Memories of Childhood Neglect and Abuse: Corroboration in a Series of Sisters

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Reports from 87 community-based sister-pairs, selected for high rates of neglect or abuse in childhood, have been used to establish validity of the CECA, a retrospective interview measure of childhood experience. Corroboration was based on independent assessments of sisters’ accounts of what happened to each other in childhood. Corroboration of scales assessing parental neglect, physical abuse in the household and sexual abuse (either household or nonhousehold) was satisfactory, with a mean correlation for the three experiences of .60 (weighted kappa [Kw]).

Concordance reflected the degree to which experience was shared and was judged by comparing the sisters’ accounts of their own experience. Among sisters with shared (concordant) experience for neglect or abuse, corroboration was high (mean of .74), but for those with nonshared (nonconcordant) experience it was largely absent (mean of .01). The degree to which the experiences of neglect or abuse were concordant was related to whether the perpetrator was a member of the household. Neglect and physical abuse were by definition from household members (mainly parents) and involved high concordance of experience. Sexual abuse occurred from many sources and in practice was commonly from an adult living outside the household and such experiences were less likely to be shared by sisters. An overall index indicating the presence of at least one abusive experience before the age of 17 showed a concordance of .64 with corroboration between sisters as high as .70. Issues involving retrospective recall and measurement are discussed.

Keywords: Validity, childhood, abuse, retrospective measure.

Abbreviations: CECA: Childhood Experiences of Care and Abuse; CTS: Conflict Tactics Scale; PBI: Parental Bonding Instrument.

Introduction

Acquiring information about childhood from adults recalling their early life has become common practice as a means of examining the long-term effects of childhood adverse experience (Brewin, Andrews & Gotlib, 1993). Development in retrospective measurement has been accompanied by an increased capacity of instruments to trigger memory of relevant material and to discriminate between what occurred and the person’s response to it (Bifulco, Brown & Harris, 1994). At the same time, there has been a growth of research into the adverse consequences of childhood neglect and abuse, now accepted as sufficiently prevalent to warrant attention from health care practitioners, both to protect children at risk and to treat adults with prior maltreatment (Finkelhor, 1986; Gillham, 1991).

There are obvious practical advantages in using adult accounts of extreme negative childhood experience when investigating the aetiology of adult disorders. However, there are also less obvious reasons: ethical conflicts concerning confidentiality and mandated reporting of abuse make research activity with children difficult. There are also problems over a child’s willingness or ability to report ongoing abuse, either because of fear of reprisals or because of an inability to identify an experience as abusive. Parents are also potentially unsatisfactory informants, particularly where the parent is the abuser or where the perpetrator of any abuse does not belong to the household.

However, despite recent developments, doubt has been raised again about the veracity of childhood memories, particularly those concerning sexual abuse (Loftus & Ketcham, 1994). The current debate has inevitably cast some doubt on the trustworthiness of methods for ascertainment and, by implication, on estimates of the prevalence of child abuse. In particular, controversy has focused on the possible “false memories” of sexual abuse (Crews, 1994). The debate has largely centred on litigious proceedings in the U.S.A., where cases have arisen of fathers being accused by their adult daughters of sexual abuse in early childhood as a result of memories “recovered” during psychotherapy. It has been claimed that psychotherapists, in their over-zealous searching for the earliest causes of symptomatology, can “implant”
memories of abuse either when clients are under hypnosis or when they are in a highly suggestible state (BPS Report, 1994; Loftus, 1993; Ofshe & Watters, 1995). In most of the published cases the alleged behaviour has been restricted to sexual abuse, occurring at a very young age, with the alleged perpetrator being the natural father.

Leaving this contemporary controversy aside, there has been longstanding concern that retrospective reporting may involve systematic bias involving over-reporting of negative circumstances where psychiatric disorder is being investigated. There may, for example, be an effort to explain current symptoms by means of exaggerating a negative past, or the symptoms themselves may hamper memory selectively. There is also the possibility that cognitive biases linked to vulnerability to depression may influence reporting even after the recovery from a depressive episode.

However, the reverse is also possible: there may at times be under-reporting, particularly when childhood experience has been of a highly traumatic nature. This may be due to an unwillingness to think and talk about the experience because of associated stigma, or as a result of amnesia for the childhood trauma (Feldman-Summers & Pope, 1994; Herman & Suttzow, 1987; Terr, 1994). It has been argued that, as a protective mechanism, memory of abuse can actively be repressed and can become inaccessible to consciousness unless specific triggers from either the environment or psychotherapeutic intervention are used. Studies have suggested a link between severity, duration and early age of abuse for childhood amnesia (Feldman-Summers & Pope, 1994; Herman & Suttzow, 1987).

A study of 129 adults, officially recorded in childhood as sexually abused, found that 38% of the incidents were not reported when the victims were interviewed later as adults (Williams, 1994). Abuses at a young age (6 or under) or by someone close were less likely to be reported. However, as many as two-thirds of those failing to report the target abuse reported another abuse by a different perpetrator. Therefore, even where under-reporting is present, a retrospective index of abuse may show satisfactory validity when based on the occurrence of at least one incident.

