Appendix D

Sources and Qualifications of Data for Mental Health Practitioners and Trainees

Psychiatry

American Medical Association 2000–01 Physician Characteristics and Distribution in the United States

Scope of Data. Data are derived from the American Medical Association's (AMA) Masterfile, which contains current and historical data on all physicians practicing in the United States. Psychiatrists in the Masterfile include physicians who self-designated their practice specialty as psychiatry. This designation is determined by the largest number of professional hours reported by the physician on the AMA Physicians' Practice Arrangements (PPA) questionnaire, a rotating census that is sent to approximately one-third of all physicians each year. Data presented in the *Physician Characteristics and Distribution in the U.S.* are based on the self-designated practice specialty coding contained in the AMA Physician Masterfile. Data on medical residents and inactive psychiatrists have been excluded to reflect clinically trained and clinically active psychiatrists more accurately.

Limitations. Because the AMA Masterfile includes physicians who are self-designated or self-identified as psychiatrists, the data may include some physicians with no specialty psychiatric training.

1999 American Psychiatric Association Membership Data

Scope of Data. The 1999 American Psychiatric Association (APA) membership estimates were taken from the September 1999 APA membership data base. At that time, the total APA membership was approximately 40,000, which included 26,877 clinically trained psychiatrists believed to be actively practicing in the United States. The remaining APA members were disqualified as they fell into one of the following membership categories: psychiatric resident, medical student, and members not practicing psychiatry in the United States.

Limitations. The APA membership data are limited in that not all of the Nation's psychiatrists are members of the APA. However, unlike the AMA Masterfile data, all psychiatrists in the APA membership are board-certified or board-eligible and have some specialty psychiatric training.

The 1998 National Survey of Psychiatric Practice

Scope of Survey. The APA National Survey of Psychiatric Practice (NSPP) is a biennial survey of 1,500 randomly selected APA members. The primary purpose of the survey is to gather information, at the physician level, to assess the current status of psychiatric practice and to track trends in psychiatry.

Response Rate. Of the 1,500 members included in the study, 1076 (71.9 percent) completed the 1998 NSPP. Of those who completed the survey, 976 are considered active in psychiatry (excludes psychiatrists who are either retired or temporarily not in psychiatric practice).

Data Limitations. Because this survey does not include responses from non-APA members, caution should be taken when comparing these data with the 1988–89 APA Professional Activities Survey (PAS) estimates. Although this survey obtained a good response rate and included a very large number of respondents, the findings may be subject to some response bias. To reduce the impact of this bias, the data from respondents were weighted against the survey sampling frame (all APA members believed to be active in psychiatry) using APA membership information (age, gender, race/ethnicity, etc.).

1996–97 American Medical Association Physician Characteristics and Distribution in the United States

Scope of Data. Data are derived from the AMA Masterfile, which contains current and historical data on all physicians practicing in the United States. Psychiatrists in the Masterfile include physicians who self-designated their practice specialty as psychiatry. This designation is determined by the largest number of professional hours reported by the physician on the AMA PPA questionnaire, which is sent to approximately one-third of all physicians each year. Data presented in the Physician Characteristics and Distribution in the United States are based on the self-designated practice specialty coding contained in the AMA Physician Masterfile. Data on medical residents and inactive psychiatrists have been excluded to accurately reflect clinically trained and clinically active psychiatrists.

Limitations. Because the AMA Masterfile includes physicians who are self-designated or self-identified as psychiatrists, the data may include some physicians with no specialty psychiatric training.

1996 American Psychiatric Association Membership Data

Scope of Data. The 1996 APA membership estimates were taken from the July 1996 APA membership data base. At that time, the total APA membership was 40,866, which included 28,970 active psychiatrists practicing in the United States. The remaining 11,896 APA members included 5,438 psychiatric residents, 3,105 medical students, 2,035 psychiatrists not practicing in the United States, and 1,318 inactive psychiatrists.

Limitations. The APA membership data are limited in that not all of the Nation's psychiatrists are members of the APA. The APA membership data do, however, include a significant majority of the physicians in the AMA Masterfile. Unlike the AMA Masterfile data, all psychiatrists in the APA membership are board-certified or board-eligible and have some specialty psychiatric training.

