A CHECKLIST FOR SCREENING DISSOCIATIVE DISORDERS IN CHILDREN AND ADOLESCENTS

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ABSTRACT

The development of the Child/Adolescent Dissociation Checklist (CADC) for screening children and adolescents for Multiple Personality Dissociative Disorders (MPD/DISS) was first reported at the Third International Conference on Multiple Personality/Dissociative States in 1986. The CADC consists of thirteen index characteristics. CADC total score was found to be significantly associated with diagnosis of MPD/DISS. An initial study of the CADC as a screening tool for MPD/DISS was conducted in 1986, with a follow-up study being done one year later. While the reporting of MPD/DISS diagnoses dropped off between the 1986 and 1987 studies, MPD/DISS association with CADC score was maintained. Therapists stated that they found the CADC helpful with both clients and colleagues. Differences were explored in subsequent treatment course and circumstances between clients diagnosed MPD/DISS and those diagnosed otherwise in 1986. The CADC appears to be a valid and reliable screening tool, and the authors suggest further studies should involve application of the CADC by child protective, educational, and social service professionals.

INTRODUCTION

Multiple personality disorder (MPD) is still described in most psychiatry and abnormal psychology textbooks as "rare" at any age. Although, as noted by Kluft (1984), the case of eleven-year-old Estelle was first reported in 1984, the condition is not even mentioned in current child development, child psychiatry, or child psychotherapy textbooks. Jean Goodwin's (1985b) excellent article in Eth & Pynoos's *Post-traumatic Stress Disorder in Childhood* is a single exception to our knowledge of the omission of MPD from child abuse literature. A review of the available literature reveals that articles, chapters, and books focused on childhood MPD are few. Clinicians published up to 1991 agree that this critical issue is in serious need of attention (Baldwin, 1990; Kluft, 1990; Deblinger, 1989; Braun & Sachs, 1985). Properly diagnosing MPD in childhood or adolescence could save later years of protracted mental health problems (Sanders & Giolas, 1991; Terr, 1991; Dell & Eisenhower, 1990; Kluft, 1990; Vincent & Pickering, 1988).

There is now a growing body of knowledge supporting the childhood etiology of Multiple Personality Disorder (e.g., Horton & Miller, 1972; Greaves, 1980; Elliott, 1983; Goodwin, 1985a; Kluft, 1984, 1985a; Weiss, Sutton, & Utecht, 1985; Wilbur, 1984). Professional materials on the identification and treatment of children and adolescents with multiple personality or other dissociative disorders continue, however, to be sparse. Many, perhaps most, professionals who come in contact with them have little or no index of suspicion about the disorders, often believing them to be quite rare. However, the *Diagnostic and Statistical Manual (DSM-III-R)* (American Psychiatric Association, 1987) now states that multiple personality disorder in adulthood is now no longer believed to be rare. Further, the link between the adult diagnosis and childhood history of chronic and severe physical, sexual, and/or emotional abuse is now clear (Saltman & Solomon, 1982; Kluft, Braun, & Sachs, 1984; Putnam, Guroff, Silberman, Barbon, & Post, 1986; Wilbur, 1984, 1985; Bowman, Blix, & Coons, 1985; Goodwin, 1985b; Kluft, 1985a, in press; Baldwin, 1990).

It is just beginning to become standard practice for clinicians working with children and adolescents to inquire about abuse histories. It is still quite uncommon for them to consider a diagnosis of Multiple Personality or Dissociative Disorder among even their traumatized child patients. This condition prevails, despite the facts that Putnam et al. (1986) reports 83 percent of adult MPs as having child sexual abuse histories, and 78 percent of them as having histories of physical abuse in childhood. Further, therapists for adult MPs are consistently obtaining reports of the undetected existence of the disorder in childhood, beginning usually between zero and eight years (Kluft, 1984).

Putnam (1981) suggests that the disorder be seen, along with child abuse *per se*, as a public health problem, and therefore needing early detection and prevention. Elliott (1983) asserts that the diagnosis of MPD in a child should be considered as a legal criterion of harm for the justification of state intervention on behalf of abused children, especially where no other "physical" evidence is available. MPD or dissociative disorders are all too rarely identified in their early

FIGURE 1
Child/Adolescent Dissociative Checklist

Client Name_____ Age Described_____ Sex____ Birthdate _____

Evaluator Name_____ Today's Date _____

Circle the answer which best describes at the time (within the last two years) you knew the most about him/her. Use also information from primary caregivers, teachers, counselors, social service workers, etc. Circle "?" if you are unsure, or if your client showed only suggestive signs; "Y" if signs are clear or strongly suggestive; or "N" if there are no signs of clinical significance.

Y N ? 1. SEXUAL ABUSE: rape, attempted rape, or unwanted sexual touching or fondling.

Y N ? 2. PHYSICAL ABUSE: hitting, kicking, biting, beating, burning, hurting, with objects or weapons.

Y N ? 3. EMOTIONAL ABUSE: tricking, harassing, abandoning, blaming, shunning, etc.

Y N ? 4. SERIOUS ILLNESS/injury: may or may not be due to abuse.

Y N ? 5. SERIOUS LOSS: may or may not be due to abuse.

Y N ? 6. EXTREME INCONSISTENCIES IN ABILITIES, LIKES, DISLIKES: dramatic fluctuations in behavior/performance, unexpected changes in preferences for food/clothing/social relationships.

Y N ? 7. DENIAL OF BEHAVIOR OBSERVED BY OTHERS: perceived as lying when confronted re: behavior witnessed by credible adults, often fierce sense of injustice if punished.

Y N ? 8. EXCESSIVE DAYDREAMING/SLEEPWALKING: trance-like behaviors, "spacey," extreme concentration/attention difficulties, sleep disturbances.

Y N ? 9. PERPLEXING FORGETFULNESS: loss of time, unexpected test failure, confusion re: names of teachers, peers, inability to use or acknowledge prior experience, loss of familiarity with well-known objects.

Y N ? 10. INTENSE ANGRY OUTBURSTS: often without apparent provocation, may involve unusual physical strength, brief or persistent, often followed by amnesia.

Y N ? 11. PERIODIC INTENSE DEPRESSION: may include suicidal gestures/attempts, often without clear precipitation or focus, psychomotor slowing or agitation.

Y N ? 12. REGRESSIVE EPISODES: often followed by amnesia, dramatic reductions in language or motor skills when exposed to trauma-related stimuli (e.g., frightened thumb-sucking at age twelve).

Y N ? 13. IMAGINARY COMPANIONS (past age six): imaginary quality may be denied by client.

Y N ? 14. AUDITORY HALLUCINATION-LIKE EXPERIENCE: friendly or unfriendly, content related to "imaginary companions" or to traumatic experience, voices arguing or commenting; usually inside the head.

Y N ? 15. PHYSICAL COMPLAINTS/INJURIES OF VAGUE ORIGIN: may be self-inflicted, accidental, or abuse related; fluctuating degrees of discomfort expressed, often uncertain medical basis.

Y N ? 16. POOR LEARNING FROM EXPERIENCE: normal discipline/guidance/therapeutic measures have little or no lasting effect, corrective experience may be denied by client.