This debate also has implications for the retrospective assessment of other adversities such as physical abuse or neglect in childhood. An official record kept at the time of the abuse is high. However, the use of a questionnaire cannot rule out increased agreement due to familial styles of reporting, for example a tendency to rate on extreme points, or idiosyncratic family definitions of what constitutes “good” or “bad” characteristics of relationships. This may artificially increase levels of agreement between family members. Interviews where full descriptive accounts are obtained can help to rule out this possibility.

There have also been PBI studies comparing responses of parent and adult offspring, and these have shown fairly high levels of agreement, for example, product-moment correlations of .44 for mother’s quality of care and .55 for mother’s overprotection (Parker, 1981). The Conflict Tactics Scale (CTS) questionnaire, however, has shown much more variability in degree of corroboration, for example a lack of any agreement about “mother’s reasoning” but a high level of agreement (.64) for “father’s violence” (Strauss & Gelles, 1990).

A similar exercise has used the Home Environment Interview, for a sibling comparison of childhood experience among substance-abusing clinic attenders and their “well” siblings (Robins et al., 1985). The interview is structured and thus does not have the facility for using additional probing questions to clarify responses and obtain full details of childhood context. No actual figures are reported but only half of the scales measured attained significant correlations between siblings (op. cit.). Interestingly, there was no suggestion of bias from patients’ current psychiatric state. The main source of error concerned the type of question: factual items showed higher levels of agreement than did more interpretative or value-laden scales.

A second approach has involved the use of parents and young children as informants. Studies using the CTS questionnaire obtained very low associations. In one study the correlation for “symbolic aggression” from mother to child was .16 and from father to child .19 (Hetherington & Clingempeel, 1992). In a second study the correlation for aggression from mother was .08 and from father .09 (Reiss et al., 1994). There have been consistently higher associations between parents’ reports than between parent and child reports, a finding rather puzzlingly used to underline the failings of children as respondents rather than to invalidate the instruments as such.

When an adult offspring’s retrospective account of their parent’s earlier behaviour is compared with harsh parenting recorded at the time, low levels have been reported (e.g. father’s hostility kappa = .19 and mother’s = .24; Maughan, Pickles & Quinton, 1995). The assessment of harsh parenting was based on Expressed Emotion measures of criticism together with other assessments of disciplinary practice. Discrepancies appeared to be largely due to under-reporting of negative experience by offspring with better functioning in adult life. How-
ever, as the authors themselves comment, the prospective measures of harsh parenting only covered a relatively brief period around the time of the first assessment and may not have been typical of childhood as a whole. The retrospective assessments, then, may possibly have given a more accurate picture of childhood. Offspring with better adult outcome may have been those for whom harsh parenting existed for a briefer period in childhood, which may have accounted both for the under-reporting and the better outcome.

A number of statistical approaches have been used to reflect degree of validation, although weighted kappa or intra-class correlations have been most commonly employed. Most studies have taken statistically significant correlations as reflecting an adequate result (for instance around .30 on a sample of 80 or more observations, \( p < 0.005 \)). The level of corroboration that is possible will be constrained by any lack of reliability of a particular measure. It will also be lowered by the fact that a second informant will at times be in no position to confirm a report, perhaps because of not witnessing the relevant behaviour. With such sources of potential unreliability in mind, Cronbach has noted: "It is unusual for a validity coefficient to rise above .60, though that is far from perfect prediction ... To the question 'what is a good validity coefficient?' the only sensible answer is 'the best you can get'" (Cronbach, 1970, p. 135).

The Childhood Experience of Care and Abuse (CECA) instrument, used in the validational exercise reported here, obtains a comprehensive and detailed assessment of childhood experience from adults. It is based on a combination of intensive, semi-structured interview and investigator-based judgements, which rely on a lengthy training and use of a series of precedent examples to rate the severity of various kinds of childhood experience. The interview concentrates on actual experiences in chronological sequence with the aim of obtaining details relating to severity and frequency. Reports in general terms about the past are not enough: actual examples of events and others' behaviour have to be obtained to justify ratings. Ratings made by interviewers are checked at consensus meetings with other workers trained in the measure, and reliability has been shown to be good (Bifulco et al., 1994).

A previous exercise using the CECA with 20 pairs of sisters, all of whom experienced the death of a mother in childhood, yielded high levels of agreement concerning care received from parents or parent substitutes (Bifulco et al., 1994). However, the analysis was limited by small numbers, by the fact that only the period after the mother's death was covered, that experiences with surrogate mothers rather than natural mothers were focused on and that abuse was not covered.

The current study aims to extend the exercise with a larger series of adult sisters, close in age, who were in the main brought up by their natural mothers and spent most of their childhood together. The aim is to establish the degree of corroboration by two informants of the experience of each (see Fig. 1A).

