Expressed emotion in a mother’s communications about her child may reflect both direct and subtle ways in which she transmits aspects of her depressive affective and cognitive style to her children. This study considered whether: (1) depressed mothers are more likely than well mothers to express negative emotional statements in descriptions of their children; (2) mothers' negative emotion statements are associated with children's mood disorders; (3) mothers' negative emotional statements are associated with children's self-esteem; and (4) children's self-esteem is associated with their mood disorders. Two groups of families were studied, 20 families with depressed mothers and 19 families with well mothers, each with a target child between 8 and 10 years old. Mothers were asked to describe their child. Children's self-esteem was measured with Harter's Self-Perceived Competence Scale, and children's diagnosis were determined with the Kiddie-SADS, a semi-structured diagnostic interview of both the mother and child. Depressed mothers made significantly more negative emotional statements overall, and specifically, more hostile or critical comments about their child, and more self-blaming comments. Depressed children had mothers who expressed significantly fewer positive statements, and showed a trend toward using more negative and critical statements. Mothers who made more critical or hostile statements had children with lower perceived physical appearance and behavioral conduct competence, and mothers who made more "negative other" statements had children with lower perceived scholastic achievement and athletic competence. Attached are 4 data tables and 12 figures. (LLL)
Symposium: Family Relations and Mood Disorders in Children

Paper: Depressed Mothers' Expressed Emotion and their Children's Self-Esteem and Mood Disorders

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Emory University

and

Joanne Riniti


¹ Lauren Adamson, of Georgia State University, was a coinvestigator on the research described in this paper.
Expressed emotion in depressed and well mothers' communications about their 8 to 10 year old children was studied for its relationship to children's self-esteem and mood disorders.

This is one of a series of studies testing the nature of the relationship between parental disorder, in this case depression in mothers, and problems in their children. I want to begin by having us consider several alternative hypotheses regarding transmission.

First, (slide 1) there is strong empirical support for a genetic basis to the association between parents' and children's depression (if not other forms of child psychopathology). Yet genetic factors alone are inadequate to explain the extent and breadth of risk to the children of depressed parents.

Second, (slide 2) children may be vulnerable as a function of exposure to maternal behaviors which are symptoms of affective disorders, such as dysphoric mood, negative self-perception, self-focused attention, or withdrawal. Researchers have reliably observed that parenting by depressed women, relative to well women, is less responsive, more coercive, and, sometimes, more overinvolved. These patterns of parenting are theorized to affect children either, first, via inadequate satisfaction of the child's needs by the mother, leading to impaired relationships and psychopathology in the child (an object relations theory or
modern interpersonal systems theory explanation) or, second, via modeling of the depressed mother's mood, cognition, and behavior, including her inadequate interpersonal style (a Bandurian social cognitive learning theory explanation), leaving the child vulnerable to disorder.

Finally, (slide 3) a third hypothesized mechanism for the transmission of psychopathology is the correlates of maternal depression. Maternal depression has been strongly associated with marital discord, divorce, psychiatric illness in the father, and dysfunctional family environments. Thus children of depressed mothers are faced with multiple risk factors, and complex models are required.

Returning to the work I am presenting today, (slide 4) expressed emotion in a mother's communications about her child may reflect both direct and subtle ways in which she transmits aspects of her depressive affective and cognitive style to her children. The child may acquire, via modeling and other social learning mechanisms, negative views of him or herself and vulnerability to depression. However, bidirectional effects may also exist, in that children at this age may already be experiencing symptoms of depression or other disorders themselves, and their mothers may be both reacting to and contributing to problems in the child.

I will be presenting the results of testing four questions:
(1) whether depressed mothers are more likely than well mothers to express negative emotional statements in descriptions of their children; (2) whether mothers' negative emotion statements are associated with children's mood disorders; (3) whether mothers' negative emotional statements are associated with children's self-esteem; and (4) whether children's self-esteem is associated with their mood disorders.

In order to answer these questions, we studied two groups of families, 20 families with depressed mothers and 19 families with well mothers, each with a target child between 8 and 10 years old, with approximately equal numbers of boys and girls in each group. The sample was predominantly Caucasian, and middle SES, with a high percentage of intact marriages. Mothers' diagnoses were determined by the SADS-L Interview. To qualify for the study, depressed mothers had to have had at least one episode of unipolar major depression during the child's life time. In fact, most depressed women had at least two episodes during that time frame, but most were not in episode at the time of the study. Depressed mothers had a mean BDI score of 12.97 (S.D.=8.3), meaning that they were mildly depressed at the time of the interview, compared to well mothers' mean score of 2.38 (S.D.=3.5), which is considered normal.

