DISSERTATION

CHARACTERISTICS OF THE CHILD CLIENT: AN EXPLORATORY ANALYSIS OF A COMMUNITY MENTAL HEALTH CLINIC

Submitted by

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WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY SCOTT A. JENSEN ENTITLED CHARACTERISTICS OF THE CHILD CLIENT: AN EXPLORATORY ANALYSIS OF A COMMUNITY MENTAL HEALTH CLINIC BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT FOR DISSERTATION

CHARACTERISTICS OF THE CHILD CLIENT: AN EXPLORATORY ANALYSIS OF A COMMUNITY MENTAL HEALTH CLINIC

Though information regarding children's mental health is increasing, and we know that approximately 20% of children meet criteria for a mental disorder, little is known about the characteristics of the child client population at community mental health clinics. This study is an exploratory analysis of the demographic and treatment characteristics of the child client population at a psychology training clinic/community mental health center. Demographic and treatment information is presented and compared across various service categories as well as diagnostic categories. Comparisons between those served during the first six years and those served during the second six years of the study period are also made. Results are discussed in terms of generalizability of results as well as available information from the literature.

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CHAPTER 1

Introduction

Interest in children's mental health is increasing and has been the impetus for much recent research. Higher than expected levels of child psychopathology have been found, with between 16% and 21% of children ages 5-17 in the United States meeting criteria for mental or addictive disorders during any given year (Briggs-Gowan, Horwitz, Schwab-Stone, Leventhal, & Leaf, 2000; Flisher, Kramer, Grosser, Alegria, Bird, Bourdon, et al., 1997; Shaffer, Fisher, Dulcan, Davies, Placentini, Schwab-Stone, et al., 1996). It is estimated that 5% of the child population in the U.S. have extreme functional impairment as a result of their symptoms (Shaffer et al., 1996). Many more children are believed to have subsyndromal disorders placing them at risk for developing mental disorders later in life (Rotheram-Borus, 1997). While research is increasing our understanding of children's mental health, there is still much to be learned.

The most prevalent disorders among children are Anxiety Disorders (13% of the total child population), Disruptive Behavior Disorders (10% of the total child population), Mood Disorders (6% of the total child population), and Substance Use Disorders (2% of the total child population; Shaffer et al, 1996.) Though one in five children are at least mildly affected by mental illness, research suggests that few of these children and their families receive traditional mental health services. Flisher et al. (1997) found in their study that 20.9% of children and adolescents (9-17 years-old) were in need of mental

health services, as defined by the presence of a diagnosable psychiatric disorder with significant impairment in functioning. However, only 18.2% of those identified to have a mental health need actually received services, leaving 81.8% of those identified with an unmet mental health need (Flisher et al., 1997). Additionally Flisher et al. (1997) found that 2.7% of children received mental health services in the absence of need, almost as many of those with need who received mental health services (3.8% of the total sample).

Other research has found much higher mental health use rates by defining a broader perspective of mental health services to include schools, primary care physicians, and informal, or non-professional services in addition to traditional mental health services. Farmer, Stangl, Burns, Costello, and Angold (1999) studied mental health use for children and adolescents (9-13 years-old) over a one year period. They found that 20% met criteria for a psychiatric diagnosis, and 21.1% received some type of service to address a mental health problem. Farmer et al. (1999) reported that 8% of children in their sample received traditional mental health services, twice as many as reported by Flisher et al. (1997). The majority (12% of total population and 57.5% of those receiving services) of these services to children were provided through educational placements, usually a school counselor. Others received services through medical providers (4%, mostly primary care physicians), and from informal or non-professional sources (4%). Serious questions, however, have been raised (Rotherram-Borus, 1997) as to whether school services as defined in this study effectively meet the youth's mental health needs.

Several studies have examined barriers to treatment among children and differences between those who receive and do not receive services. Owens, Hoagwood, Horwitz, Leaf, Poduscka, Kellam et al. (2002) studied barriers to children's mental health

services. Results were based on information gathered from students who's parents had indicated a mental health need through interviews completed during the first and seventh grade as part of a school-based prevention project. The majority (85%) of participants were African-American students. Thirty-five percent of those indicating a mental health need also indicated at least one barrier to receiving mental health services. The most commonly reported barriers to receiving services were "thought problems not serious" (20.7%), "decided to handle problems on own" (17.2%), "not know where to go" (15.5%), "help too expensive" (10.3%), "lacked confidence in who recommended help" (10.3%), and "people trusted most did not recommend help" (10.3%; Owens et al., 2002, p. 733). It is important to note that these statistics do not reflect actual use of services; both those who received services and those who didn't reported barriers to service use.

In comparing those who did and did not receive mental health services, Flisher et al. (1997) found that African American youth were less likely than White, non-Hispanic and Hispanic youth to receive services when a need was present. They also found that after adjusting for sex, age, ethnicity, and site, several demographic variables, including the family being on public assistance, lack of health insurance, the presence of parental psychopathology and poor school grades, were associated with a child not receiving services. Beliefs about the effectiveness of professional mental health services (one of the larger barriers reported by Owens et al., 2002) were not significantly associated with receiving services. Regarding reported barriers, those not receiving services reported "youth refusing to go" (30.5%), "youth wanting to solve the problem on his/her own" (27.3%), "being unsure about where to go for help" (25.5%), "help being too expensive" (24.2%), and "concern about being hospitalized or taken away against parents' will"

(23.6%) as the most common barriers to receiving treatments (Flisher et al., 1997, p. 1151).

Farmer et al. (1999) found that being male, living in poverty, and having a parent with psychopathology increased the likelihood that a child would receive services. These findings seem to conflict with Flisher et al.'s (1997) findings that poverty (public assistance and lack of health insurance) and parental psychopathology decrease a child's likelihood of receiving services. It is possible that these differences result from Flisher et al. (1997) adjusting for sex, age, ethnicity and site. In a study of primary physician's referral's to mental health services, poverty was not correlated with talking to the primary care physician about mental health needs or being referred for such services (Briggs-Gowan, Horwitz, Schwab Stone, Leventhal, and Leaf, 2000). Financial stress, however, was correlated with speaking to the primary care physician about mental health needs in that same study. Overall, factors separating those who do and do not receive mental health services are still unclear, though it does appear that parental psychopathology, and family economic status play an important role.

Though some information is available on differences between children who do and do not receive mental health services, relatively little is known about the demographic, diagnostic, and other characteristics of children who receive services through mental health clinics. This information is critical to the understanding and improvement of treatments available for such individuals. Such information can assist in determining similarities and differences between prevalence rates and treatment rates of specific disorders. Thus far, no national information is available regarding demographics, diagnostics or other characteristics of children being treated in mental health centers.

UNOCCAP

In 1994 the National Institute of Mental Health recognized the importance of obtaining information on child client populations and began a multi-site pilot study on the Use, Needs, Outcomes, and Costs in Child and Adolescent Populations (UNOCCAP; National Institute of Mental Health, 1998). This project was terminated prior to its completion by NIMH after a review of the recommendations made by an Oversight Board appointed to review the study. The Oversight Board concluded that the original project was too broad in its scope to be effectively conducted as one project. The board identified a set of "Critical Questions" currently unanswered by the available data:

1. What are the frequencies of symptoms and impairment in U.S. children and adolescents?
    - How do these frequencies vary over time and with changing policies?
    - How do these frequencies vary across demographic factors such as age, socioeconomic status, location, gender, and ethnicity?
    - Which symptoms cluster to form patterns or diagnostic groups?
2. What is the service use associated with various symptoms and impairment?
    - How does service use change over time?
    - How does service use differ across demographic groups?
3. A. What are the costs of mental health services to youth in treatment?
    - How do costs vary by demographic groups?
    - How do costs vary by mental health problem?

