Parenting behaviors of parents of young children with anxiety disorders: Relations to parental psychopathology and child temperament

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## Author Disclosures

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Anxiety disorders in childhood

- Are among the most common disorders (Albano et al., 2003)
- Preschoolers present with persistent anxiety disorders (Egger & Angold, 2006; Lavigne et al., 1998)
- Symptom presentations are strikingly similar to those found in older children (Eley et al., 2003; Spence, Rapee, McDonald, & Ingram, 2001).
CBT for anxiety in young children

- Protocols used to treat anxiety in young children include a parent component training the parents to apply CBT strategies with their anxious children.

  e.g., the “Being Brave” manualized treatment (Hirshfeld-Becker et al., 2008, 2010)
Open questions

- What type of parenting strategies are used by parents of young children with anxiety disorders to respond to the child’s anxiety in specific situations?

- Which parent and child factors are related to parental use of such strategies?
Both parental acceptance and parental control are related to anxiety (McLeod et al., 2007).

- Styles and parenting practices/behaviors

Very few studies of anxious children assessed both parenting styles and actual parental behaviors (Wood et al., 2003).

Our knowledge about how parenting behaviors other than acceptance and control are related to childhood anxiety is limited.

It is not clear what behaviors parents use in actual real-life situations that provoke anxiety in the child.
Study Approach

- We wanted to study how parents of clinically anxious young children respond in real-life situations when their children are anxious.

- We used descriptions of children’s expressions of anxiety and parents’ reactions in real-life situations, as reported by parents in initial CBT parent sessions, to characterize parenting behaviors in response to children’s anxious episodes.

- We compared these descriptions with questionnaires about parenting attitudes.

- We examined whether parental diagnoses or children’s temperament influenced which parenting behaviors were used.
Participants and procedure

- 44 children (21 boys and 23 girls) and their parents attending CBT (using the “Being Brave” protocol)
- Mean age = 5.39 (SD = 1.08, 4 to 7 years)
- 84.09 % (n = 36) were Caucasian
Measures

- **Childhood anxiety**
  - Child version of the Schedule for Affective Disorders and Schizophrenia, Epidemiologic Version (K-SADS-E) for DSM–IV (Orvaschel, 1994)
  - the DSM–III–R avoidant disorder module from the Diagnostic Interview for Children and Adolescents, Parent Version (Herjanic & Reich, 1982)

- **Parenting style - Questionnaire measure**
  - Warmth/nurturance and restrictiveness (Rickel & Biasatti, 1982)
Measures

- Parental anxiety and depression
  - Structured Clinical Interview for DSM–IV (First et al., 1995)
  - the Beck-Depression Inventory and the Beck Anxiety Inventory
- Behavioral inhibition
  - Behavioral observations (using protocols adapted from Kagan et al.)
  - Shyness scale - Emotionality-Activity-Sociability Temperament Survey for Children (Buss & Plomin, 1984)
Parenting Strategies

- Coded 72 vignettes taken from the first or second session of treatment (parent only sessions)
- 56 concerned mother’s responses to anxiety, 29 concerned father’s responses, and 13 concerned responses by both parents.
- In teaching parents to monitor their child’s anxious reactions, the therapist asks about an example of a recent time the child got anxious, and asks for antecedents, the child’s response, and the consequences.
Parental Strategies
Interrater reliabilities calculated based upon 40 vignettes

- Positive reinforcement (i.e., reward), $k = 1$
- Verbal reinforcement (i.e., praise), no $K$ value
- Punishment/criticism
  - Punishment, $k = 1$
  - Criticism/shaming, no $k$ value
- Basic CBT strategies
  - Verbally encouraging exposure, $k = 1$
  - Graduated exposure, $k = 1$
  - Prompting coping skills, $k = 0.88$
Parental Strategies
Interrater reliabilities calculated based upon 40 vignettes

- **Modeling**
  - Modeling the non-anxious behavior for the child, no k
  - Doing the non-anxious behavior with the child, $k = 1$

- **Providing comfort**
  - Physical contact, $k = 1$
  - Reassurance, $k = .94$

- **Information**, $k = .87$

- **Forced exposure**, $k = 1$

- Parent facilitation of avoidance versus exposure, ICC = .99
An example....

