**Supplementary figure 1.** Mediating effect of PTSD on the relationship between total childhood trauma and internalizing disorders

 

Standardized regression coefficients for the relationship between total childhood trauma and internalizing disorders as mediated through PTSD severity. The regression coefficient between total childhood trauma and internalizing disorders, controlling for PTSD severity is in parenthesis. \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001

CTQ, childhood trauma questionnaire

**Supplementary Table 1.** Rates of exposure to different trauma types

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | All Participants(N = 262) | Int. Disorder(n = 138) | No Int. Disorder(n = 124) | Group Comparisons | Ext. Disorder(n = 56) | No Ext. Disorder(n = 206) | Group Comparisons |
|  | n | (%) | n | (%) | n | (%) | χ2 | *df* | *p* | n | (%) | n | (%) | χ2 | *df* | *p* |
| Traumatic eventsa |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  Car accident | 35 | (13.4) | 18  | (13.0) | 17  | (13.7) | 0.0 | 1 | 0.874 | 9  | (16.1) | 26 | (12.6) | 0.5 | 1 | 0.501 |
|  Other accident | 35 | (13.4) | 24  | (17.4) | 11  | (8.9) | 4.1 | 1 | 0.043\* | 12  | (21.4) | 23 | (11.2) | 4.0 | 1 | 0.045\* |
|  Fire | 10 | (3.8) | 5  | (3.6) | 5  | (4.0) | 0.0 | 1 | 0.863 | 3  | (5.4) | 7  | (3.4) | 0.4 | 1 | 0.450b |
|  Witness of a disaster | 6 | (2.3) | 3  | (2.2) | 3  | (2.4) | 0.0 | 1 | 1.000b | 1  | (1.8) | 5  | (2.4) | 0.1 | 1 | 1.000b |
|  Witness of a violent crime | 129 | (49.6) | 66 | (47.8) | 63  | (50.8) | 0.2 | 1 | 0.630 | 34 | (60.7) | 95 | (46.1) | 3.8 | 1 | 0.053 |
|  Victim of violent crime | 90 | (34.4) | 49 | (35.5) | 41 | (33.1) | 0.2 | 1 | 0.678 | 22 | (39.3) | 68 | (33.0) | 0.8 | 1 | 0.381 |
|  Confronted with traumatic news | 149 | (56.9) | 83  | (60.1) | 66 | (53.2) | 1.3 | 1 | 0.259 | 31 | (35.4) | 118 | (57.3) | 0.1 | 1 | 0.797 |
|  Witness to domestic violence | 115 | (43.9) | 65 | (47.1) | 50 | (40.3) | 1.2 | 1 | 0.270 | 28 | (50.0) | 87 | (42.2) | 1.1 | 1 | 0.299 |
|  Physical abuse | 70 | (26.7) | 41 | (29.7) | 29 | (23.4) | 1.3 | 1 | 0.248 | 20 | (35.7) | 50 | (24.3) | 2.9 | 1 | 0.086 |
|  Sexual abuse | 107 | (40.8) | 68 | (49.3) | 39 | (31.5) | 8.6 | 1 | 0.003\*\* | 20 | (35.7) | 87 | (42.2) | 0.8 | 1 | 0.379 |
|  Other | 54 | (20.6) | 30 | (21.7) | 24 | (19.4) | 0.2 | 1 | 0.634 | 7 | (12.5) | 47 | (22.8) | 2.9 | 1 | 0.091 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Mdn | (IQR) | Mdn | (IQR) | Mdn | (IQR) | *U* | *Z* | *p* | Mdn | (IQR) | Mdn | (IQR) | *U* | *Z* | *p* |
| Number of trauma types | 3 | (2; 4) | 3 | (2; 4) | 3 | (2; 4) | 6857 | -2.84 | 0.005\*\* | 3.5 | (2; 4) | 3 | (2; 4) | 4917 | -1.73 | 0.083 |
|  Excluding abuse | 2 | (1; 3) | 2 | (2; 3) | 2 | (1; 3) | 7548 | -1.70 | 0.090 | 3 | (2; 4) | 2 | (1; 3) | 4907 | -1.77 | 0.078 |
| Int. Disorder = Internalizing Disorder; Ext. Disorder = Externalizing Disorder; PTSD = posttraumatic stress disordera Determined with the K-SADS-PL b Fisher’s exact test used when cells have count less than 5 \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001 |

**Supplementary Table 2.** Logistic regression using total childhood trauma severity with internalizing disorder as outcome variable

