CHRIS Study

Neuropsychiatry questionnaire – Childhood Trauma Screener

Version 1.1

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1. Introduction

This module stores information related to childhood and adolescence trauma, that was collected with the neuropsychiatry questionnaire, part of the self-administered questionnaire.

Participants book a morning appointment at the CHRIS study center, ranging from 7.45 to 8.45 a.m. Each study participant is assigned a workflow at the reception. If there are ten study participants (maximum capacity), there are ten different workflows, marked with the letters from “A“ to “K“. The current workflow is as follows: A-B-C-D-E-F-G-H-I-K. All the workflows can be found in the documentation of CHRIS Baseline/General information/Administrative data, in the file named “Workflows at baseline assessment”. The self-administered questionnaire is filled in always after the blood draw, for most before the interview (workflows B, C, E, F, H, I, L). For the remainder, the self-administered questionnaire is filled in just after the interview (workflows A, G) or after the interview and the ECG measurement (workflow D). The neuropsychiatry questionnaire was printed on paper and could be filled in at the study center, or at home and then returned by mail.

The Childhood Trauma Screener (CTS) was developed by Grabe and colleagues to assess traumatic events in childhood and adolescence, as a shorter version of the Childhood Trauma Questionnaire, made of 28 items, from which five items were identified that best represented its five abuse and neglect dimensions. These five items were shown in an independent clinical sample to correlate well with the dimensions of sexual, physical and emotional abuse, as well as physical and emotional neglect. Each item asks the respondent the degree to which a statement on their life when growing up is true, on a 5-point Likert scale, ranging from “Never true” to “Very often true”.

The CTS was initially designed in English, and its German and Italian translation had already been validated.

Glaesmer and colleagues, based on the cases identified with the Childhood Trauma Questionnaire, set the cut-offs to identify trauma in each of the dimensions: specifically, for the emotional and physical abuse dimensions, respectively, the categories "Sometimes", “Often” and "Very often" were categorized as conspicuous; for sexual abuse, the threshold was set lower and any answer from "Rarely" to "Very often" was considered conspicuous; for the dimensions of emotional and physical neglect, the threshold was set higher, to only “Often" and "Very often" (once reversed).

The assessment and selection of CTS for the CHRIS study was implemented under supervision of Prof. Dr. Marcella Rietschel, Department of Genetic Epidemiology in Psychiatry, Central Institute of Mental Health, Medical Faculty, Mannheim, Univ. of Heidelberg. The CTS questionnaire is available at CHRIS Baseline/Self-Assessment/Neuropsychiatry Questionnaire.

2. History version changes

Version 1 of this module was in use since November 25th, 2015.

The cleaning process added the variables x0ct07b, x0ct11b, x0ct18b, x0ct24b, x0ct26b, and x0ct30.

3. Data cleaning

1. The main CHRIS dataset was loaded.

2. All the questionnaire items, x0ct07-x0ct26, had their missing observations set to:
    a) "Not in use" (-98) if the examination date was before November 25th, 2015,
    b) "Missing by design" (-99) if the exact age (not the rounded one x0_ager, but x0_age) was at least 65,
    c) "Unexpected missing" (-89) otherwise.
3. The number of missing answers was investigated. Of those returning the neuropsychiatry questionnaires, 97.8% had no missing item of the CTS and 1.3% had all the 5 items missing.
4. The negatively formulated CTS items were assigned a score as follows:
    a) The answer "Never true" was assigned a score of 1,
    b) The answer "Rarely true" was assigned a score of 2,
    c) The answer "Sometimes true" was assigned a score of 3,
    d) The answer "Often true" was assigned a score of 4,
    e) The answer "Very often true" was assigned a score of 5.
5. The positively formulated CTS items, x0ct07, x0ct26, were assigned a score as follows:
    a) The answer "Never true" was assigned a score of 5,
    b) The answer "Rarely true" was assigned a score of 4,
    c) The answer "Sometimes true" was assigned a score of 3,
    d) The answer "Often true" was assigned a score of 2,
    e) The answer "Very often true" was assigned a score of 1.
6. For each CTS item, a dichotomous variable was created based on the cut-offs proposed by Glaesmer and colleagues. For emotional and physical neglect (x0ct07 and x0ct26), the resulting variable had values:
    a) "No" if the positive feeling occurred at least "Sometimes" up to "Very often" (i.e., for emotional neglect, x0ct07≥3),
    b) "Yes" if the positive feeling occurred "Never" or "Rarely" (i.e., for emotional neglect, x0ct07≤2),
    c) "Not in use" (-98) if the examination date was before November 25th, 2015,
    d) "Missing by design" (-99) if the exact age (not the rounded one x0_ager, but x0_age) was at least 65,
    e) "Unexpected missing" (-89) if the corresponding item was "Unexpected missing".

