ISPCAN Child Abuse Screening Tools Retrospective version (ICAST-R): Delphi study and field testing in seven countries

Michael P. Dunne\textsuperscript{a,}\textsuperscript{*}, Adam J. Zolotor\textsuperscript{b}, Desmond K. Runyan\textsuperscript{b}, Inna Andreva-Miller\textsuperscript{c}, Wan Yuen Choo\textsuperscript{d}, Simon K. Dunne\textsuperscript{a}, Bernard Gerbaka\textsuperscript{e}, Oksana Isaeva\textsuperscript{f}, Dipty Jain\textsuperscript{g}, Mohd Sham Kasim\textsuperscript{h}, Bonnie Macfarlane\textsuperscript{a}, Nurgul Mamyrova\textsuperscript{c}, Clemencia Ramirez\textsuperscript{i}, Elena Volkova\textsuperscript{f}, Randa Youssef\textsuperscript{j}

\textsuperscript{a} School of Public Health, Queensland University of Technology, Victoria Park Road, Kelvin Grove 4059, Brisbane, Queensland, Australia
\textsuperscript{b} University of North Carolina, Chapel Hill, USA
\textsuperscript{c} Chui Oblast Hospital, Chui Oblast, Kyrgyzstan
\textsuperscript{d} Department of Social and Preventive Medicine, University of Malaya, Kuala Lumpur, Malaysia
\textsuperscript{e} Universite Saint-Joseph, Beirut, Lebanon
\textsuperscript{f} Nizhniy Novgorod State Pedagogical University, Nizhniy Novgorod, Russia
\textsuperscript{g} Department of Pediatrics, Government Medical College, Nagpur, India
\textsuperscript{h} Universiti Putra Malaysia, Kuala Lumpur, Malaysia
\textsuperscript{i} Universidad de Los Andes, Bogota, Colombia
\textsuperscript{j} Alexandria University Faculty of Medicine, Alexandria, Egypt

\textbf{Article info}

\textbf{Article history:}
Received 5 February 2009
Received in revised form 15 August 2009
Accepted 14 September 2009
Available online 22 October 2009

\textbf{Keywords:}
Child abuse
Retrospective questionnaire
Young adults
International field test

\textbf{Abstract}

\textbf{Objectives:} To gain consensus among an ethnically and linguistically diverse group of international child protection experts on the structure and content of a new survey tool for retrospective measurement of child abuse, and to determine the performance of the instrument through an international field trial with young adults.

\textbf{Methods:} The questionnaire was developed through focus group discussions with international experts, and then subjected to a Delphi study in two waves to determine the perceived importance and translatability of items. The resultant questionnaire was translated into six languages and field tested in seven countries with convenient samples of young adults aged 18–26 years ($N=842$).

\textbf{Results:} Child maltreatment experts from 28 countries provided input to questionnaire development. Satisfactory agreement on draft item inclusion and exclusion and the translatability of items was gained. The tool includes 15 primary questions about potentially abusive physical, sexual and emotional events, with follow-up questions about perpetrator characteristics, frequency of acts and periods in childhood when the recalled abuse occurred. The field test revealed lifetime prevalence per item usually exceeded 10\% (11/15 items; range 2.1–49.5\%). Internal consistency (Cronbach’s alpha) was moderate to high for each of three item sub-sets (between .61 and .82) and the rates of missing data were low (less than 1.5\% for 14 of 15 items). The great majority of respondents nominated either peer and/or adult perpetrators (between 82.3\% and 98.2\% depending upon the item), and among these, child/adolescent peers and non-family adults (including teachers for emotional and physical acts) were nominated often.

\textbf{Conclusions:} The ICAST-R is based on consensus from international experts, translates clearly and has satisfactory properties for adoption as a survey tool to estimate prevalence and describe perpetrators and other contextual aspects of child abuse.
Introduction

One of the most frequent approaches to studying child maltreatment (CM) in community samples has been to survey adolescents and young adults about events that occurred during their recent childhood (Fergusson & Mullen, 1999; Hardt & Rutter, 2004). Once limited mainly to affluent, English-speaking countries, such studies are now being undertaken throughout the world (Pinheiro, 2006). In time, a comprehensive picture of global trends in the prevalence and correlates of child abuse and neglect should emerge. This will enable analysis of fundamental questions about the causes of variation between and within countries, cultures and ethnic groups (Elliot & Urquiza, 2006) which hopefully will create new insights into ways in which children can be protected from violence.

However, growth in survey activity does not necessarily generate a clear picture, at least in the short term. This is well illustrated in the accumulated evidence from many hundreds of retrospective surveys of young people over more than three decades in English-speaking western nations. Typically, reviews find very wide variation in prevalence and incidence estimates even among otherwise comparable samples (Fergusson & Mullen, 1999; Finkelhor, 1994; Gilbert et al., 2008; Gorey & Leslie, 1997; Pereda, Guilera, Forns, & Gomez-Benito, 2009). Further, there is considerable variation in patterns of putative causal factors and the consequences of abuse and neglect (Elliot & Urquiza, 2006). Such wide variation in estimates and a lack of consistency in findings regarding the impact of child abuse on health and well-being has been used by some to throw doubt on the validity of maltreatment research, particularly that which is focused on sexual abuse experiences (Rind, Tromovitch, & Bauserman, 1998, 2001).

