

Online supplement

Childhood adversities assessment

Respondents were classified as having experienced physical abuse when they indicated that, when they were growing up, their father or mother (includes biological, step or adoptive parent) slapped, hit, pushed, grabbed, shoved or threw something at them, or that they were beaten up as a child by the persons who raised them.

For sexual abuse, the following questions were asked ‘The next two questions are about sexual assault. The first is about rape. We define this as someone either having sexual intercourse with you or penetrating your body with a finger or object when you did not want them to, either by threatening you or using force, or when you were so young that you didn’t know what was happening. Did this ever happen to you?’ or ‘Other than rape, were you ever sexually assaulted or molested?’ Sexual abuse was the only adversity where information was not collected that would distinguish whether the perpetrator was a family member or someone else. However, previous research using a similar measure but that did allow such a distinction showed that a good indirect way to distinguish family versus non-family sexual abuse is to ask about number of instances of victimisation, with cases involving one or two instances typically perpetrated by a stranger and those involving three or more instances typically perpetrated by a family member.¹¹ In the World Mental Health surveys therefore, respondents who reported that any of these experiences occurred to them three times or more were coded as having experienced sexual abuse (within the family context). The rationale for focusing on sexual abuse in the family context is that such abuse is most likely to be a chronic stressor.

For the assessment of neglect, two neglect scales were created. These were based on responses to the neglect items: ‘How often were you made to do chores that were too difficult or dangerous for someone your age?’; ‘How often were you left alone or unsupervised when you were too young to be alone?’; ‘How often did you go without things you need like clothes, shoes, or school supplies because your parents or caregivers spent the money on themselves?’; ‘How often did your parents or caregivers make you go hungry or not prepare regular meals?’; ‘How often did your parents or caregivers ignore or fail to get you medical treatment when you were sick or hurt?’. The serious neglect scale was the sum of the number of neglect items where the respondent replied ‘often’ or ‘sometimes’, plus 1 if the respondent rated either of their parents as having spent little or no effort in watching over them to ensure they had a good upbringing. The severe neglect scale is the sum of the number of neglect items where respondents replied ‘often’ plus 1 if the respondent rated either of their parents as

having spent no effort in watching over them to ensure they had a good upbringing. Both the serious and severe neglect scales ranged from 0 to 6. For the final definition of neglect, the respondent had to have a score of at least 1 on the severe neglect scale and at least 2 on the serious neglect scale. (Note that the coding of the neglect domain was determined empirically on the basis of frequency distributions, to derive estimates in keeping with existing literature on the prevalence of these experiences in the general population).

For parental death, parental divorce or other parental loss, respondents were first asked whether they lived with both of their parents when they were brought up. If respondents replied in the negative, they were asked: ‘Did your biological mother or father die, were they separated or divorced or was there some other reason?’ According to their answers to these questions, respondents were classified as having experienced parental death (i.e. when they indicated that one or both parents died), parental divorce (i.e. when they indicated that their parents divorced), and other parental loss (i.e. when respondents replied that they were either adopted, went to boarding school, were in foster care, or that they left home before the age of 16).

Respondents were coded as having experienced family violence when they indicated that they ‘were often hit, shoved, pushed, grabbed or slapped while growing up’ or ‘witnessed physical fights at home, like when your father beat up your mother?’.

Respondents were classified as having had a physical illness when they responded affirmatively to the question ‘Did you ever have a life-threatening illness?’. They were then asked whether they ever had or were diagnosed by a medical doctor as having cancer, epilepsy, diabetes or AIDS. Respondents who responded affirmatively for any of these diseases prior to the age of 18 were classified as having had a physical illness in childhood.

Family economic adversity was coded positive if there was a positive response to either item (a) or item (b). Item (a) was: ‘During your childhood and adolescence, was there ever a period of 6 months or more when your family received money from a government assistance program like Welfare, Aid to Families with Dependent Children, General Assistance, or Temporary Assistance for Needy Families?’ (This item was modified to be relevant to the welfare programmes in each country where the survey was administered). Item (b) was: if there was no male head of the family and the female head did NOT work all or most of the time during the respondent’s childhood; or if there was no female head of the family and the male head did NOT work all or most of respondent’s childhood, or if there was no female head and no male head of the family.

