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CONCERN FOR SELF AND OTHERS IN THE COMMUNICATION OF  
SIBLING JEALOUSY

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CONCERN FOR SELF AND OTHERS IN THE COMMUNICATION OF

SIBLING JEALOUSY

By

Renee Elizabeth Strom

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**ABSTRACT**

**CONCERN FOR SELF AND OTHERS IN THE COMMUNICATION OF  
SIBLING JEALOUSY**

By

Renee Elizabeth Strom

The effects of concern for self and others on the frequency and types of jealous communication by siblings were investigated in this study. There is little research available concerning the expression of sibling jealousy in young adulthood. Four hypotheses and one research question were advanced in this study concerning the relationship between the constructs of concern for self and others and the types and frequencies of messages about jealousy that are communicated by siblings. Questionnaires measuring attachment styles, background information, concern for self and others, sibling information, conflict information, closeness of siblings, as well as how jealousy was communicated were administered to the two hundred and fifteen participants. Results show that the hypotheses were not supported, however, a post hoc analysis shows closeness affected how siblings communicated jealousy.

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## TABLE OF CONTENTS

LIST OF TABLES.....	v
LIST OF FIGURES.....	vi
INTRODUCTION.....	1
SECTION 1	
LITERATURE REVIEW.....	2
SECTION 2	
METHODS.....	12
Participants.....	12
Procedures.....	12
Measures.....	13
RESULTS.....	16
DISCUSSION.....	20
CONCLUSIONS.....	22
APPENDIX.....	28
BIBLIOGRAPHY.....	39

## LIST OF TABLES

TABLE 1-Means and Standard Deviations for Concern for Self and Other and Communication Patterns.....	24
TABLE 2- Means and Standard Deviations for All Variables.....	25
TABLE 3- Pearson's Correlations for Path Model.....	26

## LIST OF FIGURES

FIGURE 1- Post hoc path model depicting the relationship between closeness and communication patterns.....	27
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## Concern for Self and Others in the Communication of Sibling Jealousy

“Siblings comprise a salient, long lasting and influential socialization environment. Siblings may provide each other with a readily available resource for support, help and friendship, or they may encourage antisocial behavior and maladjustment” (Newman, 1994, p. 119). Because the sibling relationship is so enduring, it is extremely important to understand how siblings communicate in their relationships, specifically how they communicate potentially negative emotions like jealousy. There is little research, however, that actually links sibling rivalry to jealousy experienced as an adult (White & Mullen, 1989). Much of the research on sibling jealousy has looked at siblings up to the age of five, and little research has been conducted concerning the nature and functions of sibling relationships during adolescence and early adulthood (Cicirelli, 1995).

This study aims to offer insight into the differences in jealous experiences, and the communication that can result, for college-aged participants with siblings. One potential theory that has been advanced concerning why siblings communicate jealousy the way they do is attachment theory (Ainsworth, 1982; Bowlby, 1988). According to this theory children, over time, internalize experiences with caretakers in such a way that early attachment relations come to form a prototype for later relationships inside and outside of the family (Bartholomew & Horowitz, 1991). These attachments in early childhood affect the relationship between siblings, and distinct patterns of interaction between siblings form within the family unit (Dunn, 1993). If one were to strip back attachment theory, however, what is exposed is concern for self and concern for other.

These parsimonious constructs may serve to provide stronger evidence concerning how jealousy is communicated between siblings.

The intent of this study is to question the frequency of the ways in which siblings with high and low levels of concern for self and concern for others communicate jealous feelings. One area that is important to study concerning how siblings communicate jealousy is uncertainty, specifically Planalp and Honeycutt's five-pattern model (1985), which is incorporated in this study. To provide background for this study an overview of the literature concerning sibling jealousy and how siblings communicate jealous feelings is explained. Next, information dealing with concern for self and others is provided. Finally, hypotheses and a research question are offered concerning these variables.

### *Jealousy*

Jealousy is defined as "a combination of fear and anger that occurs when people perceive their exclusive possession of a source of security, status or affection challenged by another person" (Salovey & Rodin, 1989, p. 222). As evidenced by this definition, jealousy is a very complex, multifaceted emotion, and research has shown that the way people express potentially negative emotions like jealousy (Guerrero & Andersen, 1998) can affect how satisfied people are with their relationships (Guerrero & Affifi, 1999). Consequently, jealousy doesn't have to be negative, but often times it is portrayed in society as something viewed as negative.

Americans have, during the twentieth century, become more uncomfortable with the emotion of jealousy than ever before. The handling

of jealousy-how to view it in others, how to judge it in oneself, even whether to admit it fully-constitutes one of the more interesting tensions in modern American emotional life. (Stearns, 1988, p. 193)

Much of the previous research concerning jealousy has been in the romantic domain (White & Mullen, 1989) yet this research is not applicable to siblings because the two domains incorporate different triangles. Romantic relationships are voluntary and can be ended whenever necessary. In addition, the romantic triangle involves two lovers and a third rival, therefore jealousy may ensue when a person feels the relationship with his or her romantic partner is being threatened by a third rival. In the sibling relationship, the players and the connections are different.

### *Sibling Jealousy*

Sibling jealousy occurs in a relationship that is unique from romantic relationships because sibling relationships are not voluntary. The sibling relationship can be one of the first significant social relationships (along with parental and peer relationships) experienced by a young child, yet little is known about sibling experiences that can affect adulthood (Bedford, 1998). Because siblings differ in their behaviors, they evoke different responses from their parents and thus receive rearing environments somewhat different from one another (Scarr & Grajek, 1982). Thus, sibling jealousy is often times characterized as a rivalry, with siblings competing for one or both parents' attention, approval, and affection (Newman, 1994). Sibling jealousy is different than romantic jealousy because in romantic relationship rivals may not be

confronted as readily as they may be in sibling relationships due to the potential close proximity of siblings if they live in the same house. In addition, the likelihood that the relationship may be terminated is much higher in romantic relationships than in sibling relationships.

