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1 **Defining child maltreatment for research and surveillance: An international, multi-**
2 **sectoral, Delphi consensus study in 34 countries in Europe and surrounding regions**

3
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46 **Summary**

47 Child maltreatment is a complex public health issue that has consequences across the life-
48 course. Studies to quantify child maltreatment and identify interventions and services are
49 constrained by a lack of uniform definitions. We conducted a European Delphi study to reach
50 consensus on types and characteristics of child maltreatment for use in surveillance and
51 research. Statements were developed following a scoping review and identification of key
52 concepts by an international expert team (n=19). A multidisciplinary expert panel (n=70)
53 from 34 countries completed three rounds of an online survey. We defined consensus as
54 $\geq 70\%$ agreement or disagreement with each statement after the final round. Consensus was
55 reached on 26/31 statements (participant retention rate 94%). From the statements, we
56 propose a unified definition of child maltreatment to improve measurement and surveillance
57 in Europe. Concerted efforts are now required to test and refine the definition further prior to
58 real-world operationalisation.

59

Key messages

- There is a lack of consensus-based definitions of child maltreatment, which hinders measurement of child maltreatment and limits comparability across sectors and countries.
- We conducted a pan-European study in 34 countries with a multidisciplinary panel of 70 experts and adults with lived experience of child maltreatment using Delphi methodology, to gain consensus on types and characteristics of child maltreatment for use in surveillance and research.
- In the final round of the e-Delphi survey, consensus was reached for 26 of 31 statements, enabling the development of a standardised definition of child maltreatment, including features that distinguish child maltreatment from violence against children, subtypes, and key characteristics of child maltreatment.
- Use of a standardized definition will improve measurement and recording of child maltreatment, and lead to the development and implementation of more effective and targeted services and interventions. This in turn has the potential to reduce inequalities and lead to improved public health outcomes for children at risk of maltreatment.
- Concerted efforts are now required to test and refine the definition further prior to real-world operationalisation.

60

61

62 **Introduction**

63 Child maltreatment has been recognised by the World Health Organization (WHO) as a
64 major public health problem that can have severe and long-lasting effects on physical and
65 mental health and wellbeing across the life-course.¹ It is also associated with significant
66 financial and societal costs.² In Europe, an estimated 18 million children experience sexual
67 abuse, 44 million physical abuse, and 55 million emotional abuse before their 18th birthday.³
68 In addition, at least 850 children in Europe die every year because of severe maltreatment.³
69 Governments and international organizations advocate for increased action to prevent child
70 maltreatment.^{4,5} However, for prevention efforts to be successful, improved measurement
71 strategies and systematic surveillance are required.⁶ High quality measurement and
72 surveillance of child maltreatment, in turn, require the use of a standardized definition.

73

74 Global public health organizations have adopted their own definitions of child maltreatment,
75 and these have been used to inform national and international child protection policies,
76 strategies and legal frameworks.^{5,7,8} However, these organizations acknowledge that the
77 quantification of child maltreatment is complex and that estimates vary, in large part because
78 of inconsistent definitions.⁵ Research using both population-based surveys and administrative
79 data^{9,10} has also shown that a standardised definition is needed because differences in
80 definitions lead to variation in prevalence and incidence estimates.¹¹⁻¹⁶ Different sectors and
81 professions involved in child protection practice and research use their own terminology and
82 use varying definitions, and these can often be non-specific or implicit.¹⁰ In addition, the
83 definition of child maltreatment varies within and between countries.^{17,18} All of these issues
84 hinder attempts to quantify child maltreatment and compare trends over contexts or time, and
85 to monitor the effectiveness of services and interventions.¹⁹

86

87 Among the major issues in defining child maltreatment is whether all types of “violence
88 against children” should be considered “child maltreatment”, and whether all sub-types of
89 child maltreatment (such as “neglect”) should be considered “violence”. Linked to this is the
90 breadth of perpetrators included,¹⁰ for example, whether child maltreatment is restricted to
91 caregiver-perpetrated violence or whether it also includes violence by acquaintances, peers,
92 or strangers (especially when considering child sexual abuse). Major debates also circle
93 around the defining characteristics of violent acts and omissions, including whether power
94 differentials between victims and perpetrators are required. Distinguishing violent acts and
95 omissions from (normal) difficulties associated with parenting is another challenge (for
96 example, should a single event of belittling be counted as child maltreatment).¹⁰

97

98 Several attempts have been made to standardise definitions for research and surveillance in
99 this field. However, these have either focused on a broader concept of violence against
100 children that includes collective as well as interpersonal violence (for example, during armed
101 conflict),²⁰ or specific forms of child maltreatment such as abusive head trauma²¹ or near-
102 fatal child maltreatment²². In addition, few of these have used robust consensus-based
103 methodologies.^{7,20,21} This evidence gap is increasingly being recognised, with recent calls for
104 a standardised definition of child maltreatment to support global surveillance efforts.²³

105

106 Euro-CAN (Multi-Sectoral Responses to Child Abuse and Neglect in Europe: Incidence and
107 Trends) is a multidisciplinary network funded by the European Cooperation in Science and
108 Technology Association (COST) under COST Action number 19106.²⁴ It comprises
109 researchers and child protection practitioners from 35 countries in Europe and surrounding
110 regions, established to develop a unified system of child maltreatment data collection. There
111 are five working groups, with Working Group 1 (the investigators of this current study)

112 focused on developing an international, consensus-based, multi-sectoral definition that can be
113 used for child maltreatment data collection and surveillance in Europe. The aim of this study
114 was to reach consensus on types and characteristics of child maltreatment for use in
115 surveillance and multi-sectoral research within the countries represented within the Euro-
116 CAN network. The specific objectives were to develop consensus on 1) the characteristics
117 that distinguish child maltreatment as a subset of violence against children, 2) types and sub-
118 types of child maltreatment, and 3) the minimum characteristics required to define an incident
119 as child maltreatment for surveillance and research purposes.

