

# Social Dysfunction and Psychiatric Disorder in Mothers and Their Children

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## ABSTRACT

**Objective:** The authors examine (1) the reliability and validity of the Adult Personality Functioning Assessment (APFA) as a retrospective measure of baseline social dysfunction in adults; and (2) the association between mothers' APFA scores and psychiatric disorders and functioning in their children. **Method:** The subjects (50 mothers and their children) are a subsample of a larger family-genetic study which examined the relationship between panic disorder and major depression in probands and their first-degree relatives. **Results:** The APFA demonstrates good interrater reliability for its subscale domains as well as construct validity. Children of psychiatrically ill parents, regardless of disorder, are not all alike in their response to maternal disorder and functioning. The level of impact of mothers' impaired baseline functioning varies according to maternal psychiatric diagnosis. There is less impact of maternal functioning on children of depressed mothers compared to children of anxious mothers. Poor maternal baseline functioning may signal the increased need for treatment for children exposed to chronically dysfunctional parents indicated by the children's increased enrollment in therapy and their rates of suicidality. **Conclusion:** Parent and child adaptation appears intertwined, and intervention in one is likely to affect functioning in another. Specifically, intervention in parental social functioning may decrease the risk for disorder and dysfunction in offspring. Clinical and research implications are discussed. *J. Am. Acad. Child Adolesc. Psychiatry*, 1994, 33, 9:1256-1264. **Key Words:** Adult Personality Functioning Assessment, social dysfunction, impairment.

Personality disorders are actually disorders of interpersonal functioning, best defined by criteria that focus on the interpersonal aspects of behavior (McLemore and Benjamin, 1979; Rutter, 1987; Widiger and Kelso, 1983). The Adult Personality Functioning Assessment (APFA) was developed by Rutter and colleagues (Hill et al., 1989) as part of an effort to systematize the

analysis and assessment of personality disorder by measuring persistent pervasive impairment in different domains of adult role-functioning.

The investigation of baseline social functioning, as distinct from social functioning while ill or after recovery, is an important area of study in its own right, regardless of the relevance to personality theory. There is wide variability of outcome and prognosis for individuals with the same psychiatric diagnosis (Charney et al., 1981; Dohrenwend et al., 1983; Flaherty et al., 1983; Hammen et al., 1990a; Shea et al., 1987; Warner et al., 1992). It may be that variability in course and consequence of disorder is related to underlying or lifelong maladaptive patterns of social role-functioning (Flick et al., 1993; Hecht and Wittchen, 1988; Paykel and Weissman, 1973). Persistent sociobehavioral dysfunction may increase risk for psychiatric disorder. More likely the relationship is synergistic: impaired interpersonal functioning increases the likelihood of episodes of affective or anxiety disorder, which then result in development or accentuation of social maladjustment (Hecht and Wittchen, 1988).

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Impairment in social role-functioning impacts directly on those around us, particularly within the family. Keller et al. (1986) examined the relationships between maternal psychiatric status and history and children's psychiatric status and adaptive functioning in 37 families in which at least one parent had a current or past depressive disorder. They found a significant association between more severe parental illness, increased rates of psychopathology, and poorer adaptive functioning in the children. Hammen et al. (1987, 1990b) studied the mechanisms of risk to children, specifically family functioning, by comparing families in which mothers had unipolar depression, bipolar depression, a medical illness, or were "normal." They wanted to identify those risks due to deficits in interpersonal functioning and those attributable to the affective illness itself. They found support for a causal relationship between maternal functioning and children's symptoms and psychopathology, in addition to a relationship between child characteristics and child outcome. Poor maternal functioning was more likely to occur in depressed mothers, but could also occur in medically ill and normal mothers who were stressed. The poor maternal functioning in the latter two groups also affected the offspring. Little has been done to examine this relationship in anxious mothers and their children and to examine differential effects of a specific diagnosis. Still, these studies suggest that baseline enduring level of social functioning may likely operate as an effect modifier, modifying the well-established association between parental diagnosis and psychiatric status of children (Goodman and Brumley, 1990; Hammen et al., 1990b, 1991; Keller et al., 1986; Orvaschel, 1990; Puig-Antich et al., 1993; Weissman et al., 1987, 1988).

