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degree of

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By

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ORGANIZATION OF PARENT KNOWLEDGE

A Dissertation APPROVED FOR THE  
DEPARTMENT OF PSYCHOLOGY

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## Table of Contents

List of Tables.....	vi
List of Figures.....	vii
Abstract.....	ix
Background.....	1
Method.....	19
Results and Discussion.....	28
Section 1: Current Feelings.....	28
Section 2: Relationship Types.....	32
Section 3: Potential Moderators.....	44
General Discussion.....	53
References.....	65
Tables 1-13.....	80
Figures 1-10.....	93
Appendix.....	103

## List of Tables

Table 1.	Actual Card Sorts Illustrating Compartmentalized and Integrative Organization of Parent Knowledge .....	80
Table 2.	Hierarchical Regressions of Mother Love-Like and Father Love-Like onto Measures of Content and Structure of Mother and Father Descriptions.....	81
Table 3.	Mothers: Descriptive Statistics for Mother Intrapersonal and Interpersonal Variables.....	82
Table 4.	Fathers: Descriptive Statistics for Father Intrapersonal and Interpersonal Variables.....	83
Table 5.	Descriptive Statistics and Parent Differences for Intrapersonal and Interpersonal Variables.....	84
Table 6.	Mothers: Factor Loadings for Mother Interpersonal Variables.....	85
Table 7.	Fathers: Factor Loadings for Father Interpersonal Variables.....	86
Table 8.	Mother-Cluster Solution: Descriptive Statistics and Cluster Differences for Intrapersonal and Interpersonal Dimensions.....	87
Table 9.	Father-Cluster Solution: Descriptive Statistics and Cluster Differences for Intrapersonal and Interpersonal Dimensions.....	88
Table 10.	Mothers: Hierarchical Regressions of Mother Clusters onto Measures of Content and Structure of Mother Descriptions.....	89
Table 11.	Fathers: Hierarchical Regressions of Father Clusters onto Measures of Content and Structure of Father Descriptions.....	90
Table 12.	Hierarchical Regressions of Relationship Dimensions (Attitude, Attributions, Closeness, Contact, Cooperation, and Control) onto Measures of Demographic Characteristics.....	91
Table 13	A Summary of Significant Effects of Hierarchical Regressions of Relationship Dimensions (Attitude, Attributions, Closeness, Contact, Cooperation, and Control) onto Measures of Demographic Characteristics.....	92

## List of Figures

Figure 1.	Mothers: Adjusted predicted values for Love-Like, illustrating the interaction between compartmentalization ( $\phi$ ) and differential importance (DI) of mother descriptions at one standard deviation above and below the means.....	93
Figure 2.	Fathers: Adjusted predicted values for Love-Like, illustrating the interaction between compartmentalization ( $\phi$ ) and differential importance (DI) of father descriptions at one standard deviation above and below the means.....	94
Figure 3.	Mothers: Values for each cluster on intrapersonal and interpersonal relationship dimensions (scaling is accomplished by subtracting the lowest observed value from the class-specific means and dividing the result by the observed range).....	95
Figure 4.	Fathers: Values for each cluster on intrapersonal and interpersonal relationship dimensions (scaling is accomplished by subtracting the lowest observed value from the class-specific means and dividing the result by the observed range).....	96
Figure 5.	Mothers: Adjusted predicted values for probability of assignment to mother-Cluster 1 ( <i>Denying</i> ), illustrating the interaction between compartmentalization ( $\Phi$ ) and differential importance (DI) of mother descriptions at one standard deviation above and below the means.....	97
Figure 6.	Mothers: Adjusted predicted values for probability of assignment to mother-Cluster 2 ( <i>Dealing</i> ), illustrating the interaction between compartmentalization ( $\Phi$ ) and differential importance (DI) of mother descriptions at one standard deviation above and below the means.....	98
Figure 7.	Mothers: Adjusted predicted values for probability of assignment to mother-Cluster 2 ( <i>Dealing</i> ), illustrating the interaction between differential importance (DI) and content (Neg) of mother descriptions at one standard deviation above and below the means.....	99

Figure 8.	Fathers: Adjusted predicted values for probability of assignment to father-Cluster 3 ( <i>Distancing</i> ), illustrating the interaction between differential importance (DI) and content (Neg) of father descriptions at one standard deviation above and below the means.....	100
Figure 9.	Mothers: Adjusted predicted values for attributions for mothers' negative behaviors, illustrating the interaction of gender of the child and age at one standard deviation above and below the means.....	101
Figure 10.	Fathers: Adjusted predicted values for closeness in relationships with fathers, illustrating the interaction age and the number of years the child and father lived together at one standard deviation above and below the means.....	102

## Abstract

The present study explored the association between organization of knowledge about parents and the types of relationships that adult children have with them. This study demonstrated that for fathers, types of relationships were predicted primarily by the content of parent knowledge (and not knowledge structure). However, for mothers, structure of parent knowledge was associated with three distinct types of parent-child relationships. *Positively compartmentalized structures* (in which positive and negative beliefs about mothers were categorized separately, and positive beliefs were rated as more important than negative ones) were associated with relationships characterized by positive attitudes and attributions and high levels of closeness, contact, and cooperation in the relationship. *Positively integrative structures* (in which positive and negative beliefs about mothers were categorized together, but positive beliefs were rated as more important than negative ones) were associated with relationships characterized by moderately positive attitudes, moderately high levels of closeness, positive attributions, and low levels of contact and cooperation. *Negative parent structures* (in which there were high levels of negative beliefs about mothers, and these negative beliefs were considered more important than positive ones by the child) were associated with relationships characterized by negative attitudes and attributions, and low levels of closeness, contact, and cooperation.

## Organization of Parent Knowledge

Researchers who study adult relationships have suggested a variety of strategies that people use to cope with relationship partners' negative characteristics and behaviors (Fincham & Bradbury, 1992; Murray & Holmes, 1993; Showers & Kevlyn, 1999). For example, individuals may decide to distance themselves emotionally or physically from the partner (Grasha & Homan, 1995; Vangelisti & Young, 2000) or employ more cognitively-oriented strategies, such as focusing only on positive behaviors and characteristics and ignoring negative ones (Holmes & Boon, 1990; Johnson & Rusbult, 1989). Individuals may even transform negative characteristics or behaviors into positive ones, for example, by reinterpreting a partner's behavior of criticism as the partner's dedication to detail and perfection (Murray & Holmes, 1993).

Of particular interest are strategies of cognitive organization (e.g., Baldwin, 1992; Linville 1985; Showers, 1992a). The model of evaluative organization of knowledge suggests that strategies for organizing positive and negative beliefs about a relationship partner have an impact on how one thinks about a partner's negative characteristics and behaviors, and even predict positive feelings about the partner and relationship outcomes, such as relationship longevity (Showers & Kevlyn, 1999; Showers & Zeigler-Hill, 2004). It is also possible that these organizational structures are linked to other strategies individuals might use; that is, these structures might correspond to or even facilitate the use of additional cognitive or behavioral mechanisms. The present study applies the model of evaluative organization of knowledge to parent-child relationships in an attempt to investigate this link.

An examination of parent-child relationships provides researchers with an opportunity to extend research on evaluative organization of knowledge in several ways. Showers (1992a, 1992b) first proposed the model to explain how *organization of valenced self-attributes* (and not merely the valence of the attributes themselves) predicts differences in mood and self-esteem. She found that depending on the overall content and importance of self-knowledge, *compartmentalization* or *integration* (two different strategies for organizing self-beliefs) may both be adaptive ways to maintain positive self-views. Showers and colleagues later applied the model to romantic relationships (Showers & Kevlyn, 1999; Showers & Zeigler-Hill, 2004). Applying the model of evaluative organization to romantic relationships provided an interesting opportunity to study these organizational strategies when individuals also have the option to end relationships as a way to handle their partners' negative characteristics.

Parent-child relationships differ from romantic relationships because the relationship partners are not voluntarily chosen. In addition, these relationships cannot be easily dissolved. Although children may not be able to *end* their relationships with their parents, they may manage their parents' negative characteristics in other ways, such as distancing themselves from their parents physically or emotionally, denying the presence or importance of the negative characteristics, or coping with the negative characteristics by linking them to positive ones. Interestingly, these different strategies may be linked to a variety of relationship outcomes (such as liking of the parent, closeness of the relationship, and the amount of contact between the parent and child) that, when considered collectively, distinguish between different types of parent-child relationships.

For children whose parents have salient negative characteristics, organizational strategies should be associated with one of three distinct types of relationships. First, children who choose to distance themselves physically and emotionally from their negative parents are likely to report low levels of liking for their parents, low emotional closeness, and low levels of contact. In contrast, children who are able to deny the importance of their parents' negative characteristics are likely to have positive relationships with them. They are likely to report high levels of liking, closeness, and contact with their parents. Finally, children who deal with their parents' negative characteristics by linking them to positive ones may report the most realistic relationships. That is, although they may limit contact to avoid encountering their parents' negative characteristics, they maintain moderately high levels of liking and closeness with them by continuing to focus on their parents' positive traits and behaviors as well as their negative ones.

## Background

### *Evaluative Organization of Knowledge*

Following the lead of cognitive psychologists, researchers have recently emphasized a multifaceted view of the self, allowing for distinctions to be made between the content and organization of self-beliefs (cf. Kihlstrom & Cantor, 1984; Linville, 1985; Markus & Wurf, 1987). These strategies of cognitive organization allow for differences in the complexity (Linville 1985, 1987), clarity (Campbell, 1990), discrepancy (Higgins, 1987), importance (Pelham & Swann, 1989), and evaluative organization (Showers, 1992a) of self-beliefs that are linked to differences in self-esteem and mood (see Showers & Zeigler-Hill, 2003 for a review of these structural models).

Among these strategies, however, the model of evaluative organization is unique in that it accounts for both the structure of specific self-beliefs as well as the valence of those beliefs.

### *Self-Structure*

The model of evaluative organization suggests that depending on the overall content and importance of self-knowledge, different types of organization are adaptive ways of maintaining positive self-evaluations and mood (e.g., Showers, 1992a; Showers, 1995; Showers, 2000; Showers, Abramson, & Hogan, 1998). The model identifies two types of self-structure: compartmentalized and integrative. In compartmentalized self-concepts, positive and negative characteristics are separated into distinct aspects of the self, such that each aspect contains primarily positive or primarily negative beliefs about the self. For example, a compartmentalized individual may describe his “student” self-aspect as *comfortable*, *confident*, and *intelligent*, but his “employee” self-aspect as *lazy*, *inferior*, and *irritable*. In contrast to compartmentalized self-concepts, integrative self-concepts are characterized by a mixture of positive and negative self-beliefs in each aspect. For example, an integrative individual may describe herself as a student as *successful* and *capable*, but also *weary* and *tense*.

Because these different types of organization of self-knowledge are believed to affect the accessibility of positive and negative self-beliefs, evaluative organization may moderate the impact of specific beliefs on self-esteem and mood. Specifically, the basic model predicts that when positive self-aspects are important, compartmentalized structures (i.e., segregating positive and negative self-traits into separate self-aspect categories) will be associated with the most positive outcomes, such as lower depression

and higher self-esteem. In this way, compartmentalization allows individuals to “sweep under the rug” their negative characteristics, allowing them to maintain positive self-views. In contrast, when negative self-aspects are important, integrative structures (i.e., allowing a mixture of positive and negative traits in each self-aspect category) will be associated with the most positive outcomes. By mixing negative traits with positive ones, individuals cushion the effect of their salient negative traits. For example, when children think of their negative parents as *unreliable*, they may also remember that their parents are often *fun and entertaining*, which may allow them to maintain relatively positive views of their negative parents.

#### *Partner Structure*

The model of evaluative organization of knowledge has also been successfully applied to the organization of partner knowledge in romantic relationships (Showers & Kevlyn, 1999; Showers & Zeigler-Hill, 2004). When individuals described their partners with many positive attributes, compartmentalized structures were related to more positive current feelings about their partners (Showers & Kevlyn, 1999). Likewise, when individuals described their partners in relatively negative terms, integration was associated with more positive feelings about the relationship partner.

Predictions of relationship longevity are more complicated, however. Showers and Zeigler-Hill (2004) found that when assessed one year later, organizational structures of partner knowledge that were initially related to positive feelings predicted higher rates of terminating the relationship. That is, for individuals who originally described their partners positively, compartmentalization was associated with a greater likelihood of breakup than was integration. Interestingly, it is possible that although positive

compartmentalized structures provide a (false) sense of security for individuals at the beginning of a relationship, they may represent a form of denial (in which the individual refuses to recognize the presence or importance of the partner's negative traits or behaviors), and could lead to long-term disappointment because these compartmentalized structures are vulnerable to shifts in the perceived importance of the relationship partner's negative characteristics (Murray & Holmes, 1999; Neff & Karney, 2004; Showers, Limke, & Zeigler-Hill, 2004; Showers & Zeigler-Hill, 2004; Zeigler-Hill, 2004). For example, an individual who describes her romantic partner as *insecure*, *lazy*, and *immature* around his friends may ignore these characteristics by avoiding situations in which she is around her partner when he is with his friends, allowing her to maintain a positively compartmentalized view of him. However, if she is ever unable to avoid these situations (e.g., at her partner's graduation celebration), she may become overwhelmed by the sudden importance of her partner's negative characteristics in this context, which may result in extremely negative feelings towards him. In contrast, for individuals who initially described their partners negatively, compartmentalization was related to relatively lower rates of breakup than integration (Showers & Zeigler-Hill, 2004). For these individuals who are likely to have maintained the relationship for extrinsic reasons (e.g., financial security), compartmentalization may represent a way to manage the relationship partner's negative characteristics that are not likely to change.

To summarize, for individuals who describe themselves or relationship partners positively, compartmentalization is associated with more positive current evaluations (i.e., higher self-esteem and more positive mood as well as more positive current feelings towards partners) than integration. For individuals who describe themselves or

relationship partners negatively, integration is associated with more positive evaluations than compartmentalization. Although these structures may reflect the most positive current feelings, they may not be the most beneficial structures for maintaining long-term relationships. Thus, it is possible that these strategies are linked not only to evaluations of relationship partners, but also to distinct *types* of relationships.

### *Adult Child-Parent Relationships*

#### *Relationship Characteristics*

For years, relationships between adult children and their parents were ignored by researchers, largely because of the assumption that they were merely continuations of the formative parent-child relations established in infancy and childhood (e.g., Bowlby, 1969; Mahler, 1975). Researchers have recently suggested, however, that these relationships may be more complicated. That is, they may also reflect major intergenerational transitions, such as children leaving home for the first time (Greene & Boxer, 1986) or beginning to care for their parents (Cicirelli, 1981) or even the warmth and supportiveness of family as a whole (Davies & Cummings, 1994). In fact, research has suggested that the quality of affective relationships between parents and children increases as children move from adolescence into young adulthood (Aquilino, 1997; Thornton, Orbuch, & Axinn, 1995). That is, when children move into more adult roles (such as an employee or spouse), their experiences become more like those of their parents. This increasing similarity of life experiences strengthens parent-child bonds and promotes increasing reciprocity in their relationship (see also Bengtson & Black, 1973).

There is considerable ambiguity, however, as to what defines the quality of relationships between adult children and their parents. Belsky and colleagues (Belsky et

al., 2001; Belsky et al., 2003) have investigated relationships between adult children and their parents using a model of family solidarity (cf. Roberts, Richards, & Bengston, 1991) that suggests that the family is a social group in which interrelated relationship dimensions shape the family across adulthood (Rossi & Rossi, 1990). Drawing on the work of Bengston and colleagues (e.g., Bengston & Harootyan, 1994; Lawton, Silverstein, & Bengston, 1994), Belsky and colleagues defined intergenerational solidarity as including two main components. Affectional solidarity represented both love/closeness of the relationship (or feelings of love and appreciation, dependence, good communication, and understanding in the relationship) as well as a lack of conflict (or the lack of experienced conflict, tension, and disagreement in the relationship). Associational solidarity consisted of the degree of contact between the parent and child (or the frequency of face-to-face contact, phone contact, or extended visits) as well as the amount of reciprocal assistance in the relationship (or care when sick, help with travel, help with home maintenance, information/advice about relationships).

Aquilino (1997; 1999) has characterized these bonds by the amount of mutuality in the relationship. This interdependence has four main components: emotional closeness (or the extent to which the relationship involves humor and affection), shared activities (or the frequency with which the pair shares activities, meals, and other enjoyable times), support from the child (or the likelihood of relying on the child for emotional support or advice) and control-conflict (or the extent to which the parent's desire for control over the child causes problems in the relationship).

Still, other research has more heavily emphasized the quality of the affectional bond and independence in the relationship (e.g., Cicirelli, 1980, 1995; Frank, Avery, &

Laman, 1988; Shmotkin, 1999). For example, Frank and colleagues (1988) proposed three dimensions to describe the relationships between adult children and their parents: connectedness (empathy, communication, and emotional closeness), competence (ability to make decisions independent of their parents), and emotional autonomy (respect, personal control, and self-assertion in the relationship). However, researchers have noted that past attempts to measure this “affectional bond” miss the multifaceted nature of parent-child relationships (Bengston & Schrader, 1982; Gronvold, 1988). In an attempt to address this criticism, researchers have also proposed that the child’s attributional style for the parent’s behaviors (Fincham, Beach, Arias, & Brody, 1998; Fincham & Bradbury, 1992) and interpersonal sense of control in the relationship (Cook, 1993, 2001) are important predictors of the quality of the relationship and the child’s feelings toward the parent.