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | B | (SE) | Wald | p | Odds Ratio | (95% CI) |
| Model 1 |  |  |  |  |  |  |
|  Constant | -2.07 | (1.14) | 3.32 | 0.069 | 0.13 |  |
|  Male sex | -0.71 | (0.26) | 7.37 | 0.007\*\* | 0.49 | (0.29 – 0.82) |
|  Age | 0.16 | (0.07) | 4.77 | 0.029\* | 1.18 | (1.02 – 1.36) |
| Model 2 |  |  |  |  |  |  |
|  Constant | -2.64 | (1.18) | 5.02 | 0.025 | 0.07 |  |
|  Male sex | -0.55 | (0.27) | 4.14 | 0.042\* | 0.58 | (0.34 – 0.98) |
|  Age | 0.12 | (0.08) | 2.61 | 0.106 | 1.13 | (0.97 – 1.31) |
|  CTQ total | 0.02 | (0.01) | 6.47 | 0.011\* | 1.02 | (1.01 – 1.04) |
| Model 3 |  |  |  |  |  |  |
|  Constant | -1.92 | (1.24) | 2.39 | 0.122 | 0.15 |  |
|  Male sex | -0.29 | (0.29) | 0.96 | 0.327 | 0.75 | (0.42 – 1.33) |
|  Age | 0.02 | (0.08) | 0.08 | 0.772 | 1.02 | (0.87 – 1.20) |
|  CTQ total | 0.00 | (0.01) | 0.18 | 0.672 | 1.00 | (0.99 – 1.02) |
|  PTSD severity | 0.05 | (0.01) | 25.82 | <0.001\*\*\* | 1.05 | (1.03 – 1.07) |
| Model 1: χ²(2) = 13.72 (p = .001\*\*); Nagelkerke R² = 0.068Model 2: χ²(3) = 20.55 (p < 0.001\*\*\*); Nagelkerke R² = 0.101; Block: χ²(5) = 6.82 (p = 0.009\*)Model 3: χ²(4) = 50.85 (p < 0.001\*\*\*); Nagelkerke R² = 0.235; Block: χ²(1) = 30.30 (p < 0.001\*\*\*)\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001 CTQ, Childhood Trauma Questionnaire |

**Supplementary Table 3.** Logistic regression using total childhood trauma severity with externalizing disorder as outcome variable

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | B | (SE) | Wald | p | Odds Ratio | (95% CI) |
| Model 1 |  |  |  |  |  |  |
|  Constant | -0.36 | (1.35) | 0.07 | 0.790 | 0.70 |  |
|  Male sex | 0.54 | (0.31) | 3.09 | 0.079 | 1.72 | (0.94 – 3.14) |
|  Age | -0.08 | (0.09) | 0.78 | 0.377 | 0.93 | (0.78 – 1.10) |
| Model 2 |  |  |  |  |  |  |
|  Constant | -0.98 | (1.40) | 0.49 | 0.484 | 0.38 |  |
|  Male sex | 0.80 | (0.33) | 5.72 | 0.017\* | 2.22 | (1.16 – 4.28) |
|  Age | -0.13 | (0.09) | 1.98 | 0.159 | 0.88 | (0.73 – 1.05) |
|  CTQ total | 0.03 | (0.01) | 6.47 | 0.011\* | 1.03 | (1.01 – 1.05) |
| Model 3 |  |  |  |  |  |  |
|  Constant | -1.00 | (1.40) | 0.51 | 0.477 | 0.37 |  |
|  Male sex | 0.80 | (0.34) | 5.38 | 0.020\* | 2.22 | (1.13 – 4.29) |
|  Age | -0.13 | (0.09) | 1.81 | 0.178 | 0.88 | (0.73 – 1.06) |
|  CTQ total | 0.03 | (0.01) | 5.94 | 0.015\* | 1.03 | (1.01 – 1.05) |
|  PTSD Severity | -0.00 | (0.01) | 0.03 | 0.873 | 1.00 | (0.98 – 1.02) |
| Model 1: χ²(2) = 4.27 (p = .119); Nagelkerke R² = 0.025Model 2: χ²(3) = 10.79 (p = 0.013\*); Nagelkerke R² = 0.062; Block: χ²(5) = 6.53 (p = .011\*)Model 3: χ²(4) = 10.82 (p = 0.029\*); Nagelkerke R² = 0.063; Block: χ²(5) = 0.03 (p = .873)\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001CTQ, Childhood Trauma Questionnaire |

