Reliability and Comparability of Psychosis Patients' Retrospective Reports of Childhood Abuse

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An increasing number of studies are demonstrating an association between childhood abuse and psychosis. However, the majority of these rely on retrospective self-reports in adulthood that may be unduly influenced by current psychopathology. We therefore set out to explore the reliability and comparability of first-presentation psychosis patients' reports of childhood abuse. Psychosis case subjects were drawn from the Aetiology and Ethnicity of Schizophrenia and Other Psychoses (ÆSOP) epidemiological study and completed the Childhood Experience of Care and Abuse Questionnaire to elicit abusive experiences that occurred prior to 16 years of age. High levels of concurrent validity were demonstrated with the Parental Bonding Instrument (antipathy: $r_s = 0.350 - 0.737$, P < .001; neglect: $r_s = 0.688 - 0.001$ 0.715, P < .001), and good convergent validity was shown with clinical case notes (sexual abuse: $\kappa = 0.526$, P < .001; physical abuse: $\kappa = 0.394$, P < .001). Psychosis patients' reports were also reasonably stable over a 7-year period (sexual abuse: $\kappa = 0.590$, P < .01; physical abuse: $\kappa =$ 0.634, P < .001; antipathy: $\kappa = 0.492$, P < .01; neglect: $\kappa = 0.432, P < .05$). Additionally, their reports of childhood abuse were not associated with current severity of psychotic symptoms (sexual abuse: U = 1768.5, P = .998; physical abuse: U = 2167.5, P = .815; antipathy: U =

2216.5, P = .988; neglect: U = 1906.0, P = .835) or depressed mood (sexual abuse: $\chi^2 = 0.634$, P = .277; physical abuse: $\chi^2 = 0.159$, P = .419; antipathy: $\chi^2 = 0.868$, P = .229; neglect: $\chi^2 = 0.639$, P = .274). These findings provide justification for the use in future studies of retrospective reports of childhood abuse obtained from individuals with psychotic disorders.

Key words: psychotic disorders/child abuse/trauma/ schizophrenia/psychometrics

Introduction

Recently, there has been renewed interest in the role of adverse childhood experiences in the etiology¹ and course² of psychosis with 2 reviews recently being published in Schizophrenia Bulletin.^{3,4} However, the majority of studies involving individuals with clinical psychosis have relied upon retrospective assessments in adulthood of such events. This is often to avoid the expense, extremely long follow-up period, and ethical difficulties associated with prospective longitudinal investigations of this relatively low-incidence disorder.^{5,6} Retrospective designs have been criticized for possibly producing unreliable and inaccurate accounts as events recalled from a long time ago may be affected by normal processes of forgetting,^{7,8} depressed mood,^{9,10} infantile and trau-matic amnesia,^{11,12} subsequent events,¹³ and a need to justify or understand mental illness.^{14,15} These are potentially compounded by the cognitive impairments,¹⁶ delusional beliefs,^{17,18} and detachment from reality associated with psychosis.¹⁹ Therefore, it is imperative to establish the accuracy of retrospective accounts of childhood adversity in individuals with psychosis, so that future studies can justifiably investigate early trauma in this population.

We used data from the Aetiology and Ethnicity of Schizophrenia and Other Psychoses (ÆSOP) epidemiological study to explore the reliability and validity of retrospective self-reported accounts of childhood adversity by adults with psychotic disorders. Specifically, we sought to address the similarity of abuse ratings obtained using 2 different measures of childhood adversity

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(concurrent validity), corroboration of abuse reports from independent clinical case notes (convergent validity), stability of abuse reporting of psychosis patients over time (test-retest reliability), and the impact of current psychopathology on recall.

Methods

Participants

The sample for this study was drawn from individuals who participated in the ÆSOP epidemiological case-control study. Full details of the study and sample recruitment are provided, elsewhere.²⁰ Briefly, case subjects were aged 16-64 years and presented for the first time with psychosis (International Classification of Diseases, Tenth Revision [ICD-10], codes F20-F29 and F30-F33)²¹ between 1997–2000 to mental health services in defined catchment areas in southeast London and Nottingham, UK. Exclusion criteria were evidence of psychotic symptoms precipitated by an organic cause and transient psychotic symptoms resulting from acute intoxication as defined by ICD-10. Diagnoses were determined by consensus of senior psychiatrists using information obtained from the Schedules for Clinical Assessment in Neuropsychiatry (SCAN).²² These were made blind to ethnicity and abuse history.