Once the threat of a sibling is recognized, jealousy is experienced cognitively, emotionally, and behaviorally. White and Mullen (1989) suggest that people dealing with jealousy must first cognitively digest to what extent the rival relationship exists. With siblings this involves assessing how the parent(s) feel about the rival sibling. Perceived or observed inequalities between a child's relationship with a parent and that of another sibling have been associated with sibling conflict and feelings of resentment (Bank & Kahn, 1980). As a part of the aversive reaction to an apparent relational threat people may experience any one, or a combination, of the following emotions: anger, fear, hatred, anxiety, sadness, hurt, envy, love, and even pride (Guerrero & Andersen, 1998b). Strong feelings are associated with both the cognitive and emotional dimensions and consequently lead to strong expressions of jealousy (Guerrero, 1998).

As previously evidenced, sibling jealousy constitutes a complex triangle in which siblings experience and express jealousy that may stem from a threat to the parental relationship that is posed by a sibling. Of course, jealousy then can be communicated in different ways, but why is this? Why do siblings react differently to jealousy inducing events even though they both may have grown up in the same environment? Individual differences among siblings exist to which parents are responsive, differences that arise because of the child's individual

genotype and because of the response to the child's behavior (Lytton, 1980). Analytic, trait, and learning theories suggest that childhood experiences with sibling rivals may be influential in establishing patterns of adult jealousy (White & Mullen, 1989). Thus, the ways siblings learn to interact with each other, as well as from families and friends, may offer possible insight into differences in communication. In the past, sibling differences have been explained through the variables that describe a sibling constellation (i.e. birth order, age spacing, age, and sex of the siblings). Yet, research has shown that sibling constellation is an inadequate explanation for sibling differences. This poor fit is due to a glaring lack of theory to guide and interpret sibling constellation research (Scarr & Grajek, 1982). One theory that has attempted to provide a possible explanation for sibling differences, specifically concerning jealousy, is attachment theory.

### *Attachment Theory*

Attachment theory (Ainsworth, 1982; Bowlby, 1988) was developed from observations of the behavior and activities of infants and young children who were separated from their primary caregiver for differing lengths of time (Hazan & Shaver, 1987). Proponents of attachment theory claim that infants and children create mental models of themselves and their major social-interaction partners, and that these models regulate a person's social behaviors and feelings throughout life (Bowlby, 1988; Shaver, Hazan, & Bradshaw, 1988;). Bowlby argues that the actual quality of the relationship between caregiver and child becomes the shaping influence on the child's personality. Attachment classifications of these relationships developed from the Ainsworth Strange

Situation and were labeled secure, avoidant, and anxious-ambivalent (Ainsworth, Blehar, Waters, & Wall, 1978). These categories served to designate the differences between children's attachments to their primary caregivers.

Attachment theorists posit that the nature and quality of a person's close relationships in adulthood are strongly influenced by affective events that took place during childhood (Collins & Read, 1990). Work by Bartholomew and Horowitz (1991) has expanded attachment theory from Ainsworth et al.'s (1978) three-style categorization to four styles in order to specifically measure adult attachment. These four styles are secure, preoccupied, dismissive-avoidant, and fearful-avoidant. This categorization is a four-cell model that incorporates a model of self (dependence) and a model of others (avoidance). "If a person's abstract image of the self is dichotomized as positive or negative and if the person's abstracted image of the other is also dichotomized as positive or negative, then four combinations can be conceptualized" (Bartholomew & Horowitz, 1991, p. 227). Each cell, then, represents a theoretical ideal, or prototype. The following description of each cell is as follows:

Cell I (secure) is positive self and positive other, and indicates a sense of worthiness (lovability) plus an expectation that other people are generally accepting and responsive. Cell II (preoccupied) is negative self and positive other and indicates a sense of unworthiness (unlovability) combined with a positive evaluation of others. This combination of characteristics would lead the person to strive for self-acceptance by gaining the acceptance of valued others. Cell III (fearful) is negative self

and negative other and indicates a sense of unworthiness (unlovability) combined with an expectation that others will be negatively disposed (untrustworthy and rejecting). By avoiding close involvement with others, this style enables people to protect themselves against anticipated rejection by others. Cell IV (dismissing) is positive self and negative other and indicates a sense of love-worthiness combined with a negative disposition toward other people. Such people protect themselves against disappointment by avoiding close relationships and maintaining a sense of independence, and invulnerability.(Bartholomew & Horowitz, 1991, p. 227)

A major focus of attachment theory is that long-lasting interpersonal relationships may involve affectional bonds, like the attachments of child to parent, the bonds of parents to child, and bonds with other kin (Ainsworth, 1989). In childhood, siblings each form their own attachment to a primary caregiver, thus siblings do not develop the same personalities or behaviors, and parents do not treat siblings the same way. Individual differences in attachment style observed between children (and adults) are accredited to systematic differences in underlying models of self and others (Collins & Read, 1994). These positive and negative conceptualizations are similar to how conflict types are conceptualized in Rahim's (1983) work.

The five-style typology (Rahim, 1983) of conflict styles share the same basis as the aforementioned attachment typology. Each of the five conflict styles (competing, avoiding, compromising, collaborating, and accommodating) (Ruble

& Thomas, 1976) is based on higher or lower levels of concern for self and concern for others.

It is important to understand whether or not concern for self or others drives sibling behavior, because displays of jealousy can increase uncertainty in a sibling, which may then cause a breakdown in communication between the dyad (Guerrero, Andersen, Jorgensen, Spitzberg, & Eloy, 1995).

### *Communicative Responses to Jealousy*

Research has shown that individuals who experience jealousy engage in a wide variety of communicative responses to jealousy (Guerrero & Afifi, 1999). A communicative response to jealousy is a behavioral reaction to jealousy that carries communicative value and can potentially fulfill individual and/or relational goals (Guerrero et al., 1995). Many potential communicative responses to jealousy exist, both pro-social and anti-social, that jealous individuals use to cope with jealousy (Guerrero, 1998).

In a recent study Guerrero (1998) applied attachment style differences to the experience and expression of romantic jealousy. The Communicative Responses to Jealousy Scale (Guerrero et. al., 1995) was incorporated to assess how jealousy was experienced and expressed in romantic relationships.

Guerrero (1998) found that participants with negative models of themselves tended to experience more jealous worry and suspicion than those with positive models of themselves. Also, jealous individuals with negative models of others felt fear less intensely and engaged in avoidance/denial more frequently than jealous individuals with positive models of others. It seems clear, then, that how



people view themselves and others may be indicative of how they will react behaviorally to a jealous instance. Thus, the two constructs of self and other, the underlying dimensions of attachment and conflict styles, seem to be potentially valid indicators of how siblings communicate jealousy. The Communicative Responses to Jealousy Scale (Guerrero et al., 1995) was created for romantic relationships, however, which may not be indicative of jealous communication in sibling relationships.