The purpose of this article is (1) to examine the reliability and validity of the APFA as an instrument to retrospectively measure baseline social dysfunction in adults; (2) to examine the association between APFA scores measuring baseline social functioning and psychiatric disorder among adults (mothers); and (3) to expand on the aforementioned findings on mechanisms of risk by examining the association between APFA scores measuring baseline social functioning of mothers and manifestation, course, and outcome of psychiatric disorder in their children. We hypothesize that pervasive inadequacies in mothers' interpersonal functioning will be associated with increased risk for psychiatric

disorder among their children, will affect course and consequence of illness among those children with disorder, and will affect levels of current functioning regardless of psychiatric status.

## METHOD

### Sample

The subjects are a subsample of a larger family-genetic study. A complete description of the probands, relatives, and their assessments can be found in Weissman et al. (1993).

For the present study, mothers in the larger study who were either probands or spouses of probands, who had children between ages 6 and 17, and who had complete diagnostic assessments on both themselves and their offspring, were contacted sequentially until a target sample of 50 was reached. For these analyses, the mothers were classified into the following mutually exclusive diagnostic groups: never mentally ill, major depression without anxiety, any anxiety disorder without major depression, major depression comorbid with any anxiety disorder, or falling into a residual "other diagnosis" category (*DSM-III* or *DSM-III-R* criteria).

The APFA instrument was administered to all 50 mothers by the author (L.M.). For the reliability study, 15 adult cases were selected for joint rating by the author (L.M.) and a team of interviewers in England. Cases for the reliability study were selected by rank-ordering them according to perceived level of difficulty and ambiguity in scoring. The sample was designed to represent a broad range of dysfunction and to address difficult assessment problems.

The sample of mothers consists of 13 women with major depression, 5 with any anxiety, 17 with major depression comorbid with anxiety disorder, 2 with some other diagnosis, and 12 normal controls. Median age for mothers was 37.5 years and all were married at the time of assessment. There were 82 children included, with equal numbers of boys and girls. The median age of children in the sample was 12.2 years. There are no statistically significant differences in age, marital status, education, or work status among mothers, and no significant differences in age or sex by mother's diagnostic group. All children in the sample were living with their biological mother and almost all (93%) had siblings or step-siblings in the home. Sixty-two percent of the children have a father with any psychiatric diagnosis: 30% with major depression, 30% with any anxiety disorder, 16% with major depression and an anxiety disorder, and 24% with any substance abuse. The relationship of mother's diagnostic status to the likelihood of having a father with a psychiatric disorder is not statistically significant (data not shown). The father's diagnosis does not appear to contribute beyond the maternal diagnosis, possibly because the majority of the mothers ( $n = 36$ ) are probands in the larger study.

### Assessments

The diagnostic assessment of children was based on the Schedule for Affective Disorders and Schizophrenia for School-Age Children, Epidemiologic Version (K-SADS-E) (Orvaschel et al., 1982), which was administered to mothers about their children and to children themselves. Included in the battery was the Children's Global Assessment Scale (Shaffer et al., 1983) as well as assessment of child's functioning in past year using the Social Adjustment Inventory for

Children and Adolescents (SAICA) (John et al., 1987). An estimate of the child's general verbal functioning was derived from the Peabody Picture Vocabulary Test-Revised Form M (PPVT) (Dunn and Dunn, 1981). Mothers were assessed using the Schedule for Affective Disorders and Schizophrenia Lifetime Version for Anxiety Disorders (SADS-LA) (Manuzza et al., 1986). Current functioning was measured by the Social Adjustment Scale, which rates effective or poor social adjustment during the past 2 weeks (Weissman and Bothwell, 1976). For both the child and adult sample, a best-estimate diagnostic procedure was used in which a diagnosis was assigned on the basis of all available sources of information (Leckman et al., 1982).

