

PRELIMINARY RESULTS OF THE FIELD TRIAL OF PROPOSED CRITERIA FOR DISSOCIATIVE DISORDER OF CHILDHOOD

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ABSTRACT

Despite recent increased awareness of child and adolescent dissociative disorders, the lack of an official "sanction" by the inclusion of specific diagnostic entities in the DSM-III-R/IV has seriously impeded the acceptance of these conditions in youthful population. There are also widespread concerns that the adult-oriented DSM criteria are often inappropriate for child and adolescent cases. To correct these deficiencies, the diagnosis of Dissociative Disorder of Childhood (DDoC) has been proposed. A preliminary, questionnaire-based, field trial was initiated to test the proposed DDoC criteria. Results indicate that the DDoC criteria identify a group of children who do not meet DSM-III-R/IV criteria for multiple personality disorder, but who nonetheless have significant levels of dissociative symptoms. These criteria also serve to discriminate children with DDoC from another group of children, frequently labeled with Dissociative Disorder NOS, who have a different clinical picture. Based on these data, DDoC criteria will be further refined.

INTRODUCTION

The last decade has seen a marked increase of interest in the dissociative disorders, primarily multiple personality disorder (MPD). Initially, clinical attention and research studies focused almost exclusively on dissociative disorders in adults. More recently attention gradually has begun to turn towards the manifestations of pathological dissociation in children and adolescents. This refocusing reflects the increasing realization that MPD, in particular, appears to be a chronic condition that first develops during childhood as a result of severe, and usually repetitive trauma (Kluft, 1984; Bliss, 1986; Putnam, 1989). Kluft (1984, 1985) has enumerated the reasons for the belated recognition of dissociative disorders in children and adolescents including the lower index

of suspicion for these conditions among clinicians who treat children and the fact that dissociative symptoms in children are often attributed to other commonly diagnosed childhood conditions (such as conduct problems, attention-deficit hyperactivity disorder and depression). In the last five years, a growing literature, currently totalling approximately 100 cases, has begun to detail the clinical phenomenology of dissociative disorders in youth (e.g., Fagan & McMahon, 1984; Kluft, 1984, 1985; Bowman, Blix & Coons, 1985; Weiss, Sutton, & Utecht, 1985; Riley & Mead, 1988; Vincent & Pickering, 1988; Dell & Eisenhower, 1990; Hornstein & Putnam, 1992).

Childhood dissociative disorders still have not received much attention in standard texts nor, despite the vigorous efforts of concerned colleagues, have they been included in currently planned epidemiological surveys of childhood mental illness. Frontline clinicians continue to be the major source of information on dissociative disorders in youth. In many instances, pathological dissociation in children and adolescents is different from allied phenomena in adults (Putnam, 1993). Recognizing these differences, early pioneers often qualified their descriptions of child cases with terms such as "incipient multiple personality" (Fagan & McMahon, 1984), or "MPD in evolution" (Malenbaum & Russel, 1987). As additional cases have enlarged our perspectives, it has become apparent that many children and adolescents have significant levels of dissociation that fall short of clear-cut MPD and are poorly characterized by the examples and criteria for the diagnosis of dissociative disorder not otherwise specified (DDNOS).

Both authors have been repeatedly contacted by professionals seeking advice on the applicability of DSM dissociative diagnoses in children and adolescents. Discussions with child clinicians, particularly social workers and psychiatric nurses working with maltreated children, reveal that many are afraid or unwilling to make the diagnosis of MPD or some other dissociative disorder. A number of reasons are commonly offered. It is frequently observed that, although dissociative, the child in question does not fit the DSM-III-R criteria for MPD. Many complain that the lack of any references in the DSM to childhood dissociative disorders make their supervisors reluctant or unwilling to consider these diagnoses. They fear that third-party payers will not accept these diagnoses in children without an official DSM sanction. Some consider the diagnosis of MPD too bizarre and stigmatizing to give to a child.

