The importance of cognitions and attachment in family therapy has long been recognized but attachment to parental figures apparently does not affect the way that family events are cognitively processed. Given the large body of literature suggesting the importance of attachment and cognition, McCarthy speculated that the lack of significance for attachment may have been due to limitations in methodology (such as restricting samples to females and measuring events not necessarily relevant). The replication and extension of the McCarthy study, and an examination of attachment and gender on cognitive processes, are presented here. Participants, 254 college students, were grouped based on a percentile split of attachment scores. Results indicate that, contrary to the McCarthy study, appraisals of conflict with primary caregivers may be influenced by attachment to that person. The present study found that Roseman's (1990) model of appraisals can be used to explain the relationship between cognitive appraisals and emotional states with family-related events. Moreover, it is suggested that cognitive family therapists may need to take into account the effects of gender and attachment to different family members. Contains 12 references. (RJM)
The Relationship of Attachment and Gender to Cognitive Appraisal of Family Conflicts

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The Relationship of Attachment and Gender to Cognitive Appraisals of Family Conflicts

Roseman et al. (1990) demonstrated that specific cognitive appraisals lead to specific emotional responses. The research of the present authors has suggested that this model may be useful in a variety of clinical settings, including individual therapy (McCarthy, Beaton, & Brack, 1993; McCarthy, Brack, Brack, & Beaton, in press), couples supervision (Brack, Brack, & McCarthy, in press), and group work (McCarthy & Hill Carlson, 1997). Family therapists who use cognitive approaches are especially concerned with the relationship of cognitions to emotions and believe that it is distorted thinking which leads to problematic emotional states in the family such as anxiety and depression (Wright & Beck, 1989). Family attachment has also shown to be a critical factor in how people cognitively process their family experiences (Armsden & Greenberg, 1987; Bluestein, Walbridge, Friedlander, & Palladino, 1991). The importance of cognitions and attachment in family therapy was previously tested by McCarthy, Brack, & Brack (in press), and support was found for the usefulness of Roseman’s model in predicting family emotions. But surprisingly, attachment to parental figures did not affect the way family events were cognitively processed. Given the large body of literature suggesting the importance of attachment and cognition, McCarthy et al. (in press) speculated the lack of significance for attachment may have been due to limitations in their methodology. These limitations included: 1) the restriction for their sample to females and 2) measuring events which were not necessarily relevant to differing levels of attachment. The former limitations seemed especially important given that gender
differences have been found in emotional attachment (McGrath, Keita, Strickland, & Russo, 1990). The present study was designed to replicate and extend McCarthy et al.'s (in press) study and examine the effects of attachment and gender on cognitive processes.

**Review of Related Literature**

**Cognitive Appraisal Theory**

Cognitive behavioral theorists have long suggested that affect is linked to how emotional events are cognitively processed (Ellis, 1967; Beck, 1976; Safran & Greenberg, 1982). However, even well developed theories, such as those proposed by Ellis (1967) do not define exactly what thoughts lead to specific emotions.

Roseman et al.'s (1990) model provides a comprehensive theory connecting specific cognitive appraisals with specific discrete emotional states. According to this theory, there are six specific appraisal dimensions which lead to sixteen discrete emotions. The development of such a theory would seem to have important implications for cognitively-oriented family therapists who recommend efforts to ferret out and change the beliefs or appraisals responsible for a client's unpleasant emotions. Specifically, the work of Roseman et al. (1990) suggests that therapists can work backwards from the emotional responses of clients to the specific dimensions of their thinking that account for their responses.

Roseman et al. (1990) postulated that we make appraisals based on six specific cognitive dimensions: situational state, an appraisal of whether a specific event is consistent or inconsistent with what is desired by the individual; motivational state, which refers to whether the individual is seeking something positive or striving to avoid something painful; probability, which is the perceived likelihood that the event will occur; power, which is the degree to which individuals
believe they are capable of coping with a given situation; legitimacy, which refers to whether or not the individual believes they deserved the event, and agency, which refers to whether the event is caused by the individual, another person, or some other agency. This appraisal dimension consists of three separate sub-dimensions: 1) agency-self, the degree to which an event is perceived as caused by oneself; 2) agency-other, the degree to which the event is perceived as caused by another person; and 3) agency-circumstance, the degree to which the event is perceived as caused by external circumstances.

Roseman et al. (1990) found that by measuring appraisals along each of these dimensions an individual's emotional reaction could be predicted. The theory includes ten specific negative emotions: disgust, distress, sadness, fear, unfriendliness, anger, frustration, shame, regret, and guilt. The six positive emotions were joy, relief, affection, pride, hope, and surprise. Figure 1 illustrates the hypothesized relationship between appraisals and discrete emotional states (Roseman et al., 1990).