120

121 **Methods**

122 We conducted an electronic Delphi (e-Delphi) study. The full methodology is reported in the
123 study protocol.²⁵ Ethical approval was granted by the Cardiff University School of Medicine
124 ethics committee in February 2023 (reference number: SMREC22/96). We report the
125 methods and results in accordance with the Conducting and Reporting Delphi Studies
126 (CREDES) Guidelines (see appendix, page 1).²⁶

127

128 This study was designed and conducted by an international, multidisciplinary expert team of
129 19 researchers and child protection practitioners from 11 countries involved in the Euro-CAN
130 network. Of 19 team members, 11 do not have English as their mother tongue. Preliminary
131 work included a scoping review,²⁷ comparative analysis of international child maltreatment
132 classification systems (infographic available at ²⁴), a survey of child maltreatment experts,
133 and critical appraisal of other attempts to improve surveillance systems in this field.^{20,28}
134 Taken together, these showed substantial variation in definitions of child maltreatment and
135 data collection practices. The scoping review of 25 studies found that only four studies
136 reported attempts to create new conceptualizations or definitions of child maltreatment, and

137 only one study tested their new definition in practice. The results also indicated that more
138 attention should be paid to the conceptualization of psychological and emotional
139 maltreatment and neglect during efforts to define child maltreatment. The comparative
140 framework analysis found that most classifications^{5,8,29-31} organized maltreatment into only
141 types ranging from four to seven types, whereas one used a hierarchical classification⁷ in
142 which maltreatment categories are organized into types and subtypes. We identified 14
143 criteria used to define child maltreatment and its (sub)types, such as type of behavior, impact
144 on the child, and severity of harm, but the classifications did not use the same criteria, or
145 define the criteria in the same way. The survey of experts in child maltreatment showed
146 inconsistencies in national definitions for data collection purposes in different public systems.
147 Taken together, this preliminary work showed substantial variation in definitions and
148 surveillance of child maltreatment.

149

150 We discussed this evidence at a study workshop in October 2022 during which the key areas
151 where consensus was lacking were identified and the statements for the Delphi questionnaire
152 were developed. We finalised the questionnaire at a second study workshop in January 2023,
153 after which we piloted it with 12 members involved in the Euro-CAN network, to ensure
154 clarity of language and format. Where there were linguistic challenges, these were discussed
155 by the team and resolved in real time to ensure that the statements were interpreted in the
156 same way by individuals from different countries.

157

158 **The e-Delphi process**

159 We purposefully recruited an expert panel from the countries contributing to the Euro-CAN
160 network, consisting of child protection professionals, healthcare professionals, academics,
161 police, legal professionals, forensic specialists, policy makers or civil servants, and adults

162 with lived experience of child maltreatment. The inclusion criteria were significant practical
163 experience and/or a robust research track record in child maltreatment (see appendix page 4
164 for participant eligibility criteria). These were developed to ensure that participants would
165 have knowledge of the existing international classification systems and the current issues and
166 challenges in defining child maltreatment for population-level data collection. We recruited
167 adults with lived experience of child maltreatment via the Children’s Social Care Research
168 and Development Centre (CASCADE) established public involvement groups. The expert
169 panel was independent of the study team. All participants gave informed consent to take part
170 in the study.

171

172 We collected data over three rounds between April and December 2023 (round one in April
173 to May, round two in July to September, round three in October to December), using the
174 KoBo toolbox platform (www.kobotoolbox.org/). We divided the questionnaire into three
175 sections to correspond with the three study objectives and initially included 21 statements in
176 English. Participants ranked their agreement with each statement using a 4-point Likert scale
177 (‘strongly agree’, ‘agree’, ‘disagree’, ‘strongly disagree’).^{32,33} Open-ended questions allowed
178 participants to elaborate on their level of agreement with each statement; make suggestions
179 for additions or changes to be incorporated into the statements for the next round; and/or
180 indicate where the wording of a statement was unclear or non-specific.

181

182 **Data Analysis**

183 After each round, we calculated the percentage consensus for each statement based on the
184 Likert scale responses. We defined consensus a priori as 70% or more of the panel rating a
185 statement as ‘agree’ or ‘strongly agree’, or 70% or more of the panel rating a statement as
186 ‘disagree’ or ‘strongly disagree’.^{33,34} Median values for the Likert scale responses were also

187 examined to gain an understanding of the strength of agreement (median value of 4 indicates
188 strong agreement) or disagreement (median value of 1 indicates strong disagreement). Free-
189 text comments were analysed thematically by six members of the study team (LEC, UN, KD,
190 DL, LH, AN), including three individuals whose first language is not English (UN, KD, DL),
191 to explore the rationale behind participants' responses.

192

193 The study team reviewed the quantitative and qualitative results at workshops in May (round
194 one) and September (round two) 2023. Where there was evidence that statements were
195 unclear or participants were conflicted in their responses, the qualitative data was used to
196 inform decisions on changes to the wording or explanatory text. This was particularly evident
197 for the statements included under objective three, which required changes between each
198 round. For example, responses after round one, where participants were asked about the
199 characteristics that are "important to consider" when defining child maltreatment, suggested
200 that this phrasing was unclear: "*chronicity is **important when considering** impact... but is **not***
201 ***central in defining** whether or not an incident is maltreatment"* (participant 25, academic
202 researcher). Therefore, the final wording for these statements in round three asked
203 participants whether a characteristic was "essential" for the definition. New statements were
204 introduced when it was clear that key concepts had been missed. For example, we added the
205 questions on power, responsibility and trust under objective one because multiple respondents
206 referred to these in their comments on the nature of the child-perpetrator relationship.

