PARENT AND CHILD APPRAISAL STYLES IN RESPONSE TO MODERATELY STRESSFUL EVENTS

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ABSTRACT

The present study examines the primary appraisals of mothers and children in response to events children might encounter in their daily lives. The study explored whether mothers and children differed in their appraisals of mildly stressful events, and whether appraisals of mothers differed according to sex of child. Six vignettes describing typical events in children’s lives were presented in a home interview setting. The dyads (n=99) were asked to rate how much they cared about the event and how bad it was. A notable finding is that mothers appear to care significantly more about events in their children’s lives than do their children.

INTRODUCTION

Everyone experiences minor hassles in their daily life, but people vary widely in their responses to these events. Research with adults has shown that differences in the way people appraise events are related to differences in their emotional responses to those events (Scherer and Ceschi, 1997; Parkinson, 1999). Two people who experience the same event may interpret it in very different ways, causing them to experience different emotions. For instance, if someone were to bump into you, you might not have an emotional reaction to the event, thinking that it is an accident. On the other hand, if you think it was done purposefully you might get angry. In psychological literature, these evaluations are called “appraisals” (Folkman and Lazarus, 1984; Smith and Lazarus, 1993).

Children also experience minor hassles in their daily lives, and their emotional responses to such events will depend on how they evaluate those events (Folkman and Lazarus, 1984; Cassidy, 2000). Although there is some literature related to children’s appraisal of major life events such as death of a loved one (Hasan, 1996) or divorce (Sheets, Sandler, and West, 1996), very little is known about how children appraise more mundane events, and where and how they learn to do so. However, some research suggests that there are links between other types of children’s cognitions and parents’ patterns of cognition (Bugental and Johnson, 2000; Dix, Ruble, Grusec, and Nixon, 1986; MacBrayer, Milich, and Hundley, 2003). This being true, it seems reasonable to believe that children’s appraisals are related to their parents’ appraisals of similar events.

Since children’s appraisals determine their emotional response to events and therefore the amount of stress they will experience, it is important that we determine exactly how they learn to appraise events. In the present study I will attempt to demonstrate links between mother and child appraisals of minor stressful events. Specifically, I attempt first to determine whether mothers’ primary appraisals, namely evaluations of the importance or significance and degree of threat of an event, are related to their children’s appraisals of the same event. Second, I examine whether
mother-child appraisal relations differ across boys and girls. Finally, I attempt to determine whether mothers and children differ in their level of response to minor stressors. This study, then, represents an initial important step towards understanding the ways in which children appraise stressful events and the ways in which mothers affect child appraisals. Such knowledge can inform interventions designed to help children manage stress, or to help parents teach children how to manage stress.

**Appraisal Theory**

In our daily lives, we are constantly scanning our environment and evaluating the situations we encounter. Folkman and Lazarus (1984) named this process of ongoing evaluation *cognitive appraisal*. They identified two types of appraisal, *primary appraisal* and *secondary appraisal*. Primary appraisal is the process of determining the significance of an encounter with respect to one’s own well being (Folkman and Lazarus, 1984). Secondary appraisal is defined as the process of determining what, if anything can be done about it. The appraisal process is often automatic and instantaneous, and is based on the individuals’ experience with similar encounters (Lazarus and Smith, 1988). The appraisal process is also dynamic: people appraise and reappraise events, as new information from the environment becomes available.

The term “primary appraisal” is somewhat misleading, since the appraisal process is continuous and not necessarily linear. Instead, primary appraisal refers to the process of determining whether an event is personally significant and the implications for well being. Secondary appraisal, on the other hand, is a complex process that involves consideration of coping options and the likelihood that a particular strategy can be applied effectively (Folkman and Lazarus, 1984). Some components of secondary appraisal include determining who or what is accountable for a situation, how to cope with the situation itself or with emotions arising from it, and how the situation is likely to resolve (Lazarus and Smith, 1986). Outcomes of primary and secondary appraisal determine emotional responses to a situation. For example, in the example given above, if a person determines that being pushed is significant and harmful (primary appraisal), and that someone else did it intentionally (is accountable), the emotion of anger is likely to result. In contrast, if a person appraises being pushed as non-significant or harmless, a strong emotional response is unlikely.

