

Michael H. Mattei, Psy.D.

Staff Psychologist, Napa State Hospital, Napa, California.

Grant Aram Killian, Ph.D.

Adjunct Professor of Psychology, Nova University, Fort Lauderdale, Florida.

William I. Dorfman, Ph.D.

Associate Professor of Psychology, Nova University, Fort Lauderdale, Florida.

AUTOMATED CHILD/ADOLESCENT SOCIAL HISTORY

Mark Rohde. Minnetonka, Minnesota: National Computer Systems/PAS Division.

Introduction

The Automated Child/Adolescent Social History (ACASH; Rohde, 1988a) was developed with the goal of producing an objective, valid, and reliable social history for children or adolescents in a quick and cost-effective manner. The ACASH is a computer-administered structured interview that uses the client's parents or guardians for data input. After thus collecting the information, the clinician may print out a written report or save the document in the computer for word processing. The instrument is intended to gather psychosocial history data on children or adolescents ranging in age from 5 to 19.

The ACASH author, Mark Rohde, earned a master's of education from Arizona State University and a Ph.D. in professional psychology from The Union Institute-Union Graduate School in Cincinnati, Ohio. He is currently in private practice, specializing in family, group, and individual psychotherapy as well as psychoeducation, psychological assessment, and substance abuse treatment. His other professional activities have included assessments in school and hospital settings.

Initial work on the ACASH began in May 1982, and it was copyrighted in 1985 and again in 1988. In 1986 the scope of the project expanded to include the construction of behavioral rating scales from specific test items. The manual (Rohde, 1988b) states that these scales would lend themselves to psychometric analysis, thus meeting the author's original goal to produce an objective, valid, and reliable product. At the time of this writing, however, the publisher had abandoned plans to pursue the development and validation of these scales (M. Maruish, personal communication, July 2, 1991).

Initial questions for the item pool came from various sources, including structured interviews (over 20) used in mental health settings, existing automated social history programs (e.g., GOLPH; Giannetti, 1987), client chart reviews, major test instruments such as the Minnesota-Briggs History Record (Briggs, Rouzer,

Hamberg, & Holman, 1972), and the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1980). Questions also were based on a review of the social history and interviewing literature.

A general criterion for selecting questions was that a given item have behavioral specificity. In the early stages of development, the author felt that such specificity would aid in future development of behavioral rating scales. Although his intent was to develop a theoretically neutral instrument, Rohde later determined that this was not feasible and as such identified the following theoretical orientations as reflected in the test items: psychoanalytic, developmental, and systems theory.

The author conducted field testing as part of initial development. The process involved having a group of clinicians consider the merits and weaknesses of various topic areas and make suggestions regarding questions. Prior to the release of the program two other field trials took place. The first was carried out over several months and resulted in the inclusion of additional items deemed clinically relevant (e.g., questions regarding handicapping conditions, child-parent separations, and parental criminal behavior). The second trial entailed an evaluation of the program by a psychoanalytic psychiatrist, a general psychiatrist, a systemic family therapist, a Rogerian therapist, a behavioral therapist, and a school guidance counselor (Rohde, 1988b). Since its release, no revisions or alternative formats have developed, although several are planned for the near future, including a paper-and-pencil version and the addition of a diagnostic interview (M. Rohde, personal communication, July 3, 1991).

The ACASH operates on the MICROTTEST assessment system, a PC-based system consisting of the software, a mechanical scoring box that attaches to the user's computer, a user guide, and a toll-free technical support number. ACASH administrations are ordered and loaded onto the scoring box by telephone from National Computer Systems (NCS). The scoring box contains an internal "clock" that allows the user to score only a fixed number of prepaid administrations.

The hardware required to run the system consists of an IBM-compatible personal computer with a communications port for a printer, DOS 2.1 or higher, one 360K floppy disk drive, and 720K of hard disk space. Use of a separate numeric keypad is recommended but not required. At this time the MICROTTEST system is not configured to operate with Apple computers.

The examiner's role in the data-collecting process is minimal. The primary task is to ensure that the respondent (parent or guardian) has the necessary reading (ninth-grade level) and English-language skills to complete the questionnaire. The examiner should provide the respondent with a rationale for using an automated procedure, discuss the confidentiality of the results, and situate him or her in front of the computer. Examiners should stay with respondents while they answer the first two or three items, not only to ensure that they understand the procedure but also to help allay any anxiety over using a computer. Prior to the start of the interview, the examiner boots the program and answers the questions in the first section. At the end of the administration, the program can print out a report or save the results to disk for future access or word processing.