The data on mothers' statements about their children came from fifteen minutes of each mother's description of her child as
the preliminary step in administering the Kiddie-SADS, the unstructured portion of the child diagnostic interview of the mother about her child. Mothers were given the open ended instruction to describe their child and later prompted to describe the child regarding four content areas: school, peer relations, family relations, and hobbies, spare time activities, sports, etc.. The mothers' descriptions were transcribed and coded (slides 5 - 10) into categories of positive affect, negative affect, or non-affective statements. Negative affect statements were subcategorized as critical or hostile, maternal over involvement, self-blaming, or negative other. Scores were the percentage of all of the mother's statements which were in each category. Reliability, checked on 25% of the sample, indicated Kappa of .75 for agreement on the segments and an average of 92% agreement on the categories.

Children's self-esteem was measured with Harter's Self-Perceived Competence Scale (slide 11), a reliable and valid measure which yields scores on five scales and general self-worth.

Children's diagnoses were determined with the Kiddie-SADS, a semi-structured diagnostic interview of both the mother and child, conducted blind to other information on the child or parents. Children who met criteria for major depression or dysthymia at any point in their lifetimes were considered to have
a depressive disorder. Out of the total sample, six children met the diagnostic criteria, 5 of whom had depressed mothers.

The first question was whether depressed mothers make more negative affect statements about their children than do well mothers. (*slide 12*) We found that depressed mothers made significantly more negative emotional statements overall and, specifically, more hostile or critical comments about their child and more self-blaming comments. Percentages of the other negative categories were in the predicted direction, but not significant. The two groups of mothers did not differ on the percentage of positive or non-affective statements.

The second question was whether there is a relationship between mothers’ negative emotional statements and the child’s depressive disorder. That is, are depressed children more likely to have mothers who expressed a higher proportion of negative statements. (*slide 13*) In fact, depressed children had mothers who expressed significantly fewer positive statements, more negative statements overall, and, specifically, more negative other statements, and showed a trend towards using more negative or critical statements.

The third question was whether mothers’ negative emotional statements about their children are associated with children’s self-esteem. For children with depressed mothers, there were no significant relationships between the proportion of mothers’
speech in any of the categories and perceived competence. However, for children with well mothers, mothers who made more negative statements overall had children with lower athletic competence. Specifically, (slide 14) mothers who made more critical or hostile statements had children with lower perceived physical appearance and behavioral conduct competence and mothers who made more negative other statements had children with lower perceived scholastic achievement and athletic competence.

The fourth question was whether children's self-esteem is associated with their mood disorders. In comparing the groups of children with and without mood disorders on each of the self-esteem scales, we found no significant differences, but in all cases the scores were in the predicted direction. Depressed children scored lower on all indices of self-esteem.

In sum (slide 15), our results contribute to the accumulating body of knowledge about mechanisms for the transmission of psychological disturbance from depressed parents to their children. First, we replicated previous findings of elevated rates of depression in children with depressed parents even in our young sample. Taken alone, this finding might be seen as support for the genetic model. However, the rate of disorder, 25% of the children with depressed mothers, is significantly higher than the 5-15% that would be predicted solely on a genetic basis. Therefore, we have to look further.
Which takes us to the second point, that we demonstrated that depressed mothers express more negative affect regarding their children and third, we showed an association between mothers' negative statements and depression in the child. The latter finding may indicate that children become depressed as a function of exposure to mothers negatively. However, mothers' negative emotional statements may also reflect their reaction to depression in their children, regardless of the contribution of her disorder to the origin of the child's depression. Finally, the role of child's self-esteem as a mediator in the transmission of psychopathology was not supported by these data, although it clearly plays a role in children with well mothers.

In our future work, we will be testing whether other forms of disorder are also elevated in these children and whether mothers' critical statements are associated with depression specifically, or with psychopathology in general. For example, while we know that maternal depression is associated with elevated rates of anxiety disorder, ADHD, and conduct disorder, we don't know whether mothers' negative emotional statements are differentially related to depression versus other disorders. We will also continue our exploration of multiple risk factors, specifically marital discord or divorce and history of paternal disorder. Finally, we will be examining observed mother-child interactions in order to better test the complex patterns of
transactional relationships, and the relative predictive value of maternal diagnosis alone versus parenting characteristics such as mothers' negative emotional statements about their child.
Models for the Transmission of Psychopathology in Families with Depressed Parents
Models for the Transmission of Psychopathology in Families with Depressed Parents

Depressed parent → Inadequate parenting → Child acquires behaviors via modeling → Child's needs unmet → Child's relationship impairment → Psychopathology in child → Child has depressed mood, negative selfcognitions poor interpersonal skills
Models for the Transmission of Psychopathology in Families with Depressed Parents

- Depressed parent
  - Marital conflict, divorce, paternal disorder, distressed family relationships
  - Inadequate parenting
  - Child stressed
    - Inheritance of genes
      - Relationship impairment, acquisition of depressed mood, etc. via modeling, vulnerability to depression

Psychopathology in child
Models for the Transmission of Psychopathology in Families with Depressed Parents

- Depressed parent
- Inadequate parenting
- Child's needs unmet
- Child's relationship impairment
- Psychopathology in child

- Child acquires behaviors via modeling
- Child has depressed mood, negative self cognitions, poor interpersonal skills
Expressed Emotion Categories

Positive Affect

Negative Affect

- Critical or Hostile
- Maternal Overinvolvement
- Self-Blaming
- Negative Other

Nonaffective
Positive Affect

Definition: expression of praise, approval or appreciation of the behavior or personality of the child.