Mother's baseline social functioning was assessed with the APFA (Hill et al., 1989). This is a semistructured instrument, designed to provide a standardized assessment of a person's functioning in a range of social domains. The aim of the interview is to identify impairment that is specific to particular areas of adult role-functioning as well as provide a measure of general level of social dysfunction across areas. The six domains examined are work, love relationships, friendships, nonintimate social contacts, negotiations, and everyday coping and are rated from "1," indicating very good functioning, to "6," interaction dominated by marked avoidance or repeated discord and breakdown. The interviewer assesses the person's level of functioning within each area of his or her life without assuming a homogeneous level of functioning across areas. Ratings are made predominately for the age period of 21 to 30 years as an adult baseline rating of function, but shifts are made to a prior or subsequent age period if there has been significant psychiatric illness or a lack of opportunity to function in the domain during this time. The baseline rating is based on retrospective reports of functioning that occurred for a 5-year period between the ages of 21 and 30, during which time the individual was believed to be free of psychiatric illness. The baseline measure is believed to be akin to a premorbid social role-functioning level, a stable characteristic until possibly affected by psychiatric illness.

APFA scores for each separate domain were summed to construct a total score (range 6 to 36) indicating general dysfunction. A categorized rating of general dysfunction also is obtained by establishing a cutoff score (16) that requires a person have major problems in at least two social domains and is likely to have major problems in at least three or four. The procedure for rating the interview vignettes and deriving impairment scores is described in detail by Hill et al. (1989).

### Statistical Analyses

Interrater reliability of the APFA instrument was examined by intraclass correlation coefficients (ICCs) estimated by analyses of variance (ANOVAs) (Shrout and Fleiss, 1979). Interrater reliability of the overall summary score of social functioning also was examined using the  $\kappa$  coefficient of agreement between raters on the categorical measure of generalized social dysfunction (Cohen, 1968). Scale consistency was measured with Chronbach's  $\alpha$ . Convergent validity was examined by comparing scores on the Global Assessment Scale (GAS), an established measure of lifetime social functioning (Endicott and Spitzer, 1978), among those assessed as impaired or not impaired on the APFA measure using an ANOVA test. The association between baseline APFA scores and mothers' psychiatric diagnosis was examined using ANOVA for the continuous measure and  $\chi^2$  for the dichotomous measure of impairment.

For children, small numbers of cases required that we consider those who fell into two broader diagnostic groupings: any depressive

disorder (major depressive disorder [MDD], dysthymia, and depression not otherwise specified [NOS]) and any anxiety disorder (separation anxiety, social or simple phobia, obsessive-compulsive disorder, overanxious disorder, panic disorder, post-traumatic stress disorder [PTSD], and anxiety disorder NOS). Note that the analysis of APFA and course of illness among offspring does not take into account mother's diagnosis. An analysis of covariance procedure (SPSS, 1992) was used to examine mother's baseline social functioning and child's current social functioning (SAICA score). A model was tested that entered mother's diagnostic status and child's own diagnostic status as main effects and mother's baseline social functioning (APFA score) and child's verbal functioning (PPVT score) as covariates. A number of other variables such as age and gender of child and diagnostic status of father were tested but eliminated from consideration because they did not improve model fit. Note that for analyses of both adult and child current social functioning, it is impossible to formally test interaction effects because our small case base results in empty cells.

To formally test the hypothesis that mother's poor baseline social functioning increases risk for development of psychopathology in her children, a series of hierarchical logistic regressions (SPSS, 1992) were run with major depression, any anxiety disorder, and any psychiatric disorder as separate binary dependent variables. All models control for age and sex of the child. In preliminary tests, father's diagnostic status was not significantly associated with any of the outcomes under consideration and consequently was not included in final models. Also presented is the  $\chi^2$  statistic indicating the improvement in model fit with the addition of the baseline impairment variable. Again, small sample size and empty cells prevent formal statistical tests of interaction effects.

## RESULTS

### Reliability and Validity of APFA

*Interrater Reliability.* The ICCs were calculated between two raters' scores on the six separate social areas, and the overall summary score, for the 15 interview vignettes that were the basis of the reliability study. The ICCs varied from .43 for everyday coping to .89 for negotiations. The ICC for work was not included in the analyses because six cases were not eligible for work ratings, leaving too few for a valid coefficient. The lowest ICC was for everyday coping (.43), which is in the fair range. The domains of friends (.53) and nonintimate social contacts (.53) also were in the fair range, while the domains of love relationships (.87) and negotiations (.89) were in the good to excellent range, demonstrating high interrater reliability.