Ethical approval was obtained from the Nottingham and the south London and Maudsley research ethics committees. All participants provided written consent after reading a detailed information sheet.

Measures

Childhood Adversity. The Childhood Experience of Care and Abuse Questionnaire (CECA.Q)²³ is a self-report measure designed to elicit information concerning adverse events before the age of 17 years. These experiences include physical abuse by the main mother and father figures (usually but not necessarily the biological parents), sexual abuse by any adult or an individual at least 5 years older than the recipient, parental antipathy (hostility, rejection, or coldness), and emotional or physical neglect. Both the physical and sexual abuse sections of the CECA.Q begin with screening questions, and then positive responses are followed up with more detailed questions to elicit concrete examples. The antipathy and neglect sections include 8 specific questions that are each rated on a 5-point scale. Because the lower age limit for inclusion in this study was 16 years, only incidences of abuse that occurred prior to this age were included. This questionnaire was read out to all participants to improve the accuracy of the fixed category responses obtained. The guidelines published by Bifulco et al²³ were employed to create ordinal scores and dichotomous variables for each CECA.O subscale using the most conservative cut points to ensure only severe instances of abuse were included.

The Parental Bonding Instrument (PBI)²⁴ is a 25-item self-report measure to retrospectively assess the behaviors and attitudes of each parent toward the child from birth to 16 years of age. Each item is rated on a 4-point scale from "very untrue" (0) to "very true" (3). Two versions of the questionnaire are administered—one for the main mother figure and one for the main father figure. Each version comprises 12 questions on "care" and 13 questions on "protection" from that parental figure. The care subscale ranges from rejection or coldness to warmth and affection, while the protection subscale ranges from allowance of autonomy to overprotection and controlling behaviors.²⁵ The subscale scores were calculated in accordance with the guidelines provided by MacKinnon et al.²⁵ Higher scores indicate greater levels of parental care and protection. The PBI has been shown to have good internal reliability and provide stable scores over long periods of time.^{26,27}

Clinical Reports of Adversity. Patients' reports of childhood abuse during routine mental health care were obtained from case notes covering the first 2 months of each patient's contact with services. Two researchers independently screened the case notes for any mention of "sexual abuse," "molestation," "incest," "rape," "physical abuse from mother/father/parents," "physical assault by mother/father/parents," and "beatings from mother/father/parents," and "beatings from mother/father/parents" that occurred prior to the age of 16 years. Both researchers were blind to CECA.Q scores for sexual and physical abuse. Discrepancies in ratings were discussed with a third researcher and consensus reached about the presence or absence of abuse in the case notes.

Symptom Severity and Current Mood. Presence and severity of symptoms were assessed using the SCAN.²² All interviews were conducted as soon as possible after first contact was made with psychiatric services and based on symptoms experienced over the previous month. Symptom ratings from the SCAN or information obtained from case notes and informants (where face-to-face interview with the patient was not possible) were converted into the SCAN's item group checklist (IGC).²² The IGC comprises 41 groups of related items from the SCAN, with each group constituting a different symptom area. Each item group is rated 0 (absent or below threshold), 1 (at least 2 items above threshold plus at least moderate disability and/or distress associated with the symptoms), or 2 (as for 1 but with severe disability and/or distress). Information was available to rate 31 item groups in this study. For ease of analysis, each symptom group was converted into a binary variable, with scores of 0 remaining as 0 (symptom absent) and scores of 1 and 2 being recoded into 1 (symptom present). A total severity score was calculated by summing the binary

