This study examined parents' and children's affect regulation skills and constructive behavior to test whether a modeling mechanism or a parent-child interaction mechanism best accounted for children's behavior. Thirty-six married couples and their 4- to 7-year-old children participated in the study. The families were asked to play a board game called "Max the Cat" in a cooperative manner. Parents were then asked to choose a problem area in their relationship to discuss in front of their child, and later completed the Conflict Tactics Scale. Videotapes of these interactions were then coded and analyzed. It was found that while parents' self-report of overall aggression in their marriages was associated with their observed behavior during the marital problem discussion, parents' behavior during that task was independent of their behavior during the family game task. Parents' supportive behaviors in both family tasks were positively associated with children's positive affect and negatively associated with children's negativity, whereas parents' negative behaviors and level of marital aggression were positively associated with children's negative behavior, negative affect, and withdrawal. It is concluded that children are influenced both by their parents' interactional behavior and parenting behavior. (Contains 12 references.) (MDM)
Affect Regulation in Families: A Link between Marital Conflict and Child Behavior

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Abstract

Marital conflict is known to have adverse effects on children. However, research has not yet established the most influential pathway between the marital dyad and children's behavior. The purpose of the present study was to examine parents' and children's affect regulation skills and constructive behavior in two videotaped laboratory situations, in order to test whether a modeling mechanism or a parent-child interaction mechanism better accounted for children's behavior. It was found that while parents' self-report of overall aggression in their marriages was associated with their observed behavior during a marital problem discussion, parents' behavior during that task was independent of their behavior during a family game task. Mothers' and fathers' self-reported level of marital conflict and their behaviors during both interaction tasks were significantly associated with their children's behavior. In general, parents' supportive behaviors were positively associated with children's positive affect and negatively associated with children's negativity, whereas parents' negative behaviors and level of marital aggression were positively associated with children's negative behavior, negative affect, and withdrawal. The results of regression analyses suggest that parents' behavior in the marital dyad and their behavior in the parenting context both make independent and important contributions to predicting children's behavior.
Studies of the effects of marital conflict on children have established that children of conflictual marriages are at risk for both externalizing and internalizing difficulties (Fincham, Grych, & Osborne, 1994; Hetherington, Cox, & Cox, 1978; Katz & Gottman, 1993). Research on marital interaction suggests that couples’ conflict resolution and affect regulation skills are predictive of the success of the marital relationship (Baucom & Epstein, 1990; Markman & Hahlweg, 1993) and of children’s later behavior (Katz & Gottman, 1993). Research also suggests that these skills develop during childhood within the context of family interactions (Eisenberg, Fabes, Carlo, & Karbon, 1992), and that children who show behavior problems also often demonstrate poor affect regulation skills (Cole & Zahn-Waxler, 1992). Thus, maritally distressed parents who lack affect regulation and conflict resolution skills may have children who also lack such skills.

Previous research has not clearly established a mechanism by which marital conflict affects subsequent child behavior. At least three viable pathways exist. Children may learn maladaptive methods for dealing with frustration and conflict by watching their parents interact ineffectively with each other (the modeling hypothesis). Alternatively, marital conflict may negatively influence the quality of parent-child interactions, indirectly linking child outcomes to marital conflict (the interaction hypothesis). A third possibility is that parents in conflictual marriages have general deficits in handling negative affect and conflict which manifest across contexts and influence both marital and parent-child relationships. Several researchers have emphasized the need for studies which explicitly test these mechanism theories (Fincham, Grych, & Osborne, 1994; Kerig, Cowan, & Cowan, 1993; Markman, 1992).
The present study examined parents’ and children’s affect regulation skills and constructive behavior in two laboratory situations to test which of the above mechanisms best accounted for children’s behavior.

Methods

Participants

Participants were 36 married couples and their 4-7 year-old children (mean age = 5.97 years) living in the greater metro Denver area. The family was roughly equally divided between families with boys and with girls. Families were recruited from the developmental subject pool at the University of Denver and were invited to participate in a study of family interaction. Ninety-three percent of the participants were Caucasian, and median family income was $50,000-60,000.

Procedure

Families came to the lab at the University of Denver, where they completed a number of self-report measures and participated in several videotaped interaction tasks. Tasks and measures examined in the present study are described below.

Family game task. The family was asked by an experimenter to play a board game ("Max the Cat") together. The game is designed to be played in a cooperative manner in which the family must decide together how to move Max the cat and several small animals whom Max is trying to catch. The object of the game is to get the small animals safely to their nests before Max eats them. Parents were provided with written instructions and asked to play as they would at home. This interaction task lasted approximately 10 minutes.