The ICC for the summary score of impaired baseline social functioning was .85, which was good. Interrater reliability of the categorical measure of generalized social dysfunction was also good:  $\kappa = .64$ .

*Convergent Validity.* The mean GAS score measuring lifetime functioning for subjects with an impaired baseline APFA score (dichotomous measure) was 66.9.

The GAS of those with an APFA rating of good functioning was 10 points higher, at 76.2 ( $F = 9.990$ ,  $p = .003$ , ANOVA test).

#### Baseline Social Functioning and Psychiatric Disorder

There is no significant association between baseline level of functioning on the APFA and mothers with any anxiety. There is a significant association between baseline APFA scores and mothers with any depression diagnosis ( $p < .01$ ) and a trend for mothers with any diagnosis ( $p < .10$ ) using the continuous measure of impairment (Table 1). When the mothers' psychiatric diagnostic groups are further stratified, it is impossible to see these relationships because the sample size becomes too small. The APFA score for the never mentally ill was 15.6 (SD 3.0) and the score of those with an anxiety disorder but no MDD was 15.9 (SD 3.7). The APFA score among depressives was consistently higher: 19.4 (SD 4.8) for those with a lifetime diagnosis of MDD and 19.6 (SD 4.6) for those with MDD and comorbid anxiety disorder. Likewise, using the dichotomous measure of impaired baseline functioning, only one third (33%) of the never mentally ill and 40% of those with anxiety disorder were classified as impaired compared to more than two thirds (69%) of those with MDD and three quarters (76%) of those with MDD plus anxiety disorder (data not shown). None of these differences are statistically significant.

#### Mother's Baseline Functioning and Psychiatric Disorder in Children

*Bivariate Analysis.* A bivariate analysis (not shown here) of child's diagnosis and mother's high or low

baseline functioning within each diagnostic grouping of mothers was conducted. Among 6 children of mothers with no psychiatric diagnosis but impaired baseline functioning, half have some psychiatric disorder. Among the never mentally ill mothers, all children with depressive, anxiety, or disruptive disorders are found among those mothers with poor social role-functioning as measured by the APFA. Of the 13 children of never mentally ill mothers with adequate baseline functioning, 1 had a specific developmental disorder and 1 received a diagnosis of PTSD. All 5 children of mothers with anxiety disorder and impaired baseline functioning were themselves diagnosed with psychiatric disorder; none of the 3 children of mothers with anxiety disorder but adequate functioning received a diagnosis. Six of 20 children of mothers with MDD and anxiety have some psychiatric disorder, but only 1 among the 7 children of mothers in the same diagnostic category, but with good baseline functioning, have a diagnosis. Among children of mothers with major depression but no anxiety, mothers' baseline functioning did not affect the likelihood of her children receiving a diagnosis.

*Multivariate Analysis.* Multivariate logistic regression analyses assessing the importance of a mother's baseline social functioning on her child's psychiatric disorder are presented in Table 2. The first column lists the adjusted odd ratios and standard errors of the log odds ratios for children of mothers with different diagnoses, using the never mentally ill as the reference category. The second column lists the same coefficients in a model that includes the mother's baseline social dysfunction score as well as her diagnostic status.

Mother's diagnosis of major depression is the strongest predictor of diagnosis of depression in her children, with an eight-fold increase in risk compared to children of the never mentally ill. This relationship is marginally statistically significant at the .10 level and remains unaffected by the addition of mother's poor baseline functioning to the model. In contrast, the risk for childhood anxiety disorder from mother's anxiety disorder is reduced when considering the mother's pattern of social functioning. Mother's poor baseline functioning is almost as adverse as her diagnostic status, with an odds ratio of 7.13. The addition of the baseline impairment variable significantly improves the model predicting child's diagnosis of anxiety disorder. Likewise, when considering any diagnosis, the only signifi-

**TABLE 1**

Relationship between Mothers' Diagnosis and Current and Baseline Functioning

Mothers' Diagnosis	APFA
Any MDD	
No	16.0 (3.2)
Yes	19.8 (4.4)**
Any anxiety	
No	17.2 (3.9)
Yes	18.9 (4.6)NS
Any diagnosis	
No	15.9 (3.1)
Yes	18.9 (4.3)*

*Note:* Values represent mean (SD). APFA = Adult Personality Functioning Assessment; MDD = major depressive disorder; NS = not significant.

