sex	0.32	
15. <i>boy pee (semen)</i>	0.35	
64. <i>milk (semen)</i>	0.35	
90. <i>white pee (semen)</i>	0.35	
28. <i>cum (semen)</i>	0.35	

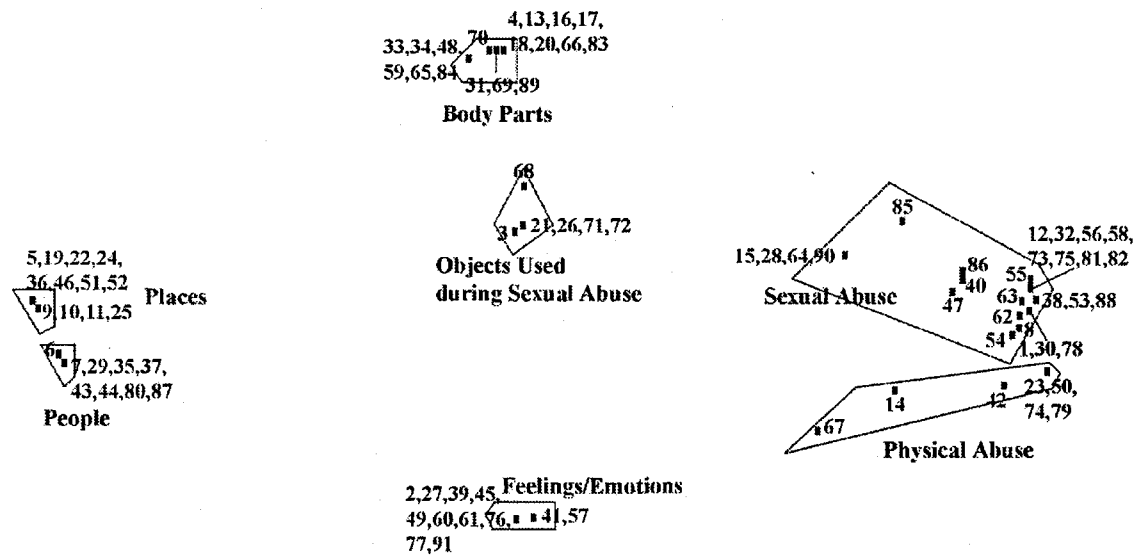
	85. touch (private parts)	0.82
	Cluster Bridging Value	
		0.23
Objects Used	3. animal	0.26
during	21. camera	0.22
Sexual Abuse	71. porno magazine	0.22
	72. pornography	0.22
	26. computer	0.22
	68. object	0.53
	Cluster Bridging Value	0.28
Physical Abuse	14. bother	0.84
	67. (offender's name/description of episode) not nice	1.00
	23. choke	0.33
	74. punch	0.33
	79. slap	0.33
	50. hit	0.33
	42. good touch	0.55
	Cluster Bridging Value	0.53
Feelings (Emotions)	2. angry	0.03
	77. scared	0.03
	91. yucky	0.03
	61. mad	0.03
	76. sad	0.03
	49. happy	0.03
	60. love	0.03
	39. funny	0.03
	45. gross	0.03
	27. concerned	0.03
	41. giggle	0.10
	57. laugh	0.10
	Cluster Bridging Value	0.04
Body Parts	4. ass (<i>buttocks</i>)	0.00
	66. nipple	0.00

	83. <i>tit (breasts)</i>	0.00
	18. <i>bum hole (anus)</i>	0.00
	20. <i>butt hole (anus)</i>	0.00
	16. <i>breasts</i>	0.00
	17. <i>bum (buttocks)</i>	0.00
	13. <i>boob (breasts)</i>	0.00
	31. <i>doodoo (vagina)</i>	0.00
	69. <i>private parts</i>	0.00
	89. <i>vagina, flower, spoon (vagina), cunt, pussy (vulva)</i>	0.00
	70. <i>penis, peanut, chuksie, boy parts, cock, dick, pee (penis)</i>	0.01
	33. <i>eye</i>	0.04
	65. <i>mouth</i>	0.04
	84. <i>tongue</i>	0.04
	48. <i>hand</i>	0.04
	59. <i>lips</i>	0.04
	34. <i>finger</i>	0.04
	Cluster Bridging Value	0.01
People	6. <i>babysitter</i>	0.10
	7. <i>bad person</i>	0.02
	80. <i>step dad</i>	0.02
	87. <i>uncle</i>	0.02
	43. <i>grandma</i>	0.02
	44. <i>grandpa</i>	0.02
	35. <i>foster dad</i>	0.02
	37. <i>friend</i>	0.02
	29. <i>dad</i>	0.02
	Cluster Bridging Value	0.03
Places	5. <i>aunt's home</i>	0.00
	51. <i>home</i>	0.00
	52. <i>hospital</i>	0.00
	36. <i>foster home</i>	0.00
	46. <i>group home</i>	0.00
	22. <i>car</i>	0.00
	24. <i>church</i>	0.00

19. bus	0.00
9. bathroom	0.01
11. bed	0.01
25. closet	0.01
10. bath tub	0.01
Cluster Bridging Value	0.01

Note. The words and phrases in brackets are not actually part of the items to be taught to the children. These words can be filled in with a specific thing (e.g., a person's name) by the children. The words in italics are informal language. The words in brackets and italics are synonymous standard words of the informal language.

Figure 8. The Investigator Concept Map



Description of The 7 Categories of The Investigator List

The investigator concept map included 7 categories of 91 items: Sexual Abuse, Physical Abuse, Objects Used during Sexual Abuse, Feelings (Emotions), Body Parts, People, and Places.

Sexual abuse. This category contained words necessary to report sexual abuse, including '1. adult stuff,' '8. bad touch,' '12. blowjob,' '15. boy pee,' '28. cum,' '30. did that thing,' '32. eat out,' '38. fuck,' '40. game,' '47. group sex,' '53. hump,' '54. hurt,' '55. jerk off, jack off, whack off,' '56. kiss,' '58. lick,' '62. mean,' '63. mess with,' '64. milk,' '73. poke,' '75. rub,' '78. sex,' '81. suck,' '82. tickle,' '85. touch (private parts),' '86. truth or dare,' '88. up and down,' and '90. white pee.'

Objects used during sexual abuse. This category contained names of objects that could be used during sexual abuse, including '3. animal,' '21. camera,' '26. computer,' '68. objects,' '71. porno magazine,' and '72. pornography.'

Physical abuse. This category contained words necessary to report physical abuse, including '14. bother,' '23. choke,' '42. good touch,' '50. hit,' '67. not nice,' '74. punch,' and '79. slap.'

Feelings (Emotions). This category contained words necessary to label emotions, including '2. angry,' '27. concerned,' '39. funny,' '41. giggle,' '45. gross,' '49. happy,' '57. laugh,' '60. love,' '61. mad,' '76. sad,' '77. scared,' and '91. yucky.'

Body parts. This category contained the names of body parts, including '4. ass,' '13. boob,' '16. breasts,' '17. bum,' '18. bum hole,' '20. butt hole,' '31. doodoo,' '33. eye,' '34. finger,' '48. hand,' '59. lips,' '65. mouth,' '66. nipple,' '69. private parts,' '70. penis,' '83. tit,' '84. tongue,' and '89. vagina.'

People. This category contained words necessary to describe people who might play some role in child abuse incidents or in child protection, including ‘6. babysitter,’ ‘7. bad person,’ ‘29. dad,’ ‘35. foster dad,’ ‘37. friend,’ ‘43. grandma,’ ‘44. grandpa,’ ‘80. step dad,’ and ‘87. uncle.’

Places. This category contained words necessary to report locations, including ‘5. aunt’s home,’ ‘9. bathroom,’ ‘10. bath tub,’ ‘11. bed,’ ‘19. bus,’ ‘22. car,’ ‘24. church,’ ‘25. closet,’ ‘36. foster home,’ ‘46. group home,’ ‘51. home,’ and ‘52. hospital.’

Feedback from Participants

Out of the 16 participants who took part in the focus group interviews, 11 participants (68.8% response rate) responded to the verification questionnaire soliciting feedback.

Participants generally indicated that they agreed with the comprehensive map and their own group concept maps. For example, participants reported that “The map makes sense to me,” “I like the way you laid out the maps,” “I think it works the way it is presented,” and “I agree with the findings.” However, two participants expressed some confusion about concept maps. Although it was stated in the questionnaire that the concept maps represented the collective opinions of participants regarding the vocabulary items and their organization, these two participants found difficulty understanding what the concept maps were trying to illustrate.

One participant provided specific commentary on the category of ‘Understanding Child Abuse’ on the comprehensive concept map. This participant indicated that an item ‘threats (or threaten)’ should be included in this category. The participant’s verbatim comments are below:

“The concept of ‘threats’ is missing. I think it is important because children may not always be aware of the amount of control that comes from threats. ‘Threat’s are often used to keep the victim from telling.”

One participant also thought that some words could be included within a couple of categories, but the participant did not provide specific suggestions as to what these words were.

CHAPTER 5: SUMMARY AND DISCUSSION

In this chapter, a discussion of the results of the study is provided. First, a summary of the research findings is presented. Second, the comprehensive list of personal safety vocabulary items and categories of the items are examined in more detail, relating the main result to the secondary results obtained from each of the focus groups. In addition, the results are compared with existing research on abuse prevention programs. Finally, the limitations of the study, practical implications, and directions for future research are presented.

Summary of Key Findings

The intent of the present study was to identify and organize personal safety vocabulary items that children with intellectual disabilities need to learn in order to develop accurate reporting skills. Three separate focus groups for parents, educators, and investigators (i.e., police, social welfare workers) were interviewed to generate their own group lists of personal safety vocabulary. The parent list contained 98 items, the educator list, 98 items, and the investigator list, 91 items. The three focus groups then rated all the items on the three group lists. As a result of this rating process, the 98 most important items were determined to be included in the comprehensive list.

The comprehensive list of the 98 items was organized into 8 conceptual categories by the focus groups: Understanding Child Abuse, Safety, Sexual Abuse, Physical/Emotional Abuse and Neglect, General Descriptors of Child Abuse, Feelings (Emotions), Body Parts, and People.

In addition, the parents organized the parent list of the 98 items into 8 categories: Self-Protection, Child Abuse, Objects Used during Child Abuse, Feelings, Body Parts,

Body Intrusion, People, and Places. The educators organized the educator list of the 98 items into 8 categories: Understanding Child Abuse, Safety Plan, Sexual Abuse, Physical Abuse, Emotional Abuse and Neglect, Feelings (Emotions), Body Parts, and People. The investigators organized the investigator list of 91 items into 7 categories: Sexual Abuse, Objects Used during Sexual Abuse, Physical Abuse, Feelings (Emotions), Body Parts, People, and Places.