Planalp and Honeycutt's (1985) extensive research on outcomes concerning uncertainty increasing events yielded communication patterns that may be more pertinent to a study concerning siblings. Planalp and Honeycutt (1985) claim that when an uncertainty increasing event occurs, such as jealousy, people will display one of five possible communication patterns in response to the event. The patterns that Planalp and Honeycutt (1985) found were talking about the issue, talking around the issue, arguing about the issue, avoiding the issue, or avoiding the person. It was found that individuals who communicated after an uncertainty-increasing incident reported experiencing positive relational outcomes, and were thus more likely to maintain the same level of relationship with the other person. Individuals who avoided communication following the incident, however, experienced negative relational outcomes like becoming less close with the other person. Arguing over the issue was not associated with outcomes (Planalp & Honeycutt, 1985). Because these communication patterns are not specific to one type of relationship, it is clear that these communication

patterns can be applied to sibling relationships in order to determine how they communicate about a jealous encounter.

Based on this information, siblings who experience uncertainty increasing events, like sibling jealousy, are predicted to communicatively react depending on the type of attachment style they have with their parents. In addition, this study posits that the concern for self and concern for others may be indicative of the attachment styles evident in that participant. Thus the following formal hypotheses are posited:

H1: Participants who have higher concern for self and lower concern for others will be classified as predominantly dismissive-avoidant and will be more likely to argue about the issue.

H2: Participants who have lower concern for self and lower concern for others will be classified as fearful-avoidant and will be more likely to avoid the issue and avoid the person.

H3: Participants who have lower concern for self and higher concern for others will be categorized as preoccupied and will be more likely to talk around the issue.

H4: Participants with higher concern for self and higher concern for others will be categorized as secure and will be more likely to talk about the issue.

Along with concern for self and concern for others, a third construct this study will consider concerning jealousy between siblings is closeness and how this may affect how siblings communicate. Closeness of siblings may play an

important role, and Bersheid (1986) defines relationships as close if the two people are highly interdependent upon one another. Interdependence is revealed by the individuals' impact on each other, the degree of strong impact per each occurrence, the impact on diverse kinds of activities, and whether or not these interconnected activities occur for a relatively long duration of time. According to a study by Ross and Milgram (1982) closeness was by far the most complex, elusive, and somewhat abstract concept to emerge from a study of adult sibling relationships. Closeness was perceived as a descriptor of the relationships between siblings, and stemmed from increasingly shared personal values, shared and complementary interests, and activities arising from them (Ross & Milgram, 1982). Finally, closeness rarely originated in adulthood, but instead was developed in childhood and then carried through to adulthood. Thus, closeness is an important construct to consider when looking at how an emotion like jealousy might play out with siblings. It is not clear, however, how closeness will relate to attachment or concern for self or others. With this in mind, the sole research question of the study is:

RQ1: Will the closeness of siblings affect the different ways participants communicate jealousy?

## Method

### *Participants*

Two hundred and fifteen students (81 males and 132 females) enrolled in undergraduate communication courses at a large mid-western university participated in the current study. Students with majors other than communication were enrolled in these courses, as well as students who were communication majors. All students who had a sibling and were interested in participating were invited to take part in the study for research credit in their class. The reasons for sampling college students are that they have the most availability and accessibility as adults. In addition, many college-aged students have not been out of the home for very long and therefore may have experienced jealous feelings toward a sibling more than those who have not recently lived at home recently (in the past five years).

### *Procedure*

The study was announced in undergraduate communication courses and the students were told they would receive research credit for participating. At the beginning of the study, participants were told they would be participating in a study about siblings. They were instructed to fill out a background questionnaire that assessed age, sex, parental relationship, and information about siblings. Along with the background questionnaire, participants filled out the Relationship Scales Questionnaire (Griffen & Bartholomew, 1994), a measure that assesses attachment styles. Participants were then given a definition of jealousy and were asked to think of a sibling toward whom they had recently felt jealousy.

Participants then filled out the Interpersonal Solidarity Scale (Wheeless, 1978) to measure how close they are to the sibling about whom they were thinking. Then, participants were asked to fill out a revised conflict scale questionnaire (Rahim, 1983) to assess their concern for self and other. Next, participants filled out a sibling questionnaire that had been developed to measure how the participants would communicate sibling jealousy. The participants were instructed to answer a series of open-ended questions about their most recent jealous experience they had with their sibling. Finally, participants filled out the Communication Pattern Scale (Jang, Smith, & Levine, 2002) to assess how they communicated their jealous feelings.

Upon completion of the questionnaire participants were told that their responses would be used for a sibling study on the communication of sibling jealousy, were given their research credit, and then were thanked for their time.

### *Measures*

The attachment measurement that was used in this study was the Relationship Scales Questionnaire (RSQ) which consisted of 30 phrases drawn from the paragraph descriptions in Hazan and Shaver's (1987) attachment measure, Bartholomew and Horowitz's (1991) Relationship Questionnaire, and Collins and Read's (1990) Adult Attachment Scale (Griffen & Bartholomew, 1994). Participants rated (on a 5 point scale) how well each of the items fit their characteristic style in close relationships. Four items contributed to the scores for the preoccupied and fearful patterns whereas five items contributed to the scores for the secure and dismissive patterns (see Appendix).

The background questionnaire assessed information about number of siblings, description of parent's relationship, and specific information about type of sibling(s) (e.g. number of siblings you have; describe your parent's relationship) (see Appendix).

Next, participants were given a definition of jealousy (a combination of fear and anger that occurs when people perceive their exclusive possession of a source of security, status, or affection is challenged by another person) and were asked to think of one sibling toward whom they had recently felt jealous feelings.

Participants were then asked to fill out the Interpersonal Solidarity Scale (Wheless, 1978) which assessed how close the participant felt toward this sibling. Participants were instructed to mark the scales to indicate how they relate to the sibling toward whom they recently felt jealous. They were asked to rate a series of twenty statements to indicate whether they (7) strongly agree; (6) agree; (5) moderately agree; (4) are undecided; (3) moderately disagree; (2) disagree; or (1) strongly disagree with each statement. Example items include: We are very close to each other; This person has a great deal of influence over my behavior; I trust this person completely (see Appendix).