207

208 We provided participants with feedback and anonymised aggregate data at the start of
209 subsequent rounds, to explain why and how the statements changed, in accordance with
210 standard Delphi procedures.³⁵ For statements that did not change, participants rated these
211 again, so that we could examine the stability of agreement across rounds. For statements that

212 changed, participants were shown the previous and adapted statements but only rated the
213 adapted statements. Statements achieving consensus after the final round were used to
214 develop a definition of child maltreatment for research and surveillance.

215

216 **Role of the funding source**

217 The study funders had no role in the study design, data collection, data analysis, data
218 interpretation, or writing of the findings.

219

220 **Findings**

221 Of the 71 participants who were invited to contribute to the Delphi process, 70 (99%) agreed
222 and completed round one, 66 (94% of 70) completed round two, and 66 (94% of 70)
223 completed round three. A broad range of professions was represented (Table 1), and 21
224 participants held multiple roles. The commonest professions were academic researchers
225 (50%) or healthcare professionals in the field (26%). Four adults with lived experience of
226 child maltreatment also participated. Participants from all European regions were included;
227 34% were from Northern Europe and 31% were from Southern Europe. There were also five
228 participants from countries outside of Europe but with links to the Euro-CAN network (Israel
229 and Turkey). There were seven experts from the United Kingdom, four from Norway, three
230 from six countries, two from 15 countries, and one from 11 countries (Figure 1).

231

232 There were 21 statements assessed in round one (Figure 2). Seven were added, and ten were
233 modified for round two, making a total of 28 statements assessed. Nine were added, nine
234 were modified, and six were removed for round three, making a total of 31 statements
235 assessed. Overall, consensus was reached for 26 statements and not reached for five. Results
236 from each round are presented in Tables 2–4 accompanied by the statements tested in the

237 third round. The statements from rounds one and two are provided in the appendix for
238 completeness (see page 5 onwards). For statements where consensus was reached, quotes that
239 illustrate participants' rationale for their responses are given in Table 5. For statements where
240 consensus was not reached, quotes that illustrate the reasons for participants' opposing views
241 are given in Table 6. A definition of child maltreatment was formed by combining the
242 information from the 26 statements for which consensus was reached. This is provided in
243 Panel 1.

244

245 **Objective 1: The characteristics that distinguish child maltreatment as a subset of**
246 **violence against children**

247 Across all three rounds, there was consensus that child maltreatment should be classified as a
248 subset of violence against children (Table 2), with 91% consensus (median score 4) in round
249 three. There was also consensus that the nature of the victim-perpetrator relationship is one of
250 the key characteristics that defines child maltreatment as a sub-type of violence against
251 children, with 90% consensus in round three (median score 3). There was consensus that
252 perpetrators of child maltreatment can be adults or minors (83% consensus in round three;
253 median score 3). To distinguish between child maltreatment and violence against children, we
254 asked participants which relationships between the child and perpetrator were applicable to
255 each. Participants agreed that the perpetrators of child maltreatment could be family, other
256 caregivers, other authority figures, and other trusted figures, but not strangers or peers,
257 whereas all could be perpetrators of violence against children.

258

259 Defining the nature of the relationships further was challenging and this was the only area
260 where there was a lack of consensus remaining after the third round for some statements.

261 Participants agreed that the perpetrator must be in a position of power over the victim in *child*

262 *maltreatment* (80% consensus in round three; median score 3), but there was no consensus on
263 whether they must be in a position of responsibility or have a relationship of trust with them
264 (Tables 2 and 6). There was consensus that perpetrators do not need to be in a position of
265 responsibility for, or have a relationship of trust with, the victim in *violence against children*
266 (78% and 72% consensus respectively in round three; median score for both 2), but no
267 consensus on whether they must be in a position of power.

268

269 **Objective 2: Types and sub-types of child maltreatment**

270 There was consistent agreement across all rounds for the four statements included under this
271 objective (Table 3). There was consistent consensus that “neglect” is a broad type of child
272 maltreatment within which there are different sub-types (97% consensus in round three;
273 median score 4), and that all sub-types of neglect can be characterised as a failure to provide
274 or a failure to supervise (90% consensus in round three; median score 3). Participants also
275 agreed that the term “psychological” should be used as the overarching term to encompass
276 emotional, cognitive, and behavioural maltreatment (97% consensus in round three; median
277 score 4), and that psychological maltreatment should be divided into sub-types of
278 psychological abuse and psychological neglect for research and surveillance purposes (92%
279 consensus in round three; median score 4).

280

281 **Objective 3: The minimum characteristics required to define an incident as child** 282 **maltreatment, for surveillance and research purposes**

283 After round three, consensus was reached for all statements included under this objective
284 (Table 4). Participants agreed that it is essential to know that an act or omission has caused
285 harm, or has the potential to harm a child, to define an incident as child maltreatment, and
286 that a harmful act should be defined as child maltreatment regardless of the traditional or

287 cultural beliefs of the perpetrator (86% consensus for both after round three; median scores
288 3). Participants did not think that an act or omission must be intentional (77% consensus after
289 round three; median score 2), severe (75% consensus after round three; median score 2), or
290 continual and/or repeated (76% consensus after round three; median score 2) to define it as
291 child maltreatment for research or surveillance purposes. There was also consensus that
292 maltreatment does not require confirmation, for example by a multidisciplinary team or
293 statutory authority (70% consensus after round three; median score 2), for research or
294 surveillance purposes. Responses were consistent for all types of child maltreatment.
295

Panel 1. Definition of child maltreatment developed from the 26 statements for which consensus was reached

Child maltreatment is a sub-type of violence against children. The perpetrator can be an adult or minor but must be in a position of power over the victimized child. To define an act or omission as child maltreatment, it must cause harm or have the potential to cause harm, regardless of intention, severity, chronicity, or the traditional/cultural beliefs of the perpetrator. “Neglect” is a broad type of child maltreatment comprised of sub-types that can all be characterised as “failure to provide” or “failure to supervise”. In addition, the broad umbrella term encompassing emotional, behavioural, or cognitive maltreatment should be “psychological”, and psychological maltreatment should be divided into sub-types of psychological abuse and psychological neglect.