In resource-rich countries that have strong social science infrastructure, researchers can afford to “stand back a little” and observe the data as they come in from many sites. Comprehensive reviews can eventually establish best estimates about what is normal for the population and determine robust trends over time, between ethnic groups and other social and cultural variables (e.g., Gilbert et al., 2008). In resource-poor environments however, such composite pictures often are patchy, if they can be sketched at all. When it is feasible to do only a few studies in a population, there is a high opportunity cost of methodologically flawed research.

Researchers planning retrospective surveys with young people face a challenge to select the most appropriate instruments for their population. Many published tools vary widely in length, operational definitions of abuse types, specificity of items and psychometric properties (Hamby & Finkelhor, 2001; Hulme, 2004, 2007). Some tools have been developed for one-time use, while others are modified versions of published tools and thus have limited comparability between studies. In her analysis of tools for Child Sexual Abuse (CSA) research reported in 132 publications from 1986 to 2001, Hulme (2004) found that a major weakness was that none appeared to be based on consensus among experts regarding the operational definition of CSA.

The psychometric properties of existing scales for measurement of child abuse and neglect by retrospective self-report have been reviewed elsewhere (Hamby & Finkelhor, 2001; Hulme, 2007; Stowman & Donohue, 2005; Straus & Kantor, 2005). These tools have many positive elements and various studies have yielded important data. However, their usefulness across cultures may be limited by several factors. Some tools have been framed specifically to explore parent or other adult-initiated violence, in part because this maps readily onto Child Protection Systems and/or crime data in western countries. This is especially a characteristic of tools that assess sexual abuse, as the questions can be highly specific about the age of the child at the time and the relative age difference from the perpetrator (Pereda et al., 2009). The structure and content of many tools seems to reflect the idea that adult to child abuse is of paramount importance. Often, violence and other maltreatment perpetrated by peers is either not included or is reduced to a small number of questions. This does not appear to be based on evidence that abuse by peers and siblings is less common or less harmful than is violence perpetrated by parents or other adults. Indeed, recent evidence suggests that peer and sibling violence during childhood might be as harmful to health and development of victims (Finkelhor, Turner, & Ormrod, 2006).

Another limitation is that some tools appear on face value to have poor translatable. For example, scales include items such as “you were emotionally abused,” “you were sexually molested,” or “you were hit hard enough to see the doctor.” The meanings of the word “abuse” and “molested” vary widely between cultures and languages. Also, the question about physical hitting and seeing the doctor contains two elements, the second of which assumes that doctors are available and perhaps affordable, which often is not true in the developing world. Also, some scales tend to lump together multiple acts, such as “Made you look at their private parts; flashed their private parts; say something sexual about you/your body”. Such items may be difficult to translate literally and affirmative responses are hard to interpret due to the multiple behavioral acts in the stem of the question.

As far as we know, none of the major CM questionnaires were developed through a systematic process of consultation with a broad cross-section of international experts from non-English-speaking countries and none were field tested in multiple
languages during the development phase. In this study, the ISPCAN Child Abuse Screening Tool—Retrospective (ICAST-R) questionnaire was developed with the aid of a Delphi study to gain consensus on core indicators of relatively common forms of maltreatment. The draft tool was translated and back-translated into six languages and subjected to a field test with convenience samples of young people in seven countries.

The tool presented here was designed to be complementary to the many existing retrospectively measures of child maltreatment. One important difference is that the ICAST-R focuses on relatively few indicators of behaviorally specific acts rather than a wide variety of possible acts. A second important difference is that the context of the adverse events (for example, the age difference between aggressor and victim, or the social setting in which events occur) is not used at the outset to define types of abuse. In the ICAST-R format, questions about lifetime exposure are shown first and are followed by questions about age periods in which the event(s) occurred, and both adult and peer aggressors are nominated from a comprehensive list.

Methods

Research process

Phase 1: Initial consultation to develop draft tools: ISPCAN co-ordinated a workshop in Brisbane, Australia September 22–24 2004, just after the ISPCAN World Congress. Participants included academics, clinicians and community-based advocates. They were asked to focus attention on the main ingredients of new tools for measurement of child maltreatment in international contexts. The tools were to be designed for parents (Runyan, Dunne, & Zolotor, 2009; Runyan, Dunne, Zolotor, Madrid, et al., 2009), Children (Zolotor et al., 2009) and young adults (aged 18–24 years). The aim was to construct core questions sets, which hopefully will be incorporated wholly or partly into future studies, so that there is an accumulation of comparable data over time.

In setting criteria for a brief screening tool in international contexts, we decided on the basis of experience working internationally and prior research (e.g., Fricker, Smith, Davis, & Hanson, 2003; Hamby & Finkelhor, 2001; Hardt & Rutter, 2004) that the questionnaire should satisfy seven conditions:

(a) Items are judged to be important for assessment of child maltreatment on the basis of majority opinion from CM experts who work in various countries, cultures and languages.
(b) Include questions about exposure to multiple forms of violence (physical, psychological and sexual abuse).
(c) Are inclusive of many different social situations, and are not limited to specific interpersonal contexts, such as parent-child violence, or inter-partner violence, or school-based violence only, or where the relative age of the victim and perpetrator is specified beforehand. Thus, it was proposed to ask first about experience of abusive acts, and then question the respondent about the adult and peer perpetrator(s), times of life the events occur and other contextual aspects.
(d) Are relatively brief (no more than 20 core “stem” questions) and self-completion takes around 20–30 min.
(e) Express items about discrete acts unambiguously and show evidence they can be accurately translated.
(f) Include questions about relatively common experiences (rather than rare events) so the tool has efficiency in detecting violence in samples of a few hundred individuals (Hamby & Finkelhor, 2001).
(g) Do not have questions that, on face value, refer to situations or experiences that are specific to socio-economic or cultural situations that do not apply internationally.