PBI	Median (Range, <i>n</i>)	CECA.Q	Median (Range, <i>n</i>)	CECA.Q Vs PBI Care, r _s	CECA.Q Vs PBI Protection, r_s
Maternal care	28 (0-36, 83)	Maternal antipathy	15 (7-40, 82)	-0.737*	0.350*
Maternal protection	12 (0-31, 83)	Maternal neglect	13 (8-36, 82)	-0.715*	
Paternal care	24 (0-36, 74)	Paternal antipathy	17 (7–38, 78)	-0.725*	0.525*
Paternal protection	9 (0-32, 74)	Paternal neglect	16 (8-36, 76)	-0.688*	

Table 1. Comparison of CECA.Q and PBI Subscale Scores for Psychosis Case Subjects

Note: CECA.Q, Childhood Experience of Care and Abuse Questionnaire; PBI, Parental Bonding Instrument. *P < .001.

score for each item group (maximum score of 31). The depressed mood (IG12) item group was used to represent the presence (score of 1 or 2) or absence (score of 0) of depression over the month prior to interview as previously employed in this sample.²⁸

Psychotic Symptom Content. The content of symptoms was determined from a combination of clinical records and information obtained during the SCAN interviews. Clinical case notes were obtained at entry to the ÆSOP study and covered approximately the first 2 months of each patient's contact with secondary mental health services. Therefore, for the majority of patients, this comprised comprehensive psychiatric assessments and notes made either during inpatient admission or community care. A researcher blind to history of childhood abuse screened available baseline clinical notes and SCAN ratings to obtain a description of the content of the psychotic symptoms patients were experiencing around the time they completed the CECA.Q. Themes directly related to sexual or physical abuse were identified, eg, delusions or somatic hallucinations of being "raped," "sexually abused," "molested," "sexually interfered with," "physically assaulted," "beaten," "attacked," as well as auditory or visual hallucinations of the alleged perpetrator. A consensus decision on the presence of symptoms involving themes of sexual or physical abuse in childhood was reached with an independent researcher also blind to reported history of abuse. It was decided not to look at antipathy or neglect as these concepts are more subjective and less concretely defined and thus would be extremely difficult to clearly identify in symptom content.

Statistical Analysis. Spearman ρ correlations were employed to compare the CECA.Q with the PBI due to the ordinal level of the data from each questionnaire and the positively skewed distributions for each subscale that violated the assumptions of parametric testing. The total scores for each scale were utilized as it was not possible to determine comparable cutoff scores to create dichotomous variables. The κ statistic was used to determine the level of agreement between (1) researchers

in rating the presence of child abuse in case notes and (2) reports of abuse on the CECA.Q compared with those documented in case notes. Sensitivity and specificity analyses were conducted to determine the proportion of psychosis cases who reported positive or negative histories (respectively) of sexual and physical abuse on both the baseline CECA.Q and (1) in the clinical case notes and (2) at 7-year follow-up. There is no gold standard measure of childhood abuse, and therefore, we have used the original CECA.Q reports of abuse as our baseline measure against which the case notes and follow-up reports were compared. Mann-Whitney U tests were employed to explore whether those reporting each type of abuse had higher levels of symptomatology than those denying such childhood experiences due to the ordinal and skewed nature of the data. Finally, χ^2 analysis was conducted to determine whether there was a significant difference in presence of depression between those who did and did not report childhood abuse. All analyses were conducted using SPSS version 15.0 for Windows.

Results

Concurrent Validity of CECA.Q Vs PBI

Data were available on 84 psychosis case subjects from the Nottingham ÆSOP cohort who had completed both the CECA.Q and the PBI. The majority were men (56.0%), considered themselves to be White British (79.8%), and had an average age of 31 years (SD = 12.1). For the purposes of this study, only the CECA.Q scores for maternal and paternal antipathy and neglect were utilized as these are roughly comparable to the PBI scales. The neglect scales of the CECA.Q have previously been shown to have the weakest correlations with the parental protection scales on the PBI as they are tapping into different experiences.²⁹ Subsequent studies have only compared the neglect scores with the PBI care scores, ^{23,30} and therefore, this study followed this procedure. The median scores for the antipathy and neglect subscales of the CECA.O and the care and protection subscales of the PBI are presented in table 1 along with the Spearman ρ correlations between them.