Table DS1 Multivariate associations between type and number of childhood adversities with subsequent onset of suicidal behaviours, after adjusting for respondents' mental disorder^a

	Lifetime attempt	Lifetime ideation	Lifetime plan among respondents with lifetime ideation	Lifetime attempt among ideators with lifetime plan	Lifetime plan among ideators without lifetime plan
Type of adversity					
Physical abuse, OR (95% CI)	2.6 (2.1–3.1)*	2.3 (2.0–2.5)*	0.9 (0.7–1.1)	1.3 (0.9–1.8)	1.1 (0.7–1.6)
Sexual abuse, OR (95% CI)	3.1 (2.5–3.9)*	2.6 (2.2–3.0)*	1.1 (0.9–1.4)	1.3 (0.9–1.9)	1.2 (0.8–1.8)
Neglect, OR (95% CI)	2.6 (2.1–3.1)*	2.1 (1.9–2.4)*	1.3 (1.0–1.6)	1.5 (1.0–2.1)*	1.1 (0.7–1.7)
Parent death, OR (95% CI)	1.6 (1.4–1.9)*	1.4 (1.3–1.6)*	1.0 (0.8–1.2)	1.1 (0.8–1.6)	1.0 (0.7–1.5)
Parent divorce, OR (95% CI)	2.0 (1.7–2.5)*	1.7 (1.5–1.9)*	0.9 (0.7–1.2)	1.4 (0.9–2.2)	1.5 (1.0–2.1)*
Other parent loss, OR (95% CI)	1.8 (1.5–2.3)*	1.6 (1.4–1.8)*	0.8 (0.6–1.1)	1.1 (0.7–1.8)	1.5 (0.9–2.2)
Family violence, OR (95% CI)	1.7 (1.4–2.1)*	1.5 (1.4–1.7)*	0.9 (0.7–1.2)	1.0 (0.6–1.4)	1.2 (0.9–1.8)
Physical illness, OR (95% CI)	2.1 (1.7–2.7)*	1.8 (1.6–2.1)*	1.1 (0.8–1.4)	1.1 (0.7–1.8)	1.5 (0.9–2.1)
Financial adversity, OR (95% CI)	1.2 (0.9–1.5)	1.3 (1.0–1.5)*	0.7 (0.5–1.0)*	1.1 (0.6–2.1)	1.1 (0.6–1.8)
Significance, ^b χ^2 (P)	91.5 (<0.05)	157.4 (<0.05)	17.2 (<0.05)	4.6 (ns)	5.8 (ns)
Number of adversities					
2 adversities, OR (95% CI)	0.7 (0.6–0.9)*	0.7 (0.6–0.8)*	1.2 (0.9–1.6)	0.9 (0.6–1.5)	1.0 (0.6–1.8)
3 adversities, OR (95% CI)	0.5 (0.3–0.7)*	0.5 (0.4–0.6)*	1.3 (0.2–2.1)	1.1 (0.5–2.3)	0.9 (0.4–2.1)
4 adversities, OR (95% CI)	0.4 (0.2–0.6)*	0.4 (0.3–0.5)*	1.3 (0.7–2.3)	1.2 (0.4–3.6)	1.1 (0.4–3.1)
5 adversities, OR (95% CI)	0.2 (0.1–0.4)*	0.2 (0.1–0.3)*	1.1 (0.5–2.6)	1.9 (0.4–9.1)	0.9 (0.2–4.0)
6+ adversities, OR (95% CI)	0.1 (0.0–0.2)*	0.1 (0.0–0.2)*	–	–	–
Significance, ^b χ^2 (P)	30.5 (<0.05)	73.0 (<0.05)	1.7 (ns)	2.3 (ns)	0.5 (ns)

OR, odds ratio; ns, not significant.
a. Models control for country differences, a set of age-related variables (i.e. age, onset and time since onset), respondents' mental disorders (mood disorders (major depressive episode, dysthymia, bipolar disorder), anxiety disorders (panic disorder, agoraphobia without panic, generalised anxiety disorder, specific phobia, social phobia, post-traumatic stress disorder, adult separation anxiety disorder), externalising disorders (attention-deficit hyperactivity disorder, oppositional-defiant disorder, conduct disorder, intermittent explosive disorder), and substance use disorders (alcohol misuse or dependence, illicit drug use or dependence)), gender, educational attainment, marriage, previously significant interaction terms between intervals (13–19, 20–29, 30+) and demographics and parental psychopathology.
b. χ^2 values indicate levels of significance (d.f. = 8) for differences between types of adversities.
* $P < 0.05$.

