

Correlates of Internalizing and Externalizing Behavior Problems: Perceived Competence, Causal Attributions, and Parental Symptoms

**Bruce E. Compas,^{1,2} Vicky Phares,¹ Gerard A. Banez,¹
and David C. Howell¹**

Young adolescents in the clinical range on internalizing, externalizing, and both internalizing and externalizing behavior problems, as well as youth in the normal range on both types of problems, were identified separately using adolescents' self-reports and mothers' reports of behavior problems. In comparisons of groups identified on the basis of either type of informant, differences among the four groups were found in adolescents' self-perceptions of competence and in their fathers' psychological symptoms. Specifically, normals reported a more positive sense of their social acceptance and their behavioral conduct than all clinical groups, and fathers of adolescents in the clinical range on both internalizing and externalizing problems tended to report more psychological symptoms than the fathers of the normal group. Differences were found in mothers' psychological symptoms only when mothers' reports of adolescents' behavior problems were used to identify the groups. No consistent differences among the groups were found on adolescents' causal attributions for success and failure.

Manuscript received in final form September 10, 1990.

This research was supported by funds from the William T. Grant Foundation and preparation of this manuscript was supported in part by National Institute of Mental Health grant MH43819. We are grateful to Rebecca Williams and Carole Giunta for their assistance with data collection, and to Tom Achenbach, Harold Leitenberg, and two anonymous reviewers for their comments on an earlier draft of this paper.

¹University of Vermont, Burlington, Vermont 05405.

²Address all correspondence to Bruce E. Compas, Department of Psychology, University of Vermont, Burlington, Vermont 05405.

Empirically derived taxonomies of child and adolescent problems have become important in both research and clinical practice in developmental psychopathology (Achenbach, 1985; Achenbach & McConaughy, 1987). A significant task now facing the field is to identify characteristics of children and their social environments that are associated with classification in the clinical vs. normal ranges, as well as with different subtypes of problems. Correlates of clinical groups and subtypes may provide additional important information about the nature of these groups and may serve as areas for change in interventions with these children.

A challenge in this area involves the identification of characteristics of children and their environments which distinguish subgroups of children classified on the basis of reports of different informants. That is, given the modest rates of correspondence among reports from parents, teachers, peers, and children (Achenbach, McConaughy, & Howell, 1987), the correlates of clinical subgroups may differ when they are identified by these various sources. One concern is that correlates of clinical groups may be primarily a function of the informant used to identify the groups. Alternatively, there may be consistency in the correlates of clinical subgroups identified by different informants in spite of variability in ratings of behavior problems used to classify children.

The "broad-band" factors of internalizing (overcontrolled) and externalizing (undercontrolled) problems have been most consistently identified in factor analyses of reports of parents, teachers, and children (Achenbach & Edelbrock, 1978). Therefore, these broad-band factors represent a useful level for comparison across informants of the correlates of subtypes of child and adolescent psychopathology. Internalizers and externalizers (or children with subtypes of problems subsumed by these broad-band factors) have been compared with one another and with nonclinical groups on a variety of dimensions, including measures of social competence, cognitive skills, social cognition, and parental and family functioning. The findings have been inconsistent, perhaps as a result of the use of different informants to identify the groups, different criteria for determining clinical status, and different measures. For example, studies have been inconsistent with regard to differences in self-esteem. Using parent reports to identify clinical groups, Cohen, Gotlib, Kershner, and Wehrspann (1985) did not find a difference between internalizers and externalizers in global self-esteem as measured by the Piers-Harris Scale (1964) in a sample of 6- to 11-year-old clinic-referred boys and girls. McConaughy, Achenbach, and Gent (1988), in a study of 6- to 11-year-old clinic-referred boys, also used parents' ratings to create groups and found that externalizers denied more negative statements about themselves (i.e., reported more positive self-esteem) than internalizers. In a sample of nonreferred elementary school aged boys and

girls, Schneider and Leitenberg (1989) compared children displaying problems of aggression, withdrawal, both aggression and withdrawal, and neither aggression nor withdrawal as identified by a combination of teacher and peer ratings. Control children reported higher self-esteem on the Piers-Harris than children in any of the three clinical groups, while aggressive children reported higher self-esteem than children identified as withdrawn or both aggressive and withdrawn. In a related domain of social cognition, none of these three studies reported consistent differences between clinical subgroups in causal attributions or locus of control.

In contrast to research which has included both internalizers and externalizers, studies that have compared children displaying depressive symptoms, an internalizing problem, with controls have generated a more consistent picture of the features of these children. Depressed children have been characterized by lower self-esteem and more dysfunctional patterns of causal attributions than normal controls (e.g., Asarnow & Bates, 1988; Kaslow, Rehm, Pollack, & Siegel, 1988; Leon, Kendall, & Garber, 1980; Meyer, Dyck, & Petrinack, 1989). These differences have been consistent when groups were created using parents' reports (Leon et al., 1980), children's self-reports (Meyer et al., 1989), and clinical interviews (Kaslow et al., 1988).

Prior research has also examined features of the psychosocial environment that may be associated with internalizing and externalizing problems. Specifically, parental psychological symptoms may be useful in understanding the development and maintenance of child and adolescent behavior problems. For example, Jaenicke et al. (1987) found that depressed mothers had children who reported low self-esteem and dysfunctional causal attributions. Recent findings by Lee and Gotlib (1989) indicate that child maladjustment may be associated with other types of maternal psychopathology as well. Other studies have demonstrated the importance of fathers' psychopathology in relation to child maladjustment (e.g., Compas, Howell, Phares, Williams, & Ledoux, 1989b). Therefore, the association of a wide range of psychological symptoms in both mothers and fathers with children's internalizing and externalizing problems needs to be examined.

In summary, it is unclear which characteristics of children and their social environments distinguish clinical and nonclinical groups formed using the reports of different informants. In the present study young adolescents in the clinical range on only internalizing problems, only externalizing problems, and both internalizing and externalizing problems and young adolescents within the normal range on both of these broad-band factors were compared on their self-perceptions of competence in different life domains, global self-worth, attributions of cause for success and failure, and levels of a wide range of psychological symptoms in their mothers and fathers. These

comparisons were conducted both when using adolescents' self-reports of behavior problems to create the groups and when using mothers' reports of their children's behavior problems to create the groups. Data were obtained twice over a period of 9 months to allow for a test of the replicability of the findings as well as to examine the stability of groups over time. All of the prior studies in this area have been cross-sectional in design; as such, the replicability of the findings over time have not been tested.

If differences between clinical and nonclinical groups and among clinical subgroups are primarily the result of the informants used to identify the groups, then the groups created using adolescents' self-reports would be expected to differ in self-reports of perceived competence and causal attributions, whereas the groups created using mothers' reports would be expected to differ on mothers' symptoms. Differences between groups that are not associated with the informants used to create the groups would provide evidence for markers of clinical groups that are independent of "method effects."