Marital discussion with child present task. Parents were asked to choose a problem area in their relationship to discuss in front of their child. Parents agreed on a topic before the child entered
the room. Toys were available in the room for the child to play with during the task. Children were not given any instructions by the experimenter. This interaction task lasted approximately 10 minutes.

**Measures**

**Conflict Tactics Scale (CTS, Straus, 1979).** This scale first asks participants to rate the frequency with which they used a number of conflict resolution strategies during the past year. Frequency choices range from “never” to “more than 20 times” using a 0-6 scale. The 23 tactics represent escalating levels of violent and destructive behavior, from “Tried to discuss the issue calmly” up to “Used a knife or a gun” and “Forced partner to engage in a sexual activity.” The next two sections of the scale ask the participant to use the same items to describe their partner’s actions during the last year, and then to rate the frequency with which their child witnessed each of these activities. Summary scores were created for each individual which combined each parent’s self-report of behavior as well as the partner’s report of that parent’s behavior. Summary scores were also created reflecting both parents’ reports of marital conflict to which their child was exposed.

**System for Coding Interactions in Dyads (SCID, Malik & Lindahl, 1995).** This global coding system was used to behaviorally assess the communication and affect regulation skills of mothers and fathers during a marital problem-solving discussion. Each behavior code was rated using a Likert-type scale of 1 (Very Low) to 5 (High). Positive and negative summary scores were created for mothers and fathers separately. Behaviors included in the positive summary score were communication, emotional support and attunement, and positive affect. Behaviors included in the negative summary score were verbal aggression, negativity and conflict, withdrawal, coerciveness and control, and negative escalation.
System for Coding Interactions and Family Functioning (SCIFF, Lindahl & Malik, 1996). This global coding system was used to assess parent and child behavior and affect during the triadic family game task. Each behavior was rated using a Likert-type scale of 1 (Very Low) to 5 (High). For parents, positive and negative summary scores were created for mothers and fathers separately. Behaviors included in the positive parenting summary score were emotional support of child and technical support of child. Behaviors included in the negative parenting summary score were rejection and invalidation of child and coerciveness and control of child. Child codes were examined individually, and included anger and frustration, withdrawal, opposition and defiance, and positive affect.

Coping and Affect Regulation System (CAR). This coding system was used to assess the behavior and affect of the child while present during the parents’ marital problem discussion. The system contains both individual and global codes. Individual codes were marked for occurrence/nonoccurrence every 30 seconds during the 10-minute task, and a proportion score was then calculated for each code based upon the number of times that behavior had occurred during the task. Proportional codes of importance in this study were sadness and whine/complain. Global codes were rated on a Likert-type scale from 1 (very little or no) to 5 (almost all or all) and were used to judge behavior across the 10-minute interaction. The global codes utilized in this study were positive affect and negative affect.

Predictions

Hypothesis 1: Parents’ communication and affect regulation skills in the marital context will be associated with their parenting and affect regulation skills in the triadic family interaction context. In other words, parents will have a general level of skills that will generalize across contexts.
Hypothesis 2: Parents’ reported level of marital aggression will be associated with their affect regulation skill seen during the marital problem discussion.

Hypothesis 3: Parents’ affect regulation skills will be associated with their child’s affect regulation skills.

Results

Parental Cross-situational Communication and Affect Regulation

Only mothers’ supportive parenting behavior during the triadic family game task was associated with their positive behavior during the marital problem discussion, $r(35) = .36$, $p = .03$. Contrary to expectations, mothers’ and fathers’ unsupportive parenting behaviors during the triadic family game task were unrelated to their positive and negative behaviors during the marital problem discussion. Likewise, fathers’ supportive parenting behaviors during the triadic family game task were unrelated to their marital interaction behaviors.