There are many reasons for having a child-oriented dissociative disorder diagnosis in the DSM taxonomy: 1) to have

a more accurate and developmentally appropriate diagnostic description; 2) to alert clinicians to dissociative disorders in children; 3) to avoid the stigma of an MPD diagnosis; 4) to use as an intermediate diagnosis if an MPD diagnosis is suspected but not established for some period of time; 5) to administratively sanction and justify therapy directed toward the resolution of dissociative symptoms in children and adolescents; and 6) to encourage research on childhood dissociative disorders.

History of the Proposed Diagnosis of "Dissociative Disorder of Childhood"

In 1989 the first author (G.P.) presented a paper describing a constellation of symptoms that seemed to capture the nature of dissociative disorder in childhood (Peterson, 1989). He designated this constellation of symptoms as "Dissociation Identity Disorder" (DID). The DID symptom complex included three categories of symptoms and a rule-out criterion: A) amnesic or trance-like experiences; B) marked behavior fluctuations; C) behavioral and other symptoms which are frequently seen in other disorders; and D) the subject does not qualify for a *DSM-III-R/IV* diagnosis of multiple personality disorder.

During and after the 1989 meeting, many clinicians working with children with dissociative disorders were encouraged and excited about the prospect of having a formally recognized, child-oriented dissociative disorder diagnosis. In February of 1990, the first author (G.P.) wrote to the *DSM-IV* Task Force to petition for consideration of such a diagnosis. There are precedents in the *DSM* system for diagnoses which have one form in childhood and another in adulthood. For instance, the *DSM-III-R* includes childhood diagnoses of conduct disorder, avoidant disorder, identity disorder, and overanxious disorder, which are thought to be precursors of antisocial personality disorder, avoidant personality disorder, borderline personality disorder, and generalized anxiety disorder respectively (APA, 1987).

In 1990, the first author (G.P.) was appointed to the American Psychiatric Association *DSM-IV* Task Force Dissociative Disorders Work Group as a child psychiatry liaison advisor representing the American Academy of Child and Adolescent Psychiatry. The second author (F.P.) was already a member of the Dissociative Disorders Work Group. The concept of DID was not received with great enthusiasm by the Chair of the work group. He suggested that to be consistent with his nomenclature the name should be changed to include "dissociative" rather than "dissociation." In order to conform with his terminology, DID was changed to "Dissociative Disorder of Childhood" (DDoC). The first author (G.P.) drafted the proposed text and criteria. In November, 1990, he met with the second author (F.P.) and Francis Waters, A.C.S.W., to finalize them. The DDoC proposed criteria are listed in Table 1.

Over the next few years vigorous efforts were made to interest the Dissociative Disorders Work Group in the DDoC concept. However, in the *DSM-IV Options Book* there was no mention of child, adolescent or youth in the dissociative disorders section (American Psychiatric Association, 1993).

TABLE 1
Proposed Diagnostic Criteria for Dissociative Disorder of Childhood

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| <p>A) A disturbance of at least six months during which either one or two of the following are present:</p> <ol style="list-style-type: none"> 1) Recurrent amnesic periods or missing blocks of time 2) Frequent trance-like states or appearing to be in a daze or in another world <p>B) Perplexing, major fluctuations in behavior which include at least two of the following:</p> <ol style="list-style-type: none"> 1) Dramatic fluctuations in school or work performance and behavior 2) Variations in apparent social, cognitive, or physical abilities 3) Sudden, recurrent shifts in friendship patterns 4) Changes in language, accent, and voice tone 5) Perplexing changes in preferences for clothes, food, toys, games, etc. <p>C) At least three of the following:</p> <ol style="list-style-type: none"> 1) Refers to self in third person or uses another name to refer to self or parts 2) Has vivid imaginary companionship 3) Frequently disavows observed behavior 4) Exhibits frequent inappropriate sexual behaviors or is sexually precocious 5) Has intermittent depression 6) Has auditory hallucinations from inside the head 7) Has frequent sleep problems 8) Exhibits unprovoked explosive anger and violent behavior 9) Exhibits other antisocial behaviors <p>D) Does not meet the criteria for Multiple Personality Disorder.</p> |
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TABLE 2
Mann-Whitney "U" Pairwise Comparisons of Factors and CDC Score
(Tie-Corrected Z score and p Value)