METHOD

Subjects

Participants were 309 young adolescents (167 female and 142 male) and their parents living in the rural northeast portion of Vermont. The young adolescents ranged from 10 to 15 years old with a mean age of 12.00 ($SD = 1.01$) and they were attending grades 6 through 8. Typical of this section of Vermont, more than 98% of the families were white. Mothers and fathers had means of 13.18 ($SD = 2.47$) and 12.72 ($SD = 3.44$) years of education, respectively. A total of 81.4% of the mothers worked outside of the home for an average of 33.94 h/week ($SD = 13.90$); 93.8% of fathers worked outside of the home for an average of 46.07 h/week ($SD = 11.39$). Median family income was between \$20,000 and \$24,999, ranging from less than \$3,000 to more than \$40,000. There were 82% two-parent families and 18% single-parent families. Family socioeconomic status based on education, occupation, gender, and marital status (Hollingshead, 1975) was as follows: Level I (unskilled laborer), 3%; Level II (semiskilled worker), 23%; Level III (skilled craftsman, clerical worker), 27%; Level IV (medium business, minor professional), 33%; Level V (major business or professional), 14%. The number of children in the families ranged from one to six with a mean of 2.61 ($SD = 1.06$). This sample is comparable to the population of this section of Vermont in annual income, percentage

of two-parent families, education, and family size (Vermont Office of Policy Research and Coordination, 1988).³

Procedures

As part of a larger study, all students in the sixth, seventh, and eighth grades in eight rural schools were given a letter of informed consent to take home to their parents. Approximately half of the available families volunteered to take part in the study. Participation was completely voluntary and \$25 was given to each family for completion of the forms. Questionnaires were completed anonymously (identified only by a code number for each family).

Students completed their questionnaires at school in small groups with a research assistant available to explain directions and answer any questions. Students were given an envelope containing questionnaires for their parents and were instructed to take these materials home and return the completed parent forms in a sealed envelope. All procedures at followup were identical to those at the initial data collection. The 9-month time period was selected so that the data collections would coincide with the beginning and end of the school year.

Measures

Adolescent Emotional/Behavioral Problems. Mothers completed the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983). The CBCL consists of 118 behavior problem items rated by parents as *not true*, *somewhat or sometimes true*, or *very true or often true* for their child. Normalized *T* scores based on a sample of clinical and nonclinical youth were used for the internalizing and externalizing behavior problem scores. Norms, reliability, and validity of the CBCL are well established (Achenbach & Edelbrock, 1983).

Adolescents completed the Youth Self-Report (YSR) version of the CBCL (Achenbach & Edelbrock, 1987). The YSR includes 102 behavior problem items like those on the CBCL except that they are worded in the first person, plus an additional 16 socially desirable items that replace items from the CBCL which were considered inappropriate for self-report (e.g.,

³Prior regression analyses with the entire sample indicated that fathers' symptoms were related to adolescents' self-reports on the YSR and mothers' symptoms were related to their own reports on the CBCL (Compas, Howell, Phares, Williams, & Giunta, 1989a). However, analyses involving extreme groups may identify nonlinear relations among the variables that are not apparent in correlational or regression analyses (McConaughy et al., 1988).

whining). The socially desirable items were excluded from the analyses. Normative data and the factor-analytically derived scales for the Youth Self-Report Profile were obtained from samples of nonreferred and clinically referred adolescents. Normalized *T* scores based on a sample of clinical and nonclinical youth were used for the internalizing and externalizing behavior problem scores. Reliability and validity have been well established (Achenbach & Edelbrock, 1987).

Adolescents' Perceived Competence. Self-perceptions of competence were assessed with the Self-Perception Profile for Children (Harter, 1985), a self-report measure which assesses children's and young adolescents' perceptions of competence in five life domains: scholastic competence, social acceptance, athletic competence, physical appearance, and behavioral conduct. The instrument also provides a separate index of global self-worth or self-esteem. Higher scores reflect higher perceived competence. Reliability and factorial, convergent, construct, and discriminant validity have been well established (Harter, 1985).

Adolescents' Causal Attributions. Causal attributions were assessed with a measure developed by Fielstein et al. (1985) which includes success and failure events in the social, academic, and athletic domains. Adolescents were given a forced choice of four attributions (ability/lack of ability; effort/lack of effort; good luck/bad luck; task ease/task difficulty) in response to 12 vignettes (four in each of the three domains; half were success events and half were failure events). Attribution scores were calculated by counting the number of attributions in each category for the six success events and for the six failure events, yielding eight attribution scores (success and failure events for skill, effort, luck, and ease attributions), with attribution scores ranging from 0 to 6. Test-retest reliability and content validity have been shown to be adequate (Fielstein et al., 1985).

Parental Symptoms. Mothers and fathers independently completed the Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1983), which consists of 90 items addressing a variety of psychological and somatic symptoms. Respondents rate the extent to which they have been distressed by each symptom during the past week (0 = not at all, 4 = extremely). Test-retest reliability, internal consistency, and concurrent validity have been shown to be adequate (Derogatis, 1983). Factor analyses have identified nine subscales: somatic symptoms, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoia, and psychoticism. Scores for each scale are obtained by summing the scores of individual items and dividing by the total number of items. Alphas for the current sample ranged from .84 to .93.

Table I. Means and Standard Deviations of Internalizing and Externalizing Behavior Problems on the YSR and the CBCL for the Internalizing, Externalizing, Mixed, and Normative groups at Time 1 and Time 2^a

	n	Time 1				Time 2				
		Internalizing		Externalizing		Internalizing		Externalizing		
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	
YSR groups										
Internalizers	27	67.44	4.97	58.33	5.94	16	67.69	6.14	58.52	4.60
Externalizers	9	58.44	3.47	66.00	3.00	14	54.93	5.17	65.86	2.51
Mixed	12	69.75	6.15	67.33	3.17	11	70.82	4.79	68.36	4.52
Normative	151	44.86	6.93	43.07	6.91	146	44.30	6.41	43.30	7.00
CBCL groups										
Internalizers	25	65.25	2.45	56.79	4.35	22	65.27	1.98	56.59	3.35
Externalizers	24	57.79	3.46	65.29	2.66	14	58.50	3.65	64.93	2.20
Mixed	27	68.89	4.32	68.26	6.12	18	67.67	4.14	68.22	3.77
Normative	92	46.22	4.94	45.81	5.25	85	45.97	5.49	45.97	5.32

^aYSR = Youth Self-Report; CBCL = Child Behavior Checklist.

Demographic Questionnaire. Parents completed a demographic questionnaire concerning marital status, age, education, income, and number of children in the family.