Table DS2 Interactions between gender and type and number of childhood adversities with subsequent onset of suicide attempt across the lifespan^a

	Lifetime attempt during childhood years, age 4–12	Lifetime attempt during teen years, age 13–19	Lifetime attempt during young adulthood, age 20–29	Lifetime attempt during later adulthood, age 29+
Interaction between female and type of adversity				
Physical abuse, OR (95% CI)	0.6 (0.2–2.0)	0.9 (0.4–1.8)	0.7 (0.4–1.3)	1.1 (0.6–2.2)
Sexual abuse, OR (95% CI)	1.4 (0.2–8.4)	0.8 (0.3–2.1)	0.8 (0.3–1.9)	0.7 (0.2–1.9)
Neglect, OR (95% CI)	3.4 (0.5–23.7)	1.1 (0.5–2.3)	2.0 (0.9–4.4)	1.2 (0.6–2.5)
Parent death, OR (95% CI)	1.4 (0.2–8.6)	1.0 (0.5–1.9)	0.9 (0.5–1.7)	2.0 (1.1–3.7)*
Parent divorce, OR (95% CI)	0.9 (0.2–4.6)	1.3 (0.7–2.4)	1.0 (0.5–1.8)	1.2 (0.5–2.8)
Other parent loss, OR (95% CI)	1.4 (0.3–7.2)	0.7 (0.3–1.5)	1.1 (0.5–2.7)	1.2 (0.5–2.7)
Family violence, OR (95% CI)	1.1 (0.2–6.0)	0.7 (0.3–1.4)	1.4 (0.7–2.8)	1.2 (0.6–2.6)
Physical illness, OR (95% CI)	0.9 (0.2–3.9)	0.8 (0.4–1.7)	1.4 (0.5–3.6)	1.5 (0.6–3.6)
Financial adversity, OR (95% CI)	0.6 (0.1–4.2)	1.6 (0.5–4.7)	1.5 (0.5–4.0)	1.7 (0.6–5.3)
Significance, ^b χ^2 (P)	6.0 (ns)	6.1 (ns)	9.2 (ns)	6.7 (ns)
Interaction between female and number of adversities				
2 adversities, OR (95% CI)	0.3 (0.0–2.4)	1.0 (0.4–2.6)	0.7 (0.3–1.7)	0.7 (0.3–1.7)
3 adversities, OR (95% CI)	0.8 (0.0–20.9)	0.9 (0.2–4.3)	0.4 (0.1–1.4)	0.5 (0.1–2.0)
4 adversities, OR (95% CI)	1.0 (0.0–132.6)	1.4 (0.2–10.2)	0.2 (0.0–1.5)	0.2 (0.0–1.3)
5 adversities, OR (95% CI)	0.4 (0.0–156.6)	0.5 (0.0–10.8)	0.4 (0.0–5.6)	0.1 (0.0–1.4)
6+ adversities, OR (95% CI)	0.3 (0.0–781.2)	–	–	–
Significance, ^b χ^2 (P)	5.4 (ns)	13.3 (0.02)	4.4 (ns)	30.2 (<0.001)

OR, odds ratio; ns, not significant.
a. Models have the same controls and main effects as Table 4. In addition to that, interaction effects were included between gender and each of the types of adversity, and interaction effects between gender and number of adversities. The ORs and χ^2 presented here are the interaction terms instead of the main effects shown in Table 4. For example, for the row on physical abuse, it shows the odds of having been physically abused and being female, etc.
b. χ^2 values indicate levels of significance (d.f. = 8) for differences between each interaction term.
* $P < 0.05$.