296

297 **Discussion**

298 The aim of the study was to reach consensus on types and characteristics of child
299 maltreatment for use in surveillance and multi-sectoral research in the Euro-CAN countries
300 using a robust Delphi methodology. A definition was formed from the 26 statements for

301 which consensus was reached. Our Delphi study aimed to unify and simplify child
302 maltreatment definitions across disciplines and regions. We identified key elements from
303 existing classification systems, to obtain consensus on areas where there are differences, and
304 therefore to distil the essential features required to define child maltreatment in the context of
305 research and surveillance. Our proposed definition is therefore not a completely new
306 definition, but builds on and synthesises information from the existing classifications.

307

308 It is important to recognise that this is the first step in achieving international consensus on a
309 definition of child maltreatment that can be widely used within research and surveillance. The
310 next step will be to test whether the consensus commands support amongst additional experts
311 from a wider range of professions. We suspect that several aspects of the definition will be
312 challenged. These debates are positive and necessary, and may lead to significant refinements
313 and modifications prior to wider acceptance and operationalisation. We discuss several of the
314 key issues that require further consideration below.

315

316 An international classification of violence against children (ICVAC) was recently developed
317 to promote standardized data collection and enable countries to produce comparable
318 statistical data.²⁰ This includes collective as well as interpersonal violence (for example,
319 during armed conflict). We drew on this work to attempt to distinguish between the concepts
320 of violence against children and child maltreatment. There was clear consensus in our study
321 that child maltreatment is a sub-set of violence against children. Our participants also agreed
322 that violence against children has a broader set of perpetrators, consistent with a recent
323 umbrella review of child maltreatment definitions.¹⁶ In addition, the defining characteristics
324 of child maltreatment as identified in our study differ from those adopted for violence against
325 children in ICVAC. Our findings suggest that for child maltreatment, it is only essential to

326 know that the act or omission has caused harm or has the potential to cause harm, whereas for
327 the definition of violence against children, it is assumed that four characteristics (deliberate,
328 unwanted, non-essential, harmful) must be present simultaneously. The experts in this study
329 strongly agreed that “child maltreatment” is a sub-set of “violence against children”. We
330 acknowledge that other experts may not agree with this finding. For example, some
331 professionals may consider online abuse, witnessing domestic violence, or exploitation as
332 forms of child maltreatment rather than violence against children. Additional work is needed
333 to clarify the characteristics that distinguish between these concepts, as well as to identify
334 mechanisms that can be used by professionals working in this field to identify and classify
335 new forms of maltreatment as they come to light.

336

337 Related to this, several internationally-recognised classification systems for child
338 maltreatment were also identified in our background work, each using different approaches,
339 definitions and terminology (infographic available at ²⁴). Most of these^{5,8,29,30} organize
340 maltreatment by type, including physical abuse, sexual abuse, psychological abuse, and
341 neglect, and some include additional types (e.g., exploitation ⁸). In contrast, the Centers for
342 Disease Control Child Maltreatment Surveillance (CMS) recommendations⁷ organize
343 maltreatment by both type and sub-type (e.g., “physical neglect” is a sub-type of “failure to
344 provide” which, in turn, is a sub-type of “child neglect”). Given these differences, it is no
345 surprise that obtaining consistent measurements of child maltreatment is challenging. Results
346 of our background work indicated that areas requiring particular attention were the
347 conceptualization of neglect and psychological maltreatment. Whilst we did not attempt to
348 gain consensus on all potential sub-types of maltreatment, our study participants agreed that
349 neglect and psychological maltreatment are broad types of maltreatment within which there
350 are sub-types.

351

352 Neglect, as agreed by our participants, is characterized by the failure to provide essential
353 resources or failure to supervise a child, which leads to harm or the potential for harm. This
354 consensus progresses beyond the internationally recognized maltreatment classification
355 systems mentioned above, which typically recognize a broader category of neglect without
356 delineating sub-types. The agreement that all forms of neglect can be characterized as either a
357 failure to provide or a failure to supervise aligns with the CMS.⁷ It will be helpful to further
358 categorise neglect within these two sub-types, because specific types of neglect (e.g.,
359 educational or medical) require different and specialized interventions and support. However,
360 gaining consensus on further sub-divisions of neglect was beyond the scope of this study, and
361 warrants a dedicated investigation.