Determination of Clinical and Nonclinical Groups

Four groups were formed: adolescents in the clinical range on only internalizing problems (*internalizers*), adolescents in the clinical range on only externalizing problems (*externalizers*), adolescents in the clinical range on both internalizing and externalizing problems (*mixed*), and adolescents in the normal range on both internalizing and externalizing problems (*normative* group). At both Time 1 and Time 2, groups were identified separately using the broad-band internalizing and externalizing scales on the CBCL and the YSR based on the clinical cutoffs reported in the respective manuals (Achenbach & Edelbrock, 1983, 1987). Adolescents were identified as *internalizers* if they received a *T* score of greater than or equal to 63 on the internalizing scale and less than 63 on the externalizing scale. Adolescents were identified as *externalizers* if they received a *T* score of greater than or equal to 63 on the externalizing scale and less than 63 on the internalizing scale. Adolescents were identified as *mixed* if they received a *T* score of greater than or equal to 63 on both the internalizing and externalizing scales. The normative group consisted of those adolescents who received a *T* score of less than 55 on both the internalizing and ex-

ternalizing scale. Because of the importance of identifying a truly normative group, the difference between the T scores of 63 and 55 left a number of adolescents unclassified.⁴

The means and standard deviations for the internalizing and externalizing T scores for the groups created on the basis of the YSR and the CBCL are presented in Table I. Based on the YSR at Time 1, there were 27 internalizers (8 boys, 19 girls), 9 externalizers (6 boys, 3 girls), 12 mixed (4 boys, 8 girls), 151 in the normative group (75 boys, 76 girls), and 110 unclassified or missing data at Time 1; and at Time 2, there were 16 internalizers (7 boys, 9 girls), 14 externalizers (8 boys, 6 girls), 11 mixed (4 boys, 7 girls), 146 in the normative group (65 boys, 81 girls), and 104 unclassified or missing data (18 youths who completed the YSR at Time 1 did not complete the measure at Time 2). Mean T scores for internalizers on the internalizing scale were 9.11 and 9.44 T -score points higher than their mean scores on the externalizing scale at Time 1 and Time 2, respectively. Mean T scores for externalizers on the externalizing scale were 7.66 and 10.93 T -score points higher than their mean T scores on the internalizing scale at Time 1 and Time 2, respectively.

Based on the CBCL at Time 1, there were 25 internalizers (11 boys, 14 girls), 24 externalizers (13 boys, 11 girls), 27 mixed (17 boys, 20 girls), 92 in the normative group (36 boys, 56 girls), and 141 unclassified or missing data; and at Time 2, there were 22 internalizers (9 boys, 13 girls), 14 externalizers (11 boys, 3 girls), 18 mixed (10 boys, 8 girls), 85 in the normative group (28 boys, 57 girls), and 152 unclassified or missing data (62 mothers who completed the CBCL at Time 1 did not complete the measure at Time 2). Mean T scores for internalizers on the internalizing scale were 8.46 and 8.68 T -score points higher than their mean T scores on the externalizing scale at Time 1 and Time 2, respectively. Mean T scores for externalizers on the externalizing scale were 7.50 and 6.43 T -score points higher than their mean T scores on the internalizing scale at Time 1 and Time 2, respectively.

In order to analyze the stability of group status from the first to the second data collection, the data at each time period were classified into clinical *cases* and *noncases*. A *case* (T score ≥ 63) was defined as an adolescent who scored in the clinical range on internalizing problems, externalizing problems, or both. A *noncase* (T score < 55) was defined as an

⁴A number of different criteria have been used in previous studies in identifying clinical groups. We selected the cutoff of a T score of 63 on the internalizing and externalizing scales of the YSR and CBCL because this level is suggested in the manuals for these measures as the most reliable criterion for distinguishing between referred and nonreferred groups. The T score of 55 was selected for the nonclinical group to insure that the clinical and nonclinical groups were sufficiently different from one another to allow for meaningful comparisons.

adolescent who scored in the normal range on both internalizing and externalizing problems. Of the 48 cases identified at Time 1 on the YSR, 20 (41%) remained cases at Time 2 (*stable cases*), 5 became noncases (*remissions*), 20 were neither a case nor a noncase (*unclassified*), and 3 had missing data at Time 2. Of the 151 noncases identified at Time 1 on the YSR, 100 (66%) remained noncases at Time 2 (*stable noncases*), 9 became cases (*new cases*), 32 were unclassified, and 10 had missing data at Time 2. Switching to the CBCL, of the 76 cases identified at Time 1, 33 (41%) remained cases at Time 2 (*stable cases*), 9 became noncases (*remissions*), 13 were unclassified, and 21 had missing data at Time 2. Of the 92 noncases identified at Time 1 on the CBCL, 50 (54%) remained noncases at Time 2 (*stable noncases*), 5 became cases (*new cases*), 14 were unclassified, and 23 had missing data at Time 2. It should be noted that the change from a case to a noncase, or vice versa, represented a change from a *T* score of 63 or above to a *T* score of 55 or below, or vice versa. Of those individuals who remained cases at both Time 1 and Time 2, only a small minority remained in the same category (e.g., internalizers at both times).

There was some consistency in the identification of adolescents in the clinical range on both the YSR and CBCL. For those adolescents with complete data on both measures at Time 1, 18 of 44 in the clinical range on one of the broad-band factors on the YSR were also in the clinical range on the CBCL (41%), and 18 of the 75 in the clinical range on the CBCL were also in the clinical range on the YSR (24%). For those with complete data on both measures at Time 2, 11 of 22 in the clinical range on the YSR were also in the clinical range on the CBCL (50%), and 11 of the 54 in the clinical range on the CBCL were also in the clinical range on the YSR (20%). However, there was very little agreement between the two informants in classification into the internalizing, externalizing, or mixed categories.

RESULTS

The results are presented in two sections. First, comparisons of the groups identified on the basis of the YSR at Time 1 and Time 2 are presented. Second, the same comparisons for the groups identified on the basis of the CBCL at Time 1 and Time 2 are presented. Because of the large number of comparisons required to examine group differences and because subsets of variables represented underlying constructs, separate multivariate analyses of variance (MANOVAs) were completed for each set of variables (i.e., adolescents' perceived competence, adolescents' causal attributions, mothers' symptoms, and fathers' symptoms), followed by univariate analyses of variance (ANOVAs), and *post hoc* comparisons of group differences.

Table II. Means and Standard Deviations for Adolescent and Parent Measures with Groups Based on YSR^a