For the purposes of this study, I will focus only on the relation of primary appraisals in children to their mothers’ primary appraisals of the same types of events. Primary appraisal is important to study because it determines the interpretation of an encounter, thus affecting the determination of what, if anything can be done about it (secondary appraisal). Numerous studies over the past two and a half decades have demonstrated that a primary appraisal of significance and threat is related to stress (Folkman and Lazarus, 1984). Many different methods have been used to study appraisal, such as interviews in which participants report their own appraisal of past situations (Sheets, Sandler, and West, 1996) and the vignette method, which involves asking the participant to imagine themselves in a situation and to answer a set of questions as if they had experienced the situation (Smith, Haynes, Lazarus, and Pope, 1993; MacBrayer, Milich, and Hundley, 2003). It is noteworthy that the link between appraisal and emotions has been consistently demonstrated across these different methods.

**Social Cognition in Parents and Children**

Although relationships between parent-child appraisals have not been studied, there is a body of research examining parent-child links in other forms of social cognition. Because a thorough review of this literature is beyond the scope of this paper, I will only highlight studies specifically relevant to this study. For example, in a study of ninety-six elementary school children and their parents, Seligman et al. (1984) found that the explanations children and their mothers gave for
bad events were very similar, whereas child and father explanations were not. This may mean that children learn to evaluate events in their own lives by watching their mothers evaluate events. In contrast, Fincham and Cain (1986) explored effort and ability attributions in third-grade children, and found that the way parents explained bad events affecting their children was more closely related to children’s explanations than to how parents explained bad events in their own lives. However, the only statistically significant link was between father and child cognitions. These findings suggest that parents’ evaluations of events in their children’s lives affect the way children evaluate events in their own lives.

Parsons, Adler, and Kaczala (1982) administered questionnaires measuring attitudes and beliefs regarding mathematics achievement to children in grades 5-11. Parsons and her colleagues found that children’s evaluations of their performance in math were more closely related to their parents’ evaluations than to the children’s actual performance. Parsons et al. concluded that regardless of actual performance, children tend to look at themselves as their parents do. Miller’s (1995) extensive review of literature on the effects of parents’ attributions of their children’s behavior provides additional support for this conclusion. Miller concluded that the way that parents think about their children seems to affect their behavior toward their children, which in turn affects their child’s development.

Symbolic Interactionism

According to the symbolic interactionism perspective, individuals develop a sense of self as they learn to see themselves the way they believe others see them (Dai, 2002). Taking this perspective, Shrauger and Schoeneman (1979) state that it seems likely that in childhood, children will begin to see themselves as they believe their parents see them. By extension, if children view themselves as they believe their parents to view them, it may be that the way parents appraise events in their children’s lives will affect their children’s appraisal process.

In a study of 266 tenth grade students in China, Dai (2002) compared adolescent self-concepts and parent perceptions in relation to academic performance. While there was a positive correlation between parent perceptions and actual academic abilities, academic self-concepts were negatively correlated with parent perceptions. The results of this study suggested that children’s academic self-concepts are not shaped by parent cognitions.

Sex Differences in Parent and Child Cognitions

In addition to simple correlations between parent and child cognition, some studies have explored differences in cognition related to the sex of the parent and/or child. In their study of 373 fourth through seventh grade children and their parents, Felson and Reed (1986) found that for elementary school children, fathers tended to have a more favorable evaluation of their daughters’ performance than of their sons’ performance, and that in those children, girls’ self-evaluations were more positive than boys’ were. Furthermore, Felson and Reed (1986) concluded that parents tended to have a stronger influence on the child of the opposite sex. These findings imply that watching their parents appraise events will shape children’s future appraisals.

