Supplementary Table 1. The World Mental Health-International College Student surveys included in the analyses.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Country** | **Number of participating universities** | **Number of first-year students eligible** | **Number of first-year student respondents1** | **Response Rate2** | **Number of first-year students in analyses3** | **Survey Field Dates** | **Sampling and procedures** |
| **Australia** | 1 public | 13,752 | 1,202 | 8.7% | 956 | 2016-17 | All first-year students were invited to participate through e-mail. Five reminder emails were sent with personalized links to the survey. Conditional incentives were applied (movie passes). |
| **Belgium** | 1 public | 13,103 | 5,844 | 44.6% | 5,380 | 2014-17 | All first-year students between 2014-2016 were invited for a psycho-medical check-up in the student mental health center. Surveys were completed in the waiting room. Students who did not show up for the psycho-medical check-up received up to eight reminder emails. Conditional incentives were applied (store credit coupons). In 2016-2017, all first-year students were invited to participate through e-mail (up to eight emails). |
| **Germany** | 2 public | 11,210 | 1,757 | 15.7% | 1,707 | 2016-18 | All first-year students were invited to participate through e-mail. Six reminder emails were sent with personalized links to the survey. Conditional incentives were applied (store credit coupons). |
| **Hong Kong** | 1 public | 519 | 208 | 40.1% | 208 | 2017 | All first-year full-time students were invited to participate through email and campus posters with QR codes for electronically registering for participation by providing university email address. After verification by university research team of the email addresses being provided, individual survey links were sent to the students. Up to five reminder emails, each one week apart, were sent for non-responding or incomplete surveys. All respondents who completed surveys were given HKD100 (=USD 12.8) shopping coupons as incentives. |
| **Mexico** | 5 private/4 public | 10,747 | 8,076 | 75.1% | 8,053 | 2016-18 | All first-year students were eligible for the survey. Initial contact differed by university: survey included in an obligatory health evaluation (2 universities), as part of obligatory group tutoring sessions (1 university), or as part of required classes (3 universities) or teacher evaluations (2 universities) and direct invitations from university administrators (1 university). Two universities sent reminder emails (tutors sent out emails to their tutees; in a required class of personal development, reminders were sent out by faculty). No incentives were applied for baseline surveys. |
| **Northern Ireland** | 1 public | 4,359 | 739 | 17.0% | 711 | 2015 | All first-year students due to register were invited to participate. Following registration, ID numbers and links to the survey were provided. Five reminder emails/text messages were sent with personalized links to the survey. A 6th reminder involved a researcher telephoning non-responders. All responders were entered into a number of draws to win an iPad. |
| **South Africa** | 1 public | 5,338 | 686 | 12.9% | 666 | 2015 | All first-year students were invited to participate through e-mail. Eight reminder emails and one text message were sent with personalized links to the survey. Conditional incentives were applied (5x R1000 draw). |
| **Spain** | 5 public | 16,332 | 2,118 | 13.0% | 2,046 | 2014-15 | All first-year students 18-24 were eligible for the survey. Initial contact differed by university (information stands, information sessions in classrooms, through the university's website, personalized email from university representatives). Four reminder emails were sent with personalized links to the survey. Conditional monetary incentives were applied. Additionally, an end-game strategy was implemented by selecting a random proportion of non-respondents and offering all of them a monetary incentive. |
| **United States** | 3 private | 4,382 | 739 | 16.9% | 700 | 2015-16 | All first-year students were invited to participate through e-mail. Three reminder emails were sent with personalized links to the survey. Conditional incentives were applied (gift cards). |
| **Total** | **8 private/ 16 public** | **79,742** | **21,369** | **45.6%** | **20,427** | **2014-18** |  |

*Note. WMH-ICS, World Mental Health College Student Initiative.*

*1Full respondents.*

*2Weighted by achieved sample size.*

*3Analysis was restricted to full-time students 18 or older reporting male or female gender.*

Supplementary Table 2. Sample sociodemographic characteristics.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Australia** | **Belgium** | **Germany** | **Hong Kong** | **Mexico** | **Northern**  **Ireland** | **South Africa** | **Spain** | **United States** | **Total** |
|  | **n=956** | **n=5,380** | **n=1,707** | **n=208** | **n=8,053** | **n=711** | **n=666** | **n=2,046** | **n=700** | **n=20,427** |
|  | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** |
| **Gender** |  |  |  |  |  |  |  |  |  |  |
| Female | 53.1 (1.8) | 57.0 (0.7) | 51.1 (1.3) | 68.1 (4.3) | 52.9 (0.6) | 54.7 (1.9) | 54.4 (2.1) | 56.0 (2.0) | 60.7 (2.0) | 54.7 (0.4) |
| **Age** |  |  |  |  |  |  |  |  |  |  |
| 18 | 40.2 (1.7) | 71.3 (0.6) | 26.6 (1.1) | 64.8 (3.4) | 54.4 (0.6) | 40.7 (1.9) | 42.9 (2.0) | 62.6 (2.0) | 78.7 (1.6) | 56.8 (0.4) |
| 19 | 21.8 (1.4) | 22.9 (0.6) | 34.1 (1.2) | 25.4 (2.9) | 24.8 (0.5) | 27.3 (1.7) | 40.5 (2.0) | 22.1 (1.9) | 19.3 (1.6) | 25.1 (0.4) |
| 20 | 6.6 (0.9) | 3.2 (0.3) | 19.0 (1.0) | 7.2 (1.3) | 10.7 (0.4) | 10.8 (1.2) | 10.0 (1.2) | 4.4 (0.6) | 1.5 (0.4) | 8.2 (0.2) |
| 21 | 6.3 (0.8) | 0.8 (0.1) | 6.9 (0.6) | 1.4 (0.5) | 4.2 (0.2) | 3.6 (0.7) | 3.6 (0.8) | 3.7 (0.6) | 0.4 (0.2) | 3.4 (0.1) |
| 22 | 3.8 (0.7) | 0.6 (0.1) | 4.0 (0.5) | 0.4 (0.3) | 2.4 (0.2) | 3.2 (0.7) | 0.7 (0.3) | 3.1 (1.0) |  | 2.1 (0.1) |
| 23 | 21.2 (1.4) | 1.2 (0.2) | 9.4 (0.7) | 0.7 (0.4) | 3.3 (0.2) | 14.3 (1.3) | 2.3 (0.6) | 4.1 (1.1) | 0.2 (0.2) | 4.4 (0.2) |
| **Parental education** |  |  |  |  |  |  |  |  |  |  |
| University graduate | 50.2 (2.5) | 60.5 (1.1) | 47.9 (1.3) | 26.5 (4.1) | 56.1 (0.6) | 36.6 (1.9) | 70.9 (1.9) | 45.6 (1.9) | 85.8 (1.4) | 55.8 (0.5) |
| Some post-secondary education | 25.6 (2.3) | 23.6 (0.9) | 23.8 (1.1) | 12.4 (2.8) | 25.3 (0.5) | 32.1 (1.8) | 18.5 (1.6) | 35.9 (1.9) | 9.7 (1.2) | 25.2 (0.4) |

*Note. SE: standard error. The data are weighted and the SEs are design-corrected.*