Type of Abuse	Sensitivity ^a , % (n/N)	Specificity ^b , % (<i>n</i> / <i>N</i>)	κ
Sexual	45.5 (5/11)	97.9 (47/48)	0.526*
Physical	33.3 (7/21)	100 (39/39)	0.394*

Table 2. Level of Agreement Between Abuse Reports in theCECA.Q and Case Notes

Note: CECA.Q, Childhood Experience of Care and Abuse Questionnaire.

^aAbuse reported in case notes compared with positive CECA.Q reports of abuse.

^bAbuse absent in case notes compared with negative CECA.Q reports.

*P < .001.

There were highly significant correlations (P < .001) in the expected directions between the maternal and paternal antipathy and neglect scores on the CECA.Q and the care and protection subscales of the PBI. The strongest levels of agreement occurred with the PBI care subscales.

Convergent Validity of Self-reports Vs Case Notes

Clinical case notes were available on 60 psychosis case subjects from the London ÆSOP cohort who had completed the CECA.Q at baseline. Just over half of this sample was women (53.3%), and the majority presented with nonaffective psychosis at baseline (66.7%). The mean age of these cases at baseline was 32 years (SD = 11.2; range = 18–61 y). The largest ethnic groups were White British (35%), Black Caribbean (33.3%), and Black African (18%).

There was significant agreement between the 2 researchers on presence of both sexual abuse ($\kappa = 0.815$, P < .001) and physical abuse ($\kappa = 0.702$, P < .001) in the clinical case notes. The results of the sensitivity (reported as present in both CECA.Q and case notes), specificity (reported as absent in both CECA.Q and case notes), and κ analyses are presented in table 2. According to Sim and Wright, ³¹ this study had approximately 90% power to detect a κ of 0.40.

There were highly significant levels of agreement between the reports of childhood sexual and physical abuse obtained using the CECA.Q and those documented in clinical case notes. According to Shrout³² the κ coefficient for childhood sexual abuse (0.526) indicated a fair level of agreement between reports from the CECA.Q and those documented in case notes, while the κ for physical abuse (0.394) just fell short of fair consistency in reporting between the 2 formats.

No reports of physical abuse were present in case notes that were not also reported on the CECA.Q (100% specificity), while one claim of sexual abuse in clinical notes was not elicited by the CECA.Q (97.9% specificity). It is possible that this discrepancy occurred because the reported incident was not severe enough to warrant clas-

Table 3. Level of Agreement Between Childhood Abuse Reports

 Over a 7-y Period

Type of Adversity	Sensitivity ^a , % (n/N)	Specificity ^b , % (n/N)	к
Sexual abuse	75.0 (6/8)	86.4 (19/22)	0.590**
Parental physical abuse	80.0 (8/10)	85.0 (17/20)	0.634***
Parental antipathy	71.4 (5/7)	82.6 (19/23)	0.492**
Parental neglect	71.4 (5/7)	78.3 (18/23)	0.432*

^aAbuse reported at 7-y follow-up compared with positive baseline reports of abuse.

^bAbuse absent at follow-up compared with negative baseline reports.

 $^{*}P < .05; ^{**}P < .01; ^{***}P < .001.$

sification as sexual abuse on the CECA.Q. The consistency between positive reports of physical and sexual abuse obtained with the CECA.Q and comparable documentation in case notes was much lower, with rates ranging from 54.5% to 66.7%, respectively.

Test-Retest Reliability of Self-reports

A total of 30 psychosis case subjects from the London ÆSOP cohort completed the CECA.Q both at baseline and 7-year follow-up. Just over half were men (56.7%), and the majority presented with nonaffective psychosis at baseline (73.3%). Almost two-thirds of this sample were White British (60.0%), approximately a quarter were Black Caribbean (23.3%), and 6.7% were Black African. The mean age of the cases at baseline was 29 years (SD = 7.9; range = 18-53 y), and the mean number of years between completion of the CECA.Q at baseline and follow-up was 7 years (SD = 0.9, range = 5-8 years). No significant differences were found between this retested sample and the rest of the psychosis case subjects who completed the CECA.Q at baseline in terms of gender ($\chi^2 = 0.547$, P = .549), ethnicity ($\chi^2 = 7.838$, P = .551), age (U = 2104.5, P = .505), or diagnosis ($\chi^2 = 2.301$, P =.154) distributions.