Y N ? 17. FAMILY HISTORY OF MULTIPLE PERSONALITY OR OTHER DISSOCIATIVE DISORDER: may not have been formally diagnosed as such.

TOTALS

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Total score of 10 or more "y's" suggest a need for thorough evaluation for multiple personality disorder.

stages, however, and efforts need to be made to enlighten child-protective, legal, educational, and medical and mental health professionals regarding the early signs and symptoms (Elliott, 1983; Kluft, in press).

Fagan & McMahon (1984), Kluft (1984, 1985a), and Coons (1985) all assert that the MPD/Dissociative Disorder diagnosis is extremely important to make. These are direct and usually quite beneficial effects of successful treatment for identified children and treatment has significant preventative value against the decades of life disruption, anguish, and service costs reported by adult MPs untreated until adulthood.

TABLE 1
Indicators for Child/Adolescent MPD or Dissociation (Item Numbers)

CADC ITEM	Kluft (1984)	Putnam (1981)	Fagan & McMahon (1984)
1. Traumatic History	—	1	—
2. Fluctuations in Abilities, Preferences	3,13	7,12	3,5,6
3. Observed Behavior Denied	6,8,9,10	8,9,11	9,11,S4
4. Excessive Daydreaming, Sleepwalking	2	10,11	1,20,S1
5. Perplexing Forgetfulness	4	2,8	4,8,S1
6. Intense Angry Outbursts	—	—	12,14
7. Periodic Intense Depression	1	3	13,15
8. Fearful Regressive Episodes	3	5	—
9. Imaginary Companions (past age 6)	7	6,9	S5
10. Auditory Hallucinations	5	4	S3
11. Physical Complaints/Injuries	—	3,12	13,19
12. Poor Learning from Experience	14	—	8,10
13. Family History of MPD/Dissociation	15	—	—

PUBLISHED ITEMS NOT INCLUDED IN THE CADC:

1.	Muted signs of MPD	11	(Kluft, 1984)
2.	Attenuated signs of MPD	12	(Kluft, 1984)
3.	Other DSM-III Diagnosis Possible	16	(Kluft, 1984)
4.	Reference to self in third person	13	(Putnam, 1981)
5.	Responds to more than one name	2, S_2	(Fagen & McMahon, 1984)
6.	Sent to principal for disruptive behavior	7	(Putnam, 1981)
7.	Precocious sexuality	16	(Fagan & McMahon, 1984)
8.	Truant	17	(Fagan & McMahon, 1984)
9.	Lonely	18, S_6	(Fagan & McMahon, 1984)

NOTES:
1. Numbers refer to item numbers in publications.
2. "S" refers to Fagan & McMahon's (1984) "Subjective Experiences" list.

Kluft (1984, 1985a) discussed a number of factors which might explain why MPD and dissociative states are diagnosed so rarely in patients under age eighteen. These include (1) a number of differences from the adult condition, (2) symptoms simulating other psychiatric conditions or normal childhood behaviors, (3) children's being unaware of their condition or actively withholding critical data, and (4) the absence of an index of suspicion among mental health professionals, teachers, parents, or other caretakers.

The purpose of the two studies described in this paper was to address the professional index of suspicion in one area of Southern California and to evaluate whether an informal instrument, the *Child/Adolescent Dissociation Checklist (CADC)*, (see Figure 1) could be useful in the identification of young patients in the area who might, unbeknownst to their therapists, be suffering from some form of dissociative disorder.

DEVELOPMENT OF THE CHECKLIST

Kluft (1984) presented a list of predictors for childhood MPD based upon his 1978 review of the psychiatric records of twenty successfully treated adult MPs. He compared his sixteen items with the twelve on a list developed by Putnam (1981) and applied all these criteria to

the case data for five diagnosed boys. He observed that some predictors, (e.g., auto-hypnotic trance-like behaviors, hallucinated voices, and disavowed witnessed behaviors), clearly applied more consistently to his small MPD sample than to others (e.g., imaginary companions, failure in previous therapy). He concluded all predictors should be retained at this early stage of research. Fagan & McMahon (1984) independently developed a list of twenty symptom behaviors observable by teachers and parents, and six additional subjective experiences as indicators for childhood MPD. They tabulated the distribution of their index factors for the childhoods (age 5 to 16) of five famous cases (Billy, Eve, Christina, Henry, and Sybil) reported in the literature, and for three child cases known personally to the authors. They concluded that their list had potential for identifying other multiples among child clinical populations. (See Table 1).

Beginning research on a checklist for use by professionals in the initial screening of children and adolescents for multiple personality and related dissociative disorders was presented by the authors at the Third International Conference on Multiple Personality and Dissociative States in Chicago in 1986. The project aimed both to create a useful device for detecting MPD/Dissociative Disorders (MPD/DISS) in early stages, and to impact the index of suspicion among mental health professionals in one urban Southern California area.

STUDY 1: CONDUCTED IN 1986

Method

The Child/Adolescent Dissociation Checklist was developed on the basis of indices listed by Putnam (1981), Kluft (1984, 1985a), Fagan & McMahon (1984), and the authors' clinical experience with children, adolescents, and adults.

Since the reputation of the term "multiple personality" varies from occasional fad-like popularity to incredulity and disdain among many mental health professionals, educators, and lay-persons, the checklist title used only the more acceptable term, "dissociation," and obvious clear MPD items regarding third person and other name references were not included. Further, since children and adolescents are much more frequently observed by persons other than clinicians, indices requiring diagnostic sophistication were eliminated. Finally, items which the author believed would not discriminate children with MPD or Dissociative Disorders from other children were avoided for the CACD with the other available predictor lists.

Data Collection Procedures

A total of 115 completed CACD forms were collected for the first study. The author gave lectures about multiplicity and dissociative disorders in children and adolescents on twelve occasions in Southern California, February through August 1986, to approximately 225 mental health, social service, juvenile justice, and educational professionals. During each presentation the CACD was distributed, and members of the audience were asked to complete one or more checklists for juvenile clients to whom they had delivered services and with whom they felt familiar. Sixty-six CADCs were obtained from this process. Another fifteen CADCs were completed by the third author on the basis of clinical records at a local mental health agency for children and adolescents. Thirty-four additional completed checklists were solicited from three mental health professionals known to be knowledgeable about children, and about MPD and Dissociative Disorders.

Professionals who completed the checklists were contacted a few weeks later by the second author who interviewed them about the following: diagnosis; therapy status; characteristics of traumatic history; family history of abuse, alcoholism, or drug addiction; neurological indicators; educational placement; psychiatric hospitalization; and foster care or other out-of-home placement. On the basis of the

TABLE 2
DSM-III Diagnoses for Subjects

(N = 115)

DSM-III Diagnosis	N	%
Multiple Personality	23	20.0
Dissociative Disorder	31	26.9
Anxiety Disorder	7	6.1
Post-Traumatic Stress Disorder	26	22.6
Depression	18	15.7
Borderline Personality Disorder	12	10.4
Schizophrenia	3	2.6
Oppositional Disorder	2	1.7
Conduct Disorder	11	9.6
Attention Deficit Disorder	9	7.8
Learning Disabilities	10	8.7
Adjustment Disorder	6	5.2
No Diagnosis	7	6.1

NOTES:
1. Diagnoses were assigned by patient's own therapist.
2. More than one diagnosis was assigned for 33.0 percent of the sample.
3. No significant relationships were found for DIAGNOSIS x AGE CATEGORY.

interviews, traumatic history data were rated on a 4-point scale: 1 = None; 2 = Probably; 3 = Mild-Moderate; 4 = Ongoing-Severe.