FACTORS	MPD vs DDoC	DDoC vs ODD
Attention & Hyperactivity	-.81 NS	-1.78 NS
Anxiety & Phobias	-.73 NS	-1.60 NS
Depression	-.04 NS	-2.04 p = .04
Eating Problems	-.82 NS	-.25 NS
Identity Disturbances	-.81 NS	-1.66 NS
Dissociative Symptoms	-1.07 NS	-1.66 NS
School Problems	-.28 NS	-2.08 p = .03
Thought Disorder Sx	-.27 NS	-2.05 p = .04
Aggression	-.44 NS	-2.35 p = .01
Amnesia	-2.04 p = .04	-1.34 NS
Conduct Problems	-1.51 NS	-1.52 NS
Hallucinations	-.02 NS	-1.53 NS
OCD Symptoms	-.31 NS	-.59 NS
PTSD Symptoms	-.17 NS	-1.61 NS
Sleep Disturbances	-.46 NS	-2.27 p = .02
Sexual Problems	-.64 NS	-3.04 p = .002*
CDC Score	-1.95 p = .05	-2.12 p = .03

* Significant at $p < .05$ after Bonferroni correction for number of comparisons

Ironically, we were more successful in informing other *DSM-IV* work groups about the need to include dissociative disorders in their rule-out differential diagnosis sections. Our efforts did result in the inclusion of a mention of children in the rule-out criterion for MPD (renamed "Dissociative Identity Disorder" in the *DSM-IV*) and the inclusion of dissociative disorders in the rule-out criterion for attention-deficit/hyperactivity disorder. DDoC was not accepted into *DSM-IV* as a diagnostic category, nor was it listed in the appendices as a diagnosis for future consideration (APA, 1994).

Purpose of the Study

The purpose of this study was to provide a preliminary test of the applicability of the DDoC diagnostic approach to dissociative disorders in youth. In particular, we were interested in determining if the DDoC criteria would identify a group of children and adolescents who had significant dissociative symptoms but did not meet *DSM-III-R* criteria for MPD. We were also interested in determining if there were children and adolescents, thought to have significant dissociative symptoms, who did not meet criteria for either MPD

or DDoC. Finally, we were interested in determining which DDoC criteria appeared to be the most sensitive to non-MPD dissociative disorders in youth.

There were serious time and funding constraints on this study. We were interested in having data supporting the DDoC concept to present to the *DSM-IV* Dissociative Disorders Work Group. No funds were available to support the project, nor was there sufficient time to apply for funding. These constraints ruled out a clinical study involving structured interviews or similar approaches to the accrual and characterization of a clinical research sample. For example, it took several years for Hornstein and Putnam to collect a combined clinical sample of 64 child and adolescent dissociative disorder patients (Hornstein & Putnam, 1992). Drawing upon the second author's experience with clinician questionnaire studies (e.g. Putnam, Guroff, Silberman, Barban, & Post, 1986; Putnam & Loewenstein, 1993), it was decided to adopt a therapist questionnaire approach as a first order approximation of the suitability of the proposed DDoC criteria.

TABLE 3
Contingency Table Comparison of Proposed DDoC
Criteria by Diagnostic Group
(Percent of cases positive for DDoC Criterion)

