

Supplement

The Assessment of Childhood Maltreatment and its Associations with Affective
Symptoms in Adulthood: Results of the German National Cohort (NAKO)

Johanna Klinger-König Fabian Streit, Angelika Erhardt, Luca Kleineidam, Florian
Schmiedek, Børge Schmidt, NAKO Investigators, Michael Wagner, Jürgen Deckert,
Marcella Rietschel, Klaus Berger, Hans J. Grabe

Table S1. Mean and Standard Deviation of the CTS Scores Itemised by Socioeconomic Variables (N=76,731).

	Summary Score (Range: 5-25)	Physical Neglect (Range: 1-5)	Emotional Neglect (Range: 1-5)	Physical Abuse (Range: 1-5)	Emotional Abuse (Range: 1-5)	Sexual Abuse (Range: 1-5)
Age (MAD)	0.47 (0.26)	0.23 (0.15)	0.15 (0.10)	0.07 (0.08)	0.02 (0.03)	0.02 (0.05)
20-29	6.35 (2.08)	1.39 (0.82)	1.47 (0.75)	1.17 (0.55)	1.27 (0.71)	1.06 (0.36)
30-39	6.72 (2.38)	1.51 (0.95)	1.60 (0.84)	1.23 (0.64)	1.30 (0.76)	1.09 (0.41)
40-49	7.17 (2.67)	1.71 (1.11)	1.76 (0.95)	1.28 (0.70)	1.31 (0.79)	1.11 (0.47)
50-59	7.65 (2.88)	1.92 (1.20)	1.89 (1.01)	1.38 (0.81)	1.33 (0.82)	1.13 (0.51)
60-72	7.73 (2.79)	2.10 (1.29)	1.88 (1.02)	1.38 (0.80)	1.26 (0.75)	1.10 (0.47)
Sex (MAD)	0.07 (0.24)	0.03 (0.00)	0.00 (0.04)	0.03 (0.00)	0.06 (0.09)	0.06 (0.14)
Men	7.31 (2.48)	1.88 (1.19)	1.80 (0.93)	1.36 (0.75)	1.23 (0.68)	1.04 (0.29)
Women	7.44 (2.95)	1.82 (1.18)	1.79 (1.01)	1.30 (0.75)	1.35 (0.86)	1.17 (0.58)
Education (MAD)	0.82 (0.58)	0.24 (0.11)	0.23 (0.15)	0.14 (0.16)	0.14 (0.16)	0.08 (0.16)
Lower	9.24 (4.01)	2.40 (1.42)	2.31 (1.30)	1.65 (1.11)	1.60 (1.14)	1.29 (0.83)
Intermediate	7.67 (2.95)	1.96 (1.23)	1.86 (1.02)	1.37 (0.82)	1.34 (0.85)	1.13 (0.53)
Higher	7.11 (2.48)	1.75 (1.13)	1.74 (0.92)	1.28 (0.68)	1.25 (0.71)	1.09 (0.41)
Study Centre (MAD)	0.12 (0.10)	0.04 (0.03)	0.05 (0.04)	0.02 (0.03)	0.02 (0.03)	0.02 (0.04)
Augsburg	7.47 (2.72)	1.89 (1.16)	1.85 (0.99)	1.33 (0.75)	1.29 (0.76)	1.10 (0.46)
Regensburg	7.38 (2.70)	1.84 (1.16)	1.85 (0.99)	1.29 (0.71)	1.29 (0.77)	1.10 (0.46)
Mannheim	7.50 (2.87)	1.85 (1.19)	1.86 (1.02)	1.36 (0.78)	1.30 (0.79)	1.14 (0.54)
Freiburg	7.49 (2.75)	1.85 (1.17)	1.83 (0.95)	1.34 (0.76)	1.32 (0.80)	1.14 (0.54)
Saarbrücken	7.30 (2.66)	1.79 (1.11)	1.80 (0.97)	1.32 (0.75)	1.29 (0.77)	1.10 (0.45)
Essen	7.63 (2.96)	1.90 (1.23)	1.86 (1.04)	1.41 (0.85)	1.33 (0.83)	1.13 (0.53)
Münster	7.26 (2.66)	1.78 (1.14)	1.78 (0.95)	1.30 (0.72)	1.28 (0.77)	1.11 (0.47)
Düsseldorf	7.43 (2.85)	1.83 (1.21)	1.84 (1.04)	1.34 (0.79)	1.30 (0.80)	1.11 (0.50)
Halle-Wittenberg	7.08 (2.56)	1.81 (1.17)	1.67 (0.90)	1.27 (0.70)	1.25 (0.74)	1.07 (0.38)
Leipzig	7.25 (2.66)	1.86 (1.18)	1.72 (0.94)	1.30 (0.73)	1.28 (0.75)	1.09 (0.45)
Berlin-North	7.31 (2.78)	1.86 (1.22)	1.73 (0.95)	1.33 (0.77)	1.29 (0.79)	1.10 (0.45)
Berlin-Centre	7.47 (2.83)	1.82 (1.18)	1.83 (0.99)	1.34 (0.78)	1.34 (0.84)	1.13 (0.50)
Berlin-South	7.50 (2.85)	1.82 (1.17)	1.86 (1.02)	1.36 (0.79)	1.33 (0.81)	1.14 (0.52)
Hannover	7.35 (2.75)	1.78 (1.15)	1.82 (0.99)	1.33 (0.75)	1.32 (0.79)	1.10 (0.45)
Hamburg	7.54 (2.83)	1.90 (1.22)	1.84 (1.00)	1.35 (0.80)	1.32 (0.81)	1.13 (0.52)
Bremen	7.46 (2.90)	1.78 (1.15)	1.87 (1.02)	1.34 (0.77)	1.34 (0.82)	1.14 (0.53)
Kiel	7.49 (2.80)	1.90 (1.22)	1.83 (1.01)	1.35 (0.78)	1.31 (0.80)	1.11 (0.48)
Neubrandenburg	7.17 (2.44)	1.92 (1.23)	1.68 (0.86)	1.28 (0.68)	1.22 (0.67)	1.06 (0.36)