Results

Subject and Respondent Characteristics

The 115 children and adolescents on whom the CADCs were completed ranged in age from three to eighteen, with a mean age of 11.5 years (median 12.0, mode 15.0). Nine (7.8 percent) of the subjects were of preschool age (3-4 years), forty-nine (42.6 percent) were elementary (6-12 years), and fifty-seven (49.6) were adolescent (13-18 years). The vast majority of subjects were White-Anglo in ethnicity. The subject population was 58.3 percent female (N = 67) and 41.7 percent male (N = 48). Twenty percent of the respondents were physicians and psychiatrists, 40 percent were doctoral level psychologists, and 40 percent Master's level psychologists, counselors, or social workers, largely Anglo in ethnic origin.

All but seven (6.1 percent) of the subjects had received a *DSM-III* (American Psychiatric Association, 1980) diagnosis prior to their therapist's completing a CACD. For a third of them (33.0 percent), the therapists indicated more than one prior diagnosis. Table 2 summarizes the distribution of 165 diagnoses to the 115 subjects.

Fifty-seven (49.6 percent) of the sample were reported to be still in psychotherapy at the time of CACD completion: twenty-four (20.9 percent) subjects had been psychiatrically hospitalized on at least one occasion. Forty (34.8 percent) of the youths had been tested for neurological problems, with twenty-seven (23.5 percent) diagnosed as having some form of neurological disorder. Special education placement was in the current or past histories of twenty-seven (23.5 percent) subjects.

Therapists suspected or knew that abuse was in the parental histories for sixty-six (57.3 percent) of the juveniles, and that seventy-two (62.6 percent) had primary caretakers who abused alcohol or drugs. Twenty subjects (17.4 percent) had been placed out of their homes at some time by government protective agencies. Of the subjects diagnosed MPD/Dissociative Disorder, forty-nine (42.6 percent) of the subjects had been abused sexually, forty-six (40.0 percent) abused physically, and fifty-one (44.3 percent) abused emotionally.

Interviews of the therapist raters supported the effectiveness of the lecture series and CACD distribution on the index of suspicion. Therapists changed diagnoses for twenty-five children to Dissociative Disorder, or added this diagnosis to prior ones. Another twelve cases were identified as clear Multiple Personality Disorder after the interviews. Interestingly, within six weeks after the interviews, four therapists spontaneously recontacted the authors, stating that it had now become clear that the child previously diagnosed only Dissociative Disorder should properly be diagnosed Multiple Personality. Considering this understandable initial uncertainty about the two diagnoses in mind, it was decided that the predictor variable should be defined as MPD/DISSOCIATIVE DISORDER.

Data obtained in the checklist and follow-up interviews with all items scored dichotomously (yes or no) was analyzed first.

TABLE 3
Traumatic History as Related to MPD/Dissociative Disorder Diagnosis

Traumatic History	N	%	Cramer's V	Chi2 Sig	Phi	Chi2 Sig
[1]Traumatic History (ANY)	97	84.3			.24003	.0206
[2]Traumatic History (SUM)	97	84.3	.33697	.0028		
One Type	40	34.8				
Two Types	31	27.0				
Three Types	17	14.8				
Four Types	5	4.3				
Five Types	4	3.5				
Sexual Abuse	49	42.6	.48681	.0000	.29271	.0032
Physical Abuse	46	40.0	.31778	.0088	.12862	ns
Emotional Abuse	51	44.3	.29896	.0168	.04871	ns
Serious Illness/Injury	11	10.0	.10427	ns	.06676	ns
Serious Loss	36	31.3	.19881	ns	.07680	ns
CACD Total w/ Trauma Hx (ANY)	115	100.0	.54771	.0006		
CACD Total w/ Trauma Hx (SUM)	115	100.0	.62629	.0001		

NOTES:
1. Trauma Hx (ANY) = scored 1 for any type trauma history scored "Y."
2. Trauma Hx (SUM) = scored 1-5 for number of types scored "Y."
3. Cramer's V statistic used when item allowed to vary: No, Maybe, Yes, Severe/Ongoing.
4. Phi statistic used when item scored dichotomously: No, Yes.

In order to examine the impact of the number and types of abuse, the data were also coded to reflect the sum of the types of abuse.

Each item was found to be significantly related to whether or not the subject was diagnosed MPD/Dissociative Disorder, except for the item relating to family history. The total CACD score was significantly ($p < .0006$) related to whether the subject was diagnosed MPD/Dissociative Disorder. The predictive validity increased when severity of abuse was taken into account. (See Table 3).

The traumatic history variable was examined. As previously stated, traumatic history when scored dichotomously (yes or no) alone predicted the diagnosis of MPD/Dissociative Disorder at the .02 level. It should be noted that approximately 35 percent of the checklists contained only one kind of abuse, down to 3.5 percent with five types. Specifically, examining each different type of abuse revealed that sexual abuse was the best predictor alone, increasing in validity when the severity of abuse was ranked. When utilizing severity ratings in this manner, physical and emotional abuse also proved to be additional predictors. (See Tables 4 & 5.)

To examine the structure of the checklist, a Factor Analysis of CACD was conducted utilizing Varimax Rotation and a Principle Component Analysis.

The factor analysis extracted a factor structure of five independent factors in nine iterations, all of which had values greater than 1.19 and accounted for 55.4 percent of the variance of the checklist (Table 6). An examination of the loading of the specific questions on each of the five factors in the factor solution revealed the following:

Factor 1 — labeled *Emotional Overloading* — consisted of five items: Poor learning from experience; fearfully regressive episodes; intense angry outburst; periodic intense depression; and excessive day-dreaming, sleepwalking.

Factor 2 — labeled *Psychological Symptoms and Illness and Injury*, consisted also of five items: Imaginary companions past six years; auditory hallucinations; perplexing forgetfulness; physical complaints (injuries of vague origin); and dramatic history of serious illness, injury.

Factor 3 — labeled *Physical/Emotional Abuse Causing Inconsistency*, consisted of four items: Traumatic history of physical abuse; traumatic history of emotional abuse; fluctuations in abilities (likes, dislikes); and observed behavior denied.

Factor 4 — labeled *Family History of Dissociative or Multiple Personality* consisted of the two items: Family history of dissociative disorder; and family history of multiple personality disorder.