1988–89 American Psychiatric Association, Professional Activities Survey (PAS)

Scope of Survey. The 1988–89 APA PAS gathered data on both APA members and nonmembers who had identified themselves in the AMA Masterfile as primarily specializing in psychiatry. APA members and nonmembers were combined and cross-checked against the APA membership file in order to remove duplicate records, resulting in a residual list of 10,091 self-designated psychiatrists and 34,164 APA members.

Response Rate. Of the 34,164 APA members included in the study, 23,126, or 67.7 percent, responded to the survey. The sample of 10,091 self-designated psychiatrists yielded a response rate of 28.9 percent, or 2,922 completed surveys. Of the 2,922 completed surveys, 341 respondents were found not to be psychiatrists, and 125 psychiatrists were already members of the APA. The remaining total of 25,582 yielded 19,498 "active" psychiatrists (excludes psychiatrists who are residents or fellows, retired, or not primarily active in psychiatry), of whom 17,930 were APA members and 1,568 were nonmembers.

Data Limitations. In order to assess potential sources of survey nonresponse bias, an analysis was conducted in which demographic characteristics of respondents were compared with those of nonrespondents. Although this analysis revealed no major differences between the groups, other factors may have affected response. Other possible limitations may include self-reporting error of psychiatrists with respect to the recollection and estimation of weekly and monthly activities (Dorwart et al. 1992).

Psychology

The American Psychological Association Member Survey

Sources and Qualifications of the Data. Who is to be counted as a mental health services provider in psychology?

Not all psychologists are trained for health service provider roles, and not all of those with the necessary training are actively engaged in providing these services. In order to determine the number of

psychologists who are qualified to function as health service providers and the number who actually deliver relevant services, it was necessary to consider the type and amount of training and the acquisition of the appropriate credentials for delivering those services. This required the examination of several variables.

- Licensure as a psychologist—In all 50 States and the District of Columbia, licensure as a psychologist by a State board of psychological examiners is required for the independent practice of psychology. As is the case with most professions, these licensing statutes are designed in part to protect the public by ensuring that practitioners have met minimum training and competency requirements.

- Doctoral degree in psychology—A significant amount of advanced and highly specialized training is required in order to independently provide the full spectrum of mental health services. In psychology, the doctoral degree meets this requirement, and this definition has been incorporated into State licensing laws and criteria used by third-party payers to recognize psychologists as eligible for reimbursement for their services.

- Training in mental health services—Only some of the basic subfields in psychology deal directly with the provision of health and mental health services. These are clinical, counseling, and school psychology. Although these three fields constitute those for which graduate-training programs are accredited, a host of other postgraduate specializations exist in which psychologists can earn additional credentials (e.g., forensic psychology, clinical neuropsychology, behavior therapy, family psychology, and clinical hypnosis). Both field of degree and current major field were considered in this analysis.

Reported counts or estimates of mental health service providers in psychology do vary as a result of the differential application of these criteria by the individual counters. Examples include the counts of licensed psychologists by State boards, which often fail to account for the fact that some individuals may be licensed in more than one State—a situation characteristic of large metropolitan areas such as Boston and New York, or areas that are densely populated and near State borders, such as the Baltimore-DC-Richmond metropolitan statistical area. Dual licensure (as much as 12 percent in some States) will be more common in such areas due to the proximity of States and the density of population. In addition, early versions of State licensing laws did not specify degree level as a major criterion, with the result that individuals with less than a doctoral degree may have been "grandfathered" in when new statutes were established.

Another problem with relying on counts of licensed psychologists provided by the States is that certain States do encourage individuals in other non-health-service psychological subfields (e.g., industrial/organizational and experimental) who provide other kinds of services (organizational consulting, research and statistical services) to get their licenses. These people should not be counted among the clinically trained.

The APA Member Survey. The majority of data on psychologists were derived from the APA Directory data base based on a survey of APA members. The survey is no longer conducted at 4-year intervals, but is sent out to members on a rolling basis as pieces of information change in their files (e.g., mailing address), or as new members join. It is intended to be a census of all APA members. Its purpose is twofold—to provide updated individual listings for publication and to describe and monitor changes in the characteristics of APA members. The next mailing to all members was scheduled for the summer of 2000.