Criterion	Percent MPD	Percent DDoC	Percent ODD	Chi Sq. p Value
A1	75.4%	42.8%	23.0%	16.3, $p = .0003^*$
A2	92.4%	94.2%	84.6%	1.2 $p = \text{NS}$
B1	88.6%	94.2%	53.8%	13.5, $p = .001^*$
B2	86.7%	91.4%	7.6%	43.8, $p = .0001^*$
B3	35.8%	37.1%	15.3%	2.2, $p = \text{NS}$
B4	83.0%	60.0%	30.7%	14.8, $p = .0006^*$
B5	47.1%	8.5%	0%	21.3, $p = .0001^*$
C1	71.7%	40.0%	38.4%	10.6, $p = .005^*$
C2	41.5%	28.5%	23.0%	2.4, $p = \text{NS}$
C3	71.5%	62.8%	23.0%	10.4, $p = .005^*$
C4	49.0%	51.4%	15.3%	5.5, $p = \text{NS}$
C5	75.4%	74.2%	30.7%	10.4, $p = .005^*$
C6	82.6%	60.0%	23.0%	17.9, $p = .0001^*$
C7	67.9%	74.3%	38.5%	5.5, $p = \text{NS}$
C8	66.0%	62.9%	30.7%	5.5, $p = \text{NS}$
C9	56.6%	45.7%	7.6%	10.0, $p = .006^*$

* Significant at $p < .05$ after Bonferroni correction for the number of comparisons.

METHODS

Questionnaire Design

Individual cases of children and adolescents with dissociative symptoms were collected by means of a questionnaire completed by a clinician involved with the case. In most instances the questionnaire was completed by the child's primary therapist. The questionnaire was derived from the data base developed by Putnam and Hornstein to facilitate data collection in their two-site study of the clinical phenomenology of child and adolescent dissociative disorders (Hornstein & Putnam, 1992).

The DDoC questionnaire consists of six parts. Part I includes an introductory section explaining the purpose of the study, confidentiality safeguards, information about the clinician completing the questionnaire, demographic information on the patient, and information about setting and purpose of the clinician's contact with the child.

Part II contains a 107-item symptom checklist inquiring about behavioral problems, affective symptoms, dissociative

symptoms, cognitive and thought disorder symptoms, post-traumatic symptoms, self-injurious and aggressive behaviors, school problems, anxiety symptoms and miscellaneous symptoms. For each item on the checklist, the clinician checked one of four possible options: "present," "past," "never," or "unknown." Part II ends with a brief section inquiring about full scale, verbal and performance IQ data, and the name of the IQ measure the patient had been given.

Part III inquires about the child's history of trauma and maltreatment. The clinician is asked to indicate whether the child has experienced physical abuse, sexual abuse, neglect or abandonment, emotional abuse, death of a parent, domestic violence, or other traumas that could be specified by the respondent. For each trauma, the clinician was asked to indicate his/her degree of certainty ("well documented," "suspected," or "unknown") about the actual occurrence of the alleged experience.

Part IV collects information on current and past DSM-III-R diagnoses received by the child, and information on substance abuse patterns. Part V collects information on the

TABLE 4
Mann-Whitney "U" Pairwise Comparisons of Proposed DDoC Criteria
(Tie-Corrected Z score and p Value)

Criterion	MPD vs DDoC	DDoC vs ODD	MPD vs ODD
A1	-3.07, $p = .002^*$	-1.08, $p = \text{NS}$	-3.52, $p = .0004^*$
A2	-.33, $p = \text{NS}$	-1.16, $p = \text{NS}$	-.87, $p = \text{NS}$
B1	-.89, $p = \text{NS}$	-3.48, $p = .0005^*$	-2.89, $p = .003^*$
B2	-.66, $p = \text{NS}$	-5.37, $p = .0001^*$	-5.60, $p = .0001^*$
B3	-.12, $p = \text{NS}$	-1.28, $p = \text{NS}$	-1.40, $p = \text{NS}$
B4	-2.39, $p = .01$	-1.58, $p = \text{NS}$	-3.76, $p = .0002^*$
B5	-3.78, $p = .0002^*$	-1.03, $p = \text{NS}$	-3.11, $p = .001^*$
C1	-2.94, $p = .003^*$	-.10, $p = \text{NS}$	-2.23, $p = .02$
C2	-1.22, $p = \text{NS}$	-.23, $p = \text{NS}$	-1.21, $p = \text{NS}$
C3	-.86, $p = \text{NS}$	-2.24, $p = .02$	-3.21, $p = .001^*$
C4	-.21, $p = \text{NS}$	-2.59, $p = .009$	-2.18, $p = .02$
C5	-.12, $p = \text{NS}$	-2.52, $p = .01$	-3.04, $p = .002^*$
C6	-2.34, $p = .01$	-2.07, $p = .03$	-4.19, $p = .0001^*$
C7	-.63, $p = \text{NS}$	-2.03, $p = .04$	-1.94, $p = .05$
C8	-.39, $p = \text{NS}$	-1.75, $p = \text{NS}$	-2.30, $p = .02$
C9	-.99, $p = \text{NS}$	-2.30, $p = .02$	-3.14, $p = .001^*$