Table DS3 Interaction between gender and type and number of childhood adversities with persistence of suicidal behaviours^a

	Lifetime attempt	Lifetime ideation	Lifetime plan among respondents with lifetime ideation	Lifetime attempt among ideators with lifetime plan	Lifetime plan among ideators without lifetime plan
Interaction between female and type of adversity					
Physical abuse, OR (95% CI)	1.5 (0.6–3.7)	1.3 (0.9–1.9)	1.0 (0.6–1.8)	0.9 (0.3–2.8)	7.3 (1.5–35.2)*
Sexual abuse, OR (95% CI)	1.4 (0.5–3.5)	1.0 (0.6–1.7)	1.1 (0.6–2.2)	1.1 (0.3–3.6)	3.8 (0.6–23.3)
Neglect, OR (95% CI)	0.8 (0.4–1.9)	1.0 (0.7–1.6)	1.3 (0.7–2.6)	0.8 (0.3–2.0)	1.4 (0.3–6.8)
Parent death, OR (95% CI)	1.4 (0.5–3.7)	1.3 (0.9–1.9)	1.3 (0.7–2.3)	1.1 (0.4–3.1)	4.4 (0.9–22.4)
Parent divorce, OR (95% CI)	1.1 (0.5–2.6)	1.3 (0.9–1.9)	1.0 (0.5–2.0)	0.6 (0.2–1.5)	9.1 (1.7–48.3)*
Other parent loss, OR (95% CI)	0.9 (0.3–2.3)	1.0 (0.6–1.6)	1.7 (0.8–3.7)	0.8 (0.2–2.5)	2.9 (0.7–12.1)
Family violence, OR (95% CI)	0.7 (0.3–1.7)	0.9 (0.6–1.4)	0.9 (0.5–1.7)	0.9 (0.3–2.3)	1.9 (0.5–7.6)
Physical illness, OR (95% CI)	1.4 (0.5–3.9)	1.1 (0.7–1.7)	1.7 (0.8–3.6)	1.4 (0.4–4.9)	6.1 (1.5–24.3)*
Financial adversity, OR (95% CI)	1.4 (0.5–4.5)	1.4 (0.8–2.3)	3.8 (1.4–9.8)*	1.9 (0.4–9.0)	1.6 (0.3–8.9)
Significance, ^b χ^2 (P)	6.1 (ns)	5.5 (ns)	13.8 (ns)	5.1 (ns)	6.0 (ns)
Interaction between female and number of adversities ^c					
2 adversities, OR (95% CI)	1.1 (0.4–3.5)	0.7 (0.4–1.1)	0.7 (0.3–1.6)	1.4 (0.3–5.6)	0.2 (0.0–1.4)
3 adversities, OR (95% CI)	0.6 (0.1–3.4)	0.6 (0.3–1.5)	0.8 (0.2–2.5)	0.9 (0.1–7.6)	0.0 (0.0–0.5)*
4 adversities, OR (95% CI)	1.0 (0.1–12.2)	0.7 (0.2–2.2)	1.0 (0.2–5.6)	1.4 (0.1–25.1)	0.0 (0.0–2.1)
5 adversities, OR (95% CI)	0.6 (0.0–13.3)	0.6 (0.1–3.8)	0.3 (0.0–2.9)	1.7 (0.0–75.6)	0.0 (0.0–2.0)
6+ adversities, OR (95% CI)	1.0 (0.0–72.5)	0.7 (0.1–6.9)	–	–	–
Significance, ^b χ^2 (P)	3.5 (ns)	4.3 (ns)	3.9 (ns)	1.5 (ns)	6.7 (ns)

OR, odds ratio; ns, not significant.

a. Models have the same controls and main effects as Table 4. In addition to that, we include interaction effects between gender and each of the types of adversity, and interaction effects between gender and number of adversities. The ORs and χ^2 presented here are the interaction terms instead of the main effects shown in Table 4. For example, for the row of physical abuse, it shows the odds of having been physically abused and being female, etc.

b. χ^2 values indicate levels of significance (d.f. = 8) for differences between each interaction term.

c. For interaction between female and number of adversities, the odds ratio represents the odds of interaction between female and that number of adversities or more. For example, for lifetime plan among lifetime ideators, 5 represent interaction between female and 5 or more adversities (i.e. 5+ adversities).

* $P < 0.05$.