Supplementary Table 3. Prevalence of childhood adversities type, number, and frequency by country.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Australia** | **Belgium** | **Germany** | **Hong Kong** | **Mexico** | **Northern Ireland** | **South Africa** | **Spain** | **United States** | **Total** |
|  | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** |
| **Type of childhood adversity** |  |  |  |  |  |  |  |  |  |  |
| Parental psychopathology | 48.4 (1.7) | 35.3 (0.7) | 51.4 (1.3) | 32.3 (3.9) | 37.2 (0.6) | 38.8 (1.9) | 48.4 (2.1) | 33.6 (1.8) | 39.3 (2.0) | 38.5 (0.4) |
| Physical abuse | 21.9 (1.5) | 7.5 (0.4) | 16.1 (1.0) | 36.3 (4.1) | 20.7 (0.5) | 16.1 (1.4) | 20.6 (1.7) | 10.1 (1.1) | 11.6 (1.3) | 15.5 (0.3) |
| Emotional abuse | 41.4 (1.7) | 20.4 (0.6) | 48.4 (1.3) | 42.9 (4.1) | 23.9 (0.5) | 27.3 (1.7) | 36.8 (2.0) | 20.3 (1.5) | 29.5 (1.8) | 26.4 (0.3) |
| Sexual abuse | 3.5 (0.6) | 1.5 (0.2) | 2.2 (0.4) | 4.9 (1.9) | 3.2 (0.2) | 2.2 (0.5) | 4.3 (0.8) | 1.5 (0.5) | 2.1 (0.6) | 2.5 (0.1) |
| Neglect | 18.2 (1.4) | 7.0 (0.4) | 14.7 (0.9) | 14.1 (2.8) | 9.8 (0.3) | 8.5 (1.1) | 12.8 (1.4) | 7.4 (0.9) | 7.6 (1.1) | 9.6 (0.2) |
| High frequency bullying victimization | 50.2 (1.7) | 33.3 (0.7) | 37.3 (1.2) | 28.8 (4.0) | 21.7 (0.5) | 48.8 (1.9) | 49.4 (2.1) | 31.0 (1.7) | 30.9 (1.8) | 30.6 (0.4) |
| Low frequency bullying victimization | 29.7 (1.6) | 33.6 (0.7) | 32.7 (1.2) | 26.8 (3.5) | 27.7 (0.5) | 26.5 (1.7) | 29.3 (1.9) | 27.1 (1.7) | 34.0 (1.9) | 29.9 (0.4) |
| Dating violence | 19.5 (1.4) | 6.5 (0.4) | 13.6 (0.9) | 9.6 (2.5) | 10.0 (0.3) | 17.6 (1.4) | 14.5 (1.4) | 6.8 (0.8) | 10.8 (1.2) | 9.9 (0.2) |
| **Number of adversities** |  |  |  |  |  |  |  |  |  |  |
| 0 | 11.6 (1.1) | 21.2 (0.6) | 12.9 (0.9) | 22.4 (3.4) | 31.2 (0.5) | 16.2 (1.4) | 9.9 (1.2) | 28.7 (1.9) | 20.7 (1.6) | 24.2 (0.4) |
| 1 | 24.1 (1.5) | 38.6 (0.7) | 25.4 (1.1) | 24.6 (3.8) | 27.6 (0.5) | 35.2 (1.8) | 29.5 (1.9) | 33.3 (1.8) | 33.5 (1.9) | 31.2 (0.4) |
| 2 | 23.1 (1.5) | 23.2 (0.6) | 25.2 (1.1) | 17.4 (2.9) | 17.5 (0.4) | 21.7 (1.6) | 23.5 (1.7) | 19.9 (1.6) | 19.0 (1.6) | 20.6 (0.3) |
| 3 | 17.2 (1.3) | 10.6 (0.5) | 16.6 (1.0) | 18.4 (3.4) | 10.7 (0.4) | 10.9 (1.2) | 18.8 (1.6) | 11.1 (1.2) | 16.8 (1.5) | 12.1 (0.3) |
| 4 | 13.9 (1.2) | 4.2 (0.3) | 12.0 (0.9) | 9.0 (2.2) | 7.6 (0.3) | 8.7 (1.1) | 11.1 (1.3) | 4.2 (0.6) | 7.4 (1.0) | 7.2 (0.2) |
| 5 | 5.9 (0.8) | 1.5 (0.2) | 5.5 (0.6) | 5.4 (2.0) | 3.8 (0.2) | 4.5 (0.8) | 5.0 (0.9) | 2.2 (0.4) | 2.1 (0.5) | 3.3 (0.1) |
| 6 | 3.4 (0.6) | 0.5 (0.1) | 2.0 (0.4) | 1.3 (0.8) | 1.1 (0.1) | 2.6 (0.6) | 1.7 (0.5) | 0.5 (0.3) | 0.1 (0.1) | 1.1 (0.1) |
| 7 | 0.8 (0.3) | 0.1 (0.1) | 0.4 (0.2) | 1.5 (1.3) | 0.5 (0.1) | 0.2 (0.2) | 0.5 (0.2) | 0.1 (0.1) | 0.5 (0.3) | 0.4 (0.0) |
| 4 or more | 24.0 (1.5) | 6.3 (0.4) | 19.9 (1.0) | 17.2 (3.2) | 13.0 (0.4) | 16.0 (1.4) | 18.3 (1.6) | 6.9 (0.8) | 10.0 (1.1) | 11.9 (0.2) |
| **Frequency of adversities** |  |  |  |  |  |  |  |  |  |  |
| 0 | 23.4 (1.5) | 43.7 (0.8) | 30.0 (1.2) | 40.9 (4.1) | 49.1 (0.6) | 32.6 (1.8) | 23.9 (1.7) | 46.9 (2.0) | 40.8 (2.0) | 42.9 (0.4) |
| 1 | 14.8 (1.2) | 19.2 (0.6) | 14.1 (0.9) | 13.6 (2.7) | 12.9 (0.4) | 17.9 (1.5) | 18.3 (1.6) | 15.2 (1.4) | 13.4 (1.4) | 15.4 (0.3) |
| 2 | 12.7 (1.2) | 12.3 (0.5) | 13.3 (0.9) | 8.0 (2.0) | 10.1 (0.4) | 11.2 (1.2) | 12.0 (1.4) | 11.3 (1.3) | 11.0 (1.2) | 11.3 (0.3) |
| 3 | 10.3 (1.0) | 8.5 (0.4) | 10.1 (0.8) | 11.5 (2.6) | 7.7 (0.3) | 10.1 (1.1) | 11.1 (1.3) | 8.6 (1.1) | 13.0 (1.4) | 8.7 (0.2) |
| 4 | 8.0 (0.9) | 5.2 (0.3) | 6.6 (0.6) | 5.5 (1.7) | 5.0 (0.2) | 5.0 (0.8) | 8.0 (1.2) | 6.7 (1.0) | 6.8 (1.0) | 5.7 (0.2) |
| 5 | 6.5 (0.9) | 3.2 (0.3) | 6.6 (0.7) | 7.8 (2.6) | 3.8 (0.2) | 5.4 (0.8) | 7.4 (1.1) | 4.3 (0.7) | 4.8 (0.8) | 4.3 (0.2) |
| 6 | 6.2 (0.8) | 2.4 (0.2) | 5.0 (0.6) | 5.2 (2.1) | 2.8 (0.2) | 5.1 (0.8) | 5.6 (1.0) | 2.1 (0.4) | 3.1 (0.7) | 3.2 (0.1) |
| 7 | 2.9 (0.6) | 1.7 (0.2) | 3.0 (0.4) | 1.0 (0.5) | 2.3 (0.2) | 3.4 (0.7) | 4.1 (0.8) | 1.4 (0.3) | 1.5 (0.4) | 2.2 (0.1) |
| 8 | 2.6 (0.6) | 1.2 (0.2) | 2.5 (0.4) | 1.1 (0.5) | 1.5 (0.1) | 1.9 (0.5) | 3.3 (0.7) | 0.9 (0.2) | 1.8 (0.5) | 1.6 (0.1) |
| 9 or more | 12.7 (1.2) | 2.6 (0.2) | 8.9 (0.7) | 5.3 (2.0) | 4.6 (0.2) | 7.5 (1.0) | 6.3 (1.0) | 2.7 (0.4) | 3.9 (0.7) | 4.8 (0.2) |

*Note. SE: standard error. The data are weighted and the SEs are design-corrected.*

Supplementary Table 4: Prevalence of lifetime and 12-month disorders by country.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Australia** | **Belgium** | **Germany** | **HongKong** | **Mexico** | **Northern**  **Ireland** | **South Africa** | **Spain** | **United States** |
|  | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** | **% (SE)** |
| **Lifetime disorders** |  |  |  |  |  |  |  |  |  |
| MDD | 25.5 (1.5) | 15.0 (0.5) | 21.7 (1.0) | 20.4 (3.6) | 11.4 (0.4) | 22.2 (1.6) | 18.0 (1.5) | 22.9 (1.5) | 14.4 (1.4) |
| BD | 6.8 (0.9) | 1.9 (0.2) | 3.4 (0.5) | 5.1 (1.6) | 4.5 (0.2) | 3.3 (0.7) | 2.8 (0.6) | 3.1 (0.5) | 2.2 (0.5) |
| GAD | 28.4 (1.5) | 11.0 (0.4) | 15.0 (0.9) | 24.6 (3.7) | 12.9 (0.4) | 22.4 (1.6) | 20.0 (1.6) | 21.1 (1.5) | 14.8 (1.3) |
| PD | 11.7 (1.1) | 2.5 (0.2) | 5.0 (0.5) | 4.5 (1.8) | 4.2 (0.3) | 6.3 (1.2) | 4.5 (1.2) | 3.0 (0.6) | 3.5 (0.7) |
| AUD | 8.5 (1.0) | 5.3 (0.3) | 4.2 (0.6) | 3.8 (1.7) | 8.8 (0.3) | 10.4 (1.2) | 7.6 (1.1) | 7.3 (1.2) | 3.9 (0.8) |
| DUD | 9.2 (1.0) | 2.0 (0.3) | 4.9 (0.6) | 2.0 (1.5) | 2.8 (0.2) | 3.2 (0.7) | 5.5 (0.9) | 5.2 (0.9) | 4.3 (0.8) |
| **12-months disorders** |  |  |  |  |  |  |  |  |  |
| MDD | 22.3 (1.4) | 12.4 (0.5) | 19.2 (1.0) | 18.3 (3.5) | 9.7 (0.3) | 20.4 (1.5) | 15.0 (1.4) | 18.9 (1.4) | 12.6 (1.3) |
| BD | 6.7 (0.9) | 1.6 (0.2) | 3.3 (0.4) | 5.1 (1.6) | 4.2 (0.2) | 2.9 (0.6) | 2.7 (0.6) | 3.0 (0.5) | 2.0 (0.5) |
| GAD | 26.7 (1.5) | 9.5 (0.4) | 13.1 (0.8) | 17.4 (3.3) | 11.6 (0.4) | 21.7 (1.6) | 18.4 (1.5) | 17.3 (1.3) | 13.6 (1.3) |
| PD | 11.0 (1.1) | 2.4 (0.2) | 4.6 (0.5) | 3.6 (1.6) | 3.9 (0.3) | 5.8 (1.1) | 4.2 (1.1) | 2.4 (0.5) | 3.4 (0.6) |
| AUD | 7.8 (1.0) | 5.0 (0.3) | 4.0 (0.5) | 3.8 (1.7) | 7.6 (0.3) | 9.5 (1.1) | 7.5 (1.1) | 6.9 (1.2) | 3.9 (0.8) |
| DUD | 4.8 (0.8) | 1.2 (0.2) | 2.9 (0.4) | 2.0 (1.5) | 1.5 (0.1) | 1.9 (0.5) | 4.7 (0.9) | 1.9 (0.4) | 3.8 (0.8) |