Marital Status (MAD)	0.38 (0.25)	0.12 (0.06)	0.11 (0.07)	0.07 (0.08)	0.05 (0.06)	0.03 (0.06)
Married	7.29 (2.61)	1.87 (1.19)	1.76 (0.94)	1.32 (0.73)	1.25 (0.72)	1.10 (0.45)
Separated	7.92 (3.14)	1.95 (1.22)	1.99 (1.08)	1.45 (0.89)	1.37 (0.88)	1.15 (0.54)
Single	7.12 (2.63)	1.67 (1.07)	1.75 (0.95)	1.27 (0.70)	1.33 (0.80)	1.10 (0.45)
Divorced	8.19 (3.30)	2.03 (1.25)	2.07 (1.13)	1.47 (0.92)	1.44 (0.95)	1.18 (0.62)
Widowed	7.86 (3.00)	2.11 (1.30)	1.89 (1.06)	1.39 (0.85)	1.33 (0.84)	1.15 (0.54)
Partnership (MAD)	0.29 (0.26)	0.03 (0.01)	0.10 (0.08)	0.04 (0.05)	0.07 (0.10)	0.03 (0.06)
Yes	7.27 (2.63)	1.84 (1.18)	1.76 (0.94)	1.31 (0.73)	1.27 (0.74)	1.10 (0.45)
No	7.85 (3.15)	1.90 (1.20)	1.97 (1.10)	1.39 (0.84)	1.42 (0.93)	1.16 (0.58)
German as a Native language (MAD)	0.26 (0.15)	0.06 (0.09)	0.10 (0.10)	0.03 (0.04)	0.04 (0.04)	0.01 (0.04)
Yes	7.35 (2.72)	1.84 (1.17)	1.79 (0.96)	1.32 (0.75)	1.29 (0.77)	1.11 (0.47)
No	7.86 (3.02)	1.97 (1.35)	2.00 (1.17)	1.39 (0.83)	1.36 (0.86)	1.14 (0.55)
German Language Skills (MAD; N=4,251)	0.90 (0.20)	0.43 (0.18)	0.33 (0.18)	0.03 (0.16)	0.07 (0.16)	0.10 (0.25)
Very High	7.39 (3.07)	1.65 (1.14)	1.80 (1.05)	1.38 (0.86)	1.39 (0.92)	1.16 (0.61)
High	7.86 (2.87)	2.02 (1.34)	2.00 (1.14)	1.38 (0.79)	1.35 (0.83)	1.12 (0.50)
Average	8.52 (3.08)	2.35 (1.53)	2.29 (1.32)	1.42 (0.84)	1.34 (0.82)	1.12 (0.54)
Low	8.75 (3.07)	2.36 (1.55)	2.56 (1.38)	1.37 (0.80)	1.29 (0.76)	1.17 (0.57)
Very Low	10.78 (3.70)	3.44 (1.74)	2.89 (1.69)	1.44 (1.33)	1.56 (1.33)	1.44 (1.33)