The conflict scale assessed the degree to which participants had concern for self and concern for others. This scale was adapted from the Organizational Conflict Inventory II (Rahim, 1983). Participants were asked to rate fourteen statements about their behavior when they are interacting with people close to them where "1" represents behavior "not at all like me" and "5" represents behavior "very like me" (see Appendix).

Next, participants were given the sibling jealousy questionnaire to complete. This questionnaire asked participants to answer a series of questions about the recent jealous event they experienced with their sibling. They were asked to provide a description of their immediate response to the jealousy they were feeling at that time (see Appendix).

Next, in order to assess how the jealousy was communicated participants were asked to fill out the Communication Pattern Scale (Jang, Smith, & Levine, 2002). This scale assessed the participant's communication with questions concerning five patterns (talking about the issue, talking around the issue, arguing about the issue, avoiding the issue, or avoiding the person). They were instructed to rate 20 statements on a 9-point Likert scale with "1" representing "not at all" and "9" representing "very much" (e.g., I talked over the jealous incident with my sibling; I pretended nothing happened after the jealous incident while interacting with my sibling) (see Appendix).

Pre-testing showed that the questions and statements that comprised the sibling questionnaire seemed to evoke jealous responses from siblings, and therefore have face validity. Of the 41 participants involved in the pretest, 37 were able to identify accurately and describe a jealous encounter with a sibling.

Confirmatory factor analysis (CFA, Hamilton & Hunter, 1988; Hunter & Gerbing, 1982) was performed to test the dimensionality of all twelve multiple item scales: concern for self and other; closeness; talk about the issue; talk around the issue; argue about the issue; avoid the issue; avoid the person; and the secure, preoccupied, fearful-avoidant, and dismissive-avoidant attachment

scales. The CFA of the attachment items was non-interpretable. According to a recent report by Kurdek (2003) the goodness-of-fit indices for the RSQ (Griffen & Bartholomew, 1994) failed to validate the existence of the secure, fearful, preoccupied, and dismissing styles, therefore, all 30 of these items were deleted from further analysis. In addition, the five communication patterns were collapsed into four as the items for talking around the issue and those for avoiding the issue were found to measure the same construct. The data were consistent with the newly revised seven-factor model, in which internal consistency and parallelism were generated with small errors. This procedure resulted in the deletion of a total of eleven items. These deleted items are starred in the appendices that follow (excluding the attachment items which were deleted completely).

## Results

### *Communication Patterns*

The proposed hypotheses focused on how participants' concern for self and concern for others affected the communication patterns (arguing over the issue; avoid the issue and avoid the person; talk around the issue; talk over the issue) they incorporated after experiencing a jealous encounter with a sibling. Analysis of variance and regression were used to test each of the above four hypotheses. Means and standard deviations for higher and lower concern for self and others, as well as communication patterns, can be found in Table 1. Means, standard deviations, and reliabilities for all variables can be found in Table 2.

Hypothesis 1 predicted that participants with higher concern for self and lower concern for others would be more likely to argue about the jealous incident.



A median split was performed on the two independent variables, concern for self and concern for others, and an analysis of variance was performed on the data. No evidence of non-additivity was found. Thus, the dependent variable, arguing about the issue, was regressed onto both concern for self and other. No substantial effects were found for concern for self ( $\beta = .09$ ) or concern for others ( $\beta = -.05$ ),  $F(2, 205) = 1.09$ , *ns*,  $R^2 = .01$ .

Hypothesis 2 predicted that participants with higher concern for self and lower concern for others would be more likely to avoid the person. A median split was performed on the two independent variables, concern for self and concern for others, and an analysis of variance was performed on the data. No evidence of non-additivity was found. Thus, the dependent variable, avoiding the person, was regressed onto both concern for self and other. No substantial effects were found for concern for self ( $\beta = .02$ ) or concern for others ( $\beta = -.05$ ),  $F(2, 205) = 1.29$ , *ns*,  $R^2 = .01$ .

Hypothesis 3 predicted that participants with lower concern for self and higher concern for others will be more likely to talk around the issue. A median split was performed on the two independent variables, concern for self and concern for others, and an analysis of variance was performed on the data. No evidence of non-additivity was found. Thus, the dependent variable, talk around the issue, was regressed onto both concern for self and other. No substantial effects were found for concern for self ( $\beta = .02$ ) or concern for others ( $\beta = -.05$ ),  $F(2, 205) = .34$ , *ns*,  $R^2 = .01$ .

Hypothesis 4 predicted that participants with higher concern for self and higher concern for others will be more likely to talk about the issue. A median split was performed on the two independent variables, concern for self and concern for others, and an analysis of variance was performed on the data. No evidence of non-additivity was found. Thus, the dependent variable, talk about the issue, was regressed onto both concern for self and other. No substantial effects were found for concern for self ( $\beta = .08$ ) or concern for others ( $\beta = -.01$ ),  $F(2, 205) = .67, ns, R^2 = .01$ .

In order to understand if structural features of the family had an effect on how participants reported communicating their feelings, the number of siblings was regressed onto each of the dependent variables (talk about the issue, talk around the issue, argue about the issue, avoid the person) and there were no significant effects of number of siblings on how they communicated. In addition, type of family (married versus not married) was regressed onto each of the dependent variables, and there were no significant effects found for family type on communication after the jealous incident.

In addition, a post hoc analysis was completed and a path model was developed to employ an alternative method of explaining the data. Path analysis (Pathe, Hunter & Hamilton, 1995) was performed and the path model in Figure 1 was tested.

To test the post hoc model the least squares criterion was used to estimate the parameters, parameter size was examined, and the fit of the model was assessed. The correlations employed to estimate the fit of the model

parameters are presented in Table 3, and the path coefficients, after being corrected for attenuation due to reliability, are presented in Figure 1.

Parameter size was determined in the path diagram by performing a simple regression of each endogenous variable onto its causal antecedent and model fit was tested by comparing the estimated parameter size to reproduced correlations (see Hunter & Gerbing, 1982 for information on reproducing correlations in path analysis). To the extent that the path coefficients are substantial and the differences between parameter estimates and reproduced correlations (error) are attributable to sampling error, the model is said to be consistent with the data.