362

363 Study participants also agreed that the term “psychological” should be used as the
364 overarching term to encompass emotional, cognitive, and behavioural maltreatment. Brassard
365 and colleagues have described psychological maltreatment as the least recognized and
366 addressed form of child maltreatment, and note that a variety of terms are used
367 interchangeably including emotional abuse and neglect, mental violence, and emotional
368 maltreatment.³⁶ In the current study, the strong agreement (97% consensus) among experts
369 that "psychological" should be used as an umbrella term (similar to “physical”) rather than
370 “emotional” was surprising given the widespread use of the term “emotional maltreatment” in
371 practice. However, it is encouraging, because use of standardised terminology within
372 surveillance and research will improve the comparability of estimates between settings and
373 studies. However, whilst participants agreed that psychological maltreatment should be
374 divided into sub-types of psychological abuse and psychological neglect, this finding
375 contradicts attempts to classify maltreatment types into hierarchical categories. Specifically,

376 according to our consensus definition, psychological neglect could either be a sub-type of
377 psychological maltreatment or a sub-type of neglect. Further work is needed to explore how
378 the concept of “psychological maltreatment” overlaps with the broad neglect category and to
379 understand whether there are additional sub-types within “psychological maltreatment” that
380 could be important to distinguish (e.g., fabricated or induced illness³⁶ or childhood verbal
381 abuse³⁷).

382

383 The WHO guidance on the prevention of child maltreatment provides a conceptual definition
384 which states that child maltreatment occurs “*in the context of a relationship of responsibility,*
385 *trust or power*”.⁵ However, these inter-related concepts are not themselves defined or clearly
386 delineated. They also appear in legal definitions, such as the “*abuse of position of trust*” in
387 the UK Sexual Offences Act 2003³⁸, where “*position of trust*” refers to adults in specific roles
388 and settings who have regular and direct contact with children such as teachers, care workers,
389 sports coaches, and faith group leaders. The statements on power, responsibility and trust
390 were added to our questionnaire after the first round because some participants had identified
391 one or more of these concepts as potentially relevant in the open-ended responses. When we
392 tested these statements, participants agreed that for an act or omission to be defined as child
393 maltreatment, the perpetrator must be in a position of “*power*” over the victim, but there was
394 no consensus on positions of “*trust*” and “*responsibility*”. The qualitative data suggested that
395 it is easier to operationalize and measure “*power*”, whereas “*trust*” and “*responsibility*” were
396 thought to be too ambiguous or subjective to be of use for routine surveillance or research
397 purposes. Further work is needed to define and distinguish between these concepts before
398 they can be considered as defining features of child maltreatment.

399

400 A key strength of this study was the inclusion of 70 experts working across multiple
401 disciplines, including child protection professionals, healthcare professionals, academics,
402 police, legal or forensic professionals, policy makers or civil servants, as well as adults with
403 lived experience of child maltreatment, who are frequently excluded from research in this
404 field. Adults with lived experience of child maltreatment found some of the technical terms
405 used difficult to understand, however they were supported by the member of our team
406 responsible for public involvement to complete the survey in all three rounds. Another
407 strength was the very high retention rate across rounds, with 94% of participants completing
408 all three rounds. Whilst Delphi studies tend to have smaller sample sizes than other
409 population health studies, the number of participants and the retention rate in this study
410 compares very favourably with those of other published Delphi studies³⁹ and ensured that a
411 broad range of different perspectives were included. However, most of the participants were
412 academic researchers and/or healthcare professionals and there was only a small number of
413 participants from some professions, for example legal professionals and police. In addition,
414 we did not include other professional groups who may be dealing with individual cases of
415 child maltreatment such as teachers. As such, our findings may not reflect the full range of
416 opinions of all professions. We were also unable to analyse the data by professional group
417 due to small numbers. Despite this, previous research has found that even a small panel (23
418 participants) with a general understanding of the field of interest is sufficient to achieve stable
419 consensus and develop reliable criteria in a Delphi study.³²

420

421 In addition, we included experts from the 34 different countries involved in the Euro-CAN
422 network. The fact that stable consensus was achieved for the majority of statements
423 strengthens our confidence in the broad potential applicability of this definition to a range of
424 countries, despite the differences in child protection systems, laws and policies throughout

425 Europe. Although we had excellent participation from countries in the network, these are not
426 necessarily representative of all countries. It is therefore not clear how applicable the
427 definition would be in countries outside of Europe, and replication of this study in other
428 settings would strengthen confidence in our findings. However, achieving consensus within
429 Europe is an important starting point and further work is now needed to develop consensus
430 on a global scale. In addition, conducting the study in English limited participation to
431 individuals who were confident with the English language. In addition, during the design of
432 the questionnaire, the team identified several areas where use of terminology differed in
433 different languages. For example, in Icelandic, the term “perpetrator” is only used to refer to
434 adults, and in Polish there is no distinction between the terms “abuse” and “violence” in the
435 context of child maltreatment. Due to the multi-lingual nature of the team, we were able to
436 construct the statements to account for some of these linguistic nuances; however, it was
437 evident from the qualitative responses that some differences in interpretation persisted. We
438 carefully examined and discussed these with team members to identify areas where additional
439 explanatory text was required to mitigate the effects of these challenges. If researchers are
440 planning a similar study in other settings, we recommend that they carefully select team
441 members for their diversity and follow the same approach as us.

442

443 We did not include statements relating to physical or sexual abuse because these are accepted
444 within existing classification systems to be broad types of maltreatment. However, areas of
445 uncertainty remain in relation to the specific sub-types and acts that should be considered as
446 physical or sexual abuse. For example, the limits of physical punishment are not universally
447 agreed, and not all studies of sexual abuse include non-contact sexual acts within their
448 definition, which will underestimate prevalence.⁴⁰ In addition, whilst participants agreed that
449 their responses applied to all types of maltreatment, the open-ended responses nevertheless

450 suggested some nuances. For example, some participants suggested that the perpetrators of
451 sexual abuse might be a wider group than those of other types of child maltreatment. It was
452 beyond the scope of this study to reach consensus on the definitional criteria for each sub-
453 type of maltreatment. However, these areas require further exploration. A secondary analysis
454 of the qualitative data from this study may be provide insights to guide this further work.