Section I of the questionnaire asks for updated information, including current address, email, phone, and fax information, date of birth, field and year of highest degree, major field and specialty areas, position title, employer, and licensure status. Most of this information appears in the Directory listing. Section II asks for more detailed information on (1) the nature of the individual's employment, such as primary and secondary employment settings, and a ranking of the three top work activities that the individual performed for each setting; (2) the individual's involvement as a psychologist in specific activities during the past 3 years; and (3) additional demographic information such as race, ethnicity, and receipt of professional degrees in areas other than psychology.

Procedures for Identifying Health Service Providers in Psychology. As previously mentioned, individuals who are trained or employed in psychology, work in a wide range of subfields and career roles. Thus, the criteria for inclusion as an active health service provider in psychology were as follows: (1) the individual is currently a U.S. resident; (2) the individual had earned a doctoral degree;

(3) the individual indicated that he or she was licensed by one or more States for the independent practice of psychology; (4) the individual reported being employed in psychology; and (5) the individual was involved in the provision of health and mental health services.

Those who are clinically trained constitute a slightly larger group, including all of the above, as well as those who (1) were licensed and trained in a health service provider subfield, but who reported no current involvement in direct services, or (2) were not licensed but stated that they had received their doctorate in a practice-related subfield.

Given these criteria and the information available on members, attempts were made to derive estimates of the population of both clinically active and clinically trained personnel in psychology, rather than to simply report figures pertaining only to the APA membership. First, estimates were made of the number in the APA membership who were clinically trained, and what percentage of this group was clinically active. Practice Directorate files of State applications for Committee for the Advancement of Private Practice (CAPP) grants included counts of the numbers of licensed psychologists residing in each State making application. These numbers represent unduplicated counts of doctoral-level psychologists for those States. These numbers were available for 40 of the 51 States (including the District of Columbia), almost 78 percent.

The raw numbers of licensed psychologists reported by each State licensing board were used for the remaining 18 States. Each count was reduced by 12 percent, which is the representation of multiple licensure (licensed in more than one State) found among APA members. When the 12-percent reduction dropped a State below the APA's count of the numbers of clinically trained psychologists for that State, the APA number was used. Thus, the estimate of clinically trained psychologists used in this chapter is based on a deliberate blend of several data bases.

Using only APA counts of clinically trained psychologists would have yielded an unreasonably low count, one that was less than the number reported 2 years ago in an earlier version of this chapter. This did not make sense. Using only State licensing board raw counts of licensed psychologists would have resulted in what appeared to be an uncomfortably inflated count. This also did not make sense. There was little chance that psychology could have reached the State numbers based on the numbers currently graduating from the pipeline with doctoral degrees in appropriate fields in psychology.

These numbers represent estimates of the total numbers of clinically trained and clinically active psychologists overall, in each of the regions, and in each of the States. The percentages reported in the tables are based on the responses to the APA membership survey.

The number of clinically active psychologists in 1999 nationally was derived by using the percentage of clinically trained APA members who were clinically active. The number of clinically active psychologists in 1999 was estimated at just over 76 percent of the clinically trained, or 59,263.

Qualifications of the Data. As previously mentioned, the information reported in the tables was based on analyses of the APA membership coupled with State-by-State data on the population of licensed psychologists, including those who did not belong to the APA. This strategy assumes that those who are licensed, but do not belong to the APA, are similar to licensed psychologists who do belong to the APA. Previous research on both APA members and nonmembers indicated that the APA membership has been quite representative of doctoral-level health service providers in psychology with respect to demographic characteristics, education, and employment (Howard et al. 1986; Stapp, Tucker, and VandenBos 1985). Comparisons of member data with data from the National Science Foundation (NSF) also revealed similarities for doctoral-level psychologists. See NSF's biennial series of reports on the doctoral science and engineering population (Characteristics of Doctoral Scientists and Engineers in the United States, 1997, NSF 00-308) for these national data. The growth in the membership of APA who report being active direct service providers parallels the national data on growth in degree production in the relevant fields as well as growth in employment settings focusing on service provision.