Discussion

Because there are few abuse prevention programs for teaching the personal safety vocabulary necessary to report child abuse, very little is known about the vocabulary items that children with intellectual disabilities need to learn. This study was undertaken to identify and organize a comprehensive (more complete) list of items. Importantly, in identifying the items and item categories, a greater emphasis was placed on the ideas and concerns of parents, educators, and investigators who were directly involved in child protection systems. As a result of this study, a comprehensive concept map was created to graphically illustrate 98 personal safety vocabulary items and 8 item categories. The comprehensive map can serve as a framework for the development of an abuse prevention program to teach personal safety vocabulary. In particular, input from the significant people helped to identify the list of items and categories of the items that would be important for children with intellectual disabilities. This ensured that the program would be more relevant.

Some of the categories on the comprehensive map included knowledge that has been addressed in existing abuse prevention programs, while other categories included new

knowledge and topics. Further discussion about the findings of this study is presented in the following sections.

The Comprehensive List of Personal Safety Vocabulary

The comprehensive list includes the 98 most important personal safety vocabulary items chosen as a result of the rated importance of all items generated by the three focus groups. The 98 items represent a broad range of topics. Some of the items are the names of private body parts and words to label feelings that have also been covered in existing abuse prevention programs (e.g., Lumely et al., 1998; Plaute et al., 2002; Valenti-Hein et al., 1994). Many of the items are specific words necessary to identify and describe sexually inappropriate touches, physically and emotionally abusive behaviours, and perpetrators. Interestingly, some items also cover knowledge that seems to be indirectly related to reporting skills.

Based on the three group lists generated by the focus groups, it appears that the comprehensive list includes more items identified by the educators than by either the parents or the investigators, although there is very little difference in the number of items on the group lists. This indicates that the participants rated some items highly that their own groups did not generate, while they judged items, originally identified by their own groups, as being less important in some cases. For example, although both the parents and the investigators generated words necessary to describe places, these items were not included in the comprehensive list. This demonstrates that the participants in this study did not necessarily rate items from their own group lists preferentially.

An examination of the group lists indicates that there are considerable differences in the individual items on the group lists. That is, the number of identical (or duplicate) items

generated by two or three of the focus groups is relatively small. This demonstrates that the three focus groups had very different ideas about individual items to teach to children with intellectual disabilities.

In addition to the comprehensive list, this study provided a list of informal words to describe private body parts and sexual behaviours. Briggs (1995) notes that alternative colloquial or coarse language may assist in teaching children with disabilities standard words. Because children may be familiar with informal language rather than standard words, the list of informal words would be useful as additional material in future abuse prevention programs.

Categories of Personal Safety Vocabulary

The comprehensive list of the 98 items was organized into 8 conceptual categories by the three focus groups. The 8 categories include knowledge and topics that are both directly and indirectly related to developing accurate reporting skills. The categories are presented below, along with a description and discussion of each.

The category of 'Understanding Child Abuse' focuses on teaching children with intellectual disabilities child abuse concepts. This category includes teaching about knowledge of appropriate and inappropriate touching behaviours (e.g., abuse, appropriate, good touch, hurt, pain, and privacy). In the category, it is also explained that offenders often use various kinds of manipulation (e.g., bribery with money, sweets, or treats, trick) to gain children's consent to child abuse and to secure a promise not to tell (or to keep a secret). It is important to note that although the participants in this study were asked to generate vocabulary items necessary to describe instances of child abuse, they identified education about child abuse concepts as a critical component in

developing reporting skills. Children with disabilities often don't have access to sexuality education programs (Blum et al., 1991; Stromsness, 1993). For these children it may be essential to gain a basic sense about child abuse before learning prevention skills and specific words necessary to describe child abuse. Thus, this category needs to be addressed as a foundation for learning other categories.

Teaching children to discriminate between appropriate behaviours and child abuse has often been addressed in existing abuse prevention programs for teaching self-protection skills (Haseltine & Miltenberger, 1990; Lee & Tang, 1999; Lumley et al., 1998; Miltenberger et al., 1999) and decision-making skills (Khemka et al., 2005). However, there has been only one program that has taught about abuse situations (Lumley et al., 1998). If children are aware of characteristics of abuse situations (e.g., they can be bribed to give consent to child abuse), there is a greater likelihood that they will recognize child abuse when it occurs. Therefore, teaching about child abuse situations should be a component of future abuse prevention programs.

Based on three group concept maps, it appears that both the parents and the educators paid particular attention to this category. The parent concept map includes the category of 'Child Abuse' which addresses teaching about characteristics of child abuse situations (e.g., bribery with money, sweets, or treats, threats (I'll kill), a secret (not to tell)). Similarly, the educator concept map includes the category of 'Understanding Child Abuse,' dealing with characteristics of child abuse situations (e.g., bribe, trick, threaten, consent, a secret). Unlike the category of 'Child Abuse' on the parent map, however, this category also covers teaching about knowledge of appropriate and inappropriate behaviours (e.g., appropriate, bad touch, feelings, privacy). Moreover, such words as fair

trade, surprise (e.g., birthday party), and loyalty are included in the category, because the explanation of these words was thought to help the children to better understand child abuse situations.

It is interesting to note that the parent and educator concept maps include a category to teach basic concepts of child abuse, while the investigator map does not include any such category. This difference may reflect the different roles of the three focus groups in child protection systems. Parents and educators have an important role in preventing child abuse and teaching abuse prevention skills. Thus, they may consider education about basic concepts of child abuse to be relevant and important for children. Because investigators usually play a role in intervention after child abuse, however, they are more likely to focus on specific vocabulary words to describe child abuse.

The category of 'Safety' focuses on teaching children with intellectual disabilities the knowledge and skills necessary to respond safely to and cope with child abuse. This category includes education about verbal and physical refusal skills (e.g., saying 'No' and 'Stop,' going away from the situations). The category also covers an explanation of that children need to take their feelings seriously when they feel unsafe, because those feelings sometimes provide clues to dangerous situations. Moreover, it addresses teaching about children's right to report abuse or neglect. That is, it is taught that children should report attempted or actual child abuse in order to get protection and help (e.g., tell, talk, phone numbers, protect). Finally, information about who is responsible for child abuse (e.g., not child's fault) and the roles of resource people (e.g., trust, protect) is included in the category.

Interestingly, the participants in this study identified knowledge concerning children's right to report abuse, responsibility for child abuse, and the roles of resource people as a category, although it does not seem to be directly related to developing accurate reporting skills. Children with intellectual disabilities may have fears of blame or punishment, and perceptions that adults would not believe them if they report incidents. Such misconceptions can prevent these children from coming forward to report the incidents. Considering this fact, teaching about the knowledge may be necessary to help the children to increase their confidence to make a disclosure.

Education about refusal skills and children's right to report has been addressed in the existing self-protection programs (Haseltine & Miltenberger, 1990; Lee & Tang, 1998; Lumley et al., 1998; Miltenberger et al., 1999), yet an explanation of responsibility for child abuse and the roles of resource people has rarely been covered in the programs. Because the knowledge play have a critical role in increasing the likelihood that children disclose abuse, future self-protection programs need to cover teaching about the knowledge.

This category received major attention by both the parents and the educators. The parent map includes the category of 'Self-Protection' which covers teaching about refusal skills (e.g., saying 'Stop,' going away) and the right to report (e.g., I'll show you). Likewise, the educator map includes the category of 'Safety Plan' which addresses teaching about refusal skills (e.g., saying 'No,' 'Stop') and the right to report (e.g., talk, tell, phone number). Unlike the category of 'Self-Protection' on the parent map, however, this category also covers explaining the roles of resource people (e.g., listen, trust, protect, discipline). Moreover, teaching about who has responsibility for child abuse is

addressed in the category of 'Understanding of Child Abuse' on the educator map. However, the investigator map does not include any categories addressing the aforementioned skills and knowledge. Again role-based differences may account for this distinction among the three focus groups. Because parents and educators have a major role to play in preventing child abuse, they are likely to place a greater emphasis on teaching about refusal skills and the importance of reporting.

It is important to note that the category of 'Safety Plan' on the educator map includes items related to body boundaries and self-esteem (e.g., boundaries, good touch, personal space, self-esteem). Monahan and Lurie (2003) indicate that children with disabilities who often depend on others may be confused about personal space and the right to govern their own body. Furthermore, when a child does not have a sense of oneself as important and valuable, he or she is less likely to resist and report child abuse. Thus, there is no doubt about the importance of a sense of personal boundaries and a positive self-image in preventing child abuse. However, the existing abuse prevention programs are unlikely to deal with these issues directly. An attempt needs to be made to develop programs for building personal boundaries and healthy self-esteem.

The category of 'Sexual Abuse' focuses on teaching children with intellectual disabilities to identify and report sexual abuse. This category includes the teaching of words to describe a variety of sexually abusive behaviours (e.g., bad touch, expose, fondle, hug, intercourse, kiss, lick, masturbation, naked, take off, no clothes, oral sex, rub, sex, suck, tickle, and touch). It also covers teaching about objects that might be used during sexual abuse (e.g., camera, take pictures, pornography, porno magazine, video).

Moreover, it includes the teaching of words necessary to describe something that happens to one's body during sexual abuse (e.g., in me, on me, inside).

Based on the three group concept maps, it appears that the three focus groups all paid major attention to this category. The parent concept map includes the category of 'Child Abuse' which covers the teaching of words to describe sexual behaviours and objects used during sexual abuse. The parent map also includes the category of 'Body Intrusion' for teaching words to describe something that could happen to one's body (e.g., in me, on me). The educator map includes the category of 'Sexual Abuse' which addresses the teaching of words related to sexual behaviours and sexual objects. The investigator map includes the two categories of 'Sexual Abuse' and 'Objects Used during Sexual Abuse,' which almost one-third of the 91 items identified by the investigators fall into.

Interestingly, the investigators placed a greater emphasis on the teaching of words related to sexual abuse. This may be partly associated with their experiences. When physical abuse or physical neglect cases are referred to them, there are more likely to be clear signs or evidence, such as bruises, scratches, or dehydration. However, sexual abuse does not always have noticeable physical signs. In these circumstances, children's disclosures provide a clear clue to support any charges. Thus, the investigators are likely to pay particular attention to teaching about sexual abuse.

The category of 'Physical, Emotional Abuse and Neglect' focuses on teaching children with intellectual disabilities to identify and report physical and emotional abuse as well as neglect. This category includes the teaching of words to describe physically abusive behaviours (e.g., burn, choke, control, force, grab, hit, slap, spank, hold down, restrain, tie, kick, lock, isolate, punch, push, and shake). It also addresses the teaching of words to

describe emotionally abusive behaviours (e.g., bad words, family violence, name-calling, punishment (threats of corporal punishment), yell, shout) and neglect (e.g., no food). Furthermore, it includes an explanation of harmful tools that can be used during child abuse (e.g., knife).