\*  $p \leq .10$ ; \*\*  $p \leq .01$ .

**TABLE 2**

Logistic Regression Models Assessing the Importance of Mother's Baseline Social Functioning on Childhood Disorder

Child's Diagnosis	Model 1		Model 2	
	OR	(SEOR)	OR	(SEOR)
<b>Major depression</b>				
Mother's diagnosis				
Major depression	8.06	(1.20)*	8.93	(1.26)*
Any anxiety	4.93	(1.58)	5.31	(1.60)
Depression & anxiety	4.09	(1.22)	4.67	(1.32)
Mother's poor baseline functioning			0.80	(0.80)
Improvement <sup>a</sup>			$\chi^2 = 0.077$ NS	
<b>Anxiety disorder</b>				
Mother's diagnosis				
Major depression	3.99	(0.98)	2.87	(1.09)
Any anxiety	13.08	(1.11)***	9.26	(1.16)**
Depression & anxiety	0.75	(1.06)	0.40	(1.12)
Mother's poor baseline functioning			7.13	(0.89)***
Improvement <sup>a</sup>			$\chi^2 = 6.158$ †	
<b>Any disorder</b>				
Mother's diagnosis				
Major depression	3.16	(0.72)	2.77	(0.76)
Any anxiety	4.02	(0.93)	3.43	(0.98)
Depression & anxiety	1.37	(0.68)	0.93	(0.73)
Mother's poor baseline functioning			3.36	(0.58)***
Improvement <sup>a</sup>			$\chi^2 = 4.68$ ***	

Note: All models control for age and sex of child. OR = odds ratio; SEOR = standard error of the log odds ratio.

<sup>a</sup> Improvement of goodness of fit of model with the addition of dichotomous variable measuring mother's poor baseline functioning.

\*  $p \leq .10$ ; \*\*  $p \leq .055$ ; \*\*\*  $p \leq .050$ ; †  $p \leq .01$ .

cant relationship is between mother's baseline functioning and child's diagnosis (odds ratio, 3.3).

Comparing children with any depressive disorder and children with any anxiety disorder, mother's baseline social functioning appears to affect impairment associated with child's psychiatric illness (not shown here). There is significantly more impairment in the children with any depression whose mothers also report significant impairment in baseline functioning. For five (63%) of the eight children with a lifetime diagnosis of depression and mothers with impaired baseline functioning, impairment of the child's worst episode was rated as moderate or severe. None of the five depressed children whose mother's baseline functioning was adequate had an episode of depression with moderate or severe impairment ( $\chi^2 = 6.738$ ,  $p = .009$ ). Other

indicators of course of illness, such as number of episodes, treatment history, suicide ideation and/or attempts, show differences in the expected direction but none reach statistical significance.

#### Mother's Baseline Functioning and Current Functioning in Children

Table 3 presents the analysis of child's current (past school year) social adjustment as measured by the SAICA. Contrary to expectation, neither mother's diagnostic status nor mother's baseline social functioning significantly affects the child's current social adjustment. The greatest influence on a child's sociobehavioral functioning is his or her own history of psychopathology and verbal intelligence.

The mean SAICA scores are presented in the bottom half of the table, with lower scores indicating more effective functioning. We can see that the bivariate association between mother's diagnosis and child's current functioning is changed when controlling for child's own diagnosis and verbal skills. For example, children of mothers with anxiety disorder score 6.14 or 0.44 above the sample mean. When controlling for mother's diagnosis, the adjustment score is 5.72; adding own diagnosis and verbal skills, the adjustment score is 4.76 or  $-0.94$  below the overall mean. This indicates that as long as children of anxiety-disordered mothers are free from psychopathology and relatively intelligent, their current social adjustment is good and is less affected by mother's diagnosis. Other changes in mean scores indicate that the effect of child's diagnostic status and verbal skills is not consistent across all types of mother's diagnosis.