At least 63,690 clinically trained doctoral-level psychologists were members of APA in 1999. This was 82 percent of the estimated 77,456 clinically trained psychologists identified nationally for this chapter. Using State numbers for licensed psychologists with no reduplication plus the numbers reported in the CAPP grant applications would have resulted in an overestimate given current graduation rates in the service provider subfields (about 2,800 per year) and the overall count we had provided in earlier years.

Because not all members responded to the APA membership survey, the extent to which the results are affected by nonresponse bias is unclear. Earlier comparisons of basic biographical information for

nonrespondents with the data for respondents did not indicate marked differences with respect to highest degree, sex, and age. Because a large proportion of members did not specify their race or ethnicity and because the proportions seem somewhat low given the proportions reported in other national data bases, we do urge caution in applying these data. Conclusions could not be developed for information on employment. Thus, for example, we cannot be sure whether psychologists in certain types of employment settings were less likely to respond.

Psychological personnel at the master's, specialist, and baccalaureate levels also work in the general medical and mental health specialty areas. These individuals were not included in our analysis, first because the data are based on APA membership, and this membership is not representative of those with less than a doctoral degree. Second, because the current licensing laws in most States require a doctorate in order to sit for licensure as a psychologist, this group is an increasingly small minority of psychologists qualified for the independent practice of psychology.

For additional information on the data presented in chapter 17 and on the characteristics of psychologists, please contact the Research Office, American Psychological Association, 750 First Street, NE, Washington, D.C., 20002, or call (202) 336-5980, visit the Web site at http://research.apa.org or e-mail at *research@apa.org*.

The 1994 American Psychiatric Association Membership Directory Survey

Scope of Survey. The APA membership directory was a full membership survey of 38,242 members. The primary purpose of the survey was to compile an updated directory of APA members, with a secondary purpose to gather data on psychiatrists' primary and secondary practice settings and professional activities.

Response Rate. Of the 38,242 members included in the study, 27,843 (72.8 percent) completed the survey. Of those who completed the survey, 20,579 provided data on their primary practice setting, while 14,773 provided data on their secondary employment setting.

Data Limitations. Because this survey did not include responses from nonmembers of APA, the setting data obtained from this population are not directly comparable with the 1982 APA PAS and the 1988–89 APA PAS setting estimates. Consequently, inferences and trends in work setting data cannot be directly drawn between these populations. Although this survey obtained a good response rate and included a very large number of respondents, the findings may be subject to some response bias.

Social Work

Data Collection for the National Association of Social Workers (NASW)

The data for NASW were collected from both applications for new membership and annual membership renewal forms. As the data are collected, they are entered into the membership data base on a continuous basis. Data exist for the large majority of the NASW membership, and all tables had less than 20 percent missing data. Tables are based on current membership information as of April 30, 1996.

The data collection forms ask for the highest degree awarded (either in social work or in another field), sex, and date of birth. Other questions request information about the following:

- *Ethnic* origin
- *Auspices* of primary and/or secondary jobs (auspices include such things as public, private, sectarian, etc.)
- *Function* on the job (primary and/or secondary), such as direct service, supervision, and research
- *Setting* of primary and/or secondary jobs, such as social service agency, private practice, hospital, and outpatient facility
- *Practice area* of primary and/or secondary jobs, such as children and youth, family services, mental health, school social work, alcohol/drug abuse, and services to the aged
- *Total years* of social work experience since first social work degree

The data were drawn from the 152,067 total NASW members, selecting the clinically trained as those with master's or doctoral degrees who were not retired. Clinically active social workers were the

subset that reported they were engaged in direct practice, supervision, or agency-based training, the last category representing less than 1 percent. It is critical to note that these numbers represent only NASW members and that the universe of social workers is two to three times larger. Compared to Census Bureau numbers, NASW has between 30 to 50 percent of the total number of trained social workers. Therefore, the numbers in the tables significantly understate the total numbers of trained social workers.

Psychiatric Nursing

This study uses a subset of the 1996 Division of Nursing's (DON) National Sample Survey of Registered Nurses data set. The methodology of this study has been extensively documented (DON 1997). Briefly, a complex stratified sampling design is used to randomly sample the population of registered nurses licensed in the United States. States are sampled at different rates to allow for State-level estimates. The disproportional stratified sampling methodology requires accounting for the design effect in analyses.