Together, these studies suggest a variety of important intrapersonal and interpersonal dimensions that may define relationships between adult children and their parents. Children’s perceptions of the parent (intrapersonal processes) include *attitudes* towards parents (such as how positively or negatively they view them) and *attributions* for parents’ negative behaviors. Characteristics of the relationship (interpersonal processes) are likely summarized by four dimensions: *contact* with the parent, *closeness* in the relationship (the amount of interdependence, influence, intimacy, and social support present in the relationship), *conflict* between the parent and child, and perceptions of *control* over relationship outcomes.

### *Relationship Types*

Although typical parent-child relationships may reflect a variety of combinations of these relationship dimensions, research suggests that children of family dysfunction or divorce generally report lower quality relationships with their parents as adults than children of non-dysfunctional or intact families (Booth & Amato, 1994; Mothersead, Kivlighan, & Wynkoop, 1998; Orbuch, Thornton, & Cancio, 2000; Riggio, 2004). In fact, research suggests that relationships with negative parents are often distinguished either by enmeshment or fusion between children and their negative parents or by distance or disengagement from them (Fullinwider-Bush & Jacobvitz, 1993; Protinsky & Ecker, 1990; Watt, 2002; Zastowny & Lewis, 1989).

Enmeshed (or fused) relationships often consist of weak maintenance of relationship boundaries between parents and children. Thus, these relationships are often characterized by high levels of contact and emotional closeness despite the salience of parents' negative characteristics. To maintain these relationships, children are likely to make positive attributions for their parents' negative characteristics and behaviors (i.e., to say that their parents' behaviors are caused by external forces and are not stable or global assessments their parents' behaviors).

In contrast, distant (or disengaged) relationships are often characterized by high levels of adversity and low levels of support within the relationship. To avoid conflict and negative feelings that result from engaging their parents, these children choose to limit their emotional involvement with their negative parents, and may even prefer to discontinue contact with their parents if possible. Children in these relationships are likely to make negative attributions for their parents' characteristics and behaviors (i.e.,

to say that their parents' behaviors are caused by internal forces and are stable, global assessments of their parents' behaviors).

Although not formally proposed by previous literature, it is also possible that some children with negative parents have more realistic relationships with them. That is, although these children do not wish to "end" their relationships with their negative parents, they are constantly aware of their parents' negative characteristics and behaviors. Thus, they may choose to limit contact with their parents, but maintain close relationships with them as much as possible given the current circumstances. In doing this, they are likely to make more realistic attributions regarding their parents' problematic behaviors.

To summarize, there are three potential types of relationships children experience with parents who have many salient negative characteristics. Children who do not wish to face their parents' negative characteristics and behaviors are likely to experience enmeshed relationships that consist of high levels of liking of the parent, contact, and closeness. Alternatively, children may choose to distance themselves from their parents, resulting in low levels of liking, contact, and closeness. Finally, some children may cope with their parents' negative characteristics and behaviors by limiting contact but maintaining emotional ties with their parents.

#### *Parent Structure and Relationship Types*

Interestingly, these types of relationships may be linked to strategies of evaluative organization. Compartmentalization (in which positive and negative traits are segregated into separate parent aspect categories) may allow children to focus on either a parent's positive characteristics *or* negative characteristics by allowing them to devalue or "sweep under the rug" opposite valenced traits. Specifically, *positive compartmentalization* (in

which positive and negative traits are segregated into separate parent aspect categories and the positive ones are rated as more important) may allow children to isolate negative beliefs about their parents to specific situations or contexts. Children may be able to devalue these aspects of their parents (e.g., by saying that those specific situations are not important to their relationships with their parents). Positive compartmentalized structures may even represent a form of denial if these children refuse to acknowledge the salience of their parents' negative characteristics and behaviors, allowing them to maintain extremely close relationships with them. Thus, positive compartmentalized structures should be associated with an enmeshed (or fused) relationship type.

Similarly, because the child is focused solely on negative traits and behaviors, *negative compartmentalization* (segregating positive and negative traits into separate parent aspect categories and rating the negative ones as more important) is likely to be associated with a distant (or disengaged) type of relationship. Here, negative compartmentalization may accentuate parents' negative characteristics, and so children may manage these problem characteristics and behaviors by disengaging from their parents, physically and/or emotionally, to avoid potential conflict that could arise. This general disengagement results in low closeness and negative feelings towards the negative parents.

In contrast, *integration* (allowing a mixture of positive and negative traits in each category) may help children cope with their parent's negative characteristics by allowing them to focus on positive characteristics and behaviors as well. Integrative styles may be associated with a more realistic type of relationship. Although children are constantly aware of their parents' problems, they are also reminded of their parents' positive

characteristics and behaviors, which might provide them with reasons for preserving their relationships with their negative parents. For example, when thinking of his father in the role of a parent, a child might report that his father is *controlling* and *aggressive*, but also remembers that his father is *reliable* and *strong*. By constantly thinking of their negative parents' positive characteristics and behaviors as well as their negative ones, children are able to maintain relatively close relationships with them. Thus, although children may wish to limit contact with negative parents to reduce potential conflict and negative feelings, they may still report moderately positive levels of closeness and feelings towards the parent.

#### *Demographic Characteristics and Relationships*

The link between types of relationships with negative parents and strategies of evaluative organization should represent processes underlying the formation of relationships. However, because research has suggested that certain demographic characteristics may be associated with the quality of parent-child relationships, these characteristics should be noted and included in the investigation of this link.

*Gender.* Theorists have long agreed that same-gender parent-child relationships are qualitatively different from opposite-gender parent-child relationships (e.g., Chodorow, 1974; Frank et al., 1988). In fact, research has shown that mothers and daughters have closer relationships in their adult years than mothers and sons, fathers and daughters, and fathers and sons (Rossi, 1989). Therefore, gender of the parent as well as gender of the child should be considered in examining these intergenerational relationships.

*Age.* According to Erikson (1968), late adolescence through young adulthood is a time when identity development and relationship formation is essential for development. During this time, individuals are seeking autonomy and may slightly disengage from their parents psychologically to gain functional independence (ability to manage affairs without support of parents), attitudinal independence (development of own set of beliefs), emotional independence (freedom from need for approval, closeness, and emotional support from parents), and conflictual independence (freedom from negative feelings related to conflict with parents) (Hoffman, 1984). Research has also suggested that during this time, separation from parents is essential to the development of a positive self-concept (e.g., Moore, 1987). However, developmental theorists agree that this exploration of autonomy should be rooted in secure parent-child relationships (Cassidy, 1999; Laible, Carlo, & Raffaelli, 2000). With this in mind, the child's age or own emotional adjustment (such as the level of the child's self-esteem) is likely to be negatively correlated with the quality of current parent-child relationships among young adults.

*Minority status.* Parent-child relationships vary among racial and ethnic minorities, especially on issues such as the father's role in the family, the extent of available support the family should provide to the child, and the family's size, structure, and composition (Parke & Buriel, 1998). For example, large and extended families are more common among minority groups than among the White majority, which could have implications for parents' availability and the quality of individual children's relationships with them. Minority status is also confounded with other demographic factors, such as family status, socioeconomic status, and parental education levels (McLoyd, Cause,

Takeuchi, & Wilson, 2000) that may be associated with differences in the quality of parent-child relationships.

*Socioeconomic status.* Studies have shown that both parents' expectations for their children and their relationships with their children are influenced by income and education (e.g., Steinberg, Mounts, Lamborn, & Dornbusch, 1991). Specifically, Steinberg and colleagues found that families with lower parental education (a key component of socioeconomic status) had higher rates of conflict due to the child's natural pursuit of autonomy. Low-income parents are also more likely to use physical punishment and criticize their children (Hoff-Ginsburg & Tardif, 1995). Thus, socioeconomic status (measured by parental education level) could be an important predictor of relationship quality between parents and their adult children.

*Parental divorce.* Research has shown that parental divorce is also a risk factor in parent-child relationships (Hetherington & Jodl, 1994). Approximately one-third of children in divorced families become disengaged from their families, compared to only 10% in non-divorced families. In fact, young adults from divorced families report less contact with their fathers than those from intact families (Cooney, 1994). In addition, daughters of divorce report lower levels of intimacy with their fathers compared to daughters of intact families. However, the quality of parent-child relationships in divorced families may be, at least in part, predicted by post-divorce living arrangements (Aquilino, 1994). Children (especially males) who reside with their fathers following a divorce report relatively positive relationships with them. Thus, investigations of the quality of parent-child relationships among young adults should include the number of years children lived with their parents as a predictor of current relationship functioning.

In summary, demographic characteristics such as gender of the child and parent, age, minority status, parental education level, and number of years living with the parent may be associated with the quality of parent-child relationships among young adults. However, to the extent that these demographic characteristics correspond to substantive differences in parent structure, controlling for these differences may be questionable. By accounting for these differences, variability that could be attributed to structure of parent knowledge may be credited to demographic differences instead.<sup>1</sup>

### *Current Study*

#### *Overview*

For the current study, college students performed a card-sorting task (Showers, 1992a; Showers & Kling, 1996) to generate descriptions of their mothers and fathers. Measures of content and structure of parent knowledge were used to predict attitudes towards the parent and types of relationships. To do this, data analysis of this project was divided into three parts. The first section of the data analysis (“Current Feelings”) attempted to extend the findings of Showers and Kevlyn (1999) and Showers and Zeigler-Hill (2004) to parent-child relationships. The second section of data analysis (“Relationship Types”) examined these relationships more closely, focusing on the association between parent structures and types of parent-child relationships, especially when the parents have many negative characteristics. The third section of data analysis (“Potential Moderators”) examined demographic variables and the child’s own adjustment to see if they are important moderators in the relationship between parent structure and relationship types.

## *Goals and Hypotheses*

*Section 1: Current feelings.* The goal of this section of analyses is to replicate the basic findings of the model of evaluative organization in a new context; that is, to extend findings of the association between evaluative organization and current feelings to parent-child relationships. Because these analyses include a cross-sectional design (and are not predicting relationship longevity), it is expected that liking of the parent will follow the basic model of compartmentalization (Showers, 1992a; Showers & Kevlyn, 1999). Therefore, negative content of parent knowledge should be associated with less positive attitudes towards the parent. In addition, specific strategies of organization of parent knowledge should predict current attitudes towards the parent.

Hypothesis 1: Negative content of parent descriptions will be associated with less positive attitudes towards the parent.

Hypothesis 2: For children who hold positive views of their parents, compartmentalization will be associated with greater liking of the parent.

Hypothesis 3: For children who hold negative views of their parents, integration will be associated with greater liking of the parent.

*Section 2: Relationship types.* This section of analyses involves the primary purpose of this investigation, and thus includes three main goals. First, analyses will identify relevant dimensions of parent-child relationships. Although a summary of the literature suggested that relationships between parents and children might be characterized by six important dimensions (attitude, attributions, contact, closeness, conflict, control), it is possible that these dimensions will not be supported by empirical study. Second, by combining the identified relationship dimensions, analyses will

distinguish specific types of relationships experienced between parents with salient negative characteristics and their young adult children. Finally, analyses will examine the link between these types of relationships and strategies of organization. It is expected that for children who describe their parents with many negative characteristics, organizational structure will be associated with different relationship types.

Hypothesis 4: For children with negative parents, positive compartmentalization will be associated with enmeshed (or fused) relationships (i.e., relationships high in liking, closeness, and contact).

Hypothesis 5: For children with negative parents, negative compartmentalization will be associated with distant (or disengaged) relationships (i.e., relationships low in liking, closeness, and contact).

Hypothesis 6: For children with negative parents, integration (both positive and negative) will be associated with realistic relationships (i.e., relationships low in contact, but moderately high in liking and closeness).

*Section 3: Potential moderators.* This section of analysis is included to investigate the potential moderating effects of demographic characteristics (gender, age and self-esteem, minority status, parental education level, and years living with the parent) on the link between types of parent-child relationships and strategies of evaluative organization. Because this link should represent a cognitive process (and because organizational strategies do not generally overlap with demographic characteristics) it is expected that although these demographic characteristics may predict relationship quality, they will not change the link between evaluative organization and types of parent-child relationships.

Hypothesis 7: Effects of evaluative organization of parent knowledge will remain after controlling for important demographic characteristics.

## Method

### *Participants*

Participants were 230 undergraduates (59 males and 171 females) enrolled in introductory psychology at the University of Oklahoma who participated in exchange for credits toward a class research exposure requirement. Participants volunteered for a study described as “pencil-and-paper tasks that ask about your attitudes and life experiences.” The average age of participants was 19.48 years ( $SD = 2.73$ ). Eighty percent of the participants were White, 4% were Black, 8% were Native American, 4% were Asian, 3% were Hispanic, and 1% was Other Race/Ethnicity. Of the 230 participants, 19% reported that their mothers had a high school education or less; 10% had some college or vocational training; 46% had a college degree; and 25% reported that their mothers had at least a graduate degree. Similarly, 15% reported that their fathers had a high school education or less; 13% had some college or vocational training; 43% had a college degree; and 29% reported that their fathers had at least a graduate degree. On average, participants reported living with their mothers for 18.06 years ( $SD = 2.58$ ) and living with their fathers for 16.37 years ( $SD = 4.81$ ).

Of the 230 individuals who completed the study, 26 were excluded from analyses due to family structure (15 indicated non-biological fathers; 4 indicated both parents were non-biological relatives; 3 referred to non-biological mothers; 3 referred to deceased fathers; and 1 referred to a deceased mother). The remaining sample ( $N = 204$ ) did not differ from the original sample of 230 participants on gender, age, racial/ethnic minority

status, level of parental education, or number of years living with their parents,  $t_s(203) < 1.79, p_s > .05$ .

### *Materials*

#### *Parent Structure*

A card sorting task was used to measure the content and structure of beliefs about the parent. This card sorting task, originally developed by Zajonc (1960) and used by Linville (1985; 1987), was adapted by Showers to assess the structure of knowledge about the self (Showers 1992a) and romantic partners (Showers & Kevlyn, 1999). For the present study, participants were provided with a deck of 60 cards,<sup>2</sup> each containing a trait that could be used to describe a parent. The deck contained 30 positive attributes (e.g., outgoing, successful, encouraging, nurturing) and 30 negative attributes (e.g., irritable, tense, controlling, irresponsible). Participants were given the following instructions, “Your task is to think of the different aspects of your mother/father or your mother’s/father’s life, and then form groups of traits that go together, where each group of traits describes an aspect of your mother/father or your mother’s/father’s life” (see Showers & Kevlyn, 1999 for complete instructions). Participants were instructed that they could form as many or as few groups as they desired, and use as many or as few traits in each group as they wished. Following the completion of the card sorting task, participants rated the positivity, negativity, and importance of each aspect generated on 7-point Likert scales.

*Evaluative organization (phi)*. The measure of evaluative organization (compartmentalization) is a phi coefficient based on a chi-square statistic (cf. Cramer, 1946, p. 443) that compares the frequencies of positive and negative traits in each group

to what would be expected by chance given the proportion of negative items in the card sort overall (i.e., the chance values for organizing positive and negative attributes in self-aspects without regard for valence of the attributes). Phi can range from 0 (perfect integration; positive and negative attributes are evenly distributed across all parent aspects) to 1 (perfect compartmentalization; each parent aspect contains either positive or negative traits). Phi is only computed if two or more negative attributes are included in the card sort. The sample card sorts shown in Table 1 illustrate high compartmentalization (Panel A:  $\Phi = 1.00$ ) and low compartmentalization (Panel B:  $\Phi = .35$ ) of parent knowledge.

*Differential importance (DI).* Differential importance is a measure of the relative importance of each parent aspect (cf. Pelham & Swann, 1989). It is computed as the correlation between individuals' ratings of the importance of each aspect and the difference between positivity/negativity ratings for each aspect. DI scores can range from -1 to 1, with positive scores indicating that positive aspects are considered more important than negative ones, and negative scores indicating that negative aspects are considered more important than positive ones (cf. Showers, 1992a).

*Proportion of negative attributes (neg).* The proportion of negative attributes is a measure of parent knowledge that is calculated as the number of negative attributes used in the card sort divided by the total number of items. The valence of the original 40 attributes was established by independent raters (Showers, 1992a).<sup>3</sup>

#### *Intrapersonal Relationship Variables*

*Attitudes toward the parent.* Rubin's (1970) Loving and Liking scales for romantic relationships were adapted to assess attitudes toward the parent. The *loving*

scale consisted of items such as “I would forgive my mother for practically anything” and “It would be hard for me to get along without my mother.” The *liking* scale consisted of items such as “In my opinion, my mother is an exceptionally mature person” and “I think that my mother is one of those people who quickly win respect.” Participants responded to the items on scale ranging from 1 (not at all true; completely disagree) to 9 (definitely true; agree completely). For the current sample, the internal consistencies of the two scales (loving and liking) for mothers and fathers ranged from .87 to .93.

In addition, participants completed the Adult Attachment Scale (AAS; Cicirelli, 1995) to assess the participant’s current feelings about the parent. The AAS consists of four subscales (love, security, separation, and reunion) that are combined to produce a total attachment score. Although the AAS was originally designed as a measure of adult attachment to a parent, it was included in this study as an index of strong positive feelings towards the parent. Items included “Being with my mother makes me feel very happy” and “I feel lonely when I don’t see my mother often,” and were answered on a 7-point Likert scale (1 = disagree strongly; 7 = agree strongly). The entire measure showed excellent reliability,  $\alpha = .95$  and  $.96$  for mothers and fathers, respectively.