Importantly, an examination of this category indicates that the participants in this study paid relatively less attention to teaching about emotional abuse and neglect, although they were given the definition of child abuse during the focus group interviews, including sexual, physical, and emotional abuse, and neglect. This may be in part due to the lack of clear and operational definitions of emotional abuse and neglect. In incidence studies on child abuse, child abuse has frequently been conceptualized as sexual abuse, physical abuse, or physical neglect. There is little research that has attempted to estimate the incidence of emotional abuse. This suggests that there appears to be agreement on what sexual and physical abuse constitutes, yet the definitions of emotional abuse and neglect (e.g., psychological neglect) still remain vague. The other possible explanation is related to social attitudes towards child abuse. Because of the lack of incidence data about emotional abuse, the severity of emotional abuse tends to go unrecognized. Thus, our society may take prevention of emotional abuse as being less important. The fact that most of school-based abuse prevention programs focus on sexual abuse prevention reflects these attitudes.

The three focus groups all placed an emphasis on teaching about physical abuse, while teaching about emotional abuse received attention by both the parents and the educators. The parent map includes the two categories of 'Child Abuse,' dealing with physical and emotional abuse, and 'Objects Used during Child Abuse.' The educator map includes two

categories of 'Physical Abuse' and 'Emotional Abuse and Neglect.' The Investigator map only includes the category of 'Physical Abuse.'

The category of 'General Descriptors of Child Abuse' focuses on teaching children with intellectual disabilities to report instances of child abuse in non-specific ways. This category includes the teaching of words such as bully, did that thing, don't like, mean, not nice, threaten, and I'll kill. Although the words may not give a clear clue of child abuse, they can provide hints about the incident.

This category does not appear on any of the group concept maps. Rather, the group maps demonstrate how the three focus groups organized the items within this category in different manners. For example, the parents organized the word 'mean' into the category of 'People,' the educators, into 'Emotional Abuse and Neglect,' and the investigators, into 'Sexual Abuse.' Such findings can be taken to support the value of involving multiple people in the task of content organization.

The category of 'Feelings (Emotions)' focuses on teaching children with intellectual disabilities to identify and label emotions. This category includes education about feelings associated with child abuse (e.g., child abuse can make children feel alone, angry, cry, sad, scared, afraid, and uncomfortable). It also covers an explanation of positive feelings (e.g., love) to help the children to identify unsafe feelings. Teaching about feelings has been addressed in several existing abuse prevention programs (Garwood & McCabe, 2000; Khemka et al., 2005; Valenti-Hein et al., 1994).

The three focus groups all placed an emphasis on teaching about feelings. The parent concept map includes the category of 'Feelings' which covers education about unsafe feelings associated with child abuse. The educator and investigator maps also include the

category of 'Feelings (Emotions)' which addresses teaching about unsafe feelings. Unlike the category of 'Feelings' on the parent map, however, the category on these latter two maps also includes teaching about positive feelings.

The category of 'Body Parts' focuses on teaching children with intellectual disabilities to identify and label body parts. This category covers education about the names and locations of private body parts (e.g., breasts, anus, buttocks, bum, nipples, penis, private parts, vagina, vulva). It also includes the teaching of the names and locations of non-private body parts, such as finger, hand, lips, mouth, tongue, and tummy. Although the three focus groups generated several names for non-private body parts, they emphasized the importance of teaching about a variety of non-private parts during the focus group interviews. This suggests that teachers or parents should teach the names and locations of different body parts. Education about body parts have frequently been addressed in the existing abuse prevention programs (Garwood & McCabe, 2000; Haseltine & Miltenberger, 1990; Kempton, 1978; Lee & Tang, 1999; Lindsay et al., 1992; Lumley et al., 1998; Penny & Chataway, 1982; Plaute et al., 2002; Robin, 1984).

This category received major attention by all three focus groups. The three group concept maps each include the category of 'Body Parts' which addresses teaching about private and non-private body parts.

The category of 'People' focuses on teaching children with intellectual disabilities potential perpetrators and resource people. This category includes teaching about who can be perpetrators (e.g., babysitter, bad person, big person, friend, grown-up, man, stranger). It also includes education about resource people to whom children can report child abuse and who can provide the children with help and protection (e.g., caring adult,

good person, nice person, trusted person/adult, safe person, police). Interestingly, the participants in this study identified the knowledge of resource people as an essential component, although it does not seem to be directly related to reporting skills. If children know about resource people they can talk to about child abuse, it may encourage the children's decisions to disclose. Thus, an explanation of resource people is necessary to increase the likelihood that children disclose abuse or neglect.

The three focus groups all placed an emphasis on teaching about people. The three group concept maps each include the category of 'People' which addresses teaching about potential offenders and resource people.

Overall, the comprehensive concept map includes a variety of categories that are directly and indirectly related to developing accurate reporting skills. The categories of 'Sexual Abuse,' 'Physical, Emotional Abuse and Neglect,' 'General Descriptors of Child Abuse,' 'Feelings (Emotions),' 'Body Parts,' and 'People' cover the teaching of specific words necessary to describe experiences of being abused or neglected. In addition, the categories of 'Understanding Child Abuse,' 'Safety,' and 'People' include teaching about knowledge that has a critical role to play in understanding basic concepts of child abuse, avoiding potentially abusive situations, and encouraging children's decisions about reporting. All but two of the categories (i.e., Body Parts, Feelings (Emotions)) have rarely been addressed in the existing abuse prevention programs.

Some categories on the comprehensive concept map include topics or knowledge that were identified by two or three of the focus groups, while other categories on the comprehensive map include knowledge identified by only a single focus group. The comprehensive map is very similar to the educator concept map. This makes sense, given

that the comprehensive map is composed of more items generated by the educators than by either of the other two focus groups.

Based on the three group concept maps, it appears that there are significant similarities among the focus groups. It is interesting to note that although there are notable differences in individual items on the group concept maps, categories on the group maps overlap with one another in some form. This indicates that they had similar ideas about the key topics that children need to learn, but they had different ideas about what items are necessary to address those topics. In addition, there appears to be important differences in the categories on the three group concept maps. This can be partly explained by the different roles of the three focus groups. Because parents and educators have a major role in preventing child abuse, they are likely to consider teaching about child abuse concepts, refusal skills, and the right to report as important. However, because investigators have a central role when child abuse occurs, they tend to focus on specific words necessary to describe instances of child abuse. These findings suggest that a variety of significant people should participate in the development of abuse prevention programs.

Concept mapping is often criticized for obscuring between-group differences. However, the use of focus group interviews in the present study enabled the creation of the comprehensive concept map as well as the individual group concept maps. These group concept maps allowed for between-group comparisons regarding personal safety vocabulary. The results of this study provide significant implications for the potential applicability of concept mapping to research in a variety of disciplines.

Conclusion

The objectives of this study were to identify and organize personal safety vocabulary items necessary for children with intellectual disabilities to report child abuse. In the identification of the items and their categories, much emphasis was placed on the ideas of parents, educators, and investigators who were directly involved in child protection systems, because they knew the needs of children well. The results of this study provided a comprehensive concept map displaying the comprehensive list of 98 items and 8 item categories identified by the three focus groups. The majority of the categories on the comprehensive map included vocabulary words that children with intellectual disabilities needed to learn in order to describe experiences of being abused or neglected: Sexual Abuse, Physical/s Emotional Abuse and Neglect, General Descriptors of Child Abuse, Feelings (Emotions), Body Parts, and People. In addition, some of the categories included critical knowledge useful to understand what child abuse is, to avoid child abuse, and to encourage child's decision about disclosure: Understanding Child Abuse, Safety, and People.

In addition, the results of this study provided the three group concept maps that showed group lists of items and item categories. These findings demonstrated that there were significant similarities and differences among the three focus groups. The three focus groups all placed an emphasis on teaching about sexual abuse, physical abuse, body parts, feelings, and people. However, education about child abuse concepts, refusal skills, and children's right to report child abuse received attention by both the parent and educator focus groups, but not by the investigator focus group. These differences partly reflected

the role-differences of the focus groups. Overall, the comprehensive concept map was very similar to the educator concept map.

Limitations of the Study

Several limitations should be taken into account interpreting the results of this study. One weakness of the study is related to the participant sample. In an effort to develop culturally sensitive abuse prevention programs, an attempt was made to include participants from various ethnic groups or who have had specific experience with ethnic minority children. Nevertheless, the participants were not entirely representative of all ethnic groups. Moreover, more parents of children without disabilities than those of children with disabilities participated in the study. An additional limitation lies in the fact that the computer software program used in the study had a practical limitation. Because the Concept System designed by Trochim (1987) could analyze no more than 98 items, the 98 most important personal safety vocabulary items were included in a comprehensive list. Finally, it is possible that participants might not fully disclose all of their ideas during focus group interviews. Child abuse and sexuality are topics that are considered sensitive and are often regarded as taboo. Thus, the participants in each focus group might not have felt entirely comfortable discussing all of their ideas or concerns in public.

Practical Implications

Reporting is a critical means of preventing further or ongoing child abuse. In order for children with intellectual disabilities to be able to report instances of child abuse, it is important to teach these children the personal safety vocabulary items necessary to describe the incidents. The findings of this research study provide a complete and

comprehensive list of personal safety vocabulary and its groupings that can be useful to parents, teachers, and program developers. The results suggest that the children need to learn specific words necessary to describe sexually, physically, and emotionally abusive behaviors, neglect, and perpetrators. The names of body parts and feelings are also considered essential to the children. Moreover, the findings highlight that teaching about children's right to report, responsibility for child abuse, a list of resource people, and the roles of these resource people is critical in increasing the likelihood that the children disclose. Thus, efforts need to be made to ensure that children with intellectual disabilities have all of the vocabulary tools and understanding needed to make a report.

In addition, the results have implications for how to modify or add on to existing programs to provide a complete and quality abuse prevention programs. They also can be used for the development of communication boards for children who use alternative and augmented communication systems.

Teaching personal safety vocabulary items is only one approach to prevent child abuse. In order to reduce the risk of child abuse, it is also equally important for children with intellectual disabilities to learn other abuse prevention skills, including self-protection skills, decision-making skills, social-sexual skills, and sexual knowledge. Moreover, other practices can be a crucial element in the reducing the risk of child abuse, such as staff screening, staff training, agency policies dealing with child abuse. Therefore, teaching abuse prevention skills to children with intellectual disabilities needs to be accompanied by efforts to change the administrative, legal, and social conditions.

Implications for Future Research

The results of the present study have several implications for future research. Future studies could be conducted with other significant people in child protection systems, including counsellors, therapists, and health care workers. More studies are also needed to determine age-appropriate vocabulary items for young children, elementary-aged children, and adolescents, and sequence of the vocabulary items. Moreover, effective instructional methods for teaching personal safety vocabulary need to be examined. Finally, future research could be conducted to evaluate the effectiveness of an abuse prevention program to teach personal safety vocabulary to these children.