*Note. MDD: major depressive disorder; BD: bipolar disorder; GAD: generalized anxiety disorder; PD: panic disorder; AUD: alcohol use disorder; DUD: drug use disorder*. *SE: standard error. The data are weighted and the SEs are design-corrected.*

Supplementary Table 5. Prevalence of lifetime, 12-month, persistent disorders and severe role impairment associated with each disorder.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Prevalence of mental disorders** | | | **Severe role impairment among those with each disorder in the past 12 months**  **n=5,703** | | | | |
|  | **Lifetime**  **n=20, 427** | **12-month**  **n=20, 427** | **Persistent disorder** | **Home management** | **Work** | **Relationships** | **Social life** | **Any severe**  **impairment** |
|  | % (SE) | % (SE) | % (SE) | % (SE) | % (SE) | % (SE) | % (SE) | % (SE) |
| MDD | 15.8 (0.3) | 13.4 (0.3) | 83.3 (0.8) | 10.0 (0.7) | 19.1 (0.8) | 24.8 (0.9) | 25.2 (0.9) | 39.9 (1.0) |
| BD | 3.5 (0.1) | 3.3 (0.1) | 92.2 (1.1) | 14.7 (1.4) | 22.9 (1.7) | 27.7 (1.8) | 27.3 (1.8) | 44.3 (2.0) |
| GAD | 14.9 (0.3) | 13.1 (0.3) | 87.1 (0.8) | 12.4 (0.7) | 21.9 (0.9) | 25.5 (0.9) | 27.5 (0.9) | 43.2 (1.1) |
| PD | 4.1 (0.2) | 3.8 (0.2) | 92.1 (1.6) | 15.0 (1.5) | 24.6 (1.9) | 27.8 (1.9) | 29.9 (2.0) | 45.9 (2.2) |
| AUD | 7.1 (0.2) | 6.4 (0.2) | 89.6 (1.0) | 8.1 (0.9) | 11.9 (1.0) | 14.6 (1.1) | 13.1 (1.1) | 24.8 (1.4) |
| DUD | 3.5 (0.2) | 1.9 (0.1) | 46.2 (2.8) | 14.6 (2.0) | 22.1 (2.4) | 27.3 (2.5) | 23.2 (2.4) | 40.4 (2.8) |
| Any Disorder | 31.3 (0.4) | 27.6 (0.4) | 87.4 (0.5) | 8.8 (0.4) | 16.0 (0.5) | 20.1 (0.6) | 20.4 (0.6) | 33.5 (0.7) |

*Note. Persistent disorder was construed as the presence of any 12-month disorder among those with prior disorder. Severe role impairment was defined as a score equal to or above 7 on the Sheehan Disability Scale. MDD: major depressive disorder; BD: bipolar disorder; GAD: generalized anxiety disorder; PD: panic disorder; AUD: alcohol use disorder; DUD: drug use disorder. SE: standard error. The data are weighted and the SEs are design-corrected.*

Supplementary Table 6. Bivariate associations between childhood adversities and 12-month disorders (n=20,427).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **12-month disorders** | | | | | |
|  | **MDD** | **BD** | **GAD** | **PD** | **AUD** | **DUD** |
|  | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) |
| **Type of childhood adversity** |  |  |  |  |  |  |
| Parental psychopathology | 1.90 (1.76-2.05)\* | 2.79 (2.38-3.28)\* | 2.03 (1.88-2.19)\* | 2.20 (1.86-2.60)\* | 1.51 (1.35-1.69)\* | 2.70 (2.18-3.36)\* |
| Physical abuse | 1.77 (1.62-1.95)\* | 3.50 (2.99-4.11)\* | 1.93 (1.76-2.11)\* | 2.28 (1.88-2.78)\* | 1.76 (1.55-2.00)\* | 3.17 (2.56-3.93)\* |
| Emotional abuse | 2.29 (2.12-2.48)\* | 3.75 (3.20-4.39)\* | 2.24 (2.07-2.43)\* | 2.75 (2.30-3.29)\* | 1.55 (1.38-1.75)\* | 3.16 (2.56-3.91)\* |
| Sexual abuse | 1.92 (1.61-2.29)\* | 2.60 (1.92-3.52)\* | 1.85 (1.55-2.21)\* | 2.07 (1.46-2.93)\* | 1.92 (1.48-2.51)\* | 4.16 (2.90-5.98)\* |
| Neglect | 1.96 (1.77-2.17)\* | 3.49 (2.93-4.15)\* | 2.05 (1.86-2.27)\* | 2.25 (1.81-2.79)\* | 1.72 (1.48-2.00)\* | 3.38 (2.69-4.25)\* |
| High frequency bullying victimization | 2.70 (2.45-2.98)\* | 4.68 (3.80-5.78)\* | 3.10 (2.81-3.43)\* | 3.57 (2.86-4.46)\* | 1.19 (1.04-1.36)\* | 2.24 (1.71-2.94)\* |
| Low frequency bullying victimization | 1.44 (1.29-1.61)\* | 2.09 (1.66-2.65)\* | 1.54 (1.38-1.73)\* | 1.58 (1.22-2.03)\* | 1.10 (0.96-1.26) | 1.68 (1.26-2.24)\* |
| Dating violence | 1.64 (1.48-1.82)\* | 3.26 (2.74-3.87)\* | 2.08 (1.89-2.29)\* | 2.30 (1.93-2.75)\* | 2.12 (1.83-2.44)\* | 3.42 (2.72-4.31)\* |
| **Number of adversities** |  |  |  |  |  |  |
| 4+ | 4.78 (4.12-5.54)\* | 12.38 (9.06-16.93)\* | 5.45 (4.70-6.31)\* | 7.24 (5.12-10.23)\* | 2.25 (1.88-2.68)\* | 10.43 (6.70-16.25)\* |
| 3 | 3.99 (3.43-4.64)\* | 5.56 (3.95-7.82)\* | 3.78 (3.24-4.42)\* | 4.90 (3.46-6.95)\* | 1.60 (1.32-1.94)\* | 4.59 (2.82-7.46)\* |
| 2 | 2.54 (2.18-2.95)\* | 3.36 (2.39-4.72)\* | 2.73 (2.35-3.17)\* | 3.29 (2.38-4.55)\* | 1.33 (1.11-1.58)\* | 2.90 (1.80-4.68)\* |
| 1 | 1.79 (1.54-2.08)\* | 1.89 (1.34-2.68)\* | 1.74 (1.49-2.03)\* | 1.87 (1.32-2.65)\* | 0.98 (0.83-1.17) | 2.16 (1.33-3.51)\* |
| F-test | 156.81 (4) [0.000]\* | 109.76 (4) [0.000]\* | 183.97 (4) [0.000]\* | 53.24 (4) [0.000]\* | 30.95 (4) [0.000]\* | 49.63 (4) [0.000]\* |
| **Frequency of adversities** | 1.20 (1.18-1.21)\* | 1.33 (1.30-1.36)\* | 1.22 (1.20-1.23)\* | 1.26 (1.23-1.29)\* | 1.11 (1.09-1.13)\* | 1.27 (1.23-1.31)\* |

*Note. MDD: major depressive disorder; BD: bipolar disorder; GAD: generalized anxiety disorder; PD: panic disorder; AUD: alcohol use disorder; DUD: drug use disorder. RR: Risk ratio; CI = confidence interval.*