In order to interact with the computer effectively, the individual providing the information must have at least ninth-grade reading ability, recent experience with

the client, "good" English skills, and no evidence of psychosis or other mental disorder. The relatively high reading level required likely exerts a negative impact on the clinical utility of this instrument.

The interview itself is divided into six topic or subtest areas: Reason for Referral and Identifying Information; Developmental History—Pre-Natal, Birth and Infancy; Developmental History—Childhood to Present; Educational History; Current Family—Members and Background; and Problem Identification. For each subtest, the computer presents a series of related questions to assess the specific topical areas.

Because the instrument is computer administered, no written answer forms are available or needed. Questions appear on the screen in a multiple-choice format for the most part. The author feels that response options must be limited in order not to overwhelm the respondent with choices. Because of this stipulation, all possible responses cannot be accounted for, which necessitates the "other/don't know/doesn't apply" response option. Any question answered in this manner can be automatically printed at the end of the report to facilitate further assessment efforts.

The ACASH program uses "response-dependent question presentation," commonly referred to as *branching logic*. This response-dependent format means that the questions presented to the respondent will be based in part on the client's age and sex and on the types of responses made to previous questions. For example, if the client is an only child, the program's design prevents inquiry about relationships to siblings or in assessing for sexual abuse, for example, if none is reported, the program proceeds to another topic; if abuse is noted, a series of questions appears regarding when it occurred, who was the perpetrator, the extent of the abuse as well as the child's reaction, and other relevant information.

The presentation of questions also is designed to decrease the likelihood of a response set developing, this by varying as much as possible how items are presented. For example, some questions require descriptive answers, others a simple "yes" or "no."

The ACASH report offers a narrative presentation of the interview data. In addition, the profile presents basic demographic information on the subject as well as sections identifying potentially critical concerns, improbable responses, and reported assets and strengths. One of the goals here is to avoid the awkward language seen in many computer-generated narratives. With this in mind, the ACASH conforms to the rules of English and to the terminology used within the treatment settings it is designed for as much as possible. For example, when the program compiles a report for a school setting, the client is consistently referred to as "the student." The program also addresses respondents by proper title and refers to them with appropriate pronouns.

Practical Applications/Uses

Each section of the ACASH collects information on variables related to the six previously mentioned topic areas. The manual states that the program can be used in outpatient as well as inpatient settings, juvenile justice agencies, and schools. In both outpatient and inpatient settings, its proposed use is to provide

the clinician with the data necessary for developing hypotheses about the nature of the presenting problem. The manual suggests using the ACASH prior to hospitalization in order to help decrease the lag time between admission and implementation of treatment. In juvenile justice agencies, proposed uses include facilitating placement of first-time offenders and providing information that might be otherwise unavailable. In school settings the developer claims it is useful as a screening device for placement in alternative programs. According to the manual, appropriate users include psychologists and psychiatrists as well as other mental health professionals or paraprofessionals.

The publishers state that the instrument could be beneficial in monitoring treatment progress and in conducting final outcome evaluations (M. Maruish, personal communication, July 9, 1991). Rohde feels that although the ACASH is a viable instrument, ongoing evaluation regarding its usefulness needs to continue. Areas he identifies for further clarification or exploration include researching its effectiveness in various clinical settings as well as assessing client and professional acceptance. The author believes that this will help fully establish the instrument's clinical utility (M. Rohde, personal communication, July 9, 1991).

The manual makes no specific recommendations regarding appropriate administration settings except to say that respondents should work alone at a computer terminal. The test manual and its supplement, the Quick Reference Guide, outline thorough and clear instructions for administering the ACASH. The instructions also guide the user through the setup procedures, starting with directions for selecting the appropriate subdirectory and "calling up" an on-line administration. This part of the procedure offers menus from which to make the initial selections. The first section of the ACASH is completed by the examiner in about 10-15 minutes and includes such basic information as client demographics and reason for referral.

According to the instructions, respondents should be advised ahead of time that they will be using an automated assessment instrument and should be given a sound rationale for the procedure (the latter to help allay anxiety about using a computer or about being interviewed). The manual advises telling the respondent that the program is simple to use and that help will be available any time a question arises. Although before proceeding the examiner should ensure that the respondent possesses the required language skills, the manual does not specify how to go about this.