*Attributions for parent behaviors.* To assess attributions for parents’ negative behaviors, participants completed an adapted version of the Relationship Attribution Scale (Fincham et al., 1998; Fincham & Bradbury, 1992). Participants read four statements of negative behaviors (e.g., “Your mother criticizes something you say”) and used a 6-point Likert scale to rate the action on six dimensions: locus (her behavior was due to something about her), stability (the reason was something that is not likely to change), globality (the reason affects other areas of our relationship), intent (she did it on

purpose), motivation (she did it for selfish reasons), and blame (she deserves to be blamed for it). The locus, stability, and globality dimensions were reversed and combined to provide a measure of positive attributions for parental behaviors. This composite measure showed high internal consistency,  $\alpha = .79$  and  $.88$  for mothers and fathers, respectively.

#### *Interpersonal Relationship Variables*

*Contact.* Participants indicated both their current and ideal levels of contact with their parents using a modified version of the questions revised by Belsky and colleagues (Belsky et al, 2001; Belsky et al., 2003) assessing intergenerational contact (face-to-face, phone, and e-mail). Although Belsky and colleagues traditionally use only measures of current contact in intergenerational relationships, it is possible that depending on the level of control children have in their relationships with their parents, the amount of contact children experience in their relationships and the amount of contact they desire for these relationships may be different. Thus, for each type of contact (face-to-face, phone, and e-mail), participants reported both their current levels of contact as well as their desired level of contact for the future, given their parents' current circumstances and characteristics.

*Closeness.* Because previous literature has defined closeness in intergenerational relationships in a variety of ways (i.e., amount of interdependence, influence, intimacy, and social support) several measures were included to ensure a thorough examination of this relationship dimension. To measure the level of perceived interdependence within the relationship, participants completed items revised by Belsky and colleagues (Belsky et al., 2001; Belsky et al., 2003) assessing intergenerational assistance. For these items,

participants (separately) rated the amount of assistance they gave and received from their parents in the following forms: financial, care when sick, help with travel, home maintenance, information and advice concerning relationships, and emotional support when upset. For the current sample, internal consistencies for mothers and fathers on both scales (giving and receiving) were acceptable, ranging from .67 to .83.

To measure the level of parental influence in the relationship, participants completed the Strength Scale of the Relationship Closeness Inventory (RCI; Berscheid, Snyder, & Omoto, 1989) to assess the amount of parental influence over the participants' attitudes and behaviors. The Strength Scale contains 34 items, such as "My mother influences the basic values that I hold" and "My mother influences how I spend my free time" that are rated on a 7-point scale (1 = strongly disagree; 7 = strongly agree). Internal consistencies for the measure were high,  $\alpha = .88$  and  $.93$  for mothers and fathers, respectively.

To assess the amount of intimacy in parent-child relationships, participants completed the Miller Social Intimacy Scale (Miller & Lefcourt, 1982). The MSIS is a 17-item measure that consists of two subscales: frequency (e.g., "How often do you confide very personal information to her?") and intensity (e.g., "How important is it to you to listen to her personal disclosures?"). These subscales were combined to obtain a composite measure of emotional intimacy. This compilation showed excellent internal consistency,  $\alpha = .95$  for both mothers and fathers. In addition, participants completed the Inclusion of Other in Self (IOS) scale (Aron, Aron, & Smollan, 1992). The IOS scale is a single-item measure designed to assess participants' perceptions of interpersonal relatedness. To do this, participants selected the picture that best described

their relationships with their parents from a series of seven Venn-type diagrams. Each of the diagrams represents a different (and increased) degree of overlap of the two circles.

Finally, participants also completed the Quality of Relationships Inventory (QRI; Pierce, Sarason, & Sarason, 1991). The QRI is a 26-item scale with three dimensions: social support (e.g., “To what extent can you count on your mother to listen to you when you are angry at someone else?”), conflict (e.g., “How angry does your mother make you feel?”), and depth (e.g., “How significant is this relationship in your life?”). Participants responded to the items on a 0 (not much) to 6 (a great deal) scale. Internal consistencies for the scales for mothers and fathers ranged from .84 to .92. The Depth Scale represents a measure of intimacy between parents and children whereas the Social Support Scale is a reliable index of the amount of perceived social support offered between parents and children in these relationships.

*Conflict.* The Conflict Scale from the Quality of Relationships Inventory (QRI; Pierce, Sarason, & Sarason, 1991) was included as a measure of conflict experienced in current parent-child relationships.

*Control.* Participants completed the Interpersonal Sense of Control Scale (Cook, 1993, 2001) to assess their feelings of relative control over their relationships with their parents. The ISCS has four subscales: effectance (a belief in personal control over relationship outcomes), acquiescence (a sense that the parent controls the relationship outcomes), fate (a belief that chance or unknown factors controls the outcomes of the relationship), and conflict control (a belief that personal relationship skills helps the child get along with the parent). Following the recommendation of W. L. Cook (personal communication, April 5, 2005), average scores for the Acquiescence Scale were

subtracted from average scores for the Effectance Scale to create a measure of relative control of the relationship. Thus, positive scores indicate that the child has more control over the relationship than the parent, and negative scores imply that the parent has more control than the child. For the current sample, internal consistencies for effectance and acquiescence for mothers and fathers ranged from .62 to .81.

### *Other Measures*

*Parental attributes.* For a measure of participants' general attitudes towards their parents and overall assessments of their parents' positive and negative characteristics, participants completed a parental attributes questionnaire (PAQ; see Appendix) that was constructed much like the Self-Attributes Questionnaire (SAQ; Pelham & Swann, 1989). Here, participants rated the number of positive and negative attributes their mothers and fathers possessed compared with other college students' mothers and fathers on scales ranging from 1 (bottom 5%) to 10 (top 5%). They also rated the extent to which their mothers' and fathers' positive and negative characteristics were personally important to them on 10-point scales.

*Self-esteem and adjustment.* In addition to measures assessing relationships with their parents, participants completed a variety of self-esteem and adjustment measures, such as the Rosenberg Self-Esteem Scale (Rosenberg, 1965), the Beck Depression Inventory (BDI; Beck, 1967), a short version of the Scales of Psychological Well-Being (SPWB; Ryff, 1989), the Brief Symptom Inventory (BSI; Derogatis & Spencer, 1982), and a questionnaire measure of self-knowledge organization (PNCI; Showers, personal communication, July 28, 2004). Participants also completed the Tendency to Forgive

Scale (Brown, 2003), and the Personal Need for Structure Scales (Neuberg & Newsom, 1993).

*Attachment.* To examine the association between current parent-child relationships, reports of childhood parent-child relationships, and current romantic relationships, two measures of attachment were included. Participants completed the Experiences in Close Relationships Scale (ECR; Brennan, Clark, & Shaver, 1998) as a measure of attachment styles in romantic relationships. The Parental Bonding Inventory (PBI; Parker, Tupling, & Brown, 1979) was included as a retrospective measure of childhood attachment style.<sup>4</sup>

#### *Procedure*

Participants volunteered for the study using an on-line registration system. They completed two laboratory sessions (a mother session and a father session) scheduled one week apart. The order of the sessions was counterbalanced across participants. Sessions contained groups ranging from 2 to 12 participants. For the mother session, participants were given the following verbal instructions:

This study is about parents and children. In today's session, we'll be focusing on your mother or a person who is a mother figure in your life. For most people, this will be your biological mother, as long as you know her well enough to answer questions about her and your relationship with her. So, if you know your biological mother (and this is whether you lived with her or not)...this is the person you will describe when asked about your mother.

Additional instructions were given to select a mother figure in case no biological mother was available. Following these directions, participants answered demographic questions about their mothers and their relationships to their mothers. Participants then completed a card sorting task describing their mothers, as well as questionnaires assessing the participants' past and current relationships with their mothers (i.e., attitude, attributions, contact, closeness, conflict, control, and childhood attachment). Participants also completed the Scales of Psychological Well-Being (Ryff, 1989), the questionnaire measure of self-knowledge organization, the Beck Depression Inventory (Beck, 1967), and the Brief Symptom Inventory (Derogatis & Spencer, 1982).

In the father session, participants were given similar instructions and began with the same card sorting task and relationship questionnaires referring to their fathers. Following the relationship measures, participants completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965), the Experiences in Close Relationships scale (Brennan et al., 1998), the Personal Need for Structure Scales (Neuberg & Newsom 1993), the Tendency Toward Forgiveness scale (Brown, 2003), and a short demographic questionnaire.

## Results and Discussion

### *Section I: Current Feelings*

#### *Overview*

To extend findings of the association between evaluative organization and current feelings towards a romantic partner (cf. Showers & Kevlyn, 1999) to parent-child relationships, measures of the content, structure, and importance of parent knowledge were used to predict liking of the parent. Although longevity of parent-child

relationships is obviously longer than romantic relationships among young adults, the link between evaluative organization and current feelings should be the same.<sup>5</sup>

Hypothesis 1: Negative content of parent descriptions will be associated with less positive attitudes towards the parent.

Hypothesis 2: For children who hold positive views of their parents, compartmentalization will be associated with greater liking of the parent.

Hypothesis 3: For children who hold negative views of their parents, integration will be associated with greater liking of the parent.

### *Results*

Of the 204 participants eligible for the analyses, 32 (16%) did not use at least 2 negatives in their mother card sorts (phi could not be computed) and were excluded from all analyses of organization of mother knowledge. Similarly, 29 (14%) of the 204 participants were excluded from all analyses of organization of father knowledge for using fewer than 2 negatives in their father card sorts. An exclusion rate of 10% is typical on self-descriptive sorting tasks (e.g. Showers et al., 1998). These rates (16% and 14%) are somewhat higher, but are consistent with previous research on partner organization which suggests a lower tendency to report negative characteristics of relationship partners (Showers & Kevlyn, 1999).

Following the format of Showers and colleagues (Showers & Kevlyn, 1999; Showers & Zeigler-Hill, 2004), Rubin's Loving and Liking Scales (Rubin, 1979) were scored separately ( $r_{\text{mothers}} = .77$ ;  $r_{\text{fathers}} = .80$ ) and then standardized and averaged to produce Love-Like (or a composite measure of attitude toward each parent). A hierarchical regression was performed on current feelings towards each parent. On Step

1, the main effect terms for evaluative organization (phi, DI, and neg) were entered. These terms were centered for the purpose of testing interactions (Aiken & West, 1991). On Step 2, the two-way interactions involving structure (Phi x DI and Phi x Neg) were entered.

Table 2 (Panel A) presents the regression results for mother Love-Like. There was a main effect for DI,  $\beta = .17, p < .05$ , as well as a main effect for neg,  $\beta = -.56, p < .001$ . Participants who described their mothers with relatively few negative characteristics or rated their positive ones as more important reported the most positive current feelings towards their mothers. There was also a significant Phi x DI interaction,  $\beta = .16, p < .05$ . Predicted values for this interaction are shown in Figure 1.

Table 2 (Panel B) present the regression results for father Love-Like. There was a main effect for DI,  $\beta = .33, p < .001$ , as well as a main effect for neg,  $\beta = -.57, p < .001$ . Participants who described their fathers with relatively few negative characteristics or rated their positive ones as more important reported the most positive current feelings towards their fathers. There was also a significant Phi x DI interaction,  $\beta = .14, p < .05$ . Predicted values for this interaction are shown in Figure 2.

### *Discussion*

As hypothesized, content of parent descriptions predicted current feelings for both mothers and fathers, such that high levels of negative content indicated lower levels of liking of the parent. The interactions between compartmentalization (phi) and differential importance (DI) are consistent with previous research on the relationship between self-organization and mood (e.g., Showers & Kling, 1996) and follow the pattern of findings for current feelings and organization of knowledge of relationship partners (e.g., Showers

& Kevlyn, 1999). When positive aspects of the parent were important, compartmentalization was associated with greater liking of parent. Here, it is likely that compartmentalization promotes positive feelings because it minimizes access to the parent's negative characteristics and behaviors. In contrast, when negative aspects of the parent were important, integration was associated with greater liking of the parent. In this case, integration may serve to minimize the impact of important negative characteristics by buffering them with positive ones.

Unlike previous findings of the association between evaluative organization and current feelings in a relationship in which the moderating effects of compartmentalization ( $\phi$ ) were found as interactions with content of partner descriptions (neg) (Showers & Kevlyn, 1999), in the present study, these effects of compartmentalization ( $\phi$ ) were found as interactions with differential importance (DI).

Interestingly, the current findings are similar to studies of self-knowledge organization (e.g., Showers, 1992a; Showers & Kling, 1996) that have shown a  $\phi \times DI$  interaction predicting participants' mood and self-esteem. Although these data are correlational, this might suggest that feelings about a parent (due in part to the longevity inherent in the type of relationship studied) may function much like the self-concept. That is, unlike descriptions of romantic partners in which negative characteristics are only included if they are relatively stable and important to the individual, the overall number of negative characteristics included in these descriptions may be less meaningful and may make them easier to include in descriptions of mothers and fathers because children feel that the inclusion of negative characteristics in their descriptions does not necessarily represent negative feelings towards the parent.

## Section 2: Relationship Types

### Overview

The purpose of this section of analyses is to examine the association between parent structure and types of relationships, especially when the parent has many negative characteristics. First, principle axis factor analyses were used to identify the underlying interpersonal dimensions in parent-child relationships. Next, scores for both of the proposed intrapersonal dimensions (attitude and attributions) as well as the interpersonal dimensions (identified in the factor analysis) were used in a Latent Class Model cluster analysis to distinguish specific types of relationships. Finally, to examine the link between strategies of evaluative organization and specific types of parent-child relationships, participants' probabilities of assignment to each of these relationship types were regressed onto measures of content, structure, and importance of parent knowledge.

Hypothesis 4: For children with negative parents, positive compartmentalization will be associated with a high probability of assignment to the relationship type that is the most *denying* (high levels of liking of the parent, contact, and closeness, and positive attributions for behaviors).

Hypothesis 5: For children with negative parents, negative compartmentalization will be associated with a high probability of assignment to the relationship type that is the most *distancing* (low levels of liking of the parent, contact, and closeness, and negative attributions for behaviors).

Hypothesis 6: For children with negative parents, integration (both positive and negative) will be associated with a high probability of assignment to the relationship type that involves *dealing* (moderately high levels of liking of the

parent and closeness, but low levels of contact and negative attributions for behaviors).

### *Results*

Table 3 (mothers) and Table 4 (fathers) present intercorrelations for all of the intrapersonal and interpersonal relationship variables. Table 5 displays the means, standard deviations, and differences between mothers and fathers for these measures. As shown, participants reported more positive relationships with mothers on all of the intrapersonal and interpersonal relationship variables except lack of conflict and relative control over the relationship,  $F_s(1, 203) > 4.25, p_s < .05$ .<sup>6</sup>

*Factor analyses.* Because of the potential overlap among multiple measures of interpersonal variables, these measures were factor analyzed (separately for mothers and fathers) using principle axis factoring with direct oblimin rotation. Eleven variables were entered into the factor analysis: given assistance, received assistance, strength, current contact, ideal contact, social support, (lack of) conflict, depth, intimacy, inclusion of other, and relative control. The factor analysis generated three factors with eigenvalues over 1. However, scree tests revealed that not more than 4 factors should be used to represent the data. Because the fourth factor had eigenvalues close to 1 (.91 for mothers and .78 for fathers), the factor analyses were performed again, with the solution constrained to four factors. This solution accommodated all variables. Table 6 (mothers) and Table 7 (fathers) present the loadings for each variable on these factors. Variables were assigned to factors based on their highest loadings. The first factor was labeled *Closeness* (eigenvalues were 4.59 for mothers and 5.54 for fathers) and included measures of emotional intimacy, social support, and lack of conflict in the relationship.

The second factor was labeled *Contact* (eigenvalues were 1.51 for mothers and 1.05 for fathers) and included measures of both current and ideal amounts of contact with the parent. The third factor was labeled *Cooperation* (eigenvalues were 1.12 for mothers and 1.37 for fathers) and included measures of assistance received and given as well as the amount of influence the parent has over the child's decisions and behaviors. The fourth factor was labeled *Control* (eigenvalues were 0.91 for mothers and 0.78 for fathers) and included the measure of relative control over the relationship. To create factor (or dimension) scores for these interpersonal relationship processes, individual scale scores were standardized and then averaged for each factor.

Dimension scores were also created for two sets of intrapersonal variables - attitudes and attributions. For *attitudes*, the total score from the Adult Attachment Scale (Cicirelli, 1995) was standardized and averaged with the previously computed Love-Like variable for each parent ( $r_{\text{mothers}} = .85$ ;  $r_{\text{fathers}} = .85$ ). Total scores of positive attributions (a combination of locus, stability, and globality of parental attributions) from the Relationship Attribution Measure (Fincham et al., 1998; Fincham & Bradbury, 1992) were used as a measure of parental *attributions*.

*Cluster analyses.* Because this study seeks to examine the link between parent structure and relationship types for children with negative parents, responses to the parental attribute questionnaire (PAQ; see Appendix B) were used to identify participants whose parents have salient negative characteristics or behaviors. Specifically, participants rating their parents in their bottom 5% of all parents in the number of negative characteristics or traits they possess (i.e., the most positive participants) were excluded from these analyses. This criterion excluded the most positive 25% of the

sample. Thus, the remaining participants who were eligible for use in analyses of evaluative organization ( $N_{\text{mothers}} = 129$ ;  $N_{\text{fathers}} = 145$ ) were children who recognized that their parents were more negative than at least some other parents.