Factor 5 — labeled *Major Traumatic History*, consisted of three items: Traumatic history serious loss; traumatic history sexual abuse (negatively related); and traumatic history

TABLE 4
Individual CACD Items as Related to MPD/Dissociative Disorder Diagnosis

CADC Item	N	%	Cramer's V	Chi2 Sig	Phi	Chi2 Sig
[1]Traumatic History (ANY)	97	84.3			.24003	.0206
[2]Traumatic History (SUM)	97	84.3	.33697	.0028		
Fluctuations in Abilities, Preferences	64	55.7	.43654	.0001	.19792	.0532
Observed Behavior Denied	68	59.1	.34727	.0031	.24367	.0154
Daydreaming/Sleepwalking	66	57.4	.55920	.0000	.34442	.0005
Perplexing Forgetfulness	49	42.6	.61061	.0000	.43429	.0000
Intense Angry Outbursts	65	56.5	.37545	.0010	.21799	.0317
Periodic Intense Depression	62	53.9	.53106	.0000	.43909	.0000
Regressive Episodes	43	37.4	.55161	.0000	.43160	.0000
Imaginary Companions	15	13.0	.29542	.0004	.22579	.0320
Auditory Hallucinations	24	20.9	.55848	.0000	.27379	.0068
Physical Complaints/Injuries	44	38.3	.42572	.0001	.30565	.0020
Poor Learning from Experience	64	55.7	.37245	.0012	.23315	.0208
Family Hx of MPD	14	12.2	.12652	ns	.04236	ns
Family Hx of Dissociative Disorder	11	9.6	.20442	ns	.12627	ns
CACD Total w/ Trauma Hx (ANY)	115	100.0	.54771	.0006		
CACD Total w/ Trauma Hx (SUM)	115	100.0	.62629	.0001		

NOTES:
1. Trauma Hx (ANY) = scored 1 for any type trauma history scored "Y."
2. Trauma Hx (SUM) = scored 1-5 for number of types scored "Y."

serious illness, injury.

A particularly interesting finding of this analysis is the isolated clustering of the family history questions concerning the presence of Multiple Personality Disorder or Dissociative Disorder in Factor 4.

A Stepwise Regression Analysis of the checklist items on the dependent variable of Multiple Personality Disorder or Dissociative Personality Disorder was conducted to identify and determine the individual contribution of the significant checklist items.

The regression equation yielded a significant F through four steps. Four variables were found to be predictive. They are as follows in their order of entry into the regression equation: periodic intense depression, perplexing forgetfulness, fearful regressive episodes, and traumatic history of sexual abuse.

Additionally, a forced multiple regression analysis was conducted on the 18 items comprising the checklist. It also yielded a significant F. In this analysis, only two items were found to be significant: periodic intense depression and fearful regressive episodes. (Table 7.)

Finally, a one-way analysis of variance on the sum of the test items by the diagnosis of MPD/Dissociative Disorder yielded a significant F ($p < .00001$). (Table 8).

DISCUSSION

Results of the first study suggest that the clinical index of suspicion for MPD/Dissociative Disorders in children and adolescents can be impacted considerably by application of a simple one-page checklist, with or without an orientation lecture. Eleven juveniles were diagnosed MPD prior to their therapists' completing the CACD; twelve more were diagnosed after their CACD scores prompted their therapists to evaluate their clinical pictures more closely. The impact of the CACD was even more dramatic for the (unspecified) diagnosis of Dissociative Disorder. In keeping with the general belief that dissociative disorders are relatively rare, only six youngsters had diagnoses of Dissociative Disorder prior to the CACD completion. Afterwards, twenty-five were identified as dissociative, with three cases diagnosed as both MPD and (unspecified) Dissociative Disorder. Given that consideration of either diagnosis is relatively new for most therapists, it is understandable that the index of suspicion for the less severe diagnosis, requiring only detection of symptoms short of multiple identities, would be most influenced.

Telephone interviews with both experienced and novice clinicians at all training levels found therapists enthusiastic about these new perspectives on behalf of their juvenile clients. One psychiatrist, after working with a particularly frustrating young adolescent for over a year, exclaimed, "Now all this makes sense. I'm finding out things from him this way that he prob-

TABLE 5
CACD Measures as Related to Age Category

CADC Measure	Chi^2 Cramer's V	Sig
1. Traumatic History (ANY)		ns
Sexual Abuse		ns
Physical Abuse		ns
Emotional Abuse		ns
Serious Illness/Injury		ns
Serious Loss		ns
Traumatic History (SUM)		ns
2. Fluctuations in Abilities, Preferences	.26129	.0197
3. Observed Behavior Denied		ns
4. Excessive Daydreaming/Sleepwalking		ns
5. Perplexing Forgetfulness	.26465	.0095
6. Intense Angry Outbursts		ns
7. Periodic Intense Depression		ns
8. Fearful Regressive Episodes		ns
9. Imaginary Companions (past age 6)		ns
10. Auditory Hallucinations	.23642	.0402
11. Physical Complaints/Injuries		ns
12. Poor Learning from Experience		ns
13. Family History of MPD/Dissociation		ns
CACD Total w/Trauma Hx (ANY)	.45415	.0030
CACD Total w/Trauma Hx (SUM)	.35310	ns
Any DSM-III Diagnosis		ns

NOTES:
1. Cramer's V statistic used when item allowed to vary: No, Maybe, Yes, Severe/Ongoing

ably would never have told me otherwise." Further, therapists often commented on the usefulness of the CACD as an aid when they were discussing their cases or MPD/Dissociative issues with their colleagues.

The findings of high predictive validity for almost all of the CACD items offered important support for the earlier pioneering work by Putnam (1981), Kluft (1984), and Fagan and McMahon (1984). The statistical analyses made possible with this larger sample indicate that four of the variables should probably be given special clinical weight in differential diagnostic evaluations of children and adolescents. *Periodic intense depression* appeared highly predictive in both step-wise and forced-entry regression analyses, and loaded heavily in Factor 1 of the factor analysis. Since depressive symptoms are highly likely throughout any clinical population, we suspect that the periodic intensity of the MPD/Dissociative patients' dysphoria was the critical aspect which differentiated them from children with other disorders. Likewise, *fearful regressive episodes* figures significantly in both regression analyses, and also loaded on Factor 1, indicating that these events were pivotal in therapists' diagnostic thinking. Indeed, clinicians familiar with MPD consider these events the most dramatic indicators of the disorder.

Although *perplexing forgetfulness* and *traumatic history of sexual abuse* did not appear as significant predictors in the forced-entry regression analysis, they were highly significant when allowed to enter regression in a step-wise fashion. *Perplexing forgetfulness* appeared also in Factor 2, labeled *Psychiatric and Medical Symptoms*, and probably becomes diagnostic when the child is noted not to recall information previously observed to be mastered.

Traumatic history of sexual abuse appeared in Factor 5, separately from other forms of abuse, and clustered there inversely with *traumatic history of serious loss* and *traumatic history of serious illness/injury*. *Sexual abuse* was the only type of traumatic history which, when scored only "yes or no," was significantly ($p < .0032$) associated with MPD/Dissociative Disorder. As shown in Table 3, it was the type of abuse most strongly associated ($p < .0000$) with MPD/Dissociative Disorder when rated for severity, when *physical abuse* and *emotional abuse* also reached significance. *Traumatic history of sexual abuse* was reported by 83 percent of the adult MPD patients in Putnam's (1984) NIMH sample.