**Supplementary Table 4.** Logistic regression with comorbid internalizing and externalizing disorder as outcome variable

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | B | (SE) | Wald | p | Odds Ratio | (95% CI) |
| Model 1 |  |  |  |  |  |  |
|  | Int only |  |  |  |  |  |  |
|  |  Intercept | 1.69 | (1.95) | 0.75 | 0.542 |  |  |
|  |  Male sex | -0.81 | (0.47) | 3.00 | 0.083 | 0.45 | (0.18 – 1.11) |
|  |  Age | 0.08 | (0.12) | 0.42 | 0.518 | 1.08 | (0.85 – 1.38) |
|  |  Physical Abuse | -0.13 | (0.06) | 4.98 | 0.026\* | 0.88 | (0.79 – 0.99) |
|  |  Emotional Abuse | 0.02 | (0.05) | 0.13 | 0.718 | 1.02 | (0.92 – 1.14) |
|  |  Sexual Abuse | 0.39 | (0.04) | 0.91 | 0.341 | 1.04 | (0.96 – 1.13) |
|  |  Physical Neglect | 0.05 | (0.07) | 0.52 | 0.471 | 1.05 | (0.92 – 1.19) |
|  |  Emotional Neglect | -0.11 | (0.05) | 5.39 | 0.020\* | 0.90 | (0.82 – 0.98) |
|  | Ext only |  |  |  |  |  |  |
|  |  Intercept | 4.75 | (2.69) | 3.11 | 0.078 |  |  |
|  |  Male sex | 0.37 | (0.65) | 0.33 | 0.566 | 1.45 | (0.41 – 5.14) |
|  |  Age | -0.23 | (0.18) | 1.69 | 0.193 | 0.79 | (0.56 – 1.12) |
|  |  Physical Abuse | 0.03 | (0.08) | 0.14 | 0.705 | 1.03 | (0.88 – 1.20) |
|  |  Emotional Abuse | -0.07 | (0.08) | 0.67 | 0.412 | 0.94 | (0.80 – 1.10) |
|  |  Sexual Abuse | -0.08 | (0.08) | 1.12 | 0.289 | 0.92 | (0.79 – 1.07) |
|  |  Physical Neglect | 0.11 | (0.09) | 1.41 | 0.234 | 1.12 | (0.93 – 1.34) |
|  |  Emotional Neglect | -0.15 | (0.07) | 5.22 | 0.022\* | 0.86 | (0.75 – 0.98) |
|  | No disorder |  |  |  |  |  |  |
|  |  Intercept | 3.88 | (1.95) | 3.96 | 0.047\* |  |  |
|  |  Male sex | -0.32 | (0.45) | 0.50 | 0.481 | 0.73 | (0.30 – 1.77) |
|  |  Age | -0.02 | (0.12) | 0.02 | 0.904 | 0.99 | (0.77 – 1.26) |
|  |  Physical Abuse | -0.04 | (0.06) | 0.62 | 0.430 | 0.96 | (0.86 – 1.07) |
|  |  Emotional Abuse | -0.06 | (0.06) | 1.19 | 0.276 | 0.94 | (0.85 – 1.05) |
|  |  Sexual Abuse | -0.04 | (0.04) | 0.88 | 0.348 | 0.96 | (0.86 – 1.07) |
|  |  Physical Neglect | 0.02 | (0.07) | 0.12 | 0.731 | 1.02 | (0.90 – 1.17) |
|  |  Emotional Neglect | -0.09 | (0.05) | 3.83 | 0.050 | 0.91 | (0.83 – 1.00) |
| Model 2 |  |  |  |  |  |  |
|  | Int only |  |  |  |  |  |  |
|  |  Intercept | 1.75 | (1.98) | 0.78 | 0.377 |  |  |
|  |  Male sex | -0.80 | (0.48) | 2.78 | 0.095 | 0.45 | (0.18 – 1.15) |
|  |  Age | 0.07 | (0.13) | 0.34 | 0.561 | 1.08 | (0.84 – 1.38) |
|  |  Physical Abuse | -0.12 | (0.06) | 4.84 | 0.028\* | 0.89 | (0.79 – 0.99) |
|  |  Emotional Abuse | 0.01 | (0.06) | 0.04 | 0.834 | 1.01 | (0.91 – 1.13) |