#### Limitations

This article describes a constructed sample with few cases in some diagnostic groups; caution must be exercised in generalizing findings to broader populations. The very few cases available for study in some instances limit analysis to simple comparison of rates and proportions. It cannot be determined whether several of the trends observed in these data would reach statistical significance with adequate sample size. The ability to test formally for interaction effects in multivariate analyses is prevented by small sample sizes and empty cells. Another limitation is that of retrospective reporting of functioning required by the APFA. It is necessary to keep in mind the possibility

**TABLE 3**

Child's Current Functioning by Mother's Diagnosis, Child's Diagnosis, Child's Verbal IQ, and Mother's Baseline Social Functioning

Source of Variation	Sum of Squares	df	Mean Square	F	Signif of F
Main effects	190.422	4	47.605	5.128	.001
Mother's diagnostic status	18.280	3	6.093	0.656	.582
Child's diagnostic status	145.119	1	145.119	15.631	.000
Covariates	114.807	2	57.403	6.183	.004
Mother's baseline social functioning	0.164	1	0.164	0.018	.895
Child's Verbal IQ (PPVT)	108.782	1	108.782	11.717	.001
Explained	305.229	6	50.871	5.479	.000
Residual	538.485	58	9.284		
Total	843.714	64	13.183		

Multiple Classification Analysis<sup>a</sup>

	n	Unadjusted Deviation from Mean <sup>b</sup>	Deviation Adjusted for Main Effects	Deviation Adjusted for Main Effects & Covariates
Mother's diagnostic status				
Never mentally ill	17	-0.68	-0.26	0.19
Major depression	18	1.26	0.84	0.76
Any anxiety disorder	6	0.44	0.02	-0.94
Depression & anxiety	24	-0.57	-0.45	-0.47
		( $\eta$ .23)	( $\beta$ .15)	( $\beta$ .16)
Child's diagnostic status				
Never mentally ill	41	-1.25	-1.17	-1.07
Any diagnosis	24	2.13	2.00	1.82
		( $\eta$ .45)	( $\beta$ .43)	( $\beta$ .39)
Multiple R <sup>2</sup>			.226	.362
Multiple R			.475	.601

Note: Lower scores on the Social Adjustment Inventory for Children and Adolescents indicate more effective functioning over past year. PPVT = Peabody Picture Vocabulary Test.

<sup>a</sup> Grand Mean = 5.696 (SD 3.56).

<sup>b</sup> Column entries are deviations from the overall mean score.

of recall bias when reporting on one's past functioning and when asked to isolate a number of years and describe functioning for a period when illness-free, particularly if one currently is ill. Possible sources of error include forgetting actual events or functioning, distortion due to time, and distortion due to subsequent events and/or illnesses.

## DISCUSSION

One of our initial goals was to examine the usefulness of the APFA instrument itself. Our results suggest that the APFA distinguishes current from baseline functioning in adults. It demonstrates good interrater reliability for its subscale domains as well as construct

validity. Nonetheless, we caution in using it in cross-cultural studies for several reasons. The interview relies on making ratings according to the quality of functioning based on characterizations of concrete behaviors. Many of these behaviors in several of the domains such as friendships and nonintimate social contacts that are used as the basis of comparison for assigning a score may be culturally specific. For example, the social activities adults engage in after work in England, such as married couples frequenting bars, appear to differ from those in the United States. As a result, Americans are penalized for engaging in fewer after-work activities that result in fewer acquaintances and for seeing "close" friends less frequently than is reported in England. Without cultural adaptation, various popu-

lations may be penalized unjustly in their ratings. With modification according to local social customs, however, it is likely that the instrument could be used in other US studies and with other populations.

#### Maternal Social Functioning and Maternal Psychiatric Disorder

Second, we were interested in the role of baseline social dysfunction in mothers' risk for affective and anxiety disorders. The suggested association between decreased baseline social functioning and depression with and without comorbid anxiety in mothers, points to a co-occurrence of depression with poor baseline functioning. This is consistent with Bronisch and Hecht (1990), who found that social dysfunction of subjects with depression and anxiety is mainly related to depression rather than to anxiety or the interaction between the two.