    B. How does the structure of insurance benefits influence the use of services and the costs of care?

- What are the effects of managed care on service use and costs?
- What benefit packages are associated with variation in service use and costs?
- How do parity laws affect the cost of treating children?

4. What are the paths into and out of disorder and into and out of service use?
   - How do these paths vary across different demographic groups?
   - Are the paths different for different disorder?
5. Which services are effective for which children and adolescents?
   - How does effectiveness vary over demographic groups?
   - Who are the children who need, but do not receive, effective services?
   - What are the costs of effective services?
   - How does quality vary across settings and provider characteristics?

   (NIMH, 1998, p.3)

Available Data on Children's Mental Health Clinics

In an extensive search of the literature, only one study providing extensive information on client characteristics like those recommended by NIMH (1998) was found. Mordock (1996) published client demographic, diagnostic and other information on the child clients at three clinics in Dutchess County, New York. These data were collected over three years (1989-1991). Mordock (1996) found that in two of the three clinics, client's ethnicity reflected those found in the general populations, with ethnic minorities being over-represented in the third clinic. All three clinics served an over-representation of low income families, with 40% to 66% of clients served being

Medicaid eligible, compared to 4% to 24% of the town populations being Medicaid eligible. Only 27% of the children served lived with both biological parents. The most common referral source was family or self (34-45%), followed by public schools (19-34%), public health or welfare agencies (12-17%), and courts (10%). Age at admission revealed a bi-modal distribution with 7,8 and 12 years being the most frequent age of children when first receiving services (Mordoch, 1996).

Fifty-three percent of those receiving services were diagnosed with Adjustment Reactions (Mordoch, 1996). Other common diagnosis included Depression (11.3%), Oppositional Defiant (11%), Impulse Control Disorder (3.7%), Anxiety Disorders (3%), and Attention Deficit Disorder (3%). Nine percent of children receiving services were not diagnosed, 2% received V-codes, and 4% received other diagnosis. Treatment duration varied by disorder, being on average 6 months for those diagnosed with adjustment disorder, 8 months for those diagnosed with depression, 9 months for those with a disorder manifesting in infancy/childhood/adolescence (such as ADHD, Pervasive Developmental Disorders, and Elimination Disorders), and 10 months for those diagnosed with parent-child problem. Thirty-seven percent of those diagnosed with adjustment disorder terminated treatment prior to six sessions compared to only 19% of those diagnosed with a disorder manifesting in infancy/childhood/adolescence (Mordoch, 1996).

Clearly there is a need for more information on client characteristics for agencies providing mental health services for children. Thus far, no national information and little individual clinic information is available on child client characteristics. Were national information available, it is likely that data from sliding fee scale agencies, such as those

commonly found associated with Psychology Training Clinics, would differ from other child clinics. Though some information is available from psychology training clinics, the information focuses on adult clients (Todd, Kurcjas, and Gloster, 1994, Horton and Rosén, 2000 and 2001).

Present Study

The purpose of the present study was to provide descriptive information regarding the demographic and treatment characteristics of child clients receiving mental health services through a psychology training agency/community mental health clinic. Given the exploratory nature of the present study, and the lack of available information in this area, the following research questions were explored: 1) What are the demographic characteristics of the child client population at a sliding fee psychology training/community mental health clinic?, 2) Do children who receive different mental health services such as therapy, diagnostic testing, or a combination of services differ in demographic or treatment characteristics?, 3) Within each service category, do demographic or other treatment characteristics differ by diagnostic category?, 4) Are there differences in demographic and treatment characteristics between clients served during the first six years (1991-1996) and the second six years (1997-2002) of the study period?

CHAPTER 2

Method

Participants

Participants in the study included all child clients (ages 1-17) who received services from 1991 to 2002 through the Psychological Services Center (PSC). The agency serves as a community mental health center providing sliding fee mental health services to a community of approximately 130,000 individuals in the Western United States. The agency provides diagnostic testing and individual, couples, and group psychotherapy services for children, adolescents, adults, families, and couples. PSC is a psychology training agency, which is a service, research, and training facility of a Counseling Psychology Doctoral Program in the Department of Psychology. Fees for service are determined by a sliding scale based on income and family size. The agency does not contract with any insurance providers, and if clients have insurance they submit their own claim forms. The university provides services for students through a separate counseling center, so the client population is primarily from the community and neighboring towns, with some students from the university and local community college.

All clients are seen by advanced doctoral students in the Counseling Psychology Ph.D. Program. Students begin seeing clients at PSC at the beginning of their third year, having already had a minimum of one year experience seeing clients. The clinic is staffed by a director, a graduate student assistant director, an administrative assistant/office

manager, the graduate student therapists, faculty supervisors, and a pat-time undergraduate work study. During an average year there are ten to fifteen student therapists and six to nine faculty supervisors. A full-time or adjunct faculty member, who is a doctoral level psychologist, supervises each case. Student therapists are required to complete at least 120 direct client contact hours for the academic year. Horton and Rosén (2000, 2001) have previously documented that this training agency appears similar to other training agencies throughout the United States.

All clients at the psychology training agency receive at least one of two types of service (therapy or diagnostic testing) or a combination of both. Therapy consists of periodic visits (usually once a week) with a therapist with the intent to accomplish established therapeutic goals, and was accomplished individually, with a group, or with a family. Diagnostic testing consists of the administration and interpretation of one or more assessment tools/clinical interviews with the intent to provide appropriate diagnoses and/or treatment recommendations.

Procedure

As a regular procedure at intake, clients filled out demographic, background, and parent information. Student therapists assessed and documented diagnostic information and other treatment variables at the time of intake and termination. Demographic and treatment information were maintained in client files. Client characteristics used for this study were collected from information available in clients files and included the following:

Demographic Information: Clients' sex, age at intake, ethnicity, family income, child's living arrangement, and parent demographic information (education and marital status) were collected.

Treatment Information: Types of services received, date of intake, date of termination, length of treatment, number of treatment sessions, source of referral, intake diagnosis (Axis I, II, and V), termination diagnosis (Axis I, II, and V), and testing materials administered were collected.

Diagnoses were made based on the criteria in the Diagnostic and Statistical Manual of Mental Disorders, Third Edition – Revised, Fourth Edition, and Fourth Edition – Text Revision (DSM-III-R, DSM-IV, and DSM-IV-TR; American Psychiatric Association, 1987, 1994, 2000). Axis I is used for reporting clinical disorders and other conditions that are a focus of clinical attention. Axis II is used for reporting personality disorders and/or mental retardation. Axis V is used for reporting the client's global assessment of functioning (GAF), which is the clinician's judgment of the clients overall level of functioning. GAF scores are based on a scale from 1 to 100 with higher scores indicating healthier levels of psychological, social, and occupational functioning.