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APPENDICES

Appendix A: Information/Consent Letter

Dear Potential Participants:

I am a graduate student in the Department of Educational Psychology at the University of Alberta. I am writing to ask if you would be interested in participating in a study that I am conducting for my doctoral dissertation. The purpose of this study is to generate and organize personal safety vocabulary that children with intellectual disabilities need to learn in order to report child abuse.

In the study, focus group interviews will be conducted to get personal safety vocabulary items. There will be separate focus groups for parents, teachers, and investigators (child welfare workers and police officers). A meeting time and location will be set at focus group participants' convenience. The focus group interviews are expected to last for approximately one hour.

After the focus group interview, you will have a short break (approximately 30 minutes) and then be asked to sort a list of the vocabulary items into piles. The sorting task takes roughly 30 minutes. At a later date, you will be asked to sort one comprehensive list of vocabulary items compiled from all of the focus groups. The comprehensive list will be mailed to you along with sorting instructions and a stamped return-envelope. At the end of the study, a verification questionnaire will be mailed to you to verify the research findings.

If you choose to participate in this study, you will have opportunities to obtain ideas about child abuse issues and abuse prevention programs. Additionally, your participation may help you to educate your children, colleagues and community about abuse

prevention skills and/or personal safety vocabulary. Although you will not be at any risk directly from the study, you may be reminded of unpleasant memories relating to child abuse or violence. If you have any questions or concerns, I may be able to recommend resources where you can seek further support.

Your choice to participate in the study is voluntary. You have a right to withdraw from the study at any point without penalty. However, the ideas you have shared during the focus group interview will be used for data analysis after your withdrawal. Because your contributions become part of the compiled data in the course of the focus group interview, it may not be possible to remove your individual ideas. All information obtained during this study will be kept confidential. No specific participant will be referred to by name during the focus group interview or in the reporting of the results. I will also encourage participants to keep confidential what they hear during the interviews. However, I may not guarantee complete confidentiality because you can be recognized by other focus group participants. My research assistant will sign a confidentiality agreement and will comply with the University of Alberta Standards of the Protection for Human Research Participants. All information will be coded and stored in a locked secure location for five years following the study, before being destroyed.

Results of the study will be shared through publication in my doctoral dissertation, a research journal, and presentation at a conference.

The plan for this study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEA REB) at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the EEA REB c/o Betty jo Werthmann at

(780) 492-2261. If you have any questions about the study, please contact me at (780) 716-1945, (780) 988-1690 (after 5:00 pm) or by e-mail at yurik@ualberta.ca. My supervisor at the U of A is Dr. Dick Sobsey. He may be contacted at (780) 492-4505.

Thank you very much for your interest in my study.

Sincerely,

Yu-Ri Kim

(Keep this portion for your records)

I, _____, have read and understand the information letter regarding the study entitled "Personal Safety Vocabulary for Children with Intellectual Disabilities." I agree to participate in this study. I have received a copy of the letter describing the study and this permission slip to keep.

Signature _____

Printed Name _____

Date _____

(Return to Yuri Kim: please bring this slip when you come to the focus group interview)

I, _____, have read and understand the information letter regarding the study entitled "Personal Safety Vocabulary for Children with Intellectual Disabilities." I agree to participate in this study. I have received a copy of the letter describing the study and this permission slip to keep.

Signature _____

Printed Name _____

Date _____

Appendix B: Demographic Information Questionnaire

In presenting the findings of the research study, it would be useful to include some information about the make up of focus groups. This information will be presented in describing the focus groups and no information about individual participants will be disclosed.

For each question below, you will be asked to either check a box () or fill in a blank (_____). Please take your time and answer each question. Thank you.

For Parents

1. Please indicate your gender: _____
2. Please indicate your age: _____
3. Please indicate your ethnicity: _____
4. Please indicate gender of your child/children: _____
5. Please indicate age of your child/children: _____
6. Please indicate ethnicity of your child/children: _____
7. Please indicate the type of disability (if you have a child with disability): _____
8. Your child/children have been abused or neglected? YES NO

If yes, what kind of child abuse? _____

who is an abuser? _____

For Educators

1. Please indicate your gender: _____
2. Please indicate your age: _____
3. Please indicate your ethnicity: _____
4. Please indicate years of service: _____

5. Please indicate your experience in service:

- Teaching abuse prevention programs Developing abuse prevention programs

6. Please indicate gender of children whom you have been developing or teaching to abuse prevention programs: _____

7. Please indicate age range of the children: _____

8. Please indicate ethnicity of the children: _____

9. Some of the children have disabilities? YES NO

If yes, what kind of disabilities? _____

For Investigators

1. Please indicate your gender: _____

2. Please indicate your age: _____

3. Please indicate your ethnicity: _____

4. Please indicate your occupation: Child welfare worker Police officer

5. Please indicate years of service: _____

6. Please indicate gender of children whom you have investigated: _____

7. Please indicate age range of the children: _____

8. Please indicate ethnicity of the children: _____

9. Some of the children have disabilities? YES NO

If yes, what kind of disabilities? _____

Appendix C: Focus Group Interview Guide

Small Talk – ice breaking

Introductory Question - Issues of child abuse and intellectual disability, and the purpose of the study

“Child abuse is a serious problem. In Canada, about 1% of all children are officially confirmed to be abused or neglected. Children with intellectual disabilities are more likely to be abused or neglected than their peers without disabilities. One recent study demonstrates that the children are 4 times as likely to be abused or neglected as children without disabilities. In response to a high risk for child abuse, an attempt has been made to develop abuse prevention programs. However, very little attention has been given to develop such programs for teaching personal safety vocabulary necessary to report child abuse. The purpose of the study is to identify and categorize personal safety vocabulary that children with intellectual disabilities need to learn in order to report child abuse.”

Key Question

“Please generate personal safety vocabulary items that children with intellectual disabilities need to learn in order to report or describe any type of child abuse.”

Probes

“Could you tell me more specific about the item?”

“Could you tell me what the item means/indicates?”

Appendix D: Confidentiality Agreement

Confidentiality Agreement

Study title – Personal Safety Vocabulary for Children with Intellectual Disabilities

I, _____, the research assistant have been hired to report vocabulary items during the interviews.

I agree to –

keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format (e.g., disks, tapes, transcripts) with anyone other than the *Researcher*.

keep all research information in any form or format (e.g., disks, tapes, transcripts) secure while it is in my possession.

return all research information in any form or format (e.g., disks, tapes, transcripts) to the *Researcher* when I have completed the research tasks.

after consulting with the *Researcher*, erase or destroy all research information in any form or format regarding this research project that is not returnable to the *Researcher* (e.g., information stored on computer hard drive).

_____	_____	_____
(print name)	(signature)	(date)

_____	_____	_____
(print name)	(signature)	(date)

Appendix E: Initial Group Lists

The Parent List

1. alone	46. hand	91. <i>pussy</i>
2. arm	47. hang	92. <i>restrain</i>
3. ass	48. hate	93. <i>rope</i>
4. aunt	49. here	94. <i>rub</i>
5. back	50. hit	95. <i>sad</i>
6. bad person	51. hold down	96. <i>scared</i>
7. basement	52. home	97. <i>school</i>
8. bathroom	53. hug	98. <i>secret</i>
9. bed	54. hungry	99. <i>sex</i>
10. big person	55. hurt	100. <i>shake</i>
11. blond hair	56. I	101. <i>shout</i>
12. boob	57. I'll show you	102. <i>sister</i>
13. breasts	58. I'll kill	103. <i>slap</i>
14. bribe	59. in me	104. <i>sofa</i>
15. brother	60. inside	105. <i>spank</i>
16. brown hair	61. intercourse	106. <i>squeeze</i>
17. bum	62. kick	107. <i>stick</i>
18. camera	63. kiss	108. <i>stop</i>
19. car	64. knife	109. <i>stranger</i>
20. cheek	65. leg	110. <i>strong</i>
21. choke	66. lick	111. <i>suck</i>
22. close door	67. lips	112. <i>sweets</i>
23. cock	68. lock	113. <i>take off</i>
24. cry	69. love	114. <i>take pictures</i>
25. cunt	70. made me feel	115. <i>tall person</i>
26. dad	71. man	116. <i>threaten</i>
27. dark	72. mean	117. <i>tie</i>
28. dick	73. mom	118. <i>tongue</i>
29. dirty	74. money	119. <i>touch (private parts)</i>
30. don't love	75. mouth	120. <i>treats</i>
31. don't tell	76. naked	121. <i>trusted person</i>
32. ears	77. neighbour	122. <i>uncle</i>
33. face	78. nice person	123. <i>upstairs</i>
34. fat person	79. nose	124. <i>vagina</i>
35. flash	80. on me	125. <i>video</i>
36. floor	81. outside	126. <i>weenie</i>
37. force	82. pain	127. <i>winkie</i>
38. friend	83. park	128. <i>woman</i>
39. fuck	84. pat	
40. go away	85. pee	
41. good person	86. penis	
42. grab	87. poo	
43. gun	88. prick	
44. gym	89. pull	
45. <i>hair</i>	90. <i>push</i>	

The Educator List

1. abuse	46. ignore	91. <i>surprise</i>
2. afraid	47. isolate	92. <i>swear</i>
3. alone	48. happy	93. <i>talk</i>
4. anus	49. kiss	94. <i>tease</i>
5. appropriate	50. love	95. <i>tell</i>
6. attack	51. lips	96. <i>threaten</i>
7. bad touch	52. listen	97. <i>tickle</i>
8. bad words	53. lock	98. <i>tongue</i>
9. belly button	54. loyalty	99. <i>touch</i>
10. betray	55. mean	100. <i>trick</i>
11. boundaries	56. mouth	101. <i>trust</i>
12. breasts	57. name-calling	102. <i>trusted adult</i>
13. bribe	58. nipple	103. <i>tummy</i>
14. bully	59. no	104. <i>uncomfortable</i>
15. burn	60. no clothes	105. <i>vagina</i>
16. buttocks	61. no food	106. <i>vulva</i>
17. caring adult	62. no healthcare	107. <i>yell</i>
18. coincident	63. no school	
19. confusion	64. not my fault	
20. consent	65. penis	
21. control	66. personal space	
22. cope	67. (phone number)	
23. counsellor	68. police	
24. creepy	69. pornography	
25. disappointed	70. power	
26. discipline	71. privacy	
27. don't like	72. protect	
28. ears	73. punch	
29. embarrass	74. punishment	
30. expose	75. push	
31. fair trade	76. put-down	
32. family	77. responsibility	
33. family violence	78. sad	
34. feelings	79. safe people	
35. finger	80. safety plan	
36. fondle	81. scared	
37. force	82. secret	
38. friend	83. self-esteem	
39. good touch	84. sex	
40. gossip	85. shake	
41. grown-up	86. shame	
42. gut feeling	87. slap	
43. hand	88. spank	
44. hit	89. stop	
45. <i>hurt</i>	90. <i>stranger</i>	

The Investigator List

1. adult stuff	46. game	91. suck
2. angry	47. giggle	92. tickle
3. animal	48. good touch	93. tit
4. ass	49. grandma	94. tongue
5. aunt's home	50. grandpa	95. touch (private parts)
6. babysitter	51. gross	96. truth or dare
7. bad person	52. group home	97. uncle
8. bad touch	53. group sex	98. up and down
9. bathroom	54. hand	99. vagina
10. bathtub	55. happy	100. whack off
11. bed	56. hit	101. white pee
12. blowjob	57. home	102. yucky
13. boob	58. hospital	
14. bother	59. hump	
15. boy parts	60. hurt	
16. boy pee	61. jack off	
17. breasts	62. jerk off	
18. bum	63. kiss	
19. bum hole	64. laugh	
20. bus	65. lick	
21. butt hole	66. lips	
22. camera	67. love	
23. car	68. mad	
24. choke	69. mean	
25. chuksie	70. mess with	
26. church	71. milk	
27. closet	72. mouth	
28. cock	73. nipple	
29. computer	74. not nice	
30. concerned	75. object	
31. cum	76. peanut	
32. cunt	77. pee	
33. dad	78. penis	
34. dick	79. porno magazine	
35. did that thing	80. pornography	
36. doodoo	81. poke	
37. eat out	82. punch	
38. eye	83. pussy	
39. finger	84. rub	
40. flower	85. sad	
41. foster dad	86. scared	
42. foster home	87. sex	
43. friend	88. slap	
44. fuck	89. spoon	
45. funny	90. step dad	

Appendix F: An Initial Comprehensive List

Bold items are generated by three focus groups. *Italics items* are generated by two focus groups.