*Significant at $p < .05$ after Bonferroni correction for number of comparisons

child's family including dissociative and other mental disorders in family members. Part VI consists of a checklist for the proposed criteria for DDoC. The clinician is instructed to check all of the items that applied to each case. DDoC items were arranged in the A, B, C, and D groupings proposed by Peterson (1991).

In addition, each clinician is asked to have a parent or guardian complete a copy of the Child Dissociative Checklist (CDC) and to return it with the questionnaire. The CDC is a 20-item parent/adult observer report measure that quantifies dissociative behaviors in children and adolescents. Prior research has established the reliability and validity of the CDC (Malinosky-Rummell & Hoier, 1991; Hornstein & Putnam, 1992; Putnam, Helmers, & Trickett, 1993; Wherry, Jolly, Feldman, Adam, & Manjanatha, 1994; Putnam, Helmers, Horowitz, & Trickett, in press).

Sampling and Subjects

Copies of the questionnaire were distributed by the first author (G.P.) under the auspices of the Department of Psychiatry, of the University of North Carolina. Questionnaire

distribution took several forms. Copies were mailed to clinicians known to be working with dissociative child and adolescent cases. Questionnaires were mailed to clinicians who were members of the International Society for the Study of Multiple Personality and Dissociation (ISSMP&D), a professional organization devoted to understanding and treating patients with dissociative disorders. Copies of questionnaires were also distributed during professional workshops and lectures on the subject of childhood dissociative disorders given by the first author (G.P.) and his associates. Distribution of questionnaires occurred over the period July, 1991 to July, 1993. Approximately 500 copies were distributed, but the precise number is not available because some respondents copied the questionnaire and redistributed it within their clinical networks. One hundred and twenty-three completed questionnaires were returned by 76 clinicians. From this sample, 102 questionnaires were selected for data analysis. Study sample questionnaires were selected such that no clinician contributed more than three cases (2.9%) to the sample. Whenever possible, a CDC completed by a parent, guardian or other independent observer was also available

TABLE 5
Mann-Whitney "U" Pairwise Comparison of Summation of DDoC Criteria
(Tie-Corrected Z score and p Value)

Criteria Sum	MPD vs DDoC	DDoC vs ODD	MPD vs ODD
Sum of A Items	-2.72, $p = .006^*$	-1.47, $p = \text{NS}$	-3.07, $p = .002^*$
Sum of B Items	-2.13, $p = .03$	-4.48, $p = .0001^*$	-4.60, $p = .0001^*$
Sum of C Items	-1.98, $p = .04$	-4.18, $p = .0001^*$	-4.77, $p = .0001^*$
Total of All Items	-2.89, $p = .003^*$	-4.84, $p = .0001^*$	-5.11, $p = .0001^*$

* Significant at $p < .05$ after Bonferroni correction for the number of comparisons

(89 cases, 87.3%).

Data Analysis

Using the DDoC criteria in Part VI, cases were categorized into three groups. Cases were given a diagnosis of Multiple Personality Disorder (MPD) if the clinician indicated that the child met *DSM-III-R* criteria for MPD (DDoC Criterion D). Cases were given a diagnosis of Dissociative Disorder of Childhood (DDoC) if they did not meet criteria for MPD but did satisfy DDoC criteria. Cases were given a diagnosis of other dissociative disorder (ODD) if they suffered a dissociative disorder but did not satisfy criteria for MPD or DDoC. Data were analyzed by these three diagnostic categories.