Once in front of the computer the respondent follows on-screen directions, which begin with an introduction to the program. This tutorial covers basic keyboard functions and presents sample questions. The examiner should help in completing the first two or three to make sure that the respondent grasps the instructions and is sufficiently comfortable with the process. If both parents are available, they should not complete the ACASH together (increased administration time often results over disagreements about how questions should be answered). Instead, they should answer the questions separately and the results be compared. This procedure is recommended especially when parents are divorced or marital conflict is apparent.

After the completing the assessment questions, a screen message asks the respondent to summon the examiner. At this point the examiner saves the data and can either print a report or access it with a word processor at a later time. If the

administration must be interrupted, the program can store the data until both respondent and examiner are ready to resume. Using the ACASH requires minimal computer knowledge of either the examiner or the respondent, and as such it is relatively easy to use. However, due to the nature of the branching logic programming, no alteration of the testing sequence is allowable. The interview will generally require 1 hour to complete, but this time frame will vary depending on the number of reported difficulties as well as the respondent's reading ability.

Scoring is done automatically by the computer once the data are saved, and the printed report is available within minutes. The reliability of the administration procedures, data recording, and output are much higher than with traditional examiner-administered interviews. Unlike the latter, given a fixed set of conditions and data, the computer will administer the same set of questions and record the answers perfectly every time.

Interpretation of the ACASH narrative derives from the examiner's subjective assessment of the report. The manual suggests that the results be compared with the clinical impressions formed independently by the professional. In addition, a copy of the ACASH narrative should be given to the parent or guardian in order to elicit their input and obtain clarification of any ambiguous or unclear data. The manual states that the section on Potentially Critical Concerns may serve as the basis of the "Identified Problems" section of a typical treatment plan. With this in mind, the examiner is further cautioned to verify this information independently before planning treatment strategies. As the manual clearly states, the respondent's perceptions about the client may be distorted (or at the very least subjective) and quite different from those held by other observers. The report is described as recording "the respondent's perceptions at a particular point in time" and therefore not reflective of any "objective or permanent reality." Given the above-mentioned considerations, it becomes clear that proper use of the ACASH information requires a relatively high level of caution and sophistication.

Technical Aspects

Although structured interviews often are not considered psychometric tests, they nevertheless possess characteristics that make them amenable, in part, to psychometric inquiry and study (Haynes & Jensen, 1979). By definition, the ACASH is an automated structured interview and, as such, should be held to the same professional standards as more traditionally defined psychometric instruments. The governing position with regard to computerized interviews is that "all the standards apply with equal force" (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1985, p. 4). As it would be beyond the scope of this review to evaluate the ACASH on every AERA/APA/NCME standard, the focus here will rely on those classified as primary, which according to the *Standards for Educational and Psychological Testing* "are those which should be met by all tests before their operational use and in all test uses" (AERA et al., 1985, p. 2). For a more exhaustive review of which standards the ACASH met, the reader is referred to Mattei (1991).

The utility of a structured interview rests in part on the content-related evidence of validity. According to Anastasi (1982), content validity should be built

into an instrument throughout its development. In addition, demonstrating content validity for the prescribed uses of an instrument is the developer's responsibility (AERA et al., 1985). An examination of how Rohde constructed the ACASH shows that the established procedures to build and demonstrate content validity were for the most part followed. The developer specified the domain that the instrument was intended to represent, subject-matter experts were used appropriately, and an assessment of the appropriateness of topics and questions was done using a second set of subject-matter experts. An examination of the ACASH reveals a well-designed instrument, both complete and comprehensive, that adheres to accepted clinical interview content (Korchin, 1976; Lazarus, 1973; Sundberg, Tyler, & Taplin, 1973; Watson, 1951, cited in Bernstein, Bernstein, & Dana, 1974). Because of this, the developer can demonstrate that the instrument's contents are relevant to its proposed use of obtaining social history data.

According to the AERA/APA/NCME *Standards* (1.7), when subject-matter experts have been used, their relevant training, experience, and qualifications should be described (p. 15). Although the manual fails to describe the first set of subject-matter experts, the omission does not negate the evidence indicating that content validity was "built" into the ACASH.