Patterns of relationships were then examined for mothers and fathers for these participants using LatentGold® 3.0 to compute a Latent Class Model Cluster Analysis with an Expectation Maximization algorithm (cf. Dempster, Laird, & Rubin, 1977; McLachlan & Krishnan, 1997). Unlike other forms of cluster analysis that assign cases or observations to clusters to minimize within-group differences and maximize between-group differences (and thus, create clusters that are maximally different from each other on each characteristic), the EM algorithm seeks to create the best overall fit of the data to the proposed number of clusters. It computes both probabilities of assignment to each cluster (i.e., it provides information concerning each child's potential "fit" to each relationship type), as well as assigns each case to the cluster with the best fit. Factor scores for each of the intrapersonal and interpersonal relationship dimensions (attitude, attribution, closeness, contact, cooperation, and control) were entered into the cluster analyses. Based on the number of expected relationship types, solutions were constrained to three clusters for both mothers and fathers.

For mothers, Cluster 1 ( $N = 51$ ) was characterized by very positive attitudes towards mothers and moderately positive attributions for their negative behaviors, as well as high levels of closeness, contact, and cooperation, and moderate levels of control (see Figure 3). Because children reporting these types of relationships are likely relying only on their mothers' positive characteristics to determine the types of relationships they have with them thereby devaluing their mothers' negative characteristics, these relationships

can be tentatively labeled as *denying*. Cluster 2 ( $N = 53$ ) was characterized by moderately positive attitudes and attributions, moderately high levels of closeness, moderate levels of control, and low levels of cooperation and contact. Although children in these relationships may not be able to deny their mothers' negative characteristics (evidenced by their low levels of cooperation and contact), their positive attitudes and attributions may reflect their attempts to cope with their negative mothers. Thus, these relationships can be labeled as *dealing*. Cluster 3 ( $N = 25$ ) was characterized by negative attitudes and attributions, as well as low levels of closeness, contact, and cooperation, and moderate levels of control. Because of their low levels of contact and closeness, these relationships can be labeled as *distancing*.

These relationship types were compared on each of the six dimensions (attitude, attribution, closeness, contact, cooperation, and control) using a multivariate analysis of variance (MANOVA) followed by Games-Howell multiple comparison procedures for unequal variances (see Table 8). Cluster 1 and Cluster 3 differed on five of the relationship dimensions (attitude, attributions, cooperation, contact, and closeness),  $ps < .001$ . Cluster 2 was different from both Cluster 1 and Cluster 3 in attitude and closeness,  $ps < .001$ , but was similar to Cluster 1 in attributions for mothers' negative behaviors. In addition, these relationships were similar to Cluster 3 in their amount of cooperation and contact with their mothers. That is, *dealing* relationships were similar to *denying* relationships in the attributions made for mothers' negative behaviors, but were like *distancing* relationships in their amount of cooperation and contact. There were no differences between any of the types of relationships in relative control. Overall, this

three-cluster model of relationship types with mothers represented the data well, Wald  $\chi^2 = 7.39, p < .05$  (classification errors = .05).

For fathers, Cluster 1 ( $N = 85$ ) was also characterized by very positive attitudes towards fathers and positive attributions for their negative behaviors, as well as high levels of closeness, contact, and cooperation, and moderate levels of control (see Figure 4). Similar to relationships with mothers, because these relationships are likely based only on fathers' positive characteristics, these relationships can be tentatively labeled as *denying*. Cluster 2 ( $N = 41$ ) was characterized by moderate attitudes and attributions, as well as moderate levels of closeness, contact, cooperation, and control. Because children in these relationships may always be aware of their fathers' negative characteristics, their attempts to cope may result in moderately positive feelings and behaviors. Thus, these relationships can be labeled as *dealing*. Cluster 3 ( $N = 19$ ) was characterized by negative attitudes and attributions, as well as low levels of closeness, contact, and cooperation, and moderate levels of control. Because of their low levels of closeness and contact, these relationships can be labeled as *distancing*.

Using the same MANOVA procedures, the relationship types were compared on each dimension (see Table 9). The types differed from each other on five of the six dimensions (attitude, attributions, closeness, contact, and cooperation),  $ps < .001$ . That is, for these dimensions, Cluster 2 was significantly less positive than Cluster 1, but significantly more positive than Cluster 3. There was no difference between the types in the relative control of the relationship. Overall, this three-cluster model of relationship types with fathers represented the data well, Wald  $\chi^2 = 36.24, p < .001$  (classification errors = .03).<sup>7</sup>

*Regression analyses.* A hierarchical regression was performed on the likelihood of classification for each of the three relationship clusters to assess the association between relationship types and the organization of parent knowledge. Again, all predictor variables were centered for the purpose of testing interactions (cf. Aiken & West, 1991). On Step 1, the main effect terms for evaluative organization (phi, DI, and neg) were entered. On Step 2, all two-way interactions of phi, DI, and neg were entered. On Step 3, the three-way interaction of these variables was entered.

Table 10 displays the regression results for mothers. For Cluster 1 (*denying*), there was a main effect for neg,  $\beta = -.35, p = .001$ , such that participants describing their mothers with relatively few negative attributes had the highest likelihood of classification for Cluster 1. There was also a significant Phi x DI interaction,  $\beta = .21, p < .05$ . Predicted values for this interaction are shown in Figure 5. Positively compartmentalized participants had the highest likelihood of classification to this cluster. For Cluster 2 (*dealing*), there was a main effect for phi,  $\beta = -.22, p < .05$ , such that integrative participants had the highest likelihood of classification in this cluster. There was also a significant Phi x DI interaction,  $\beta = -.29, p < .01$ , as well as a significant DI x Neg interaction,  $\beta = .24, p < .05$ . The predicted values for these interactions are shown in Figures 6 and 7. Positively integrative participants or participants describing their mothers with many important negative characteristics had the highest likelihood of assignment to this cluster. For Cluster 3 (*distancing*), there was a main effect of DI,  $\beta = -.30, p < .001$  and a main effect for neg,  $\beta = .37, p < .001$ . Participants who described their mothers with many negative attributes or rated their mother's negative

characteristics as more important than their positive ones had the highest likelihood of classification in this cluster.

Table 11 presents the regression results for fathers. For Cluster 1 (*denying*), there was a main effect for DI,  $\beta = .25, p = .001$  and a main effect for neg,  $\beta = -.46, p < .001$ . Participants who described their fathers with relatively few negative attributes or rated their fathers' negative attributes as less important than positive ones had the highest likelihood of classification for Cluster 1. There were no significant effects for Cluster 2 (*dealing*). For Cluster 3 (*distancing*), there was a main effect for DI,  $\beta = -.25, p = .001$  and a main effect for neg,  $\beta = .47, p < .001$ . There was also a significant DI x Neg interaction,  $\beta = .36, p < .001$ . Predicted values for this interaction are shown in Figure 8. Participants who described their fathers with many negative attributes and rated them as more important than their positive ones had the highest likelihood of classification for Cluster 3. Thus, unlike relationships with mothers, there were no significant effects for parent structure for relationships with fathers.

### *Discussion*

In this study, participants rated their mothers consistently more positively (with more positive attitudes and attributions, more cooperation, more contact, and more closeness) than they rated their fathers. However, factor analyses confirmed that relationships with mothers and fathers are represented by the same interpersonal dimensions (cooperation, contact, closeness, and control). Although the types of relationships children experienced with their mothers were related to evaluative organizational styles, relationships with fathers were predicted only by measures of negativity.

*Mother clusters.* For mothers, Cluster 1 relationships were characterized by very positive attitudes and attributions, high levels of cooperation, contact, and closeness, and moderate levels of relative control. These relationships may be a reflection of children's success at *denying* the importance of their mothers' negative characteristics. Here, although these children reported that their mothers were more negative than at least some other mothers; they maintained seemingly close positive relationships with their mothers by devaluing these negative characteristics and behaviors. However, Cluster 2 relationships were not only characterized by moderately positive attitudes, moderately high closeness, and moderate levels of relative control, but also the same positive attributions used by individuals with *denying* relationships. Here, this attributional style may buffer children against the negative characteristics of their mothers, allowing them to maintain positive views of and close relationships with them. However, these children report low levels of cooperation and contact, perhaps reflecting their realistic views of their mothers in their willingness to give and accept assistance and to allow their mothers to influence their attitudes and behaviors. In this way, these children in these relationships may be characterized as *dealing* with their mothers' negative characteristics and behaviors. Similar to relationships with fathers, Cluster 3 relationships with mothers were characterized by negative attitudes and attributions, low levels of cooperation, contact, and closeness, and moderate levels of relative control. Because of the high number and importance of their mothers' negative characteristics, these children may choose to *distance* themselves from their mothers.

*Mother structure.* Hypotheses regarding the association between mother descriptions (compartmentalization, content, and importance) and relationship types were

partially supported. Specifically, participants who were positively compartmentalized (i.e., they segregated positive and negative traits into separate mother-aspect categories and rated the positive ones as more important) were likely to be classified as having a relationship type that was characterized as *denying* (i.e., positive attitudes and attributions, high levels of closeness, contact, and cooperation, and moderate levels of control). For these participants, compartmentalization may be a way to minimize the impact of any of their mothers' negative characteristics and behaviors, making them inaccessible most of the time, allowing them to maintain very close, positive relationships with their mothers.

Participants who were positively integrative (i.e., they allowed a mixture of positive and negative traits in each mother-aspect category, but rated the positive aspects as more important than the negative ones) were likely to be classified as having a relationship type that was characterized as *dealing* (i.e., moderately positive attitudes, positive attributions, moderate levels of closeness and control, but also low levels of cooperation and contact). For children who cannot deny the presence or importance of their mothers' negative characteristics, integration allows them to buffer the impact of these characteristics by encouraging them to focus on positive ones as well. Therefore, by linking negative attributes to positive ones, although these children are realistic about their mothers' shortcomings (which may be evidenced with their low levels of contact and cooperation), they maintain relatively positive relationships (positive attitudes and moderately high levels of closeness).

Participants who described their mothers with a relatively high proportion of negative items or rated negative aspects as more important than positive ones were likely

to be classified as having a relationship type that was characterized as *distancing* (i.e., negative attitudes and attributions, low levels of cooperation, contact, and closeness, and moderate levels of control). These children may manage their mothers' negative characteristics and behaviors by disengaging with her (both physically and emotionally) to avoid conflict and tension in the relationship. Although it was predicted that negative integration would also be associated with these relationships, parent structure does not seem to matter for the most seemingly negative types of relationships. Research suggests that individuals naturally categorize information based on its valence (Halberstadt & Niedenthal, 1997; Osgood, 1969). Thus, it is possible that when negative characteristics are important, long-term integration requires too much effort and is an overwhelming and unsuccessful task (cf. Showers & Kling, 1996).

*Father clusters.* For fathers, Cluster 1 relationships were characterized by very positive attitudes and attributions; high levels of closeness, contact, and cooperation; and moderate levels of relative control. These relationships may be characterized as *denying* relationship because although their fathers have many negative traits, these children de-emphasize the importance of their fathers' negative traits and behaviors, allowing them to maintain close positive relationships with them. Cluster 2 relationships were characterized by moderately positive attitudes and attributions; moderately high levels of closeness, contact, and cooperation; and moderate levels of relative control. These relationships may be described as *dealing* because they may represent children's attempts to cope with their fathers' negative characteristics. That is, by somewhat limiting their contact with their fathers and the amount of influence and emotional intimacy that is shared, it allows them to maintain somewhat positive relationships with them, possibly by

limiting the conflict that arises in the relationship. Cluster 3 relationships were characterized by negative attitudes and attributions; low levels of closeness, contact, and cooperation; and moderate levels of relative control. These relationships may be described as *distancing* relationships, in which children cope with their fathers' overwhelming and important negative characteristics by disengaging with their fathers physically and emotionally.

*Father structure.* Although hypotheses of structure predicting these types were not supported for fathers, these relationship types corresponded to measures of content (neg) and importance (DI) of father descriptions, suggesting that these relationship types (at least for fathers) may represent merely perceptions of positivity. Specifically, participants who described their fathers with a relatively low proportion of negative items and reported that these negative traits/aspects were not as important as positive ones were likely to be classified as having the relationship type that is the most *denying* (i.e., positive attitudes and attributions, high levels of cooperation, contact, and closeness, and moderate levels of control). Participants who described their fathers with a relatively high proportion of negative items and rated them as being more important than positive ones were likely to be classified as having the relationship type that is the most *distancing* (i.e., negative attitudes and attributions, low levels of cooperation, contact, and closeness, and moderate levels of control). There were no effects of structure, content, or importance on the likelihood of classification of *dealing* relationships.

*Gender of parent.* Although it is not easily evident from these analyses why structure of parent knowledge is associated with types of relationships with mothers but not with types of relationships with fathers, there are several possibilities that should be

mentioned. First, it is possible that the unequal proportion of males (25.7%) and females (74.3%) in the sample contributes to problems detecting differences that may be sensitive to same-gender relationships. Thus, these associations may be apparent for mothers and not fathers merely due to the higher number of same-gender relationships between mothers and daughters (and not anything specific regarding these types of relationships).

It is also possible that relationships with mothers are qualitatively different from relationships with fathers. For example, early psychoanalytic and object relations theorists suggested that both males and females experience strong bonds with their mothers early in development (e.g., Balint, 1965; Bowlby, 1969; Chodorow, 1978; Klein, 1928). Although these bonds likely change over time, they serve as the foundation of relationships that are different from those that are experienced with fathers. In this way, it is possible that relationships with mothers are more thoroughly processed than relationships with fathers; that is, they represent a greater complexity of relationship issues and cognitive strategies.

### *Part 3: Potential Moderators*

#### *Overview*

Selected demographic variables associated with quality of parent-child relationships were examined to assess how the link between parent structure and relationship types changes when demographic characteristics are controlled. It is possible that children with certain demographic characteristics are more likely to be classified in one type of relationship than another type of relationship. It is also possible that these demographic characteristics enhance or diminish the association between parent structure and the likelihood of classification for these types of relationships. For this reason, three

sets of analyses were conducted. First, parent-differences for each of the original interpersonal relationship variables were re-examined including gender of the child as a between-subject factor. Second, each of the intrapersonal and interpersonal relationship dimensions (attitude, attributions, closeness, contact, cooperation, and control) were regressed onto measures of gender of the child, socioeconomic status (measured by parental educational level), age, race/ethnicity (coded as racial/ethnic minority status), number of years living with the parent, and the child's self-esteem. Finally, these demographic characteristics were added to the regression analyses that used measures of content, structure, and importance of parent knowledge to predict likelihood of classification to the three relationship types.

### *Results*

Because theorists have suggested that same-sex parent-child relationships may be qualitatively different from opposite-sex ones (e.g., Chodorow, 1974; Frank et al., 1988), differences between the relationships of mothers and fathers were re-examined using mixed factorial analyses of variances (ANOVAs). Gender of the parent (mother or father) was included as a within-subjects variable and gender of the child (male or female) was included as a between-subjects variable to examine differences in each of the original measures of intrapersonal and interpersonal dimensions (Love-Like, attachment, positive attributions, given assistance, received assistance, strength, current contact, ideal contact, social support, lack of conflict, depth, intimacy, inclusion of other, and relative control).<sup>8</sup> Although many of the previously noted gender-of-parent differences (shown in Table 5) remained, 8 of the 11 differences (attachment, given and received assistance, current contact, social support, depth, intimacy, and inclusion of other) were qualified by

a Gender of Parent x Gender of Child interaction,  $F_s(1, 202) > 3.76, p_s < .05$ , such that females consistently rated their mothers more positively than they rated their fathers, and more positively than males rated either parent. For example, females rated their relationships with their mothers as more intimate ( $M = 126.21, SD = 1.80$ ) than they rated their relationships with their fathers ( $M = 110.12, SD = 2.25$ ) and than males rated their relationships with their mothers ( $M = 107.11, SD = 3.01$ ) or fathers ( $M = 107.61, SD = 3.74$ ),  $F(1, 202) = 12.64, p < .001$ .

*Relationship dimensions.* To examine the combined effect of the demographic characteristics on relationship dimensions, hierarchical regressions were performed on each of the six relationship dimensions (attitude, attribution, cooperation, contact, closeness, and control) to assess the association between the relationship dimensions and measures of demographic characteristics and self-esteem. The main effect terms for the demographic variables (gender, parental education level, age, racial/ethnic minority status, number of years living with the parent, and self-esteem) were centered (cf. Aiken & West, 1991) and entered on Step 1. On Step 2, all possible two-way interactions of these demographic variables were entered into the regression using a stepwise procedure. Table 12 displays the regression results for mothers and fathers. Table 13 provides a summary of the significant main effects and interactions.

For mothers, relationships were consistently predicted by the gender of the child. Females reported more positive attitudes,  $\beta = .17, p = .001$ , higher levels of closeness,  $\beta = .28, p < .05$ , more contact,  $\beta = .18, p < .01$ , and more cooperation,  $\beta = .25, p < .001$  in their relationships with their mothers than did males. The number of years children lived with their mothers also predicted these outcomes. Participants who lived with their

mothers for a longer time reported more positive attitudes,  $\beta = .28, p < .001$ , greater closeness,  $\beta = .24, p = .001$ , more contact,  $\beta = .31, p < .001$ , and more cooperation,  $\beta = .28, p < .001$ . In addition, non-minority (white) participants reported more contact with their mothers than did minority participants,  $\beta = -.16, p < .01$ .

Age and self-esteem were also related to these dimensions. Specifically, higher self-esteem was associated with less positive attitudes,  $\beta = -.24, p = .001$ , and less closeness,  $\beta = -.22, p < .01$ . Similarly, older participants reported less positive attitudes,  $\beta = -.32, p < .001$ , less positive attributions,  $\beta = -.16, p < .05$ , less closeness,  $\beta = -.25, p = .001$ , less contact,  $\beta = -.27, p < .001$ , and less cooperation,  $\beta = -.38, p < .001$ .