Variable	Group I (<i>n</i> = 27)		Group E (<i>n</i> = 9)		Group M (<i>n</i> = 12)		Group N (<i>n</i> = 151)		<i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
	Time 1								
Perceived competence									
Scholastic	2.57	0.68	2.65	0.35	2.34	0.65	3.10	0.62	10.67 ^b
Social acceptance	2.50	0.71	3.06	0.73	2.54	0.41	3.20	0.59	13.25 ^b
Athletic	2.47	0.77	3.06	0.63	2.32	0.84	3.04	0.66	8.45 ^b
Appearance	2.08	0.72	2.31	0.74	1.94	0.46	2.87	0.68	10.68 ^b
Behavior	2.80	0.74	2.61	0.20	2.48	0.38	3.21	0.53	8.00 ^b
Global self-worth	2.33	0.74	2.66	0.57	2.37	0.56	3.27	0.55	27.38 ^b
Attributions									
Success									
Skill	1.56	1.19	1.89	1.17	1.25	0.87	2.29	1.61	—
Effort	2.70	1.44	1.56	1.01	2.58	1.08	2.23	1.43	—
Luck	0.93	1.14	1.67	1.58	1.17	1.19	0.66	1.00	—
Task ease	0.63	0.74	0.89	0.60	0.92	1.00	0.58	0.86	—
Failure									
Skill	1.85	1.54	1.89	1.76	2.00	1.65	1.08	1.12	—
Effort	1.70	1.46	1.78	1.48	1.50	1.09	1.94	1.32	—
Luck	1.00	1.00	1.89	1.45	1.17	1.03	1.43	1.13	—
Task difficulty	1.26	1.23	0.44	0.53	1.17	0.84	1.31	1.14	—
Mothers' symptoms									
Somatic	0.76	0.63	0.67	0.60	0.73	0.76	0.51	0.53	—
Obsessive-compulsive	0.74	0.58	0.82	0.55	0.87	0.74	0.65	0.54	—
Interpersonal sensitivity	0.92	0.65	0.89	0.74	0.91	0.94	0.72	0.65	—
Depressive	0.90	0.66	1.08	0.75	1.09	0.94	0.76	0.69	—
Anxiety	0.85	0.79	0.77	0.46	0.83	1.01	0.52	0.52	—
Hostility	0.63	0.60	0.72	0.89	0.77	0.97	0.51	0.54	—
Phobic anxiety	0.24	0.79	0.07	0.12	0.35	0.95	0.11	0.22	—
Paranoia	0.45	0.39	0.33	0.49	0.62	0.99	0.48	0.50	—
Psychoticism	0.25	0.40	0.31	0.32	0.49	0.65	0.25	0.36	—
Fathers' symptoms									
Somatic	0.58	0.36	0.22	0.13	0.67	0.87	0.33	0.37	—
Obsessive-compulsive	0.76	0.70	0.20	0.09	0.76	0.65	0.48	0.45	—
Interpersonal sensitivity	0.56	0.52	0.19	0.23	0.46	0.56	0.37	0.39	—
Depressive	0.60	0.64	0.13	0.12	0.75	0.83	0.41	0.43	—
Anxiety	0.54	0.47	0.21	0.18	0.71	0.74	0.29	0.30	—
Hostility	0.67	0.72	0.39	0.54	0.73	0.45	0.40	0.46	—
Phobic anxiety	0.13	0.26	0.10	0.17	0.00	0.00	0.11	0.25	—
Paranoia	0.71	0.51	0.39	0.67	0.80	0.92	0.40	0.42	—
Psychoticism	0.30	0.56	0.07	0.06	0.29	0.24	0.20	0.27	—

Table II. Continued

Variable	Group I (<i>n</i> = 16)		Group E (<i>n</i> = 14)		Group M (<i>n</i> = 11)		Group N (<i>n</i> = 146)		<i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Time 2									
Perceived competence									
Scholastic	2.88	0.57	2.70	0.70	2.62	0.65	3.11	0.62	3.76 ^c
Social acceptance	2.59	0.52	2.93	0.65	2.63	0.57	3.16	0.64	5.82 ^b
Athletic	2.58	0.69	2.81	0.67	2.48	0.45	2.98	0.61	3.87 ^d
Appearance	2.30	0.77	2.43	0.62	2.20	0.48	2.87	0.70	6.89 ^b
Behavior	2.91	0.39	2.56	0.49	2.53	0.39	3.20	0.53	12.22 ^b
Global self-worth	2.87	0.57	2.88	0.59	2.63	0.47	3.29	0.56	8.24 ^b
Attributions									
Success									
Skill	1.88	1.50	1.93	1.54	1.64	1.69	2.35	1.51	—
Effort	2.31	1.92	2.00	1.88	2.46	1.51	2.06	1.56	—
Luck	1.06	1.12	1.07	1.39	0.64	0.67	0.58	0.85	—
Task ease	0.75	1.00	1.00	1.11	0.73	0.91	0.75	0.84	—
Failure									
Skill	1.63	1.36	1.21	1.12	1.09	1.14	1.11	1.11	—
Effort	1.69	1.14	1.93	1.00	1.73	1.42	2.03	1.38	—
Luck	1.44	1.15	1.36	1.08	2.18	1.47	1.46	1.13	—
Task difficulty	1.25	0.76	1.36	1.08	0.46	0.69	1.14	1.09	—
Mothers' symptoms									
Somatic	0.45	0.37	0.27	0.51	0.42	0.50	0.47	0.50	—
Obsessive-compulsive	0.59	0.61	0.24	0.24	0.50	0.34	0.53	0.49	—
Interpersonal sensitivity	0.72	0.64	0.18	0.17	0.49	0.58	0.45	0.45	—
Depressive	0.78	0.60	0.41	0.26	0.52	0.49	0.59	0.57	—
Anxiety	0.47	0.53	0.24	0.37	0.34	0.34	0.39	0.54	—
Hostility	0.55	0.60	0.17	0.17	0.80	0.76	0.40	0.47	—
Phobic anxiety	0.09	0.17	0.00	0.00	0.00	0.00	0.10	0.20	—
Paranoia	0.51	0.52	0.20	0.36	0.30	0.58	0.36	0.43	—
Psychoticism	0.20	0.29	0.18	0.11	0.16	0.15	0.20	0.35	—
Fathers' symptoms									
Somatic	0.43	0.30	0.57	0.61	0.98	1.09	0.32	0.40	3.13 ^c
Obsessive-compulsive	0.59	0.53	0.11	0.12	0.68	0.89	0.43	0.50	1.11
Interpersonal sensitivity	0.59	0.68	0.17	0.33	0.58	0.74	0.41	0.50	0.77
Depressive	0.49	0.41	0.37	0.55	0.62	0.82	0.40	0.50	0.32
Anxiety	0.46	0.35	0.18	0.24	0.63	0.57	0.26	0.38	1.93
Hostility	0.54	0.42	0.29	0.34	0.96	0.58	0.39	0.49	2.05
Phobic anxiety	0.25	0.29	0.00	0.00	0.11	0.21	0.09	0.25	1.37
Paranoia	0.52	0.55	0.04	0.08	1.25	1.19	0.38	0.50	4.17 ^c
Psychoticism	0.35	0.42	0.00	0.00	0.18	0.29	0.21	0.44	0.66

^aYSR = Youth Self-Report; I = internalizers; E = externalizers; M = mixed; N = normative.

^b*p* < .001.

^c*p* < .05.

^d*p* < .01.

YSR-Identified Groups

Means and standard deviations for the internalizing, externalizing, mixed, and normative groups on the measures of adolescents' self-perceptions of competence, causal attributions, and mothers' and fathers' psychological symptoms at Time 1 and Time 2 are presented in Table II. Univariate F values are presented in those cases in which the MANOVA reached significance for that block of variables.