The path coefficients were ample and statistically significant. In addition, no errors were found that were greater than what would be expected from sampling error in the population; the global test for goodness of fit indicated that the data were consistent with the model  $\chi^2(4) = 1.91, p = .752$ . Thus, the data were judged to be consistent with the model.

According to the model, as closeness between siblings increases there is less avoidance of the sibling after a jealous incident. This decrease in avoidance leads to an increase in talking around the issue as well as arguing about the issue. Conversely, as closeness between siblings increases, their talk about the issue increases as well. This leads to a decrease in talking around the issue, but leads to an increase in arguing about the issue.

## Discussion

In the current study communication patterns were investigated as a result of concern for self, concern for others, and closeness of individuals who experienced a jealous incident with a sibling. The results were not consistent with the hypotheses concerning the communication patterns employed by siblings following a jealous incident. Participants with higher concern for self and lower concern for others did not argue over the issue more. Additionally, participants with lower concern for self and others did not avoid the issue more. Participants with lower concern for self and higher concern for others did not talk around the issue more. Finally, participants with higher concern for self and others did not talk over the issue more.

While the predicted relationships above were not found, according to the post-hoc path model siblings who are close may not avoid each other, but they may still evade the topic by talking around it. In addition, by choosing to not avoid the person, arguments may result as a method of dealing with the jealous incident. Talking around the issue is an indirect form of communication, so if this type of communication increases, direct communication, or talking about the issue, will decrease. As talking about the issue decreases, arguing about the issue increases between the siblings. Because siblings may not feel able to directly discuss the incident, they may chose to deal instead with it by fighting or arguing about the incident.

According to this model, there is evidence to support the idea that when siblings are close they do talk about the jealous issue. Directly talking about the

issue seemingly results in a decrease in talking around the issue. Conversely, participants reported that talking directly about the issue led to an increase in arguments about the issue. Talking about the issue and arguing about the issue are direct forms of communication, thus this model shows support for the idea that close siblings are more prone to directly communicate about an issue of jealousy.

An interesting finding from this study is participants reported arguing more when they avoided their siblings and also when they talked about the issue. Thus, according to this model arguments seem to be a predominant way that siblings deal with their jealous feelings. With further replication as support it seems possible that arguments are a way that siblings feel they can express their anger and/or sadness about a jealous incident. This is an important construct that deserves more attention, because it may help to explain sibling dynamics in certain situations. If siblings are able to recognize that they do tend to lapse into arguments, they may make more of an effort to find other, more constructive, ways to resolve their feelings of jealousy.

Finally, in order to determine the validity of the model, it is recommended that a replication with formal hypotheses about the model be conducted.

#### *Limitations and Directions for Future Research*

The primary limitation of this study is that only one account of the jealous experience was represented. It would be interesting to have been able to bring in both siblings and compare their recollections of the jealous incident, and how they communicated about it. Because this study incorporated only recall as the

method of data collection, certain events may have been remembered incorrectly. It would have been difficult, however, to ascertain both siblings' information due to time and geographical concerns.

A second limitation is the failure of the Relationship Scales Questionnaire (Griffen & Bartholomew, 1994) to measure attachment. Because this scale was found to be non-interpretable (Kurdek, 2003) the four attachment styles were removed from the design of the study. Conversely, concern for self and concern for others as an underlying framework for what drives communication patterns in the face of jealousy is advanced here, and it is a framework that deserves more time and study.

Concerning directions for the future, the aforementioned suggestions about the post-hoc model would be an important undertaking in order to determine if the model could be replicated successfully. In addition, a longitudinal study of sibling jealousy and communication patterns is suggested in order to truly determine the relationship between these constructs. Finally, continued research on adult siblings and jealousy is important as much of the literature on siblings is dominated by studies about siblings in their childhood years, and much of the literature on expressions of jealousy is dominated by the romantic relationship context.

## Conclusions

In sum, siblings experience jealous encounters often, and the way they choose to communicate these feelings depends on the sibling's feelings of closeness toward the other sibling. The experience of jealousy can cause a

sibling to avoid the other person, discuss the incident, discuss ideas other than the incident, or argue about the incident. The results of the current study did not offer support for the hypothesized effects of higher or lower levels of concern for self and others on how siblings communicate differently about jealous incidents. Further investigation as to how the underlying dimensions of concern for self and others affect communication patterns is suggested, however. In addition, it is clear from the post-hoc analysis that closeness does play an important role in how siblings choose to communicate about their feelings of jealousy. This is an important area to consider as closeness may have important implications for sibling communication in adulthood.

Table 1

*Means and Standard Deviations for Concern for Self and Other and Communication Patterns*

Other	Self		Higher	Lower	Mean
	Higher	Lower			
<i>N</i>	124	23	54	10	<i>SD</i>
<u>Argue about issue</u>					
Mean	2.50	3.26	2.39	1.92	2.52
<i>SD</i>	2.07	2.68	2.01	1.15	1.98
<u>Avoid the person</u>					
Mean	1.97	2.25	1.87	2.67	2.19
<i>SD</i>	1.72	1.56	1.73	1.69	1.68
<u>Talk around issue</u>					
Mean	3.47	3.97	3.62	2.68	3.44
<i>SD</i>	2.24	2.48	2.27	1.69	2.17
<u>Talk about issue</u>					
Mean	3.30	3.70	3.55	2.79	3.35
<i>SD</i>	2.13	2.00	2.30	1.48	1.98
Mean	2.81	3.30	2.86	2.52	
<i>SD</i>	2.04	2.18	2.08	1.50	

*Note.* Communication patterns were measured on a 9-point Likert-type scale; concern for self and other was measured on a 5-point Likert-type scale.



Table 2

*Means and Standard Deviations for All Variables*

	Concern for self	Concern for other	Closeness	Talk around issue	Avoid the person	Talk about issue	Argue about issue
<i>M</i>	3.75	3.89	5.19	3.60	2.0	3.4	2.57
<i>SD</i>	.71	.57	1.31	2.25	1.71	2.13	2.12
<i>Sl<math>\alpha</math></i>	.83	.73	.95	.90	.78	.83	.92

*Note.* Concern for self and other was measured on a 5-point Likert scale.