To date, no attempts have been made to obtain reliability and validity estimates for this instrument. Regardless, the manual states that use of the ACASH increases the "accuracy" of placement decisions for first-time offenders in juvenile justice settings and that the report can be used as a screening device for placement in alternative school programs. However, no evidence appears demonstrating the instrument's predictive validity for these recommended uses. The *Standards* (1.23) state that developers must provide evidence of an instrument's differential predictive ability before claiming that it can classify individuals into "specified alternative treatment groups" (p. 18). In addition, all criterion measures must be clearly specified and a "rationale for choosing them as relevant criteria should be made explicit" (AERA et al., 1985, p. 16). The ACASH clearly violates these requirements. Another primary AERA/APA/NCME standard (1.1) states that "evidence of validity should be presented for the major types of inferences for which the use of a test is recommended" (1985, p. 13). Criterion-related studies examining the interview's predictive validity would be needed for the developer and publisher to justify making the aforementioned claims. These studies should identify the outcome criteria and provide scores with which to predict criterion performance. Until evidence can be provided, the developer and publisher should refrain from making claims of this nature.

The manual implies that the ACASH can measure the theoretical construct of "compromised thought process." Although it does not provide a quantified score as a measure of the construct, the program is said to have the ability to detect indicators of compromised or intact functioning. However, no clear construct-related evidence demonstrating convergent or discriminative validity is offered to support this inference. In addition, no evidence appears demonstrating concurrent validity, which makes this claim a violation of AERA/APA/NCME standard 1.8 ("construct-related evidence should be presented to support such inferences"; p. 15). As noted in the *Standards* (5.7), a test developer and publisher should avoid making unsubstantiated claims.

Numerous studies have shown data obtained through interviews subject to considerable errors of measurement (Walsh, 1967; Yarrow, Campbell, & Burton, 1970). These potential sources of error include client bias and an unwillingness to disclose certain types of information. Technically, the ACASH is not a self-report interview; rather, it is considered an inventory of observed behavior (Anastasi, 1982), which is subject to additional sources of error. For example, studies have shown a tendency on the part of parents to present considerably distorted information when interviewed about their children (Sobell & Sobell, 1975; Vaughn & Reynolds, 1951). Wenar and Coulter (1962) found that only 43% of parents interviewed about their child's development gave consistent accounts when interviewed again between 3 and 6 years later. These findings typify the error associated with retrospective data-recall and retrospective data-gathering techniques. Lapouse and Monk (1958) noted that reliability is low on parent interviews covering vague issues such as overactivity but high on easily defined issues such as speech impediments.

Costello, Edelbrock, and Costello (1985) reported that the reliability of parent interview data obtained from an automated interview was substantially higher than that obtained from an automated child interview. One advantage that computer-based interviews have lies in the virtual elimination of error and bias in both inquiry and response recording (Hay, Hay, Angle, & Nelson, 1979). Rohde does note (personal communication, July 9, 1991) that the computer-administered interview has the potential to control for output variance as well as input variance, thus decreasing or eliminating this source of error.

In general, the ACASH manual fails to address the majority of the issues regarding sources of errors. In fact, the manual presents a somewhat skewed perspective of the research by emphasizing studies that have demonstrated the superior reliability of structured as opposed to unstructured interviews. According to the *Standards* (2.1), a developer should provide estimates of reliabilities and standard errors of measurement in sufficient detail to allow users to determine whether an instrument is "sufficiently accurate for the intended use" (AERA et al., 1985, p. 20). No such information exists for the ACASH. In light of this, the manual should inform users of the lack of reliability data and should make clear and detailed statements regarding possible sources of error.

Critique

The ACASH is a well-constructed and useful computer-based interview. It is comprehensive and easy to use, plus the directions presented to the respondent are clear and detailed. In addition, branching logic greatly enhances the administration process. The *Guidelines for Computer-Based Tests and Interpretations* (American Psychological Association, 1986) state that a computer-based instrument should present questions and collect responses in a way which will not cause unnecessary frustration or handicap the test taker's performance. Rohde's programming eliminates unnecessary inquiry through extensive use of branching, and it facilitates performance with the clarity of displays and instructions. Further, at all times during the administration the ACASH respondent may pause to review the

instructions. Unlike other automated interviews, such as the Developmental History (Rainwater & Batter Slade, 1988), the ACASH can be interrupted and the data saved until such time as the interview can proceed. This suspension of the interview is accomplished via easily learned keyboard commands, which the manual explains.

One area in which the ACASH appears significantly deficient is in allowing the respondent to change answers. The APA *Guidelines* state that computerized administration should provide test takers with the same amount of editorial control over their responses as they would experience with a traditional format. Unfortunately, due to programming limitations inherent in the branching logic format, an ACASH respondent wishing to change an answer may only back up one question. This very limited editorial capacity may prove unduly frustrating and perhaps lead to an invalid report.