In what follows, it is important to distinguish corroboration from concordance of the two sisters' experience. Concordance reflects the extent to which they describe having had similar experiences or a "shared environment" (see Fig. 1B). These two aspects will not necessarily covary: it is possible to have concordance (for example where both have the same experience of sexual abuse by stepfather) but no corroboration (perhaps because each is unaware that it happened to the other). It is equally possible, in the absence of concordance (for instance only one sister reports being physically abused by the mother), to have corroboration (both sisters confirming that only this one sister was abused).

The degree of concordance of experience is potentially central to the validational exercise. Given that a subject's report of another's experience is acknowledged to be less reliable than a report of their own experience (Robins, 1966), concordance of experience can be seen as an alternative form of validation, even in the absence of a corroboration account. In other words, if two sisters independently recall a similar abusive experience, this can be seen as a form of validation even if neither is aware of it happening to the other.

Another issue concerns the possibility that agreement on earlier experiences might depend on discussions sisters have had about their experiences. These might lead to spurious convergence of accounts, perhaps as a consequence of the development of a family mythology about past events. Criticism of the cross-informant approach to family measures has been made on this basis (Platt, 1980). However, this makes the assumption that sisters' discussions about childhood experience would necessarily lead to false accounts. Although this is a possibility, it is just as likely that they would simply reconfirm memories of similar childhood events held independently up to that point. Either way, any cross-informant validity exercise should take into account the fact of any such discussions, as they might threaten the independence of accounts.

The following analysis will seek to determine the level of corroboration between sisters on three scales concerning parental neglect, household physical abuse and any sexual abuse before age 17, as defined in previous analyses, to reflect "Childhood Adversity". The extent to which agreement is related to confiding between the sister pairs will be examined and the level of concordance (or shared experience) will be determined. Finally corroboration will be re-assessed once concordance is taken into account.

### Method

A community series of 87 pairs of sisters aged 20–50 were interviewed in 1990–1994. They were specially selected so that over half had adverse childhood experience. The first contact women (sister 1) were drawn by postal screening from two health centre patient lists in Islington, North London. They were considered suitable if they had a sister who was within 5 years of their age, brought up with the respondent and currently living in the U.K. Just over half the series (47 pairs) were selected on the basis of reporting problematical relationships with parents in childhood. This was achieved by means of the CECA-Q questionnaire, which covers 17 items on the mother's behaviour to the respondent in childhood, reflecting neglect and antipathy, items based on the interview questions covered in the full CECA instrument. Two open questions on other adverse experiences in childhood were also used to pick up spontaneous descriptions of abuse. Details of the CECA-Q development and scoring are the subject of a forthcoming report (Bifulco &
A. CORROBATION

<table>
<thead>
<tr>
<th>SISTER 1 ABOUT SELF</th>
<th>ADVERSITY PRESENT</th>
<th>ADVERSITY ABSENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVERSITY PRESENT</td>
<td>'a' Agree adversity present for both.</td>
<td>'b' Disagree. Sister 1's report of presence of adversity not confirmed by sister 2.</td>
</tr>
<tr>
<td>ADVERSITY ABSENT</td>
<td>'c' Disagree. Sister 1's report of absence of adversity not confirmed by sister 2.</td>
<td>'d' Agree adversity absent for both.</td>
</tr>
</tbody>
</table>

NOTE: This analysis is repeated reversing the sisters i.e. sister 2 reporting about herself with sister 1 reporting on sister 2. This results in a doubling of the number of observations (for example, on 87 pairs, N=174).

B. CONCORDANCE

<table>
<thead>
<tr>
<th>SISTER 2 ABOUT SISTER 1</th>
<th>ADVERSITY PRESENT</th>
<th>ADVERSITY ABSENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADVERSITY PRESENT</td>
<td>'A' Both experienced adversity.</td>
<td>'B' Different experiences. Sister 1 alone had adversity.</td>
</tr>
<tr>
<td>ADVERSITY ABSENT</td>
<td>'C' Different experiences. Sister 2 alone had adversity.</td>
<td>'D' Neither experienced adversity.</td>
</tr>
</tbody>
</table>

Note: the resulting N on a concordance analysis is the same as the number of pairs (for example, for 87 pairs N=87).

Figure 1. Definitions of corroboration and concordance

Moran, 1997). A sister (2) of each target subject (1) was traced and independently given a full interview covering childhood experience. All ratings reported on here refer to the full interview assessments and not the screening scores.

The remaining respondents (40) were consecutive responders to the screening questionnaire, selected solely on the basis of being in the correct age range and having a suitable sister. Again one sister was traced and interviewed for each.