Marital Conflict and Marital and Family Affect Regulation

As expected, reports of mothers’ marital aggression were positively correlated with their negative behavior during the marital problem discussion and negatively correlated with their positive behavior during the marital problem discussion (see Table 1). The same results were found for fathers. Reports of mothers’ marital aggression was also negatively correlated with their supportive parenting behavior during the triadic family game task, but marital aggression was not associated with either mothers’ unsupportive behavior or fathers’ supportive or unsupportive behavior during the triadic family game.
Parents’ and Children’s Affect Regulation Skills

As can be seen in Table 2, parents’ positive behavior was positively associated with children’s positive behavior and parents’ negative behavior was positively associated with children’s negative behavior. As expected, this was true both within and across task situations. For example, within the family game task, mothers’ negative parenting behavior was positively correlated with child withdrawal and with child opposition/defiance. Fathers’ negative parenting behavior was also positively correlated with child withdrawal. Both mothers’ and fathers’ supportive parenting behavior was positively correlated with child positive affect. Across tasks, mothers’ and fathers’ negative parenting behavior in the triadic family game task was positively correlated with their child’s sadness during the marital problem discussion. Fathers’ supportive parenting behavior in the triadic family game task was negatively correlated with their child’s whining/complaining during the marital problem discussion.

In addition, parents’ reports of marital aggression were also associated with child behavior. Children in families with higher levels of marital aggression showed more anger and frustration in the triadic family game task and more sadness during the marital problem discussion.

Children’s behavior across the two lab situations was related as well. For example, child opposition and defiance during the triadic task was positively correlated with negative affect and sadness during the marital problem discussion. Child withdrawal during the triadic task was also positively correlated with sadness during the marital problem discussion. In addition, child positive affect during the triadic task was negatively correlated with sadness during the marital problem discussion.
Cross-situational Regression Analyses

In order to examine the effects of both marital and parenting behaviors simultaneously, a series of hierarchical regression analyses were performed. In these analyses, child behavior and affect codes were regressed onto parental behavior and affect codes in a two-step procedure. For the marital task, children's behaviors and affect during marital interaction were regressed onto parental behaviors and affect during the marital interaction in the first step. In the second step, parental behaviors and affect during the family task and marital aggression were allowed to enter the equation. A similar procedure was followed for the triadic family game, with children's behaviors and affect during the game first regressed onto parental behaviors and affect during the game. The second step, then, allowed marital behaviors and marital aggression to enter the equation. Analyses were performed separately for mothers and fathers.

In general, as would be suggested by the zero-order correlations presented above, child behavior and affect were best predicted by the behaviors and affects of their parents during the same task. However, for several aspects of child behavior and affect, cross-situational parental behaviors and affects made independent contributions as well.

Children's sadness expressed during the marital interaction task was not related to either maternal negative marital behavior, $\beta = .05, p = .80$, or paternal negative marital behavior, $\beta = .09, p = .61$. However, both parental unsupportive behaviors and marital aggression were found to contribute to children's sadness in the marital interaction task. Greater sadness was predicted by greater maternal unsupportiveness during the family game, $\beta = .59, p = .0001$, and by more maternal marital aggression, $\beta = .41, p = .01$. The overall regression equation predicting from all three maternal scores was significant, Adjusted $R^2 = .44, p = .0002$. For fathers, the effects were similar.
Both paternal unsupportiveness during the family game, $\beta = .52$, $p = .001$, and paternal marital aggression, $\beta = .42$, $p = .01$, contributed to the overall prediction of children’s sadness during marital interactions, Adjusted $R^2 = .34$, $p = .002$.

Some aspects of children’s behavior and affect during the family game were also affected by marital variables. Children’s level of anger and frustration was predicted by paternal marital aggression, $\beta = .36$, $p = .04$. Children’s level of anger and frustration was not well predicted by paternal supportive behaviors during the family game, $\beta = .21$, $p = .22$, and the overall equation was only marginally significant, Adjusted $R^2 = .11$, $p = .07$.

Children’s overall positive affect during the family game was predicted both by maternal supportive behavior during the game, $\beta = .66$, $p = .0001$, and by maternal marital positivity, $\beta = -.32$, $p = .04$. The overall regression equation was significant, Adjusted $R^2 = .35$, $p = .0004$.

Discussion

The goal of this study was to examine parents’ and children’s behaviors in marital and family contexts in order to test several models which had been proposed by previous researchers to explain the pathway between marital conflict and child behavior. This study addressed several limitations of previous research by directly observing families interacting, rather than relying only on self-report data or hypothetical vignettes presented to participants, and by observing both mothers and fathers interacting with their children in a marital and a family context.

Do parents show a general level of affect regulation skill across contexts? Results of this study suggest that, in general, parents’ skills in regulating affect and resolving conflict in the marital context are largely independent of their ability to engage in supportive parenting behaviors during interactions with their children. Thus, parents may be utilizing different skills to assist their children.
than to interact with their spouses, and they may have strengths or weaknesses in either area. The only exception to this general pattern occurred with maternal positive interaction patterns, which were moderately correlated across situations. Mothers’ behaviors in the two settings may then reflect some of the same skills and stylistic patterns.