|  |  Sexual Abuse | 0.04 | (0.01) | 0.09 | 0.770 | 1.00 | (0.98 – 1.03) |
|  |  Physical Neglect | 0.04 | (0.07) | 0.38 | 0.538 | 1.04 | (0.92 – 1.18) |
|  |  Emotional Neglect | -0.11 | (0.05) | 5.27 | 0.022\* | 0.90 | (0.82 – 0.99) |
|  |  PTSD Severity | 0.00 | (0.01) | 0.09 | 0.770 | 1.00 | (0.98 – 1.03) |
|  | Ext only |  |  |  |  |  |  |
|  |  Intercept | 4.01 | (2.73) | 2.17 | 0.141 |  |  |
|  |  Male sex | 0.27 | (0.67) | 0.16 | 0.686 | 1.31 | (0.35 – 4.84) |
|  |  Age | -0.14 | (0.18) | 0.55 | 0.457 | 0.87 | (0.61 – 1.25) |
|  |  Physical Abuse | 0.03 | (0.08) | 0.13 | 0.717 | 1.03 | (0.88 – 1.21) |
|  |  Emotional Abuse | -0.00 | (0.08) | 0.00 | 0.964 | 1.00 | (0.85 – 1.18) |
|  |  Sexual Abuse | -0.04 | (0.08) | 0.29 | 0.590 | 0.96 | (0.82 – 1.12) |
|  |  Physical Neglect | 0.13 | (0.10) | 1.76 | 0.185 | 1.14 | (0.94 – 1.37) |
|  |  Emotional Neglect | -0.16 | (0.07) | 5.15 | 0.023\* | 0.85 | (0.75 – 0.98) |
|  |  PTSD Severity | -0.06 | (0.02) | 7.15 | 0.008\* | 0.94 | (0.90 – 0.99) |
|  | No disorder |  |  |  |  |  |  |
|  |  Intercept | 3.36 | (1.99) | 2.84 | 0.092 |  |  |
|  |  Male sex | -0.49 | (0.47) | 1.06 | 0.303 | 0.62 | (0.24 – 1.55) |
|  |  Age | 0.06 | (0.13) | 0.24 | 0.623 | 1.07 | (0.83 – 1.37) |
|  |  Physical Abuse | -0.04 | (0.06) | 0.56 | 0.454 | 0.96 | (0.86 – 1.07) |
|  |  Emotional Abuse | -0.02 | (0.06) | 0.07 | 0.796 | 0.99 | (0.88 – 1.10) |
|  |  Sexual Abuse | -0.02 | (0.05) | 0.18 | 0.672 | 0.98 | (0.90 – 1.07) |
|  |  Physical Neglect | 0.02 | (0.07) | 0.12 | 0.733 | 1.02 | (0.90 – 1.17) |
|  |  Emotional Neglect | -0.09 | (0.05) | 3.40 | 0.065 | 0.92 | (0.84 – 1.01) |
|  |  PTSD Severity | -0.04 | (0.01) | 8.70 | 0.003\* | 0.96 | (0.93 – 0.99) |
| Model 1: χ²(21) = 53.56 (p < 0.001\*\*\*); Nagelkerke R² = 0.203; Male sex: χ²(3) = 6.34 (p = .096); Age: χ²(3) = 4.40 (p = .222); Physical abuse χ²(3) = 7.74 (p = .052); Emotional abuse: χ²(3) = 4.27 (p = .233); Sexual abuse χ²(3) = 9.07 (p = .028\*); Physical neglect: χ²(3) = 1.66 (p = .065); Emotional neglect: χ²(3) = 7.43 (p = .059)Model 2: χ²(24) = 81.44 (p < 0.001\*\*\*); Nagelkerke R² = 0.294; Male sex: χ²(3) = 5.15 (p = .161); Age: χ²(3) = 2.08 (p = .556); Physical abuse χ²(3) = 7.28 (p = .064); Emotional abuse: χ²(3) = 0.36 (p = .949); Sexual abuse χ²(3) = 3.98 (p = .264); Physical neglect: χ²(3) = 1.93 (p = .587); Emotional neglect: χ²(3) = 7.49 (p = .058); PTSD severity: χ²(3) = 27.87 (p < .001\*\*\*)\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001Ext, Externalizing disorder; Int, Internalizing disorder |