The screening procedure showed that women with suitable sisters were relatively rare: only around 6% of 4,000 women screened fitted the criteria for selection. Response rate (after reminder letters) was similar to that achieved in an earlier screening in the same part of London, around 45%. Previous analysis of nonresponders showed that the majority had moved away, indicating some inaccuracy of the surgery records. Once these were excluded, an estimated response rate of 70% registered at the correct address was achieved (Brown, Craig & Harris, 1985). Refusal to be interviewed or allow contact with a sister occurred for 2% of those sending back a questionnaire. Four of the women interviewed had sisters who finally refused to be seen and have been excluded from the present exercise. For eight of the “high-risk” families, a third sister was also interviewed where she fitted the age and location criteria. However, these additional sisters are not used in the current analysis in order to keep the pairs truly independent.

All 87 pairs of women were asked at length about their own and their paired sister's experiences before age 17. Each was interviewed independently by a different interviewer and neither rater had access to the paired sister's interview or ratings. Ratings were checked at consensus meetings where neither the interviewer nor the team members taking part had access to the ratings of the other sister of the pair. A number of childhood experiences were covered in the interview, but this paper will deal only with the three highlighted in previous analyses as being most highly related to adult experience of depression: neglect, physical or sexual abuse (Bifulco et al., 1994). Other scales will be dealt with in a separate report.

Of the final sample, two-thirds were middle-class as assessed by their own or their partner's occupation; a higher proportion than in childhood, where around half had middle-class upbringings. Half of the sample were married or cohabiting and half had children. A fifth of the women were raising a child single-handedly. There were no differences in the demographic characteristics of the sister 1 and sister 2 series.
Measures
Childhood Experience of Care and Abuse (CECA)
A range of experiences before age 17 were covered as part of
the standard CECA interview. All experiences were rated in
terms of their severity, using predetermined criteria, on 4-point
scales with “1: marked” for most negative and “4: little/no”
for least negative experience. In order to assess corroboration,
two ratings were made on each scale for each woman—one
reflecting her own experience and the second her report of her
sister’s experience.

Parental Neglect
Neglect from parents or surrogate parents was a global
assessment of disinterested behaviour in terms of material care
for the child, emotional availability when the child was
distressed, interest in the child’s friendships, school work or
career. Questions about neglect were repeated for each house-
hold arrangement lasting at least a year with different parent
figures. In the current series, 8 pairs of sisters had 2
arrangements and thus 95 comparisons could be made for the
87 pairs. Questioning about parental neglect began with a series
of questions about a “typical” day when the child was around
10 years old, and the daily routine outlined in terms of who
woke the child up, cooked breakfast, took the child to school,
washed the clothes, prepared an evening meal, bathed the child
and put them to bed. This would give the outline not only for
household routines but also some indication of neglect in terms
of whether the child had to prepare her own meals, was left
alone in the evenings or at night, and so on. Further questioning
then dealt with whether the parents knew who the child’s friends
were, their interest in whether the child was bullied or isolated,
their interest in school work in terms of reports, school open
days or truanting and whether they showed interest in future
jobs or career when the child was a teenager.

The severity of neglect was rated on the basis of the
pervasiveness of lack of interest in the child’s wellbeing. Thus
typically a rating of “1: marked” neglect might involve material
and emotional neglect as evidenced by the child not being fed or
clothed adequately as well as lack of interest in the child’s school
and social life. A typical “2: moderate” neglect rating would
involve parental lack of interest of somewhat less severity but in
a number of relevant domains, such as lack of attention when
the child is distressed or lack of interest with the child’s school
work and social life. A rating of “3: some” neglect typically
involved both less severe and pervasive disinterest—for in-
stance either emotional distance without behavioural neglect or
indifference in one circumscribed area such as school work.
A rating of “4: little/no” neglect obtained when parents showed
concern in all areas.

Physical Abuse in Household
Physical abuse was assessed for all household members
including mother, father or surrogate parents, siblings and any
other adults living in the home. In practice most physical abuse
was from parents or surrogates, with only 4% of instances from
siblings or other adults. Abuse from different perpetrators was
rated separately. A 4-point rating reflected both the severity of
attack (e.g. the weapon/implement used and the number of
hits), the frequency of the attacks during childhood, and other
relevant information about injuries sustained, threats invoked
and the degree to which the perpetrator was uncontrolled and
the hitting arbitrary. A rating of “1: marked” typically involved
repeated, violent and uncontrolled beatings; “2: moderate”
involved the child being hit repeatedly with an implement such
as belt or stick but in a more controlled, less violent and less
frequent manner; “3: mild” usually involved a single hard hit
across the head with an open hand on a few occasions in
childhood and “4: little/no abuse” was rated for at most only
minor incidents such as being slapped or slapped across the legs.
Since physical abuse could be from more than one source (e.g.
mother or father) a separate rating was made for each, but in
addition a peak rating was made for overall physical abuse.