The first draft of the retrospective instrument for young adults contained 21 “stem” items that referred to experiences that may ever have occurred before age 18, phrased in a behaviorally specific way. For example, we asked “When you were growing up (before age 18) did anyone ever beat you with an object like a stick, broom or belt?”. Each stem item was followed by “leaf” questions, asking young adults to recall approximately how many times this occurred and at which periods of their life it occurred (less than 5 years, between 5 and 9 years, 10 and 13 years, and 14 and 17 years). Then, they were asked to select from a long list of types of people who may have done this to them.

Phase 2: Delphi study of experts’ opinions: Selection of experts for the Delphi study is described in the introduction by Runyan, Dunne, and Zolotor (2009). Sixty one experts were randomly selected for review of the ICAST-R (61 were allocated to development of the Parent questionnaire). Of those selected for the retrospective interview, 49/61 agreed by email to participate. Only two experts refused at first contact, and nine could not be contacted or did not respond to two follow-up emails. The Delphi study for the ICAST-R was completed in two waves. First, a draft of the questionnaire was emailed, along with instructions for experts to rate numerically (a) How important each individual question was for assessment of child maltreatment (5 point scale; not important at all, somewhat important, moderately, very, extremely), and (b) the ease with which each item could be translated into local languages (4 point scale; easy to find equivalent words, a little difficult, difficult but possible, very difficult). They also were invited to give open-ended comment and criticism.

In the second wave, the experts received the modified questionnaire and were asked to suggest any changes to the wording of each stem question and to criticize and make suggestions regarding the follow-up questions on event frequency, timing, perpetrators and other aspects of the abusive experiences.

Phase 3: Translation and back-translation into six languages: The next step was to demonstrate that the revised questionnaire could be translated satisfactorily into multiple languages, and to make further refinements based on feedback from
The instrument has been translated in Arabic, Hindi, Malay, Marathi, Russian, and Spanish. Back-translation was performed by different bi-lingual speakers. Finally, the English back-translations were drawn together by the first author (MPD). Each back-translated document was compared to the original. Across the translations from six languages there was a high level of agreement: that is, terms or phrases that were difficult to translate from English in one language were also problematic in others. Numerous small editorial changes were made to wording of the English version prior to field testing, then these changes were sent back to field site coordinators for modification prior to testing in local languages.

**Phase 4: Field tests in Colombia, Egypt, India, Kyrgyzstan, Lebanon, Malaysia, and Russia:** The field test was completed by August 2006. We gained the participation of 842 young people in seven countries. The translations and in-country field tests were co-ordinated by co-authors, all of whom used their academic and clinical contacts to recruit convenient samples, with a target sample size of 120. In each country the respondents were drawn from various sectors of society such as university students, youth working on the streets, health clinic attendees, people in detention, and members of religious groups. The aim was to sample for diversity, rather than for representativeness. As there are few participants per country and the samples are convenient, we do not consider the data to be sufficient for estimating prevalence or making comparisons between countries.

Participants self-completed the questionnaires, usually in groups of about 20 people at a time. Often this was done in school or university classrooms, and some smaller clusters of young people completed the questionnaire in clinics and other facilities.

Data were entered locally by study personnel in each field test location using EPI Info 3.0 (Centers for Disease Control and Prevention, Atlanta, GA). Data files were merged, cleaned, and analyzed using SPSS v11. Analysis included simple frequencies of affirmative responses and missing data by sight and in aggregate. A comparison of victimization by gender was done using chi squared tests. Internal consistency of each sub-scale was tested using a Cronbach’s alpha coefficient. Finally, for those endorsing victimization, analysis characterized perpetrators by frequency of characteristics.

**Ethical considerations**

This research was done in some sites where there was no local research ethics review committee. However, steps were taken to ensure ethical research. The field site co-ordinators were requested to participate in an online human subjects research training module, and ethical implications were discussed in the research field guide presented to co-ordinators in advance of their data collection. The study protocol was approved by the ethics review board of the International Society for Prevention of Child Abuse and Neglect. All young adult participants gave informed, voluntary consent and all information remained anonymous.

**Results**

**Outcomes of the Delphi study**

**Delphi Wave 1:** In early 2005 we received completed returns from 37/49 (76%) of those who originally agreed to do the survey. The responding researchers, clinicians and staff of government and non-government health and welfare service workers (62% female) were based in 28 countries and had 14 different mother languages. They were citizens of countries in most regions, including Africa (7), East and South Asia (8), Central/South America (4), North America (5), Europe (7), Middle East (2), Russia/Baltic (3), and Oceania (1). Three quarters (76%) had 10 or more years experience working in the field of child protection (one-third had been working for more than 20 years). Among those 14 experts who did not participate at this stage, the most common reason given when re-contacted was lack of time.