MacBrayer, Milich, and Hundley (2003) examined 100 aggressive children and their mothers in an effort to link hostile attributions between the children and their mothers. MacBrayer and her colleagues concluded that children learn to view rather ambiguous actions of others as hostile in a way similar to their mothers. Daughters’ attributions and behavioral intentions, in particular, were significantly correlated with maternal attributions, while sons’ and mothers’ were not (MacBrayer, Milich, and Hundley, 2003). In addition to exploring mother-child relations overall, the present study examines associations related to the sex of the child.
Hypotheses

In sum, considerable research has been undertaken to determine how people appraise particular events and what particular emotions result from different appraisals. This brief review of the literature discusses appraisal theory, which states that the way we evaluate or appraise events determines our emotional response. According to appraisal theory, primary appraisal, or the initial evaluation of whether an event is important and whether it is threatening, is the main determinant of an emotional response. To date, there have been no studies of how children learn to evaluate everyday events. Despite this omission, there is a body of literature that shows relations between parent and child cognitions.

The literature on cognition provides an empirical basis for the primary hypothesis of this study:

\[ H1: \text{Mothers’ appraisals of their children’s events will be related to children’s appraisals of those same events.}\]

In addition, there is some evidence of sex differences in relations between parent and child cognitions. Thus, I use appraisal theory to examine the relationships between mothers’ appraisals to sons’ and daughters’ appraisals separately. The second hypothesis of this study:

\[ H2: \text{The relation of mothers’ appraisal to sons’ appraisal is different than the relation to daughters’}.\]

A final exploratory question is whether mother and child appraisals differ in their intensity of the primary appraisals of threat and significance of an event.

METHOD

Sample

The family-based study reported in this paper is part of a larger, school-based study conducted in the school district of a mid-sized university town. Last fall, 434 of 501 third through fifth grade students in the school district completed surveys related to social and academic behaviors. Results of the survey were sent home to parents in the form of a newsletter to explain the study and to invite further participation in a family interview. 129 families in Pullman, Washington agreed to participate in the study, and 99 children and their families completed a family interview. The sample in the present study consists of those 99 third through fifth grade children and their families, which represents approximately 20 percent of families with third through fifth grade children in the school district. Data concerning race and ethnicity of participants was collected upon interviewing. Of the 91 children for whom ethnicity was reported, 78 (84.8%) were European American, 8 (8.7%) Asian American/Asian, 1 (1.1%) African American, 2 (2.2%) American Indian, and 2 (2.2%) claimed other ethnicities; eight (8.7%) did not report ethnicity. Approximately twenty percent of the parents involved in this study reported being on public assistance. Fifty three percent of the children were male.

Procedure

Three faculty investigators and eleven trained research assistants, including myself, conducted the family interviews for this study. The interviews were conducted in the family homes; each interview lasted approximately two hours. Upon arrival to the family home, the investigators reviewed a child and parent consent form with both parents and children. After
consent was given for the study, the child was taken into a room separate from their parents to ensure confidentiality. At this time, the parents were given 50 dollars for their participation in the home interview.

Generally, two investigators went to each home at the time of the scheduled interview. In cases where assistance was needed with children not involved in the interview process, an additional investigator went into the homes. The investigator with the parents reviewed each measure prior to the parents filling out the questionnaire. The investigator assisting the child read the entire child survey aloud to the child and offered some assistance in filling out the questionnaire when possible.

All study procedures were approved by the Institutional Review Board of Washington State University.

Measures

Three of the primary investigators in the study, Drs. Laura Hill and Tom Power, and graduate student Brianne Hood, created measures based upon standard appraisal measures that have been shown to be reliable and valid in previous research studies (Hasan and Power, 2002). These are measures of children’s and parents’ appraisals of everyday stressful events. The parent measure assessed how parents appraise situations their children may potentially encounter. The child measure assessed how children appraise those same life events.

Since it is difficult to capture appraisals of events in real time, the standard method of assessing appraisal relies on asking participants to imagine themselves in a particular situation, and then asking for their appraisals of that situation. In the present study, researchers read a series of short vignettes depicting slightly stressful situations, and participants were asked to imagine that they were in a specific situation. Each vignette was followed by questions that measure primary and secondary appraisals. For example, each child was presented with the following vignette: “It is recess. You are outside playing with your classmates. You hear some kids talking. You hear the kids say that they do not like you.” Children were then asked if they cared about it (appraisal of significance) and if they thought this was bad (appraisal of threat). Questions measuring appraisals are rated on a five-point scale with responses ranging from “YES” (strong agreement) to “NO” (strong disagreement). The complete series of vignettes and questions is included in Appendix A. Although the interviews measured both primary and secondary appraisal, I analyzed only the primary appraisals of significance, that is, “I care about this,” and the appraisal of threat, “This is bad.”