Sexual Abuse
All sexual abuses were rated regardless of relationship to
perpetrator, but with a distinction made between perpetrators
who were household members and those who were not. Physical
sexual contact with an adult was usually involved, and severity
took into account age at abuse, the degree of intrusiveness of
contact, its frequency and the relationship of the child to
perpetrator. Thus “1: marked” sexual abuse usually involved
sexual intercourse or repeated abuse involving some form of
physical sexual contact by a household family member such as
father or brother. A rating of “2: moderate” involved touching
of genitals on repeated occasions by an adult usually known to
the child and “3: mild” usually involved single incidents of
touching of genitals, often by strangers. A rating of “4: little/no
abuse” was rated if none was reported or only non-contact by
stranger, for example seeing an exhibitionist. Since sexual abuse
could occur from more than one perpetrator, ratings were made
for each abusive experience. However, a peak “worst” sexual
abuse was taken as an overall rating in the following analysis
and household or nonhousehold residence of perpetrator was
distinguished.

In previous analyses examining the relationship of neglect
and abuse to adult depression, only ratings of “marked” or
“moderate” have been taken as denoting presence of the abuse
or neglect of sufficient severity. These dichotomies were derived
empirically in relation to adult depression (Bifulco, Brown &
Harris, 1987; Bifulco et al., 1994; Harris, Brown & Bifulco,
1986). Thus ratings of “mild” for either neglect or physical or
sexual abuse are unrelated to adult depression; this is compared
with a doubling of risk among those with “marked” or
“moderate” ratings.

Childhood Adversity Index
In published analyses, an index of childhood adversity has
been used based on the presence of either severe neglect or
physical abuse or sexual abuse as used in the dichotomised
scales (Bifulco et al., 1994). The extent to which sisters
corroborate and are concordant on this overall assessment will
be made in addition to the individual scales.

Confiding
Two assessments of confiding were made. First, sisters were
asked if they generally confided in each other about significant
and emotionally charged topics. No special reference was made
to childhood experience, but given the nature of the research it
is quite likely that sisters who regularly confided may have
discussed childhood experiences either around the time the
interviews were planned or earlier. Second, for incidents of
physical or sexual abuse, respondents were asked if they
confided in anyone about the abuse during childhood itself.
Although these latter questions were not focused on confiding
in the sister in particular, if the abuses were made public in
childhood it is possible that a sister would learn of it second-
hand, rather than as a witness. Confiding ratings were 4-point,
with the top 2 points denoting a “marked” or “moderate”
amount of confiding. For the highest point there would be
evidence of full disclosure of the abuse with elaboration in terms
Table 1

Rates of Neglect and Abuse in the Sisters Series

<table>
<thead>
<tr>
<th>Childhood experience</th>
<th>Sister 1</th>
<th>Sister 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Marked or moderate ratings)</td>
<td>N = 87</td>
<td>N = 87</td>
<td>N = 174</td>
</tr>
<tr>
<td>A. Three types of childhood adversity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neglect (parental)</td>
<td>24% (21)</td>
<td>18% (16)</td>
<td>21% (37)</td>
</tr>
<tr>
<td>Physical abuse (household)</td>
<td>39% (34)</td>
<td>37% (32)</td>
<td>38% (66)</td>
</tr>
<tr>
<td>Sexual abuse (any)</td>
<td>22% (19)</td>
<td>20% (17)</td>
<td>21% (36)</td>
</tr>
<tr>
<td>B. Childhood adversity index</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Any one of above)</td>
<td>56% (49)</td>
<td>47% (41)</td>
<td>52% (90)</td>
</tr>
<tr>
<td>C. Perpetrator of abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse from father</td>
<td>22% (19)</td>
<td>16% (14)</td>
<td>19% (33)</td>
</tr>
<tr>
<td>Physical abuse from mother</td>
<td>23% (20)</td>
<td>22% (19)</td>
<td>22% (39)</td>
</tr>
<tr>
<td>Sexual abuse—household member</td>
<td>10% (9)</td>
<td>5% (4)</td>
<td>7% (13)</td>
</tr>
<tr>
<td>Sexual abuse—nonhousehold member</td>
<td>14% (12)</td>
<td>15% (13)</td>
<td>14% (25)</td>
</tr>
</tbody>
</table>

of feelings and responses. For “moderate” confiding it was only necessary for the child to have informed someone of the abusive situation.

Statistical Analysis

Comparison between sisters was assessed using weighted kappa (Kw) on the full 4-point scales (Cohen, 1968). Percent agreement was calculated using standard procedures on scales dichotomised between “2: moderate” and “3: some” ratings, as already described.

Results

Rates of Neglect and Abuse in the Series

Table 1A shows the rates of childhood adverse experiences in this selected series by type of sister (sister 1 vs. sister 2). When expressed in these aggregate terms, there was little difference found in the experience of the sister 1 and sister 2 groups. Rates of neglect and sexual abuse were both around 20%, with physical abuse reaching just under 40%. The latter two are approximately double the rates found in representative community series, but with the same ratio of sexual to physical abuse (Bifulco, Brown & Adler, 1991). Half of the series were rated on the overall childhood adversity index as having at least one of the component experiences (Table 1B). Again, this was similar for both sets of sisters. This is, as expected, higher than the rate of around 29% obtained among a sample of inner-city, working-class women (Bifulco et al., 1994).