Based on the above findings, a recommendation appears warranted that all children with known abuse histories, especially when the abuse was chronic, severe, and sexual, should be evaluated for MPD/Dissociative Disorder. Further, clinical suspicion should be even more supported if, among sex-

TABLE 6
Factor Analysis of the Child and Adolescent Dissociation Checklist

A Factor Analysis of the Instrument, the "Child and Adolescent Dissociation Checklist," using a Varimax Rotation and a Principle Component Analysis, extracted a factor structure of five independent factors in nine iterations, all of which had even values greater than 1.19 and accounted for 55.4 percent of the variance of the test instrument.

An examination of the loading of the specific questions on each of the five factors revealed the following:

Factor 1: Emotional Overloading
- Poor learning from experience
- Fearfully regressive episodes
- Intense angry outbursts
- Periodic intense depression
- Excessive daydreaming/sleepwalking

Factor 2: Psychological Symptoms and Illness and Injury
- Imaginary companions past six years
- Auditory hallucinations
- Perplexing forgetfulness
- Physical complaints — injuries of vague origin
- Traumatic history of serious illness/injury*

Factor 3: Physical/Emotional Abuse causing Inconsistency
- Traumatic history of physical abuse
- Traumatic history of emotional abuse
- Fluctuations in abilities, likes, dislikes
- Observed behavior denied

Factor 4: Family History of Dissociative or Multiple Personality
- Family history of dissociative personality disorder
- Family history of multiple personality disorder

Factor 5: Major Traumatic History (Loss, Injury, Sexual Abuse)
- Traumatic history serious loss
- Traumatic history sexual abuse (negatively related)
- Traumatic history serious illness/injury*

*Loading occurred on Factor 2 and Factor 5 equally

ually abused children, periodic intense depression, fearful regressive episodes, and perplexing forgetfulness are also observed.

Another approach to the use of the CACD in the screening of children and adolescents involves the establishment of a cut-off score for the suspicion index developed in the present project. It should be emphasized that the CACD, like other common inventories and questionnaires, should be considered only as a screening tool, and not as a formal, standardized diagnostic instrument. As such, it can be particularly useful both in prompting needed diagnostic procedures, and in preventing costly referrals to expert clinicians. In that a thorough evaluation for MPD can rarely be completed in a single clinical hour with children or adults, and in that evaluations for juveniles inevitably require additional hours with teachers and primary caretakers, this latter savings can be substantial in both time and health care costs.

Whether *traumatic history* is scored only "yes/no," or summarily for cumulative types of trauma, a cut-off score of ten appears to minimize the misidentification of children or adolescents as probably MPD/Dissociative (see Tables 8 and 9). Inspection of the four misidentified cases with scores greater than ten reveals one 7-year-old male diagnosed Antisocial Conduct Disorder (score: 11), one 16-year-old learning-disabled male (score: 12), one male and one female, who were given no diagnosis at all. Of the non-diagnosed adolescents, one had sustained sexual, physical, and emotional abuse, and the other severe physical abuse.

Reducing the cut-off score to eight or more, it happened that seven of the 115 juveniles not eventually diagnosed MPD/Dissociative were also given no other diagnosis at the time of the study. Two of these patients were severe sexual abuse victims, and all but one of them had sustained physical and/or emotional abuse. Given these findings, and the results that physical and emotional abuse also were found to be significantly associated with MPD/Dissociative Disorder diagnoses, it is conceivable that a less conservative cut-off score of eight could be safely used for the CACD. Utilizing this more generous, although speculative, criterion, and still assuming other "false positives" were accurately diagnosed non-MPD/Dissociative, would correctly identify thirty-seven patients, and misidentify six more, for an error rate of only 14 percent if all but one non-diagnosed subject were assumed to be ultimately identified as MPD/Dissociative. A cut-off of ten accurately identifies twenty-four patients by the same

TABLE 7
Stepwise Regression Analysis of the Child and Adolescent Dissociation Checklist

In a step-wise regression analysis of the instrument items on the dependent variable of Multiple Personality Disorder or Dissociative Disorder, the regression equation yielded a significant F throughout the four steps (see below):

Step	F	Sig. F
1	26.98955	.00001
2	22.32780	.00001
3	19.46717	.00001
4	16.01473	.00001

Four variables were found to be predicted. They are as follows in their order of entry into the regression equation:

Instrument	Beta	Sig. T
Periodic intense depression	-.23161	.0071
Perplexing forgetfulness	-.25825	.0023
Fearful regressive episodes	-.25755	.0030
Traumatic history of sexual abuse	-.15821	.0466

Additionally, a forced multiple regression was run on the eighteen items comprising the test instrument. It also yielded a significant F (see below):

Step	F	Sig. F
1	3.61203	.00001

Only two items were found to be significant:

Instrument Item	Beta	Sig.T
Periodic intense depression	-.21295	.0291
Fearful regressive episodes	-.23060	.0186

Based on the mean's 95 percent confidence level in this analysis, and a visual inspection of the data, a cut-off score for the CACD checklist was generated. Subjects scoring ten or greater when considering severity of traumatic history provided the best point for correct classification of the diagnosis of MPD or Dissociative Disorder.

criteria, misidentifies two, and yields an error rate of 8 percent. There were no indications that sex or age of subject were in any way related to the incidence of "false positives."

There are a number of limitations to the first study which should be considered at this early stage of research in the area of childhood MPD/Dissociative Disorders. First, the helpful professionals who initially completed the CACD were doing so in the explicit spirit of finding more dissociative disorders, and were the same therapists who ultimately arrived at the diagnoses reported in the subsequent telephone interviews. Their enthusiasm may have biased their diagnostic judgment, a problem of little concern if our impression of the prevailing base rate of under-diagnosis is correct. Nevertheless, would separate experts, using standardized diagnostic protocols, come to the same diagnostic conclusions?

Second, how effective a screening measure would the CACD turn out to be if it were administered blindly regarding control subjects from the schools, including learning disabled children, as well as about clinical samples? Further, would the screening instrument be as effective if completed by teachers, or workers in juvenile detention or dependency facilities?

Finally, are there other items which are not included in the current CACD which would be as highly predictive of MPD/Dissociative Disorder diagnoses as the current items? Embedding the CACD items in other questionnaire items might be a fruitful approach here. Certainly, using the CACD in conjunction with other assessment tools, and cross-validating it against them, might well be in order after more research is done during the next decade.