Is parents’ level of marital conflict related to their behavior during marital interaction? Reports of mothers’ marital aggression were related both to their marital behavior and to their parenting behavior whereas reports of fathers’ marital aggression were only related to their marital behavior. For mothers, greater marital aggression was related to their own less supportive parenting, less marital positivity, and more marital negativity. Fathers’ marital aggression was only related to their own lessened positivity and heightened negativity in the marital task. Taken together, these results could indicate that the marital relationship may have greater generalizability for mothers than for fathers.

Does a modeling model or a parent-child interaction model better predict children’s behavior? Results of both the correlational and regression analyses indicate that children are influenced both by their parents’ interactional behavior during a marital discussion and by their parents’ parenting behavior during a triadic family interaction. While within interaction tasks children’s behaviors and affect are correlated with parental behaviors and affects, children’s behaviors and affects are also predicted by cross-situational behaviors and affects. Marital aggression was especially important in the prediction of children’s sadness, and anger and frustration. It may be that marital aggression and negativity are important for the development and expression of children’s very negative affects. Children’s positive affect during a family game was predicted by maternal marital positivity, thus suggesting that children’s happiness is affected both
by the quality of the parent-child relationship and by the quality of the marital relationship, independent of the parent-child relationship.

In summary, neither parent-child interaction nor marital interaction alone is sufficient to predict child behavior and affect. Both aspects of family relationships make unique contributions to child functioning. Future research should further address the specific contributions made by parent-child interaction and by marital interaction in order to better understand the complexity of familial and child functioning. Additionally, the roles of other familial stresses and supports should be investigated. Of particular interest may be the importance of sibling interaction in buffering the effects of marital conflict or poor parent-child relationships. Extrafamilial resources and stressors may also be important in advancing our understanding of the effects of marital and parent-child conflict.
References


Table 1

Interrelations between Marital Aggression and Parents’ Positive and Negative Behaviors and Affect during Marital and Parent-child Interaction Tasks

<table>
<thead>
<tr>
<th>Marital Aggression</th>
<th>Mothers</th>
<th>Fathers</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supportive Parenting</td>
<td>-.52**</td>
<td>-.50**</td>
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<tr>
<td>Unsupportive Parenting</td>
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<td>.12</td>
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<tr>
<td>Marital Positivity</td>
<td>-.45**</td>
<td>-.52**</td>
</tr>
<tr>
<td>Marital Negativity</td>
<td>.47**</td>
<td>.50**</td>
</tr>
<tr>
<td>Fathers</td>
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<td></td>
</tr>
<tr>
<td>Supportive Parenting</td>
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<td>.15</td>
</tr>
<tr>
<td>Unsupportive Parenting</td>
<td>-.10</td>
<td>-.04</td>
</tr>
<tr>
<td>Marital Positivity</td>
<td>-.35*</td>
<td>-.40*</td>
</tr>
<tr>
<td>Marital Negativity</td>
<td>.38*</td>
<td>.41*</td>
</tr>
</tbody>
</table>

*p < .05, **p < .01.
Table 2

Correlations between Parental Behaviors and Affects and Children’s Behaviors and Affects

<table>
<thead>
<tr>
<th>Child Behaviors</th>
<th>Family Context</th>
<th>Marital Context</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Mothers Fathers</td>
<td>Mothers Fathers</td>
</tr>
<tr>
<td>Family Context</td>
<td></td>
<td></td>
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<tr>
<td>Anger/Frustration</td>
<td>.25  .14</td>
<td>-.14 -.23</td>
</tr>
<tr>
<td>Oppositional/Defiant</td>
<td>.43** .16</td>
<td>-.12 .08</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>.37* .46**</td>
<td>-.16 -.06</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>-.24 -.25</td>
<td>.55*** .46**</td>
</tr>
<tr>
<td>Marital Context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sadness</td>
<td>.60*** .50**</td>
<td>-.29 -.03</td>
</tr>
<tr>
<td>Whining/Complaining</td>
<td>.08 .23</td>
<td>-.16 -.34*</td>
</tr>
<tr>
<td>Positive Affect</td>
<td>-.02 .10</td>
<td>.18 -.11</td>
</tr>
<tr>
<td>Negative Affect</td>
<td>.26 .19</td>
<td>-.15 -.20</td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001.