Supplementary Table 7. Multivariate associations between childhood adversities and 12-month disorders (n=20,427).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **12-month Disorders** | | | | | |
|  | **MDD** | **BD** | **GAD** | **PD** | **AUD** | **DUD** |
|  | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) |
| **Type of childhood adversity** |  |  |  |  |  |  |
| Parental psychopathology | 1.09 (0.95-1.24) | 1.08 (0.83-1.39) | 1.07 (0.93-1.22) | 1.00 (0.77-1.30) | 1.16 (0.97-1.39) | 1.67 (1.19-2.35)\* |
| Physical abuse | 0.88 (0.77-1.01) | 1.26 (0.99-1.60) | 0.89 (0.78-1.02) | 0.99 (0.76-1.28) | 1.33 (1.09-1.62)\* | 1.55 (1.12-2.16)\* |
| Emotional abuse | 1.33 (1.15-1.54)\* | 1.31 (0.98-1.74) | 1.12 (0.97-1.30) | 1.27 (0.96-1.68) | 1.06 (0.86-1.32) | 1.78 (1.22-2.59)\* |
| Sexual abuse | 1.04 (0.86-1.26) | 0.80 (0.58-1.10) | 0.90 (0.75-1.08) | 0.89 (0.62-1.27) | 1.15 (0.86-1.53) | 1.36 (0.91-2.03) |
| Neglect | 1.09 (0.96-1.25) | 1.27 (1.02-1.59)\* | 1.02 (0.89-1.16) | 1.01 (0.77-1.33) | 1.19 (0.97-1.45) | 1.64 (1.20-2.25)\* |
| High frequency bully victimization | 1.55 (1.35-1.77)\* | 1.72 (1.31-2.27)\* | 1.59 (1.38-1.82)\* | 1.55 (1.16-2.07)\* | 0.80 (0.66-0.97)\* | 1.15 (0.80-1.66) |
| Low frequency bully victimization | 1.21 (1.06-1.37)\* | 1.44 (1.10-1.89)\* | 1.24 (1.09-1.42)\* | 1.20 (0.90-1.60) | 0.92 (0.78-1.09) | 1.41 (1.00-1.99) |
| Dating violence | 1.01 (0.88-1.15) | 1.48 (1.19-1.83)\* | 1.18 (1.04-1.33)\* | 1.22 (0.97-1.53) | 1.75 (1.45-2.11)\* | 2.16 (1.62-2.89)\* |
| F-test | 8.18 (8) [0.000]\* | 3.82 (8) [0.000]\* | 8.95 (8) [0.000]\* | 2.15 (8) [0.031]\* | 7.02 (8) [0.000]\* | 5.70 (8) [0.000]\* |
| **Number of adversities** |  |  |  |  |  |  |
| 4+ | 0.71 (0.49-1.04) | 0.69 (0.35-1.37) | 0.76 (0.53-1.10) | 0.62 (0.31-1.24) | 0.91 (0.54-1.55) | 0.35 (0.14-0.87)\* |
| 3 | 1.00 (0.78-1.29) | 0.86 (0.54-1.37) | 0.94 (0.73-1.20) | 0.90 (0.56-1.45) | 1.04 (0.73-1.47) | 0.56 (0.30-1.02) |
| 2 | 1.00 (0.84-1.18) | 0.99 (0.71-1.39) | 1.05 (0.89-1.24) | 1.10 (0.79-1.52) | 1.08 (0.86-1.36) | 0.73 (0.47-1.14) |
| F-test | 5.88 (3,13924)\* | 0.82 (3,15037) | 3.36 (3,8623)\* | 2.61 (3,343) | 0.87 (3,6899) | 1.78 (3,6411) |
| **Frequency of adversities** | 1.16 (1.12-1.20)\* | 1.24 (1.17-1.31)\* | 1.20 (1.16-1.24)\* | 1.25 (1.18-1.33)\* | 1.04 (0.99-1.10) | 1.13 (1.04-1.23)\* |
| 12-df F-test | 77.50 (12) [0.000]\* | 51.60 (12) [0.000]\* | 93.90 (12) [0.000]\* | 29.56 (12) [0.000]\* | 16.40 (12) [0.000]\* | 26.14 (12) [0.000]\* |
|  |  |  |  |  |  |  |
| All types of CAsa | 0.393 (0.014) | 0.575 (0.017) | 0.430 (0.016) | 0.487 (0.027) | 0.187 (0.033) | 0.498 (0.029) |

*Note. All models adjusted for country, gender, parental education (high vs low, medium vs low). MDD: major depressive disorder; BD: Bipolar disorder; GAD: generalized anxiety disorder; PD: Panic disorder; AUD: Alcohol use disorder; DUD: Drug use disorder. PARP = population attributable risk proportion; RR: Risk ratio; SE = standard error.*

*aModel predictors: country, sex, parental education, childhood adversity, number of adversities, and frequency of adversities. F-test: F statistic (df) [p-value].*

Supplementary Table 8. Bivariate associations between childhood adversities and lifetime mental disorders (n=20,427).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Lifetime Disorders** | | | | | |
|  | **MDD** | **BD** | **GAD** | **PD** | **AUD** | **DUD** |
|  | **RR (95%CI)** | **RR (95%CI)** | **RR (95%CI)** | **RR (95%CI)** | **RR (95%CI)** | **RR (95%CI)** |
| **Type of childhood adversity** |  |  |  |  |  |  |
| Parental psychopathology | 2.14 (2.00-2.29)\* | 2.87 (2.45-3.35)\* | 2.06 (1.92-2.22)\* | 2.23 (1.90-2.62)\* | 1.54 (1.39-1.72)\* | 2.61 (2.22-3.07)\* |
| Physical abuse | 2.06 (1.90-2.24)\* | 3.47 (2.98-4.05)\* | 2.01 (1.85-2.19)\* | 2.20 (1.81-2.68)\* | 1.79 (1.58-2.02)\* | 2.85 (2.41-3.36)\* |
| Emotional abuse | 2.61 (2.43-2.80)\* | 3.74 (3.21-4.36)\* | 2.34 (2.17-2.52)\* | 2.64 (2.21-3.14)\* | 1.54 (1.38-1.73)\* | 2.69 (2.30-3.15)\* |
| Sexual abuse | 2.34 (2.00-2.73)\* | 2.65 (1.98-3.54)\* | 2.11 (1.79-2.49)\* | 2.02 (1.42-2.86)\* | 2.22 (1.74-2.83)\* | 4.29 (3.27-5.63)\* |
| Neglect | 2.31 (2.11-2.53)\* | 3.48 (2.94-4.12)\* | 2.13 (1.93-2.35)\* | 2.20 (1.79-2.72)\* | 1.79 (1.55-2.07)\* | 3.18 (2.67-3.80)\* |
| High frequency bullying victimization | 3.17 (2.91-3.46)\* | 4.36 (3.58-5.31)\* | 3.32 (3.03-3.64)\* | 3.73 (3.00-4.63)\* | 1.16 (1.02-1.32)\* | 2.26 (1.83-2.78)\* |
| Low frequency bullying victimization | 1.49 (1.35-1.65)\* | 1.94 (1.55-2.42)\* | 1.52 (1.37-1.69)\* | 1.63 (1.28-2.07)\* | 1.07 (0.95-1.22) | 1.65 (1.33-2.04)\* |
| Dating violence | 1.91 (1.75-2.09)\* | 3.13 (2.65-3.71)\* | 2.21 (2.02-2.43)\* | 2.28 (1.92-2.71)\* | 2.23 (1.94-2.56)\* | 3.08 (2.58-3.68)\* |
| **Number of adversities** |  |  |  |  |  |  |
| 4+ | 6.27 (5.50-7.14)\* | 12.40 (9.18-16.74)\* | 5.62 (4.92-6.42)\* | 7.08 (5.06-9.92)\* | 2.23 (1.89-2.64)\* | 8.43 (6.22-11.42)\* |
| 3 | 4.41 (3.85-5.04)\* | 5.52 (3.97-7.66)\* | 3.68 (3.19-4.23)\* | 5.00 (3.55-7.03)\* | 1.58 (1.32-1.90)\* | 4.13 (2.97-5.74)\* |
| 2 | 2.76 (2.43-3.15)\* | 3.34 (2.41-4.63)\* | 2.63 (2.29-3.01)\* | 3.46 (2.55-4.70)\* | 1.30 (1.10-1.53)\* | 2.79 (2.01-3.85)\* |
| 1 | 1.82 (1.59-2.08)\* | 1.98 (1.42-2.75)\* | 1.61 (1.40-1.84)\* | 1.86 (1.32-2.61)\* | 0.97 (0.83-1.14) | 1.86 (1.33-2.61)\* |
| F-test | 274.08 (4) [0.000]\* | 116.25 (4) [0.000]\* | 232.36 (4) [0.000]\* | 55.43 (4) [0.000]\* | 33.81 (4) [0.000]\* | 77.25 (4) [0.000]\* |
| **Frequency of adversities** | 1.25 (1.24-1.26)\* | 1.33 (1.30-1.36)\* | 1.24 (1.23-1.26)\* | 1.26 (1.23-1.29)\* | 1.11 (1.09-1.13)\* | 1.26 (1.23-1.29)\* |

*Note. MDD: major depressive disorder; BD: bipolar disorder; GAD: generalized anxiety disorder; PD: panic disorder; AUD: alcohol use disorder; DUD: drug use disorder. RR: Risk ratio; CI = confidence interval. F-test: F statistic (df) [p-value].*

Supplementary Table 9. Prevalence of lifetime mental disorders across LCA-based classes (n=20,427).

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **AUD** | **DUD** | **GAD** | **MDD** | **BD** | **PD** | **No disorder** | **Overall class distribution** | **Number of disorders** |
| Latent classes | % | % | % | % | % | % | % | % |  |
| Class 1 | 0.0 | 0.0 | 11.9 | 9.9 | 26.0 | 27.6 | 0.0 | 0.7 | 3.1 |
| Class 2 | 4.2 | 18.5 | 0.4 | 3.0 | 0.0 | 2.0 | 0.0 | 0.2 | 2.6 |
| Class 3 | 7.9 | 12.9 | 3.9 | 2.5 | 13.1 | 8.6 | 0.0 | 0.2 | 4.1 |
| Class 4 | 60.0 | 44.7 | 0.0 | 0.0 | 34.1 | 0.0 | 0.0 | 2.1 | 1.0 |
| Class 5 | 13.3 | 6.4 | 37.0 | 83.0 | 11.3 | 0.0 | 0.0 | 5.4 | 1.4 |
| Class 6 | 0.0 | 3.9 | 44.6 | 1.6 | 11.6 | 60.6 | 0.0 | 3.1 | 1.2 |
| Class 7 | 14.7 | 13.7 | 2.2 | 0.0 | 3.9 | 1.2 | 0.0 | 0.3 | 2.1 |
| Class 8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 88.1 | 0.0 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 0.2 |

*Note. AUD: alcohol use disorder; DUD: drug use disorder; GAD: generalized anxiety disorder; MDD: major depressive disorder; BD: bipolar disorder; PD: panic disorder.*

Supplementary Table 10. Multivariate associations between childhood adversities and lifetime mental disorders (n=20,427).