In conclusion, the first study reported here demonstrates that it is possible to impact therapists' index of suspicion regarding MPD/Dissociative Disorders in childhood and adolescence in a fairly sophisticated urban area. The one-page checklist has apparently become quite handy, and may be considered to have already identified at least thirty-seven juvenile patients who eventually were diagnosed MPD or Dissociative Disorder, but who might, without the CACD, have continued over the next decades in the kind of

TABLE 8
One-Way Analysis of Variance of the Child and Adolescent Dissociation Checklist by the Diagnosis of Multiple Personality Disorder or Dissociative Disorder

A one-way analysis of variance on the sum of the test items by the diagnosis of Multiple Personality Disorder or Dissociative Disorder yielded a significant F (see below):

Source	Sum of D.F.	Mean Squares	F Squares	F Ratio	Prof.
Between groups	1	427.8691	427.8691	41.0250	.00001

Group	Count	Mean	Standard Deviation	95% Confident Interval for Mean
Yes	51	8.9608	3.4926	7.9785 to 9.9431
No	64	5.0781	3.0043	4.3277 to 5.8286

TABLE 9
Cross-tabulation of CACD Total by MPD/Dissociative Disorder (Traumatic History – ALL)

CADC Count	MPD/Dissociative Disorder Diagnosis Yes	No	Row Total
1		3	3
2	1	7	8
3	1	11	12
4	2	11	13
5	7	10	17
6	4	4	8
7	8	8	16
8	5	5	10
9	7	3	10
CUTOFF			
10	5	1	6
11	5		5
12	5	1	6
13	1		1
COLUMN TOTAL	51	64	115

therapeutic morass and general life upheaval reported by most adult MPDs. Clearly more research is needed.

CHILD/ADOLESCENT DISSOCIATION CHECKLIST: ONE YEAR LATER

In the first study, the CACD total score, with and without weighting for severity of abuse history, was found to be associated at a high level of significance with diagnosis of MPD of Dissociative Disorder. Twenty-three minors were diagnosed Multiple Personality Disorder, and another thirty-one obtained other dissociative diagnoses, for a total of fifty-four MPD/Dissociative Disorder subjects. Further, twelve of the thirteen component items were also found independently to be predictive of MPD/Dissociative Disorder. (Family history of Multiple Personality or Dissociation was not a predictor.) These results obtained regardless of age or sex of child, or experience of therapist/rater.

The original study had several limitations, e.g., non-random volunteer sample selection, non-standardized diagnostic procedures, etc. These factors notwithstanding, the 1986 results indicated that the CACD was worthy of further exploration, especially if they withstood the test of time. The second study described here was concluded, therefore, as a follow-up to the 1986 study. Finding out how useful participating therapists had found the CACD in their clinical, consultative, or educational work during the year after their initial participation was to be examined. In addition, assessment of at least the durability (if not the stringent validity and reliability) of the 1986 diagnoses, and their relation to the CACD scores for as many child subjects as possible was to be determined. Finally, the authors wanted to get some idea of what had happened clinically to and for the fifty-four children and adolescents identified as MPD/DISS over the year following their being recorded on the CACD.

STUDY 2: CONDUCTED IN 1987

Method

Subjects

Questionnaires were mailed to each of the fifty-four therapists, with inquiries about each of the 115 children and adolescents on whom CADCs had been completed in 1986 (see Table 11.) Twenty percent of the original respondents were physicians (usually psychiatrists), 40 percent were doctoral level psychologists, and 40 percent were Masters level counselors or social workers, largely White-Anglo in ethnicity.

The 115 children and adolescents rated in the 1986 study included nine (7.8 percent) preschoolers, forty-nine (42.6 percent) elementary age children, and fifty-seven (49.6 percent) adolescents; average age was 11.5 years (median 12.0, mode 15.0). The vast majority (inadequate data were collected) of the sixty-seven females (58.3 percent) and forty-eight males (41.7 percent) were White-Anglo. The first columns of Table 12 summarize the distribution of 165 diagnoses (some patients received more than one diagnosis) reported in 1986 by telephone for the 115 minor subjects. Of the subjects diagnosed MPD/Dissociative Disorder, forty-nine (42.6 percent) were reported to have been sexually abused, forty-six (40.0 percent) physically abused, and fifty-one (44.3 percent) emotionally abused. Fifty-seven (49.6 percent) of the sample were reported to be still in psychotherapy at the time of initial CACD completion in 1986.

TABLE 10
Cross-tabulation of CACD Total by MPD/Dissociative Disorder
(Traumatic History – SUM)

CADC Count	MPD/Dissociative Disorder Diagnosis Yes	No	Row Total	
0		2	2	
1		4	4	
2		5	5	
3	4	13	17	
4		9	9	
5	5	16	11	
6	3	6	9	
7	6	2	8	
8	9	8	17	
9	2	5	7	
				CUT
10	6		6	
11	4	1	5	
12	3	3	6	
13	2		2	
14	3		3	
15	2		2	
16	2		2	
COLUMN TOTAL	51	64	115	

Materials

Envelopes sent to each therapist included five components: (1) a cover letter requesting participation in the follow-up study; (2) a CACD Follow-up Questionnaire, including six questions about the usefulness of the CACD in

clinical practice, as well as a request for suggestions to improve the CACD; (3) copies of each of the CADCs originally completed, without indication of the diagnoses obtained by telephone; (4) a CACD Follow-up Survey for each CACD subject, including seventeen questions about the minor's status and mental health care over the past year, and a request for comments; and (5) a first-class stamped, self-addressed envelope for return of the data.

Procedures

Envelopes of materials were mailed out in mid-July 1987, with requests for their completed return by September 1, 1987. Each therapist was telephoned after two weeks as a reminder to complete the materials. Three envelopes regarding four subjects were returned as impossible to forward; an additional sixteen envelopes were returned and re-mailed after forwarding addresses had been obtained.

Results

Therapists and the CADC

Twenty-five therapists completed the brief CACD Follow-up Questionnaire. Although nine (37.5 percent) had seen five or fewer new child or adolescent clients since completing the original CADCs, fifteen (60.0 percent) had seen six or more, with four therapists having seen more than sixteen. Fifteen therapists (60.0 percent) reported that they had diagnosed a child or adolescent MPD/DISS in the past.

Overall, therapists rated the CACD as helpful; with "sometimes helpful" scored "2," and "very helpful" scored "3," the mean rating was 2.7 (S.D. = 1.3, median = 3.0, and mode = 3.0). There was no difference between experienced and inexperienced therapists; 75.0 percent of the eight therapists who had never encountered an MPD/DISS child or adolescent rated the CACD as "very helpful" or higher, as did 66.7 percent (N = 15) of those who had. Five of the six therapists who rated the CACD "not at all helpful" had little or no professional experience with children, adolescents, or MPD/DISS. Of the new clients encountered by participating therapists since their original completion of CADCs, three MPD and three Dissociative Disorder diagnoses were reportedly made.

Although thirteen therapists (52.0 percent) stated that, after the initial introduction of the device, they never discussed the CACD with colleagues regarding their colleagues' patients, twelve (48.0 percent) reportedly did do so, eight of them did so three to twelve times. When the therapists introduced the possibility of a diagnosis of MPD or Dissociative Disorder, with or without the aid of a CACD, 76.5 percent (N = 13) found their colleagues "somewhat," or "very" receptive, while four (23.5 percent) found other therapists "not receptive" or "a little receptive." Generally, the therapists who saw three or more new PTSD clients tended to find the CACD more helpful than did therapists who saw mostly clients diagnosed otherwise.