The large number of symptoms inquired after in Part II necessitated grouping the many items into factors. Following the model developed by Hornstein and Putnam (1992), behaviors and symptoms from Part II were grouped into 16 factors. A table of the Part II items composing each of these factors is available in Hornstein and Putnam (1992). The factors are: 1) attentional and hyperactivity problems; 2) amnesias and memory disturbances; 3) anxiety and phobic symptoms; 4) conduct problems; 5) depression; 6) eating symptoms; 7) hallucinations; 8) identity disturbances; 9) obsessive and compulsive behaviors; 10) dissociative symptoms; 11) post-traumatic stress symptoms; 12) school problems; 13) sexual behaviors; 14) sleep problems; 15) thought disorder and cognitive dysfunction symptoms; and 16) aggression toward self and others. Factor scores were computed by adding up the number of items checked as "present" or "past" for each factor. A trauma index, consisting of the number of Part III trauma items checked as "well documented," was computed for each case.

Statistical analysis was conducted using Statview II software. All factor and CDC data were analyzed non-parametrically, though group means are included to characterize response patterns. Pairwise comparisons of factors and CDC scores were analyzed with the Mann Whitney "U" test. Three-way comparisons were analyzed with the Kruskal-Wallis H statistic. Contingency table analyses with a Yates corrected

Chi Square statistic were used to compare proportions of MPD, DDoC, and ODD cases with respect to a given variable. Tables 2 - 5 contain Bonferroni corrections for the number of variables compared in an analysis.

RESULTS

Demographic Comparisons

After imposition of the case selection rules described above, the final sample of 102 cases consisted of 67 (65.6%) females and 35 (34.3%) males. The mean age was 11.2 ± 4.6 (range 3.0-19.1) years with no significant difference between males and females. The sample was contributed by a variety of professional disciplines. Psychiatrists contributed 29.4%, MSW social workers 28.4%, Ph.D/PsyD psychologists 18.6%, master level therapists 10.8%. Miscellaneous other professionals contributed 12.8%. Using the proposed DDoC classification criteria, there were 54 MPD cases (52.9%), 35 DDoC cases (34.3%) and 13 ODD cases (12.7%). There were no significant differences in the gender or age distributions by diagnosis.

The majority of cases were seen in outpatient settings (73.5%), followed by inpatient evaluations (15.7%), "other" situations (8.8%), and clinics (1.9%). Most of the children were seen for psychiatric or behavioral problems (80.4%), followed by social service or child protection evaluations (7.8%), school-related evaluations (5.8%), custody and legal evaluations (1.9%), and other reasons (5.8%). There were no significant differences in the reasons for evaluation or setting by age, gender or diagnostic group.

Clinical Factors

The focus of this study was to determine if the DDoC criteria proposed by Peterson (1991) delineate and appropriately characterize a group of children and adolescents who suffer from dissociative disorders that are distinct from multiple personality disorder. In the past, such cases have been lumped under the poorly defined diagnosis of Dissociative Disorder Not Otherwise Specified (DDNOS). Table 2 pre-

sents the pairwise comparisons of the three diagnostic groups on the sixteen factors and CDC scores.

In addition to the presence or absence of alter personalities (criterion D), MPD and DDoC cases can be distinguished from each other by differences in degree and types of amnesia and by CDC scores (MPD mean = 22.6 ± 7.3 ; DDoC mean = 19.25 ± 7.3 ; $Z = -1.95$, $p = .05$). There are no significant differences between these two groups on any of the other factors. The DDoC cases had significantly less amnesia for general material ($Z = -2.83$, $p = .01$) and fewer experiences of lost time ($Z = -2.05$, $p = .03$) but did not differ for amnesias related to trauma or amnesias related to specific events or circumstances.