ITEMS	ITEMS
1. abuse	41. closet
2. afraid	42. computer
3. <i>alone</i>	43. concerned
4. angry	44. confusion
5. animal	45. consent
6. <i>anus</i>	46. control
7. appropriate	47. cope
8. arm	48. counsellor
9. attack	49. creepy
10. aunt	50. cry
11. aunt's home	51. <i>dad</i>
12. babysitter	52. dark
13. back	53. (offender's name) did that thing
14. <i>bad person</i>	54. dirty
15. <i>bad touch</i>	55. disappointed
16. bad words	56. discipline
17. basement	57. don't like (offender's name/description of episode)
18. bathtub	58. don't love
19. <i>bathroom</i>	59. don't tell
20. <i>bed</i>	60. ear
21. betray	61. embarrass
22. big person	62. expose
23. blond hair	63. eye
24. bother	64. face
25. boundaries	65. fair trade
26. breasts	66. family
27. <i>bribe</i>	67. family violence
28. brother	68. fat person
29. brown hair	69. feces
30. bully	70. feelings
31. burn	71. <i>finger</i>
32. bus	72. floor
33. buttocks	73. fondle
34. <i>camera</i>	74. <i>force</i>
35. <i>car</i>	75. foster dad
36. caring adult	76. foster home
37. cheek	77. friend
38. <i>choke</i>	78. funny
39. church	79. game
40. close door	80. giggle

ITEMS	ITEMS
81. go away	121. lips
82. good person	122. listen
83. <i>good touch</i>	123. <i>lock</i>
84. grab	124. love
85. grandma	125. loyalty
86. grandpa	126. mad
87. gross	127. made me feel
88. group home	128. man
89. group sex	129. masturbation
90. grown-up	130. mean
91. gun	131. mess with
92. gut feeling	132. mom
93. gym	133. money
94. hair	134. mouth
95. hand	135. naked
96. hang	136. name-calling
97. <i>happy</i>	137. neighbour
98. hate	138. nice person
99. here	139. <i>nipple</i>
100. hit	140. no
101. hold down	141. no clothes
102. <i>home</i>	142. no food
103. hospital	143. no healthcare
104. hug	144. no school
105. hungry	145. nose
106. hurt	146. not my fault
107. I	147. (offender's name/description of episode) not nice
108. I'll show you	148. object
109. ignore	149. on me
110. I'll kill	150. oral sex
111. in me	151. outside
112. inside	152. pain
113. intercourse	153. park
114. isolate	154. pat
115. kick	155. penis
116. kiss	156. personal space
117. knife	157. (phone number) (e.g., 1-800-387-5437)
118. laugh	158. police
119. leg	159. <i>pornography</i>
120. <i>lick</i>	160. porno magazine

ITEMS	ITEMS
161. power	201. talk
162. privacy	202. tall person
163. private parts	203. tease
164. protect	204. tell
165. pull	205. <i>threaten</i>
166. <i>punch</i>	206. <i>tickle</i>
167. punishment	207. tie
168. <i>push</i>	208. tongue
169. put-down	209. touch
170. responsibility	210. <i>touch (private parts)</i>
171. restrain	211. treats
172. rope	212. trick
173. <i>rub</i>	213. trust
174. sad	214. <i>trusted person/adult</i>
175. safe people	215. truth or dare
176. safety plan	216. tummy
177. scared	217. <i>uncle</i>
178. school	218. uncomfortable
179. <i>secret</i>	219. upstairs
180. self-esteem	220. urine
181. semen	221. vagina
182. sex	222. video
183. <i>shake</i>	223. vulva
184. shame	224. woman
185. shout	225. yell
186. sister	226. yucky
187. slap	
188. sofa	
189. <i>spank</i>	
190. squeeze	
191. step-dad	
192. stick	
193. <i>stop</i>	
194. <i>stranger</i>	
195. strong	
196. <i>suck</i>	
197. surprise	
198. sweets	
199. take off	
200. take pictures	

Appendix G: Rating Questionnaire

Rating Instructions

There were 205 personal safety vocabulary items obtained from three focus groups. The data analysis program I am using for my research work with 98 items or less, so in this questionnaire I am asking you to review the comprehensive list of the 205 items and to narrow it down. To this end, you are asked to give each of the 205 items a rating to indicate how important the item is for children with intellectual disabilities. In other words, the rating should represent the extent to which you think each item (word or phrase) would be relatively important to teach the children in order for them to help describe or report instances of child abuse. Please read the list and rate each one of the items from 1 (the least important) to 5 (the most important) using the following scale.

1	2	3	4	5
the least important				the most important

Please send the record sheet by May 25, 2007.

Thank you for your time.

Contact: Principal investigator: Yu-Ri Kim

Email: yurik@ualberta.ca

*The words and phrases in brackets are not actually part of the items being taught to children. The words can be filled in with a specific thing (e.g., person's name) by teachers and/or children.

ITEMS	RATING	ITEMS	RATING
1. abuse		41. computer	
2. alone		42. concerned	
3. angry		43. confusion	
4. animal		44. consent	
5. anus		45. control	
6. appropriate		46. cope	
7. arm		47. counsellor	
8. attack		48. creepy	
9. aunt		49. cry	
10. aunt's home		50. dad	
11. babysitter		51. dark	
12. back		52. (offender's name) did that thing	
13. bad person		53. dirty	
14. bad touch		54. disappointed	
15. bad words		55. discipline	
16. basement		56. don't like (offender's name/description of episode)	
17. bathtub		57. don't love, hate	
18. bathroom		58. ear	
19. bed		59. embarrass	
20. betray		60. expose	
21. big person		61. eye	
22. blond hair		62. face	
23. bothered		63. fair trade	
24. boundaries		64. family	
25. breasts		65. family violence	
26. bribe, money, sweets, treats		66. fat person	
27. brother		67. feces	
28. brown hair		68. feelings	
29. bully		69. finger	
30. burn		70. floor	
31. bus		71. fondle	
32. buttocks		72. force	
33. camera, take pictures		73. foster dad	
34. car		74. foster home	
35. caring adult		75. friend	
36. cheek		76. funny	
37. choke		77. game	
38. church		78. giggle, laugh	
39. close door		79. go away	
40. closet		80. good person	

ITEMS	RATING	ITEMS	RATING
81. good touch		121. made me feel	
82. grab		122. man	
83. grandma		123. masturbation	
84. grandpa		124. mean	
85. gross		125. mess with	
86. group home		126. mom	
87. group sex		127. mouth	
88. grown-up		128. naked, take off	
89. gun		129. name-calling	
90. gut feeling		130. neighbour	
91. gym		131. nice person	
92. hair		132. nipple	
93. hand		133. no	
94. hang		134. no clothes	
95. happy		135. no food	
96. here		136. no healthcare	
97. hit, slap, spank		137. no school	
98. hold down, restrain, tie		138. nose	
99. home		139. not my fault	
100. hospital		140. (offender's name/description of episode) not nice	
101. hug		141. object	
102. hungry		142. on me	
103. hurt, pain		143. oral sex	
104. I		144. outside	
105. I'll show you		145. park	
106. ignore		146. pat	
107. in me		147. penis	
108. inside		148. personal space	
109. intercourse		149. (phone number) (e.g., 1-800-387-5437)	
110. kick		150. police	
111. kiss		151. pornography, porno magazine	
112. knife		152. power	
113. leg		153. privacy	
114. lick		154. private parts	
115. lips		155. protect	
116. listen		156. pull	
117. lock, isolate		157. punch	
118. love		158. punishment	
119. loyalty		159. push	
120. mad		160. put-down	

ITEMS	RATING	ITEMS	RATING
161. responsibility		201. vagina, vulva	
162. rope		202. video	
163. rub		203. woman	
164. sad		204. yell, shout	
165. safety plan		205. yucky	
166. scared, afraid			
167. school			
168. secret, don't tell (somebody)			
169. self-esteem			
170. semen			
171. sex			
172. shake			
173. shame			
174. sister			
175. sofa			
176. squeeze			
177. step-dad			
178. stick			
179. stop			
180. stranger			
181. strong			
182. suck			
183. surprise			
184. talk, tell			
185. tall person			
186. tease			
187. threaten, I (offender's name)'ll kill			
188. tickle			
189. tongue			
190. touch			
191. touch (private parts)			
192. trick			
193. trusted			
194. trusted person/adult, safe people			
195. truth or dare			
196. tummy			
197. uncle			
198. uncomfortable			
199. upstairs			
200. urine			