MAD = Mean Absolute Deviation (around the mean)

All associations reached significance (range: $2.225e-308 - .002$), except of the association between gender and emotional neglect ($p=.124$) as well as German language skills and physical abuse ($p=.915$), emotional abuse ($p=.645$) and sexual abuse ($p=.103$).

Table S2. Responses to the CTS-Items in NAKO DF100K (N=76,731), SHIP-LEGENDE (N=2,126)¹ and Rep2010 (N=2,500)². Categories attributed as “maltreated” according to Glaesmer et al. (2013) are highlighted in grey.

		Never	Rarely	Sometimes	Often	Very Often	Maltreated
Physical Neglect	NAKO DF100K	5.7%	5.2%	13.6%	19.2%	56.4%	10.9%
	SHIP-LEGENDE	6.7%	4.5%	11.5%	18.3%	58.2%	11.2%
	Rep2010	11.2%	3.4%	13.9%	26.9%	44.6%	14.7%
Emotional Neglect	NAKO DF100K	1.9%	6.3%	9.3%	34.8%	47.7%	8.3%
	SHIP-LEGENDE	5.2%	5.1%	5.5%	29.7%	54.0%	10.3%
	Rep2010	3.3%	3.4%	10.2%	36.5%	46.7%	6.7%
Physical Abuse	NAKO DF100K	79.9%	11.5%	5.8%	1.8%	1.1%	8.8%
	SHIP-LEGENDE	87.2%	7.9%	2.8%	1.5%	0.4%	4.7%
	Rep2010	87.6%	7.1%	3.7%	1.2%	0.4%	5.3%
Emotional Abuse	NAKO DF100K	83.9%	8.0%	4.5%	2.3%	1.5%	8.3%
	SHIP-LEGENDE	87.2%	7.4%	2.8%	1.6%	0.8%	5.2%
	Rep2010	85.9%	7.3%	4.1%	1.4%	1.2%	6.7%
Sexual Abuse	NAKO DF100K	93.6%	3.2%	2.3%	0.5%	0.5%	6.5%
	SHIP-LEGENDE	95.3%	2.4%	1.6%	0.2%	0.2%	4.4%
	Rep2010	93.1%	4.2%	2.1%	0.5%	0.1%	6.9%

¹ Responses of the CTS-development sample Study of Health in Pomerania - Life-Events and Gene-Environment-Interaction in Depression (SHIP-LEGENDE; Grabe et al. 2012)

² Responses of the Representative German sample 2010 (Rep2010; Glaesmer et al. 2013)

Table S3. Associations between treatment due to depression during the past twelve months and childhood maltreatment.

	Treatment due to depression during the past 12 months	
	No (%)	Yes (%)
Any Maltreatment (MAD)		8.5
No (%)	58.5	52.1
Yes (%)	41.5	47.9
Any Abuse (MAD)		19.9
No (%)	69.9	63.6
Yes (%)	30.1	36.4
Any Neglect (MAD)		25.5
No (%)	75.5	70.4
Yes (%)	24.5	29.6
CTS Summary Score (Range: 5-25)	8.51 (3.35)	9.09 (3.83)
Physical Neglect (Range: 1-5)	2.01 (1.21)	2.06 (1.24)
Emotional Neglect (Range: 1-5)	2.20 (1.13)	2.37 (1.22)
Physical Abuse (Range: 1-5)	1.53 (0.96)	1.61 (1.06)
Emotional Abuse (Range: 1-5)	1.56 (1.04)	1.73 (1.17)
Sexual Abuse (Range: 1-5)	1.21 (0.62)	1.32 (0.83)

MAD = Mean Absolute Deviation (around the mean)

All associations reached significance (range: $8.734e-17$ – .036).