Time 1. In the analyses of Time 1 data, the MANOVA produced a significant effect due to group membership for adolescents' self-reported perceived competence, $F(3, 124) = 3.50, p < .001$. ANOVAs indicated that the groups differed on all five of the perceived competence subscales as well as global self-worth. Using a significance level of .05, Student-Newman-Keuls tests were then computed to analyze group differences in each of the domains on the adolescents' perceived competence measure. The normative group showed significantly greater perceived competence than all three clinical groups in the domains of scholastic competence, physical appearance, behavioral conduct, and global self-worth. The normative group also showed significantly greater perceived competence than the internalizing and mixed groups, but not the externalizing group, in the areas of athletic competence and social acceptance. Additionally, in the area of social acceptance, the externalizing group showed significantly greater perceived competence than the internalizing group. MANOVAs of causal attributions, mothers' symptoms, and fathers' symptoms failed to reach significance.

Time 2. The same analyses were completed with the Time 2 data and yielded very similar results. The means are presented in Table II. MANOVAs revealed significant effects due to group membership for adolescents' self-reported perceived competence, $F(3, 181) = 2.86, p < .001$. Significant differences were again found on the ANOVAs for all of the scales of the Self-Perception Profile. *Post hoc* analyses were completed to investigate group differences in each of the domains on the adolescents' perceived competence measure, as well as on the subscales of the fathers' symptom measure. Student-Newman-Keuls tests ($p < .05$) revealed significant group differences in four of the five perceived competence domains as well as on the index of global self-worth. The normative group showed greater perceived competence than all three clinical groups in the areas of physical appearance, behavioral conduct, and global self-worth. The normative group also showed significantly greater perceived competence than the internalizing and mixed groups, but not the externalizing group, in the social acceptance area. Additionally, the normative group showed significantly higher perceived competence in the athletic domain than did adolescents in

Table III. Means and Standard Deviations for Adolescent and Parent Measures with Groups Based on CBCL^a

Variable	Group I (<i>n</i> = 25)		Group E (<i>n</i> = 24)		Group M (<i>n</i> = 27)		Group N (<i>n</i> = 94)		<i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Time 1									
Perceived competence									
Scholastic	2.91	0.56	2.69	0.56	2.72	0.73	3.07	0.60	—
Social acceptance	2.95	0.69	2.98	0.73	2.76	0.72	3.15	0.62	—
Athletic	2.74	0.75	2.91	0.70	2.73	0.77	3.00	0.74	—
Appearance	2.97	0.53	2.57	0.64	2.72	0.74	2.58	0.84	—
Behavior	3.40	0.43	2.68	0.47	2.77	0.69	3.08	0.55	—
Global self-worth	3.13	0.57	2.94	0.67	2.85	0.68	3.10	0.64	—
Attributions									
Success									
Skill	2.00	1.25	1.58	1.32	1.93	1.36	2.52	1.43	3.99 ^b
Effort	2.46	1.44	2.71	1.27	2.59	1.58	2.00	1.09	3.16 ^c
Luck	0.79	0.78	0.92	0.93	1.00	1.49	0.61	0.85	1.55
Task ease	0.50	0.66	0.75	0.79	0.26	0.59	0.80	0.91	3.32 ^c
Failure									
Skill	1.29	1.16	1.00	1.10	1.30	1.30	1.20	1.09	0.32
Effort	1.96	1.30	1.88	1.39	2.00	1.30	1.96	1.21	0.61
Luck	1.17	1.17	1.75	0.99	1.26	1.23	1.50	1.12	1.27
Task difficulty	1.33	1.17	1.29	1.27	1.22	0.96	1.25	0.96	0.69
Mothers' symptoms									
Somatic	0.75	0.52	0.63	0.48	1.03	0.82	0.40	0.38	11.04 ^d
Obsessive-compulsive	1.00	0.54	0.67	0.40	1.04	0.79	0.47	0.49	10.75 ^d
Interpersonal sensitivity	1.17	0.71	0.83	0.57	1.26	0.85	0.58	0.59	9.79 ^d
Depressive	1.21	0.77	0.90	0.58	1.26	0.90	0.55	0.60	10.70 ^d
Anxiety	0.85	0.58	0.53	0.45	1.16	0.80	0.45	0.55	9.96 ^d
Hostility	0.80	0.48	0.42	0.44	1.14	0.89	0.39	0.54	10.75 ^d
Phobic anxiety	0.16	0.39	0.14	0.46	0.36	0.72	0.09	0.35	2.21
Paranoia	0.79	0.62	0.47	0.46	0.84	0.64	0.33	0.51	7.46 ^d
Psychoticism	0.39	0.50	0.26	0.29	0.65	0.71	0.15	0.31	8.39 ^d
Fathers' symptoms									
Somatic	0.40	0.34	0.26	0.24	0.55	0.33	0.36	0.34	2.22
Obsessive-compulsive	0.58	0.41	0.55	0.68	0.77	0.48	0.40	0.44	2.88 ^c
Interpersonal sensitivity	0.46	0.27	0.54	0.63	0.66	0.40	0.32	0.44	3.21 ^c
Depressive	0.41	0.24	0.50	0.65	0.71	0.55	0.36	0.43	2.68 ^c
Anxiety	0.42	0.30	0.35	0.37	0.56	0.43	0.29	0.26	3.39 ^c
Hostility	0.53	0.53	0.41	0.40	0.77	0.61	0.35	0.48	3.37 ^c
Phobic anxiety	0.17	0.24	0.10	0.12	0.17	0.24	0.11	0.29	0.36
Paranoia	0.44	0.29	0.58	0.54	0.83	0.63	0.33	0.40	5.93 ^d
Psychoticism	0.15	0.17	0.27	0.40	0.39	0.55	0.19	0.28	1.84