The program provides good test security in that access to client data is restricted. Returning to the ACASH main menu requires system commands only available to the examiner. This maintains security and reasonably assures confidentiality in that a client could not intentionally or accidentally access other clinically sensitive material in the computer. According to the *Guidelines*, procedures to ensure confidentiality and privacy are the responsibility of the developer (APA, 1986). After an administration, some computer-based interviews, such as the Developmental History (Rainwater & Batter Slade, 1988) and the Psychological Social History Report (Rainwater & Silver Coe, 1988), automatically return to the main menu. By not allowing for this to occur, ACASH denies the respondent access to the DOS directory and other information or programs on the computer.

At the time of this writing, compared to other automated social histories the ACASH was rather expensive in terms of start-up costs and the prices of individual administrations. The MICROTTEST system proves cumbersome in that it decreases the flexibility of the program; that is, the scoring box must be attached to the computer and effectively limits the use of the software to one machine. This will make the ACASH particularly inconvenient to users who have notebook, laptop, or portable computers, or who operate out of more than one location.

The ACASH does not allow for alterations in the testing sequence or for personal modifications of questions or topics as do some other automated interviews (Rainwater & Batter Slade, 1988; Rainwater & Silver Coe, 1988). Although this feature might increase the program's utility, its effect on content validity would be uncertain. Because this appears to be a trend in computer-based psychological assessments, it should be noted that the ability to customize a program for uses not originally intended carries with it the potential for significant misuse.

The APA *Guidelines* (26) state that computer-generated reports should warn against common errors of interpretation. Both the ACASH manual and the report caution against using data that conflict with the clinician's own perceptions about a client. The manual also warns that items identified in the Potentially Critical Concerns section must be verified independently by other information sources before the examiner can use them to form the basis of the "Problem Section" of a treatment plan. The report itself cautions that it is based solely on the respondent's understanding of the questions presented, and that the data should be used

only in the context of a complete evaluation conducted or supervised by a qualified professional. However, despite these warnings, it cannot be said that the ACASH cautions about using the test incorrectly for certain kinds of decisions nor does it specifically warn users about the lack of established validity of the interpretations offered. In fact, suggesting specific uses for the report in school settings, for example, may encourage potential misuse of the instrument. The underlying assumption appears to be that the implied content validity can generalize and serve as evidence of the instrument's predictive validity. As stated by Anastasi (1982), one cannot use evidence for one type of validity as proof of either overall validity or other types of validity. It is in this assumption that Rohde fails to meet the goal of producing a valid instrument. Although the ACASH may be very well suited to make these differential predictions, no acceptable empirical data are offered, and for this reason alone the instrument should not be marketed in its present form.

The author's plan to develop behavioral scales for the instrument would have been a valuable addition to the ACASH, but apparently these plans have been abandoned. In keeping with the goal of producing a valid and reliable instrument, the addition of these potentially validated behavioral scales would greatly enhance the software and, more importantly, set it apart from its competitors in terms of scientific groundedness.

The ACASH approaches meeting the minimal standards necessary to release it for general use. However, of the 17 primary APA standards on which it was evaluated (Mattei, 1991), it failed to meet a full 53%. Although not every standard carries equal weight, the data suggest that the ACASH at present represents the general trend in psychology to develop and use clinical interviews as nonstandardized and subjective outlines for data gathering and assessment.

Empirical investigation regarding the use of case history interviews must assume greater importance. One factor that apparently has hampered efforts is the widespread assumption that self-report measures are inherently invalid and unreliable. Although studies have tended to support this view, some evidence does suggest that carefully designed interviews may be reliably and validly used to measure specific target behaviors (Linehan, 1977; Lucas, 1977). In addition, Haynes and Jensen (1979) have offered guidelines on how research may begin to estimate the validity of interview-derived information.

The clinical interview must be fully recognized as an assessment instrument and, as such, held up to the same standards of reliability and validity required of other assessment tools. With this in mind, psychologists should stop employing procedures that are recommended only by their availability and ease of use. In 1984 Killian, Holzman, Davis, and Gibbon proposed that psychologists had an ethical obligation to use instruments that conformed to at least the original APA standards published in 1966. The present reviewers now propose that as test users, psychologists have an ethical obligation to use instruments constructed in a sound scientific manner and conform to the current professional standards and guidelines discussed previously in this review. Given that test users and developers increasingly are being held accountable by the courts for "defective test design" and "defective validation" procedures, what was once an exclusively ethical issue now emerges as a legal one as well (Smith, 1991).