Statistical Analyses

First, descriptive statistics for the demographic characteristics were performed for the whole sample and compared to census data when available. Second, inferential statistics were performed to compare the three service categories (therapy, testing, and multiple services) on demographic and treatment characteristics. Next, descriptive and inferential statistics were performed to provide information on characteristics of each service category, as well as to compare variables across diagnostic category within each

service category. Finally, clients served during the first six year period (1991-1996) studied were compared to those seen over the second six year period (1997-2002) to determine if differences that could be considered trends existed between the two groups.

Chi square tests of association were used to determine differences between the three service categories, diagnostic categories within each service category, and the two six year time periods on demographic (except for age) and treatment characteristics (except for length of treatment and number of sessions). Adjusted residuals (Haberman, 1978) were reviewed for each chi-square statistic to determine which variables accounted for the differences between categories. Effect sizes are for the chi-square statistic are reported using Cramer's V statistic: .1 -.30, small effect; .30 - .50, moderate effect; and .50 – 1.00, large effect (Cohen, 1998).

Univariate Analysis of Variance (ANOVA) was used to compare differences in age, length of treatment, and number of sessions between the various comparison groups. Effect sizes were measured using the eta-squared statistic and effect sizes can be interpreted as follows: .0 - .06, small effect; .06-.14, moderate effect; and .14-1.00 large effect (Cohen, 1998).

Participants were compared across 11 demographic characteristics which included: Gender, Age, Family Size, Child Living Arrangement, Family Income, Referral Source, Ethnicity, Female Parent Education, Female Parent Marital Status, Male Parent Education, and Male Parent Marital Status. To account for the increased family wise error rate, the formula $\alpha_o = 1 - (1 - \alpha_i)^t$, where $\alpha_i = .05$, $t = 11$ (# of tests; Hays, 1994) was used to calculate an appropriate alpha level. Thus, $\alpha_o = .0045$ was used as the alpha level for all analysis involving demographic variables.

Participants were also compared across eight treatment characteristics including length of treatment, number of sessions, Axis I diagnosis at intake and termination, Axis II diagnosis at intake and termination, and Axis V diagnosis at intake and termination. The critical alpha value used in all analysis of treatment characteristics was $\alpha_o = .0064$. Because there are over 300 possible Axis I diagnoses, broader diagnostic categories were used for the purposes of this study. These categories closely follow those used in the DSM-IV-TR (American Psychiatric Association, 2000).

The large number of possible categories within several variables required the combining of like categories for most variables. Each case in which this has happened is noted in the results.

CHAPTER 3

Results

Results are presented in the following format: First, demographic information for all clients seen through the clinic will be presented. Then, comparisons between the three service categories will be made across demographic and treatment variables. Demographic and treatment characteristics within each type of service will also be presented. Next, comparisons will be made between diagnostic categories across demographic and treatment characteristics. Finally, demographic and treatment characteristics will be compared between the first six years (1991-1996) and the second six years (1997-2002) of the study period.

Demographic Characteristics of All Child Clients

A total of 355 child clients were seen at PSC between 1991 and 2002 with 103 clients receiving psychotherapy only (29.0%), 215 clients receiving diagnostic testing only (60.6%), and 37 clients receiving multiple services (therapy and testing, recurrent therapy, or recurrent therapy and/or testing; 10.4%). Sixty-five percent of all clients were male. The average client age was 9.96 years (median = 10 years) and average grade was 4.46 grade (median = 4^{th} grade). Though only 12 clients were ages 3 and under, clients were well distributed across all ages between 4 and 17. The most common age (mode) of children served was 9 years (N = 44), and at least 16 and not more than 36 children were served for each age between 4 and 17.

Average family size was 3.97 individuals, more than 50% larger than the average family (2.52 individuals) in the county where the clinic resides (U.S. Census Bureau, 2000). Family size of 86% of all clients was between 2 and 5 individuals. Forty-two percent of children lived with both biological parents, 28.5% lived with only the female parent, 11.2% lived with foster parents, 8.5% lived with their biological mother and a step parent, and the remaining 9.8% lived in a variety of other arrangements (see Table 1).

The large majority of clients were identified by parents as White, non-Hispanic (80.6%), with 11.0% identified as Hispanic and small numbers of other ethnicities representing the remaining 8% (see Table 2). This data suggests that the child client population at the clinic is slightly more ethnically diverse than is the county in which the clinic is located (87.5% White, non-Hispanic and 8.3% Hispanic; US. Census Bureau, 2000).

Average client family income was between $20,000 and $29,000 compared to a county average of $48,655 (U.S. Census Bureau, 2000; see Table 3 for more information on family income). Clients were referred from a variety of sources including a friend or relative (31.3%), psychologists/psychiatrists (13.1%), self-referred (12.8%), schools (12.5%), social service agencies (11.8%), physicians (7.7%), and 10.8% of referrals coming from other or multiple sources (see Table 4).

Information on parental education was available on 68.5% of female parents and 53.5% of male parents. Of those parents who reported education level, the majority had at least some college education (79.5% of female parents and 75.4% of male parents), with 37.1% of female parents and 44.1% of male parents having a 4-year or graduate

degree (see Table 5). Approximately 40% of county residents have at least a college degree (U.S. Census Bureau, 2000).

Information on parental marital status was available for 74.9% of female parents and 52.7% of male parents. For those who reported marital status, fathers more often reported being married (82.9%) than did mothers (62%). This difference may be due to the difference in reporting rates and may not reflect an actual difference in marital status between male and female parents.

Comparison of Service Categories

Three service categories (therapy only, testing only, or multiple services) were compared across 11 demographic variables: Gender, Age, Family Size, Child Living Arrangment, Family Income, Referral Source, Ethnicity, Female Parent Education, Female Parent Marital Status, Male Parent Education, and Male Parent Marital Status. The group that received multiple services did not differ significantly from either the therapy group or testing group on any of the demographic variables. The therapy and testing groups differed significantly in child living status ($\chi^2 = 24.48, p < .0045, Vc = .31$) and family income ($\chi^2 = 22.38, p < .0045, V = .31$), with moderate effect sizes. Adjusted residuals suggested that the greater likelihood of therapy clients to be living with only one parent and their lesser likelihood of being in foster care, in comparison to the testing group, accounted for differences in child living status (see Table 7). Average family income was lower for those receiving therapy only (between $15,000 and $19,999) than for those receiving diagnostic testing only (between $30,000 and $39,000; see Table 8).

The three service categories were also compared across eight treatment variables: length of treatment, number of sessions, Axis I diagnosis at intake and termination, Axis

II diagnosis at intake and termination, and Axis V diagnosis at intake and termination. The multiple services category did not differ significantly from the therapy only group for any treatment variables. The three groups differed significantly in treatment length (F (2,402) = 16.24, $p < .0064$, $eta^2 = .07$) and number of sessions (F (2,331) = 19.88, $p < .0064$ $eta^2 = .11$), with moderate effect sizes, but not on any of the other treatment variables. Both effects are accounted for by the lower treatment length and number of sessions by the receiving diagnostic testing ($M = 71.5$ days and $M = 4.57$ sessions) in comparison to those receiving multiple services and therapy ($M = 120.01$ days and $M = 8.84$ sessions; and $M = 160.42$ days and $M = 9.25$ sessions).