Table III. Continued

Variable	Group I (<i>n</i> = 22)		Group E (<i>n</i> = 14)		Group M (<i>n</i> = 18)		Group N (<i>n</i> = 85)		<i>F</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Time 2									
Perceived competence									
Scholastic	3.02	0.61	2.87	0.60	2.76	0.61	3.09	0.62	1.71
Social acceptance	2.69	0.65	2.93	0.69	2.68	0.61	3.29	0.59	8.91 ^d
Athletic	2.65	0.65	3.11	0.54	2.86	0.55	3.02	0.62	2.20
Appearance	2.61	0.76	2.96	0.46	2.55	0.63	2.72	0.74	1.06
Behavior	3.05	0.58	2.64	0.36	2.74	0.55	3.17	0.54	5.94 ^d
Global self-worth	2.98	0.67	3.27	0.47	3.02	0.45	3.23	0.61	1.55
Attributions									
Success									
Skill	1.96	1.46	2.14	1.29	1.83	1.51	2.37	1.57	—
Effort	2.50	1.57	2.43	1.40	2.22	1.96	2.17	1.58	—
Luck	0.82	1.10	0.57	0.65	0.78	1.11	0.57	0.76	—
Task ease	0.73	0.88	0.43	0.51	0.50	0.62	0.82	0.88	—
Failure									
Skill	1.41	1.33	1.07	1.14	1.39	1.34	1.21	1.10	—
Effort	1.82	1.22	1.71	1.14	2.00	1.41	2.11	1.25	—
Luck	1.46	1.06	1.36	1.01	1.06	1.16	1.48	1.10	—
Task difficulty	1.32	1.17	1.43	0.94	0.89	1.28	1.11	1.01	—
Mothers' symptoms									
Somatic	0.63	0.48	0.68	0.41	0.83	0.68	0.33	0.41	7.67 ^d
Obsessive-compulsive	0.72	0.40	0.62	0.62	1.01	0.69	0.38	0.41	9.71 ^d
Interpersonal sensitivity	0.76	0.57	0.44	0.45	0.84	0.57	0.37	0.43	6.82 ^d
Depressive	0.96	0.76	0.77	0.64	1.22	0.74	0.41	0.44	12.86 ^d
Anxiety	0.62	0.60	0.56	0.60	0.83	0.67	0.28	0.46	6.67 ^d
Hostility	0.60	0.51	0.53	0.49	0.95	0.86	0.28	0.32	10.62 ^d
Phobic anxiety	0.16	0.30	0.26	0.63	0.14	0.22	0.10	0.24	1.21
Paranoia	0.69	0.68	0.39	0.21	0.66	0.63	0.23	0.35	8.63 ^d
Psychoticism	0.31	0.45	0.16	0.24	0.56	0.54	0.15	0.28	6.99 ^d
Fathers' symptoms									
Somatic	0.37	0.29	0.51	0.32	0.65	0.59	0.28	0.44	2.95 ^c
Obsessive-compulsive	0.45	0.34	0.53	0.55	0.47	0.40	0.42	0.52	0.13
Interpersonal sensitivity	0.35	0.18	0.57	0.59	0.55	0.51	0.28	0.31	3.22 ^c
Depressive	0.32	0.21	0.35	0.28	0.57	0.60	0.33	0.34	1.63
Anxiety	0.26	0.26	0.36	0.29	0.38	0.43	0.21	0.25	1.79
Hostility	0.46	0.40	0.35	0.30	0.58	0.48	0.34	0.44	1.24
Phobic anxiety	0.10	0.19	0.16	0.21	0.12	0.17	0.04	0.15	2.09
Paranoia	0.64	0.52	0.73	0.73	0.59	0.59	0.26	0.36	5.36 ^b
Psychoticism	0.14	0.18	0.24	0.32	0.43	0.73	0.11	0.20	3.73 ^c

^aCBCL = Child Behavior Checklist; I = internalizers; E = externalizers; M = mixed; N = normative.

^b*p* < .01.

^c*p* < .05.

^d*p* < .001.

the internalizing group. There were no significant group differences in perceived competence in the scholastic domain. MANOVAs for causal attributions and for mothers' symptoms again failed to reach significance.

The MANOVA was significant for fathers' symptoms $F(3, 89) = 1.76$, $p = 0.14$, and ANOVAs revealed differences on the somatic complaints and paranoid ideation subscales of the SCL-90-R completed by fathers. In the *post hoc* analyses of fathers' self-reported symptoms, fathers of adolescents in the mixed group showed significantly greater levels of somatic complaints than those in the normative group and significantly greater levels of paranoid symptoms than those in the internalizing, externalizing, and normative groups.⁵

CBCL-Identified Groups

Means and standard deviations for the internalizing, externalizing, mixed, and normative groups on the measures of adolescents' self-perceptions of competence, causal attributions, and mothers' and fathers' psychological symptoms at Time 1 and Time 2 are presented in Table III. Univariate F values are included in those cases in which the MANOVA reached significance for that block of variables.

Time 1. The MANOVA for perceived competence was not significant ($p = .072$). The MANOVA for adolescents' causal attributions identified a significant effect due to group membership, $F(3, 164) = 1.62$, $p = .033$. ANOVAs revealed significant differences on the attribution scale for success attributions to skill, effort, and task ease. Student–Newman–Keuls *post hoc* analyses were completed on each of these measures separately, again using the .05 significance level, and there were significant *post hoc* group differences for only skill and task ease attributions for successful events. The normative group made significantly more skill attributions for success events than the externalizing group and more task ease attributions for success events than the mixed group.

The MANOVA was significant for mothers' symptoms, $F(3, 130) = 2.78$, $p < .001$, and significant ANOVAs and *post hoc* effects were found on all of the SCL-90-R subscales except phobic anxiety. The mothers of adolescents in the mixed group showed significantly higher levels of somatic, obsessive–compulsive, anxiety, and psychotic symptoms than those in the externalizing group

⁵Although the MANOVA for fathers' symptoms at Time 1 was not significant, there were significant group differences in the ANOVAs on fathers' symptoms on the anxiety and paranoid ideation subscales of the SCL-90-R. *Post hoc* comparisons indicated that fathers of adolescents in the internalizing and mixed groups scored higher than those of the normal group on the paranoid ideation scale. Thus, the findings at Time 1 and Time 2 are quite similar.

and the normative group. Further, mothers of the internalizing group showed significantly higher levels of somatic, anxiety, and psychotic symptoms than those in the normative group. On the obsessive-compulsive subscale, mothers of the internalizing group showed significantly higher levels of symptoms than mothers of the externalizing group and the normative group. Mothers of adolescents in the mixed group and the internalizing group reported significantly more interpersonal sensitivity and paranoid symptoms than those in the normative group. For the hostility subscale, mothers of adolescents in the mixed group showed significantly more symptoms than those in all three other groups, and mothers of adolescents in the internalizing group showed significantly more symptoms than both the externalizing and the normative groups. Finally, mothers in all three clinical groups (internalizing, externalizing and mixed) showed significantly more depressive symptoms than mothers of the normative group.

For fathers' psychological symptoms, the MANOVA was significant, $F(3, 95) = 1.44, p = .019$. ANOVAs and *post hoc* comparisons were significant on the interpersonal sensitivity, depression, and paranoid ideation subscales. Fathers of adolescents in the mixed group showed significantly higher levels of interpersonal sensitivity and depression than those in the normative group. Additionally, fathers of adolescents in the mixed group showed significantly higher levels of paranoid ideation than those in the internalizing and normative groups.

Time 2. When group status was defined by the parents' report on the CBCL at Time 2, the MANOVA was significant for adolescents' perceived competence, $F(3, 134) = 2.81, p < .001$. Two subscales showed significant group differences in the ANOVAs and *post hoc* analyses. The normative group showed significantly higher levels of perceived competence than the other three nonnormative groups in the social acceptance domain. Adolescents in the normative group also reported significantly greater perceived competence in the area of behavioral conduct than adolescents in the externalizing and mixed groups.⁶ No *post hoc* group differences were found in the areas of scholastic competence, athletic competence, physical appearance, or global self-worth. The MANOVA for causal attributions was not significant.