455

456 Study participants agreed that confirmation of child maltreatment is not essential for the
457 definition. Longitudinal studies (such as ⁴¹) have shown that children with confirmed and
458 unconfirmed maltreatment reports have similar long-term outcomes. This suggests that, for
459 research and surveillance purposes, data from multiple different sources (for example, self-
460 report, administrative, and clinical data) can be used to count child maltreatment using our
461 proposed definition. Research and surveillance of child maltreatment also involves multiple
462 sectors and institutions, including health, social care, and justice, among others. We suggest
463 that researchers are transparent about the data sources used and clearly state whether and how
464 child maltreatment cases have been confirmed to facilitate measurement and comparison in
465 different settings.

466

467 As noted above, our research findings represent a pivotal first step that will now require
468 concerted efforts to test and refine the definition. Ultimately, consideration will then need to
469 be given to how such a consensus definition of child maltreatment can be operationalised.
470 Standardised definitional elements are a prerequisite for the ability to compare the efficacy of
471 interventions and prevention efforts across countries and systems in empirical studies. We
472 propose a two-path roadmap towards operationalisation: first, with targeted actions to apply
473 the consensus definitional elements within research and surveillance. The second path
474 emphasises strategic advocacy. Equipped with the robust consensus achieved, we see the

475 need to support professionals, advocates, and communities to push for the resources and
476 infrastructure necessary for the empirical study of child maltreatment epidemiology,
477 prevention, and intervention.

478

479 To tackle the gap identified in our scoping review—where previous child maltreatment
480 definitions were rarely tested or operationalised—we propose developing standardised
481 toolkits and cross-sectoral checklists, alongside pilot programmes.²⁷ One promising setting
482 for piloting our definition is the Barnahus model, which is gaining traction across Europe as a
483 multidisciplinary framework for the response to child maltreatment. Piloting within Barnahus
484 centres, where healthcare, child protection, and law enforcement collaborate closely, will
485 allow for real-world testing of the definition in venues already committed to interagency
486 cooperation.⁴² In the long term, we recommend creating a comprehensive set of pan-
487 European guidelines on definitional elements for cross-sectoral implementation, with
488 consideration for adaptation given country-specific cultural and regional diversities. We
489 anticipate that the adoption of our definition will be a gradual process that is dependent on the
490 specific data collection systems in each sector and country.

491

492 Researchers often fail to penetrate policy-making realms due to the silos that separate these
493 domains. This divide is often exacerbated by limited dissemination strategies and a lack of
494 advocacy to ensure research findings translate into policy changes. The absence of
495 policymaker engagement in research initiatives like Delphi studies can widen this gap, as
496 consensus definitions fail to reach practical application in policy frameworks. Our two-part
497 approach therefore includes proactive advocacy efforts, leveraging WHO's INSPIRE
498 framework, which provides a strategic platform for child maltreatment prevention.⁴³ As
499 WHO emphasises implementation in “pathfinder” countries, our advocacy efforts can align

500 with INSPIRE’s evidence-based strategies, building momentum in European region countries
501 prioritising the prevention of violence and abuse. By actively disseminating our findings via
502 the Euro-CAN network and building alliances with stakeholders across sectors, we aim to
503 bridge the research-policy divide, helping to embed our consensus-based definition into
504 practice and enhance public health surveillance of child maltreatment.

505

506 This is the first study to have reached consensus on types and characteristics of child
507 maltreatment and to provide a definition of child maltreatment for use in multi-sectoral
508 research and surveillance in Europe. Use of a standardized definition will improve
509 measurement and recording of child maltreatment, and lead to the development and
510 implementation of more effective and targeted services and interventions. This in turn has the
511 potential to reduce inequalities and lead to improved public health outcomes for children at
512 risk of maltreatment. Concerted efforts are now required to operationalise, test, and monitor
513 the definition in real world settings.

514

515 **Tables and Figures**

516 Table 1: Respondents and response rates

517 Table 2: Quantitative results for objective 1

518 Table 3: Quantitative results for objective 2

519 Table 4: Quantitative results for objective 3

520 Table 5: Qualitative results where there is consensus

521 Table 6: Qualitative results where there is no consensus

522

523 Figure 1: Map of participants' countries

524 Figure 2: Flowchart of statements

525

526 Table A1: Checklist of the CREDES guidance

527 Table A2: Participant eligibility criteria

528

529 **Contributors Statement**

530 AJ and GO conceptualised the study and acquired the funding for the Euro-CAN network,
531 and A Naughton acquired the study funding. All authors contributed to the design of the study
532 and the questionnaire. LBR, LH and LEC led the study workshops. RV was responsible for
533 patient and public involvement. UN was responsible for overall methodology, recruitment,
534 obtaining ethical approval, and project administration. A Ntinapogias and UN curated the data
535 for analysis, with DL conducting the quantitative analysis. LEC, LH, KD, DL, UN and A
536 Naughton conducted the qualitative analysis. All authors were involved in interpreting the
537 results. LEC and LH co-wrote the manuscript together and produced the tables and figures.
538 All authors reviewed and edited the manuscript. LH provided supervisory support to LEC.

539

540 **Declaration of interests**

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545

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551

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558

559 **References**

560 1. World Health Organization. Global status report on preventing violence against
561 children. 2020. <https://apps.who.int/iris/handle/10665/332394> (accessed November 11 2022).

562 2. Hughes K, Ford K, Bellis MA, Glendinning F, Harrison E, J P. Health and financial
563 costs of adverse childhood experiences in 28 European countries: a systematic review and
564 meta-analysis. *Lancet Public Health* 2021; **6**(11): e848-e57.