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Lifetime Disorders** | | | | | |
|  | **MDD** | **BD** | **GAD** | **PD** | **AUD** | **DUD** |
|  | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) |
| **Type of childhood adversity** |  |  |  |  |  |  |
| Parental psychopathology | 1.16 (1.03-1.31)\* | 1.13 (0.88-1.45) | 0.98 (0.86-1.11) | 0.96 (0.75-1.24) | 1.27 (1.07-1.51)\* | 1.49 (1.15-1.93)\* |
| Physical abuse | 0.94 (0.83-1.06) | 1.31 (1.03-1.66)\* | 0.85 (0.75-0.97)\* | 0.98 (0.76-1.28) | 1.44 (1.19-1.74)\* | 1.35 (1.05-1.73)\* |
| Emotional abuse | 1.41 (1.24-1.61)\* | 1.32 (1.00-1.75) | 1.01 (0.88-1.17) | 1.10 (0.83-1.46) | 1.10 (0.90-1.36) | 1.29 (0.98-1.71) |
| Sexual abuse | 1.06 (0.90-1.26) | 0.77 (0.57-1.05) | 0.92 (0.77-1.10) | 0.81 (0.57-1.16) | 1.32 (1.01-1.71)\* | 1.62 (1.19-2.20)\* |
| Neglect | 1.17 (1.04-1.32)\* | 1.26 (1.01-1.57)\* | 0.92 (0.81-1.05) | 0.96 (0.73-1.26) | 1.29 (1.07-1.57)\* | 1.54 (1.21-1.96)\* |
| High frequency bully victimization | 1.65 (1.46-1.86)\* | 1.50 (1.15-1.96)\* | 1.50 (1.32-1.71)\* | 1.44 (1.08-1.92)\* | 0.78 (0.65-0.94)\* | 1.07 (0.81-1.42) |
| Low frequency bully victimization | 1.24 (1.11-1.40)\* | 1.33 (1.02-1.72)\* | 1.17 (1.03-1.32)\* | 1.17 (0.89-1.55) | 0.93 (0.80-1.09) | 1.23 (0.95-1.60) |
| Dating violence | 1.09 (0.97-1.22) | 1.43 (1.16-1.77)\* | 1.16 (1.03-1.30)\* | 1.16 (0.93-1.45) | 1.93 (1.62-2.31)\* | 1.77 (1.41-2.22)\* |
| F-test | 12.03 (8) [0.000]\* | 2.89 (8) [0.003]\* | 10.37 (8) [0.000]\* | 1.52 (8) [0.156] | 11.48 (8) [0.000]\* | 6.27 (8) [0.000]\* |
| **Number of adversities** |  |  |  |  |  |  |
| 4+ | 0.58 (0.41-0.81)\* | 0.72 (0.37-1.39) | 0.94 (0.66-1.33) | 0.74 (0.37-1.47) | 0.68 (0.41-1.13) | 0.62 (0.32-1.22) |
| 3 | 0.83 (0.66-1.04) | 0.84 (0.53-1.33) | 1.04 (0.82-1.31) | 1.05 (0.66-1.68) | 0.89 (0.64-1.24) | 0.81 (0.52-1.27) |
| 2 | 0.92 (0.79-1.07) | 0.98 (0.71-1.35) | 1.12 (0.96-1.31) | 1.22 (0.89-1.68) | 0.98 (0.79-1.22) | 0.96 (0.69-1.35) |
| 0-1 | ref | ref | ref | ref | ref | ref |
| F-test | 6.62 (3) [0.000]\* | 0.61 (3) [0.608] | 2.37 (3) [0.069] | 3.39 (3) [0.019]\* | 1.65 (3) [0.176] | 1.16 (3) [0.322] |
| **Frequency of adversities** | 1.19 (1.15-1.22)\* | 1.15 (1.09-1.22)\* | 1.18 (1.14-1.22)\* | 1.19 (1.12-1.27)\* | 1.03 (0.98-1.08) | 1.08 (1.01-1.15)\* |
| 12-df F-test | 115.76 (12) [0.000]\* | 28.47 (12) [0.000]\* | 70.93 (12) [0.000]\* | 14.55 (12) [0.000]\* | 16.16 (12) [0.000]\* | 22.43 (12) [0.000]\* |
| **Lifetime disorders latent classes** |  |  |  |  |  |  |
| Latent class 1 | dropped | 8.97 (5.93-13.57)\* | 4.98 (2.29-10.81)\* | 4.98 (2.81-8.80)\* | 1.72 (1.15-2.55)\* | 2.72 (1.78-4.16)\* |
| Latent class 2 | dropped | 3.03 (1.06-8.60)\* | 2.32 (1.38-3.89)\* | 4.67 (1.91-11.45)\* | 1.86 (0.78-4.42) | 34.35 (8.98-131.36)\* |
| Latent class 3 | 2.61 (0.70-9.78) | 9.15 (3.51-23.87)\* | 6.46 (3.01-13.88)\* | 6.41 (2.76-14.91)\* | 3.14 (1.43-6.86)\* | 4.77 (2.34-9.73)\* |
| Latent class 4 | 1.25 (0.98-1.59) | 2.79 (1.86-4.20)\* | 2.14 (1.79-2.57)\* | 2.03 (1.32-3.13)\* | 1.99 (1.43-2.76)\* | 3.34 (2.49-4.46)\* |
| Latent class 5 | dropped | 4.22 (3.45-5.16)\* | 3.40 (3.08-3.76)\* | 3.66 (2.98-4.51)\* | 1.30 (1.09-1.57)\* | 2.43 (1.96-3.01)\* |
| Latent class 6 | 2.34 (2.10-2.61)\* | 3.68 (2.83-4.79)\* | 3.76 (2.99-4.73)\* | 3.58 (2.70-4.75)\* | 1.57 (1.26-1.96)\* | 2.02 (1.46-2.79)\* |
| Latent class 7 | 2.35 (1.57-3.50)\* | 5.81 (3.03-11.13)\* | 2.01 (1.06-3.83)\* | 2.05 (0.56-7.45) | 1.55 (0.00-.)\* | 5.83 (2.95-11.52)\* |
| Latent class 8 | ref | ref | ref | ref | ref | ref |
| **F-test (DF) [p-value]** | 57.35 (4) [0.000]\* | 40.93 (7) [0.000]\* | 84.05 (7) [0.000]\* | 26.25 (7) [0.000]\* | 6.30 (7) [0.000]\* | 20.04 (7) [0.000]\* |
| **F-test for the entire model** | 126.56 (16) [0.000]\* | 52.29 (19) [0.000]\* | 119.37 (19) [0.000]\* | 33.65 (19) [0.000]\* | 16.27 (19) [0.000]\* | 31.87(19) [0.000]\* |

*Note. All models adjusted for country, gender, parent education (high vs low, medium vs low). RR: Risk ratio. MDD: major depressive disorder; BD: Bipolar disorder; GAD: generalized anxiety disorder; PD: Panic disorder; AUD: Alcohol use disorder; DUD: Drug use disorder. F-test: F statistic (df) [p-value].*