The DDoC cases were clinically distinguishable from the ODD cases in that they had significantly more depression, school problems, thought disorder and cognitive symptoms, aggression, sleep difficulties, and sexual behavior problems. Their CDC scores were also significantly higher (DDoC mean = 19.25 ± 7.3 ; ODD mean = 14.0 ± 5.0 ; $Z = -2.12$, $p = .03$). Interestingly, the DDoC cases were not significantly more dissociative, amnesic, or post-traumatic than the ODD cases.

The MPD cases differed significantly from the ODD cases on a large number of factors including: depression, identity disturbances, dissociative symptoms, school problems, thought disorder and cognitive symptoms, aggression, amnesias, conduct problems, sleep disturbances, sexual behavior problems, and CDC scores.

Trauma Histories

There were no statistical differences in the trauma histories of the three groups. The mean number of "well documented" trauma items was essentially the same across all groups (MPD 3.34 ± 1.3 , DDoC 3.07 ± 1.5 , ODD 3.09 ± 1.3 ; Kruskal-Wallis tie-corrected $H = .77$, $p = NS$). Although MPD subjects tended to have earlier ages of onset for the various traumas, the age differences were not significant and many clinicians indicated their uncertainty as to the exact age of onset of the trauma.

Proposed DDoC Criteria

Table 3 presents the percentage of subjects in each diagnostic group who were positive for each of the proposed DDoC criteria. Inspection of this table reveals that a number of proposed DDoC criteria do not significantly discriminate among the three groups: i.e., A2 (trance states), B3 (recurrent shifts in friendship patterns), B5 (perplexing changes in preferences for clothing, food, toys, games etc), C2 (vivid imaginary companionship), C4 (inappropriate or precocious sexual behavior), C7 (auditory hallucinations), C8 (frequent unprovoked explosive anger and violent behavior). Table 4 presents the Mann-Whitney "U" pairwise comparisons of each DDoC criterion for all combinations of diagnostic groups. Again, criteria A2, B3, C2 and C8 do not significantly differentiate between two or more diagnostic group combinations. Only one criterion, C6 (sleep problems), is significantly different across all three groups. The other criteria are significantly different across two diagnostic combinations.

Another approach to this question is to simply sum the

number of DDoC items checked and see if these sums differentiate the three groups. This works well in most instances. The total sum of positive A, B and C criteria readily differentiates the three groups (MPD mean = 10.7 ± 2.8 , DDoC mean = 9.2 ± 1.9 , ODD mean = 4.46 ± 2.1 , Kruskal-Wallis tie-corrected $H = 34.77$, $p = .0001$). When considered separately, the sums of A (MPD mean = $1.6 \pm .6$, DDoC mean = $1.3 \pm .5$, ODD mean = $1.1 \pm .6$, Kruskal-Wallis tie-corrected $H = 13.15$, $p = .001$), B (MPD mean = 3.3 ± 1.2 , DDoC mean = $2.9 \pm .7$, ODD mean = 1.0 ± 1.1 , Kruskal-Wallis tie-corrected $H = 27.10$, $p = .0001$), and C (MPD mean = 5.7 ± 1.7 , DDoC mean = 5 ± 1.6 , ODD mean = 2.3 ± 1.5 , Kruskal-Wallis tie-corrected $H = 26.5$, $p = .0001$) items each differentiate the three groups. Table 5 presents the diagnostic pairwise comparison of the sum of positive A, B, C and total of all DDoC items. This approach was used in *DSM-III-R* in attention deficit hyperactivity disorder but was abandoned in *DSM-IV* in favor of requiring the core symptoms (inattention or hyperactivity-impulsivity).