The results of the sensitivity (reported as present at both baseline and follow-up), specificity (reported as absent at both baseline and follow-up), and κ analyses are presented in table 3.

There were significant levels of agreement between the baseline and follow-up reports for all types of childhood abuse among psychosis case subjects. The proportion of individuals who reported adversity at follow-up but not at baseline ranged from 13.6% (sexual abuse) to 21.7% (parental neglect), while the proportion of case subjects who reported adversity at baseline but not 7 years later ranged from 20% (physical abuse) to 28.6% (antipathy and neglect). According to Shrout,³² the κ coefficients for antipathy (0.492), neglect (0.432), and sexual abuse (0.590) indicated fair levels of agreement over the

Abuse Type	Median (Range)	U	P Value
Sexual abuse Present $(n = 29)$ Absent $(n = 122)$	7.0 (0–15) 7.0 (0–18)	1768.5	.998
Physical abuse Present $(n = 39)$ Absent $(n = 114)$	7.0 (0–18) 7.0 (0–17)	2167.5	.815
Paternal antipathy Present $(n = 37)$ Absent $(n = 120)$	7.0 (2–18) 7.0 (0–17)	2216.5	.988
Paternal neglect Present $(n = 31)$ Absent $(n = 126)$	7.0 (2–18) 7.0 (0–17)	1906.0	.835

Table 4. Severity of Psychopathology for Psychosis Case Subjects

 With Vs Without Reported Histories of Childhood Abuse

7-year time period, while those for physical abuse (0.634) suggested moderate consistency in reporting.

Impact of Psychopathology on Abuse Reports

The 157 psychosis patients with both a completed CECA.Q and IGC had a mean age of 32 years (SD = 11.2, range = 17–61 y), and just over half were men (55.4%). The largest ethnic groups were White British (55.4%) and Black Caribbean (20.4%), with slightly more patients residing in London (52.2%) than Nottingham (47.8%). The median total severity score from the IGC for this sample was 7 (range = 0–18) out of a possible maximum score of 31. The median number of symptoms (total severity score) and ranges for each abuse subscale of the CECA.Q, along with Mann-Whitney U test results for comparisons between reported presence and absence of abuse, are presented in table 4.

There were no significant differences (all P values >.10) in the level of psychopathology experienced between those who did and did not report a history of antipathy, neglect, sexual abuse, or physical abuse.

Around the time of completing the CECA.Q, 66 psychosis case subjects (42.0%) could be classified on the IGC as experiencing depressed mood. Table 5 displays the proportion of psychosis patients reporting presence or absence of each type of abuse who were concurrently depressed, along with χ^2 analyses to determine if these proportions were significantly different between the 2 groups.

Psychosis case subjects with and without reported exposure to antipathy, neglect, sexual abuse, or physical abuse during childhood did not differ significantly (all P values >.10) in terms of presence of depressed mood at the time of questioning.

Impact of Symptom Content on Abuse Reports

Of the 58 psychosis patients from ÆSOP who reported experiencing sexual or physical abuse during childhood, symptom content information was available for 83% (n = 48). There were no significant differences between

Table 5. Prevalence of Depressed Mood Among Psychosis Case

 Subjects With Vs Without Reported Histories of Childhood Abuse

Abuse Type	Depressed % (n)	χ^2	P Value
Sexual abuse		0.634	.277
Present $(n = 29)$	48.3 (14)		
Absent $(n = 122)$	40.2 (49)		
Physical abuse		0.159	.419
Present $(n = 39)$	38.5 (15)		
Absent $(n = 114)$	42.1 (48)		
Paternal antipathy		0.868	.229
Present $(n = 37)$	48.6 (18)		
Absent $(n = 120)$	40.0 (48)		
Paternal neglect		0.639	.274
Present $(n = 31)$	48.4 (15)		
Absent $(n = 126)$	40.5 (51)		