This subsample was based on the 29,766 respondents living and working in the United States. Requirements for sample selection included formal education as a clinical nurse specialist or nurse practitioner in psychiatric mental health nursing, with highest education in nursing being at either the master's or doctoral level; 194 nurses met these criteria. Further review showed that the DON had not classified three as advanced practice nurses. As master's education did not focus on a clinical practice area, these nurses were deleted, resulting in a sample size of 191. This is the sample used to determine general estimates on clinically trained psychiatric nurses. Of these, 173 were employed. This group was used to generate estimates on the employed subset of clinically trained psychiatric nurses. All estimates are reported for clinically trained nurses. Due to the small sample size, it would be difficult to get reliable estimates on the subgroup of clinically active nurses. It is estimated that there are 17,318 trained and 15,330 employed psychiatric nurses.

Analyses were weighted to the population using a standard statistical program for generating means and frequencies. Standard error estimation was conducted using the SUDANN software package to account for the study's design effect for selected variables.

Limitations of the study relate mainly to the small sample size. In addition, the number of settings variable reflects the number of nursing positions nurses hold. There is no information on settings of non-nursing positions. Nor is there any information on positions that include work in more than one setting.

Counseling

Counselors may be defined in a number of ways. The purpose of this report is to estimate the number of available counselors who have the training necessary to provide independent or team treatment of populations in need of therapeutic mental health intervention and prevention and who are credentialed to provide such treatment. Sources used in calculations are National Board for Certified Counselors (NBCC) *National Study of the Professional Counselor* (2000); NBCC *1998 State Counseling Licensure Board Survey*; United States Bureau of Census data (1999); American Counseling Association 2000 membership data; data base queries of NBCC; and *Counselor Preparation, 1999–2001: Programs, Faculty, Trends* 10th ed. (2000).

Most figures reflect a conservative estimate based on national certification, association membership, State licensure, and United States Bureau of Census data. These data inform the continued systematic collection of statistics about the counseling workforce. The collection of these data has reinforced the need for the counseling profession to collect systematic and equivalent data with other mental health professions.

Marriage and Family Therapy

Data Collection

The data for marriage and family therapy were collected from several sources: the Marriage and Family Therapist Practice Patterns Survey, the American Association for Marriage and Family Therapy (AAMFT) Membership Database, the Annual Report for Accredited Programs submitted to the Commission on Accreditation for Marriage and Family Therapy Education (COAMFTE), and data collected by AAMFT from State marriage and family therapy regulatory boards on the number of licensed or certified marriage and family therapists (MFTs).

The count of MFTs for each State and the United States was derived from data collected by AAMFT in 1995 from State marriage and family therapy regulatory boards on the number of licensed or certified MFTs. For those States that did not regulate MFTs in 1995, the count of clinical members from the AAMFT Membership Database was used.

The count for the U.S. total (46, 227) from table 3 was used for tables 1, 2, 4, 5, 6, and 7, with the data on the details of these tables coming from the Marriage and Family Therapist Practice Patterns Survey conducted by William J. Doherty of the Family Social Science Department of the University of Minnesota in the summer and fall of 1994 and reported by Doherty and Simmons (1996).

The data for table 8 are from the Annual Report for Accredited Programs submitted to COAMFTE and the count of associate members (postdegree supervision students in other accredited programs) and student members (predegree students in other accredited programs) from the AAMFT Membership Database.

The Marriage and Family Therapist Practice Patterns Survey

The Marriage and Family Therapist Practice Patterns Survey was commissioned by the AAMFT Research and Education Foundation and built upon an investigation of the clinical practice patterns of MFTs in Minnesota by Doherty and Simmons (1995). The survey consisted of three parts. Part I asked general questions about the respondent's demographic and educational background and practice setting, along with a series of questions about current caseload, types of problems seen and diagnoses used, types of therapy employed (individual, couple, family, group), areas of competency, and a variety of questions about reimbursement. Part I was intended to be completed with minimal reference to clinical records, and for some of the questions—such as frequency of presenting problems and diagnosis—the therapist was expected to estimate answers.