Subject Characteristics

Twenty-five therapists returned usable data on fifty-six children and adolescents in 1987, for a return rate of 46.3 percent for the therapists and 48.7 percent for the minor patients. Questionnaires by three therapists for eight minors were eliminated due to incomplete data, leaving twenty-two therapists and forty-eight child and adolescent clients for the 1987 study. Subject pool characteristics for the 1986 and 1987 samples are summarized in Table 11. The smaller 1987 sample is quite similar to the larger 1986 sample in age, ethnicity, sex.

When second-request telephone calls were made, most therapists who did not return the follow-up questionnaires, or who filled them out inadequately, either could not be

TABLE 11
Subject Characteristics for 1986 and 1987 Samples

Characteristic	1986 N	1986 %	1987 N	1987 %
Number of therapists	54	100.0	22	40.7
Number of patients	115	100.0	48	41.7
Ethnicity				
Asian			1	2.1
Black			5	10.4
Hispanic			1	2.1
White-Anglo	Most		40	83.3
Other			1	2.1
Sex				
Female	67	58.3	29	60.4
Male	48	41.7	19	39.6
Age				
Mean	11.5		11.0	
Median	12.0		13.0	
Mode	15.0		15.0	
Range	3-18		3-18	
Preschool (1-5)	9	7.8	6	12.5
Elementary (6-12)	49	42.6	17	35.4
Adolescent (13-18)	57	49.6	25	52.1

reached, continued not to respond, or gave only "too busy"-type reasons for declining to participate. No conclusion can be drawn regarding whether these types of non-participation are systematically related to questions germane to the present study.

Diagnoses

Twenty-one (38.9 percent) of the fifty-four clients diagnosed MPD or Dissociative Disorder in 1986 (MPD/DISS-86) were retained for the 1987 study by virtue of having follow-up forms returned by their therapists. Two (9.5 percent) of the twenty-one were given no 1987 diagnosis by their therapists; one therapist could not be reached, and one stated that the three-year-old child formerly diagnosed MPD/DISS no longer showed any psychiatric symptoms at all. One therapist stated that adequate evidence for one 1986 dissociative diagnosis never developed. Three MPD/DISS-86 children were diagnosed Generalized Anxiety Disorder, Disruptive Behavior Disorder, or Adjustment Disorder with Disturbance of Conduct in 1987, after dissociative symptoms abated during treatment. Therapists for four additional minors previously designated MPD/DISS reported that appropriate diagnoses for their patients were Dysthymic Disorder, Adjustment Disorder with Mixed Emotional Features, Separation Anxiety, and Attention Deficit Disorder with Hyperactivity, since dissociative symptoms no longer were in evidence.

A higher proportion (44.4 percent, n = 12) of the 1986 clients with diagnoses other than MPD/DDIS (n = 27) failed to be given diagnoses in 1987, but most of their therapists could not be contacted for further inquiry. Despite these differences, there was no indication that MPD/DISS clients were non-diagnosed for any reasons different from other clients by participating therapists.

Diagnoses for the 1986 and 1987 subject pools are summarized in Table 12. Therapists indicated that 1986 diagnoses had changed for nine (16.7 percent) clients. Notably, only thirteen minors diagnosed MPD/DISS in 1986 who were also diagnosed MPD/DISS in 1987. Nine minors were diagnosed MPD in 1987, almost the same sample proportion as in 1986 (20.0 percent in 1986 vs. 18.8 percent in 1987). However, only four Dissociative Disorder diagnoses were given in 1987, in comparison with thirty-one (29.6 percent) in 1986. Of two additional clients diagnosed MPD/DISS in 1987, one had been diagnosed "learning disabilities" only in 1986, and the other had been given no 1986 diagnosis at all. Interestingly, therapists indicated that slightly less of the 1987 total sample were treated for MPD (N = 6; 12.5 percent), or other Dissociative Disorder (N = 3; 5.6 percent) than were diagnosed as such.

Average age for the three male and ten female youths identified MPD/DISS in 1987 was 13.0 years (median 15.0, mode 15.0, range 6.5 - 18). Four of this group were in elementary school, and nine in adolescent years, with no preschoolers. In comparison, the eight male and thirteen female subjects not diagnosed MPD/DISS in 1987 tended to be somewhat younger; mean age was 10.1 years (median 9.0, mode 9.0, range 3.5 - 17). This group included three preschool, nine elementary, and nine adolescent minors. Similar to the MPD/DISS-86 sample, the thirteen MPD/DISS-87s had serious traumatic histories of physical abuse (n = 9; 69.2 percent), sexual abuse (n = 7; 53.8 percent), emotional abuse (n = 9; 69.2 percent), serious illness/injury (n = 3; 23.1 percent), and/or significant loss (n = 5, 38.5 percent).

Twenty-five (52.1 percent) of the 1986 sample were marked as having left treatment prematurely by 1987; thirteen of these comprised 61.9 percent of the MPD/DISS-86 group, and twelve made up 44.4 percent of the non-MPD/DISS-86 group, suggesting that the clients diagnosed MPD/DISS may have been somewhat more likely to drop out of treatment than children or adolescents

TABLE 12
Subject Diagnoses for 1986 and 1987 Samples

DSM-III-R Diagnosis	1986 N	1986 %	1987 N	1987 %
Number of Subjects	115	100.0	48	100.0
Multiple Personality	23	20.0	9	18.8
Other Dissociative Disorder	31	26.9	4	8.4
Anxiety Disorder	7	6.1	3	6.3
Post-traumatic Stress Disorder	26	22.6	10	20.8
Depression	18	15.7	5	10.4
Borderline Personality Disorder	12	10.4	—	—
Schizophrenia	3	2.6	—	—
Oppositional Disorder	2	1.7	2	4.2
Conduct Disorder	11	9.6	2	4.2
Attention Deficit Disorder	9	7.8	3	6.3
Adjustment Disorder	6	5.2	3	6.3
(Learning Disabilities)	10	8.7	n/a	n/a
No Diagnosis	7	6.1	14	29.2

NOTES:
1. Diagnoses were assigned by patients' own therapists.
2. More than one diagnosis was assigned for 33.0 percent of the 1986 sample and 16.7 percent of the 1987 sample.
3. No significant relationships were found for DX x AGE.

with other 1986 diagnoses. Sixteen children or adolescents with other 1986 diagnoses. Sixteen MPD/DISS-86 clients (76.2 percent) and twenty-one non-MPD/DISS-86 clients (77.8 percent) had been seen by their therapists for psychotherapy at least once since the original CACD completion in 1986.

There were no 1987 differences between the two 1986 groups in number of psychotherapy sessions since CACD completion, number of sessions per week, or length of session. However, the MPD/DISS-86 clients were significantly more likely to require hospitalization than those diagnosed otherwise. Further, therapists responded with (non-significant) trends toward less collegial support of their treatment approaches, and less support by hospital staff, when they focused on MPD/DISS clients than when they completed follow-up surveys on non-MPD/DISS clients. Parents of the minors in the two groups did not differ in how cooperative they were seen by their children's therapists.