Closeness was measured on a 7-point Likert scale. All other scales were measured on a 9-point Likert scale.

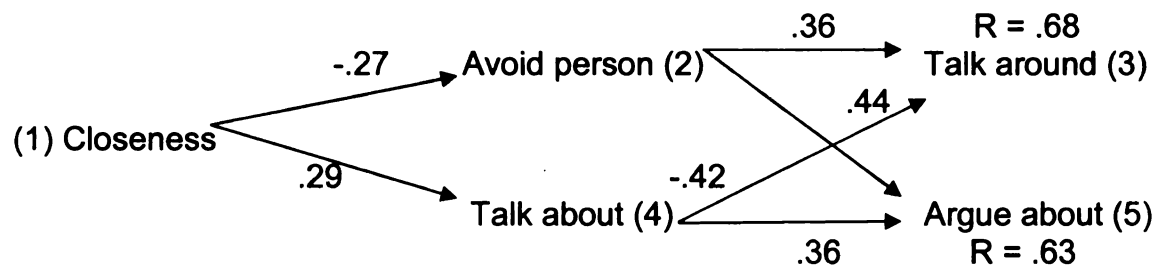
Table 3

*Pearson's Correlations for Path Model*

	1	2	3	4	5
1. Closeness	1.00	-.27**	-.17*	.29**	-.10
2. Avoid person	-.27**	1.00	.41**	-.11	.40**
3. Talk about	-.17*	.41**	1.00	-.46**	.06
4. Talk around	.29**	-.11	-.46**	1.00	.31**
5. Argue about	-.10	.40**	.06	.31**	1.00

*Note.* \*Indicates the correlation is significant at the .05 level (2-tailed); \*\*Indicates the correlation is significant at the .01 level (2-tailed);  $N = 211$ .

**Figure 1.** Post hoc path model depicting the relationship between closeness and communication patterns.



**Note.** Path coefficients have been corrected for attenuation due to reliability

## APPENDIX

**Instructions: Please rate the following thirty sentences on a 5-point Likert-type scale with '1' representing not at all like me and with '5' representing very like me.**

	Not at all like me			Very like me	
1. I find it difficult to depend on other people.	1	2	3	4	5
2. I find it easy to get emotionally close to others.	1	2	3	4	5
3. I want to merge completely with another person.	1	2	3	4	5
4. I worry that I will be hurt if I allow myself to become to close to others.	1	2	3	4	5
5. It is very important to me to feel independent.	1	2	3	4	5
6. I am comfortable without close emotional relationships.	1	2	3	4	5
7. I am not sure that I can always depend on others to be there when I need them.	1	2	3	4	5
8. I want to be completely emotionally intimate with others.	1	2	3	4	5
9. I worry about being alone.	1	2	3	4	5
10. I am comfortable depending on other people.	1	2	3	4	5
11. I often worry that romantic partners don't really love me.	1	2	3	4	5
12. I worry about others getting too close to me.	1	2	3	4	5
13. I find it difficult to trust others completely.	1	2	3	4	5
14. I want emotionally close relationships.	1	2	3	4	5
15. I am comfortable having other's depend on me.	1	2	3	4	5
16. I worry that others don't value me as much as I value them.	1	2	3	4	5

	Not at all like me			Very like me	
17. People are never there when you need them.	1	2	3	4	5
18. My desire to merge completely sometimes scares people away.	1	2	3	4	5
19. It is very important to me to feel self-sufficient.	1	2	3	4	5
20. I am nervous when anyone gets too close to me.	1	2	3	4	5
21. I often worry that romantic partners won't want to stay with me.	1	2	3	4	5
22. I prefer not to have other people depend on me.	1	2	3	4	5
23. I worry about being abandoned.	1	2	3	4	5
24. I am uncomfortable being close to others.	1	2	3	4	5
25. I find that others are reluctant to get as close as I would like to be.	1	2	3	4	5
26. I prefer not to depend on others.	1	2	3	4	5
27. I know that others will be there when I need them.	1	2	3	4	5
28. I worry about having others not accept me.	1	2	3	4	5
29. Romantic partners often want me to be closer than I feel comfortable being.	1	2	3	4	5
30. I find it relatively easy to get close to others.	1	2	3	4	

Instructions: Please rate the following fourteen statements about your behavior when you are interacting with people close to you where '1' represents behavior not at all like me and '5' represents behavior very like me.

	Not at all like me				Very like me
*1. If the other person's position seems very important to that person, I would try to meet his or her wishes.	1	2	3	4	5
2. I try not to hurt the other person's feelings.	1	2	3	4	5
*3. I try to show other people the logic and benefits of my position.	1	2	3	4	5
4. I press to get my point made.	1	2	3	4	5
5. I attempt to deal with all of the other person's concerns.	1	2	3	4	5
*6. I am usually firm in pursuing my goals.	1	2	3	4	5
7. I try to soothe the other's feelings and preserve our relationship.	1	2	3	4	5
8. I try to convince the other person of the merits of my position.	1	2	3	4	5
9. I assert my wishes.	1	2	3	4	5
10. I make an effort to get my way.	1	2	3	4	5
11. If it makes the other person happy, I let the other person maintain his or her view.	1	2	3	4	5
12. I try to be considerate of the other person's wishes.	1	2	3	4	5
13. I try to win my position.	1	2	3	4	5
*14. I sometimes sacrifice my own wishes for the wishes of another person.	1	2	3	4	5

Note. Asterisks denote deleted items

**Complete the questions to the best of your ability.**

---

***Definition of sibling: a sister or brother in your family who you are related to through blood, through marriage, or through adoption.***

1. Number of siblings \_\_\_\_\_

2. Describe your parent's relationship: married, divorced, remarried, only have a mother, etc.)

\_\_\_\_\_

\_\_\_\_\_

3. Do you have a step-parent? \_\_\_\_\_ If yes, mother or father? \_\_\_\_\_

4. Do you have a biological sibling? (circle the appropriate answer)    Yes    No

a. If yes how many biological siblings do you have? 1 2 3 4 5 6 7 8 9 10 +10

b. Write the age(s) and gender of your biological sibling(s) \_\_\_\_\_

5. Do you have an adopted sibling? (circle the appropriate answer)    Yes    No

a. If yes how many adopted siblings do you have? 1 2 3 4 5 6 7 8 9 10 +10

b. Write the age(s) and gender of your adopted sibling(s) \_\_\_\_\_

6. Do you have a step-sibling? (circle the appropriate answer)    Yes    No

a. If yes how many step-siblings do you have? 1 2 3 4 5 6 7 8 9 10 +10

b. Write the age(s) and gender of your step-sibling(s) \_\_\_\_\_

7. Do you have a half-sibling? (circle the appropriate answer)    Yes    No

a. If yes how many half-siblings do you have? 1 2 3 4 5 6 7 8 9 10 +10

b. Write the age(s) and gender of your half-sibling(s) \_\_\_\_\_

Jealousy is defined as “a combination of fear and anger that occurs when people perceive their exclusive possession of a source of security, status, or affection challenged by another person”.