The participating experts offered many suggestions to improve this tool. These were incorporated and the revised tool was sent back to the experts for further revision. In this second stage (late 2005), 31/37 offered detailed critical comments on the draft questionnaire, which were duly incorporated. The professional backgrounds of the participants at each phase are shown in Table 1.

**Table 1**

<table>
<thead>
<tr>
<th>Primary profession</th>
<th>Participants (n)</th>
<th>Recruited</th>
<th>Round 1</th>
<th>Round 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher/Academic</td>
<td>34</td>
<td>22</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Clinical work in medicine, nursing psychology, social work</td>
<td>16</td>
<td>10</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Non-government Organization</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Government Department/Program</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Experts' ratings of importance and translatability: Of the 21 original stem items on abusive acts in the first draft of the tool, items were rejected if less than 75% of the experts rated that they were very or extremely important for the measurement of child maltreatment (n = 4 were removed) or if more than one quarter believed the items were more than “a little difficult” to translate (n = 2). Items rejected as being not very important for measurement of common types of maltreatment experiences in their population were “someone forcing hot or bitter food or drink in your mouth,” “being forced to give away possessions,” “being threatened because of your racial or ethnic group,” and witnessing “someone being killed.” Items thought to be difficult to translate included “someone made you touch their genitals with your mouth” and “being spoken to in a sexual way.” One item (“did someone make you look at sexual scenes in magazines, photographs, video or the internet”) was removed because it was considered to be ambiguous and could include inadvertent exposure.

Following feedback from experts, one item that referred to being “choked, burned, or stabbed with a knife, stick or object” was simplified, and a new item was introduced to ask about being shaken very hard. Experts suggested many small changes to the wording of items. For example, the term “private parts” was judged to be difficult to translate in some languages, so the definition was clarified with the words “genitals or breasts” in brackets.

In the first draft, all perpetrator types were placed in one long list, and this included a mixed group of adults and peers (defined as someone around the respondents’ age or younger). Although the age differential relative to the child was clear for most perpetrator types, it was not clear for some. For example, brothers or cousins could have been an adult when they committed the acts. Therefore, the format for nominating perpetrators was changed by clearly separating into two groups, such as: “Female Adult” and “Female around your age or younger at the time.”

Delphi wave 2: Thirty-one experts provided open-ended criticism of the revised tool, and suggest many changes to item wording. Numerous minor refinements were made to the phrasing of questions, although the original item order remained intact. Some recommended expansion of the question set, but none recommended substantial change to the core content of the tool. Several recommended that we add two follow-up questions, one each after the physical and emotional abuse domains, to ask the young people whether the harsh treatment was done in the context of discipline and was in their view justifiable, or whether they perceived it was unjust and unfair. Two new brief questions were added to the tool.

The revised questionnaire includes six basic demographic questions about gender, age, years at school, location growing up (farm or small village; town or small city; big city; other), whether the respondent is working (full-time, paid; part-time, paid; work but no pay; no current work), and whether he or she is studying now (options include high school or junior college, technical training school, university, or none). The core of the questionnaire is 15 stem items about child maltreatment, 5 each for sexual, physical, and emotional abuse. The response options for each stem question were: Yes, No, and Cannot Remember. This was followed by the question: “If yes, how often did this happen?” (1 or 2 times; Between 3 and 10 times; More than 10 times) and then “If yes, at what times in your life did this happen to you?” (Before I was 5 years; Between age 5 and 9; Between age 10 and 13; Between age 14 and 17). The respondent then was asked to check a list of perpetrators in response to the question: “Which people did this to you?” Additional, brief follow-up items varied by type of question. The ICAST-R (version 1.0) is available at: www.ispcan.org or from the authors.

Results of the field test

Sample demographic characteristics: A total of 842 young adults from seven countries participated. They were from Russia (n = 120), Egypt (n = 89), Lebanon (n = 120), India (n = 124), Malaysia (n = 125), Columbia (n = 120), and Kyrgyzstan (n = 144). There were similar numbers of females (n = 434; 51.5%) and males (n = 407; 48.3%). Ages ranged from 18 to 26 years (mean = 20.3 years), with 53% (n = 438) aged 17–20 years, and 47% aged 21–26 years. More that half (58%) had achieved 12 years or more of education. When they were growing up, 53% had lived in big cities, 33% in towns or small cities, and 13% in villages or farms. At the time of interview, 65% were not in paid work, 31% were in paid work, and 4% stated they did unpaid work. The majority were current students, with 60% at university, 18% at school or technical college, while 21% were not students.

The estimates for each type of maltreatment and the summative prevalence of one or more events occurring within each sub-set (physical, emotional, and sexual abuse) are shown in Table 2. The samples in each country were small and non-representative so comparisons between countries may not be valid. The prevalence estimates for 14 of the 15 items were 5.0% or more, with 11 of 15 abuse events being reported by more than 10% of the total sample. The only estimate less than 5% was in response to the question “Before age 18, did someone make you pose naked in front of any person or for photographs, video or internet webcam when you did not want to do this?” which was endorsed by just 2.1%. The estimate for this one item did not exceed 5% in any country. There was very little missing data, with the percent missing for 14 of 15 items being 1.5% or less (7/15 at 1.0% or less). The proportion missing did not vary much by abuse type, with only slightly lower rates for physical abuse items. The one item with a higher rate of missing values was “members of your family or household said that they wish you had never been born, or were dead” at 5.9%. This is probably due to a technical flaw in printed questionnaires. This one stem question was printed in the middle of a page under the preceding item, whereas all other stem questions were placed at the top of pages. Some young people may have inadvertently skipped that item.
Table 2
Childhood maltreatment acts (ever) reported by the young adults (n = 842) by country.