There were significant Gender x Age interactions for attributions,  $\beta = -.23, p < .05$ , and closeness,  $\beta = -.27, p = .01$  (see Figure 9 for an example). Younger females reported more positive attributions and greater closeness than older females. In contrast, older males reported more positive attributions and greater closeness to their mothers than younger males. In addition, there was a significant Gender x Self-Esteem interaction for attributions,  $\beta = -.17, p < .05$ . Females with higher self-esteem reported less positive attributions than females with lower self-esteem. There was also a significant Mother Degree x Age interaction for closeness,  $\beta = -.31, p < .05$ . When mothers had high education, younger participants reported greater closeness than did older participants.

For fathers, relationships were consistently predicted by the number of years the fathers and children lived together. Participants who lived with their fathers for a relatively longer time reported more positive attitudes,  $\beta = .24, p < .01$ , more closeness,  $\beta = .20, p < .05$ , higher levels of cooperation,  $\beta = .29, p < .001$ , and less relative control

over the relationship,  $\beta = -.20, p < .01$ , than did participants who lived with their fathers for relatively short periods of time.

Age and self-esteem were also related to these dimensions. Specifically, higher self-esteem was associated with less positive attitudes,  $\beta = -.15, p < .05$ , less positive attributions,  $\beta = -.15, p < .05$ , lower levels of closeness,  $\beta = -.18, p < .05$ , and lower levels of relative control over the relationship,  $\beta = -.14, p = .05$ . Similarly, older participants reported lower levels of cooperation,  $\beta = -.23, p < .01$ , and lower relative control over the relationship,  $\beta = -.19, p = .01$ , than did younger participants.

There were significant Age x Years Together interactions for attitude towards fathers,  $\beta = .17, p < .05$ , attributions,  $\beta = .26, p < .01$ , closeness,  $\beta = .202, p < .03$ , and cooperation,  $\beta = .21, p < .05$ . Older participants who lived with their fathers for a shorter time reported the most negative attitudes and attributions, as well as the lowest levels of closeness and cooperation. There were also significant Father Degree x Years Together interactions for attitude,  $\beta = .16, p < .05$ , attributions,  $\beta = .16, p < .05$ , closeness,  $\beta = .16, p < .05$ , and cooperation,  $\beta = .19, p < .05$  (see Figure 10 for an example). Among those whose fathers had higher levels of education, participants who lived with their fathers for a longer time reported the most positive attitudes and attributions, as well as the greatest closeness and cooperation with their fathers. In addition, there were significant Gender x Self-Esteem interactions for attitude,  $\beta = -.16, p < .05$ , closeness,  $\beta = -.17, p < .05$ , and contact,  $\beta = -.18, p < .05$ . Among females, high self-esteem was associated with less positive attitudes, and lower levels of closeness and contact than was low self-esteem. Self-esteem was not associated with attitudes, closeness, or contact with fathers for males.

To summarize, relationships with mothers were predicted by gender of the child, age, and self-esteem. Young females rated their mothers more positively than did older females. In addition, females with low self-esteem rated their mothers more positively than did females with high self-esteem. Relationships with fathers were predicted by the number of years lived together, age, and self-esteem. Older participants who lived with their fathers for a shorter time rated their fathers the most negatively. In addition, low self-esteem was associated with more positive relationship characteristics than was high self-esteem.

*Relationship types.* Hierarchical regressions were performed on the likelihood of classification for each of the three relationship clusters for both mothers and fathers to assess the moderating effects of the gender of the child, socioeconomic status (measured by parental educational level), age, race/ethnicity (coded as racial/ethnic minority status), number of years living with the parent, and the child's self-esteem on the association between relationship types and the organization of parent knowledge. The main effect terms for evaluative organization (phi, DI, and neg) were centered (cf. Aiken & West, 1991) and entered on Step 1. The unique effects of the demographic variables and self-esteem were entered on Step 2. On Step 3, the two-way interactions of phi, DI, and neg were entered. On Step 4, all two-way interactions between structure and the demographic variables were entered into the regression using a stepwise procedure. On Step 5, the three-way interaction between phi, DI, and neg was entered.

*Mother clusters.* For mothers, there was a main effect for gender for Cluster 1 (*denying* relationships),  $\beta = .33, p < .001$ . Females were more likely to be classified as having the relationship type that is characterized as *denying* than were males. There was

also a significant DI x Gender interaction for Cluster 1,  $\beta = .23, p < .01$ , such that females who rated their mothers' positive characteristics as more important than their negative ones were especially likely to be classified in this cluster (adjusted predicted values at one standard deviation above and below the means: males with low DI = 0.18; males with high DI = 0.09; females with low DI = 0.31; females with high DI = 0.63). There was also a main effect for gender for Cluster 2 (*dealing* relationships),  $\beta = -.35, p < .001$ . Males were more likely to be classified as having the relationship type that is characterized as *dealing* than were females. For Cluster 3 (*distancing* relationships), there was a significant DI x Gender interaction,  $\beta = .23, p < .01$ , such that differential importance mattered for females but not for males (adjusted predicted values: males with low DI = 0.21; males with high DI = 0.17; females with low DI = 0.35; females with high DI = 0.02).

The number of years children lived with their parents also moderated these effects. There was a significant DI x Years Together interaction for Cluster 1 (*denying* relationships),  $\beta = .33, p < .001$ , such that participants who lived with their mothers for a relatively long time and rated their mothers' positive characteristics as more important than their negative ones were especially likely to be classified in this cluster (adjusted predicted values: few years together and low DI = 0.30; few years together and high DI = 0.27; many years together and low DI = 0.21; many years together and high DI = 0.44). There was also a significant DI x Years Together interaction for Cluster 3 (*distancing* relationships),  $\beta = -.28, p < .01$ , such that differential importance mattered for those who lived with their mothers for a relatively long time, but not for those who lived with their mothers for a relatively short time (adjusted predicted values: few years together and low

DI = 0.20; few years together and high DI = 0.18; many years together and low DI = 0.35; many years together and high DI = 0.03).

*Father clusters.* For fathers, there was a significant DI x Gender interaction for Cluster 3 (*distancing* relationships),  $\beta = -.16, p < .05$ , such that females who rated their fathers' negative characteristics as more important than their positive ones were especially likely to be classified in this cluster (adjusted predicted values: males with low DI = 0.08; males with high DI = 0.01; females with low DI = 0.24; females with high DI = -0.03). There was also a significant Neg x Years Together interaction for Cluster 3,  $\beta = -.17, p < .01$ , such that negative content of father descriptions was more predictive of classification to this cluster for participants who lived with their fathers for a short time than for participants who lived with their fathers for a long time (adjusted predicted values: few years together and low negativity = -0.05; few years together and high negativity = 0.28; many years together and low negativity = -0.02; many years together and high negativity = 0.09). There was also main effect for self-esteem for Cluster 3,  $\beta = .14, p < .05$ , such that participants with relatively high levels of self-esteem were more likely than those with low self-esteem to be classified in this cluster.<sup>9</sup>

### *Discussion*

Analyses that focused on gender indicated that females rated their mothers consistently more positively (with more positive attitudes, more cooperation, more contact, and more closeness) than they rated their fathers and more positively than males rated either their fathers or mothers. This finding supports previous research suggesting that mothers and daughters have closer relationships in their adult years than do mothers and sons, fathers and daughters, and fathers and sons (Rossi, 1989). Gender also

predicted the likelihood of classification to types of relationships. Females were likely to have *denying* relationships with their mothers, whereas males were likely to have *dealing* relationships with them. Although it is possible that females are simply report more positive relationships with their mothers than do males, it is also possible that relationships between mothers and daughters reflect findings suggesting that females have greater investment in their relationships with their mothers than do males (e.g., Lavee & Ben-Ari, 2004). It seems that the importance of parents' negative characteristics is more predictive of relationship quality for females than for males as well. Females who rated their fathers' negative characteristics as more important than their positive ones were likely to have *distancing* relationships with their fathers. Similarly, females who rated their mothers' positive characteristics as more important than their negative ones were *unlikely* to have *distancing* relationships with their mothers. This suggests that for females, the importance of parents' characteristics may be more salient, and thus, a better predictor for the type of relationships they experience with their parents than for males.

Previous research has also suggested that for young adult children, seeking autonomy may be slightly related to disengagement from parents (e.g., Hoffman, 1984). Thus, as adolescents transition into adulthood and gain more positive self-concepts as a result of increased independence, distance in parent-child relationships should become more apparent. In this way, high self-esteem may represent a young adult's successful quest for autonomy, and may be linked to characteristics such as an increased sense of environmental mastery or a sense of purpose in life that develops from separating from caregivers. In this study, both the age and self-esteem level of the child were negatively

associated with relationships with parents. In fact, children with high self-esteem were likely to have *distancing* relationships with their fathers.

Interestingly, the number of years children lived with their parents was consistently linked to the quality of parent-child relationships. Differences in how long children lived with their parents likely represent parents' marital status, such that children of divorce are likely to spend less time living with the non-custodial parent. Consistent with previous research that suggests that children of divorce experience disengagement from the non-custodial parent (e.g., Aquilino, 1994; Hetherington & Jodl, 1994), current findings suggest that more years children lived with their parents, the more positive relationships (more positive attitudes and attributions, and higher levels of closeness, contact, and cooperation) they reported having with them.

## General Discussion

### *Parent Structure and Current Feelings*

These results suggest that the organization of knowledge about a parent is associated with current feelings toward that parent when the content of parent descriptions is controlled. These findings provide both conceptual support for earlier work on the association between the organization of self-knowledge and feelings about the self (Showers, 1992; Showers & Kling, 1996) as well as empirical support for research extending these findings to current feelings in romantic relationships (Showers & Kevlyn, 1999; Showers & Zeigler-Hill, 2004). Although these data are correlational, they imply that strategies for organizing negative beliefs about a parent may either influence or reflect the impact of these negative beliefs on current feelings in the relationship.

Specifically, when positive aspects and beliefs about parents were important, compartmentalization was associated with more positive attitudes towards fathers and mothers than was integrative organization (Hypothesis 2). When negative aspects and beliefs about parents were important, integrative strategies were associated with more positive attitudes towards fathers and mothers than was compartmentalized organization (Hypothesis 3). When a child's perception of the parent includes important negative beliefs, an integrative style (in which these negative beliefs are linked to more positive ones) may be necessary to maintain positive feelings towards the parent. However, when these negative beliefs are considered unimportant by the child, compartmentalization may be an effective strategy to minimize the impact of these beliefs by limiting their accessibility.

#### *Parent Structure and Relationship Types*

The types of relationships observed between adult children and their parents were somewhat different from what was expected, although they followed a similar pattern. For fathers, relationship types merely represented overall differences in positivity (high, medium, and low) for five of the six relationship dimensions (attitude, attributions, closeness, contact, and cooperation). Thus, although hypotheses involving the structure of father knowledge were not supported, it is not surprising that classification of these relationships were predicted only by measures of the amount and importance of fathers' negative characteristics. Specifically, participants who reported relatively few negative beliefs about their fathers or rated their positive beliefs as more important than their negative ones were likely to have very positive relationships with their fathers. In contrast, participants who reported many negative beliefs about their fathers or rated their

negative beliefs as more important than their positive ones were likely to have very negative relationships with their fathers.

For mothers, relationships types were more distinct, following a pattern more consistent with the hypothesized relationship types. Children who reported relationships that were characterized as *denying* exhibited favorable attitudes towards mothers and positive attributions for their negative behaviors. These relationships consisted of high levels of closeness, contact, and cooperation with mothers. These relationships were predicted by a positively compartmentalized style of organization of mothers' negative characteristics (Hypothesis 4). Thus, these relationships could be considered *positive compartmentalized* relationships with mothers because they represent children's attempts to focus only on their mothers' positive characteristics by separating them from negative ones and devaluing the importance of their mothers' negative characteristics that could affect their relationships with them. By doing this, they are able to maintain seemingly positive relationships with them. However, some research suggests that these compartmentalized structures may be unstable and vulnerable to shifts in the perceived importance of negative characteristics, which could result in sudden, overwhelming, negative feelings towards the parent as a result of relationship stress (Murray & Holmes, 1999; Showers et al., 2004; Showers & Zeigler-Hill, 2004; Zeigler-Hill, 2004).

In contrast, children who reported relationships characterized as *distancing* exhibited unfavorable attitudes towards mothers and negative attributions for their behaviors. These relationships were evidenced by low levels of closeness, contact, and cooperation with mothers. The classification of these relationships was predicted by both the amount and importance of mothers' negative characteristics. Interestingly, the

structure of mothers' characteristics (compartmentalized or integrative) does not seem to distinguish this classification. Although it was predicted that only negative compartmentalized individuals would report experiencing these types of relationships (Hypothesis 5), it is possible that when negative characteristics are important, long-term integration requires too much effort and is an overwhelming task (cf. Showers & Kevlyn, 1996). This interpretation is consistent with findings of evaluative organization and relationship longevity in romantic partners (Showers & Zeigler-Hill, 2004), which suggest that negative integration does not have enhanced outcomes for relationships because attempts to integrate important negative attributes may eventually deplete available cognitive resources. Thus, individuals who negatively integrate their mothers' negative characteristics may experience as much negativity and physical and emotional disengagement as those who negatively compartmentalize these beliefs.

Interestingly, the lack of correlation between structure of parent descriptions and the *distancing* relationship type is also somewhat consistent with findings of self-structure among maltreated individuals (Showers, Zeigler-Hill, & Limke, in press). Showers and colleagues found that for individuals reporting sexual maltreatment only, compartmentalization was associated with more positive adjustment than was integration. In follow-up data, they found that the perpetrator of maltreatment was less likely to be a caregiver for individuals who experienced only sexual maltreatment events than for individuals who experienced both emotional and sexual maltreatment events. Thus, for these individuals, compartmentalization may increase adjustment because it minimizes access to negative self-beliefs and experiences. In contrast, for individuals reporting only emotional maltreatment or both emotional and sexual maltreatment, self-structure was

not associated with emotional adjustment. Showers and colleagues suggested that for these individuals, negative beliefs about the self are so internalized that integration may only represent an ongoing structure within the self-concept. Following this interpretation, it is possible that in the present study, negative beliefs about parents are so personal for children with the most problematic parents that attempts to integrate negative beliefs with positive ones reflect only children's struggle to manage their relationships with their parents.

Perhaps the most interesting relationships were those characterized as *dealing*. Although these relationships were evidenced by low levels of contact and cooperation, participants reported positive attributions for their mothers' undesirable behaviors, which may have allowed them to maintain moderately positive attitudes towards their mothers and moderately high levels of closeness in their relationships with them. These relationships were also predicted by a positively integrative style of organizing their mothers' negative characteristics. Thus, these could be considered *positive integrative* relationships with mothers because they represent children's constant awareness of both positive and negative characteristics of their mothers. Although it was predicted that both positive and negative integration would be associated with these relationships (Hypothesis 6), continued integration of negative information about mothers may only be advantageous when positive beliefs about mothers are viewed as important. Similarly, findings of the association between negative integration (an integrative strategy in which negative characteristics are viewed as more important than positive ones) and relationship longevity suggest that there are important limitations to the use of negative integration as a relationship enhancement strategy (Showers & Zeigler-Hill, 2004). Because integrative

strategies may require considerable effort to maintain, they may only be advantageous when mothers have salient positive characteristics that are important to the child. In this way, positive integration may help facilitate positive illusions about these negative mothers or the relationships children experience with them, which may enhance relationship quality and satisfaction (see also Fletcher, Simpson, & Thomas, 2000; Murray & Holmes, 1999; Murray, Holmes, & Griffin, 1996).

*Demographic characteristics.* Classifications to these relationship types were moderated by only the gender of the participant (Hypothesis 7). Females consistently rated their mothers more positively than they rated their fathers and more positively than males rated their fathers and mothers, and were more likely than males to have *positive compartmentalized* relationships with them. In contrast, males were more likely than females to have *positive integrative* relationships with their mothers. In addition, the importance of parents' negative characteristics was greater for females than for males. Interestingly, this suggests that there may be gender differences in the ability (or willingness) to deny mothers' negative characteristics. These findings may simply be consistent with research suggesting that relationships between mothers and daughters are more intimate than relationships between mothers and sons (e.g., Rossi, 1989), but they may also reflect gender differences in tendencies to associate the relationship outcomes with their own investment in their relationships (e.g., Lavee & Ben-Ari, 2004).

### *Strengths and Limitations*

#### *Determining Causality*

It is important to remember that these data are correlational, which raises at least two distinct possibilities about the relationship between parent structure and parent-child

relationships. It is possible that children who have very negative parents use their organizational styles as a way to justify their relationships with them. For example, children who maintain very positive relationships with their parents (e.g., positive attitudes and attributions, and high levels of cooperation, contact, and closeness) justify their positive relationships by denying the importance of their parents' negative characteristics. Individuals who have positive attitudes towards their parents, but limit their parents' influence, contact, and reciprocal assistance, may rationalize these decisions by continually thinking of both positive and negative characteristics about their parents. Children who distance themselves from their parents may justify their actions by describing their parents with many negative characteristics or by reporting that their parents' negative traits and behaviors are very important to their relationship.

Alternatively, these organizational styles may precede children's adult relationships with their parents. By compartmentalizing their parents' negative characteristics, children who report that these traits and behaviors are not important to their relationships with their parents may be enabled to sustain very positive relationships with them. Here, compartmentalization reduces the accessibility of the negative traits, so that these children do not need to think about their parents' negative characteristics and behaviors. Children who integrate their parents' negative attributes with other more positive ones may be willing to maintain close emotional relationships with their parents; however, the continued accessibility of their parents' negative traits might influence them to limit their contact with their parents as well as their parents' influence over their attitudes and behaviors. They might also choose to reduce the amount of assistance they give and receive from their parents because they distrust their parents' motivations or

ability to repay the children's goodwill. In contrast, children who report that their parents have relatively high numbers of negative traits or that these traits are undeniably important would be continually faced with the salience of these negative traits. Thus, these children may distance themselves from their parents physically and emotionally to reduce the impact of their parents' negativity on their lives.