Supplemental Table 11. Lifetime diagnosis models with interactions of childhood adversity types and frequency.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Lifetime disorders** | | | | | | |
|  | **MDD** | **BD** | **GAD** | **PD** | **AUD** | **DUD** |
|  | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) |
| **Type of childhood adversity** |  |  |  |  |  |  |
| Parental psychopathology | 1.27 (1.07-1.50)\* | 1.28 (0.87-1.88) | 1.19 (0.99-1.43) | 1.23 (0.82-1.84) | 1.19 (0.95-1.47) | 1.66 (1.14-2.41)\* |
| Physical abuse | 1.02 (0.78-1.33) | 0.77 (0.44-1.36) | 0.85 (0.64-1.13) | 0.98 (0.55-1.73) | 1.13 (0.81-1.58) | 1.60 (0.94-2.72) |
| Emotional abuse | 1.90 (1.55-2.32)\* | 1.48 (0.93-2.38) | 1.13 (0.90-1.41) | 1.66 (1.04-2.66)\* | 1.14 (0.83-1.56) | 1.75 (1.08-2.84)\* |
| Sexual abuse | 2.04 (1.25-3.31)\* | 0.47 (0.11-2.02) | 1.22 (0.70-2.12) | 0.87 (0.21-3.62) | 1.36 (0.63-2.93) | 1.82 (0.60-5.54) |
| Neglect | 1.29 (0.96-1.74) | 1.32 (0.72-2.43) | 0.98 (0.71-1.35) | 1.19 (0.59-2.42) | 1.12 (0.76-1.67) | 2.25 (1.29-3.93)\* |
| High frequency bully victimization | 1.77 (1.51-2.06)\* | 1.69 (1.17-2.45)\* | 1.78 (1.51-2.10)\* | 1.77 (1.18-2.65)\* | 0.86 (0.67-1.10) | 1.29 (0.84-1.98) |
| Low frequency bully victimization | 1.29 (1.12-1.50)\* | 1.49 (1.05-2.11)\* | 1.19 (1.02-1.39)\* | 1.52 (1.05-2.21)\* | 0.85 (0.71-1.03) | 1.68 (1.19-2.37)\* |
| Dating violence | 1.36 (1.04-1.77)\* | 1.45 (0.84-2.50) | 1.77 (1.37-2.29)\* | 1.79 (1.07-2.98)\* | 1.75 (1.25-2.45)\* | 2.55 (1.50-4.33)\* |
| F-test | 11.14 (8) [0.000]\* | 1.91 (8) [0.055] | 8.87 (8) [0.000]\* | 1.97 (8) [0.050]\* | 2.28 (8) [0.020]\* | 2.46 (8) [0.013]\* |
| **Number of adversities** |  |  |  |  |  |  |
| 0-1 | ref | ref | Ref | ref | ref | ref |
| 2 | 0.72 (0.59-0.88)\* | 0.93 (0.59-1.49) | 0.88 (0.71-1.09) | 0.80 (0.51-1.26) | 1.10 (0.83-1.46) | 0.67 (0.41-1.09) |
| 3 | 0.59 (0.44-0.80)\* | 0.88 (0.44-1.76) | 0.76 (0.55-1.05) | 0.62 (0.32-1.21) | 1.07 (0.69-1.66) | 0.47 (0.24-0.94)\* |
| 4+ | 0.42 (0.28-0.63)\* | 0.82 (0.34-1.98) | 0.71 (0.46-1.08) | 0.48 (0.20-1.15) | 0.80 (0.44-1.45) | 0.36 (0.15-0.86)\* |
| F-test | 6.12 (3) [0.000]\* | 0.09 (3) [0.967] | 1.00 (3) [0.391] | 1.08 (3) [0.355] | 1.95 (3) [0.119] | 1.83 (3) [0.140] |
| **Frequency of adversities** | 1.27 (1.20-1.34)\* | 1.23 (1.10-1.38)\* | 1.28 (1.21-1.35)\* | 1.41 (1.25-1.59)\* | 0.99 (0.90-1.08) | 1.22 (1.07-1.38)\* |
| 12-df F-test | 19.94 (12) [0.000]\* | 3.66 (12) [0.000]\* | 17.43 (12) [0.000]\* | 5.85 (12) [0.000]\* | 2.98 (12) [0.000]\* | 3.76 (12) [0.000]\* |
| **Lifetime disorders latent classes** |  |  |  |  |  |  |
| Latent class 1 | dropped | 9.08 (6.00-13.72)\* | 4.99 (2.29-10.89)\* | 5.11 (2.89-9.04)\* | 1.71 (1.15-2.55)\* | 2.78 (1.82-4.24)\* |
| Latent class 2 | dropped | 3.05 (1.07-8.68)\* | 2.41 (1.43-4.04)\* | 4.82 (1.97-11.80)\* | 1.83 (0.76-4.39) | 37.03 (9.75-140.60)\* |
| Latent class 3 | 2.67 (0.71-10.04) | 8.80 (3.36-23.03)\* | 7.02 (3.27-15.04)\* | 6.89 (2.95-16.12)\* | 3.14 (1.43-6.90)\* | 4.90 (2.39-10.05)\* |
| Latent class 4 | 1.26 (0.99-1.60) | 2.83 (1.88-4.26)\* | 2.15 (1.79-2.57)\* | 2.05 (1.33-3.16)\* | 1.99 (1.43-2.76)\* | 3.43 (2.56-4.58)\* |
| Latent class 5 | dropped | 4.23 (3.46-5.17)\* | 3.42 (3.09-3.78)\* | 3.68 (2.99-4.52)\* | 1.31 (1.09-1.57)\* | 2.44 (1.97-3.02)\* |
| Latent class 6 | 2.36 (2.11-2.63)\* | 3.67 (2.82-4.77)\* | 3.75 (2.99-4.72)\* | 3.57 (2.69-4.74)\* | 1.58 (1.27-1.96)\* | 2.02 (1.46-2.79)\* |
| Latent class 7 | 2.40 (1.61-3.57)\* | 5.91 (3.08-11.33)\* | 2.01 (1.06-3.81)\* | 2.05 (0.56-7.46) | 1.51 (0.00-.)\* | 5.85 (2.95-11.57)\* |
| F-test | 58.65 (4) [0.000]\* | 41.36 (7) [0.000]\* | 85.80 (7) [0.000]\* | 26.88 (7) [0.000]\* | 6.30 (7) [0.000]\* | 20.83 (7) [0.000]\* |
| **Interactions with the frequency of adversities** |  |  |  |  |  |  |
| Parental psychopathology | 0.99 (0.96-1.03) | 0.96 (0.89-1.03) | 0.96 (0.92-1.00)\* | 0.96 (0.89-1.03) | 1.02 (0.96-1.08) | 1.01 (0.93-1.10) |
| Physical abuse | 1.00 (0.96-1.03) | 1.09 (1.01-1.18)\* | 1.01 (0.97-1.05) | 1.01 (0.93-1.09) | 1.05 (0.99-1.12) | 0.98 (0.91-1.07) |
| Emotional abuse | 0.94 (0.90-0.98)\* | 0.96 (0.88-1.05) | 0.99 (0.95-1.03) | 0.92 (0.84-1.01) | 0.98 (0.92-1.05) | 0.95 (0.86-1.05) |
| Sexual abuse | 0.92 (0.86-0.98)\* | 1.06 (0.89-1.26) | 0.96 (0.90-1.04) | 0.99 (0.83-1.19) | 0.99 (0.89-1.10) | 0.99 (0.86-1.14) |
| Neglect | 0.99 (0.95-1.03) | 0.99 (0.91-1.07) | 1.00 (0.95-1.04) | 0.97 (0.89-1.06) | 1.02 (0.96-1.09) | 0.95 (0.88-1.02) |
| High frequency bully victimization | 0.99 (0.95-1.03) | 0.95 (0.88-1.02) | 0.95 (0.92-0.99)\* | 0.93 (0.85-1.01) | 0.98 (0.92-1.04) | 0.94 (0.87-1.02) |
| Low frequency bully victimization | 1.00 (0.96-1.05) | 0.94 (0.87-1.02) | 1.00 (0.96-1.04) | 0.92 (0.84-1.00) | 1.03 (0.97-1.09) | 0.91 (0.85-0.99)\* |
| Dating violence | 0.97 (0.93-1.01) | 0.99 (0.92-1.07) | 0.93 (0.90-0.97)\* | 0.94 (0.87-1.00) | 1.02 (0.96-1.07) | 0.95 (0.88-1.03) |
| F-test | 3.28 (8) [0.001]\* | 1.09 (8) [0.364] | 4.40 (8) [0.000]\* | 1.43 (8) [0.186] | 0.88 (8) [0.529] | 1.12 (8) [0.346] |
| F-test | 30.05 (16) [0.000]\* | 18.98 (19) [0.000]\* | 46.18 (19) [0.000]\* | 14.47 (19) [0.000]\* | 4.22 (19) [0.000]\* | 10.19 (19) [0.000]\* |

*Note. All models adjusted for country, gender, parent education (high vs low, medium vs low). RR: Risk ratio. MDD: major depressive disorder; BD: Bipolar disorder; GAD: generalized anxiety disorder; PD: Panic disorder; AUD: Alcohol use disorder; DUD: Drug use disorder. F-test: F statistic (df) [p-value].*