The emotions in the boxes in Figure 1 are the result of the appraisals which appear along the border. The appraisal dimension of power is listed on the right side of Figure 1 using the descriptors weak (low power) and strong (high power). Along the left side of Figure 1 are the descriptors associated with the agency dimension (circumstance-caused, other-caused, and self-caused). The agency dimension is further divided to account for the probability dimension (certain/uncertain). The situational state appraisal dimension (using the descriptors motive-
consistent and motive-inconsistent) is represented along the top of Figure 1. The situational state dimension is further divided to reflect appraisals on the motivational state dimension (appetitive/aversive). By tracing down or across from the appraisals made of an event, one can determine the predicted emotion (see Figure 1).

As an example, an event that is motive-inconsistent (low on the situational state dimension), one in which the individual felt strong (high on the power dimension), and one caused by circumstances (high on the agency-circumstance dimension) results in frustration. However, if the agency appraisal changes so that the event is perceived as caused by another person (high on agency-other), not circumstance, the resulting emotion would be anger, not frustration.

Attachment Theory

Research has shown that an adult's family attachment is a critical factor in how people cognitively process their experiences (Armsden & Greenberg, 1987; Lapsley, Rice, & FitzGerald, 1990). Emotional adjustment was found to be positively correlated with college adjustment, economic independence, social and personal identity, self-esteem, career development, and life satisfaction (Armsden & Greenberg, 1987; Palladino, 1991). Belitsky and Jacobs (1986) postulated that attachment may be a risk factor in pathological grief and can provide some explanation of the natural course of uncomplicated bereavement.

Adult attachment is believed to be functionally related to early attachment experiences (Bowlby, 1988). Bowlby's continuity hypothesis states that early attachment experiences are functionally related to adult attachment styles and competencies. While this has only been tested indirectly through retrospective accounts (Lopez, 1995), attachment theorists believe that adult
accounts of attachment styles should be consistent with attachment levels in childhood and early adolescence.

The potential role that an individual’s family attachment plays in developing one’s appraisal style, however, remains relatively unexplored. Armsden, McCauley, Greenberg, Burke, and Mitchell (1990) state that poor attachment to one’s parents and peers is a risk factor in developing maladaptive cognitive attribution styles. That is, these individuals may perceive their world in a negative way and may thus be at higher risk for depression. Armsden et al. (1990) suggested that poorly attached individuals may have systematic biases in the way they think about their experiences. In fact, Armsden and Greenberg (1987) believe that individuals with lower levels of attachment will show more negative effects of life stress because of these faulty attributional styles. Is it then possible that differences in attachment lead to systematic differences in the way that one appraises family-related events?

Previous research has also found that adult attachment differs by gender (Kenny & Donaldson, 1991). Therefore, it seems important to consider that differing levels of attachment and gender may influence appraisals about family related events. The specific research questions are: 1) Do differing levels of attachment to one’s mother and father influence appraisals of conflict with that parent (or parent figure)? and 2) Do males and females differ in their cognitive appraisals of family conflict with their mother and father?
Method

Instruments and Procedures:

A two part questionnaire was used to appraise the most recent family conflict with the subject's mother and father. A separate inventory was used to measure attachment of the subject to father, mother, and peers.

Cognitive Appraisals: Cognitive appraisals of family conflict were measured using a two part questionnaire adapted from Roseman et al. (1990). Part I of the questionnaire included two forms. On one form of the questionnaire, the participant was asked to write about a family conflict experienced towards the mother (or mother figure). The other form of the questionnaire asked for a family conflict experienced with the father (or father figure). Participants received both forms of the questionnaire in randomized order. Part II of the questionnaire was a 17-item inventory designed to measure appraisals. Each appraisal dimension in the Roseman et al. (1990) model was measured on a scale consisting of 3 items (2 items for the legitimacy scale); each item asked the participant to rate the experience of terms of a particular appraisal on a nine-point scale. Questions were ordered randomly on the questionnaire.

Inventory of Parent and Peer Attachment (IPPA): The IPPA was used to measure attachment to mother, father, and peers (Armsden & Greenberg, 1987). The IPPA is a 75 item questionnaire in which respondents indicate how often a statement is true for them on a five-point Likert scale ranging from "almost never or never", "seldom", "sometimes", "often", and "almost always or always", with a reversal of some items to prevent response bias. There are 25 items on each of three scales measuring attachment to the mother, father, and peers. Scores can range from 25 to 125 on each scale. With regard to parental attachment, respondents were asked to make
responses based on their feelings about the parent in question or the person of the same sex who acted as that parent. Participants who had more than one person act as the parent figure in question were instructed to respond on the basis of the person they felt most influenced them.