CADC Scores

A CACD cut-off score of ten was established in 1986 as the most likely to correctly identify MPD/DISS children and adolescents, while minimizing the likelihood of false positives. Indeed, this score misidentified no minors diagnosed Post-traumatic Stress Disorder (PTSD) in 1986, indicating that the CACD could be useful even for children and adolescents known to have been seriously traumatized. In the smaller 1987 sample (N = 48), this cut-off score correctly identified eleven out of the fourteen (78.6 percent) MPD/DISS-86 clients retained, and ten of the thirteen (76.9 percent) children diagnosed MPD/DISS in 1987, and misidentified no minors diagnosed PTSD in either year.

Fourteen of the forty-eight total client sample (29.2 percent) obtained a CACD score of ten or more, including the ten MPD/DISS minors above. This cut-off score also, perhaps not mistakenly, suggested that three youths diagnosed otherwise (one Dysthymic Disorder, one Adjustment Disorder with Mixed Emotional Features, and one Attention Deficit Disorder with Hyperactivity) should be referred for differential diagnosis to rule out MPD/DISS. The cut-off score also correctly identified the six patients being treated for MPD or Other Dissociative Disorder, regardless of how they had been formally diagnosed.

Consistent with the findings for the two different diagnostic groups, CACD scores equal to or greater than ten tended to be associated with greater likelihood of need for hospitalization, and less support perceived by therapists from colleagues or hospital staff. Again, no differences obtained between groups above or below the CACD cut-off in number of psychotherapy sessions since 1986 CACD completion, number of sessions per week, length of session, or parent cooperation.

In the 1986 study, four CACD items were identified in multiple regression analyses to be the most highly predictive of eventual diagnosis of MPD/DISS. Although the small number of MPD/DISS subjects identified in the second study prohibits sophisticated statistical treatment, it should be noted that these items were again found as significant predictors among MPD/DISS clients: traumatic history of sexual abuse, periodic intense depression, fearful regressive episodes, and perplexing forgetfulness. Counts for both the 1986 and 1987 total samples on these and the remaining CACD items are summarized in Table 13, as well as statistical information regarding their predictive strength both years.

DISCUSSION

Overall, the Child/Adolescent Dissociation Checklist was seen as helpful, at least by most of the therapists who returned data. Therapists who were already familiar with the issues and behaviors of abused children were most likely to find the screening guidelines helpful, an especially useful finding in that no PTSD children were misidentified as MPD/DISS in either 1986 or 1987 when the cut-off score of ten was used. Further, this cut-off score, as well as the predictive validity of the CACD total score and most of its component items, withstood the test of over a year's time. Even the four index items most strongly predictive in 1986 (traumatic history of sexual abuse, periodic intense depression, fearful regressive episodes, and perplexing forgetfulness) maintained their strength in 1987, even in a considerably smaller sample. Apparently, the CACD can be considered a valid and reliable screening device in the hands of mental health professionals.

Similar to the original 1986 study, this follow-up study has a number of limitations from a scientific point of view. The return rate for the questionnaires was less than optimum, and the resulting sample size was too small to allow sophisticated statistical treatment. As in 1986, the therapists, and therefore the clients, comprised a non-random sample of mental health professionals only. The diagnostic procedures used were not only non-standardized, but were frankly unknown to the author. Finally, the CACD ratings and diagnoses were by no means applied in a "blind" or independent fashion.

The persistence of more MPD diagnoses than designations of Other Dissociative Disorder may indicate that the CACD is more useful with MPD children and adolescents than with the less dramatic dissociative diagnoses. More likely, the dissociative disorders may tend to fade more easily, perhaps without direct treatment focus, as the child's anxiety level reduces as a result of psychotherapy. Indeed, one therapist who had diagnosed a young child dissociative in 1986 reported this year that "I didn't have time to treat the dissociation, I had to stabilize the family — the dissociative symptoms just went away."

Some results about the treatment circumstances for the identified MPD/DISS-86 youths are, unfortunately, not much different from what many therapists for adult MPDs experience. Children and adolescents with high CACD total scores and/or with MPD/DISS diagnoses were more likely to require hospitalization, and somewhat more likely to drop out of treatment prematurely than those with lower CACD scores and other diagnoses. Further, their therapists reported less support from colleagues or from hospital staff than therapists for the other group of patients. Interestingly, however, there was no reported difference in number of sessions per week, length of session, or parent cooperation. The latter result is particularly surprising, in that history of famil-

ial abuse — a population known for its resistance to treatment for parents or children — is more likely for the MPD/DISS youths.

As Elliott (1983) and Kluft (1985a, 1986) have ably pointed out, these environmental and clinical difficulties are further complicated by the fact that many otherwise competent therapists feel inadequate to treat multiplicity and dissociative disorders in children and adolescents. A number of the therapists interviewed made statements like, "I didn't know how to do the abreaction part, so I just treated the behavior problems." The author tentatively approached a respected professional in social services management about using the CACD to screen all children suspected of suffering abuse. The response was telling: "If we find it, who knows what to do with it, then what do we do?" As Elliott (1983) suggests, training, not only in detection but also in treatment, is needed.

What if child protection workers screened all new children encountered in a given month with a CACD, and then had them evaluated for multiplicity or dissociative disorders by experienced clinicians trained in a standard diagnostic protocol, without benefit of the CACD results? Limitations of both studies notwithstanding, the results indicate that further research in the early detection and treatment of MPD in children and adolescents is warranted. ■

TABLE 13
Individual CACD Items as Related to MPD/DISS 1986, 1987

CADC Item	1986 N	1986 %	1986 Cramer's Chi2 V	1986 Sig	1987 N	1987 %	1987 Cramer's Chi2 V	1987 Sig
[1]Traumatic History	97	84.3	.3370	.0228	41	85.4	.4898	.0421
Fluctuations in Abilities or Preferences	64	55.7	.4365	.0001	27	56.3	.5924	.0008
Observed Behavior Denied	68	59.1	.3473	.0031	30	62.5	.3115	ns
Daydreaming/ Sleepwalking	66	57.4	.5592	.0000	25	52.1	.6800	.0001
Perplexing Forgetfulness	49	42.6	.6106	.0000	19	39.6	.5958	.0007
Intense Angry Outbursts	65	56.5	.3755	.0010	31	64.6	.4743	.0129
Periodic Intense Depression	62	53.9	.5311	.0000	26	54.2	.5151	.0052
Regressive Episodes	43	37.4	.5516	.0000	17	35.4	.5561	.0020
Imaginary Companion (past age 6)	15	13.0	.2954	.0004	7	14.6	.4640	.0057
Auditory Hallucinations	24	20.9	.5585	.0000	12	25.0	.5340	.0034
Physical Complaints/ Injuries	44	38.3	.4257	.0001	18	37.5	.5376	.0031
Poor Learning from Experience	64	55.7	.3725	.0012	25	52.1	.4122	.0429
Family Hx MPD	14	12.2	.1265	ns	5	10.4	.2543	ns
Family Hx Diss. Disorder	11	9.6	.2044	ns	3	6.3	.3012	ns
CACD Total	115	100.0	.6263	.0001	48	100.0	.7081	.0450

1 Trauma Hx (SUM), scored 1-5 for number of types of trauma.

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