Treatment Characteristics for Therapy Only Category

A total of 103 clients were seen for psychotherapy only. Nineteen clients (18.4%) were only seen for an initial intake session. The most therapy sessions provided for any one client was 37. Including those who came for only one session, the average client received a median of 6 sessions of therapy over a period of approximately 2.5 months (median). Excluding those who came only for an initial intake session, clients received a median of 8 sessions over a median of 4 months. Diagnostic information at the time of intake was available for 61.2% ($N = 63$) of clients receiving psychotherapy. The two most common diagnoses at time of intake were Attention Deficit and Disruptive Behavior Disorders (25.7%) and Parent-Child Relational Problems (21.8%; see Table 9). Of the 84 clients that participated in more than one session of therapy, 76.2% received a diagnosis at termination. Again the most common diagnoses were Attention Deficit and Disruptive Behavior Disorders (32.9%) and Parent-Child Relational Problems (19.0%; see Table 10).

Axis II diagnoses was coded for 70.9% (N = 73) of clients at the time of intake. The vast majority of clients were given No Diagnosis (41.1%) or Diagnosis Deferred (50.7%). Four clients were diagnosed with Mild Mental Retardation (5.5%) and two clients with Moderate Mental Retardation (2.7%). Similarly, at termination the majority of clients were given No Diagnosis (43.8%) or Diagnosis Deferred (50.8%) on Axis II. One client was diagnosed with Avoidant Personality Disorder (1.8%), one client with Mild Mental Retardation (1.8%), and one client with Moderate Mental Retardation (1.8%).

The average score for Global Assessment of Functioning (GAF) was 58.59 (N=70) at intake and 63.28 (N= 60) at termination. Average increase in GAF from intake to termination was 5.60 (N= 47). The minimum change in GAF was –15 and the maximum was 39. Nearly half (21) did not change in GAF score from intake to termination. There was a small correlation between number of sessions and increase in GAF ($N = 47, r = .30, p < .05$)

The low N within most diagnostic categories required the combination of categories for the comparison of demographic and treatment variables across diagnoses to three groups: Attention Deficit and Disruptive Behavior Disorders, Parent-Child Relational Problem, and Other. The three groups differed significantly in Female Parent Marital Status ($\chi^2 = 25.60, p < .0045, V = .29$), with a small to moderate effect size, but in no other demographic or treatment variables. Adjusted residuals suggested that the difference between groups in Female Parent Marital Status was accounted for by the greater likelihood of the female parents of those diagnosed with Parent-Child Relational Problem to be separated and lesser likelihood to be married in comparison to the other

two diagnoses (see Table 12). Information of treatment length and number of sessions by Diagnosis can be found in Tables 13,14, 15, and 16.

The most commonly administered assessment tool for those in therapy only was the Symptoms Checklist –90-R (45%; Derogatis, 1994), which was routinely given to adolescents and adults at intake. Other commonly administered assessment tools included: the Behavioral Assessment System for Children – Parent Rating Scale (23%, Reynolds and Kamphaus, 1992), the Disruptive Behavior Rating Scale – Home Version (20%; Barkley and Murphy, 1998), and the Conners' Parent Rating Scale – Revised (17%; Conners, 1997; see Table 17).

Treatment Characteristics for the Testing Only Category

A total of 215 clients were seen for psychological/diagnostic testing only, of which 17.2% ($N = 37$) did not return to complete the testing. Excluding those that did not return after the initial request for testing, the median length of time for completion of diagnostic testing was 8.5 weeks. Information on diagnosis was available for 94.9% (N = 169) of those that completed testing. The five most common diagnoses were Attention Deficit and Disruptive Behavior Disorders (61.5%), Learning Disorders (18.3%), Other Conditions that are a Focus of Clinical Attention (14.8), Parent-Child Relational Problems (11.8%), and Mood Disorders (11.2%; see Tables 18 and 19). The majority of clients were given no diagnosis (64.8%) or Diagnosis Deferred (30.2%) on Axis II. Three individuals were diagnosed with Severe Mental Retardation (1.9%), two individuals with Mild Mental Retardation (1.3%), and one individual each was diagnosed with Moderate Mental Retardation (.6%), Severe Mental Retardation (.6%), and Mental Retardation,

Specificity Unknown (.6%). Average GAF was 61.12 (median = 60) with a minimum of 35 and a maximum of 92.

Diagnoses were combined into six diagnostic categories in order to compare differences in demographic and treatment variables across diagnoses: Attention Deficit and Disruptive Behavior Disorders, Learning Disorders, Other Conditions that are a Focus of Clinical Attention, Parent-Child Relational Problems, Mood Disorders, and Other Diagnoses. Participants from each diagnostic category differed significantly in Child Living Arrangement ($\chi^2 = 57.17, p < .0045, V = .11$), Gender ($\chi^2 = 18.37, p < .0045, V = .14$), and Referral Source ($\chi^2 = 55.41, p < .0045, V = .21$), with small effect sizes. Adjusted Residuals suggested that the differences in Living Status were accounted for by several factors including the lesser likelihood of children with Attention Deficit and Disruptive Behavior Disorders to be living with both parents, the greater likelihood of children with Learning Disorders to be living with both parents, the greater likelihood of children with Attention Deficit and Disruptive Behavior Disorders and Other Diagnoses to be living with foster parents, and the greater likelihood of children with Attention Deficit and Disruptive Behavior Disorders to be living with their mother and a step parent.

Adjusted Residuals suggested that the differences between diagnostic categories in Gender were accounted for by the greater likelihood of those diagnosed with Attention Deficit and Disruptive Behavior Disorders to be male (approximately 3 to 1) in comparison to the other groups. The differences between diagnostic categories in Referral Source resulted from the greater likelihood of children with a Attention Deficit and Disruptive Behavior Disorder to be referred by physicians and schools, the greater

likelihood of children with a Learning Disorder to be referred by a psychologist/psychiatrist, and the greater likelihood of those with Other Conditions that are a Focus of Clinical Attention and Other Diagnoses to be self referred.

The average number of assessment tools administered was 8.37 with the minimum being 0 and the maximum being 23. The most commonly administered assessment tools were the Behavioral Assessment System for Children –Parent Rating Scales (57.9%; Reynolds and Kamphaus, 1992), the Weschler Intelligence Scales for Children (50.6%; Weschler, 1994), the Conners' Parent Rating Scale (46.1%; Conners, 1997), the Behavioral Assessment System for Children – TRS (44.4%; Reynolds and Kamphaus, 1992), the Disruptive Behavior Rating Scale – Home Version (43.3%; Barkley and Murpy, 1998), the Disruptive Behavior Rating Scale – School Version (38.8%; Barkley and Murphy, 1998), the Woodcock Johnson Test of Achievement (38.8%; McGrew and Woodcock, 2001), and the Conners' Teacher Rating Scale (38.2%; Conners, 1997; see Table 20).

Treatment Characteristics for Multiple Services Category

Of the 37 clients who received multiple services, 17 received testing and therapy (45.9%), 10 received therapy multiple times (27.1%), 7 received testing once and therapy multiple times (18.9%), and 3 received diagnostic testing two or more times (8.1%). The most common diagnoses at intake were Disruptive Behavior Disorders (25.0%), Parent-Child Relational Problem (16.7), and No Diagnosis/Diagnosis Deferred (16.7; see Table 20). The most common diagnoses at termination were Disruptive Behavior Disorders (25.7%), Other Conditions that are a Focus of Clinical Attention (10.2%), Depressive Disorders (10.2%).