#### Maternal Social Functioning and Children's Psychiatric Disorder

Next, we examined the impact of mother's baseline functioning on psychiatric disorder in her offspring. We found that there was an increased risk for disorder in the children, with mothers who had poor baseline functioning independent of the mothers' psychiatric status. This is consistent with Lee and Gotlib (1991), who found that child adjustment was related to maternal psychological distress rather than to maternal diagnostic status. The children in their study continued to have difficulties even though their mothers' symptoms had remitted. This may be because they were still left with mothers' underlying baseline impairment. In this study, this was not true if the mothers had major depression only. Mother's diagnosis of MDD was the strongest predictor of depression in children and was unaffected by poor baseline functioning. In contrast, for children of mothers with an anxiety disorder, there was a decrease in risk for anxiety in the child if the mother reported good baseline functioning. Overall, mothers with poor baseline functioning increased the risk for any diagnosis in the children. Children of mothers with MDD may be exposed to so much chronic dysfunction already that the baseline impairment does not have an additive effect. In contrast, anxiety disorders such as panic disorder in adults may be more episodic in nature. Therefore, if a mother functions well between episodes, her child may be less

likely to be affected than if she is impaired both during and between episodes.

Mothers' impaired baseline functioning also appears to affect course and consequence of psychiatric disorder in children, but not to affect children's current functioning. Children with anxiety disorders and impaired maternal baseline functioning report an increased number of episodes of disorder; however, their own level of impairment did not differ according to their mothers' impairment. Mothers' impairment again does not appear to have an additive effect for depression, specifically, for increasing the number of depressive episodes in the child. Depression appears to be the disorder least affected by baseline impairment. This may be because these offspring have a particular subtype of depression due to being the offspring of probands with early-onset depression. Early-onset depression has been demonstrated to be more familial (Weissman et al., 1988). Therefore, the children of mothers with early-onset depression have an increased risk of having a depression themselves. Anxiety disorders are not as homogeneous in the findings on familiarity in transmission (Biederman et al., 1990; Crowe et al., 1983; Turner et al., 1987). The anxiety disorders category in this article includes children with separation anxiety disorder, overanxious disorder, panic disorder, and phobias. These disorders vary in believed rates of familial transmission and may be more affected by environment, especially the phobias. This difference in familial transmission for the disorders would be consistent with the finding of maternal impairment having a greater impact on offspring with anxiety disorders than those with depression.

Regardless of diagnosis, children of mothers with impaired baseline functioning reported a trend for greater involvement in therapy and increases in rates of suicidality. This suggests that mothers' baseline functioning may still signal the increased need for treatment for children exposed to a chronically dysfunctional parent, especially if the child has a psychiatric history of his or her own and is not protected by a high intelligence.

#### Implications

Since the sample size for this study was quite small, the findings must be viewed as tentative. Still the results do have several implications, both for future research as well as for clinical intervention. The results

support the idea that parent and child adaptation is synergistic and that intervention in one may affect functioning in another. It suggests that by targeting an intervention at parental social functioning, clinicians may be able to decrease the risk for disorder and poor functioning in the offspring. This is encouraging for clinicians because it is easier to intervene in social functioning sometimes, than to have a significant impact on the psychiatric disorder itself. This study supports the need for clinicians to take a familial view of children's problems and to involve parents in the treatment. It appears that mother's baseline functioning, independent of her functioning during a psychiatric episode, increases her child's vulnerability for disorder and/or impairment.

The results also demonstrate that one cannot generalize from children of depressed mothers to children of anxious mothers. The different nature of these disorders, regarding episodes, chronicity, impact on mother's functioning, and, possibly, degree of familial transmission, also vary the impact the disorders have on the children. Thus, children of psychiatrically ill parents, regardless of the disorder, are not all alike.

Overall, the results suggest the need for further research on the role of parental social role-functioning and its effects on the children's social functioning and risk for other psychiatric disorders. Specifically, further exploration of the nature of baseline functioning of mothers, not confounded by disorder, as a risk factor for psychiatric disorder or as early manifestation of disorder would provide important knowledge for the development of early interventions for the parents as well as the children. This could be accomplished through further exploration of instruments like the APFA that may be able to measure current functioning and functioning independent of disorder in order to tease out the effects of impairment stemming from a psychiatric disorder from more stable, inherent forms of social impairment.

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