Appendix H: Rating Scores

***Bold items** were determined to be retained in the comprehensive list.

ITEMS	RATING	ITEMS	RATING
1. abuse	4.07	41. computer	3.00
2. alone	3.57	42. concerned	2.50
3. angry	3.71	43. confusion	3.07
4. animal	1.86	44. consent	3.29
5. anus	3.93	45. control	3.64
6. appropriate	3.43	46. cope	2.21
7. arm	2.93	47. counsellor	3.21
8. attack	3.36	48. creepy	3.21
9. aunt	2.43	49. cry	3.79
10. aunt's home	2.29	50. dad	3.36
11. babysitter	3.57	51. dark	2.64
12. back	2.93	52. (offender's name) did that thing	4.00
13. bad person	4.07	53. dirty	3.21
14. bad touch	4.71	54. disappointed	2.21
15. bad words	4.57	55. discipline	2.79
16. basement	2.57	56. don't like (offender's name/description of episode)	4.29
17. bathtub	3.07	57. don't love, hate	3.21
18. bathroom	3.21	58. ear	2.00
19. bed	3.36	59. embarrass	3.07
20. betray	2.64	60. expose	3.93
21. big person	3.64	61. eyes	2.00
22. blond hair	2.43	62. face	2.43
23. bothered	3.29	63. fair trade	2.21
24. boundaries	2.93	64. family	3.21
25. breasts	4.57	65. family violence	3.57
26. bribe, money, sweets, treats	4.43	66. fat person	2.00
27. brother	3.21	67. feces	2.29
28. brown hair	1.93	68. feelings	4.57
29. bully	3.71	69. finger	3.43
30. burn	3.71	70. floor	2.07
31. bus	2.57	71. fondle	3.79
32. buttocks	4.64	72. force	3.93
33. camera, take pictures	4.00	73. foster dad	3.14
34. car	3.07	74. foster home	3.14
35. caring adult	4.00	75. friend	4.21
36. cheek	2.57	76. funny	2.14
37. choke	3.79	77. game	3.00
38. church	1.86	78. giggle, laugh	2.43
39. close door	2.86	79. go away	3.43
40. closet	2.57	80. good person	4.00

ITEMS	RATING	ITEMS	RATING
81. good touch	4.50	121. made me feel	4.36
82. grab	4.14	122. man	3.57
83. grandma	3.07	123. masturbation	3.93
84. grandpa	3.07	124. mean	3.79
85. gross	3.14	125. mess with	2.43
86. group home	2.50	126. mom	3.29
87. group sex	2.71	127. mouth	4.07
88. grown-up	3.57	128. naked, take off	4.64
89. gun	3.07	129. name-calling	3.79
90. gut feeling	2.71	130. neighbour	2.64
91. gym	1.79	131. nice person	3.79
92. hair	2.29	132. nipple	4.21
93. hand	3.57	133. no	4.43
94. hang	2.07	134. no clothes	4.36
95. happy	3.21	135. no food	3.43
96. here	2.79	136. no healthcare	2.43
97. hit, slap, spank	4.64	137. no school	2.64
98. hold down, restrain, tie	4.36	138. nose	2.57
99. home	3.14	139. not my fault	4.21
100. hospital	2.86	140. (offender's name/description of episode) not nice	3.86
101. hug	4.21	141. object	1.50
102. hungry	3.29	142. on me	3.93
103. hurt, pain	3.86	143. oral sex	3.50
104. I	3.15	144. outside	3.14
105. I'll show you	3.21	145. park	2.43
106. ignore	2.17	146. pat	2.29
107. in me	4.21	147. penis	4.79
108. inside	4.21	148. personal space	3.29
109. intercourse	3.79	149. (phone number) (e.g., 1-800-387-5437)	3.86
110. kick	4.00	150. police	4.64
111. kiss	4.43	151. pornography, porno magazine	3.86
112. knife	3.57	152. power	3.07
113. leg	2.79	153. privacy	3.93
114. lick	3.79	154. private parts	4.86
115. lips	3.71	155. protect	3.79
116. listen	3.07	156. pull	3.29
117. lock, isolate	3.43	157. punch	4.00
118. love	4.14	158. punishment	3.43
119. loyalty	2.43	159. push	3.64
120. mad	3.36	160. put-down	3.36

ITEMS	RATING	ITEMS	RATING
161. responsibility	3.14	201. vagina, vulva	4.93
162. rope	3.21	202. video	3.92
163. rub	4.07	203. woman	3.07
164. sad	4.43	204. yell, shout	3.79
165. safety plan	3.29	205. yucky	3.36
166. scared, afraid	4.71		
167. school	3.21		
168. secret, don't tell (somebody)	5.00		
169. self-esteem	2.29		
170. semen	3.21		
171. sex	4.50		
172. shake	3.71		
173. shame	3.00		
174. sister	2.86		
175. sofa	2.29		
176. squeeze	3.07		
177. step-dad	3.07		
178. stick	2.71		
179. stop	4.57		
180. stranger	4.71		
181. strong	2.93		
182. suck	4.00		
183. surprise	2.93		
184. talk, tell	4.79		
185. tall person	2.64		
186. tease	2.86		
187. threaten, I (offender's name)'ll kill	4.36		
188. tickle	3.71		
189. tongue	4.21		
190. touch	4.36		
191. touch (private parts)	4.86		
192. trick	3.57		
193. trust	3.50		
194. trusted person/adult, safe people	4.36		
195. truth or dare	2.86		
196. tummy	3.64		
197. uncle	3.07		
198. uncomfortable	4.36		
199. upstairs	2.64		
200. urine	2.92		

Appendix I: Sorting Instructions

Sorting Instructions

You are given a list of personal safety vocabulary items. Your task is to take a look at all vocabulary items on the slips of paper and sort them into piles that make sense to you. In other words, you are asked to organize vocabulary items into groups based on *conceptual similarity*. You are also asked to provide a name/label for each pile. This name should be a word or short phrase that best describes the vocabulary items in the particular pile.

There are few guidelines you should follow:

1. You can sort the items into as many groups as you wish. If you discover several ways the items can be sorted, please choose the one that makes best sense to you.
2. Each item can only be placed in one pile (One item cannot be placed into two piles simultaneously).
3. All items cannot be placed into a single pile.
4. All items cannot be put into their own pile. Generally the piles should contain two or more items. However, there may be some cases where a particular item will not fit into any groups with other items and thus becomes its own group.
5. When you are finished, please write a name for each pile on Post-it Notes and put the label on the top of each pile.
6. Please clip each pile and a label together and place all piles into an envelope.

Thank you for your time and interest

Sincerely,

Yu-Ri Kim

Appendix J: Verification Questionnaire

Verification Questionnaire

This letter is part of a research study in which you are taking part. The purpose of a verification questionnaire is to let you share any comments that you wish to make about the results of the study. Your response to the questionnaire is of great importance to verify the results. This questionnaire will take approximately 15 minutes to complete. Your participation is, of course, voluntary. Your confidentiality and anonymity are assured.

I greatly appreciate your time and interest. Please send the questionnaire by October 26, 2007.

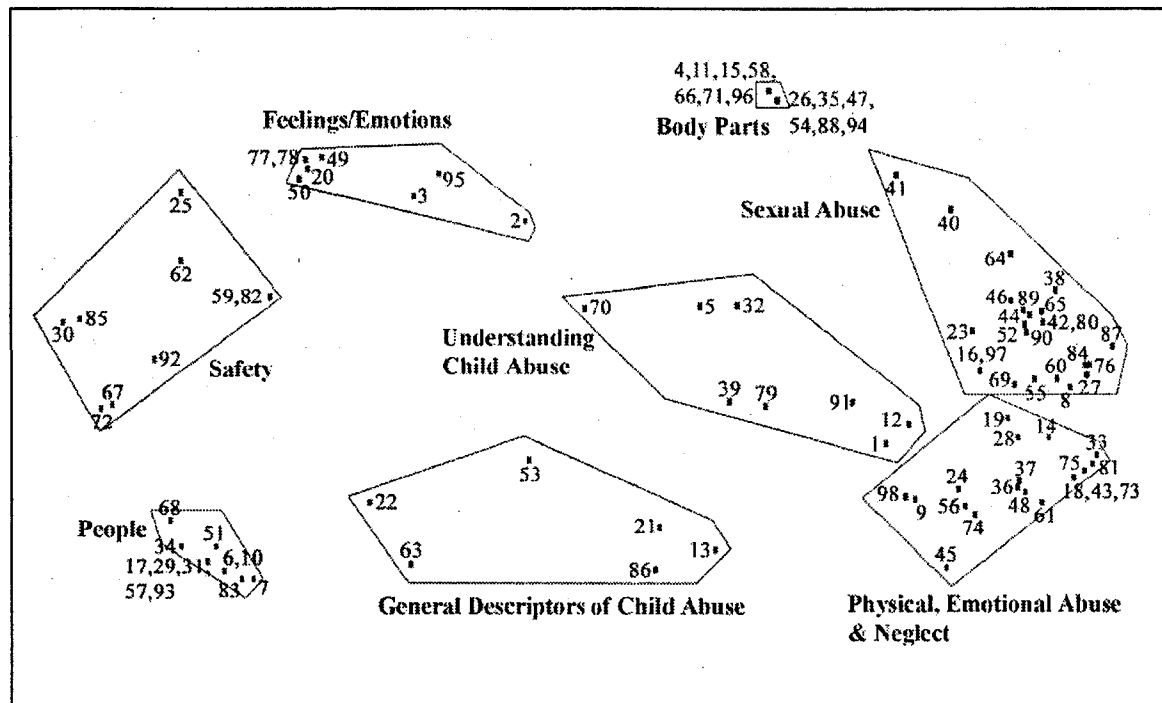
Contact: Principal investigator: Yu-Ri Kim

Email: yurik@ualberta.ca

Results of The Study

On the next page is a comprehensive concept map that shows the main result of this study. The comprehensive map displays 8 conceptual categories of 98 items. The 98 items were chosen as a result of rating of importance given to 205 items (all items generated by parents, educators, and investigators) by participants in this study. The 8 categories came from a combination of the participants' sorting. The name of each category was determined based on the typical title given by the participants. Therefore, the concept map represents the collective opinions of the participants. A brief description of each category and items composing of each category is provided below.

The Comprehensive Concept Map



This map represents vocabulary items identified by three focus groups and categories of the items based on conceptual similarities perceived by the focus groups.

Understanding Child Abuse: This category contains words necessary to understand basic concepts of child abuse, including '1. abuse,' '5. appropriate,' '12. bribe, money, sweets, treats,' '32. good touch,' '39. hurt, pain,' '70. privacy,' '79. secret, don't tell,' and '91. trick.'

Safety: This category contains words necessary to respond safely and cope with child abuse, including '25. feelings,' '30. go away,' '59. no,' '62. not my fault,' '67. (phone number),' '72. protect,' '82. stop,' '85. talk, tell,' and '92. trust.'

Sexual abuse: This category contained words necessary to report sexual abuse, including '8. bad touch,' '16. camera, take pictures,' '23. expose,' '27. fondle,' '38. hug,' '40. in

me,' '41. inside,' '42. intercourse,' '44. kiss,' '46. lick,' '52. masturbation,' '55. naked, take off,' '60. no clothes,' '64. on me,' '65. oral sex,' '69. pornography, porno magazine,' '76. rub,' '80. sex,' '84. suck,' '87. tickle,' '89. touch,' '90. touch (private parts),' and '97. video.'

Physical, emotional abuse and neglect: This category contains words necessary to report physical and emotional abuse as well as neglect, including '9. bad words,' '14. burn,' '18. choke,' '19. control,' '24. family violence,' '28. force,' '33. grab,' '36. hit, slap, spank' '37. hold down, restrain, tie,' '43. kick,' '45. knife,' '48. lock, isolate,' '56. name-calling,' '61. no food,' '73. punch,' '74. punishment,' '75. push,' '81. shake' and '98. yell, shout'

General descriptors of child abuse: This category contains words that can be used to report child abuse in non-specific ways, including '13. bully,' '21. did that thing,' '22. don't like,' '53. mean,' '63. not nice,' and '86. threaten, I'll kill.'