Finally, Table 1C shows the experiences of abuse in relation to different perpetrators. There was little difference in prevalence of physical abuse from mother or father, but sexual abuse was twice as common from a nonhousehold member (kin or nonkin) than from a household member (kin: usually father, surrogate father or older brother), a result consistent with previous findings in a representative population series (Bifulco et al., 1991). Sexual abuse by a nonhousehold member was also more common in the sister 1 group.

Table 2

Corroboration by Sisters of Childhood Experience

<table>
<thead>
<tr>
<th>A. Corroboration Using 4-point Scales</th>
<th>Kw</th>
<th>p &lt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three types of childhood adversity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neglect (parental)</td>
<td>.70</td>
<td>.0001</td>
</tr>
<tr>
<td>Physical abuse (household)</td>
<td>.57</td>
<td>.0001</td>
</tr>
<tr>
<td>Sexual abuse (any)</td>
<td>.52</td>
<td>.0001</td>
</tr>
<tr>
<td>Perpetrator of abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse by father</td>
<td>.63</td>
<td>.0001</td>
</tr>
<tr>
<td>Physical abuse by mother</td>
<td>.46</td>
<td>.0001</td>
</tr>
<tr>
<td>Sexual abuse—household perpetrator</td>
<td>.56</td>
<td>.0001</td>
</tr>
<tr>
<td>Sexual abuse—nonhousehold perpetrator</td>
<td>.37</td>
<td>.0001</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Corroboration Using Dichotomised Scales</th>
<th>Report of own adversity not confirmed</th>
<th>Report of absence of own adversity not confirmed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three types of childhood adversity “K” Agreement a + d/total</td>
<td>confirmed b + a d</td>
<td>confirmed c + e</td>
</tr>
<tr>
<td>Neglect</td>
<td>.80 94% (31 + 147/190)</td>
<td>18% (7/38) 3% (5/152)</td>
</tr>
<tr>
<td>Physical abuse</td>
<td>.66 84% (47 + 100/174)</td>
<td>29% (19/66) 7% (8/108)</td>
</tr>
<tr>
<td>Sexual abuse</td>
<td>.58 89% (18 + 136/174)</td>
<td>50% (18/36) 1% (2/138)</td>
</tr>
</tbody>
</table>

* Refers to cells in Fig. 1A.
* There were 95 household arrangements to compare neglect for 87 sister-pairs, resulting in 190 comparisons.
Table 3
Concordance of Sisters' Experience (Analysis of 4-point Scales)

<table>
<thead>
<tr>
<th>Three types of childhood adversity</th>
<th>Kw</th>
<th>p</th>
<th>(N pairs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neglect (parental)</td>
<td>.61</td>
<td>.0001</td>
<td>(85)</td>
</tr>
<tr>
<td>Physical abuse (household)</td>
<td>.40</td>
<td>.0001</td>
<td>(67)</td>
</tr>
<tr>
<td>Sexual abuse (any)</td>
<td>.27</td>
<td>.0001</td>
<td>(67)</td>
</tr>
<tr>
<td>Perpetrator of abuse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse from father</td>
<td>.46</td>
<td>.0001</td>
<td>(74)</td>
</tr>
<tr>
<td>Physical abuse from mother</td>
<td>.39</td>
<td>.0001</td>
<td>(68)</td>
</tr>
<tr>
<td>Sexual abuse—household perpetrator</td>
<td>.56</td>
<td>.0001</td>
<td>(80)</td>
</tr>
<tr>
<td>Sexual abuse—nonhousehold perpetrator</td>
<td>.15</td>
<td>n.s.</td>
<td>(7)</td>
</tr>
</tbody>
</table>

Corroboration of Accounts of Childhood Adversity

Table 2A shows levels of corroboration for the 3 childhood experiences, using the full 4-point scales. Correlations were high and ranged from .70 (neglect) to .52 (sexual abuse). There was somewhat higher corroboration for physical abuse from fathers than from mothers and for household rather than nonhousehold perpetrators of sexual abuse.

There is high overall percent agreement about the absence or presence of adverse experience with levels of agreement ranging from 84% to 94% (Table 2B, column 3). Discrepancies mainly consisted of reported adverse experience not being confirmed by a sister (Table 2B, column 4), with this being especially common for sexual abuse. It was rare for a report of adversity to come from the “witnessing” sister alone (Table 2B, column 5).

Corroboration and Confiding between Sisters

Corroboration was unrelated to confiding between the sisters. For the 58 sister-pairs who were not confidants at time of interview, essentially the same correlations were obtained as for the series as a whole (.72 for neglect, .56 for physical abuse and .53 for sexual abuse). Reports of confiding about abuse in childhood were rare, but when the 18% who said they had confided in childhood were excluded, these figures were essentially unchanged. The women in general described a reluctance to talk about the abuse as children. Although there were instances where sisters had a “feeling” that the other might have been abused, unless there was concrete evidence through witnessing or disclosure these were not included either as corroborative or instances of confiding.