With regard to peer attachment, participants were asked about their feelings about relationships with their close friends. The scores regarding attachment to parents were used in this study. Armsden and Greenberg (1987) reported good construct validity and reported reliability alphas to be 0.93 for parent attachment and 0.86 for peer attachment on a sample of 18 to 20 year-olds.

Data Source:

Participants in this study were 254 students enrolled in a large, Southwestern university. The students in the sample were enrolled in undergraduate psychology and educational psychology classes and were completing the study as partial course credit. Participants included 30.1% and 69.5% females with an average age of 21.68. The ethnic breakdown is as follows: 68.4% European American, 13.7% Latino(a), 9.8% Asian American, 2.7% African American, and 4.7% identifying themselves as belonging to other ethnic categories.

Results

According to procedures used by McCarthy et al. (in press), participants were grouped based on a percentile split into low (lower 33%), medium (middle 33%), and high (upper 33%) attachment scores. To answer the research questions in the study, two 2X3 Multiple Analysis of Variance (MANOVAS) were conducted for attachment to father and mother. One MANOVA used three levels of attachment (high, medium, low) to the father and gender as independent variables and the Roseman (1990) appraisal dimensions as the dependent variables. The other MANOVA also used three levels of attachment (high, medium, low) to the mother and gender as
the independent variables and the Roseman (1990) appraisal dimensions as the dependent variables. For attachment to mother, there was a significant interaction of gender by attachment (F(16, 418)=1.67, p=.05). Post-hoc univariate F-tests for the interaction of gender by attachment to mother, each with (2,215 df), showed a significant difference for the appraisal dimensions of probability and the three agency dimensions. There was also a significant main effect of attachment to mother (F(16, 418)=2.95, p<.0001) but no significant main effect of attachment to father (F(16, 392)=2.13, p<.01). Post hoc-univariate F-tests for attachment to father, each with (2,202 df), showed a significant difference for the appraisal dimensions of situational state, legitimacy, and agency-self. There was also a significant main effect of gender on attachment (F(8, 195)=2.55, p=.01). Post-hoc univariate F-tests for attachment to father and gender on appraisals, each with (2, 202 df), showed a significant difference for the appraisal dimensions of situational state, probability, power, and legitimacy. Tukey's HSD test was conducted for all significant univariate tests for attachment to determine which means were significantly different from each other.

Conclusions

The present study tested an individual's level of attachment to parents (or parent figures), his/her gender, and the influence of these two factors on the appraisals of family conflict through Roseman et al.'s (1990) model.

The results of this study, contrary to McCarthy et al.'s (in press) study, suggest that appraisals of conflict with primary caregivers may be influenced by attachment to that person. In McCarthy et al.'s (in press) study, attachment was not found to directly alter the appraisal process. This study finds that Roseman's model of appraisals can be used to explain the
relationship between cognitive appraisals and emotional states with family related events. Moreover, cognitive family therapists may also need to take into account the effects of gender and attachment to different family members.

Limitations of the study

There are several limitations to the generalizability of this study. First, the sample was limited to undergraduates at a southwestern university. These results would need to be replicated with a more diverse population to generalize to other groups. Second, because correlation based analysis were used, we could not infer causality from these results. Third, although tentative support was found for a relationship between appraisals and emotions, only the most frequently chosen emotions were tested in the analysis. Future studies would examine more of the emotions to further explore the relevance of appraisal theory.

Educational importance of the study:

The level of attachment that an individual has for family members was found to be a significant factor in appraisals of situations involving that primary caregiver. As suggested previously, Roseman et al.'s (1990) model may be a useful tool for cognitive family therapists seeking to help clients understand the appraisal patterns which are maintaining problematic states. Family therapists working with clients reporting these negative emotions about family issues might benefit by considering the appraisals their clients are making. Does the client experiencing anger or frustration make systematic biases in their appraisals of the environment? If so, Roseman et al.'s (1990) model could serve as a guide to the appraisals that would have to change to alter these feeling states. It may also be possible for a therapist to work backwards using Roseman et al.'s (1990) technology to take a client’s presenting emotional state and hypothesize as to the
specific thought dimensions which are underlying and maintaining the emotion. The results of the study also suggest that other variables such as family attachment gender may bias family members' appraisals of family conflict and must be taken into account when attempting to change these processes.
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<th>Circumstance-Caused</th>
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Note: The table outlines the relationship between circumstances, positive and negative emotions, and their motives being consistent or inconsistent.

Fig. 1
References


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