The MANOVA was significant for mothers' psychological symptoms on the SCL-90-R, $F(3, 126) = 2.56, p < .001$. Similarly to the findings at Time 1, the ANOVAs and *post hoc* analyses of mothers' psychological symptoms at Time 2 showed significant group differences on all the subscales on the SCL-90-R with the exception of phobic anxiety. The mothers of adolescents in the three clinical groups reported significantly higher

⁶Similar differences were found for the univariate ANOVA on behavioral conduct at Time 1, although the overall MANOVA was not significant.

levels of somatic and depressive symptoms than those in the normative group. Mothers of adolescents in the internalizing and mixed groups reported significantly greater levels of obsessive-compulsive, interpersonal sensitivity, anxiety, and paranoia symptoms than mothers of adolescents in the normative group. Mothers of adolescents in the mixed group showed significantly higher levels of hostility and psychoticism symptoms than those in the other three groups. Additionally, for hostility symptoms, mothers of adolescents in the internalizing group showed significantly higher levels of symptoms than mothers of adolescents in the normative group.

The MANOVA for fathers' psychological symptoms on the SCL-90-R was also significant, $F(3, 93) = 1.90, p = .006$. Significant effects were found in the ANOVAs and *post hoc* analyses on the subscales of somatic complaints, interpersonal sensitivity, paranoid ideation, and psychoticism. Fathers of adolescents in the mixed group reported significantly greater levels of somatic and interpersonal sensitivity symptoms than those in the normative group. Additionally, fathers of adolescents in the mixed group reported significantly greater levels of psychoticism symptoms than those in both the internalizing and the normative groups. Fathers of adolescents in all three of the nonnormative groups reported significantly higher symptoms of paranoid ideation than those in the normative group.

DISCUSSION

The present findings are useful in further understanding characteristics of adolescents and their social environments that distinguish young adolescents in the clinical range on internalizing problems, externalizing problems, or both types of problems from one another and from youth in the normal range on these syndromes. The findings will first be considered with regard to distinguishing the nonclinical group from the clinical groups as a whole, followed by a discussion of findings which distinguish the clinical groups from one another.

Whether the groups were formed on the basis of adolescents' self-reports on the YSR or mothers' reports on the CBCL, there were differences between clinical and nonclinical groups in adolescents' self-perceptions of their competence, specifically social acceptance and behavioral conduct, and in fathers' psychological symptoms. At both time points in the YSR analyses, children in the internalizing and mixed clinical groups perceived themselves as less socially accepted by their peers and children in all three clinical groups perceived their behavioral conduct as more problematic than did children in the normal group. In the CBCL analyses at Time 2, children in all three clinical groups reported lower social ac-

ceptance than normals and the externalizing and mixed groups reported worse behavioral conduct. Although the MANOVA for the perceived competence measure as a whole did not reach significance in the Time 1 CBCL analyses ($p = .072$), the externalizing and mixed clinical groups also reported worse behavioral conduct than the normal group in the univariate ANOVA in this analysis as well ($p = .002$). This pattern of findings indicates that children in the clinical groups were characterized by negative views of their relationships with their peers and of their behavior, regardless of which informant was used to identify the groups.

With regard to fathers' symptoms, fathers of children in the mixed clinical group scored higher than fathers of children in the normal group on paranoid symptoms at both Time 1 and Time 2 in the CBCL analyses and at Time 2 in the YSR analyses. Thus, paternal symptoms of paranoia were associated with clinical status, at least in the mixed group, when mothers' reports were used to identify the groups. This finding was less stable, occurring only at Time 2, when adolescents' reports were used to identify the groups.

Other factors distinguished the normal and clinical groups, but in a pattern that was dependent on the use of the YSR or CBCL to create the groups. In the YSR analyses at both points in time, the normal group reported more positive perceptions of their physical appearance and global self-worth than all three clinical groups, and more positive perceptions of their athletic competence than internalizers. Although these differences were limited to the analyses of the groups formed on the basis of the YSR, and as such may reflect some effects of informant bias, they also indicate some degree of domain specificity in differences in self-perceptions in that only internalizers reported lower perceptions of their athletic competencies. Mothers' psychological symptoms, on the other hand, were only useful in distinguishing between the normal and the clinical groups in the analyses based on the CBCL. At both points in time, mothers of children in the normal group scored lower than mothers of children in some or all of the clinical groups on all of the symptom scales of the SCL-90-R with the exception of the phobic anxiety scale. This pattern is more indicative of a generalized negative response set that may have affected mothers' perceptions of themselves and their children.

Differences among the three clinical groups were much less clear. In the YSR analyses, only two differences were found and neither effect was replicated across time. Externalizers reported higher social acceptance than internalizers at Time 1, and fathers of children in the mixed group reported more paranoid symptoms than fathers of children in the internalizing or externalizing groups at Time 2. In the CBCL analyses, mothers of children in mixed group reported more symptoms on several subscales of the SCL-90-R (somatization, anxiety, obsessive-compulsive, psychoticism, paranoia, hostility) than mothers of children in the internalizing and externalizing groups,

but only the findings for the hostility scale were replicated across the two time points, with mothers of children in the mixed group reporting more hostility than mothers of children in the internalizing groups at both times. Fathers of children in the mixed group also reported higher symptoms than fathers of children in the internalizing group, but the difference occurred for paranoid symptoms at Time 1 and psychotic symptoms at Time 2.

No support was found for the differences between internalizers and externalizers in causal attributions for success and failure. This is similar to the findings of Cohen et al. (1985), McConaughy et al. (1988), and Schneider and Leitenberg (1989), who also did not find consistent differences between internalizers (withdrawn) and externalizers (aggressive) on measures of locus of control or causal attributions. Although the literature has generally supported the tendency for depressed children to report a dysfunctional attributional style (e.g., Seligman & Peterson, 1986), it does not appear that dysfunctional attributions are characteristic of children in the broad-band category of internalizing problems.

Although distinct clinical groups were identified at each time period, there was little consistency in membership in these groups over 9 months. Because of this inconsistency, the groups would not be expected to show stable or large differences in variables that represent ongoing developmental and familial processes, especially since the same children may have been in different clinical groups in analyses at Time 1 and Time 2. Perhaps greater consistency in group membership, and therefore greater consistency in the correlates of group membership, could be expected if a sample of clinically referred children were used. Whether or not this proves to be the case in future research, the inconsistency in identifying correlates of the different clinical groups in the present study underscores the need for replication of findings such as those reported in previous studies.

In spite of this problem, the present findings clarify some of the mixed results reported in prior studies. For example, Cohen et al. (1985) failed to find differences between internalizers and externalizers on general self-esteem (which is similar to global self-worth in the present study), while Schneider and Leitenberg (1989) found that controls reported higher general self-esteem than aggressive, withdrawn, or aggressive-withdrawn children, and aggressive children reported higher self-esteem than withdrawn or aggressive-withdrawn children. The present findings indicate that it is important to account for adolescents' perceptions of competence and self-worth in different domains. Similar to the Schneider and Leitenberg (1989) study, in the present study (in the YSR analyses) adolescents in the normal range reported higher levels of global self-worth than those in all of the clinical groups. However, in the domain of social acceptance, externalizers did not differ from the normative group. Therefore, the find-

ing that aggressive children had higher self-esteem than withdrawn or aggressive-withdrawn children reported by Schneider and Leitenberg (1989) may reflect a difference primarily in social self-esteem. Further, the consistent differences between the normal and clinical groups on social acceptance in both the YSR and CBCL analyses in the present study indicate the importance of examining this domain in distinguishing these groups regardless of whether adolescents or their parents are used as informants to identify the groups.