Despite this limitation, these findings have broad implications for research on close relationships. First, the model of evaluative organization of knowledge and the card-sorting task provide a novel way to examine relationships between parents and children. As previously noted, research on the relationships between adult children and their parents is disconnected in its definition of relationships, and has largely ignored factors such as the cognitive strategies used to cope with family members' negative characteristics and behaviors. In this way, the model of evaluative organization of knowledge provides a unique outlook for examining these relationships.

Second, the present study has helped to identify the cognitive processes that are linked to certain types of relationships. That is, regardless of causal direction, this link provides important information about distinct types of relationships associated with structuring beliefs about parents in certain ways. By changing these structures, then, it may be possible to negotiate more positive or negative relationships with relational partners. For example, children who are continually focused on both positive and negative beliefs about their parents might benefit by learning to isolate their negative beliefs about their parents to specific contexts (e.g., "she is only irresponsible when she is with her friends") and avoiding these specific situations, or by construing their parent-aspects to exclude those specific beliefs (e.g., Mahoney, 1974). In contrast,

compartmentalized individuals who are constantly aware of their parents' negative characteristics might benefit from developing "yes, but" attitudes (e.g., "yes, she is irresponsible, but she is also lighthearted and energetic") that may cushion the impact of these negative characteristics (cf. Showers, 1992b; Murray & Holmes, 1999).

### *College Student Sample*

One caveat that should be placed on the conclusions of this project involves the sample that was studied. A college student sample is necessarily restricted in age (and likely, stage of development). Although several effects for age and self-esteem were found for relationship dimensions, they are likely by-products of the processes involved in starting college and living away from one's parents for the first time. As a part of this process, these individuals may be actively disengaging from their relationships with their parents as a way to form their own identities. The longer they are away from their parents (and thus, the older they are), the more successful they become in this search, which results in a high sense of autonomy and high self-esteem. However, research suggests that the quality of affective relationships between parents and children should increase as these children effectively resolve these identity issues (Aquilino, 1997; Thornton et al., 1995). As these children take on roles that are similar to those of their parents (such as that of a spouse), their relationships with their parents becomes more positive. Thus, it is certainly possible that these findings (of age and self-esteem) would reverse using an older sample of adult children. Nonetheless, this project provides important information about intergenerational relationships during a time in children's lives that is largely overlooked by researchers of adult child-parent relationships.

Amount of parental negativity may also be restricted in college student samples. Although care was taken to ensure that participants included in analyses investigating relationships with negative parents felt that their parents had salient negative characteristics (at least more than some parents of peers), it is possible that these characteristics are qualitatively different from those that would be found using more general samples. One interpretation of this limitation might be that children who reported relationships that were the most *denying* were not denying at all – that is, that these children really experience positive relationships with positive parents. However, additional analyses showed that for mothers, relationships classified as *denying* were not more positive than relationships classified as *dealing*.<sup>10</sup>

Similarly, only relationships with biological parents were included in the present study. It is possible that relationships with stepparents, adoptive parents, or other types of caregivers may be linked differently to strategies of evaluative organization. Still, these findings provide important information regarding processes of organization and relationships that may be later investigated using more objectively negative parents or other types of relationship partners.

Finally, by using college students' self-reported information regarding their relationships with their parents, this study relied on the students' *perceptions* of their relationships with their parents, and not the actual characteristics of their parents or their past and current relationships with them. It is certainly possible that students' perceptions of their parents or their relationships may not be at all accurate representations, or at least that these perceptions differ from those of their parents (cf. Aquilino, 1999). However, children's construction of the meaning of their perceptions of

their parents likely influences the experiences they have in their relationships with them (cf. Moore, 1987). Thus, perceptions of parents and relationships may be more relevant than actual characteristics in examining the link between evaluative organization and types of adult child-parent relationships.

#### *Future Directions*

Although this study provides insight into the processes involved in adult child-parent relationships, much research still needs to be conducted to examine how these organizational styles develop. For example, it is possible that children develop a baseline style of organization that is applied to the self and all relationship partners (instead of reflecting characteristics of individual relationships). In the present study, results examining the association between measures of compartmentalization ( $\phi$ ;  $r = .42, p < .001$ ), differential importance (DI;  $r = .23, p = .001$ ), and content (neg;  $r = .14, ns$ ) for organization of mother and father knowledge show that although there is no relationship between the content of their descriptions, the organizational styles applied to both parents may be linked. This suggests that children may develop a “default” style for organizing knowledge that is applied to all relational partners. Additional research should examine this possibility by investigating the link between parent organization and evaluative organization of knowledge about the self. Similarly, longitudinal studies would provide information about the stability of these structures.

Yet another direction for future study might involve the importance of flexibility in perceptions of relationship partners (Showers & Limke, in press). Research has suggested that the most adaptive strategy of self-knowledge organization is one that can change depending on current life circumstances (McMahon, Showers, Rieder, Abramson,

& Hogan, 2003; Showers, 2002; Showers et al., 2004; Showers & Zeigler-Hill, 2004). Thus, flexibility in structure of parent knowledge may be important for coping with different situations when they arise. Compartmentalization may be appropriate and desirable for times in which the partner's negative characteristics are easily avoided. For example, children of alcoholic parents may find compartmentalization of parents' negative behaviors that are associated with their addiction a successful strategy when parents are not drinking. However, integrative thinking may be advantageous when stressful situations in the relationship arise and the partner's negative characteristics become increasingly salient. That is, when situations arise in which parents' drinking behaviors are salient, children may need to adapt their evaluative organizational styles to maintain relatively positive perceptions of parents.

#### *Conclusions*

The present study explored the association between organization of knowledge about parents and the types of relationships that children have with them. This study demonstrated that for fathers, types of relationships were predicted by overall differences in positivity. For mothers, evaluative organization of parent knowledge was associated with three distinct types of parent-child relationships. *Positive compartmentalized* relationships were characterized by positive attitudes and attributions and high levels of closeness, contact, and cooperation in the relationship. *Positive integrative* relationships were demonstrated by moderately positive attitudes moderately high levels of closeness, positive attributions, and low levels of contact and cooperation. *Important negative* relationships were characterized by negative attitudes and attributions, and low levels of closeness, contact, and cooperation.

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## Footnotes

<sup>1</sup>In a study of maltreated and demographically matched non-maltreated college students (Limke, Zeigler-Hill, & Showers, 2003), analyses revealed that children from single-parent families were likely to have integrative self-structures. In addition, low parental education was associated with greater differential importance (rating positive traits as more important than negative ones) for females.

<sup>2</sup>The additional 20 traits were chosen based on a pilot study in which eight participants generated aspects and traits that described their parents. Participants were given the same basic instructions, “your task is to think of the different aspects of your father/mother or your father’s/mother’s life, and then form groups of traits that go together, where each group of traits describes an aspect of your father/mother or your father’s/mother’s life.” However, instead of providing a card deck of traits, participants were told to generate the traits that should be included in their parent-aspects. They were instructed that they could use as many or as few traits as they wished, and that traits may be reused in different parent aspects. Any trait generated by a participant in this procedure that was not already represented in the card deck was added.

<sup>3</sup>Each of the 20 added traits was presented to an independent group of 16 individuals who rated the valence of the traits. Participants were given instructions to rate the positivity and negativity of each trait on 7-point scales. These ratings had a high inter-rater reliability,  $\alpha = .95$ .

<sup>4</sup>With the exception of the Rosenberg Self-Esteem Scale (Rosenberg, 1965), measures of adjustment and attachment were not included in dissertation analyses.

<sup>5</sup>Studies of self-knowledge organization (e.g., Showers, 1992a; Showers & Kling, 1996) have shown that compartmentalization ( $\phi$ ) interacts with differential importance (DI) to predict a participants' mood and self-esteem. However, research examining the association between structure and liking of a romantic partner (Showers & Kevlyn, 1999; Showers & Zeigler-Hill, 2004) found that participants were unwilling to report romantic partners' negative characteristics unless they viewed them as relatively important, making the average DI score much lower than in self-concept studies. In studies of romantic relationships, compartmentalization ( $\phi$ ) interacted with content of partner descriptions ( $\text{neg}$ ) to predict current feelings in the relationship. Thus, predictions in the current study were unclear about which of these measures (DI or  $\text{neg}$ ) would interact with compartmentalization ( $\phi$ ) to predict current feelings in relationships with parents.

<sup>6</sup>The Love-Like variables were standardized separately for fathers and mothers; therefore, no differences were found (or expected).

<sup>7</sup>Cluster analyses were also performed using the intrapersonal dimensions (attitude and attributions) and the three highest loading interpersonal factors (closeness, contact, and cooperation). The pattern of clusters was similar, although the solution did not fit the data quite as well for mothers Wald  $\chi^2 = 6.62, p < .05$  (classification errors = .06) or for fathers, Wald  $\chi^2 = 6.71, p < .05$  (classification errors = .07).

<sup>8</sup>The original intrapersonal and interpersonal measures (instead of the factor scores) were used in these analyses to be consistent with previous analyses. In addition, the use of factor scores in repeated measures analyses conceals within-subjects differences due to their computation procedures.

<sup>9</sup>Cluster analyses using subgroups (females only, white participants only, participants with parental education levels of college degrees or higher, the oldest 75% of the sample, the 75% of the sample who lived with their parents the longest, and the 75% of the sample with the highest levels of self-esteem) were also performed to examine how the likelihood of classification changed when potential moderators were controlled. For example, cluster classification remained stable for the *denying* ( $r = .22$ ) and *dealing* ( $r = .23$ ) relationship types for fathers, but females who were originally classified as having *distancing* relationships with their fathers were less likely to remain in the classification ( $r = -.29$ ). For mothers, likelihood of classification into the *denying* ( $r = -.61$ ) and *dealing* ( $r = -.49$ ) relationship types significantly changed, although participants originally classified as *distancing* were likely to maintain that classification ( $r = .95$ ).

<sup>10</sup>The three relationship types were compared on the content (neg) and importance (DI) of parent descriptions as well as the PAQ items (see Appendix) assessing the number and importance of parents' negative traits and behaviors. Analyses indicated that there were differences between the types of relationships for each of these characteristics for both mothers,  $F_s(2, 126) > 9.70, p_s < .001$  and fathers,  $F_s(2, 142) > 17.14, p_s < .001$ . Post-hoc analyses (using a Games-Howell technique) revealed that for both mothers and fathers, relationships characterized as *distancing* were more negative (using each of these measures) than relationships characterized as *denying* or *dealing*. Likewise, for fathers, *dealing* relationships were more negative than *denying* relationships. However, for mothers, *denying* and *dealing* relationships did not differ from each other in the amount or importance of their mothers' negative characteristics or behaviors.

Table 1

*Actual Card Sorts Illustrating Compartmentalized and Integrative Organization of Parent Knowledge*

		Panel A: Compartmentalized organization		
		Before the divorce (my age: 0-7)	After the divorce (my age: 7-17)	After the divorce (my age: 17-present)
At work				
Capable	Satisfied	- Cold	- Insecure	Happy
Intelligent	Confident	- Controlling	- Uncomfortable	Lovable
Independent	Admirable	- Self-Centered	- Isolated	Comfortable
Organized	Hardworking	- Aggressive	- Inconsiderate	Nurturing
Energetic	Successful	- Irritable	- Tense	Friendly
		- Disagreeing	- Irritable	Interested
			- Controlling	Reliable
			- Not the real "him"	Fun & Entertaining
				Tolerant
				Encouraging
				Forgiving
				Flexible
				Mature
				Giving
				Needed
		Panel B: Integrative organization		
		Friend	Family	Work
Parent	Professional			
Forgiving	Satisfied	Independent	Giving	Intelligent
Giving	- Tense	Forgiving	- Sad & Blue	- Weary
- Irritable	Admirable	Giving	- Weary	Giving
Successful	Intelligent	Friendly	- Irritable	Hardworking
Admirable	Giving	- Isolated	Admirable	Tolerant
Lovable	Capable	Lovable	- Tense	Capable
Comfortable	- Weary	- Tense	Tolerant	- Tense
- Neglectful	Hardworking		- Uncomfortable	Interested
Tolerant			- Aggressive	Admirable
Flexible				
				Comfortable
				Giving
				- Weary
				Admirable
				Lovable
				Nurturing
				- Submissive
				- Tense
				Tolerant

Note. A minus sign indicates negative attributes. These father card sorts, including the aspect labels, were generated by 2 participants in this study.

Panel A: compartmentalization = 1.00; proportion of negative attributes = .36; Love-Like = -.07; Panel B: compartmentalization = .35; proportion of negative attributes = .32; Love-Like = -.42.

Table 2

## Hierarchical Regressions of Mother Love-Like and Father Love-Like onto Measures of Content and Structure of Mother and Father

## Descriptions

Predictors	Love-Like					
	Panel A: Mothers			Panel B: Fathers		
	Cumulative $R^2$	Increase in $R^2$	$sr^2$	$sr$	Cumulative $R^2$	Increase in $R^2$
Step 1	.33	.33 <sup>***</sup>			.50	.50 <sup>***</sup>
Compartmentalization (phi)			.01	.08	.00	.05
Differential Importance (DI)			.02 <sup>*</sup>	.15 <sup>*</sup>	.10 <sup>***</sup>	.31 <sup>***</sup>
Proportion of negatives (neg)			.22 <sup>***</sup>	-.47 <sup>***</sup>	.21 <sup>***</sup>	-.45 <sup>***</sup>
Step 2	.35	.02 <sup>*</sup>			.52	.02 <sup>*</sup>
Phi x DI			.02 <sup>*</sup>	.15 <sup>*</sup>	.02 <sup>*</sup>	.13 <sup>*</sup>
Phi x Neg			.00	.05	.00	.06

Note.  $sr^2$  (squared semipartial correlation coefficient) represents the proportion of variance uniquely accounted for by each predictor, beyond what is accounted for by all other predictors at that step. The sign of  $sr$  (semipartial correlation coefficient) indicates the direction of the relation between each predictor and the criterion variable.  
<sup>\*</sup>  $p < .05$ , <sup>\*\*\*</sup>  $p < .001$ .

Table 3

*Mothers: Descriptive Statistics for Mother Intrapersonal and Interpersonal Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Love-like													
2. Attachment	.85 <sup>***</sup>												
3. Positive attributions	.35 <sup>***</sup>	.33 <sup>***</sup>											
4. Given assistance	.34 <sup>***</sup>	.39 <sup>***</sup>	.09										
5. Received assistance	.56 <sup>***</sup>	.54 <sup>***</sup>	.17*	.51 <sup>***</sup>									
6. RCI strength	.38 <sup>***</sup>	.37 <sup>***</sup>	-.05	.26 <sup>***</sup>	.49 <sup>***</sup>								
7. Current contact	.43 <sup>***</sup>	.40 <sup>***</sup>	.19**	.30 <sup>***</sup>	.44 <sup>***</sup>	.20**							
8. Ideal contact	.42 <sup>***</sup>	.44 <sup>***</sup>	.10	.29 <sup>***</sup>	.45 <sup>***</sup>	.31**	.71 <sup>***</sup>						
9. Social support	.71 <sup>***</sup>	.72 <sup>***</sup>	.40 <sup>***</sup>	.27 <sup>***</sup>	.46 <sup>***</sup>	.24 <sup>***</sup>	.28 <sup>***</sup>	.35 <sup>***</sup>					
10. (Lack of) conflict	.53 <sup>***</sup>	.45 <sup>***</sup>	.46 <sup>***</sup>	.04	.23 <sup>**</sup>	.01	.18*	.20**	.51 <sup>***</sup>				
11. Depth	.82 <sup>***</sup>	.81 <sup>***</sup>	.33 <sup>***</sup>	.38 <sup>***</sup>	.58 <sup>***</sup>	.35 <sup>***</sup>	.38 <sup>***</sup>	.44 <sup>***</sup>	.74 <sup>***</sup>	.39 <sup>***</sup>			
12. Intimacy	.73 <sup>***</sup>	.74 <sup>***</sup>	.27 <sup>***</sup>	.31 <sup>***</sup>	.46 <sup>***</sup>	.26 <sup>***</sup>	.28 <sup>***</sup>	.40 <sup>***</sup>	.79 <sup>***</sup>	.51 <sup>***</sup>	.76 <sup>***</sup>		
13. Inclusion of other	.48 <sup>***</sup>	.51 <sup>***</sup>	.22 <sup>**</sup>	.33 <sup>***</sup>	.44 <sup>***</sup>	.25 <sup>***</sup>	.30 <sup>***</sup>	.39 <sup>***</sup>	.50 <sup>***</sup>	.32 <sup>***</sup>	.47 <sup>***</sup>	.46 <sup>***</sup>	
14. Relative control	-.03	.03	-.02	-.01	-.02	-.24 <sup>**</sup>	.05	-.09	.04	.17*	-.05	.07	.01

Note.  $N = 204$ .