    The variables were saved, respectively, as x0ct07b and x0ct26b.
7. For physical and emotional abuse (x0ct11 and x0ct18), the resulting variable had values:
    a) "No" if the negative feeling occurred "Never" or "Rarely" (i.e., for physical abuse, x0ct11<3),
    b) "Yes" if the negative feeling occurred "Sometimes" up to "Very often" (i.e., for physical abuse, x0ct11≥3),
    c) "Not in use" (-98) if the examination date was before November 25th, 2015,
    d) "Missing by design" (-99) if the exact age (not the rounded one x0_ager, but x0_age) was at least 65,
    e) "Unexpected missing" (-89) if the corresponding item was "Unexpected missing".

The variables were saved, respectively, as x0ct07b and x0ct26b.

8. For sexual abuse (x0ct24), the resulting variable had values:
    a) "No" if the negative feeling never occurred (i.e., x0ct24<2),

b) "Yes" if the negative feeling occurred at least "Rarely" up to "Very often" (i.e., x0ct24≥2),
c) "Not in use" (-98) if the examination date was before November 25th, 2015,
d) "Missing by design" (-99) if the exact age (not the rounded one x0_ager, but x0_age) was at least 65,
e) "Unexpected missing" (-89) if the corresponding item was "Unexpected missing".

The variable was saved as x0ct24b.

9. A CTS total score was created with values:
   a) the sum of the scores related to x0ct07, x0ct11, x0ct18, x0ct24, x0ct26,
   b) "Not in use" (-98) if the examination date was before November 25th, 2015,
   c) "Missing by design" (-99) if the exact age (not the rounded one x0_ager, but x0_age) was at least 65,
   d) "Unexpected missing" (-89) if any of the variables x0ct07, x0ct11, x0ct18, x0ct24, x0ct26, was "Unexpected missing".

   It was saved as x0ct30.

10. The baseline dataset was saved.

4. Advices for the analysis

The Childhood Trauma Screener provides a total score, computed for all the participants with all the 5 answers available. Furthermore, Glaesmer and colleagues proposed a frequency cut-off for each CTS item in order to detect specific trauma types, using the longer Childhood Trauma Questionnaire to identify cases of trauma in each dimension.

No other section of the CHRIS baseline measured trauma, but Major Psychiatric Diagnoses, part of the self-administered questionnaire, also assesses the diagnosis of posttraumatic stress disorder in the variables x0mp12*.

Furthermore, traumatic experiences were also reported in the neurology and other diseases modules of the interview, i.e. in the variables x0ne21*, x0ne22*, and x0ot*.

5. References

Grabe HJ, Schulz A, Schmidt CO, Appel K, Driessen M, Wingenfeld K, et al. A brief instrument for the assessment of childhood abuse and neglect: the childhood trauma screener (CTS). Psychiatr Prax. 2012 Apr;39(3):109-15. DOI: 10.1055/s-0031-1298984

Glaesmer H, Schulz A, Häuser W, Freyberger HJ, Brähler E, Grabe HJ. The childhood trauma screener (CTS) - development and validation of cut-off-scores for classificatory diagnostics. Psychiatr Prax. 2013 May;40(4):220-6. DOI: 10.1055/s-0033-1343116