# The National Institute of Mental Health Diagnostic Interview Schedule for Children (NIMH-DISC)

#### INTRODUCTION

The purpose of this document is to provide a brief description of the current versions of the National Institute of Mental Health Diagnostic Interview Schedule for Children ("NIMH-DISC" or "DISC") for interested users and investigators.

The first version of this instrument (DISC-1) appeared in 1983. Since then, a series of closely related second-generation instruments (DISC-R and DISC-2. 1 and 2.3) underwent methodologic and psychometric testing in the *Cooperative Agreement for Methodologic Research for Multisite Epidemiologic Surveys of Mental Disorders in Child and Adolescent Populations* (hereafter referred to as the "MECA Study).

Findings from the MECA study led to the development of the NIMH-DISC-IV, which differs from the earlier versions in addressing DSM-IV and ICD- 10 criteria; substituting a double timeframe (one month and one year) for the single six-month timeframe; including an elective module for lifetime diagnosis; having more precise probing for episode onset; and a variety of changes in the wording of items based on data collected in the MECA study. Early methodological data are now available on the DISC-IV from two sources (Tri-site and UNOCCAP pilot studies) and are included in this note.

#### DESCRIPTION OF THE INSTRUMENT

### *NIMH-DISC-IV* (1997)

The NIMH-DISC-IV, like earlier versions of the instrument, was designed to be administered by interviewers without clinical training. Originally intended for large-scale epidemiologic surveys of children, the DISC has been used in many clinical studies, screening projects, and service settings. The interview covers DSM-IV, DSMIII-R, and ICD-10, for over thirty diagnoses. These include all common mental disorders of children and adolescents that are not dependent on specialized observation and/or test procedures; altogether over thirty diagnoses can be assessed using the DISC. The interview covers diagnostic criteria as specified in DSM-IV, DSM-III-R, and ICD-10.

There are parallel parent and child versions of the instrument: the DISC-P (for parents of children ages six to seventeen) and the DISC-Y (for direct administration to children ages nine to seventeen). In most instances, investigators will use both. Some investigators have used the interview with parents of four- and five-year-olds, and with youths older than seventeen.

#### Diagnoses

The interview is organized into six diagnostic sections: the Anxiety Disorders, Mood Disorders, Disruptive Disorders, Substance-Use Disorders, Schizophrenia, and Miscellaneous Disorders (Eating, Elimination, and so on). (See Appendix for a list of diagnoses.) Each diagnosis is "self-contained," so that information from other diagnostic modules is not necessary in order to assign a diagnosis. Within each section, the diagnosis

is assessed for presence within the past year and also currently (last four weeks).

The diagnostic sections are followed by an elective "whole-life" module, which assesses whether the child has ever had any diagnosis not currently present in the past year.

#### Questions

The DISC questions are highly structured. They are designed to be read exactly as written. Responses to DISC questions are generally limited to "yes", "no", and "sometimes" or "somewhat." There are very few "open-ended" responses in the DISC.

The DISC employs a branching-tree question structure. Altogether, the DISC-Y contains 2,930 questions (the DISC-P contains a few more). These fall into four categories: (1) 358 are asked of everyone. These are the 358 "stem" questions, which are sensitive, broad questions that address essential aspects of a symptom. This structure allows the DISC to build symptom and criterion scales for all diagnoses; (2) 1,341 "contingent" questions are asked only if a stem or a previous contingent question is answered positively. Contingent questions are used to determine whether the symptoms meet the specification for a diagnostic criterion (e.g., frequency, duration, intensity); (3) 732 questions ask about age of onset, impairment, and treatment. These are only asked if a "clinically significant" number of diagnostic criteria have been endorsed (usually, just over half of those required for a diagnosis); (4) The "whole-life" module contains a total of 499 questions, also using a stem/contingent structure.