Supplementary Table 12. Bivariate associations between childhood adversities and persistent disorders, i.e. 12-month disorders among those with a prior history of the disorder.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Persistent disorders** | | | | | |
|  | **MDD**  n=2,821 | **BD**  n=638 | **GAD**  n=2,579 | **PD**  n=706 | **AUD**  n=1,033 | **DUD**  n=406 |
|  | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) |
| **Type of childhood adversity** |  |  |  |  |  |  |
| Parental psychopathology | 1.04 (0.95-1.13) | 0.99 (0.83-1.18) | 1.08 (0.99-1.18) | 1.01 (0.86-1.19) | 0.99 (0.87-1.12) | 1.03 (0.78-1.37) |
| Physical abuse | 1.05 (0.95-1.16) | 1.04 (0.88-1.23) | 1.04 (0.94-1.14) | 1.06 (0.89-1.25) | 1.03 (0.89-1.19) | 1.21 (0.91-1.60) |
| Emotional abuse | 1.08 (0.99-1.17) | 1.02 (0.86-1.22) | 1.06 (0.97-1.15) | 1.07 (0.91-1.26) | 1.04 (0.91-1.18) | 1.22 (0.93-1.61) |
| Sexual abuse | 1.04 (0.86-1.26) | 1.00 (0.73-1.38) | 0.95 (0.79-1.15) | 1.02 (0.73-1.41) | 0.90 (0.67-1.22) | 1.17 (0.76-1.78) |
| Neglect | 1.09 (0.98-1.21) | 1.03 (0.85-1.24) | 1.05 (0.94-1.17) | 1.01 (0.83-1.23) | 0.99 (0.84-1.17) | 1.20 (0.90-1.60) |
| High frequency bullying victimization | 1.07 (0.96-1.20) | 1.11 (0.88-1.39) | 1.06 (0.94-1.18) | 1.01 (0.81-1.25) | 1.03 (0.88-1.20) | 0.96 (0.67-1.36) |
| Low frequency bullying victimization | 1.04 (0.92-1.17) | 1.08 (0.83-1.40) | 1.04 (0.92-1.19) | 0.97 (0.75-1.24) | 1.02 (0.87-1.19) | 0.97 (0.66-1.44) |
| Dating violence | 1.04 (0.94-1.17) | 1.06 (0.88-1.28) | 1.02 (0.92-1.13) | 1.03 (0.86-1.23) | 0.99 (0.84-1.16) | 1.34 (1.00-1.80) |
| **Number of adversities** |  |  |  |  |  |  |
| 4+ | 1.16 (0.98-1.37) | 1.04 (0.73-1.47) | 1.18 (1.00-1.41) | 1.08 (0.78-1.49) | 1.04 (0.85-1.27) | 1.12 (0.66-1.90) |
| 3 | 1.14 (0.96-1.35) | 1.02 (0.70-1.49) | 1.16 (0.97-1.39) | 1.01 (0.72-1.42) | 1.02 (0.82-1.27) | 0.82 (0.44-1.51) |
| 2 | 1.07 (0.90-1.27) | 1.01 (0.69-1.47) | 1.13 (0.95-1.35) | 1.00 (0.71-1.39) | 1.02 (0.84-1.25) | 0.81 (0.45-1.47) |
| 1 | 1.06 (0.90-1.26) | 0.94 (0.64-1.38) | 1.12 (0.94-1.34) | 1.03 (0.73-1.46) | 1.00 (0.82-1.21) | 0.93 (0.52-1.68) |
| F-test | 1.13 (4) [0.342] | 0.15 (4) [0.964] | 0.98 (4) [0.416] | 0.15 (4) [0.961] | 0.06 (4) [0.992] | 0.96 (4) [0.428] |
| **Frequency of adversities** | 1.01 (1.00-1.03)\* | 1.01 (0.98-1.03) | 1.01 (1.00-1.03) | 1.01 (0.98-1.03) | 1.00 (0.98-1.02) | 1.03 (0.99-1.07) |

*Note. MDD: major depressive disorder; BD: bipolar disorder; GAD: generalized anxiety disorder; PD: panic disorder; AUD: alcohol use disorder; DUD: drug use disorder. RR: Risk ratio; CI = confidence interval. F-test: F statistic (df) [p-value].*

Supplementary Table 13. Multivariate associations between childhood adversities and persistent disorders, i.e. 12-month disorders among those with a prior history of the disorder.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Persistent Disorders** | | | | | |
|  | **MDD**  n=2,821 | **BD**  n=638 | **GAD**  n=2,579 | **PD**  n=706 | **AUD**  n=1,033 | **DUD**  n=406 |
|  | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) | RR (95% CI) |
| **Type of childhood adversity** |  |  |  |  |  |  |
| Parental psychopathology | 0.99 (0.86-1.15) | 0.92 (0.70-1.21) | 1.07 (0.92-1.24) | 0.99 (0.75-1.30) | 0.93 (0.76-1.14) | 1.04 (0.65-1.67) |
| Physical abuse | 1.00 (0.87-1.16) | 1.01 (0.77-1.33) | 1.00 (0.86-1.16) | 1.01 (0.77-1.33) | 0.99 (0.79-1.23) | 1.13 (0.73-1.76) |
| Emotional abuse | 1.04 (0.89-1.22) | 0.95 (0.70-1.30) | 1.05 (0.89-1.24) | 1.07 (0.79-1.46) | 1.00 (0.79-1.26) | 1.34 (0.80-2.25) |
| Sexual abuse | 1.00 (0.82-1.22) | 0.96 (0.68-1.35) | 0.92 (0.75-1.12) | 0.99 (0.70-1.41) | 0.88 (0.64-1.23) | 0.92 (0.55-1.51) |
| Neglect | 1.06 (0.92-1.22) | 1.00 (0.79-1.28) | 1.02 (0.89-1.18) | 0.97 (0.75-1.25) | 0.96 (0.77-1.19) | 1.09 (0.72-1.64) |
| High frequency bully victimization | 1.04 (0.90-1.21) | 1.06 (0.79-1.44) | 1.03 (0.89-1.20) | 1.00 (0.75-1.33) | 0.99 (0.79-1.24) | 0.92 (0.56-1.51) |
| Low frequency bully victimization | 1.02 (0.88-1.19) | 1.05 (0.77-1.43) | 1.04 (0.90-1.22) | 0.98 (0.73-1.33) | 0.97 (0.80-1.18) | 1.00 (0.64-1.59) |
| Dating violence | 1.02 (0.89-1.17) | 1.00 (0.78-1.27) | 1.02 (0.89-1.16) | 1.01 (0.80-1.29) | 0.95 (0.78-1.17) | 1.31 (0.89-1.94) |
| F-test | 0.16 (7) [0.992] | 0.14 (7) [0.995] | 0.28 (7) [0.964] | 0.06 (7) [1.000] | 0.19 (7) [0.988] | 0.40 (7) [0.905] |
| **Number of adversities** |  |  |  |  |  |  |
| 4+ | 0.98 (0.66-1.45) | 1.13 (0.54-2.36) | 0.91 (0.61-1.35) | 0.97 (0.46-2.01) | 1.28 (0.71-2.32) | 0.65 (0.19-2.20) |
| 3 | 1.01 (0.77-1.32) | 1.11 (0.67-1.85) | 0.94 (0.71-1.23) | 0.93 (0.56-1.54) | 1.15 (0.77-1.71) | 0.69 (0.30-1.56) |
| 2 | 0.98 (0.82-1.17) | 1.07 (0.74-1.54) | 0.97 (0.81-1.16) | 0.95 (0.67-1.33) | 1.10 (0.85-1.42) | 0.75 (0.41-1.41) |
| 0-1 | ref | ref | ref | ref | ref | ref |
| F-test | 0.09 (3) [0.963] | 0.07 (3) [0.978] | 0.08 (3) [0.970] | 0.10 (3) [0.960] | 0.23 (3) [0.873] | 0.26 (3) [0.851] |
| **Frequency of adversities** | 1.01 (0.97-1.04) | 1.00 (0.94-1.07) | 1.01 (0.98-1.04) | 1.01 (0.95-1.07) | 0.99 (0.93-1.05) | 1.01 (0.89-1.14) |
| 12-df F-test | 0.47 (12) [0.933] | 0.10 (12) [1.000] | 0.40 (12) [0.963] | 0.11 (12) [1.000] | 0.16 (12) [0.999] | 0.47 (12) [0.933] |
| **Lifetime disorders latent classes** |  |  |  |  |  |  |
| Latent class 1 | ref | ref | ref | ref | ref | ref |
| Latent class 2 | 0.88 (0.56-1.37) | dropped | 1.12 (0.17-7.58) | 0.58 (0.12-2.87) | dropped | dropped |
| Latent class 3 | 1.10 (0.22-5.54) | 1.01 (0.71-1.43) | 1.00 (0.71-1.40) | 1.03 (0.65-1.62) | 1.00 (0.58-1.73) | 0.93 (0.55-1.57) |
| Latent class 4 | dropped | 0.87 (0.70-1.09) | dropped | dropped | 0.97 (0.61-1.54) | 0.62 (0.42-0.92)\* |
| Latent class 5 | 0.94 (0.73-1.22) | 1.03 (0.78-1.36) | 0.93 (0.78-1.10) | dropped | 0.97 (0.59-1.58) | 0.86 (0.46-1.62) |
| Latent class 6 | 1.02 (0.69-1.51) | 0.90 (0.67-1.21) | 0.96 (0.81-1.13) | 1.06 (0.87-1.29) | dropped | 0.84 (0.43-1.66) |
| Latent class 7 | dropped | 0.96 (0.59-1.58) | 0.97 (0.69-1.38) | 1.08 (0.53-2.22) | 0.98 (0.60-1.60) | 1.09 (0.70-1.69) |
| F-test | 0.19 (4) [0.945] | 0.50 (5) [0.774] | 0.22 (5) [0.953] | 0.23 (4) [0.924] | 0.02 (4) [1.000] | 2.12 (5) [0.060] |
| F-test | 0.41 (16) [0.982] | 0.23 (17) [0.999] | 0.36 (17) [0.993] | 0.14 (16) [1.000] | 0.13 (16) [1.000] | 1.08 (17) [0.366] |

*Note. All models adjusted for country, gender, parental education (high vs low, medium vs low) RR: Risk ratio; MDD: major depressive disorder; BD: Bipolar disorder; GAD: generalized anxiety disorder; PD: Panic disorder; AUD: Alcohol use disorder; DUD: Drug use disorder.*