The importance of assessing fathers' psychological symptoms, often overlooked in studies of child and adolescent psychopathology, is highlighted by the current findings. In comparisons of groups formed on the basis of adolescents' self-reports on the YSR at Time 2 and mothers' reports on the CBCL at both time points, adolescents in the mixed clinical group had fathers who reported higher levels of psychological symptoms than youth in the normal range. The most consistent differences were found for fathers' symptoms of paranoid ideation. However, some evidence was also found for the possible importance of fathers' symptoms of interpersonal sensitivity, somatic problems, and depression, syndromes that are more typically investigated only in mothers. These data indicate that future research will need to examine a wide range of fathers' symptoms to gain a more complete understanding of factors associated with mixed emotional/behavioral problems in adolescents.

As noted above, significant findings regarding mothers' psychological symptoms were limited to comparisons of groups formed on the basis of mothers' reports of adolescents' maladjustment on the CBCL. Mothers who rated their adolescent children in the clinical range on internalizing problems, either alone or in combination with externalizing problems, reported more of a variety of psychological symptoms than mothers who rated their adolescent children in the normal range. With regard to maternal symptoms of depression, which have been studied most often in prior research, mothers who rated their children in the clinical range on internalizing, externalizing, and both types of problems reported significantly more depressive symptoms at both points in time than mothers who rated their children in the normal range. However, mothers who rated their children in the clinical range were characterized by elevations on other types of symptoms as well. These findings suggest that investigations of maternal symptoms need to examine a wider range of syndromes than just depression. Further, these findings highlight the importance of determining the effects of using mothers as the common informant for both their children's behavior problems and their own psychological symptoms.

Future research needs to address the limits of this study and to expand on the present findings in several ways. First, although we were able

to identify adolescents in the clinical range by using *T*-score cutoffs for the YSR and CBCL, it will be important to compare subgroups of clinically referred and nonreferred youth on self-perceptions of competence and parental symptoms. Further, other studies have used profiles on the CBCL based on intraclass correlations to identify groups, and this approach should be compared to the method used in the present study. Second, comparisons of youth in the clinical range on the basis of reports of other informants, including fathers, teachers, and mental health workers, are needed. Finally, replication of this study with a larger sample that is more ethnically diverse and from an urban area is warranted. The small sizes of some of the clinical groups may have limited the statistical power in some of the present analyses.

REFERENCES

- Achenbach, T. M. (1985). *Assessment and taxonomy of child and adolescent psychopathology*. Beverly Hills: Sage.
- Achenbach, T. M., & Edelbrock, C. S. (1978). The classification of child psychopathology: A review and analysis of empirical efforts. *Psychological Bulletin*, *85*, 1275-1301.
- Achenbach, T. M., & Edelbrock, C. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington: Department of Psychiatry, University of Vermont.
- Achenbach, T. M., & Edelbrock, C. (1987). *Manual for the Youth Self-Report*. Burlington: Department of Psychiatry, University of Vermont.
- Achenbach, T. M., & McConaughy, S. H. (1987). *Empirically based assessment of child and adolescent psychopathology: Practical applications*. Newbury Park, CA: Sage.
- Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, *101*, 213-232.
- Asarnow, J. R., & Bates, S. (1988). Depression in child psychiatric inpatients: Cognitive and attributional patterns. *Journal of Abnormal Child Psychology*, *16*, 601-615.
- Cohen, N. J., Gotlieb, H., Kershner, J., & Wehrspan, W. (1985). Concurrent validity of internalizing and externalizing profile patterns of the Achenbach Child Behavior Checklist. *Journal of Consulting and Clinical Psychology*, *53*, 724-728.
- Compas, B. E., Howell, D. C., Phares, V., Williams, R. A., & Giunta, C. T. (1989a). Risk factors for emotional/behavioral problems in young adolescents: A prospective analysis of adolescent and parental stress and symptoms. *Journal of Consulting and Clinical Psychology*, *57*, 732-740.
- Compas, B. E., Howell, D. C., Phares, V., Williams, R. A., & Ledoux, N. (1989b). Parent and child stress and symptoms: An integrative analysis. *Developmental Psychology*, *25*, 550-559.
- Derogatis, L. R. (1983). *SCL-90-R administration, scoring, and procedures manual*. Towson, MD: Clinical Psychometric Research.
- Fieldstein, E., Klien, M. S., Fisher, M., Hanan, C., Koburger, P., Schneider, M. J., & Leitenberg, H. (1985). Self-esteem and causal attributions for success and failure in children. *Cognitive Therapy and Research*, *9*, 381-398.
- Harter, S. (1985). *Manual for the Self-Perception Profile for Children*. Denver: University of Denver.

- Hollingshead, A. B. (1975). *Four Factor Index of Social Status*. New Haven: Department of Sociology, Yale University.
- Jaenicke, C., Hammen, C., Zupan, B., Hiroto, D., Gordon, D., Adrian, C., & Burge, D. (1987). Cognitive vulnerability in children at risk for depression. *Journal of Abnormal Child Psychology, 15*, 559-572.
- Kaslow, N. J., Rehm, L. P., Pollack, S. L., & Siegel, A. W. (1988). Attributional style and self-control behavior in depressed and nondepressed children and their parents. *Journal of Abnormal Child Psychology, 16*, 163-175.
- Lee, C. M., & Gotlib, I. H. (1989). Maternal depression and child adjustment: A longitudinal analysis. *Journal of Abnormal Psychology, 98*, 78-85.
- Leon, G. R., Kendall, P. C., & Garber, J. (1980). Depression in children: Parent, child, and teacher perspectives. *Journal of Abnormal Child Psychology, 8*, 221-235.
- McConaughy, S. H., Achenbach, T. M., & Gent, C. L. (1988). Multiaxial empirically based assessment: Parent, teacher, observational, cognitive, and personality correlates of child behavior profile types for 6- to 11-year-old boys. *Journal of Abnormal Child Psychology, 16*, 485-509.
- Meyer, N. E., Dyck, D. G., & Petrinack, R. J. (1989). Cognitive appraisal and attributional correlates of depressive symptoms in children. *Journal of Abnormal Child Psychology, 17*, 325-331.
- Piers, E. V., & Harris, D. B. (1964). Age and other correlates of self-concept in children. *Journal of Educational Psychology, 55*, 91-95.
- Schneider, M. J., & Leitenberg, H. (1989). A comparison of aggressive and withdrawn children's self-esteem, optimism and pessimism, and causal attributions for success and failure. *Journal of Abnormal Child Psychology, 17*, 133-144.
- Seligman, M. E. P., & Peterson, C. (1986). A learned helplessness perspective on childhood depression: Theory and research. In M. Rutter, C. E. Izard, & P. B. Read (Eds.), *Depression in young people: Developmental and clinical perspectives* (pp. 223-249). New York: Guilford.
- Vermont Office of Policy Research and Coordination. (1988). *Vermont: An economic-demographic profile series*. Montpelier: Author.