<table>
<thead>
<tr>
<th>Type of maltreatment</th>
<th>Russia (n = 120) %</th>
<th>Egypt (n = 89) %</th>
<th>Lebanon (n = 120) %</th>
<th>India (n = 124) %</th>
<th>Malaysia (n = 125) %</th>
<th>Colombia (n = 120) %</th>
<th>Kyrgyzstan (n = 144) %</th>
<th>Total (n = 842) %</th>
<th>Missing values %</th>
<th>No perpetrator nominated %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hit or Punched</td>
<td>48.3</td>
<td>49.4</td>
<td>15.8</td>
<td>33.1</td>
<td>25.6</td>
<td>37.5</td>
<td>31.9</td>
<td>33.8</td>
<td>.5</td>
<td>1.8</td>
</tr>
<tr>
<td>Kicked</td>
<td>14.2</td>
<td>8.0</td>
<td>10.8</td>
<td>13.7</td>
<td>17.6</td>
<td>16.7</td>
<td>18.1</td>
<td>15.6</td>
<td>.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Beaten with an object</td>
<td>22.5</td>
<td>48.3</td>
<td>11.7</td>
<td>33.1</td>
<td>39.2</td>
<td>43.3</td>
<td>26.4</td>
<td>31.4</td>
<td>1.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Shaken hard</td>
<td>8.3</td>
<td>14.6</td>
<td>4.2</td>
<td>12.1</td>
<td>4.8</td>
<td>20.8</td>
<td>17.4</td>
<td>11.8</td>
<td>.7</td>
<td>7.1</td>
</tr>
<tr>
<td>Cut or Stabbed on purpose</td>
<td>7.5</td>
<td>10.1</td>
<td>6.7</td>
<td>5.6</td>
<td>3.2</td>
<td>10.8</td>
<td>4.2</td>
<td>6.7</td>
<td>.8</td>
<td>8.9</td>
</tr>
<tr>
<td>Emotional</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulted or criticized</td>
<td>54.2</td>
<td>59.6</td>
<td>45.8</td>
<td>46.8</td>
<td>41.6</td>
<td>63.3</td>
<td>39.6</td>
<td>49.4</td>
<td>1.0</td>
<td>2.7</td>
</tr>
<tr>
<td>Told they were unloved</td>
<td>6.7</td>
<td>20.2</td>
<td>5.8</td>
<td>16.9</td>
<td>8.0</td>
<td>15.8</td>
<td>9.0</td>
<td>11.4</td>
<td>.7</td>
<td>17.7</td>
</tr>
<tr>
<td>Told “wish you had never been born/or were dead”</td>
<td>7.5</td>
<td>21.3</td>
<td>10.8</td>
<td>17.7</td>
<td>4.8</td>
<td>15.0</td>
<td>4.9</td>
<td>11.2</td>
<td>5.9</td>
<td>13.8</td>
</tr>
<tr>
<td>Threatened to be hurt or killed</td>
<td>16.7</td>
<td>25.8</td>
<td>10.0</td>
<td>12.1</td>
<td>8.0</td>
<td>32.5</td>
<td>9.0</td>
<td>15.7</td>
<td>1.3</td>
<td>9.8</td>
</tr>
<tr>
<td>Threatened to be abandoned/refused into home</td>
<td>5.8</td>
<td>19.1</td>
<td>10.0</td>
<td>12.9</td>
<td>8.0</td>
<td>9.2</td>
<td>10.4</td>
<td>10.5</td>
<td>1.3</td>
<td>9.1</td>
</tr>
<tr>
<td>Sexual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Someone exposed their genitals</td>
<td>15.0</td>
<td>27.0</td>
<td>14.2</td>
<td>20.2</td>
<td>20.2</td>
<td>28.3</td>
<td>9.7</td>
<td>17.8</td>
<td>1.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Made to pose naked</td>
<td>.8</td>
<td>0</td>
<td>.8</td>
<td>3.2</td>
<td>2.4</td>
<td>1.7</td>
<td>4.9</td>
<td>2.1</td>
<td>1.1</td>
<td>11.1</td>
</tr>
<tr>
<td>Someone touched child’s genitals</td>
<td>11.7</td>
<td>28.1</td>
<td>6.7</td>
<td>25.0</td>
<td>18.4</td>
<td>17.5</td>
<td>13.9</td>
<td>16.9</td>
<td>1.2</td>
<td>9.2</td>
</tr>
<tr>
<td>Made to touch other’s genitals</td>
<td>3.3</td>
<td>6.7</td>
<td>5.8</td>
<td>7.3</td>
<td>7.2</td>
<td>4.2</td>
<td>10.4</td>
<td>6.5</td>
<td>1.5</td>
<td>10.9</td>
</tr>
<tr>
<td>Made to have intercourse</td>
<td>5.8</td>
<td>5.6</td>
<td>3.3</td>
<td>5.6</td>
<td>4.0</td>
<td>1.7</td>
<td>8.3</td>
<td>5.0</td>
<td>1.3</td>
<td>16.7</td>
</tr>
</tbody>
</table>
Gender-specific prevalence of child maltreatment

The combined samples data for males and females are illustrated in Fig. 1. Males had significantly higher prevalence of all physical abuse items. For emotional abuse the prevalence estimates were similar for males and females for 3 items. Males were most likely to report having been “threatened to be badly hurt or killed,” while females more often reported that someone in their household threatened to abandon them or refuse to let them live in the house anymore. For sexual abuse, none of the gender differences were statistically significant.