565 3. World Health Organization. Preventing child maltreatment. 2024.
566 <https://www.who.int/europe/activities/preventing-child-maltreatment> (accessed 17 April
567 2024).

568 4. Ramiro-Gonzalez M, Dobermann D, Metilka D, Aldridge E, Yon Y, Sethi D. Child
569 maltreatment prevention: a content analysis of European national policies. *Eur J Public*
570 *Health* 2019; **29**(1): 32-8.

571 5. World Health Organization and International Society for Prevention of Child Abuse
572 and Neglect. Preventing child maltreatment: a guide to taking action and generating evidence.
573 2006. [https://www.who.int/publications/i/item/preventing-child-maltreatment-a-guide-to-](https://www.who.int/publications/i/item/preventing-child-maltreatment-a-guide-to-taking-action-and-generating-evidence)
574 [taking-action-and-generating-evidence](https://www.who.int/publications/i/item/preventing-child-maltreatment-a-guide-to-taking-action-and-generating-evidence) (accessed November 14 2022).

575 6. Fluke JD, Tonmyr L, Gray J, et al. Child maltreatment data: A summary of progress,
576 prospects and challenges. *Child Abuse Negl* 2021; **119**: 104650.

577 7. Leeb RT, Paulozzi L, Melanson C, Simon T, I. A. Child Maltreatment Surveillance:
578 Uniform Definitions for Public Health and Recommended Data Elements, Version 1.0.

- 579 Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury
580 Prevention and Control, 2008.
- 581 8. UNICEF East Asia & Pacific. Violence against Children in East Asia and the Pacific:
582 A Regional Review and Synthesis of Findings. Strengthening Child Protection Systems
583 Series: No. 4. 2014. [https://www.unicef.org/eap/reports/violence-against-children-east-asia-](https://www.unicef.org/eap/reports/violence-against-children-east-asia-and-pacific)
584 [and-pacific](https://www.unicef.org/eap/reports/violence-against-children-east-asia-and-pacific) (accessed November 14 2022).
- 585 9. Jud A, Fegert JM, Finkelhor D. On the incidence and prevalence of child
586 maltreatment: a research agenda. *Child Adolesc Ment Health* 2016; **10**: 17.
- 587 10. Jud A, Voll P. The definitions are legion: Academic views and practice perspectives on
588 violence against children. In: Bühler-Niederberger D, L A, eds. Victim, Perpetrator, or What
589 Else? (Sociological Studies of Children and Youth, Vol 25, pp 47-66). Bingley: Emerald
590 Publishing; 2019.
- 591 11. Moody G, Cannings-John R, Hood K, Kemp A, Robling M. Establishing the
592 international prevalence of self-reported child maltreatment: a systematic review by
593 maltreatment type and gender. *BMC Public Health* 2018; **18**: 1164.
- 594 12. Stoltenborgh M, van Ijzendoorn MH, Euser EM, Bakermans-Kranenburg MJ. A
595 global perspective on child sexual abuse: meta-analysis of prevalence around the world.
596 *Child Maltreat* 2011; **16**(2): 79–101.
- 597 13. Stoltenborgh M, Bakermans-Kranenburg MJ, Alink LRA, van Ijzendoorn MH. The
598 universality of childhood emotional abuse: A meta-analysis of worldwide prevalence. *J*
599 *Aggress Maltreat Trauma* 2012; **21**(8): 870–90.
- 600 14. Stoltenborgh M, Bakermans-Kranenburg MJ, van IJzendoorn MH. The neglect of
601 child neglect: a meta-analytic review of the prevalence of neglect. *Soc Psychiatry Psychiatr*
602 *Epidemiol* 2013; **48**(3): 345–55.

- 603 15. Chandan JS, Gokhale KM, Bradbury-Jones C, Nirantharakumar K, Bandyopadhyay S,
604 Taylor J. Exploration of trends in the incidence and prevalence of childhood maltreatment
605 and domestic abuse recording in UK primary care: a retrospective cohort study using ‘the
606 health improvement network’ database. *BMJ Open* 2020; **10**(6): e036949.
- 607 16. Massullo C, De Rossi E, Carbone GA, et al. Child maltreatment, abuse, and neglect:
608 an umbrella review of their prevalence and definitions. *Clin Neuropsychiatry* 2023; **20**(2): 72.
- 609 17. Gilbert R, Fluke J, O'Donnell M, et al. Child maltreatment: variation in trends and
610 policies in six developed countries. *Lancet* 2012; **379**(9817): 758-72.
- 611 18. Jud A, Fluke J, Alink LR, et al. On the nature and scope of reported child
612 maltreatment in high-income countries: opportunities for improving the evidence base.
613 *Paediatr Int Child Health* 2013; **33**(4): 207-15.
- 614 19. Saltzman LE, Fanslow JL, McMahon PM, Shelley GA. Intimate Partner Violence
615 Surveillance: Uniform Definitions and Recommended Data Elements, version 1.0. Atlanta
616 (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and
617 Control, 1999.
- 618 20. United Nations Children’s Fund. International Classification of Violence against
619 Children. 2023. [https://data.unicef.org/resources/international-classification-of-violence-
620 against-children/](https://data.unicef.org/resources/international-classification-of-violence-against-children/) (accessed 28 June 2024).
- 621 21. Parks SE, JL A, Hill HA, Karch DL. Pediatric Abusive Head Trauma: Recommended
622 Definitions for Public Health Surveillance and Research. 2012.
623 <https://stacks.cdc.gov/view/cdc/26243> (accessed March 2 2023).
- 624 22. Campbell KA, Wood JN, Lindberg DM, Berger RP. A standardized definition of near-
625 fatal child maltreatment: results of a multidisciplinary Delphi process. *Child Abuse Negl*
626 2021; **112**: 104893.