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 4

*Fathers: Descriptive Statistics for Father Intrapersonal and Interpersonal Variables*

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Love-like													
2. Attachment	.85**												
3. Positive attributions	.59**	.58**											
4. Given assistance	.43**	.49**	.24**										
5. Received assistance	.65**	.64**	.42**	.59**									
6. RCI strength	.55**	.56**	.22**	.42**	.58**								
7. Current contact	.39**	.44**	.35**	.38**	.47**	.32**							
8. Ideal contact	.47**	.54**	.33**	.45**	.51**	.38**	.69**						
9. Social support	.82**	.79**	.61**	.41**	.65**	.50**	.44**	.49**					
10. (Lack of) conflict	.61**	.57**	.64**	.12	.31**	.18*	.17*	.24**	.58**				
11. Depth	.87**	.84**	.55**	.49**	.71**	.59**	.44**	.52**	.80**	.51**			
12. Intimacy	.80**	.83**	.56**	.46**	.62**	.48**	.40**	.52**	.80**	.50**	.82**		
13. Inclusion of other	.66**	.65**	.51**	.43**	.55**	.41**	.34**	.42**	.61**	.52**	.62**	.62**	
14. Relative control	-.11	-.11	.05	-.04	-.08	-.31**	-.11	-.04	-.05	.18*	-.12	-.08	.00

Note.  $N = 204$ .

\*  $p < .05$ ; \*\*  $p < .01$ .

Table 5

*Descriptive Statistics and Parent Differences for Intrapersonal and Interpersonal Variables*

Criterion	Mothers		Fathers		Parent Effect <i>F</i> (1, 203)
	Mean	<i>SD</i>	Mean	<i>SD</i>	
Love-like	0.00	0.94	0.00	0.95	0.00
Attachment	87.52	19.01	78.69	12.16	24.87 ***
Positive attributions	44.44	9.72	42.62	12.16	4.25 *
Given assistance	13.28	5.18	10.00	5.63	67.93 ***
Received assistance	19.80	5.82	17.25	7.39	23.97 ***
RCI strength	134.22	30.29	128.32	34.93	7.14 **
Current contact	10.16	3.03	8.13	3.31	65.34 ***
Ideal contact	11.59	3.34	10.24	3.95	26.13 ***
Social support	34.45	7.56	30.75	9.33	27.18 ***
(Lack of) conflict	43.05	14.23	43.56	14.79	0.16
Depth	27.92	6.38	25.32	8.21	15.11 ***
Intimacy	121.16	23.59	109.46	27.47	30.55 ***
Inclusion of other	3.89	1.52	3.18	1.63	26.62 ***
Relative control	-0.14	0.89	-0.21	0.99	0.75

*Note.*  $N_{\text{fathers}} = 204$ ;  $N_{\text{mothers}} = 204$ . The Love-Like variable was standardized for fathers and mothers separately.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

Table 6

*Mothers: Factor Loadings for Mother Interpersonal Variables*

Scale	Factor 1: Cooperation	Factor 2: Contact	Factor 3: Closeness	Factor 4: Control
Support (QRI)	<b>.89</b>	.37	.44	-.01
Intimacy (MSIS)	<b>.89</b>	.39	.46	.06
Depth (QRI)	<b>.81</b>	.47	.60	-.15
Conflict (QRI)	<b>.59</b>	.22	.13	.24
Inclusion of other (IOS)	<b>.53</b>	.40	.47	-.04
Ideal contact (IS)	.45	<b>.90</b>	.41	-.19
Current contact (IS)	.44	<b>.80</b>	.32	.04
Received assistance (IS)	.50	.51	<b>.87</b>	-.14
Given assistance (IS)	.29	.34	<b>.59</b>	-.07
Strength (RCI)	.23	.29	<b>.55</b>	-.46
Relative control (ISOC)	-.07	-.01	-.09	<b>.59</b>

*Note.*  $N = 204$ .

Table 7

*Fathers: Factor Loadings for Father Interpersonal Variables*

Scale	Factor 1: Closeness	Factor 2: Contact	Factor 3: Cooperation	Factor 4: Control
Support (QRI)	<b>.87</b>	.55	.57	-.22
Depth (QRI)	<b>.83</b>	.57	.69	-.33
Intimacy (MSIS)	<b>.82</b>	.55	.61	-.24
Conflict (QRI)	<b>.74</b>	.23	.18	.18
Inclusion of other (IOS)	<b>.69</b>	.44	.55	-.08
Ideal contact (IS)	.53	<b>.84</b>	.45	-.21
Current contact (IS)	.44	<b>.83</b>	.34	-.21
Received assistance (IS)	.61	.59	<b>.81</b>	-.28
Given assistance (IS)	.36	.50	<b>.74</b>	-.16
Strength (RCI)	.44	.42	<b>.62</b>	-.54
Relative control (ISOC)	-.10	-.10	.05	<b>.66</b>

*Note.*  $N = 204$ .

Table 8

*Mother-Cluster Solution: Descriptive Statistics and Cluster Differences for*

*Intrapersonal and Interpersonal Dimensions*

Relationship Dimension	Cluster 1		Cluster 2		Cluster 3		<i>F</i> (2, 126)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Attitude	0.58 <sup>a</sup>	0.31	-0.31 <sup>b</sup>	0.39	-1.68 <sup>c</sup>	0.97	154.17 ***
Attribution	0.16 <sup>a</sup>	0.86	-0.04 <sup>a</sup>	0.94	-1.08 <sup>c</sup>	0.84	17.02 ***
Closeness	0.40 <sup>a</sup>	0.39	-0.22 <sup>b</sup>	0.37	-1.48 <sup>c</sup>	0.59	163.42 ***
Contact	0.46 <sup>a</sup>	0.75	-0.33 <sup>c</sup>	0.68	-0.70 <sup>c</sup>	0.97	23.15 ***
Cooperation	0.50 <sup>a</sup>	0.49	-0.38 <sup>c</sup>	0.47	-0.63 <sup>c</sup>	0.90	43.02 ***
Control	0.00	0.81	0.15	1.18	-0.01	0.87	0.39

*Note.* *N* = 129. Scores for relationship dimensions are standardized. Means within a row with different superscripts are significantly different.

\*\*\* *p* < .001.

Table 9

*Father-Cluster Solution: Descriptive Statistics and Cluster Differences for**Intrapersonal and Interpersonal Dimensions*

Relationship Dimension	Cluster 1		Cluster 2		Cluster 3		<i>F</i> (2, 142)
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Attitude	0.37 <sup>a</sup>	0.47	-0.81 <sup>b</sup>	0.46	-1.86 <sup>c</sup>	0.70	186.23 ***
Attribution	0.20 <sup>a</sup>	0.72	-0.63 <sup>b</sup>	0.60	-1.51 <sup>c</sup>	0.68	56.65 ***
Closeness	0.35 <sup>a</sup>	0.43	-0.75 <sup>b</sup>	0.40	-1.66 <sup>c</sup>	0.62	37.19 ***
Contact	0.22 <sup>a</sup>	0.77	-0.24 <sup>b</sup>	0.60	-1.36 <sup>c</sup>	0.79	107.91 ***
Cooperation	0.36 <sup>a</sup>	0.59	-0.40 <sup>b</sup>	0.49	-1.55 <sup>c</sup>	0.31	192.96 ***
Control	-0.00	1.02	-0.11	1.07	0.52	1.09	2.43

*Note.* *N* = 145. Scores for relationship dimensions are standardized. Means within a row with different superscripts are significantly different.

\*\*\* *p* < .001.

Table 10

*Mothers: Hierarchical Regressions of Mother Clusters onto Measures of Content and Structure of Mother Descriptions*

Predictors	Cluster 1			Cluster 2			Cluster 3					
	Cumulative $R^2$	Increase in $R^2$	$sr^2$	$sr$	Cumulative $R^2$	Increase in $R^2$	$sr^2$	$sr$	Cumulative $R^2$	Increase in $R^2$	$sr^2$	$sr$
Step 1	.13	.13**			.05	.05			.30	.30***		
Compartmentalization (Phi)			.01	.14			.03*	-.18*			.00	.04
Differential Importance (DI)			.01	.08			.02	.15			.07***	-.27***
Proportion of Negatives (Neg)			.09**	-.29**			.01	.03			.10***	.31***
Step 2	.16	.03			.12	.07*			.32	.02		
Phi x DI			.03*	.17*			.05**	.23**			.00	.06
Phi x Neg			.01	.11			.01	.09			.00	.03
DI x Neg			.01	.07			.04*	.19*			.02	.14
Step 3	.16	.00			.12	.00			.32	.00		
Phi x DI x Neg			.00	.00			.00	.01			.00	.01

*Note.*  $sr^2$  (squared semipartial correlation coefficient) represents the proportion of variance uniquely accounted for by each predictor, beyond what is accounted for by all other predictors at that step. The sign of  $sr$  (semipartial correlation coefficient) indicates the direction of the relation between each predictor and the criterion variable.

\*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Table 11

*Fathers: Hierarchical Regressions of Father Clusters onto Measures of Content and Structure of Father Descriptions*

Predictors	Cluster 1			Cluster 2			Cluster 3					
	Cumulative $R^2$	Increase in $R^2$	$sr^2$	$sr$	Cumulative $R^2$	Increase in $R^2$	$sr^2$	$sr$	Cumulative $R^2$	Increase in $R^2$	$sr^2$	$sr$
Step 1	.32	.32***			.03	.03			.34	.34***		
Compartmentalization (Phi)		.00	.00	.03		.00	.00	-.01		.00	.00	-.03
Differential Importance (DI)		.06**	.06**	.24**		.01	.01	-.08		.06**	.06**	-.24**
Proportion of Negatives (Neg)		.13***	.13***	-.36***		.01	.01	.11		.14***	.14***	.37***
Step 2	.33	.01			.06	.03			.44	.10***		
Phi x DI		.00	.00	.01		.00	.00	.05		.01	.01	.07
Phi x Neg		.00	.00	.04		.01	.01	.10		.01	.01	.07
DI x Neg		.01	.01	.09		.02	.02	.12		.08***	.08***	.28***
Step 3	.34	.01			.07	.01			.44	.00		
Phi x DI x Neg		.01	.01	.09		.01	.01	.10		.00	.00	.00

*Note.*  $sr^2$  (squared semipartial correlation coefficient) represents the proportion of variance uniquely accounted for by each predictor, beyond what is accounted for by all other predictors at that step. The sign of  $sr$  (semipartial correlation coefficient) indicates the direction of the relation between each predictor and the criterion variable.

\*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Table 12

*Hierarchical Regressions of Relationship Dimensions (Attitude, Attributions, Closeness, Contact, Cooperation, and Control) onto Measures of Demographic Characteristics*

Dimensions	Cumulative $R^2$	
	Mothers	Fathers
Attitudes	.26	.09
Attributions	.06	.06
Closeness	.31	.11
Contact	.19	.06
Cooperation	.28	.18
Control	.07	.13

*Note.*  $N = 204$

Table 13

*A Summary of Significant Effects of Hierarchical Regressions of Relationship*

*Dimensions (Attitude, Attributions, Closeness, Contact, Cooperation, and Control) onto Measures of Demographic Characteristics*

Relationship Dimension	Mothers	Fathers
Attitude	Gender Age Years Together Self-Esteem	Years Together Self-Esteem Gender x Self-Esteem Father Degree x Years Together Age x Years Together
Attributions	Age Gender x Self-Esteem Gender x Age	Self-Esteem Age x Years Together Father Degree x Years Together
Closeness	Gender Age Years Together Self-Esteem Gender x Age Mother Degree x Age	Years Together Self-Esteem Age x Years Together Gender x Self-Esteem Father Degree x Years Together
Contact	Gender Age Minority Status Years Together	Gender x Self-Esteem
Cooperation	Gender Age Years Together	Age Years Together Father Degree x Years Together Age x Years Together
Control		Age Years Together Self-Esteem

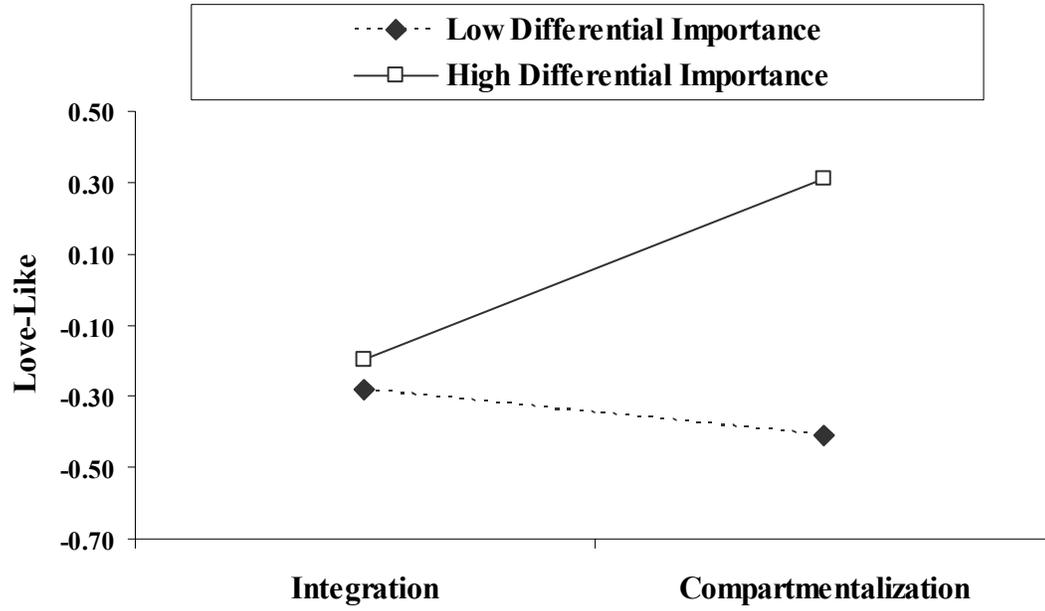


Figure 1. *Mothers: Adjusted predicted values for Love-Like, illustrating the interaction between compartmentalization ( $\phi$ ) and differential importance (DI) of mother descriptions at one standard deviation above and below the means.*

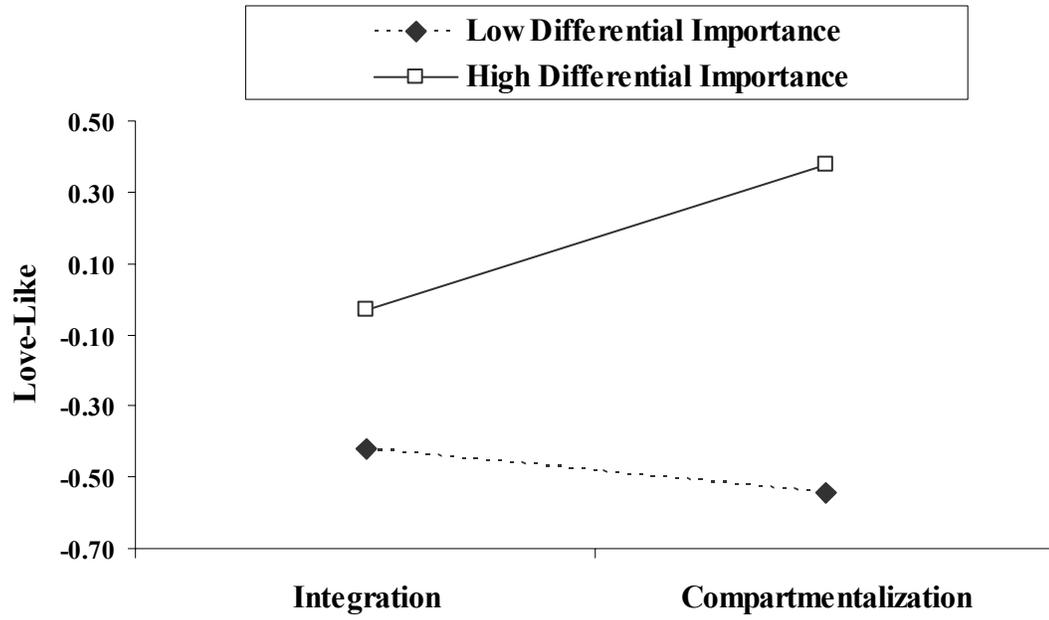


Figure 2. *Fathers: Adjusted predicted values for Love-Like, illustrating the interaction between compartmentalization ( $\phi$ ) and differential importance (DI) of father descriptions at one standard deviation above and below the means.*

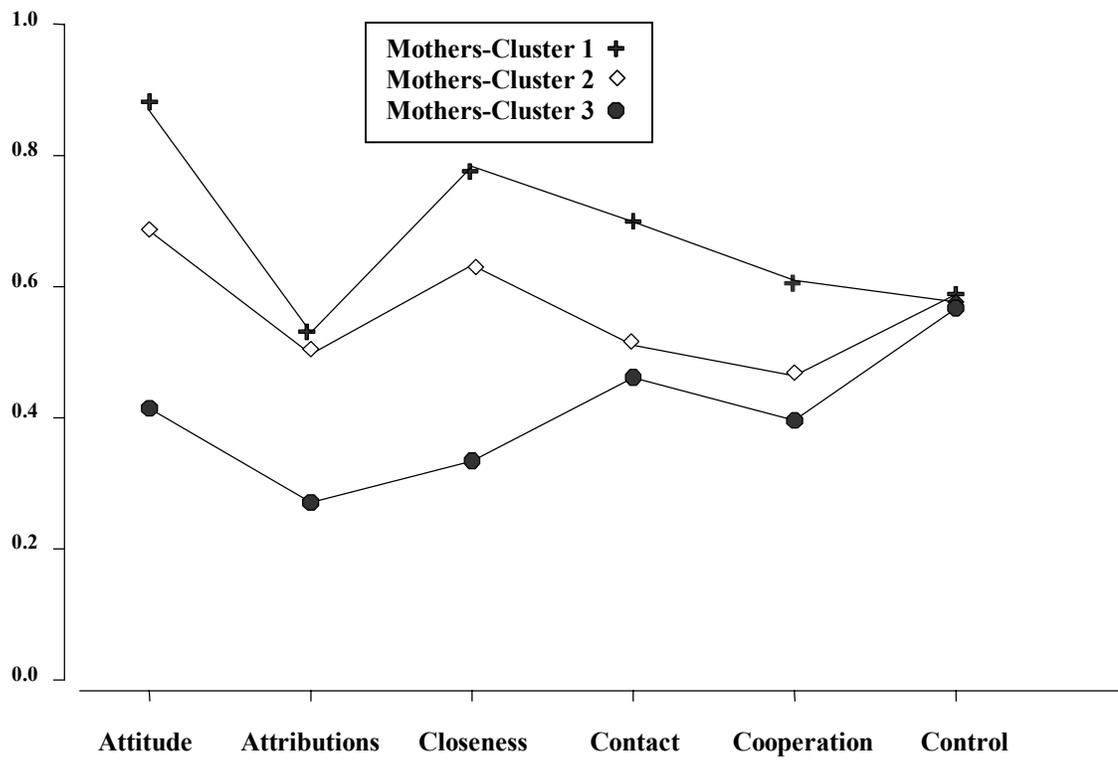


Figure 3. Mothers: Values for each cluster on intrapersonal and interpersonal relationship dimensions (scaling is accomplished by subtracting the lowest observed value from the class-specific means and dividing the result by the observed range).