Feelings/Emotions: This category contains words necessary to label emotions, including '2. alone,' '3. angry,' '20. cry,' '49. love,' '50. made me feel,' '77. sad,' '78. scared, afraid,' and '95. uncomfortable.'

Body parts: This category contains the names of body parts, including '4. anus,' '11. breasts,' '15. buttocks' '26. finger,' '35. hand,' '47. lips,' '54. mouth,' '58. nipple,' '66. penis,' '71. private parts,' '88. tongue,' '94. tummy,' and '96. vagina, vulva.'

People: This category contains words necessary to describe people who may play some role in child abuse incidents or in child protection, including '6. babysitter,' '7. bad person,' '10. big person,' '17. caring adult,' '29. friend,' '31. good person,' '34. grown-

up,' '51. man,' '57. nice person,' '68. police,' '83. stranger,' and '93. trusted person/adult, safe people.'

■ Please let me know what you think about the results of the study. Feel free to comment on anything that you like.

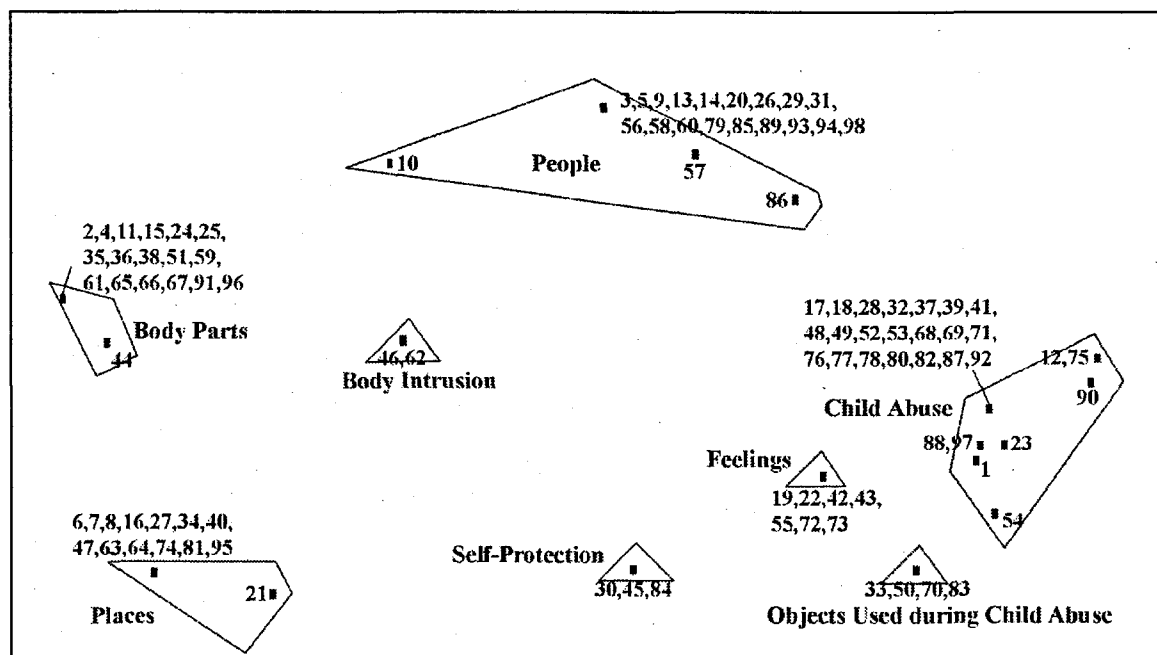
1. Does the comprehensive concept map make sense to you? If not, please indicate how you would like to see it changed and explain why.

2. If you have any other comments on the comprehensive map, please describe them

For Parents

On this page is a parent concept map that shows the secondary results of this study. The parent concept map displays 8 conceptual categories of 98 items. The 98 items were identified by parent focus group. The 8 categories came from a combination of the parents' sorting. The name of each category was determined based on the title given by the parents. Therefore, the parent map represents the collective opinions of the parents. A brief description of each category and items composing of each category is presented below.

The Parent Concept Map



Self-protection: This category contains words necessary to respond safely to child abuse, including '30. go away,' '45. I'll show you,' and '84. stop.'

Child abuse: This category contains words necessary to understand basic concepts of child abuse, including '12. bribe, money, sweets, treats,' '75. secret, don't tell,' and '90.

threaten, I'll kill.' It also contains words necessary to report sexual, physical, and emotional abuse, including '1. alone,' '17. choke,' '18. close door,' '23. don't love, hate,' '28. force,' '32. grab,' '37. hang,' '39. hold down, restrain, tie,' '41. hug,' '48. kick,' '49. kiss,' '52. lick, suck,' '53. lock,' '54. love,' '68. pull,' '69. push,' '71. rub, pat,' '76. sex, intercourse,' '77. shake,' '78. shout,' '80. slap, hit, spank,' '82. squeeze,' '87. take off, naked,' '88. take pictures, camera,' '92. touch (private parts),' and '97. video.'

Objects used during child abuse: This category contains the names of harmful objects or tools that may be used during child abuse, including '33. gun,' '50. knife,' '70. rope,' and '83. stick.'

Feelings: This category contains words necessary to label emotions, such as '19. cry,' '22. dirty,' '42. hungry,' '43. hurt, pain,' '55. made me feel,' '72. sad,' and '73. scared.'

Body parts: This category contains the names of body parts, including '2. arm,' '4. back,' '11. breasts, boob,' '15. bum, ass,' '24. ears,' '25. face, cheek,' '35. hair,' '36. hand,' '38. here,' '44. I,' '51. leg,' '59. mouth, lips,' '61. nose,' '65. pee,' '66. penis,' '67. poo,' '91. tongue,' and '96. vagina.'

Body intrusion: This category contains words necessary to describe something that happened to one's body during child abuse, including '46. in me' and '62. on me.'

People: This category contains words necessary to describe people who may play some role in child abuse incidents or in child protection, including '3. aunt,' '5. bad person,' '9. big person,' '10. blond hair,' '13. brother,' '14. brown hair,' '20. dad,' '26. fat person,' '29. friend,' '31. good person,' '56. man,' '57. mean,' '58. mom,' '60. neighbour,' '79. sister,' '85. stranger,' '86. strong,' '89. tall person,' '93. trusted person, nice person,' '94. uncle,' and '98. woman.'

Places: This category contains words necessary to report locations, including '6. basement,' '7. bathroom,' '8. bed,' '16. car,' '21. dark,' '27. floor,' '34. gym,' '40. home,' '47. inside,' '63. outside,' '64. park,' '74. school,' '81. sofa,' and '95. upstairs.'

■ Please let me know what you think about the parent concept map. Feel free to comment on anything that you like.

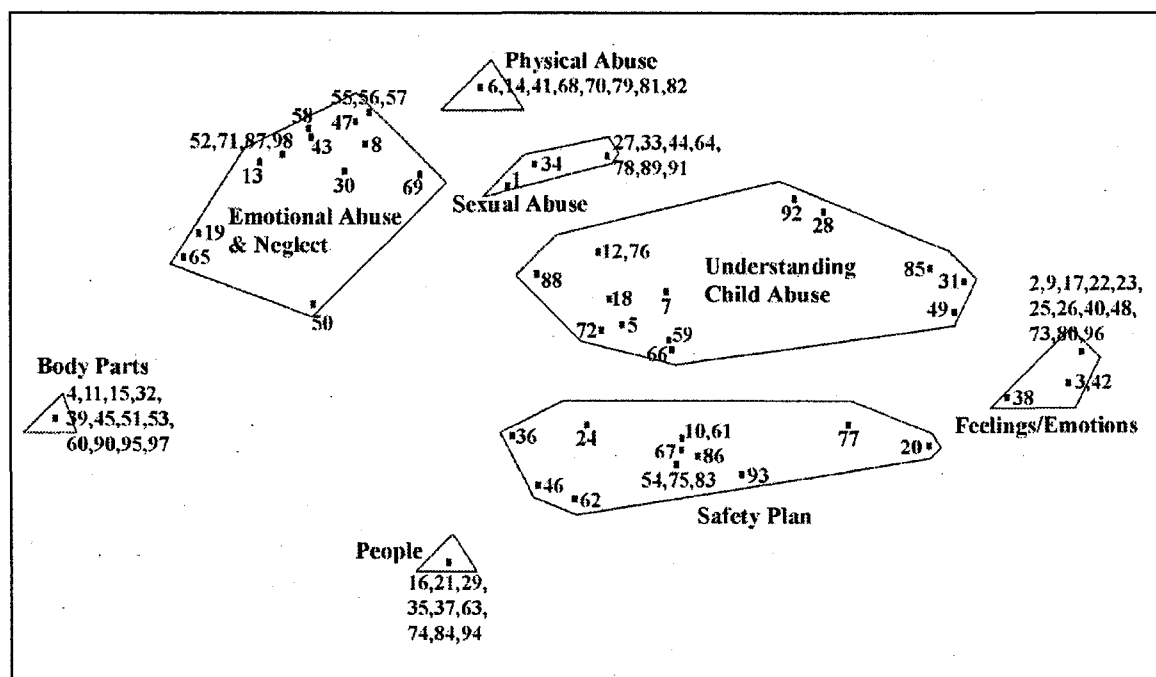
1. Does the parent concept map make sense to you? If not, please indicate how you would like to see it changed and explain why.

2. If you have any other comments on the parent map, please describe them.

For Educators

On this page is an educator concept map that shows the secondary results of this study. The educator concept map displays 8 conceptual categories of 98 items. The 98 items were identified by educator focus group. The 8 categories came from a combination of the educators' sorting. The name of each category was determined based on the title given by the educators. Therefore, the educator map represents the collective opinions of the educators. A brief description of each category and items composing of each category is presented below.

The Educator Concept Map



Understanding child abuse: This category contains words necessary to understand basic concepts of child abuse, including '5. appropriate,' '7. bad touch,' '12. bribe,' '18. consent,' '28. fair trade,' '31. feelings,' '49. loyalty,' '59. not my fault,' '66. privacy,' '72. responsibility,' '76. secret,' '85. surprise,' '88. threaten,' and '92. trick.'

Safety plan: This category contains words necessary to respond safely to and cope with child abuse, including '10. boundaries,' '20. cope,' '24. discipline,' '36. good touch,' '46. listen,' '54. no,' '61. personal space,' '62. (phone number),' '67. protect,' '75. safety plan,' '77. self-esteem,' '83. stop,' '86. talk, tell,' and '93. trust.'