Past and Present Diagnoses

Inspection of the non-dissociative symptom factor scores shows high rates of affective and post-traumatic symptoms, school and conduct problems and aggression relative to unpublished data on non-dissociative disorder children and adolescents (Putnam, unpublished data). An examination of the past and current psychiatric diagnoses reported in Part IV of the questionnaire shows that 36% of the sample had received a major affective disorder diagnosis, 33% had received one or more of the disruptive behavioral disorder diagnoses (conduct disorder, oppositional defiant disorder or attention deficit hyperactivity disorder), 47% of the sample had received a diagnosis of PTSD, and 10% had received an anxiety disorder diagnosis. In addition, there was a wide array of learning disabilities and adjustment disorder diagnoses. Although MPD and DDoC cases tended to acquire more diagnoses than ODD, these differences were not significant. This pattern of multiple diagnoses is similar to that reported by prior investigations (Hornstein & Putnam, 1992; Putnam, 1993).

DISCUSSION

Limitations of the Study Design

By necessity, this study adopted a questionnaire format to investigate the validity of the DDoC approach to dissociative disorders in children and adolescents. Although useful in situations in which one wants to survey an issue or problem rapidly and inexpensively, questionnaire studies face a number of methodological limitations (Putnam, Guroff, Silberman, Barban, & Post, 1986; Putnam & Loewenstein, 1993). Our sample is not random and represents the patients of therapists who are interested in dissociative disorders in children and adolescents. Questionnaires do not permit the degree of standardization of assessment possible with structured interview-based clinical studies. We are dependent on the judgment and understanding of the clinicians completing the questionnaire. We do not know how precisely defini-

tions of symptoms were applied in a given case. Nor did we have an opportunity to independently verify the diagnoses or establish interrater reliability on the use of the symptom and DDoC criteria checklists. The lack of a non-dissociative comparison group, although not uniquely the result of a questionnaire design, also limits the larger generalizability of our findings. These limitations should be kept in mind by the reader as they constrain the conclusions that we can draw from our data.

Validity of the DDoC Criteria Approach to Non-MPD Dissociative Disorders

Nonetheless, our results suggest that a diagnostic approach based on a DDoC model to non-MPD dissociative disorders in children and adolescents is useful. The DDoC criteria were able to identify a substantial number of cases (34.3% of the sample), who, in the opinion of their therapists, failed to fulfill DSM criteria for MPD. These cases had clinically significant levels of dissociation based on their questionnaire dissociation factor scores and on their Child Dissociative Checklist scores, completed by an independent observer.

Many of the ODD cases also had elevated levels of dissociative symptoms and did not statistically differ from the DDoC cases on the questionnaire's dissociative factor. This is not surprising given that all subjects were selected by their therapists because of their dissociative symptoms. ODD subjects did have significantly lower CDC scores than DDoC and MPD subjects. A number of DDoC criterion items also significantly differentiated DDoC and ODD subjects. In general MPD subjects were robustly different from ODD subjects on virtually all measures of dissociation included in this study. These results indicate that the DDoC criteria can partition a highly dissociative sample into a three groups, which differ on an independent measure of dissociation (the CDC) and on a number of non-dissociative clinical factors. The clinical utility of these distinctions remains to be established.

Recommendations and Future Directions

It is apparent that the opportunity to influence the DSM-IV has passed and future attempts to include a childhood dissociative disorder diagnosis must look to the next revision of this influential document. DDoC criteria will be further refined based on the results of this study and clinical experience. For instance, it is becoming increasingly clear from our unpublished data that for school age children, the difference between the imaginary companions of children with dissociative disorders and normal imaginary companionship is the degree to which the child cannot distinguish that the imaginary companion is not "real." Future studies will permit a better determination of the age/developmental stage "norms" for DDoC criteria such as imaginary companionship.

During the last few years we have come a long way in understanding childhood dissociative disorders. These conditions are being increasingly recognized in a variety of clinical settings by a range of primary clinicians and therapists. This is good, but it is far from sufficient. Further acceptance of dissociative disorders in children is going to require bet-

ter clinical descriptions and more appropriate diagnostic criteria. The DDoC field trial and our associated political lobbying with the DSM work groups made small but tangible gains in informing the larger fields of psychiatry and clinical psychology of the need to consider dissociative disorders in youth. Future gains will require better information on these conditions in youth and a more concerted and organized lobbying effort on the behalf of children afflicted with dissociative disorders. ■

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