RESULTS

The results are presented in two sections. In the first section, I report the analysis of the relations between mother-child appraisals. In the second, I report the mean differences between mother-child appraisals.

Relations between Mother and Child Appraisals

Appraisals of mothers and children were only modestly correlated, and in some cases mother-child appraisals were negatively correlated (see Table 1). The correlations ranged from -.18 to .05 for event significance and from -.12 to .15 for event threat. None of the mother-child correlations were statistically significant. However there were some interesting patterns when looking at vignettes individually. For instance, mother-child correlations were high in both event significance and event threat in vignette I, and low in vignettes III and IV. Correlations between mother and child appraisals of event significance were higher overall than those of threat.
When mother-child correlations were broken down by sex, slightly higher correlations were found among mothers and sons. The range of mother-son correlations was very broad for event significance, from -.17 to .33. Event threat for mother-son correlations ranged from -.14 to .18. Further, statistically significant correlations were found between mother-son appraisals of event significance in vignettes I and IV. Mother-son correlations were fairly high within vignette IV for both event significance and event threat. In vignettes II and IV, mother-son correlations of event significance and event threat were negatively correlated. Correlations between mother-son appraisals of event significance were higher overall than those for event threat.

Mother-daughter correlations were generally lower. Correlations for event significance in this group ranged from -.19 to .30. For event threat, correlations ranged from -.12 to .28. None of the mother-daughter correlations were statistically significant. Looking for patterns within vignettes, we can see that in vignettes II, IV, and V mothers and daughters were negatively correlated in their appraisals of both event significance and event threat. In addition, the correlation between mother-daughter appraisals of event significance and threat are somewhat higher in vignette VI than in the other five vignettes. Correlations between mother-daughter appraisals of event threat were higher overall than those for event significance.

When comparing mother-son correlations with mother-daughter correlations, mothers and sons were most strongly correlated in their appraisals of event significance, whereas mothers and daughters were most strongly correlated in appraisals of event threat.

<table>
<thead>
<tr>
<th>Table 1. Correlations for Significance and Caring, By Source</th>
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</thead>
<tbody>
<tr>
<td>Vignette</td>
</tr>
<tr>
<td><strong>Significance</strong></td>
</tr>
<tr>
<td>Mother - Child</td>
</tr>
<tr>
<td>Mother - Son</td>
</tr>
<tr>
<td>Mother - Daughter</td>
</tr>
<tr>
<td><strong>Threat</strong></td>
</tr>
<tr>
<td>Mother - Child</td>
</tr>
<tr>
<td>Mother - Son</td>
</tr>
<tr>
<td>Mother - Daughter</td>
</tr>
</tbody>
</table>

NOTE: I: Get Bad Grade  II: Break Class Rule  III: Break Home Rule  IV: Get Picked Last  V: Overhear Peers Talking  VI: Lose Team Sport  * p<.05