Comparison of Client Characteristics by Year in Treatment

Almost twice as many child clients were seen in the second six years, 1997-2002 (234), than were seen in the first six years 1991-1996 (121). The two groups differed significantly in age ($F = 7.89$, $p < .004$, $eta^2 = .02$), but with a small effect size. Average age for the first six year period ($M = 10.67$ years) was higher than for the last six year period ($M = 9.72$ years). The two groups differed significantly in Axis II Diagnosis at termination ($\chi^2 = 31.94$, $p < .004$, $Vc = .27$), but not on Axis I diagnosis at intake or termination, Axis II diagnosis at intake, or Axis V diagnosis at intake or termination. Differences between the two sets of years in Axis II diagnosis at termination was due to the greater likelihood of individuals to be diagnosed with some level of Mental Retardation during the first six years in comparison to the last six years.

Chapter 4

Discussion

The objective of the current study was to provide initial information on the characteristics of children who accessed services through a community mental health clinic. The results are discussed in terms of their generalizeability and other research that supports or conflicts with the results of the present study.

Demographic Characteristics

Sixty five percent of clients were males. Clients were fairly well distributed across all ages excluding children three years old and under. This would suggest that there is not one age, or set of ages at which children are more likely to seek mental health services. Some research has suggested that males are more likely to experience psychopathology at earlier ages than are females (Mash and Dozois, 1996), but gender was evenly distributed across age in the present client sample, suggesting a lack of gender-age interaction among those who seek treatment.

While the client population was slightly more ethnically diverse than was the general population, the relative uniformity of the general population and the small difference in the ethnicity of the child client population make generalizations about the greater likelihood of ethnic minorities to seek services difficult. In fact, since ethnic minorities are more likely to be have lower income, and the clinic studied is organized to serve individuals and families with lower incomes, the statistics may actually represent a

lesser likelihood for ethnic minorities to seek psychological services for their children. Mordoch (1996), however, similarly found that ethnic minorities were overrepresented in the one clinic in which they differed from the general population. The lower family income in comparison to the general population found in this study was expected due to the target population of the clinic (lower income families).

Fifty-two percent of clients lived in two parent families (42% with both biological parents). This is lower than the national average of 69% (U.S. Census Bureau, 2001). This lower percentage is consistent with Mordoch's (1996) finding that only 27% of child clients lived with both biological parents. Given the increased risk for psychopathology in single parent families (Gotlib and Avison, 1994), this lower percentage of children in two parent households would likely be expected in mental health treatment settings. The high percentage of children living in foster care (11.2%) is also likely a characteristic found in most child mental health settings.

The increased family size in comparison to the general population is likely due, at least in part to the fact that all families served had at least one child (the client) which automatically raises the average family size. Information on parental education was fairly similar to the client population.

Referral source patterns were similar to those reported by Murdoch (1996) in that around 40% of clients are self referred or referred by a friend or relative. Other common referral sources include schools, social service agencies, and other mental health professionals.

Service type categories differed from each other in demographic variables in only two significant ways: Child Living Arrangement and Family Income. Those receiving

diagnostic testing were more likely to live with both parents and to have higher family income. The increased family income could be a result of the reputation of the clinic for conducting thorough diagnostic testing and the possible draw to high income families to the clinic for that purpose. Two parent households are likely to have higher income, and this difference may be due to its correlation with family income.

Treatment Characteristics

Total Client Population - Over 60% of child clients received diagnostic testing without further services. No information could be found in the scientific literature on percentages of child clients who receive various services, and thus it is unknown how well this percentage generalizes to other clinics. A few characteristics specific to the clinic studied may suggest that this is a higher percentage than would be found in most clinics. The director of the clinic and many of the therapists who serve child clients have connections with the local school district and their ability to connect clients with the schools to receive services and the likelihood of schools to refer children for testing purposes may increase the percentage of clients seen only for diagnostic testing.

As would be expected, those receiving diagnostic testing were seen for a shorter period of time and for fewer sessions than were the other two groups. This finding was expected given the more terminal nature of diagnostic testing in comparison with psychotherapy. This difference would likely be found in most treatment settings.

Therapy Only – Clients averaged approximately 8 sessions over a 2 and 1/2 months period. This average length of treatment and number of sessions is lower than was reported by Mordock (1996), and may reflect the more recent emphasis on brief treatment as a result of managed care. Eighteen percent of clients did not return after the

first session. The most common diagnoses were Attention Deficit and Disruptive Behavior Disorders (25.7 - 32.9%) and Parent Child Relational Problems (19.0 - 21.8%). These results differ from those presented by Mordock (1996) in which aver half of clients were diagnosed with an Adjustment Disorder, and only 17.3% of clients were diagnosed with an Attention Deficit and Disruptive Behavior Disorder. This difference may be the result of changes in diagnostic trends over time. Results also differ, however, with the estimates of disorders in the overall child population, in which Anxiety Disorders have been found to be the most prevalent, with 13% of children meeting criteria for an Anxiety Disorder (Shaffer et al., 1996). Only between 2.5% and 4.2% of the children seen over the 12 year period of this study were diagnosed with an Anxiety disorder suggesting individuals with Anxiety Disorders are likely underrepresented in child mental health clinics. Children with Attention Deficit and Disruptive Behavior Disorders appear to be overrepresented in a child mental health clinic given that between 25% and 61.5% of clients were diagnosed with an Attention Deficit and Disruptive Behavior Disorder in comparison to the 10% prevalence rate among all children (Shaffer et al., 1996).

Axis II disorders were relatively uncommon among the present sample, with only between 5.4% and 8.2% of clients being diagnosed with Mental Retardation or a Personality Disorder. Average GAF scores suggest that clients are experiencing a moderate level of symptoms. The average increase in GAF from intake to termination is low (5.6) suggesting either only small improvement as a result of therapy, or the failure by the therapist to appropriately document change as a result of therapy on the GAF scale (this conclusion is supported by the fact that almost half of clients' GAF scores did not change).

Those diagnosed with a Parent-Child Relational Problem were more likely to live with non-married mothers. No other demographic differences existed between diagnostic categories. The wide variance in length of treatment within each diagnostic category and the lack of differences between diagnostic categories may be the result of the training nature of the clinic.

Testing Only – The attrition rate for testing was similar to that for therapy in that 17.2% of clients did not return after the initial session. Though treatment length was lower than that of therapy clients, the average of 8 weeks for completion of each diagnostic evaluation is longer than would likely be expected in a non-training clinic. The length of time for completion of testing is increased by the possible use of additional tests as part of training, and the need for supervisors to edit reports, thus lengthening the time between completion of testing and feedback to the client.

Attention Deficit and Disruptive Behavior Disorders were again the most common Diagnosis, accounting for over half of the diagnoses provided (61.5%). Other common diagnoses included Learning Disorders, V-codes, and Depressive Disorders. Again, Axis II diagnoses were rare, with only 5% of clients being diagnosed with Mental Retardation or Personality Disorders.