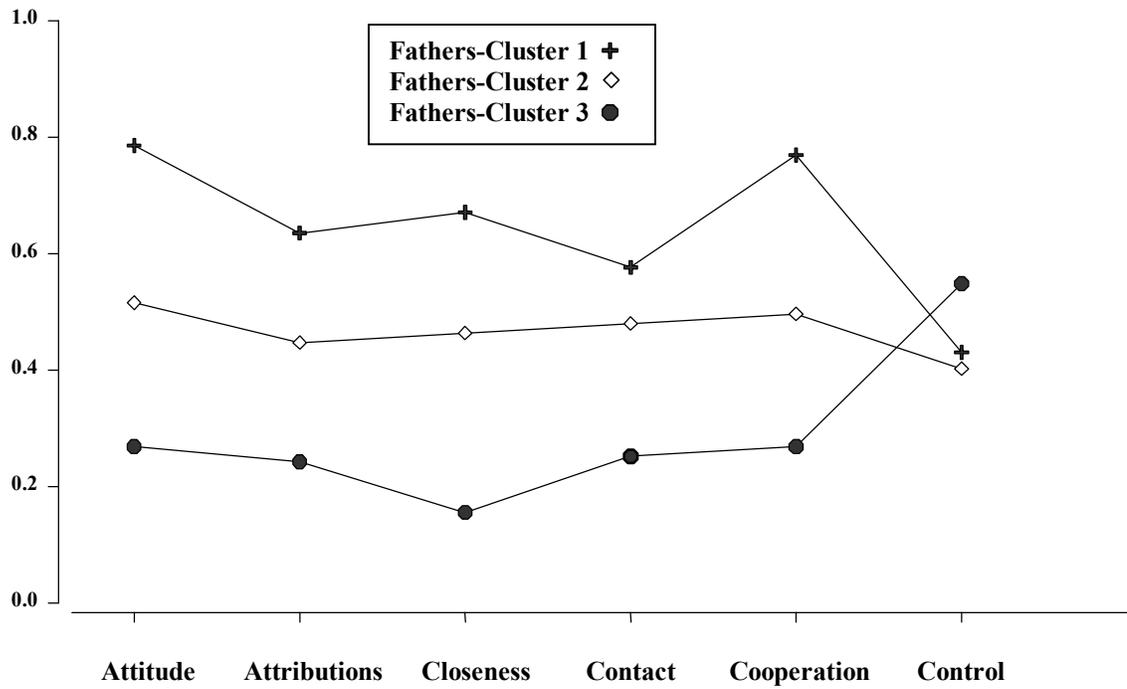


Figure 4. *Fathers: Values for each cluster on intrapersonal and interpersonal relationship dimensions (scaling is accomplished by subtracting the lowest observed value from the class-specific means and dividing the result by the observed range).*

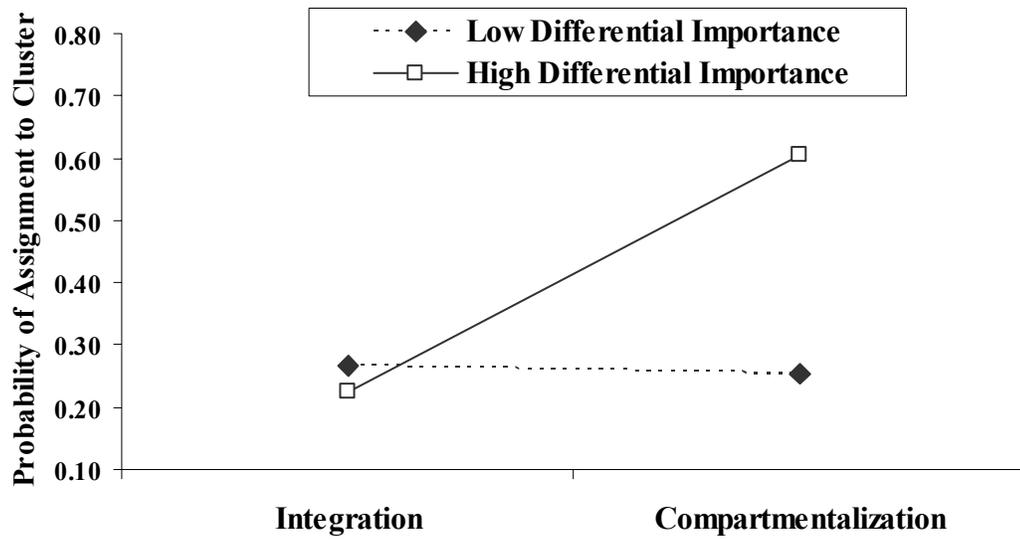


Figure 5. Mothers: Adjusted predicted values for probability of assignment to mother-Cluster 1 (Denying), illustrating the interaction between compartmentalization ( $\phi$ ) and differential importance (DI) of mother descriptions at one standard deviation above and below the means.

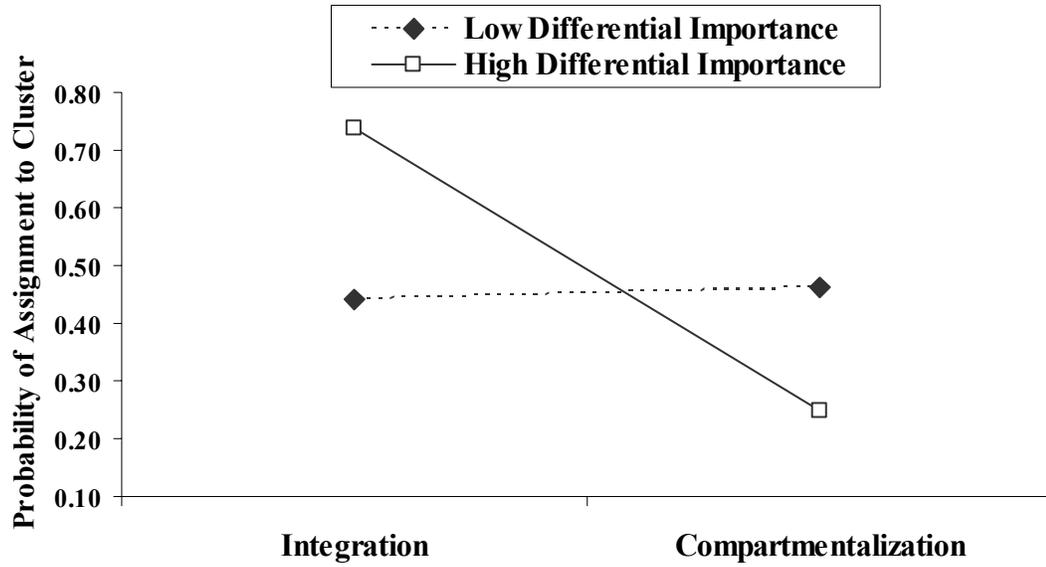


Figure 6. Mothers: Adjusted predicted values for probability of assignment to mother-Cluster 2 (Dealing), illustrating the interaction between compartmentalization ( $\phi$ ) and differential importance (DI) of mother descriptions at one standard deviation above and below the means.

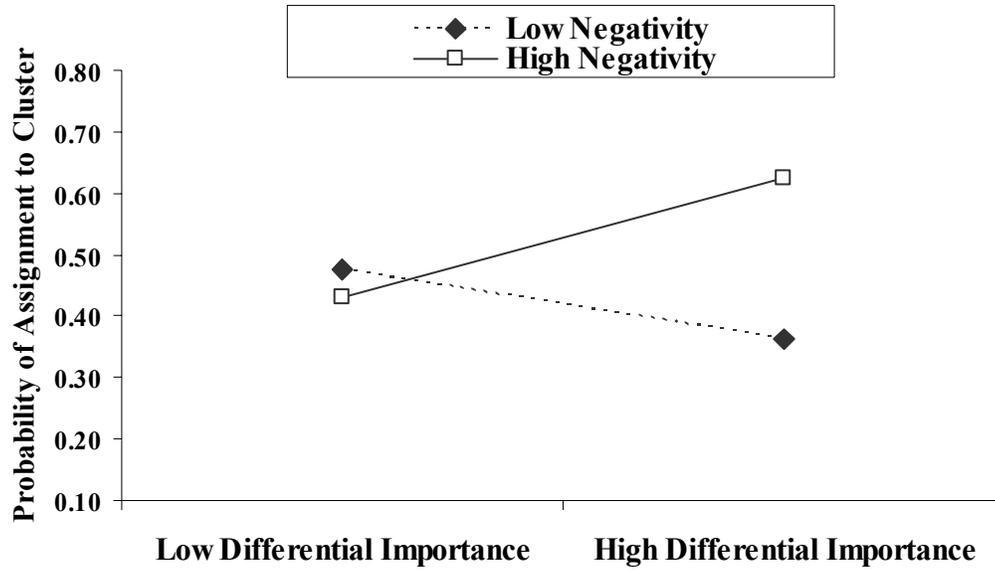


Figure 7. Mothers: Adjusted predicted values for probability of assignment to mother-Cluster 2 (Dealing), illustrating the interaction between differential importance (DI) and content (neg) of mother descriptions at one standard deviation above and below the means.

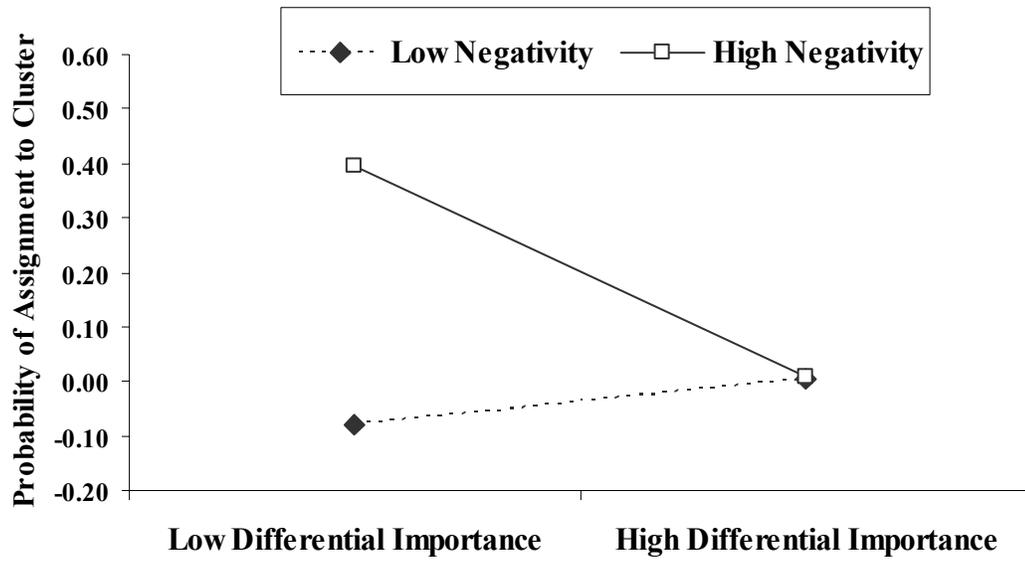


Figure 8. *Fathers: Adjusted predicted values for probability of assignment to father-Cluster 3 (Distancing), illustrating the interaction between differential importance (DI) and content (neg) of father descriptions at one standard deviation above and below the means.*

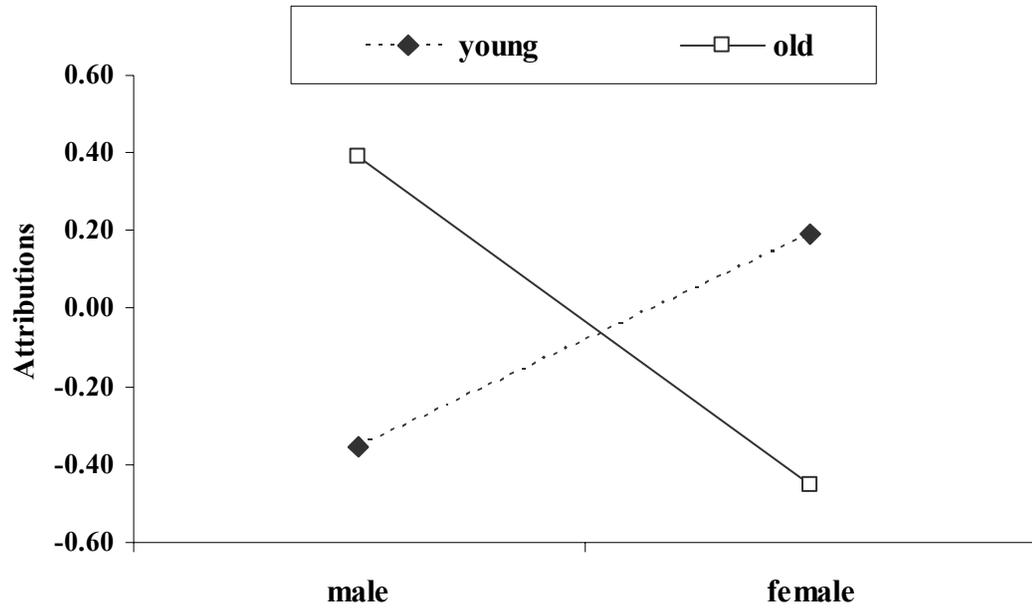


Figure 9. Mothers: Adjusted predicted values for attributions for mothers' negative behaviors, illustrating the interaction of gender of the child and age at one standard deviation above and below the means.

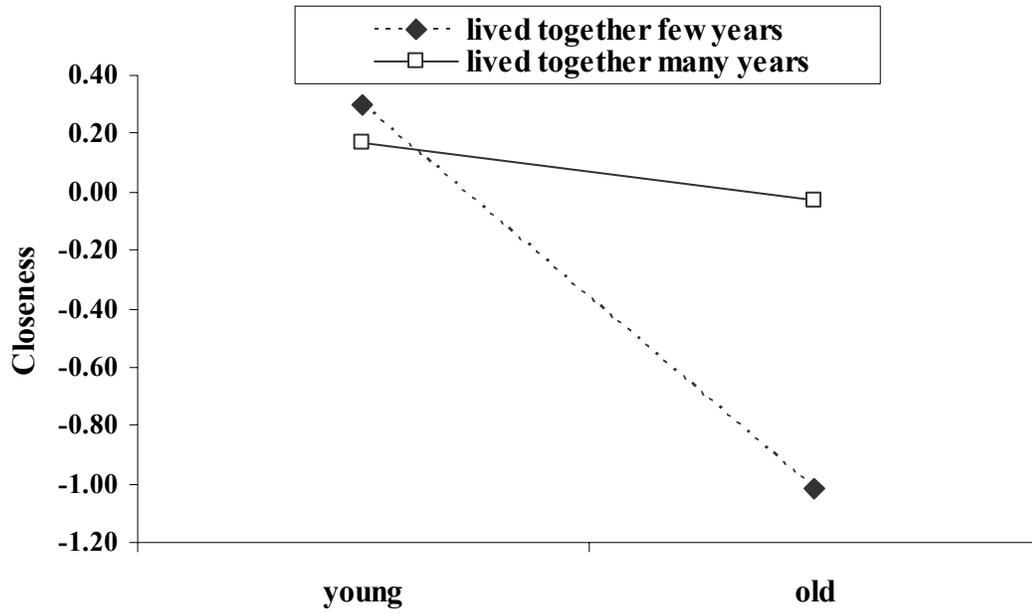


Figure 10. *Fathers: Adjusted predicted values for closeness in relationships with fathers, illustrating the interaction age and the number of years the child and father lived together at one standard deviation above and below the means.*

## Attachment

### PAQ

**Directions:** These questions ask about your father's and mother's characteristics. For the items below, you should rate the **number** of characteristics your father/mother has *relative to fathers/mothers of your peers* (e.g., other college students) by using the following scale:

1	2	3	4	5	6	7	8	9	10
Bottom 5%	Lower 10%	Lower 20%	Lower 30%	Lower 50%	Upper 50%	Upper 30%	Upper 20%	Upper 10%	Top 5%

1. My father's positive characteristics
2. My father's negative characteristics
3. My mother's positive characteristics
4. My mother's negative characteristics

**Directions:** Now rate how important the characteristics are to the way you think about your father/mother. In other words, how central are these characteristics to your overall concept of your father/mother? Use the following scale:

1	2	3	4	5	6	7	8	9	10
Not at all Important				Moderately Important					Extremely Important

5. My father's positive characteristics
6. My father's negative characteristics
7. My mother's positive characteristics
8. My mother's negative characteristics