Part II of the survey asked for detailed information on the therapist's three most recently completed cases. A completed case was defined as one "where therapy has ended, at least for now, and no specific follow-up is scheduled." One-session assessments and consultations were excluded. Detailed information on presenting problems was sought, as well as diagnosis assigned, frequency of sessions, number of sessions, method of payment, presence of chronic illness or other health care problems, and other case information. A series of questions was also posed regarding the therapist's perceptions of the outcomes of treatment for a variety of areas of functional change in clients' lives. Data were requested on up to eight participating clients for each case. Client demographics were reported (age, gender, racial or ethnic background, education), as were client relationships (marital or committed partners, parent-child relationships). One item in Part II required coding of presenting problems, which therapists were asked to list in their own words. Therapists' responses were coded into more than 30 nonoverlapping categories.

Part III, completed anonymously by clients, included questions on their satisfaction with the services they received and with the functional outcomes of their treatment. For cases that primarily involved the treatment of a child, parents were asked to complete a child version of the outcome questionnaire. Therapists answered the same outcome questions that clients did. The client satisfaction measure was adapted from Attkisson and Zwick's (1982) eight-item Client Satisfaction Questionnaire, an instrument with established reliability and validity in the area of psychotherapy research. It uses a 4-point Likert scale with a range from "very dissatisfied" to "very satisfied." The client outcome measure developed for this study consists of nine health transition questions in which clients are asked to compare their current level of functioning in various life domains (such as overall health, emotional health, work, and family) with their level of functioning prior to starting therapy (Feinstein 1987). Each item included a 5-point Likert response scale ranging from "much worse" to "much better."

In August and September 1994, AAMFT clinical members in the participating States received a joint letter from their State leadership and volunteer coordinator outlining the challenges facing the practice and profession of marriage and family therapy at both the Federal and State levels. That letter also advised members about the practice patterns survey and encouraged maximum participation in the study.

The participating States were selected from from those State divisions of AAMFT that volunteered in response to a request for proposals distributed by the AAMFT Research and Education Foundation to all of its State and provincial divisions in the United States and Canada. The 15 participating States are Alabama, California, Colorado, Florida, Illinois, Massachusetts, Michigan, Mississippi, New

York, North Carolina, Ohio, Pennsylvania, Tennessee, Texas, and Wyoming. A random sample of 1,716 clinical members was drawn from a population of more than 8,600 clinical members in the 15 States. States with fewer AAMFT members were oversampled relative to larger States in order to provide State-level data as well as national data. Throughout the data collection period, therapists received letters from the volunteer coordinator and divisional leaders in each State encouraging them to participate in the study.

In September 1994, each therapist received a letter of invitation to participate in the study, along with the survey, from William J. Doherty, Ph.D., and Deborah S. Simmons at the University of Minnesota. A stamped return envelope, addressed to the volunteer coordinator in each State, was also enclosed. In addition, each member of the sample received stamped return envelopes, addressed to the researchers at the Family Social Science Department of the University of Minnesota, to be sent to clients whose cases were being reported on. Therapists were asked to complete and return the survey within 3 weeks of receiving it.

Volunteers in each State contacted the therapists by telephone within 2 weeks after the survey had been mailed to ensure that they had received the survey and to answer any questions. Of the 1,716 therapists in the sample, 178 were ineligible because they were deceased, had moved out of State, were no longer practicing marriage and family therapy, or were ill.

After 3 weeks, many of the volunteer coordinators contacted nonrespondents by letter, postcard, or telephone and often sent a second copy of the survey. Another round of follow-up phone calls was made by the volunteers in each State within a week after the reminder contact had been made to answer nonrespondents' questions and urge therapists to participate in the study. Finally, after the surveys were returned, many therapists in the sample received a telephone call from the volunteer coordinator to clarify responses or to request missing data.

The final response rate was 34.3 percent, or 526 of the eligible 1,538 therapists. This response rate is typical for questionnaires sent to professionals, and varied considerably among the States. The principle reason given for nonparticipation was being too busy to complete the lengthy questionnaire. All of the responding therapists completed Part I of the survey and 53.8 percent completed Part II, providing data on 850 cases. The response rate for clients was 62.3 percent. A State-by-State comparison of the major findings showed a pattern of similarity, irrespective of State response rate. The findings are quite similar to those of the Minnesota study, which had an 80-percent response rate.

The AAMFT Membership Database

Data for the AAMFT Membership Database are collected from both applications for new membership and from annual membership renewal forms. As the data are collected, they are entered into the membership data base on a continuous basis.