Internal consistency

The internal consistency of the three item sub-sets was moderate to high. It was highest for sexual abuse (Cronbach’s alpha = .824) while physical (alpha = .610) and emotional (alpha = .626) scales had moderate consistency.

Characteristics of perpetrators

Perpetrator analysis involved selecting those respondents who answered “yes” and who identified perpetrator(s) to any one of the specific acts under the relevant abuse category. A minority of respondents reported that an act occurred but did not select a perpetrator type; such non-response is shown in the right hand column of Table 2. The five most frequently reported perpetrators across the combined abuse domains are shown in Table 3.

Physical abuse: Of the 842 respondents who completed the ICAST-R, 434 (52%) reported that they had experienced at least one form of abusive physical act, and the great majority subsequently nominated at least one perpetrator (between 91% and 98% depending on the specific act; see Table 2). Clearly, the two contexts in which physical abuse occurred most often were the home and school (see Table 3). Among adult perpetrators, parents and older siblings were first and third ranked, with male and female teachers being second. Among peer perpetrators, boys or girls at school and siblings were most frequent. Strangers who were around the same age or adult strangers were next most commonly mentioned.

Of those respondents who reported at least one physical abuse event, two-thirds (67%) indicated that the acts were a justified part of discipline, one in five (22%) said it was for discipline but not justified, and one in 10 (11%) said it was not for discipline and unjust.

Emotional abuse: Fifty-three percent \((n = 443)\) of the sample indicated they had either been harshly insulted or threatened with violence before age 18 (see panel 3 of Table 3). A smaller proportion of respondents reported acts that were specific to the family/household (22%; \(n = 186\); see panel 4 of Table 3). The most frequently reported perpetrators for each subtype were parents. Those who reported being insulted or threatened most frequently identified peers at school, boys in the neighborhood, and siblings as perpetrators. It is notable that two items (being told by a member of the household that
Table 3  
Counts (n) of the five most frequently reported perpetrators by abuse item sub-set and perpetrator gender and adult or peer age group.

<table>
<thead>
<tr>
<th></th>
<th>Adult male perpetrators</th>
<th>Adult female perpetrators</th>
<th>Peer male perpetrators</th>
<th>Peer female perpetrators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical</strong>&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father (266)</td>
<td>Mother (225)</td>
<td>Boy at school (105)</td>
<td>Sister (48)</td>
<td></td>
</tr>
<tr>
<td>Teacher (111)</td>
<td>Teacher (70)</td>
<td>Brother (71)</td>
<td>Girl at school (14)</td>
<td></td>
</tr>
<tr>
<td>Brother (75)</td>
<td>Sister (24)</td>
<td>Stranger (65)</td>
<td>Stranger (12)</td>
<td></td>
</tr>
<tr>
<td>Stranger (63)</td>
<td>Grandmother (17)</td>
<td>Neighborhood boy (62)</td>
<td>Girlfriend (9)</td>
<td></td>
</tr>
<tr>
<td>Neighborhood male (50)</td>
<td>Other relative (17)</td>
<td>Cousin (25)</td>
<td>Neighborhood girl (8)</td>
<td></td>
</tr>
<tr>
<td><strong>Sexual</strong>&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stranger (54)</td>
<td>Neighborhood female (8)</td>
<td>Boy at school (20)</td>
<td>Girlfriend (20)</td>
<td></td>
</tr>
<tr>
<td>Neighborhood male (24)</td>
<td>Grandmother (6)</td>
<td>Cousin (15)</td>
<td>Girl at school (19)</td>
<td></td>
</tr>
<tr>
<td>Other relative (14)</td>
<td>Family friend (5)</td>
<td>Boyfriend (15)</td>
<td>Neighborhood Girl (13)</td>
<td></td>
</tr>
<tr>
<td>Family friend (8)</td>
<td>Stranger (5)</td>
<td>Stranger (14)</td>
<td>Cousin (5)</td>
<td></td>
</tr>
<tr>
<td>Religious leader (7)</td>
<td>Other relative (3)</td>
<td>Neighborhood Boy (12)</td>
<td>Stranger (4)</td>
<td></td>
</tr>
<tr>
<td><strong>Emotional</strong>&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father (66)</td>
<td>Mother (57)</td>
<td>Boy at school (56)</td>
<td>Girl at school (33)</td>
<td></td>
</tr>
<tr>
<td>Teacher (30)</td>
<td>Teacher (28)</td>
<td>Neighborhood Boy (31)</td>
<td>Sister (18)</td>
<td></td>
</tr>
<tr>
<td>Brother (24)</td>
<td>Other relative (19)</td>
<td>Brother (22)</td>
<td>Cousin (13)</td>
<td></td>
</tr>
<tr>
<td>neighborhood male (24)</td>
<td>Grandmother (12)</td>
<td>Stranger (16)</td>
<td>Grandmother (12)</td>
<td></td>
</tr>
<tr>
<td>Other relative (19)</td>
<td>Sister (11)</td>
<td>Cousin (13)</td>
<td>Girlfriend (12)</td>
<td></td>
</tr>
</tbody>
</table>