**Mean Differences in Mother-child Appraisals**

Mothers’ reported level of caring about events was significantly higher than that of their children (See Table 2: F_{2,187} = 14.51, p < .001). Mothers’ responses of event significance ranged from a mean of 3.6 to 4.6, which is a much narrower range than the responses of the children, which ranged from 2.4 to 4.5. Mothers’ mean level of appraisal for event significance was significantly higher than those of their children in vignettes I, II, IV, V, and VI. On the other hand, children reported finding events significantly more threatening than did the mothers (F_{2,185} = 10.04, p < .001). For event threat, mothers’ responses ranged from a mean of 2.0 to 3.7 whereas the children’s responses ranged from 2.2 to 4.5. Mothers’ mean level of appraisal of event threat was significantly lower than children’s in vignettes I, III, and VI. Children reported finding events to be equally significant as they were threatening, whereas mothers reported much higher event significance than event threat.
When the means are broken down by sex (see Table 2), we can see that in most vignettes mothers’ reported level of caring about events was higher than both sons and daughters. As noted above, the mean scores for mothers ranged from 3.6 to 4.6 for event significance. Reported event significance for boys ranged from a mean of 2.1 to 4.3. For girls the means ranged from 2.6 to 4.6. Means for event threat ranged from 2.0 to 3.7 for mothers, 2.1 to 4.2 for boys and 2.4 to 4.5 for girls. Mother and daughter means of event significance were similar in vignettes I, II, and III. Mothers’ mean level of appraisal of event significance was significantly higher than daughters’ in vignettes IV and VI. In the appraisal of threat, mothers’ means were significantly lower than daughters’ in vignettes I, III, and VI. Mothers’ mean level of appraisal was significantly higher than sons’ in vignettes II, IV, V, and VI for event significance and significantly lower in vignette I. Reported levels of event significance were more similar among mothers and daughters than mothers and sons. In contrast, reported levels of event threat were more similar among mothers and sons than mothers and daughters.

**DISCUSSION**

The results provide little support for the primary hypothesis of this study, which was that mothers’ appraisals of their kids events would be related to children’s appraisals. The related literature has shown that there are parent-child links in other types of social cognition. Thus, it seemed reasonable to assume that the appraisals of mothers and children would be correlated. Surprisingly, then mother and child appraisals were only modestly and, in some cases, even negatively correlated. Mother and child correlations were much stronger in the appraisal of event significance than that of event threat. This seems logical since adults obviously feel much less threatened by such events than do children.

The second hypothesis of this study was that the relation of mothers’ to sons’ appraisals would be different from the relation of mothers’ to daughters’ appraisals. When mother-child correlations were examined by sex, the correlations were higher between mothers and sons than between mothers and daughters. This is consistent with Felson and Reed’s (1986) findings that parents have stronger influence on the child of the opposite sex. The relationship between mother and son appraisals of event significance was higher than that of event threat. In contrast, mothers and daughters are more related in their appraisals of event threat. There is little related empirical

**Table 2. Means and Standard Deviations for Significance and Caring Appraisals, By Source**

<table>
<thead>
<tr>
<th>Vignette</th>
<th>Significance</th>
<th>Threat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>Mothers</td>
<td>(n= 95)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.6 (.67)</td>
<td>4.4 (.57)</td>
</tr>
<tr>
<td>Children</td>
<td>(n= 99)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.4 (1.0)</td>
<td>4.3 (.78)</td>
</tr>
<tr>
<td>Boys</td>
<td>(n=52)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.2 (1.5)</td>
<td>4.2 (.83)</td>
</tr>
<tr>
<td>Girls</td>
<td>(n=45)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.5 (.95)</td>
<td>4.4 (.70)</td>
</tr>
<tr>
<td>Threat</td>
<td>(n=95)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.4 (1.0)</td>
<td>3.5 (.98)</td>
</tr>
<tr>
<td>Children</td>
<td>(n=99)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.2 (1.1)</td>
<td>4.2 (.87)</td>
</tr>
<tr>
<td>Boys</td>
<td>(n=52)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.0 (1.2)</td>
<td>4.2 (.93)</td>
</tr>
<tr>
<td>Girls</td>
<td>(n=45)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.3 (.86)</td>
<td>4.2 (.82)</td>
</tr>
</tbody>
</table>

**NOTE:** I: Get Bad Grade  II: Break Class Rule  III: Break Home Rule  IV: Get Picked Last  V: Overhear Peers Talking  VI: Lose Team Sport
literature that would help to interpret these findings, but the results do suggest that future research should examine fathers’ appraisals to determine whether child appraisals are actually more related to the parent of the opposite sex.