Sexual abuse: This category contains words necessary to report sexual abuse, including '1. abuse,' '27. expose,' '33. fondle,' '34. force,' '44. kiss,' '64. pornography,' '78. sex,' '89. tickle,' and '91. touch.'

Physical abuse: This category contains words necessary to report physical abuse, including '6. attack,' '14. burn,' '41. hit,' '68. punch,' '70. push,' '79. shake,' '81. slap,' and '82. spank.'

Emotional abuse and neglect: This category contains words necessary to report emotional abuse and neglect, including '8. bad words,' '13. bully,' '19. control,' '30. family violence,' '43. ignore,' '47. lock, isolate,' '50. mean,' '52. name-calling,' '55. no clothes,' '56. no food,' '57. no healthcare,' '58. no school,' '65. power,' '69. punishment,' '71. put-down,' '87. tease,' and '98. yell.'

Feelings/Emotions: This category contains words necessary to label emotions, including '2. afraid, scared,' '3. alone,' '9. betray,' '17. confusion,' '22. creepy,' '23. disappointed,' '25. don't like,' '26. embarrass,' '38. gut feeling,' '40. happy,' '42. hurt,' '48. love,' '73. sad,' '80. shame,' and '96. uncomfortable.'

Body parts: This category contains the names of body parts, including '4. anus,' '11. breasts,' '15. buttocks,' '32. finger,' '39. hand,' '45. lips,' '51. mouth,' '53. nipple,' '60. penis,' '90. tongue,' '95. tummy,' and '97. vagina, vulva.'

People: This category contains words necessary to describe people who may play some role in child abuse incidents or in child protection, including '16. caring adult,' '21. counsellor,' '29. family,' '35. friend,' '37. grown-up,' '63. police,' '74. safe people,' '84. stranger,' and '94. trusted adult.'

■ Please let me know what you think about the educator concept map. Feel free to comment on anything that you like (attach another sheet of paper, if necessary).

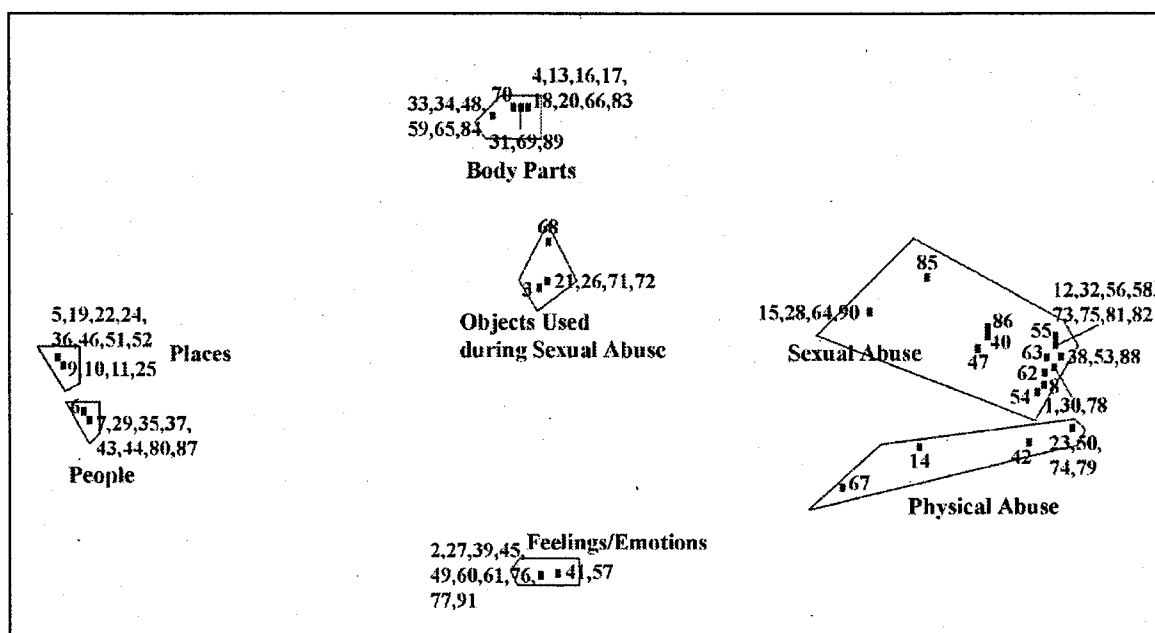
1. Does the educator concept map make sense to you? If not, please indicate how you would like to see it changed and explain why.

2. If you have any other comments on the educator map, please describe them.

For Investigators

On this page is an investigator concept map that shows the secondary results of this study. The investigator concept map displays 7 conceptual categories of 91 items. The 91 items were identified by investigator focus group. The 7 categories came from a combination of the investigators' sorting. The name of each category was determined based on the title given by the investigators. Therefore, the investigator map represents the collective opinions of the investigators. A brief description of each category and items composing of each category is presented below.

The Investigator Concept Map



Sexual abuse: This category contains words necessary to report sexual abuse, including '1. adult stuff,' '8. bad touch,' '12. blowjob,' '15. boy pee,' '28. cum,' '30. did that thing,' '32. eat out,' '38. fuck,' '40. game,' '47. group sex,' '53. hump,' '54. hurt,' '55. jerk off, jack off, whack off,' '56. kiss,' '58. lick,' '62. mean,' '63. mess with,' '64.

milk,' '73. poke,' '75. rub,' '78. sex,' '81. suck,' '82. tickle,' '85. touch (private parts),' '86. truth or dare,' '88. up and down,' and '90. white pee.'

Objects used during sexual abuse: This category contains names of objects that can be used during sexual abuse, including '3. animal,' '21. camera,' '26. computer,' '68. objects,' '71. porno magazine,' and '72. pornography.'

Physical abuse: This category contains words necessary to report physical abuse, including '14. bother,' '23. choke,' '42. good touch,' '50. hit,' '67. not nice,' '74. punch,' and '79. slap.'

Feelings/Emotions: This category contains words necessary to label emotions, including '2. angry,' '27. concerned,' '39. funny,' '41. giggle,' '45. gross,' '49. happy,' '57. laugh,' '60. love,' '61. mad,' '76. sad,' '77. scared,' and '91. yucky.'

Body parts: This category contains the names of body parts, including '4. ass,' '13. boob,' '16. breasts,' '17. bum,' '18. bum hole,' '20. butt hole,' '31. doodoo,' '33. eye,' '34. finger,' '48. hand,' '59. lips,' '65. mouth,' '66. nipple,' '69. private parts,' '70. penis,' '83. tit,' '84. tongue,' and '89. vagina.'

People: This category contains words necessary to describe people who may play some role in child abuse incidents or in child protection, including '6. babysitter,' '7. bad person,' '29. dad,' '35. foster dad,' '37. friend,' '43. grandma,' '44. grandpa,' '80. step dad,' and '87. uncle.'

Places: This category contains words necessary to report locations, including '5. aunt's home,' '9. bathroom,' '10. bath tub,' '11. bed,' '19. bus,' '22. car,' '24. church,' '25. closet,' '36. foster home,' '46. group home,' '51. home,' and '52. hospital.'

■ Please let me know what you think about the investigator concept map. Feel free to comment on anything that you like (attach another sheet of paper, if necessary).

1. Does the investigator concept map make sense to you? If not, please indicate how you would like to see it changed and explain why.

2. If you have any other comments on the investigator map, please describe them.

Appendix K: Individual Pile Titles

The Comprehensive Concept Map

Selected Labels	<i>Closest Individual Sort Pile Titles</i>
Understanding Child Abuse	<i>Child abuse Terminology to explain abuse Abusive actions Tactics</i>
Safety	<i>Words that must be understood to help keep someone safe Safety Prevention Safety plan words Ways to protect yourself</i>
Sexual Abuse	<i>Sexual abuse Words associated with sexual contact Sexual expression Sexual descriptors Sexual acts</i>
Physical, Emotional Abuse & Neglect	<i>Type of abuse Physical abuse Emotional abuse Abusive actions</i>
General Descriptors of Child Abuse	<i>Words that could be used to describe abuse Offender descriptors Description of event Abuse descriptors</i>
Feelings (Emotions)	<i>Words describe emotions or feelings Emotions Feelings What child may feel after/during abuse</i>
Body Parts	<i>Words to describe body parts Body parts Relating to body parts to describe abuse Parts of body</i>
<i>People</i>	<i>People who may or may not involved in abuse People Who Descriptions of adults Good/ bad people</i>

The Parent Concept Map

Selected Labels	<i>Closest Individual Sort Pile Titles</i>
Self-Protection	<i>Words to prevent abuse What I do (Protection) Kids try to communicate</i>
Child Abuse	<i>Words describing the abuse What happen Scene of what happened Describe actions</i>
Objects Used during Child Abuse	<i>Words describing weapons Things the kids saw or received Things people could use to harm a child</i>
Feelings	<i>How I feel The feelings of the kids Describe how a child feels</i>
Body Parts	<i>Words describing the body Parts of the body Describe child's body</i>
Body Intrusion	<i>Words describing the body Parts of the body Describe child's body</i>
People	<i>Words describing the abusers Describe people Who hurt you</i>
<i>Places</i>	<i>Words describing the place of abuse Where did person hurt you Vocabulary about the place</i>

The Educator Concept Map

Selected Labels	<i>Closest Individual Sort Pile Titles</i>
Understanding Child Abuse	<i>Words that abusers might use to coerce children</i> <i>Characteristics of abusive behaviours</i> <i>Good things/rights</i> <i>Words associated with abuse</i>
Safety Plan	<i>Personal safety</i> <i>Personal resources</i> <i>Safety plan</i> <i>Teachable methods</i>
Sexual Abuse	<i>Sexual abuse</i> <i>Types of abuse</i>
Physical Abuse	<i>Physical abuse</i> <i>Forms of physical abuse</i> <i>Types of abuse</i>
Emotional Abuse and Neglect	<i>Emotional abuse</i> <i>Neglect</i> <i>Verbal abuse</i>
Feelings (Emotions)	<i>Feelings/emotions</i> <i>Feelings</i>
Body Parts	<i>Body parts</i>
<i>People</i>	<i>People who might be involved</i> <i>Other people resources</i> <i>Adults</i> <i>People</i>

The Investigator Concept Map

Selected Labels	Closest Individual Sort Pile Titles
Sexual Abuse	Action words describe sexual action Words to describe sexual abuse, action Sexual abuse descriptors Description of the sex act
Physical Abuse	Physical abuse descriptors Words used to describe physical assault Descriptors of physical abuse Words that describe physical abuse
Objects Used during Sexual Abuse	Items that may be used before or during abuse Things/objects used during sex abuse Words for things that may be part of the abuse Things that an offender may use when offending on a child
Feelings (Emotions)	Emotions Feelings Feelings or emotions they may used to describe How they felt or we will see during interviews
Body Parts	Body parts Body part descriptors
People	People who may be described as the person who did something to them, abused them, or may know it has occurred Possible offenders Words for people in child's life
Places	Place where abuse takes place Place they may describe as where the abuse occurred