Those diagnosed with Attention Deficit and Disruptive Behavior Disorders were more likely to live with single parents or in foster care, be male, and be referred by physicians and schools. Though these individuals were more likely to be male (3 to 1), previous research has shown that differences in gender to be much higher among clinic-referred individuals: 9 to 1 (Barkley, 1998). Those diagnosed with Learning Disorders were more likely to live with two parents and to be referred by

psychologists/psychiatrists. Those diagnosed with Other Conditions that are a Focus of Clinical Attention were more likely to be self-referred. The group that differed the most from the others was those diagnosed with Attention Deficit and Disruptive Behavior Disorders.

The use of over 8 assessment tools per diagnostic testing is likely a result of the training clinic. Diagnostic testing done in other agencies might be expected to use less tools, with the intent to complete testing in a more efficient, cost effective manner. The most commonly used assessment tools were likely related to the high prevalence of Attention Deficit and Disruptive Behavior Disorders in that six of the top eight most used tools were behavior rating scales.

Changes/Trends Over Time

The most significant difference between the two time periods (1991-1996 and 1997-2002) was that twice as many clients were seen during the second time period. Average clients age was slightly younger during the second six years. There were no significant differences in Axis I diagnoses between the two groups. A greater percentage of clients were diagnosed with Mental Retardation during the first six year period in comparison to the second.

Conclusions

The results of this exploratory analysis of child clients at a community mental health center have provided some understanding of child client demographic and treatment characteristics. Unfortunately, the present study is limited by the fact that only one clinic was examined, and little information is available on the generalizeability of the findings. The following characteristics appear to be most salient and deserve further

exploration: 1) Do child clients seeking services through mental health clinics differ in ethnic makeup from the general population? 2) Are children who seek mental health services more likely to live in single-parent homes? 3) Is average family size greater for children seeking mental health services than for children not in need of mental health services? 4) What leads to the overrepresentation of children with Attention Deficit and Disruptive Behavior Disorders and the underrepresentation of children with Anxiety Disorders in the mental health setting? 5) Do a majority of children seeking mental health services receive diagnostic testing without psychotherapy? 6) What is the average length of treatment and does it differ by diagnoses? 7) Are Attention Deficit and Disruptive Behavior Disorders and Parent-Child Relational Problems the most common diagnoses in child mental health clinics, and if so, why are children with these diagnoses most likely to seek treatment? 8) Is GAF a useful measure of client improvement? 9) Is there a greater likelihood for children diagnosed with Attention Deficit and Disruptive Behavior Disorders to come from single-parent families, to be male, and to be referred by schools? and 10) Is the doubling in number of child clients receiving services over the past six years in comparison to the previous six years consistent with trends in other mental health clinics?

Much more research is necessary to begin establishing reliable norms of child client characteristics that can then be used to improve treatment services and training in serving child clients.

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Appendix A

Table 1.

Child Living Arrangement for 340 of 355 Child Clients

Who the child was living with	N	Percentage
Both Biological Parents	143	42.0
Birth Father Only	11	3.2
Birth Mother Only	93	27.3
Birth Father and Step Parent	5	1.5
Birth Mother and Step Parent	29	8.5
Birth Mother and Grandparents	4	1.2
Foster Parents/Group Home	38	11.2
Other Relative	6	1.8
Split Custody Between Parents	2	.6
Other	9	2.7
Total	340	100

Table 2.

Ethnicity for 345 of 355 Child Clients

Ethnicity	N	Percentage
White/Non-Hispanic	278	80.6
Hispanic	38	11
White/African-American	6	1.7
White/Hispanic	4	1.2
White/American Indian	1	.3
White/Asian-American	1	.3
Asian-American	3	.9
African-American	5	1.4
Hispanic/American Indian	3	.9
Other	6	1.7
Total	345	100

Table 3.

Family Income for 254 of 355 Child Clients

Income	N	Percentage	Cumulative Percentage
Below $4,999	11	4.3	4.3
$5,000 to $9,999	24	9.5	13.8
$10,000 to $14,999	31	12.2	26.0
$15,000 to $19,999	22	8.7	34.7
$20,000 to $29,999	50	19.7	54.4
$30,000 to $39,999	30	11.8	66.2
$40,000 to $49,999	22	8.7	74.9
$50,000 to $59,999	19	7.5	82.4
$60,000 to $69,999	15	5.9	88.3
$70,000 to $79,999	8	3.0	91.3
Over $80,000	22	8.7	100.0
Total	254	100	

Table 4.

Referral Source for 322 of 355 Child Clients

Referral Source	N	Percentage
Self	40	12.8
Friend/Relative	98	31.3
Physician	24	7.7
Mental Health Center	9	2.9
Social Service Agency	37	11.8
Psychologist/Psychiatrist	41	13.1
School	39	12.5
Brochure/Newspaper	4	1.2
Friend/Relative and Other	9	2.9
Other	12	3.8
Total	313	100

Table 5.

Parent Education for 240 of 355 (female parent) and 176 of 355 (male parent) Child Clients

Education Level	Female Parents			Male Parents		
	N	Percentage	Cumulative Percentage	N	Percentage	Cumulative Percentage
Graduate Degree	30	12.5	12.5	48	27.3	27.3
University Degree	59	24.6	37.1	30	17.0	44.3
Associates Degree	37	15.4	52.5	12	6.8	51.1
Some College	65	27.1	79.6	44	25.0	76.1
High School/GED	38	15.8	95.4	35	19.9	96.0
Some High School	11	4.6	100	7	4	100
Total	240	100		176	100	

Table 6.

Parent Marital Status for 263 of 355 (female parent) and 183 of 355 (male parent) Child Clients

Marital Status	Female Parents		Male Parents	
	N	Percentage	N	Percentage
Married	146	55.5	143	78.1
Remarried	17	6.5	9	4.9
Separated	17	6.5	11	6.1
Divorced	54	20.5	12	6.6
Single	27	10.3	7	3.8
Widowed	2	.7	1	.5
Total	263	100	183	100

Table 7.

Comparison of Actual and Expected Values for Child Living Arrangement for Therapy and Testing Only

Who child was living with	Therapy			Testing	
	N	Expected	Difference	N	Expected
Both Birth Parents	35	40.8	- 5.8 +	91	85.2
Percentage	27.8%		- 4.5% +	72.2%	
Birth Father	10	4.9	+ 5.1 –	5	10.1
Percentage	66.7%		+ 34.4% –	33.3%	
Birth Mother	38	27.8	+ 10.2 –	48	58.2
Percentage	44.2%		+ 11.9% –	55.8%	
Birth Mother and Other	5	7.8	- 2.8 +	19	16.2
Percentage	20.8%		- 11.5% +	79.2%	
Foster Parents	4	12	- 8 +	33	25
Percentage	10.8%		- 21.5% +	89.2%	
Other	6	4.9	+ 1.1 –	9	10.1
Percentage	40.0%		+ 7.7 –	60.0%	
Total	98			205	
Percentage	32.3%			67.7%	

Table 8.