There appeared to have been very little official awareness of the abuse in childhood. Only 8% of the physical abuses and 6% of sexual abuses involved contact with some kind of public authority. In 8% of the physical abuses and nearly a quarter of sexual abuses, secrecy was reported to have been imposed by the perpetrator, either by threats or other means of coercion.

Concordance of Adverse Childhood Experience

There was a considerable degree of concordance between sisters for neglect and abuse, again using the full 4-point scales, although at a somewhat lower level than for corroboration (see Table 3). The concordance for sexual abuse was noticeably lower than for the other two experiences and, when relationship to perpetrator was examined, this was accounted for by particularly low concordance for abuse by nonhousehold member.

In terms of percent agreement about shared experience, over three-quarters of the pairs reported similar experiences. For example, 90% (87/97) of household arrangements for the sister-pairs were reported as similar with reference to neglect and 77% (67/87) for both physical and sexual abuse.

The Association between Corroboration and Concordance

Corroboration was examined among concordant and nonconcordant sister-pairs by grouping pairs according to the extent of the within-pair similarity of reported experience on each scale. Thus sister-pairs with either

Table 4
Level of Corroboration Amongst Concordant and Nonconcordant Sister-pairs

<table>
<thead>
<tr>
<th>Three types of childhood adversity (4-point scales)</th>
<th>Corroboration in concordant pairs</th>
<th>Corroboration in nonconcordant pairs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kw</td>
<td>p</td>
</tr>
<tr>
<td>Neglect (parental)</td>
<td>.77</td>
<td>.0001</td>
</tr>
<tr>
<td>Physical abuse (household)</td>
<td>.74</td>
<td>.0001</td>
</tr>
<tr>
<td>Sexual abuse (any)</td>
<td>.72</td>
<td>.0001</td>
</tr>
<tr>
<td>Perpetrator of abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical abuse from father</td>
<td>.74</td>
<td>.0001</td>
</tr>
<tr>
<td>Physical abuse from mother</td>
<td>.63</td>
<td>.0001</td>
</tr>
<tr>
<td>Sexual abuse—household perpetrator</td>
<td>.68</td>
<td>.0001</td>
</tr>
<tr>
<td>Sexual abuse—nonhousehold perpetrator</td>
<td>.52</td>
<td>.0001</td>
</tr>
</tbody>
</table>

*a Concordance defined by 0 or 1 rating point difference between sisters on each 4-point scale.

*b Nonconcordance defined by a 2 or 3 rating point difference between sisters on each 4-point scale.
identical ratings or within a 1-point difference on a particular 4-point scale were considered to be concordant for that scale. Those with a 2- or 3-point difference were considered nonconcordant. Corroboration and concordance proved to be closely linked: corroboration between sisters only emerged among those with concordant experience (mean correlations of .74, Table 4). Without concordance, corroboration was absent (mean correlation of .01). Table 4 shows that similar results held when the perpetrator of abuse was taken into account.

**Corroboration of Childhood Adversity Index**

In previous analyses where childhood experience has been examined in relation to a range of adult experiences and disorders, it has proved useful to combine the childhood experiences into a single dichotomous index. Although it is more meaningful for validity purposes to look at the abusive experiences individually by type, it is also possible to examine the level of corroboration for the index as a whole, given extensive overlap of the relevant experiences. Half of the individual subjects who were positive on the adversity index had more than one of the factors, a level of overlap similar to that reported in a representative population series (Bifulco et al., 1994).

Table 5 shows that there is a high level of both corroboration (.70) and concordance (.64) for the overall index. If the index is restricted to household perpetrators of neglect and abuse (i.e. sexual abuse from nonhousehold members excluded) then corroboration rises to .77. Corroboration again appears to be totally accounted for by concordance of experience with correlations of .95 for the 68 concordant pairs and —.05 for the 22 non-concordant pairs, respectively.

### Discussion

High levels of corroboration were obtained from sisters about each other’s experiences of neglect or physical or sexual abuse, with average correlations of .60 (Kw). Few validational exercises have previously been undertaken concerning all three abusive childhood experiences by a range of perpetrators, and to our knowledge there have been no systematic investigations with sexual abuse. The levels of agreement are similar to corroboration levels reported on an earlier small series using the same measure but without the two abuse elements (see Bifulco et al., 1994).

One surprising result, given the literature that has previously highlighted non-shared environment in siblings, was the amount of concordance of experience (see Tables 3 and 5). Previous studies have tended to emphasise the extent of non-shared environment for siblings in terms of styles of parenting involving low warmth or high conflict (Dunn & Plomin, 1990). However, to our knowledge no study has focused on the more extreme experiences considered in this report. But findings are not necessarily inconsistent. It is obviously possible that families with severe parenting difficulties may treat the offspring more similarly than will families without such difficulties.