Think about one sibling that you have experienced your most recent feelings of jealousy toward. With this sibling in mind, fill out following scale.

Instructions: Please rate the following twenty sentences on a 7-point Likert-type scale with '1' representing strongly disagree and with '7' representing strongly agree.

	Strongly disagree				Strongly agree		
1. We are very close to each other.	1	2	3	4	5	6	7
*2. This person has a great deal of influence over my behavior.	1	2	3	4	5	6	7
3. I trust this person completely.	1	2	3	4	5	6	7
4. We feel very differently about most things.	1	2	3	4	5	6	7
5. I willingly disclose a great deal of positive and negative things about myself, honestly, and fully (in depth) to this person.	1	2	3	4	5	6	7
*6. We do <i>not</i> really understand each other.	1	2	3	4	5	6	7
7. This person willingly discloses a great deal of positive and negative things about him/herself, honestly and fully (in depth) to me.	1	2	3	4	5	6	7
8. I distrust this person.	1	2	3	4	5	6	7
9. I like this person much more than most people I know.	1	2	3	4	5	6	7
10. I seldom interact/communicate with this person.	1	2	3	4	5	6	7



	Strongly disagree				Strongly agree			
11. I love this person.	1	2	3	4	5	6	7	
12. I understand this person and who s/he really is.	1	2	3	4	5	6	7	
*13. I dislike this person.	1	2	3	4	5	6	7	
14. I interact/communicate with this person much more than with most people I know.	1	2	3	4	5	6	7	
15. We are not very close at all.	1	2	3	4	5	6	7	
16. We share a lot in common.	1	2	3	4	5	6	7	
17. We do a lot of helpful things for each other.	1	2	3	4	5	6	7	
18. I have little in common with this person.	1	2	3	4	5	6	7	
19. I feel very close to this person.	1	2	3	4	5	6	7	
20. We share some private way(s) of communicating with each other.	1	2	3	4	5	6	7	

*Note.* Asterisks denote deleted items

Jealousy is defined as “a combination of fear and anger that occurs when people perceive their exclusive possession of a source of security, status, or affection challenged by another person”.

Think about one sibling that you have experienced your most recent feelings of jealousy toward. With this sibling in mind, fill out following information.

1. What is the sex of this sibling? \_\_\_\_\_

2. Please describe this sibling's relationship to you (half-sibling, adopted sibling, biological sibling).

\_\_\_\_\_

3. Now think about the most recent instance in which you felt jealousy toward the sibling you described above. Describe the circumstances of the jealous incident below.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. Describe the feelings you experienced during the jealous instance.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5. Please explain how you expressed the jealous feelings you described above.

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6. To whom did you express your feelings of jealousy to first?

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7. Why did you express your jealous feelings to this person first?

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8. Please list anyone else you expressed your jealous feelings to:

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9. How often in the past five years did the jealous instance you described above happen with the sibling you wrote about? \_\_\_\_\_

10. Concerning the jealous experience you wrote about, did you experience an emotion toward one or both of your parents? Describe the emotion.

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11. Did you communicate with your parent or parents about this? Why or why not?

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12. How many months/years ago did this jealous encounter happen? \_\_\_\_\_

13. Write your age today \_\_\_\_\_ and at the time of the incident above \_\_\_\_\_

14. Write the age of your sibling today \_\_\_\_\_ and at the time of the incident above \_\_\_\_\_

15. Your sex: (circle the answer):      male                  female

16. The sex of the sibling you wrote about above:      male                  female

Instructions: Please rate the following twenty sentences on a 9-point Likert-type scale with '1' representing not at all and with '9' representing very much, concerning how you communicated your jealous feelings to your sibling.

	Not at All							Very much	
1. I talked over the jealous incident with my sibling.	1	2	3	4	5	6	7	8	9
*2. I pretended nothing happened after the jealous incident while interacting with my sibling.	1	2	3	4	5	6	7	8	9
*3. I did not target the jealous incident when talking to my sibling, but I asked questions around the issue.	1	2	3	4	5	6	7	8	9
4. I argued over the jealous incident with my sibling.	1	2	3	4	5	6	7	8	9
*5. When the incident was brought up by my sibling, I told him/her that I did not want to talk about it.	1	2	3	4	5	6	7	8	9
6. I did not want to see my sibling after the jealous incident, so I stopped interaction with him/her.	1	2	3	4	5	6	7	8	9
7. It was fairly easy for me to discuss the jealous incident with my sibling.	1	2	3	4	5	6	7	8	9
8. I started fights about the incident with my sibling.	1	2	3	4	5	6	7	8	9
*9. I was afraid of asking my sibling directly about the jealous incident, so I asked about things around the specific issue.	1	2	3	4	5	6	7	8	9

	Not at All							Very much	
	1	2	3	4	5	6	7	8	9
10. I stopped going to places my sibling may be present after the jealous incident.									
11. I ignored my sibling attempts to communicate after the jealous incident.									
12. I wanted to understand why I was jealous of my sibling, so I asked my sibling about it and we talked about it.									
13. Because of my jealousy, I got angry and we had a dispute.									
14. I was not able to talk about the jealous incident, so I talked around the issue.									
15. I stayed away from speaking about the jealous incident when talking with my sibling.									
16. I avoided my sibling after the incident.									
17. I wanted to know why I was jealous of my sibling, so I talked it over to clear it up.									
18. I could not control my anger, so I argued over the jealous incident with my sibling.									
19. I avoided talking about the jealous incident with my sibling.									
20. I talked around the jealous incident with my sibling.									