Members of AAMFT are coded in the membership data base according to their category of membership:

- Clinical Membership—persons who have completed a qualifying graduate degree in marriage and family therapy (or in a related mental health field and a substantially equivalent course of study) from a regionally accredited educational institution and have 2 years of postdegree supervised clinical experience in marriage and family therapy.

- Associate Members—persons who have completed a qualifying graduate degree in marriage and family therapy (or in a related mental health field and a substantially equivalent course of study) from a regionally accredited educational institution but have not yet completed 2 years of postdegree supervised clinical experience in marriage and family therapy. Associate Membership is limited to 5 years, since it is anticipated that Associate Members will advance to Clinical Membership.

- Student Membership—persons currently enrolled in a qualifying graduate program in marriage and family therapy (or in a related mental health field and a substantially equivalent course of study) in a regionally accredited educational institution or a COMAFTE-accredited graduate program or postdegree institute. Student Membership is limited to 5 years, since it is anticipated that Student Members will advance to Associate, then Clinical Membership.

- Affiliate Membership—members of allied professions and other persons interested in marriage and family therapy. Affiliate Members come from related fields such as family

medicine, family mediation, family policy, and research. The Affiliate Membership is a noncredentialing, nonevaluative, and nonvoting membership category.

COAMFTE Annual Report for Accredited Programs

Annually, the programs accredited by COAMFTE submit standard written reports concerning compliance with the accreditation standards, including, among other data, a list of all students currently enrolled in the marriage and family therapy program. Data reported include the student's name, year in program, gender, ethnicity, and academic background. Data on the number of students in each program were collated for table 8 from the most recent annual report of the accredited programs, which was either 1995 or 1994.

School Psychology

Who Is Counted as a School Psychologist?

In most States, professional school psychologists are certified to practice within school settings and nonschool settings by each State's department of education. Every State has a certification for school psychology; however, some States use more than one title for professionals qualified to be called school psychologists. State-by-State standards for certification and licensure are published by the National Association of School Psychologists (NASP) (1995). Forty-seven States (including the District of Columbia) require academic standards consistent with the Nationally Certified School Psychologist (NCSP) certification. One State, Hawaii, requires a doctorate to use the title. Three States require a master's degree with unspecified credit hours. All States require a supervised internship. Students graduating from NASP/National Council for Teacher Education-approved programs meet the NCSP credentialing standard and may receive the NCSP credential upon receiving a satisfactory score on the national examination. States that have upgraded their standards over the past 10 years have "grandparent" persons who do not meet the academic requirements of a 60-credit-hour master's or specialist degree, a 1,200-hour supervised internship, and other requirements noted in the body of the report.

Database

The data in this report are based on data gathered yearly by the U.S. Department of Education (USDOE) and found in its *Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act.* These data are required to be reported by each State education agency, which in turn has data reports from each local education agency. These data are required to be gathered to ensure that each school system is maintaining its effort to provide a "free and appropriate public education" to all children who are disabled and in need of special education and related services.

The data reported from each State education agency list as school psychologists only persons who are State certified or licensed. In fact, it considers person provisionally providing school psychological services under the category of unfilled positions.

NASP Membership Data

NASP total membership was 20,902 as of June 1998. NASP has several membership categories, of which three are critical to this report: regular, student, and retired.

Regular members must be one of the following:

- Currently credentialed and working as a school psychologist.
- Certified and working as a supervisor or consultant in school psychology.
- Primarily engaged in the training of school psychologists at a college or university.

Excluding international membership, NASP regular membership as of June 1998 was 15,008.

Student membership includes students enrolled half-time or more in programs leading to an advanced degree or post-master's certificate in school psychology or doctorate, as verified by their program advisor. Student membership as of June 1998 was 4,656.

Retired membership requires the retired school psychologist to have been a member for 5 consecutive years and retired from remunerative professional activity. Retired membership as of June 1998 was 737. It is presumed that these retired members are not clinically active in the profession of school psychology.

All regular and student members and all those holding an NCSP certificate must agree to abide by the NASP professional standards and code of ethics. By 1991, nearly 15,000 school psychologists had received the NCSP credential.