- Feared situation: bus ride to school
- Child’s response: takes off running up to the garage; “I am not going”, refuses, stomachaches
- Parent’s response: mom gets her, calms her down, make her take the bus anyway
- Child takes the bus
An example…

- Feared situation: going to a birthday party without mom
- Child’s response: decides not to go
- Parent’s response: mom “does not push it”
- Child stays home
An example…

- Feared situation: birthday party
- Child’s response: does not want to go, feels sick, wants mom to come with him
- Parent’s response: mom reminds him that he was looking forward to it and what to expect when he gets there, drives him to the party and drops him off
- Child attends the party
Results

What types of parental strategies do parents of anxiety-disordered children have in their repertoire?
<table>
<thead>
<tr>
<th>Parenting strategies</th>
<th>Mother n</th>
<th>Mother %</th>
<th>Father n</th>
<th>Father %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Positive reinforcement</td>
<td>2</td>
<td>3.57%</td>
<td>1</td>
<td>3.45%</td>
</tr>
<tr>
<td>2. Verbal reinforcement (i.e., praise)</td>
<td>1</td>
<td>1.79%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>3. Punishment/criticism</td>
<td>6</td>
<td>10.71%</td>
<td>3</td>
<td>10.34%</td>
</tr>
<tr>
<td>Punishment</td>
<td>3</td>
<td>5.36%</td>
<td>2</td>
<td>6.90%</td>
</tr>
<tr>
<td>Criticism</td>
<td>3</td>
<td>5.36%</td>
<td>1</td>
<td>3.45%</td>
</tr>
<tr>
<td>4. Basic CBT strategies</td>
<td>14</td>
<td>25%</td>
<td>7</td>
<td>24.14%</td>
</tr>
<tr>
<td>Verbally encourages exposure</td>
<td>6</td>
<td>10.71%</td>
<td>3</td>
<td>10.34%</td>
</tr>
<tr>
<td>Graduate exposure</td>
<td>4</td>
<td>7.14%</td>
<td>1</td>
<td>3.45%</td>
</tr>
<tr>
<td>Prompting coping skills</td>
<td>8</td>
<td>14.23%</td>
<td>3</td>
<td>10.34%</td>
</tr>
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</table>

Note: total number of observations for mothers = 56, for fathers = 29
<table>
<thead>
<tr>
<th>Parenting strategies</th>
<th>Mother</th>
<th>Mother</th>
<th>Father</th>
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<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
<td>n</td>
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<tr>
<td>5. Modeling</td>
<td>13</td>
<td>23.21%</td>
<td>7</td>
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<tr>
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<td>3</td>
<td>5.36%</td>
<td>2</td>
<td>6.90%</td>
</tr>
<tr>
<td>child</td>
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<tr>
<td>Doing the non-anxious behavior with the</td>
<td>10</td>
<td>17.86%</td>
<td>5</td>
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<tr>
<td>child</td>
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<td></td>
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</tr>
<tr>
<td>6. Providing comfort</td>
<td>21</td>
<td>37.5%</td>
<td>10</td>
<td>34.48%</td>
</tr>
<tr>
<td>Physical contact</td>
<td>8</td>
<td>14.23%</td>
<td>4</td>
<td>13.79%</td>
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<tr>
<td>Reassurance</td>
<td>15</td>
<td>26.79%</td>
<td>9</td>
<td>30.03%</td>
</tr>
<tr>
<td>7. Information</td>
<td>16</td>
<td>28.57%</td>
<td>6</td>
<td>20.69%</td>
</tr>
<tr>
<td>8. Forced exposure</td>
<td>11</td>
<td>19.64%</td>
<td>5</td>
<td>17.24%</td>
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Note: total number of observations for mothers = 56, for fathers = 29
### Avoidance v. exposure

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<thead>
<tr>
<th>Avoidance v. exposure</th>
<th>Mothers</th>
<th>Fathers</th>
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<tr>
<td></td>
<td>n and %</td>
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<tr>
<td>Did not encourage exposure at all</td>
<td>6 10.71%</td>
<td>3 10.34%</td>
</tr>
<tr>
<td>Made a weak effort to encourage exposure</td>
<td>14 25%</td>
<td>11 37.93%</td>
</tr>
<tr>
<td>Asked child to do an intermediate step</td>
<td>12 21.42%</td>
<td>2 6.90%</td>
</tr>
<tr>
<td>Got the child to perform the exposure</td>
<td>21 37.5%</td>
<td>11 37.93%</td>
</tr>
</tbody>
</table>

n observations mothers = 56, n observations fathers = 29
Which parent and child factors are related to parental use of such strategies?