Comparison of Family Income Level for Therapy and Testing

Family Income	Therapy			Testing		
	N	Percentage	Cumulative Percentage	N	Percentage	Cumulative Percentage
Below $4,999	5	6.2	6.2	5	3.4	3.4
$5,000 to $9,999	8	9.9	16	12	8.2	11.6
$10,000 to $14,999	14	17.3	33.3	14	9.6	21.2
$15,000 to $19,999	8	9.9	43.2	10	6.8	28.1
$20,000 to $29,999	24	29.6	72.8	23	15.8	43.8
$30,000 to $39,999	8	9.9	82.7	18	12.3	56.2
$40,000 to $49,999	6	7.4	90.1	12	8.2	64.4
$50,000 to $59,999	2	2.5	92.6	16	11.0	75.3
$60,000 to $69,999	1	1.2	93.8	14	9.6	84.9
$70,000 to $79,999	2	2.5	96.3	4	2.7	87.7
Over $80,000	3	3.7	100.0	18	12.3	100.0
Total	81			146		

Table 9.

Diagnosis at Intake for 63 of 103 Therapy Only Clients

Diagnosis	N	Percentage
Disruptive Behavior Disorders	26	25.7
Oppositional Defiant Disorder	11	10.9
ADHD, Hyperactive-Impulsive/Combined	6	5.9
NOS	4	4.0
ADHD, Inattentive	3	3.0
Conduct Disorder	2	2.0
Parent Child Relational Problem	22	21.8
Other Conditions-Focus of Clinical Attention	9	8.9
Adjustment Disorders	8	7.9
Depressive Disorders	7	6.9
Elimination Disorders	6	5.9
Learning Disabilities	6	5.9
Anxiety Disorders	5	5.0
Deferred Diagnosis	5	5.0
Other	7	6.9
Substance Abuse/Dependence	3	3.0
Pervasive Developmental Disorders	2	2.0
Somatization	1	1.0
Separation Anxiety Disorder	1	1.0
Total	101	

Table 10.

Diagnosis at Termination for 64 of 103 Therapy Only Clients

Diagnosis	N	Percentage
Disruptive Behavior Disorders	26	32.9
Oppositional Defiant Disorder	9	11.4
ADHD, Hyperactive-Impulsive/Combined	10	12.7
NOS	1	1.3
ADHD, Inattentive	5	19.0
Conduct Disorder	1	1.3
Parent Child Relational Problem	15	19.0
Other Conditions-Focus of Clinical Attention	8	10.1
Adjustment Disorders	5	6.3
Depressive Disorders	6	7.6
Elimination Disorders	2	2.5
Learning Disabilities	2	2.5
Anxiety Disorders	2	2.5
Deferred Diagnosis	2	2.5
No Diagnosis	3	3.8
Other	8	10.1
Total	101	

Table 11.

Diagnoses Included in Other Category in Table 10

Disorder	N	Percentage
Substance Abuse/Dependence	1	1.3
Pervasive Developmental Disorders	3	3.8
Separation Anxiety Disorder	1	1.3
Bipolar Disorder	2	2.5
Impulse Control Disorders	1	1.3
Total	101	

Table 12.

Comparison of Actual and Expected Values for Female Parent Marital Status by Diagnosis

Female Parent Marital Status	Disruptive Behavior Disorders		Parent-Child Relational Problem		Other Diagnoses	
	N	Expected	N	Expected	N	Expected
Single	4	2	0	1.6	4	4.4
Percentage	50%		0%		50%	
Married	12	8.75	2	6.90	21	19.35
Percentage	34.3%		5.7%		56.3%	
Separated	2	3.8	7	3.0	6	8.3
Percentage	13.3%		46.7%		40.0%	
Divorced/Widowed	1	4.5	6	3.5	11	10.0
Percentage	5.5%		33.3%		61.1%	
Total	19		15		42	
Percentage	24.0%		19.7%		55.3%	

Table 13.

Treatment Length (Days) by Intake Diagnosis for Therapy Clients

Diagnosis	N	Mean (Days)	SD	Min.	Max.
Disruptive Behavior Disorders	24	252.46	193.58	8	896
Parent Child Relational Problem	20	143.80	157.88	7	563
Other Conditions-Focus of Clinical Attention	7	309.57	370.22	46	1120
Pervasive Developmental Disorders	2	452.00	217.79	298	606
Depressive Disorders	7	143.71	112.19	20	373
Elimination Disorders	6	74.17	83.18	12	231
Learning Disabilities	6	134.67	96.16	20	287
Anxiety Disorders	5	224.40	146.26	41	420
Adjustment Disorders	7	176.00	195.46	32	541
No Diagnosis/Diagnosis Deferred	4	104.25	80.05	56	224
Other	4	170.25	120.73	20	287
Total	92	192.58	189.405	7	1120

Table 14.

Number of Sessions by Intake Diagnosis for Therapy Clients

Diagnosis	N	Mean	SD	Min.	Max.
Disruptive Behavior Disorders	24	13.33	8.850	1	34
Parent Child Relational Problem	20	9.80	7.824	1	23
Other Conditions-Focus of Clinical Attention	7	13.57	8.384	4	27
Pervasive Developmental Disorders	2	13.00	7.07	8	18
Depressive Disorders	7	11.43	8.791	2	26
Elimination Disorders	6	6.17	2.71	3	9
Learning Disabilities	6	9.67	8.571	2	21
Anxiety Disorders	5	17.20	13.572	3	37
Adjustment Disorders	7	12.71	10.14	1	28
No Diagnosis/Diagnosis Deferred	4	8.50	9.110	2	22
Other	4	12.5	8.74	4	21
Total	82	11.64	8.588	1	37

Table 15.

Treatment Length (Days) by Termination Diagnosis for Therapy Clients

Diagnosis	N	Mean (Days)	SD	Min.	Max.
Disruptive Behavior Disorders	26	332.00	283.39	41	1120
Parent Child Relational Problem	14	192.57	171.01	7	563
Other Conditions-Focus of Clinical Attention	7	135.86	96.29	34	271
Pervasive Developmental Disorders	3	324.33	269.47	69	606
Depressive Disorders	6	106.33	46.65	35	154
Elimination Disorders	2	121.5	154.86	12	231
Learning Disabilities	2	133.5	20.51	119	148
Anxiety Disorders	2	140.50	149.20	35	246
Adjustment Disorders	4	206.75	115.01	77	338
No Diagnosis/Diagnosis Deferred	5	135.80	59.35	68	218
Bipolar Disorders	2	113.00	120.21	28	198
Other	3	145.33	197.20	28	373
Total	76	221.70	213.27	7	1120

Table 16.

Number of Sessions by Termination Diagnosis for Therapy Clients

Diagnosis	N	Mean	SD	Min.	Max.
Disruptive Behavior Disorders	26	16.15	12.03	2	37
Parent Child Relational Problem	14	13.21	7.30	2	23
Other Conditions-Focus of Clinical Attention	7	11.57	8.22	3	22
Pervasive Developmental Disorders	3	11.33	5.77	8	18
Depressive Disorders	6	8.00	4.38	2	13
Elimination Disorders	2	8.00	1.41	7	9
Learning Disabilities	2	9.00	5.66	5	13
Anxiety Disorders	2	13.00	8.49	7	19
Adjustment Disorders	4	17.25	10.78	7	28
No Diagnosis/Diagnosis Deferred	5	8.6	4.93	5	17
Bipolar Disorders	2	8.00	4.24	5	11
Other	3	12.67	11.59	5	23
Total	76	13.08	9.28	2	37

Table 17. Assessment Tools Administered to Therapy Only Clients

Tool	Parent Report	Teacher Report	Self Report
Symptoms Checklist-90-R	-	-	29
Behavioral Assessment System for Children	15	8	4
Conners' Rating Scales	11	4	-
Disruptive Behavior Rating Scale	13	5	1
Home/School Situations Questionnaire	6	2	-
Child Attention Profile	3	1	-
Child Depression Inventory	-	-	7
Child Behavior Checklist – Achenbach	10	5	1
Developmental Factors Questionnaire	4	-	-
Developmental Questionnaire	2	-	-
Australian Scale (Atwood)	5	-	-
Beck Depression Inventory – II	-	-	3
Coopersmith Self Esteem Inventory	-	-	2
Weschler Intelligence Scale for Children	-	-	5
Peabody Picture Vocabulary Test	-	-	2
Minnesota Multiphasic Personality Inventory-A	-	-	2
Children's Apperception Test	-	-	3
Draw a Picture	-	-	3
Sentence Completion	-	-	3
Other Tests Administered Only Once	10	-	10
Total	79	25	75

Table 18.