patients with and without descriptive information on their symptom content in terms of age at interview (U = 180.5, P = .220), sex $(\chi^2 = 0.540, P = .496)$, or ethnicity $(\chi^2 = 1.457, P = .918)$. The 48 psychosis patients with both a positive abuse history and symptom content information had a mean age of 32 years (SD = 9.2, range = 18–56 y), and just over half were women (60.3%). The largest ethnic groups were White British (55.2%) and Black Caribbean (32.8%), with slightly more patients residing in London (58.6%) than Nottingham (41.4%).

Out of the 25 patients who reported childhood sexual abuse, there were only 3 patients (12%) experiencing psychotic symptoms with a sexual theme. For example, they reported tactile hallucinations of "orgasms with god" or "being raped over and over again" and ideas of reference such as the "TV reporting my rape." However, only one of these cases was clearly related to sexual abuse during childhood (4% of sexual abuse subsample). This patient was described as hearing the voice of her alleged attacker, since the incident occurred when she was 11 years old, commanding her to keep quiet and not tell anyone about the rape. She was considered by a psychiatrist to have paranoid delusions that the man who raped her was going to kill her family and also reported visual and tactile hallucinations associated with flashbacks of the rape. In terms of those who reported childhood physical abuse (n = 37), only one patient (2.7%) was experiencing symptoms that had a physical abuse theme, and these were not clearly related to childhood. For instance, this patient described tactile hallucinations of spirits stabbing him and attempting to strangle him. Furthermore, in one case, the symptom content had a sexual abuse theme (believed everyone thought she had been raped), but the patient had not screened positive for sexual abuse on the CECA.Q.

Discussion

The results of this set of analyses indicate that histories of childhood adversity obtained retrospectively from

psychosis patients showed evidence of reasonable reliability and comparability in this sample. Specifically, it has been demonstrated that (i) reports of adversity are fairly stable over a long period of time (test-retest reliability), (ii) current psychopathology does not appear to measurably influence the likelihood of reporting childhood abuse, (iii) reports of antipathy and neglect are similar when obtained by different assessment instruments (concurrent validity), and (iv) childhood abuse documented in clinical case notes is also self-reported on a questionnaire (convergent validity).

The consistency in reporting on the CECA.Q and PBI is in keeping with previous studies in depressed samples. These have demonstrated high levels of agreement between the CECA.Q antipathy and neglect subscale scores and the PBI care and protection (antipathy only) scores.^{23,29} The current study confirms that this can be extended to psychosis patients, at least in this sample.

The reasonably large proportion of case subjects whose abuse was not documented in their case notes despite being reported on the CECA.O is not surprising given previous research in this area. 33,34 To a degree, this discrepancy may be inevitable given that the specific questions asked during the CECA.Q were more likely to have elicited abusive experiences than the potentially more general questions involved in obtaining a clinical history. It is not possible to determine if this was actually the case as clinicians did not document exactly what they asked patients rather just what the responses were. Nevertheless, failure to inquire about abusive experiences has been shown to be common among clinicians.^{34–38} This is particularly the case when patients are severely disturbed¹⁸ as many of those in the current study would have been during their initial presentation to services for psychosis. Moreover, as clinicians usually have a professional duty to report disclosures of childhood abuse to social services or the police, patients may be less likely to tell them about such experiences for fear that it will have legal ramifications. Despite this, mental health clinicians clearly need to inquire more frequently about childhood abuse, and there is a move in the United Kingdom to make this part of all routine psychiatric assessments.³⁹

Previous studies have also demonstrated that reports of childhood abuse by adult psychiatric patients are reasonably reliable over time,^{40,41} and reports by those with schizophrenia have been shown to be as reliable as those made by the general population.⁴² The higher rate of failure to report previously disclosed abuse at 7-year follow-up than to provide new reports of abuse in the current study is consistent with findings that individuals are more likely to fail to report abusive experiences than to falsely claim that they have been abused.^{41,43,44} Therefore, contrary to the fears of some researchers,^{17,18} patients may actually be more likely to underreport instances of abuse rather than overexaggerate their occurrence.^{45,46} It is also possible that some individuals may actually have a greater tendency to disclose genuine abuse when actively psychotic if this is accompanied by disinhibition.