Male perpetrators (adult or peer in household)  Female perpetrators (adult or peer in household)  n/a  n/a

|                      |                          |                          |                        |                          |
|                      |                           |                           |                        |                          |
| **Emotional**<sup>d</sup> |                         |                           |                        |                          |
| Father (64)          | Mother (65)              | –                         | –                      | –                        |
| Brother (17)         | Grandmother (9)          | –                         | –                      | –                        |
| Grandfather (11)     | Sister (8)               | –                         | –                      | –                        |
| Other relative (11)  | Other relative (6)       | –                         | –                      | –                        |
| Step father (8)      | Step mother (6)          | –                         | –                      | –                        |

<sup>a</sup> Physical abuse (punched, kicked, beaten, shaken, stabbed).
<sup>b</sup> Sexual abuse (exposed to by someone, made to pose naked, genitals touch, made to touch persons genital, sexual intercourse).
<sup>c</sup> Emotional abuse – Applicable to any type of perpetrator (child insulted, threatened).
<sup>d</sup> Emotional abuse – Members of Family/Household only can be perpetrators (not loved, never born, abandoned); these three questions did not list adult and peer perpetrators separately.

you were not loved, and being told by a household member that they wish you had never been born or were dead) had comparatively high proportions of respondents who did not nominate a perpetrator (see Table 2).

Respondents’ perceptions about whether the adverse emotional acts were part of discipline revealed that half (52%) believed that it was mostly for discipline and was justified, while one in five (22%) said it was mostly for discipline but unjustified, and one in four (26%) said it was not for discipline and unjustified.

**Child sexual abuse:** The most frequently reported perpetrator was an older male stranger, followed by older male neighbor. Peers were often identified as perpetrators. No one in this survey reported any unwanted sexual act by a foster parent or an older sister. Overall, 242 respondents reported experiencing at least one unwanted sexual act (29%). The proportions of respondents who did not report perpetrator/s for an individual act were similar (between 9% and 11%) except in the case of forced sexual intercourse (17%).

**Discussion**

The purpose of this research was to develop a basic tool that can be used to estimate prevalence of behaviorally specific experiences and describe typical perpetrators of common aspects of childhood physical, emotional and sexual abuse in international and cross-cultural studies. Through the Delphi process we incorporated suggestions and criticisms from a diverse cross-section of international experts on the structure, content and clarity of verbal expression. The field test in six languages and seven countries revealed that the tool worked well. Prevalence was 5% or more for all but one act, and 10% or more for 11 of 15 acts. Thus, researchers can be confident in the statistical power of surveys that might use this tool with samples that may be limited to just a few hundred individuals. Further, there was minimal missing data per item and the internal consistency of the three domains was moderate to high.

With just 15 core items across three sub-sets or domains of child abuse, the tool cannot be considered to be comprehensive. It does not contain any questions about child neglect and other forms of victimization, so it is not possible with the ICAST-R to gain a broad assessment that is possible with tools such as the Juvenile Victimisation Questionnaire (Finkelhor, Ormrod, Turner, & Hamby, 2005a), the Childhood Trauma Questionnaire (Scher, Stein, Asmungson, McCreary, & Forde, 2001), the Comprehensive Child Maltreatment Inventory (Riddle & Aponte, 1999), the Childhood Trauma Interview (Fink, Bernstein, Handelsman, Foote, & Lovejoy, 1995), the Child Maltreatment Interview Schedule (Briere & Runtz, 1990) and others.
On the face of it, the core questions about adverse physical, sexual and emotional experiences that emerged from the Delphi process appear similar to items found in other CM tools. However, there are several advantages of the ICAST-R. It does not set the context of adverse or abusive experiences prior to asking the respondent to think about their childhood. The young people are first asked whether they experienced certain events, and each item is followed by questions about the frequency, times during childhood and the perpetrators. The approach is quite different from some of the longer questionnaires (mentioned above) and other brief screening tools, such as the Adverse Childhood Experiences (ACE) questionnaire (Dube, Williamson, Thompson, Felitti, & Anda, 2004). The ACE tool commences by limiting the context to abuse by parents or other adults in the household, and varies the perpetrator specifications depending on the type of abuse. It is arguable whether typical respondents actually use such specific, categorical 'filters' when they are asked to recall early adverse experiences. A key assumption in development of the ICAST-R is that young people will recall discrete and mostly serious, unwanted acts that occurred, and when prompted they will recall some of the context. The field trial revealed that the great majority of respondents (between 82% and 98%, depending on the specific act) reported at least one perpetrator.