## <u>Differences Between Parent (P) and Youth (19</u>

The type and range of behaviors and symptoms in the DISC-P and the DISC-Y are the same. Pronouns do, of course, differ, and, if a symptom has a large subjective component, the DISC-Y might ask, "Did you feel \_\_\_\_\_?" while the parent interview will ask, "Did he seem?" or "Did he say that he felt?"

#### *T-DISC* (*Teacher DISC*)

The T-DISC uses questions developed for the DISC-P It is limited to disorders whose symptoms might be expected to be observable in a school setting (i.e. disruptive disorders, certain internalizing disorders). The T-DISC has been prepared by Ben Lahey, Ph.D., and Gwen Zahner, Ph.D., and is now being field-tested.

## Administration Time

Administration time largely depends on how many symptoms are endorsed. The administration time for the whole NIMH-DISC-IV in a community population averages seventy minutes per informant, and about ninety to one hundred and twenty minutes for known patients. Administration can be shortened by dropping diagnostic modules that are not of interest for a particular setting or study. (See Table 1 for administration times for DISC-IV sections.)

#### Scoring

The DISC is scored using a computer algorithm, programmed in SAS. Algorithms have been prepared to score both the parent and the youth versions of the DISC according to the

symptom criteria listed in the DSM-IV diagnostic system. A third "combined" set integrates information from the parent and the youth. Algorithms that require both the presence of the requisite number of symptoms for each diagnosis and impairment have been prepared and are currently being tested. Symptom and criterion scales have been created for most diagnoses. Cut points at which they best predict a diagnosis are being prepared from test data.

# **Computerization**

Because the NIMH-DISC-IV is significantly more complex than earlier versions of the DISC (it contains a dual timeframe and an elective module for lifetime diagnosis that requires "on-the-spot" scoring), it is recommended that investigators using more than a single diagnostic module employ a computer-assisted program to aid interview administration. Using a computer-assisted program greatly minimizes interviewer and editor error, reduces training time, and eliminates data-entry costs, but does not usually reduce administration time.

#### C-DISC-4. 0(1997)

The C-DISC-4.0 is an update of the earlier C-DISC-2.3, revised to accommodate the DISC-IV. In 1997, it became the property of Columbia University. This program is available in both English and Spanish. It differs from the earlier C-DISC-2.3 in that the diagnostic algorithms are incorporated into the administration program to trigger whether to proceed into the "whole life" module. The DSM-IV algorithms built into the application program will yield diagnoses for both the "past year" and "current" (past four weeks) for the single-informant (parent or youth) interviews.

Maintenance and further development of the C-DISC (C-DISC-2.3 and C-DISC-IV) is being coordinated by the Division of Child Psychiatry at Columbia University. Under an agreement with NIMH, unlimited copies of the C-DISC-4.O are available for use in DHHS-funded projects. A service charge of \$2,000 is payable for each DHHS-funded project on which it is used. This provides access to an unlimited help line and regular free updates and corrections.

To obtain information about the C-DISC or to order the program, please contact Lynn Lucas at the Columbia DISC Group (see address, below).

### <u>Further</u> <u>Information</u>

For further information about the NIMH-DISC-IV and whether it might address specific research and/ or clinical needs, and information on training, please contact:

Prudence Fisher, M.S.
NIMH-DISC Training Center at
Columbia University/New York State Psychiatric Institute
Division of Child and Adolescent Psychiatry
722 West 168th Street, Unit 78
New York, New York 10032

Telephone: (212) 543-5357 or (212) 543-5424 E-mail: nimhdisc@child.cpmc.columbia.edu

fisherp@child.cpmc.columbia.edu

Fax: (212) 543-5966

For information about ordering a copy of the NIMH-DISC-IV, please contact:

Lynn Lucas Columbia DISC Group 3 Wood Street Katonah, New York 10536

Toll-free Telephone: (888) 814-DISC or (888) 814-3472

E-mail: disc@worldnet.att.net Telephone/Fax: (914) 243-0492

Note: There is a charge for the paper version of the NIMH-DISC-IV that covers copying and mailing expenses.