Diagnosis for Testing Only Clients

Diagnosis	N	Percentage
Disruptive Behavior Disorders	104	61.5
Oppositional Defiant Disorder	39	23.1
ADHD, Hyperactive-Impulsive/Combined	44	26.0
NOS	4	2.4
ADHD, Inattentive	13	7.7
Conduct Disorder	4	2.4
Parent Child Relational Problem	20	11.8
Other Conditions-Focus of Clinical Attention	25	14.8
Pervasive Developmental Disorders	10	5.9
Depressive Disorders	19	11.2
Elimination Disorders	8	4.7
Learning Disabilities	31	18.3
Anxiety Disorders	5	3.0
Other Disorders of Childhood	9	5.3
Deferred Diagnosis	3	1.8
No Diagnosis	10	5.9
Other	10	59.
Total	241	

Table 19.

Diagnoses Included in Other Category in Table 18

Disorder	N	Percentage
Substance Abuse/Dependence	3	1.8
Adjustment Disorders	2	1.2
Tic Disorders	2	1.2
Bipolar Disorder	1	.6
Identity Problem	1	.6
Sleep Terror Disorder	1	.6
Total	10	

Table 20. Assessment Tools Administered to 178 Testing Only Clients

Tool	N	Percentage
Behavioral Assessment System for Children - PRS	103	57.9
Weschler Intelligence Scales for Children	90	50.6
Conners' Parent Rating Scales	82	46.1
Behavioral Assessment System for Children – TRS	79	44.4
Disruptive Behavior Rating Scale – Home Version	77	43.3
Disruptive Behavior Rating Scale – School Version	69	38.8
Woodcock Johnson Test of Achievement	69	38.8
Conners' Teacher Rating Scales	68	38.2
Home Situations Questionnaire	49	27.5
Child Behavior Checklist (Achenbach)	40	22.5
School Situations Questionnaire	39	21.9
Gray Oral Reading Test	36	20.2
Behavioral Assessment System for Children – SRP	35	19.7
Wide Range Achievement Test	34	19.1
Child Depression Inventory	29	16.3
Teacher Report Form (Achenbach)	28	15.7
Developmental Questionnaire	28	15.7
Draw a Picture	27	15.2
Attention Deficit Disorders Evaluation Scale – Home	25	14.0
Symptoms Checklist –90-R	25	14.0

Table 20. (Cont.) Assessment Tools Administered to 178 Testing Only Clients

Tool	N	Percentage
Sentence Completion	24	13.5
Child Attention Profile	24	13.5
Attention Deficit Disorders Evaluation Scale – School	23	12.9
Developmental Factors Questionnaire	21	11.8
Rorschach	21	11.8
Children's Atypical Development Scale - Parent	20	11.2
Peabody Picture Vocabulary Test	20	11.2
Lindamood Auditory Conceptualization Test	20	11.2
Wechsler Preschool and Primary Scale of Intelligence	17	9.6
Minnesota Multiphasic Personality Inventory – A	17	9.6
Children's Apperception Test	15	8.4
Behavior Problem Checklist	14	7.9
Weschler Adult Intelligence Scale	12	6.7
Coopersmith Self Esteem Inventory	11	6.2
Australian Scale – Parent (Atwood)	10	5.6
Conners' Continuous Performance Test	10	5.6
Youth Self Report (Achenbach)	8	4.5
Disruptive Behavior Rating Scale – Self	7	3.9
Children's Atypical Development Scale - Parent	7	3.9
Australian Scale – Teacher (Atwood)	6	3.4
Asperger's Diagnostic Scale – Parent	6	3.4

Table 20. (Cont.) Assessment Tools Administered to 178 Testing Only Clients

Tool	N	Percentage
Thematic Apperception Test	6	3.4
Autism Diagnostic Interview – Revised	5	2.8
Vineland Adaptive Behavior Scales – Interview	5	2.8
Asperger's Diagnostic Scale – Teacher	4	2.2
Autism Diagnostic Observation Scale	4	2.2
Beck Depression Inventory – II	4	2.2
Childhood Autism Rating Scale - Parent	4	2.2
Comprehensive Test of Phonological Processing	3	1.7
Universal Nonverbal Intelligence Test	3	1.7
Multidimensional Anxiety Scale for Children	3	1.7
Substance Abuse Subtle Screening Inventory	3	1.7
Weschler Memory Scale	3	1.7
Bender Gestalt Test	3	1.7
Kaufman Assessment Battery for Children	2	1.1
Kaufman Test of Educational Achievement	2	1.1
Peabody Individual Achievement Test	2	1.1
Asperger's Checklist	2	1.1
Nelson Denny Reading Test	2	1.1
Other Tests Administered Only Once	53	-

Table 21.

Diagnosis at Intake for Multiple Services Clients

Diagnosis	N	Percentage
Disruptive Behavior Disorders	6	25.0
Oppositional Defiant Disorder	2	8.3
ADHD, Hyperactive-Impulsive/Combined	1	4.2
ADHD, Inattentive	1	4.2
Conduct Disorder	2	8.3
Parent Child Relational Problem	4	16.7
Other Conditions-Focus of Clinical Attention	3	12.5
Adjustment Disorders	1	4.2
Depressive Disorders	1	4.2
Elimination Disorders	1	4.2
Learning Disabilities	1	4.2
Anxiety Disorders	1	4.2
No Diagnosis/ Diagnosis Deferred	4	16.7
Other Disorders of Childhood	1	4.2
Intermittent Explosive Disorder	1	4.2
Total	24	

Table 22.

Diagnosis at Termination for Multiple Services Clients

Diagnosis	N	Percentage
Disruptive Behavior Disorders	25	25.7
Oppositional Defiant Disorder	9	15.3
ADHD, Hyperactive-Impulsive/Combined	11	18.6
ADHD, Inattentive	2	3.4
Conduct Disorder	3	5.1
Parent Child Relational Problem	4	6.8
Other Conditions-Focus of Clinical Attention	6	10.2
Adjustment Disorders	2	3.4
Depressive Disorders	5	8.5
Elimination Disorders	1	1.7
Learning Disabilities	5	8.5
Anxiety Disorders	2	3.4
No Diagnosis	4	6.8
Other Disorders of Childhood	1	1.7
Tic Disorders	1	1.7
Pervasive Developmental Disorders	3	5.1
Total	59	