

National Health and Nutrition Examination Survey

General Documentation

National Institute of Mental
Health Diagnostic Interview
Schedule for Children (DISC)

Questionnaire

Survey Years:
1999 to 2004

These data are available through the NCHS
Research Data Center



October 2006

NHANES Data Documentation

National Institute of Mental Health

Diagnostic Interview Schedule for Children (DISC)

(YDQ)

Years of Coverage: 1999–2004

First Published: October 2006

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Component Description

The National Institute of Mental Health Diagnostic Interview Schedule for Children, Version 4 (NIMH DISC IV or “DISC”) is a highly structured diagnostic interview used to assess psychiatric diagnoses of children and adolescents. The DISC was designed to be administered by interviewers with no formal clinical training following the rules and conventions outlined in the DISC training manual (see: DISC Interviewer’s Manual). The DISC questions elicit the diagnostic criteria specified in the Diagnostic and Statistical Manual of Mental Disorders - Fourth Edition (DSM-IV) and the WHO International Classification of Diseases, Version 10 (ICD-10).

The Generic or “12 month” DISC was used in NHANES. Seven of the 34 diagnostic assessments were included in NHANES over the 6 year period that the DISC was administered: Generalized Anxiety Disorder, Panic Disorder, Eating Disorder, Elimination Disorders, Major Depression/Dysthymic Disorder, Attention Deficit Disorder/Hyperactivity (ADD/ADHD), and Conduct Disorder. In each module, questions are asked about specific symptoms during the past year, and then follow-up questions in case of positive endorsement. Two of the DISC modules in NHANES, Eating Disorder and Major Depression/Dysthymic Disorder, were comprised of two parallel interviews, a youth-informant interview (DISC-Y) administered in-person to children asked questions about themselves, and a parent-informant interview (DISC -P) administered by telephone to a parents or caretaker asked questions about their child. Only the DISC-Y was administered for Generalized Anxiety Disorder and Panic Disorder, and only the DISC-P was administered for Elimination Disorder, ADD/ADHD, and Conduct Disorder. Depending on the module, responses and diagnostic scores derived from the interviews can be combined or examined separately.

In NHANES, the Generalized Anxiety Disorder and Panic Disorder were administered from 1999-2004, the remainder of the five modules were administered from 2000-2004. See Appendix 1 for details.

Interviewers used the computerized version of the NIMH DISC IV (C-DISC, IV) owned and distributed by the DISC Group, Division of Child and Adolescent Psychiatry, Columbia University, New York to conduct the interview.

Eligible Sample

Examined sample ages 8-19 years by informant and ages, as follows:

- General Anxiety Disorder: youths 8-19 yrs
- Panic Disorder: youths 8-19 yrs
- Eating Disorders: youths 8-19 years, parents of youths 8-15 yrs
- Elimination: parents 8-11 yrs
- Depression: youths 8-19 yrs, parents of youths 8-15 yrs
- ADHD: parents of youths 8-15 yrs
- Conduct Disorder: parents of youths 8-15

Interview Setting and Mode of AdministrationYouth Interview (DISC – Y):

Mobile Examination Center (MEC).

The DISC was one portion of the private interview that was administered during the MEC examination.

Parent Interview (DISC – P):

Telephone interview, post examination

Within 4-28 days of the DISC-Y, a parent or other adult member of the household was contacted by telephone and ask to complete the interview about the child. The respondent for this interview was determined at the time of the DISC-Y administration in the MEC. The mother was the preferred respondent, however, if the child did not live with the mother, the child was asked what adult he or she has lived with, who has taken care of him or her in the past year, and to whom the child felt the closest.

Both the DISC-Y and DISC-P were conducted by bilingual interviewers in English or Spanish. No proxy respondents or translators were used in situations when the respondents could not self-report.

Quality Assurance & Quality Control

The C-DISC 4.0 computerized version of the NIMH DISC included skip patterns, and checks for logical relationships but the C-DISC did not include consistency checks, valid response checks, and checks for logical relationships between modules.

Interviewers were trained to administer the modules as described in the DISC Interviewer's Manual and the NHANES MEC Interview Manual. Training, over a three day period, included practice sessions in Spanish and English with actual participants. The training session emphasized interview standardization and provided information on the strategies for difficult situations. Interviewers also were observed periodically by supervisors and approximately 5% of the interviews were recorded, with the respondent's permission, for quality control review.

Data Processing and Editing

The original DISC variable names were changed for to be consistent with the format of other NHANES variables. Data sets, with original format data, are available upon request. The NHANES code books contain the NHANES variable names as well as the original data collection variable names. The seven data sets are named as follows:

YDQG: Generalized Anxiety Disorder

YDQP: Panic Disorder

YDQE: Eating Disorder

YDQL: Elimination Disorder

YDQD: Depression

YDQA: ADHD

YDQC: Conduct Disorder

Data editing included reviews of consistency checks within but not between modules. All records of four respondents were set to missing because gender or age values were inconsistent with the NHANES demographic file.

Data editing was performed prior to the running the diagnostic scoring algorithms. The few data fields that required open-ended responses are not included in the data sets.