- 627 23. Fares-Otero N, Seedat S. Childhood maltreatment: A call for a standardised definition
628 and applied framework. *Eur Neuropsychopharmacol* 2024; **87**: 24-6.
- 629 24. Euro-CAN. Multi-Sectoral Responses to Child Abuse and Neglect in Europe:
630 Incidence and Trends. 2024. <https://liu.se/en/research/barnafrid/euro-can> (accessed 28 June
631 2024).
- 632 25. Nurmatov U, Cowley LE, Rodrigues LB, et al. Consensus building on definitions and
633 types of child maltreatment to improve recording and surveillance in Europe: protocol for a
634 multi-sectoral, European, electronic Delphi study. *BMJ Open* 2023; **13**(12): e076517.
- 635 26. Jünger S, Payne SA, Brine J, Radbruch L, Brearley SG. Guidance on Conducting and
636 REporting DELphi Studies (CREDES) in palliative care: Recommendations based on a
637 methodological systematic review. *Palliat Med* 2017; **31**(8): 684-706.
- 638 27. Laajasalo T, Cowley LE, Otterman G, et al. Current issues and challenges in the
639 definition and operationalization of child maltreatment: A scoping review. *Child Abuse Negl*
640 2023; **140**: 106187.
- 641 28. Ntinapogias A, Gray J, Durning P, Nikolaidis G. CAN-MDS policy and procedures
642 manual-Coordinated response to child abuse & neglect via a minimum data set. 2015.
643 <http://can-via->
644 [mds.eu/sites/default/files/WS.5_D6_Policy%20and%20Procedures%20Manual_%CE%95%
645 CE%9D.pdf](http://can-via-mds.eu/sites/default/files/WS.5_D6_Policy%20and%20Procedures%20Manual_%CE%95%CE%9D.pdf) (accessed March 2 2023).
- 646 29. English DJ, and the LONGSCAN Investigators. Modified Maltreatment Classification
647 System (MMCS). 1997. <http://longscan.research.unc.edu/> (accessed November 11 2022).
- 648 30. Slep A, Heyman R, Foran H. Child Maltreatment in DSM-5 and ICD-11. *Fam*
649 *Process* 2015; **54**: 17–32.

- 650 31. World Health Organization. WHO Guidelines for the Health Sector Response to Child
651 Maltreatment. 2019. [https://www.who.int/publications/m/item/who-guidelines-for-the-health-](https://www.who.int/publications/m/item/who-guidelines-for-the-health-sector-response-to-child-maltreatment)
652 [sector-response-to-child-maltreatment](https://www.who.int/publications/m/item/who-guidelines-for-the-health-sector-response-to-child-maltreatment) (accessed November 11 2022).
- 653 32. Akins RB, Tolson H, Cole BR. Stability of response characteristics of a Delphi panel:
654 application of bootstrap data expansion. *BMC Med Res Methodol* 2005; **5**: 37.
- 655 33. Vogel C, Zwolinsky S, Griffiths C, Hobbs M, Henderson E, Wilkins E. A Delphi study
656 to build consensus on the definition and use of big data in obesity research. *Int J Obes (Lond)*
657 2019; **43**: 2573-86.
- 658 34. Meshkat B, Cowman S, Gethin G, Ryan K, Wiley M, Brick A. Using an e-Delphi
659 technique in achieving consensus across disciplines for developing best practice in day
660 surgery in Ireland. *J Hosp Adm* 2014; **3**(4).
- 661 35. Beiderbeck D, Frevel N, von der Gracht HA, Schmidt SL, Schweitzer VM. Preparing,
662 conducting, and analyzing Delphi surveys: Cross-disciplinary practices, new directions, and
663 advancements. *MethodsX* 2021; **8**: 101401.
- 664 36. Brassard MR, Hart SN, Glaser D. Psychological maltreatment: An
665 international challenge to children's safety and well being. *Child Abuse Negl* 2020; **110**:
666 104611.
- 667 37. Dube SR, Li ET, Fiorini G, et al. Childhood verbal abuse as a child maltreatment
668 subtype: A systematic review of the current evidence. *Child Abuse Negl* 2023; **144**: 106394.
- 669 38. UK Government. Sexual Offences Act. 2003 (updated 2022).
670 <https://www.legislation.gov.uk/ukpga/2003/42/part/1/crossheading/abuse-of-position-of-trust>
671 (accessed 9 August 2024).
- 672 39. Niederberger M, Spranger J. Delphi technique in health sciences: a map. *Front Public*
673 *Health* 2020; **8**: 561103.

- 674 40. Mathews B, Pacella R, Dunne MP, Simunovic M, Marston C. Improving
675 measurement of child abuse and neglect: A systematic review and analysis of national
676 prevalence studies. *PLoS one* 2020; **15**(1): e0227884.
- 677 41. Kugler KC, Guastaferrero K, Shenk CE, Beal SJ, Zadzora KM, Noll JG. The effect of
678 substantiated and unsubstantiated investigations of child maltreatment and subsequent
679 adolescent health. *Child Abuse Negl* 2019; **87**: 112-9.
- 680 42. Johansson S, Stefansen K. Policy-making for the diffusion of social innovations: the
681 case of the Barnahus model in the Nordic region and the broader European context.
682 *Innovation* 2020; **33**(1): 4-20.
- 683 43. Maternowska MC, Gould C, Amisi MM, J. vdH. INSPIRE: Seven strategies for
684 ending violence against children—exploring knowledge uptake, use and impact. *Child*
685 *Protection and Practice* 2024; **1**: 100008.
- 686