Supplementary Table 14. Bivariate associations between childhood adversities and severe role impairment among those with any 12-month disorder (n=5,703).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Severe role impairment** | | | | |
|  | **Home management** | **Work** | **Relationships** | **Social life** | **Any severe**  **impairment** |
|  | RR (95%CI) | RR (95%CI) | RR (95%CI) | RR (95%CI) | RR (95%CI) |
| **Type of childhood adversity** |  |  |  |  |  |
| Parental psychopathology | 1.59 (1.30-1.95)\* | 1.38 (1.20-1.59)\* | 1.39 (1.23-1.58)\* | 1.31 (1.16-1.49)\* | 1.30 (1.18-1.44)\* |
| Physical abuse | 1.61 (1.32-1.97)\* | 1.32 (1.14-1.54)\* | 1.25 (1.09-1.43)\* | 1.23 (1.08-1.41)\* | 1.28 (1.15-1.42)\* |
| Emotional abuse | 1.60 (1.31-1.94)\* | 1.42 (1.23-1.63)\* | 1.35 (1.20-1.53)\* | 1.27 (1.12-1.44)\* | 1.31 (1.19-1.45)\* |
| Sexual abuse | 1.58 (1.13-2.21)\* | 1.31 (0.99-1.73) | 1.29 (1.00-1.65)\* | 1.21 (0.94-1.55) | 1.27 (1.05-1.54)\* |
| Neglect | 1.51 (1.23-1.87)\* | 1.30 (1.10-1.52)\* | 1.35 (1.17-1.56)\* | 1.29 (1.12-1.49)\* | 1.26 (1.12-1.41)\* |
| High frequency bullying victimization | 1.30 (1.00-1.69)\* | 1.22 (1.02-1.47)\* | 1.45 (1.22-1.71)\* | 1.38 (1.17-1.62)\* | 1.29 (1.14-1.47)\* |
| Low frequency bullying victimization | 1.17 (0.87-1.56) | 1.07 (0.87-1.32) | 1.10 (0.90-1.33) | 1.07 (0.88-1.29) | 1.09 (0.94-1.26) |
| Dating violence | 1.36 (1.10-1.68)\* | 1.26 (1.07-1.48)\* | 1.24 (1.07-1.43)\* | 1.33 (1.15-1.52)\* | 1.20 (1.07-1.34)\* |
| **Number of adversities** |  |  |  |  |  |
| 4+ | 2.42 (1.57-3.73)\* | 1.78 (1.33-2.37)\* | 2.19 (1.65-2.91)\* | 1.87 (1.44-2.44)\* | 1.77 (1.45-2.16)\* |
| 3 | 1.59 (1.00-2.52)\* | 1.52 (1.13-2.04)\* | 2.07 (1.55-2.76)\* | 1.65 (1.26-2.16)\* | 1.51 (1.23-1.86)\* |
| 2 | 1.55 (0.99-2.42) | 1.24 (0.92-1.67) | 1.69 (1.26-2.26)\* | 1.51 (1.15-1.97)\* | 1.36 (1.11-1.67)\* |
| 1 | 1.07 (0.67-1.70) | 1.01 (0.75-1.38) | 1.39 (1.03-1.87)\* | 1.18 (0.89-1.56) | 1.12 (0.90-1.38) |
| F-test | 9.88 (4) [0.000]\* | 9.63 (4) [0.000]\* | 12.22 (4) [0.000]\* | 9.44 (4) [0.000]\* | 14.74 (4) [0.000]\* |
| **Frequency of adversities** | 1.12 (1.09-1.16)\* | 1.08 (1.06-1.10)\* | 1.09 (1.07-1.12)\* | 1.08 (1.06-1.10)\* | 1.07 (1.06-1.09)\* |

*Note. Severe role impairment was defined as a score equal to or above 7 on the Sheehan Disability Scale. RR: Risk ratio; CI = confidence interval. F-test: F statistic (df) [p-value].*

Supplementary Table 15. Multivariate associations between childhood adversities and severe role impairment among those with a 12-month disorder (n=5,703).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Severe role impairment** | | | | |
|  | **Home management** | **Work** | **Relationships** | **Social life** | **Any severe**  **impairment** |
|  | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) | RR(95%CI) |
| **Type of childhood adversity** |  |  |  |  |  |
| Parental psychopathology | 1.12 (0.82-1.53) | 1.07 (0.84-1.34) | 1.07 (0.87-1.31) | 1.04 (0.85-1.27) | 1.01 (0.86-1.19) |
| Physical abuse | 1.10 (0.83-1.46) | 0.99 (0.80-1.23) | 0.96 (0.79-1.17) | 0.98 (0.81-1.18) | 0.99 (0.85-1.15) |
| Emotional abuse | 1.11 (0.79-1.56) | 1.08 (0.84-1.39) | 1.03 (0.82-1.28) | 0.98 (0.79-1.22) | 1.01 (0.85-1.20) |
| Sexual abuse | 1.11 (0.78-1.57) | 1.05 (0.79-1.40) | 1.03 (0.80-1.34) | 0.99 (0.77-1.29) | 1.03 (0.85-1.26) |
| Neglect | 1.06 (0.81-1.38) | 1.01 (0.82-1.24) | 1.11 (0.92-1.34) | 1.07 (0.89-1.29) | 1.01 (0.87-1.16) |
| High frequency bully victimization | 0.89 (0.64-1.23) | 0.94 (0.74-1.19) | 1.08 (0.87-1.34) | 1.06 (0.86-1.32) | 1.00 (0.85-1.18) |
| Low frequency bully victimization | 1.07 (0.76-1.50) | 0.97 (0.76-1.23) | 1.05 (0.84-1.31) | 0.99 (0.79-1.23) | 0.99 (0.84-1.18) |
| Dating violence | 1.12 (0.86-1.45) | 1.08 (0.89-1.32) | 1.06 (0.88-1.27) | 1.15 (0.96-1.37) | 1.03 (0.89-1.18) |
| F-test | 0.52 (8) [0.840] | 0.23 (8) [0.986] | 0.29 (8) [0.969] | 0.60 (8) [0.775] | 0.05 (8) [1.000] |
| **Number of adversities** |  |  |  |  |  |
| 4+ | 0.65 (0.29-1.49) | 1.02 (0.55-1.88) | 0.63 (0.36-1.11) | 0.85 (0.49-1.48) | 0.96 (0.62-1.48) |
| 3 | 0.72 (0.40-1.30) | 1.07 (0.70-1.63) | 0.88 (0.60-1.28) | 0.98 (0.68-1.43) | 1.01 (0.75-1.36) |
| 2 | 1.02 (0.68-1.54) | 1.04 (0.77-1.39) | 0.96 (0.74-1.25) | 1.07 (0.83-1.39) | 1.06 (0.87-1.31) |
| 0-1 | ref | ref | ref | ref | ref |
| F-test | 1.21 (3) [0.303] | 0.12 (3) [0.946] | 2.08 (3) [0.101] | 0.97 (3) [0.407] | 0.42 (3) [0.740] |
| **Frequency of adversities** | 1.15 (1.07-1.23)\* | 1.06 (1.01-1.12)\* | 1.13 (1.08-1.18)\* | 1.08 (1.03-1.13)\* | 1.08 (1.04-1.12)\* |
| 12-df F-test | 5.27 (12) [0.000]\* | 3.98 (12) [0.000]\* | 7.54 (12) [0.000]\* | 5.36 (12) [0.000]\* | 6.85 (12) [0.000]\* |
| **12-month disorders** |  |  |  |  |  |
| MDD | 1.54 (1.17-2.03)\* | 1.71 (1.40-2.08)\* | 1.84 (1.53-2.21)\* | 1.73 (1.45-2.06)\* | 1.61 (1.41-1.85)\* |
| BD | 1.79 (1.29-2.48)\* | 1.88 (1.48-2.39)\* | 1.89 (1.51-2.35)\* | 1.74 (1.40-2.16)\* | 1.67 (1.41-1.98)\* |
| GAD | 1.79 (1.41-2.27)\* | 1.88 (1.59-2.23)\* | 1.53 (1.32-1.78)\* | 1.67 (1.44-1.94)\* | 1.60 (1.42-1.80)\* |
| PD | 1.29 (0.92-1.80) | 1.50 (1.17-1.92)\* | 1.29 (1.03-1.63)\* | 1.28 (1.01-1.62)\* | 1.28 (1.07-1.53)\* |
| AUD | 1.30 (0.96-1.75) | 1.17 (0.93-1.47) | 1.08 (0.88-1.34) | 0.93 (0.75-1.15) | 1.08 (0.92-1.27) |
| DUD | 1.29 (0.92-1.83) | 1.39 (1.06-1.82)\* | 1.33 (1.04-1.68)\* | 1.11 (0.86-1.44) | 1.18 (0.97-1.43) |
| 3 or more 12-month disorders | 1.07 (0.70-1.63) | 0.84 (0.60-1.17) | 0.89 (0.67-1.20) | 0.97 (0.71-1.31) | 0.91 (0.72-1.15) |
| F-test | 5.14 (6) [0.000]\* | 13.14 (6) [0.000]\* | 12.67 (6) [0.000]\* | 16.46 (6) [0.000]\* | 18.60 (6) [0.000]\* |
| F-test for the entire model | 9.93 (19) [0.000]\* | 12.32 (19) [0.000]\* | 14.63 (19) [0.000]\* | 13.63 (19) [0.000]\* | 17.34 (19) [0.000]\* |
|  | **PARP (SE)** | **PARP (SE)** | **PARP (SE)** | **PARP (SE)** | **PARP (SE)** |
|  | 0.273 (0.047) | 0.178 (0.039) | 0.226 (0.028) | 0.189 (0.033) | 0.163 (0.023) |

*Note. All models adjusted for country, gender, parental education (high vs low, medium vs low) RR: Risk ratio; MDD: major depressive disorder; BD: Bipolar disorder; GAD: generalized anxiety disorder; PD: Panic disorder; AUD: Alcohol use disorder; DUD: Drug use disorder.*