*Note.* Asterisks denote deleted item

## BIBLIOGRAPHY

- Ainsworth, M. D. (1989). Attachments beyond infancy. American Psychologist, 44, 709-716.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). Patterns of attachment: A psychological study of the strange situation. Hillsdale, NJ: Erlbaum.
- Bank, S. P., & Kahn, M. D. (1982). The sibling bond. New York: Basic.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. Journal of Personality and Social Psychology, 61, 226-244.
- Bedford, B. H. (1998). Sibling relationship troubles and well-being in middle and old age. Family Relations, 47, 369-376.
- Bersheid, E. (1986). Emotional experience in close relationships: Some implications for child development. In W. W. Hartup & Z. Rubin (Eds.), Relationships and development, (pp.135-166). New Jersey: Lawrence Erlbaum.
- Bowlby, J. (1988). A secure base: Parent-child attachment and healthy human development. New York: Basic Books.
- Cicirelli, V. G. (1995). Sibling relationships in cross-cultural perspective. Journal of Marriage and the Family, 56, 7-20.
- Collins, N. L., & Read, S. J. (1994). Cognitive representations of attachment: The structure and function of working models. In K. Bartholomew & D.

- Perlman (Eds.), Advances in personal relationships (vol. 5, pp. 53-90).  
New York: Jessica Kingsley.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. Journal of Personality and Social Psychology, 58, 644-663.
- Dunn, J. (1993). Young children's close relationships: Beyond attachment.  
Newbury Park, CA: Sage.
- Griffen, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman (Eds.), Advances in Personal Relationships (vol. 4, pp. 17-52). New York: Jessica Kingsley Publishers.
- Guerrero, L. K. (1998). Attachment-style differences in the experience and expression of romantic jealousy. Personal Relationships, 5, 273-291.
- Guerrero, L. K., & Afifi, W. A. (1999). Toward a goal-oriented approach to understanding communicative responses to jealousy. Western Journal of Communication, 63, 216-248.
- Guerrero, L. K., & Andersen, P. A. (1998). Jealousy experience and expression in romantic Relationships. In P. A. Andersen & L. K. Guerrero (Eds.) Handbook of communication and Emotion: Theory, research, applications, and contexts (pp. 155-188). San Diego, CA: Academic Press.
- Guerrero, L. K., & Andersen, P. A. (1998b). The dark side of jealousy and envy: Desire, delusion, desperation, and destructive communication. In B. H.



- Spitzberg & W. R. Cupach (Eds.), The dark side of close relationships (pp. 33-70). Mahwah, NJ: Lawrence Erlbaum.
- Guerrero, L. K., Andersen, P. A., Jorgensen, P. F., Spitzberg, B. H., & Eloy, S. V. (1995). Coping with the green-eyed monster: Conceptualizing and measuring communicative responses to romantic jealousy. Western Journal of Communication, 59, 270-304.
- Hamilton, M. & Hunter, J. (1988). Confirmatory factor analysis. [Computer software]. East Lansing, MI: Michigan State University.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. Journal of Personality and Social Psychology, 52, 511-524.
- Hunter, J., & Gerbing, D. (1982). Unidimensional measurement, second order factor analysis and causal models. Research in Organizational Behavior, 4, 267-320.
- Hunter, J. & Hamilton, M. (1995). Pathe Analysis. [Computer software]. East Lansing, MI: Michigan State University.
- Jang, S., Smith, S., & Levine, T. (2002). To stay or leave? The role of attachment styles in communication patterns and potential termination of romantic relationships following discovery of deception. Communication Monographs, 69, 236-252.
- Kurdek, L. A. (1993). On being insecure about the assessment of attachment styles. Journal Of Social and Personal Relationships, 19(6), 811-834.
- Lytton, H. (1980). Parent-child interaction. New York: Plenum.

Newman, J. (1994). Conflict and friendship in sibling relationships: A review.

Child Study Journal, 24, 119-152.

Pines, A., & Aronson, E. (1983). Antecedents, correlates, and consequences of sexual jealousy. Journal of Personality, 51, 109-136.

Planalp, S., & Honeycutt, J. M. (1985). Events that increase uncertainty in personal relationships. Human Communication Research, 11, 593-604.

Rahim, M. A. (1983). A measure of styles of handling interpersonal conflict in organizations. Academy of Management Journal, 26, 368-375.

Ross, H. G., & Milgram, J. I. (1982). Important variables in adult sibling relationships: A qualitative study. In M. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp. 225-250). New Jersey: Lawrence Erlbaum.

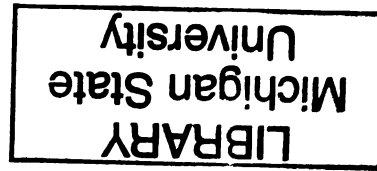
Ruble, T. L., & Thomas, K. W. (1976). Support for a two-dimensional model of conflict behavior. Organizational Behavior and Human Performance, 16, 143-155.

Salovey, P., & Rodin, J. (1989). Envy and jealousy in close relationships. In C. Hendrick (Ed.), Close relationships (pp. 221-246). Newbury Park, CA: Sage.

Scarr, S., & Grajek, S. (1982). Similarities and differences among siblings. In M. Lamb & B. Sutton-Smith (Eds.), Sibling relationships: Their nature and significance across the lifespan (pp.357-382). New Jersey: Lawrence Erlbaum Associates.

- Shaver, P., Hazan, C., & Bradshaw, D. (1988). The integration of three behavioral systems. In R. J. Sternberg & M. L. Barnes (Eds.), The psychology of love (pp.68-99). New Haven: Yale University Press.
- Stearns, P. N. (1988). The rise of sibling jealousy in the twentieth century. In C. Z. Stearns & P. N. Stearns (Eds.), Emotion and social change (p. 193). New York: Holmes & Meier.
- Teti, D. M., & Ablard, K. E. (1989). Security of attachment and infant-sibling relationships: A laboratory study. Child Development, 60, 1519-1528.
- Wheeless, L. R. (1978). A follow-up study of the relationships among trust, disclosure, and interpersonal solidarity. Human Communication Research, 4, 143-157.
- White, G. L., & Mullen, P. E. (1989) Jealousy: Theory, research, & clinical strategies. New York: Guilford Press.





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