**Supplementary Table 5.** Logistic regression using total childhood trauma severity with comorbid internalizing and externalizing disorder as outcome variable

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | B | (SE) | Wald | p | Odds Ratio | (95% CI) |
| Model 1 |  |  |  |  |  |  |
|  | Int only |  |  |  |  |  |  |
|  |  Intercept | 1.57 | (1.87) | 0.71 | 0.401 |  |  |
|  |  Male sex | -1.00 | (0.45) | 4.89 | 0.027\* | 0.37 | (0.15 – 0.89) |
|  |  Age | 0.09 | (0.12) | 0.52 | 0.469 | 1.09 | (0.86 – 1.38) |
|  |  CTQ total | -0.03 | (0.01) | 4.97 | 0.026\* | 0.97 | (0.95 – 1.00) |
|  | Ext only |  |  |  |  |  |  |
|  |  Intercept | 4.73 | (2.61) | 3.28 | 0.070 |  |  |
|  |  Male sex | 0.43 | (0.61) | 0.50 | 0.479 | 1.54 | (0.47 – 5.07) |
|  |  Age | -0.26 | (0.17) | 2.24 | 0.135 | 0.77 | (0.55 – 1.08) |
|  |  CTQ total | -0.03 | (0.02) | 2.49 | 0.115 | 0.97 | (0.93 – 1.01) |
|  | No disorder |  |  |  |  |  |  |
|  |  Intercept | 3.84 | (1.88) | 4.17 | 0.041\* |  |  |
|  |  Male sex | -0.32 | (0.44) | 0.54 | 0.463 | 0.72 | (0.31 – 1.71) |
|  |  Age | -0.02 | (0.12) | 0.03 | 0.856 | 0.98 | (0.77 – 1.24) |
|  |  CTQ total | -0.05 | (0.01) | 11.54 | <0.001\* | 0.96 | (0.93 – 0.98) |
| Model 2 |  |  |  |  |  |  |
|  | Int only |  |  |  |  |  |  |
|  |  Intercept | 1.76 | (1.89) | 0.87 | 0.352 |  |  |
|  |  Male sex | -0.97 | (0.65) | 4.34 | 0.037\* | 0.38 | (0.15 – 0.94) |
|  |  Age | 0.07 | (0.12) | 0.33 | 0.567 | 1.07 | (0.85 – 1.36) |
|  |  CTQ total | -0.03 | (0.01) | 5.20 | 0.023\* | 0.97 | (0.95 – 1.00) |
|  |  PTSD Severity | 0.01 | (0.01) | 0.15 | 0.694 | 1.01 | (0.98 – 1.03) |
|  | Ext only |  |  |  |  |  |  |
|  |  Intercept | 4.04 | (2.65) | 2.32 | 0.128 |  |  |
|  |  Male sex | 0.20 | (0.63) | 0.10 | 0.752 | 1.22 | (0.36 – 4.16) |
|  |  Age | -0.16 | (0.18) | 0.83 | 0.361 | 0.85 | (0.60 – 1.21) |
|  |  CTQ total | -0.01 | (0.02) | 0.23 | 0.632 | 0.99 | (0.95 – 1.03) |
|  |  PTSD Severity | -0.06 | (0.02) | 7.28 | 0.007\* | 0.94 | (0.91 – 0.98) |
|  | No disorder |  |  |  |  |  |  |
|  |  Intercept | 3.29 | (1.92) | 2.94 | 0.086 |  |  |
|  |  Male sex | -0.55 | (0.46) | 1.44 | 0.230 | 0.58 | (0.23 – 1.42) |
|  |  Age | 0.06 | (0.12) | 0.24 | 0.626 | 1.06 | (0.83 – 1.36) |
|  |  CTQ total | -0.03 | (0.01) | 4.28 | 0.039\* | 0.97 | (0.95 – 1.00) |
|  |  PTSD Severity | -0.04 | (0.01) | 9.37 | 0.002\* | 0.96 | (0.93 – 0.99) |
| Model 1: χ²(9) = 33.42 (p < 0.001\*\*\*); Nagelkerke R² = 0.132; Male sex: χ²(3) = 11.2 (p = .011\*); Age: χ²(3) = 5.76 (p = .124); CTQ total χ²(3) = 12.36 (p = .006\*)Model 2: χ²(12) = 64.74 (p < 0.001\*\*\*); Nagelkerke R² = 0.241; Male sex: χ²(3) = 7.48 (p = .058); Age: χ²(3) = 2.59 (p = .460); CTQ total χ²(3) = 6.39 (p = .0094) PTSD severity: χ²(3) = 31.33 (p < .001\*\*\*)\*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001CTQ, Childhood Trauma Questionnaire; Ext, Externalizing disorder; Int, Internalizing disorder |