The results of the exploratory hypothesis, which looked at whether mothers and children differ in their intensity of primary appraisals, were much more significant than those of the other hypotheses. Since there is no literature to date examining this issue, I examined mean differences in mother-child appraisals to determine whether this might be the case. A notable finding was that mothers appeared to care significantly more about events in their children’s lives than do the children themselves, yet children found the events to be much more threatening. This is most likely because as we grow older, we learn that many things are not as threatening as we once thought they were, and we also learn to separate the two ideas of caring about something and finding it threatening. It is evident that children do not yet understand this, since the data show that they find things equally significant and threatening. Further study on how children learn to appraise the significance and threat of an event aid us in better understanding how to prevent stress in children.

When reported levels of event significance were examined by sex, the results were particularly interesting. The means of mothers and daughters were more similar than those for mothers and sons. It may be that they are more related in this area simply because they are female. Children may look to the parent of the same sex when deciding how much they should care about a particular event. Again, this is a topic in need of further research and should examine fathers as well as mothers. In contrast, reported levels of event threat were more similar among mothers and sons than mothers and daughters. Overall, girls felt more threatened by the events than did boys. Since mothers were less threatened by events than the children, the mean level of appraisal of event threat was more closely related to sons than daughters. This is, perhaps, simply a gender difference in which boys do not feel as threatened by situations as girls do, rather than a relationship between mothers and sons.

CONCLUSIONS

These data have very interesting implications: if children do not learn to appraise events from their mothers, where do they learn to do so? Because we are constantly appraising our environment, and the primary appraisals of threat and significance determine our emotional responses it is important to determine where children learn to appraise events. Although recent literature has shown that children’s appraisal of major life events is affected by their parents (Hasan, 1996; Sheets, Sandler, and West, 1996), where and how children learn to appraise more minor events is unknown. One possible reason for the lack of a relationship between parent and child appraisals in this study is that children’s appraisals are not as influenced by parent appraisals for minor events as they are for major events.

REFERENCES


**APPENDIX A: PARENT APPRAISALS**

The items used to measure parent appraisals are listed below. “The following response categories were used for each item:

<table>
<thead>
<tr>
<th>I care about this.</th>
<th>YES!</th>
<th>Yes</th>
<th>Maybe</th>
<th>No</th>
<th>NO!</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is bad.</td>
<td>YES!</td>
<td>Yes</td>
<td>Maybe</td>
<td>No</td>
<td>NO!</td>
</tr>
</tbody>
</table>

1. Christmas break is just around the corner. Your child’s teacher gives each student in his/her class a piece of paper with his/her individual grades on it. Your child receives a bad grade.

2. Your child really likes his/her teacher. His/her teacher is very strict about following class rules. Your child gets in trouble for breaking a rule at school.
3. Your child breaks a rule at home and s/he knew s/he was not supposed to. You are upset with your child.

4. Your child’s gym teacher had two students in the class pick who was going to be on which side for a game. Your child is the last one picked.

5. Your child is outside playing with his/her friends at recess. Your child hears kids say they don’t like him/her.

6. Your child is playing his/her favorite team sport. Your child has been so excited about the upcoming game all week. Today, his/her team loses the game.

APPENDIX B: CHILD APPRAISALS

The items used to measure child appraisals are listed below. The following response categories were used for each item:

<table>
<thead>
<tr>
<th>I care about this.</th>
<th>YES!</th>
<th>Yes</th>
<th>Maybe</th>
<th>No</th>
<th>NO!</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is bad.</td>
<td>YES!</td>
<td>Yes</td>
<td>Maybe</td>
<td>No</td>
<td>NO!</td>
</tr>
</tbody>
</table>

1. It is almost Christmas break. Your teacher wants to let you know how you are doing in school. She passes a piece of paper to each student in the classroom with his or her individual grades on it. You get a bad grade.

2. You really like your teacher and she is very strict about students following class rules. You got in trouble for breaking a rule at school.

3. You break a rule at home. You knew you were not supposed to. Your parents found out what you did and are upset with you.

4. Your gym teacher has two students pick who’s going to be on which side for a game. You are the last one picked.

5. It is recess. You are outside playing with your classmates. You hear some kids talking. You hear the kids say that they do not like you

6. You are playing your favorite team sport. You have been excited about this game all week. Today, your team loses the game.