Sample sizes for each of the DISC modules, along with the total number of missing records, are presented in Appendix 1.

Algorithms And Scoring

SAS single-informant scoring algorithms were used to generate diagnoses, criteria or symptoms present for the past year and past 4 weeks.

Algorithms were supplied by the DISC Group, Division of Child and Adolescent Psychiatry, Columbia University, New York. Version “L” was the final version of the algorithm used to process the NHANES DISC data from 1999-2004. These algorithms are discussed in detail in the Generic DISC 4 Scoring Manual, and copies are available on request. Analysts may choose to modify existing algorithms; however this will require using the data sets generated from the original data collection mode, also available from NCHS upon request.

Please note that because only a subset of the DISC modules was administered during NHANES, there are subtypes for the diagnostic variables that, although shown in the algorithms, they are not present in the data set. For example, Panic Disorder was not assessed with or without Agoraphobia because Agoraphobia was not assessed in NHANES.

Analytic Notes

General notes:

The data files available in the NCHS Research Data Center for the seven DISC modules combine the full five year (2000-2004) or six year (1999-2004) period that the instruments were administered in NHANES. The accompanying codebooks also cover the full administration periods.

The DISC instruments, scoring algorithms and Interviewer Training Manual (see references) available to the analyst contain question names and numbering in the original DISC data collection format.

The DISC was administered as part of the examination; therefore, all analyses of these data will be conducted using the Examination Weights. It is strongly suggested, based on the rarity of most of the psychiatric diagnoses and scores, that analyses be conducted using combined 1999-2004 (Generalized Anxiety and Panic Disorder only) or 2000-2004 for the additional five modules. Refer to the NHANES Analytic Guidelines to derive weights for multiple years.

The Youth Conduct Disorder DISC Predictive Scale (YCQ_A, YCQ_B, YCQ_C), an eight question instrument based on the full DISC conduct order module was administered during the MEC examination during the Audio computer-assisted self-interview (ACASI) for 12-19 year olds. These data files are also available through the NCHS Research Data

Center.

Specific notes:

Eating disorders (YDQE): Because height and weight of participants are essential for determining the diagnosis of eating disorders, measured height and weight obtained from the NHANES Anthropometry examination (BMX) were used in the scoring algorithms. When these measurements were not available, self-reported weights were substituted. The variables YDAEN01 (height measured) and YDQEN02 (weight measured) were created as flag variables to distinguish measured from self-reported values in this data set.

Eating Disorders (YDQE) and Depression (YDQD) modules: These data sets have individual responses for youth and parent informants, in addition to youth, parent and combined symptom counts and diagnostic scores. The variable YDARTYPE should be used to select the informant record type.

References

Columbia University DISC Development Group, Generic DISC Scoring Manual, March 2006

Columbia University DISC Development Group, Interviewer Manual, March 2006.

Shaffer D, Fisher P, Lucas CP, Dulcan MK, Schwab-Stone ME. NIMH Diagnostic Interview Schedule for Children Version IV (NIMH DISC-IV): description, differences from previous versions, and reliability of some common diagnoses. J Am Acad Child Adolesc Psychiatry, 2000 Jan; 39(1): 28-38.

Appendix 1: NHANES DISC Modules and Sample Sizes, 1999-2004

Table 1: Respondents, years of data collection, and number of variables by module

Module	Respondents	Start	End	Number of variables
YDQA: Attention Deficit Disorder / Hyperactivity	Parent Only	2000	2004	274
YDQC: Conduct Disorder	Parent Only	2000	2004	316
YDQD: Major Depression / Dysthymic Disorder	Youth and Parent	2000	2004	325
YDQE: Eating Disorders	Youth and Parent	2000	2004	175
YDQG: Generalized Anxiety Disorder	Youth Only	1999	2004	149
YDQL: Elimination Disorders	Parent Only	2000	2004	227
YDQP: Panic	Youth Only	1999	2004	173

Table 2: Age range and sample sizes by module and record type

Module and record type (if applicable)	Age	Number of records	Number of records with missing data	Number of records without missing data
YDQA: Attention Deficit Disorder / Hyperactivity	8-15	4,872	867	4,005
YDQC: Conduct Disorder	8-15	4,872	867	4,005
YDQD: Major Depression / Dysthymic Disorder (Youth)	8-19	7,851	691	7,160
YDQD: Major Depression / Dysthymic Disorder (Parent)	8-15	4,872	863	4,009
YDQD: Major Depression / Dysthymic Disorder (Combined)	8-15	4,872	913	3,959
YDQE: Eating Disorders (Youth)	8-19	7,851	685	7,166
YDQE: Eating Disorders (Parent)	8-15	4,872	852	4,020
YDQE: Eating Disorders (Combined)	8-15	4,872	902	3,970
YDQG: Generalized Anxiety Disorder	8-19	9,152	705	8,447
YDQL: Elimination Disorders	8-11	1,833	381	1,452
YDQP: Panic	8-19	9,152	703	8,449

NCHS Locator Fields

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Survey Methodology: NHANES 1999-2000, 2001-2002, 2003–2004 are stratified multistage probability samples of the civilian non-institutionalized population of the U.S.

Medium: NHANES Web site; SAS transport files.