References

- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1985). *Standards for educational and psychological testing*. Washington, DC: American Psychological Association.
- American Psychiatric Association. (1980). *Diagnostic and statistical manual of mental disorders* (3rd ed.). Washington, DC: Author.
- American Psychological Association. (1986). *Guidelines for computer-based tests and interpretation*. Washington, DC: Author.
- Anastasi, A. (1982). *Psychological testing* (5th ed.). New York: Macmillan.
- Bernstein, L., Bernstein, R.S., & Dana, R.H. (1974). *Interviewing: A guide for health professionals* (2nd ed.). New York: Appleton-Century-Crofts.
- Briggs, P.F., Rouzer, D.L., Hamberg, R.L., & Holman, T.R. (1972). Seven scales for the Minnesota-Briggs History Record with reference group data. *Journal of Clinical Psychology*, 28, 431-448.
- Costello, E., Edelbrock, C., & Costello, A. (1985). Validity of the NIMH Diagnostic Interview for Children: A comparison between psychiatric and pediatric referrals. *Journal of Abnormal Child Psychology*, 13(4), 579-595.
- Giannetti, R.A. (1987). The GOLPH Psychosocial History: Response-contingent data acquisition and reporting. In J.N. Butcher (Ed.), *Computerized psychological assessment: A practitioner's guide* (pp. 124-144). New York: Basic Books.
- Hay, W.M., Hay, L.R., Angle, H.V., & Nelson, R.O. (1979). The reliability of problem identification in the behavioral interview. *Behavioral Assessment*, 1, 107-118.
- Haynes, S.N., & Jensen, B.J. (1979). The interview as a behavioral assessment instrument. *Behavioral Assessment*, 1, 97-106.
- Killian, G., Holzman, P., Davis, J., & Gibbon, R. (1984). The effects of psychotropic drugs on cognitive functioning in schizophrenia and depression. *Journal of Abnormal Psychology*, 93(1), 58-70.
- Korchin, S.J. (1976). *Modern clinical psychology: Principles of intervention in the clinic and the community*. New York: Basic Books.
- Lapouse, R., & Monk, M.A. (1958). An epidemiologic study of behavior characteristics in children. *American Journal of Public Health*, 48, 1134-1144.
- Lazarus, A.A. (1973). Multimodal behavior therapy: Treating the "BASIC ID." *Journal of Nervous and Mental Disease*, 156, 404-411.
- Linehan, M. (1977). Issues in behavioral interviewing. In J.D. Cone & R.P. Hawkins (Eds.), *Behavioral assessment* (pp. 248-277). New York: Brunner/Mazel.
- Lucas, R.W. (1977). A study of patients' attitudes to computer interrogation. *International Journal of Man-Machine Studies*, 9, 69-86.
- Mattei, M.H. (1991). *Structured clinical interviews: A review and critique of three instruments*. Unpublished professional research project, Nova University, Ft. Lauderdale, FL.
- Rainwater, G.D., & Batter Slade, B. (1988). *Developmental History* [Computer program]. Melbourne, FL: Psychometric Software.
- Rainwater, G.D., & Silver Coe, D. (1988). *Psychological/Social History Report* [Computer program]. Melbourne, FL: Psychometric Software.
- Rohde, M. (1988a). *Automated Child/Adolescent Social History (ACASH)* [Computer program]. Minnetonka, MN: National Computer Systems.
- Rohde, M. (1988b). *A guide to the use of the Automated Child/Adolescent Social History (ACASH)*. Minnetonka, MN: National Computer Systems.
- Smith, S.R. (1991). Mental health malpractice in the 1990s. *Houston Law Review*, 28(1), 209-262.
- Sobell, L.C., & Sobell, M.B. (1975). Outpatient alcoholics give valid self-reports. *Journal of Nervous and Mental Disease*, 161, 32-42.

66 *Automated Child/Adolescent Social History*

- Sundberg, N.D., Tyler, L.E., & Taplin, J.R. (1973). *Clinical psychology: Expanding horizons* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall.
- Vaughn, C.L., & Reynolds, W.A. (1951). Reliability of personal interview data. *Journal of Applied Psychology*, 35, 61-63.
- Walsh, W.B. (1967). Validity of self-report. *Journal of Counseling Psychology*, 14, 18-23.
- Wenar, C., & Coulter, J.B. (1962). A reliability study of developmental histories. *Child Development*, 33, 453-462.
- Yarrow, M.R., Campbell, J.D., & Burton, R.V. (1970). Recollections of childhood: A study of the retrospective method. *Monographs of the Society for Research in Child Development*, 35(5, No. 138).