It is important to clarify that the ICAST-R was designed to complement rather than necessarily improve upon existing psychometrically valid scales for retrospective reporting of abusive acts in childhood. Perhaps the main advantage of the ICAST-R format is that it can capture a variety of contexts for some key indicators of exposure to violence. Many of the available tools define child abuse primarily as acts perpetrated by adults upon children; thus, there are decision rules which specify that the questions pertain (in the case of sexual and physical acts) to circumstances where the perpetrator was an adult or a person 5 or more years older than the child at the time. The ICAST-R does not have an implicit decision rule. For each act, the respondent nominates one or more perpetrators from a list thought by the experts consulted to be common and reasonably indicative of maltreatment in their cultures. In data analysis, the perpetrators can be segregated by relative age and gender to provide profiles of typical aggressors for individual acts or aggregated acts within sub-groups (see Table 3). For each act, individual respondents can be classified as having single adult, single peer or mixed adult/peer perpetrators in cases where multiple events occurred. This feature is not found in other retrospective tools.

A fundamental issue to consider in interpreting data from the ICAST-R is that the addition of the number of endorsed items, either for the 15 stem items in total or within the three sub-sets, cannot be considered as an accurate summative estimate of the prevalence of child abuse. Clearly, the 15 acts comprise only a small proportion of the many ways children are maltreated. Rather, the primary value of the tool is that the individual items have been endorsed by experts internationally as being indicative of child abuse. These questions have been developed with the intention, and through field testing found, to be unambiguous in many languages.

It is arguable that any attempt to determine the extent of child abuse through summation of recalled negative experiences will fail to adequately measure the true, underlying phenomenon. As mentioned above, epidemiological analysis in this field is hampered by the many different definitions and the lack of cross-cultural consistency in behaviorally specific measures. In international research to date, there are remarkably few studies with directly comparable items for specific acts. Although this problem has been noted for some time (for example in the measurement of child sexual abuse) the problem of measurement diversity remains (Finkelhor, 1994; Pereda et al., 2009). Thus, it is hoped that the main contribution of this tool for retrospective interview research with young adults is that items with precisely the same wording and response format will be included within comprehensive surveys, perhaps as an adjunct to other tools assessing victimization, to improve standardization and direct comparability.

The field test samples in each country were small and non-representative and therefore we cannot extrapolate with confidence to broader populations. However, the overall pattern of risk for males and females deserves comment. Males were more likely than females to report physical abuse, yet in North America, for example, many studies indicate the risk to be fairly equivalent for both genders (Finkelhor, Ormrod, Turner, & Hamby, 2005b; Scher et al., 2001). Second, in the ICAST-R field test there was no gender difference for any of five indicators of sexual abuse, which is quite different from the pattern usually found in North America, Europe, Australia and other affluent western societies, where females victims typically outnumber males by at least two to one (Bouvier et al., 1999; Dunne, Purdie, Cook, Boyle, & Najman, 2003; Fergusson & Mullen, 1999; Finkelhor et al., 2005b; Martin, Bergen, Richardson, Roeger, & Allison, 2004; Putnam, 2003).

The gender ratios for physical and sexual abuse observed in the combined data from these seven countries are quite similar to recent surveys from some developing countries and non-English-speaking communities in Israel, Palestinian Territories, South Africa, Iran, China, and Vietnam (Benbenishty, Zeira, & Astor, 2002; Chen, Dunne, & Han, 2004; Chen, Dunne, & Han, 2006; Dunne, Chen, & Choo, 2008; Haj-Yahia & Tamish, 2001; Madu & Peltzer, 2001; Nguyen, Dunne, & Le, in press; Stephenson et al., 2006).

Several adjunct questions in the ICAST-R offer additional insights. It is clear that the majority (around two thirds) of young people interviewed in the field tests believed that their adverse physical and emotional experiences in childhood were done in this context of discipline, and many consider the acts to be justified. The meaning of abusive acts may influence the immediate and longer term impact on mental health and well-being, so it should be useful to include these items as potential effect moderators in multivariate statistical analyses.

Although the Delphi process established the content validity of the ICAST-R, a weakness of this study is that we did not establish the concurrent validity and test-retest reliability of this tool. Future research should, for example, correlate the abuse reports with depression or youth risk behavior, and then assess whether the predictable association between abuse experience and poorer health is found (e.g., Nguyen et al., in press; Smith, Lam, Bifulco, & Checkley, 2002).
Two technical limitations were found. The phrasing of one sexual abuse item (where respondents are asked whether someone “made you pose naked in front of any person or for photographs, video or internet webcam when you did not want to do this”) could be improved. This was endorsed by only 2.1% (less than 1.0% in three countries). It was included in the questionnaire because the majority of experts rated it as very or extremely important for CM research and it was regarded as easy to translate. The researchers and experts believed it was important to have an item that tapped into situations where people take sexual images of children. However, in retrospect it did not reach the criterion of being unambiguous and behaviorally specific as there are several scenarios in the same question. It could be modified or replaced in the future.

A second avoidable technical flaw was the placement of two stem items on the same page of the questionnaire, for which there was higher than usual missing data for the second item. We recommend that each stem item should lead into one page, or graphics be enhanced to more clearly direct readers’ vision to each stem question.

Conclusions

The ICAST-R performed well cross-culturally in different languages. It is easy to read, relatively brief to complete (20–30 min), and produces very little missing data and moderate to high internal consistency in the item sub-sets. It is likely that translation into other languages will not encounter interpretative problems. The behaviorally specific questions should aid direct comparisons internationally.

References