- **Parental anxiety and depression**
  - Theoretical models postulate that certain parenting behaviors may be more prevalent among anxious parents or depressed parents (e.g., Ginsburg & Schlossberg 2002)
  - Mixed empirical evidence (e.g., Ginsburg et al. 2004; Hirshfeld et al., 1997)

- We examined whether mothers’ and fathers’ questionnaire-reported parenting style, and anxiety and depression relates to their parenting strategies in these situations.
Parenting styles of warmth and restrictiveness

- Mothers and fathers who reported a more restrictive parenting style were more likely to use punishment/criticism when their children faced a feared situation
  - Mothers: $B (SE) = .10 (.5), p < .05$, odds ratio $= 1.11$, Wald chi-squared test $= 4.13, p < .05$
  - Fathers: $B (SE) = .09 (.04), p < .05$, odds ratio $= 1.10$, Wald chi-squared test $= 5.43, p < .05$

- No other results were significant
Maternal anxiety and depression

- Mothers who were diagnosed with MDD in the past were less likely to use modeling with their child
  - $B$ (SE) = -1.16 (.62), $p = .06$, odds ratio = .32
  - Wald chi-squared test = 3.46, $p = .06$.

- Mothers who were diagnosed with MDD in the past were less likely to provide information to their children
  - $B$ (SE) = -1.30 (.69), $p = .06$, odds ratio = .27
  - Wald chi-squared test = 3.51, $p = .06$.

- Mothers who reported experiencing more anxiety symptoms on the BAI were less likely to use forced exposure
  - $B$ (SE) = -.39 (.16), $p < .05$, odds ratio = .67
  - Wald chi-squared test = 5.76, $p < .05$. 
Paternal anxiety and depression

- Fathers with past and current anxiety disorders used less exposure (allowed more avoidance)
  - $B (SE) = -1 (.34), p < .01$ for past AD
  - $B (SE) = -1.14 (.31), p < .01$ for current AD

- Fathers who reported higher anxiety on the BAI were less likely to use modeling
  - $B (SE) = -.27 (.12), p < .05$, odds ratio = .76
    Wald chi-squared test = 5.16, $p < .05$.

- Fathers who reported higher depression on the BDI were less likely to use punishment/criticism
  - $B (SE) = -.23 (.11), p < .05$, odds ratio = .79
    Wald chi-squared test = 4.04, $p < .05$. 
Associations with Child Temperament

- Child Behavioral inhibition
  - Parenting styles and behaviors are associated with level of BI in offspring (Hirshfeld-Becker et al., 2008, Degnan & Fox, 2007)
  - Little is known about how BI children versus non BI children are parented when encountering anxiety provoking situation

- We evaluated whether behavioral inhibition is related to mothers’ and fathers’ parenting strategies in anxiety provoking situations for the child.
Behavioral inhibition

- Behavioral assessments of children’s behavioral inhibition were not related to mothers’ or fathers’ parenting strategies in specific anxiety provoking situations for children.

- Higher shyness as reported by parents was more likely to be associated with paternal use of basic CBT strategies compared to lower levels of shyness
  - $B (SE) = 1.26 (.61), p < .05$, odds ratio $= 3.55$, Wald chi-squared test $= 4.32, p < .05$

- No other results were significant.
Discussion

- This study extended the literature by evaluating specific parenting strategies used by both mothers and fathers, when their anxious children face an anxiety-provoking situation. These may differ from parenting style reported on questionnaires.

- Parents of young anxious children did seem to naturalistically use some positive parenting strategies, suggesting that parents have the ability to help their anxious children.
  
  - Perhaps consistency of using these parental strategies across situations may be more relevant?

- Parental anxiety did not appear to relate to the use of more facilitation of avoidance for mothers, but did for fathers.

- Further study is needed to determine if the patterns found here generalize beyond parents seeking CBT for their children.