Concordance of experience for sisters was notably lower for sexual abuse than for neglect or physical abuse and this is largely explained by the residence of the perpetrator. Experiences involving household resident perpetrators of all abuses showed consistently high concordances between sisters, i.e. the experience was usually shared. The most interesting contrast was the correlation of .56 for concordance of sexual abuse by father, surrogate father or brother in the household and only .15 when the perpetrator was a stranger, relative or family friend living outside the household (see Table 3).

The degree to which independently reported experiences were concordant was highly related to the level of corroboration by the sisters of each other’s accounts. In the presence of concordance, corroboration averaged .74 and in its absence .01 (Table 4); for the overall “childhood adversity” index these figures were .95 and —.05 respectively (Table 5). The high rate of corroboration among concordant pairs (those sharing the experience) provides reasonably persuasive evidence of the essential accuracy of the reports, suggesting that where sisters reported similar experience they were also able to recognise it as true for each other. It is also likely that where there was some uncertainty about the other’s experience, a sister assumed it to be similar to her own. There was no support for an alternative explanation that high levels of corroboration were the result of the sisters confiding in each other about experiences, either in childhood or adulthood.

Since only around a quarter or less of the pairs had non-shared experience of abuse and only 10% had non-shared neglect, the numbers were too small for a meaningful analysis of other possible reasons for discrepant reporting where this did occur. There were certainly convincing instances of corroboration to be found in the noncordant pairs, but the contribution of these to the overall correlation was neutralised by a similar number of noncorroboration in an analysis that only included a relatively small number of pairs overall.

| Table 5: Corroboration and Concordance of Childhood Adversity Indexa |
|-----------------|-----------------|-----------------|
| Childhood adversity index (dichotomous) | K | p < | (N pairs) |
| A. All pairs | | | |
| Corroboration | .70 | .0001 | (87) |
| Concordance | .64 | .0001 | (87) |
| B. Corroboration by presence of concordance | | | |
| Corroboration among concordant pairs | .95 | .0001 | (65) |
| Corroboration among nonconcordant pairs | —.05 | n.s. | (22) |

*aDefined by presence of either “marked” or “moderate” neglect, physical abuse or sexual abuse.*
failure to report adverse experience. However, although it could be argued that the current analysis does not discriminate between a subject's ability to report on a sister versus her merely generalising her own experience to that of her sister. But it can equally be argued that such highly similar, but independent, accounts of childhood are a form of validation in themselves.

The analysis has emphasised the accuracy of reporting actual instances of neglect and abuse. There is no comparable way of dealing with possible instances of failure to report adverse experience. However, although studies have been reviewed that suggest some under-reporting of negative childhood experience (Maughan et al., 1995; Williams, 1994), it is possible that the impact of under-reporting may be modest. For example, in Williams' study, those failing to report the publicly recognised episode of sexual abuse very commonly reported abuse from another perpetrator. In other words, if reporting is seen in terms of ability to report at least one incident reaching criteria for defining abuse, accuracy may be less impaired. The current study suggests that under-reporting may be uncommon, given that it was unusual for a witnessing sister alone to report that a woman had experienced difficulties in childhood (see Table 2B, column 5).

Such a perspective also has implications for the use of an index such as "childhood adversity" in analyses where there is a considerable amount of overlap in the three component experiences. Defining the index in terms of the presence of any one of the three component adverse experiences is therefore likely to reduce the impact of the under-reporting of any one particular type of adverse experience.

There was no evidence that sexual abuse by a household member showed any different patterning of corroboration or concordance than did parental neglect or physical abuse. Thus there was no reason to think that memory or reporting of sexual abuse differed substantially from the two other sets of experiences assessed. Although sexual abuse by household member was not common (Table 1), when it did occur concordance and corroboration were similar to that of physical abuse and parental neglect (Tables 2 and 3). Although this result requires confirmation, it reflects the lack of evidence in the present series for any substantial effect of under-reporting or amnesia for sexual abuse.

Although the possibility of either repression of childhood abuse or the falsification or mistaken memory of abuse in certain circumstances cannot be ruled out, the present results give no support to the idea that this is common in a series of women, few of whom had ever undergone psychotherapy. Accounts of sexual abuse, as with the other two experiences, were reasonably full and coherent and as readily believable as were accounts of neglect or physical abuse. The fact that sexual abuse from family friends and relatives other than the father were much more common in this series suggests that the reports were not influenced by popular beliefs that fathers are the main perpetrators of sexual abuse. Many of the women made it clear during the interview that they were disclosing the abuse for the first time. There was nothing to indicate any possible benefit to them in exaggerating any such claim. The accounts were usually painful to relate and in no instances were the women considering taking any legal action against the perpetrators, with whom most had had no contact. These results as a whole therefore lend credibility to the view that it is possible to collect retrospective accounts of childhood neglect and abuse in community series with some degree of confidence.

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