The lack of impact of current mood on reporting of childhood abuse in this sample concurs with previous findings^{47,48} that depression does not appear to particularly bias retrospective abuse reporting. The nonsignificant results for influence of severity of symptoms also go some way to counter claims that those experiencing acute psychosis are more prone to reporting abuse as they are detached from reality¹⁹ or confused about what is real.¹⁷ Indeed, Darves-Bornoz et al⁴² commented that there was no clear link between having a current diagnosis of schizophrenia and allegations of sexual abuse in their sample, inline with the findings of the present study. However, associations between severity of psychotic symptoms and reported exposure to childhood adversity might have been expected given the previous literature in this area.¹ The use of total number of psychotic symptoms reported as the measure of severity in the current study rather than severity of each individual symptom may explain these discrepant findings. Additionally, the lack of overlap between symptom content and reporting of childhood abuse can also be interpreted as running contrary to previous reports that suggested a direct influence of early experiences on the content of psychotic symptoms.⁴⁹ Further exploration of this issue is thus required.

This study has a number of potential methodological limitations. Firstly, the samples used in each study were subsets of the full ÆSOP epidemiological sample, and therefore, this may have introduced selection bias into the sample and potentially affected reporting of childhood adversity. However, analysis revealed that there were no significant differences between participants included in each study and those in the full sample in terms of gender, ethnicity, diagnosis distribution, or age at baseline interview. The sample employed was also reasonably modest in size and restricted to 2 catchment areas in the United Kingdom. This has potential implications for the power and generalizability of the results. Therefore, replication of these findings is required in larger samples from different geographical locations.

Moreover, as it is difficult to determine a "gold standard" criterion for establishing the accuracy of reported childhood abuse, we had to rely on making comparisons with the reports participants had provided during their baseline assessments. This is clearly a limitation of the current study, and the results of the test-retest reliability may have been affected by more acute symptoms at baseline. Nevertheless, we have shown that severity of symptoms did not increase the likelihood that case subjects would report an abusive history. Ideally, though, the validity of retrospective self-reports of childhood abuse should be established by comparison with childhood disclosures or social services' records of corroborated abuse.

However, it is probably unethical to obtain reports of abuse from children,⁵⁰ and they may be likely to underreport such experiences due to the operation of defense mechanisms, such as denial, repression, or dissociation, 41,51,52 or because they have been convinced by the perpetrator that it is somehow "normal" or their own fault. Thorough and repeated assessments of children's abusive experiences at regular intervals that are corroborated by family members, teachers, or doctors may overcome some of these problems.⁵ Additionally, the relevant approval was not available for this study to obtain corroboration of childhood abuse reports from social services' records. Nevertheless, these would probably not have been useful anyway for the majority of cases as very few incidents of abuse are ever reported to the authorities.⁵³ Other forms of corroboration (eg. family reports, documentation by different professionals)^{41,54} have been shown to be useful in previous studies and should therefore be included in future research.

Finally, this study focused only on specific forms of reliability and validity. Information was not available to explore the potential impact of long-term memory impairment on encoding, retrieval, and recall of childhood abuse;¹⁶ previous disclosure of abuse;⁵⁵ discussion or rehearsal of the events;⁵⁶ interpretative influence of parents or perpetrators of abuse;⁵⁷ or past depression.⁵⁸ Nevertheless, most of these would be anticipated to be likely to lead to underreporting of abuse and more conservative prevalence estimates.

In conclusion, the findings reported in this article provide further evidence that retrospective self-reports of childhood adversity by psychosis patients can be considered to be reasonably reliable. Consequently, this method of data collection is justified in future evaluations of childhood adversity in psychotic populations. However, such studies should also use comprehensive measurement tools that assess severity, frequency, and timing of adversity and rely on investigator-based judgments of abuse based on concrete examples rather than subjective interpretation.⁵

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