Example: "He's really a sweet child."
Negative Affect

- Critical or Hostile

Definition: negative description of the child or the mother's negative reaction to the child.

Example: "I hate most of what he does."

"He's evil."
Negative Affect

- Maternal Overinvolvement

Definition: indication of age, inappropriate ways of dealing with issues of autonomy / independence

Example: "He's only a baby; he needs me to help him get dressed in the morning."
Negative Affect

• Self-Blaming

Definition: description of self as directly influencing a behavior or characteristic of her child.

Example: "She's so melancholy for a little girl. I'm afraid she's taken after me."
Negative Affect

- Negative Other

Definition: negative description of child without direct statement of disapproval or dislike.

Example: "He's a non-motivated child in school."
Perceived Competence Scale for Children

(Harter, 1982)

Social Competence
School Competence
Athletic Competence
Physical Competence
Behavioral Conduct

General Self-Worth
Percentage of Speech in Categories of Expressed Emotion

By Mother’s Diagnosis

<table>
<thead>
<tr>
<th>Expressed Emotion Categories</th>
<th>Depressed</th>
<th>Well</th>
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<tbody>
<tr>
<td>N=20</td>
<td>N=19</td>
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</tr>
<tr>
<td>Positive</td>
<td>24.73 (15.61)</td>
<td>27.32 (12.04)</td>
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<tr>
<td>Negative</td>
<td>19.97 (12.36)</td>
<td>11.00 (8.65)**</td>
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<tr>
<td>Critical or Hostile</td>
<td>2.35 (3.04)</td>
<td>.35 (.91)**</td>
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<tr>
<td>Over involvement</td>
<td>1.77 (2.67)</td>
<td>.65 (1.70)</td>
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<tr>
<td>Self-Blaming</td>
<td>1.77 (3.32)</td>
<td>.11 (.46)*</td>
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<tr>
<td>Negative Other</td>
<td>14.07 (9.36)</td>
<td>9.90 (8.43)</td>
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<tr>
<td>Nonaffective</td>
<td>56.00 (17.59)</td>
<td>61.68 (11.85)</td>
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* p<.05
** p<.01
Percentage of Mothers' Speech in Categories
Of Expressed Emotion By Child's Diagnosis

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<th>Child's Diagnosis</th>
<th>Depressed (N=6)</th>
<th>Well (N=33)</th>
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<td><strong>Expressed Emotion Categories</strong></td>
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<tr>
<td>Positive</td>
<td>12.06 (6.72)</td>
<td>28.52 (13.38)**</td>
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<td>Negative</td>
<td>12.87 (6.98)</td>
<td>30.61 (13.88)***</td>
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<td>Critical or Hostile</td>
<td>4.44 (4.13)</td>
<td>.82 (1.55)</td>
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<td>Over involvement</td>
<td>1.52 (2.59)</td>
<td>1.17 (2.27)</td>
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<tr>
<td>Self-Blaming</td>
<td>1.00 (1.80)</td>
<td>.95 (2.64)</td>
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<tr>
<td>Negative Other</td>
<td>23.65 (9.58)</td>
<td>9.92 (7.29)***</td>
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<tr>
<td>Nonaffective</td>
<td>57.33 (14.45)</td>
<td>59.03 (15.47)</td>
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* P<.05
** P<.01
***P<.001
Correlations between Mothers’ Expressed Emotion and Children’s Self-Perceived Competence: Depressed Mothers

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<td>Positive</td>
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<td>.10</td>
<td>.11</td>
<td>.28</td>
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* P<.05
**P<.01
Correlations between Mothers' Expressed Emotion and Children's Self-Perceived Competence: Well Mothers

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<td>-.19</td>
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<td>Negative</td>
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<td>-.65**</td>
<td>-.34</td>
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<td>-.20</td>
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<tr>
<td>Critical/hostile</td>
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<td>-.24</td>
<td>-.30</td>
<td>-.47*</td>
<td>-.52*</td>
<td>-.25</td>
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<tr>
<td>Self-blame</td>
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<td>.02</td>
<td>-.09</td>
<td>.07</td>
<td>-.03</td>
<td>-.33</td>
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<tr>
<td>Overinvolve</td>
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<td>-.02</td>
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<td>.02</td>
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<tr>
<td>Neg. Other</td>
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<td>-.64**</td>
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<td>.12</td>
<td>.66**</td>
<td>.48*</td>
<td>.44</td>
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<td>.19</td>
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</tbody>
</table>

* p<.05
**p<.01
Models for the Relationship Between Maternal Depression, Expressed Emotion and Children's Self-Esteem and Mood Disorders

Maternal depression

Mother's negative emotional statements about her child

Child's self-esteem

Child's depressive disorder