There are approximately 3,000 school psychologists certified as NCSP who are not members of NASP. As noted above, most State certification systems require the equivalent academic requirements of NCSP. Several States will now accept NCSP as the necessary documentation for State certification.

Data Reported in Tables

Each year, NASP requests that membership respond to a set of computer-recorded demographic questions, including age, sex, ethnicity, position, employment setting, salary, student service ratio, and years of experience. There is no obligation to respond to these requests, and more than 10 percent ignore all requests. Each of the 13 items is responded to at different rates, and therefore the accuracy of the data is unknown.

For example, only 13,827 responded to "employment setting," and only 9,634 responded to "years of experience." However, when the responses are compared to mailed random surveys carried out over the years (Curtis et al. in press; Fagan 1988; Reschly and Wilson 1992), the patterns are quite similar, giving a degree of assurance that these data can be applied to the general population of certified, employed, clinically active school psychologists reported by the USDOE.

To determine the 1994 number of school psychologists reported in table 1, the authors used the ratio of NASP members who are certified, including those who are university trainers and administrators, to those who are not so specified. This produced a ratio of 1 clinically active to 1.11 clinically trained. The number reported by the USDOE was then multiplied by that radio to secure the total of 22,214. This correction factor, based on more accurate data (Lund and Reschly 1998), replaces the 1.07:1 ratio applied to calculate the numbers reported in 1992. This 1.07:1 ratio was applied to USDOE data from 1988 for table 1 to provide some longitudinal reference consistent with other professions.

The data in tables 2, 4, 6, and 7 are based on ratios and percentages reported by NASP members' responses to the membership questionnaire applied, when appropriate, to the USDOE adjusted number. The data in table 3 are the State-by-State data reported for 1998, which are the best data that exist for school psychologists who are clinically active at the present time. Table 5 is based on the assumption that most school psychologists are limited to a single employment setting. This is generally the case. Since about 10 percent of school psychologists are licensed to practice outside the school setting, there may be a second setting for these professionals. However, NASP does not request any data on this factor. Therefore, "NA" is noted both for "two or more settings" and the "part-time" category.

Table 8 represents the number of school psychology students in programs approved by NASP/NCATE as reported by the Director of Certification from the NASP data base.

Qualifications of the Data

The USDOE data are a record of State-certified or licensed school psychologists reported for 1994–95 who serve children with disabilities in schools or school-related settings. These data are based on full-time equivalents rather than individuals. Therefore, there may be more individuals certified than this number. Furthermore, the data do not exclude some contracted persons. The data also may exclude school psychologists who do not provide services to children with disabilities under the Individuals with Disabilities Education Act. For example, school psychologists are employed in Head Start programs, which may be administered by another State agency. School psychologists serving under Part H, the infant and toddlers disability program, may not be included in this USDOE count. Finally, may States have school psychologists employed under State pupil services laws and under Title I of the Improving America's School Act of 1994.

Without referencing the USDOE data, Fagan and Sachs-Wise (1994) report a consensus figure of between 20,000 and 22,000 school psychologists for 1994. It may be that these numbers underrepresent the total clinically active (and, thus, clinically trained) population of school psychologists by as much as 5 to 10 percent. This underestimation is consistent with the findings of Lund and Reschly (1998).

Adjusting the USDOE data required application of membership percentages to those data and to data provided by Lund and Reschly (1998). Since the membership data are consistent with the data on a random sample of 6,470 school psychologists (Curtis et al. in press; Reschly and Wilson 1992), it may be assumed that the membership data can be generalized to the USDOE data without any known bias.

The growth in the USDOE numbers over the 7-year span of 1988 to 1995 is progressive, but not dramatic. The number of elementary and secondary students is growing, thus causing a shift in the ratio of professionals to population. Table 3 should be read with extreme caution. It is erroneous to perceive the State population as the potential service population for school psychologists. School psychologists serve children aged 5 through 18, in general, and a subset of children aged 0 through 21 who have, or are at risk of having, a disability. The *Digest of Educational Statistics* (U.S. Department of Education 1997) estimates that there are about 52.7 million children aged 6 to 17, or about 19.6 percent of the 268.8 million total population in 1998 (*Statistical Abstract of the United States,* U.S. Bureau of the Census 1997).

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