The quality and stability of sibling relationships during adulthood were assessed by comparing Thematic Apperception Test (TAT) themes of sibling affiliation, conflict, and separation at the periods of active child-rearing (CP) and the empty nest (EN). Thirty men and 30 women, equally divided between the two life stages, were randomly selected within a designated neighborhood from a pool of married people with a same-sex sibling within 3 years of their age. The relationship with this sibling was targeted because it is usually a highly charged one, both positively and negatively. A projective instrument, the Sibling Thematic Apperception Test, was used to elicit underlying feelings about the relationship, because traditional methods of assessment have failed to tap the negative qualities of sibling relationships. Results showed no differences in affiliation theme frequencies for the CP and EN men and women contrary to previous findings. Separation themes, however, were more frequent for CP than for EN men and women, suggesting that the desire to separate from siblings reflects a developmental process related to bonding with the family of procreation. Although there were no sex differences within life periods, stories about sisters had more conflict themes than stories about brothers, an unusual finding which might be attributed to the use of an in-depth approach. (A seven-page list of references and three data tables are appended.) (Author)
A Comparison of Thematic Apperceptions of Sibling Affiliation, Conflict, and Separation at Two Periods of Adulthood

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2

Abstract

The quality and stability of sibling relationships during adulthood were assessed by comparing TAT themes of sibling affiliation, conflict, and separation at the period of active child-rearing (CP) and the empty nest (EN). Thirty men and thirty women, equally divided between the two life stages, were randomly selected within a designated neighborhood from a pool of married people with a same-sex sibling within three years of their age. The relationship with this sibling was targeted because it is usually a highly charged one, both positively and negatively. A projective instrument, the Sibling Thematic Apperception Test, was used to elicit underlying feelings about the relationship, because traditional methods of assessment have failed to tap the negative qualities of sibling relationships. Results showed no differences in affiliation theme frequencies for the CP and EN men and women contrary to previous findings. Separation themes, however, were more frequent for CP than for EN men and women, suggesting that the desire to separate from siblings reflects a developmental process related to bonding with the family of procreation. Although there were no sex differences within life periods, stories about sisters had more conflict themes than stories about brothers, an unusual finding, which might be attributed to the use of an in-depth approach.
A Comparison of Thematic Apperceptions

of Sibling Affiliation, Conflict, and Separation

at Two Periods of Adulthood

The importance of interpersonal relationships to mental health (e.g. Liem & Liem, 1978), to physical health (Pilisuk & Minkler, 1980), and as a buffer to stressful life events (Lowenthal & Haven, 1968) has recently become an important focus of social science research. As the social network shrinks in later years, however, this essential resource is threatened. Several studies have examined the social network of older people in particular, asking which members are in frequent contact (Leigh, 1982); provide financial aid, functional assistance, companionship (Scott & Roberto, 1981), emotional or psychological support (Noberini et al, 1981) (Noberini, Brady, & Mosatche, 1984; Knipscheer, 1979), and intimacy as emotional closeness (Cumming & Schneider, 1961; Adams, 1968). As in the study of interpersonal relationships generally (Hinde, 1979), the emphasis has been on the parent-child, and marital relationship. Occasionally, studies have turned to friendship, neighbors, and other relatives. It is within the category of "other relatives" that the present study is concerned, specifically with siblings.

Siblings are a unique social resource, especially when close in age, having shared the past, having bonded at an early, perhaps, critical period, and having the security of permanence, that blood and tradition provide. Yet, when studies have tried
to document the frequency of psychological, social and
instrumental support functions of siblings, brothers and sisters
have tended to fair poorly compared to other relationships (e.g.,
Knipscheer, 1979; Berardo, 1967; Cicirelli, 1982). Another
paradox is that, whereas contact frequency tends to decrease over
the years, feelings of affectional closeness seem to increase
(Brady, Mosatche, & Noberini, 1984). Perhaps such
inconsistencies indicate that psychological and behavioral
aspects of sibling relationships are independent of one another.
For instance, siblings might not help each other very often, yet
they may provide an essential "watchdog" function: keeping in the
background, but ready to step in when needed (Troll, 1983).

Several recent studies have attempted to tease out which of
the various sociological and psychological dimensions of the
sibling relationship vary or remain constant over the life-span.
Using retrospective (Mosatche, Brady, & Noberini, 1983; Gold,
1986) and cross-sectional data (Cicirelli, 1981; Noberini,
Mosatche, & Brady, 1983; Mosatche, Brady, Noberini, & Brody,
1984), between 7 and 26 dimensions have been sampled using both
structured scales (Cicirelli, 1981; Brady, Mosatche, & Noberini,
1983), and thematic coding schemes of open-ended personal
interviews (Mosatche et al, 1983, 1984; Gold, 1986). Results
vary as to whether or not the relationship improves and on what
dimensions.

The present study is an attempt to clarify the issues of
quality and stability of sibling relationships by decreasing the scope and increasing the depth of sibling research. The focus is limited to a study of the underlying feelings about siblings, independent of interaction patterns. Only two life periods are sampled, and they are defined, not by age, but by life situation. Further, a number of typical methodological practices are modified in an effort to reduce the effects of spurious influences on the variables of interest. For example, instead of relying on self-report measures, which are dependent upon conscious awareness and the willingness to disclose sensitive information, a projective technique is used. Also, instead of permitting subjects to select their emotionally closest sibling, a specific sibling relationship, which is typically highly-charged, is targeted. Finally, rather than use empirically derived descriptive categories, abstract categories, suggested by interpersonal personality theory are selected.

The original versus procreative family. Several studies support conventional wisdom (Bernard, 1942), cross-cultural observations (Weisner, 1982), and clinical impressions (Bank & Kahn, 1982) that when people marry and have children of their own, the sibling tie attenuates (Mosatche et al, 1983), as though preoccupations with their newly-created families preclude former involvements. After their children have departed from the parental home for careers and families of their own making, people again turn their thoughts to their siblings. The present
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study compares sibling relationships at these two periods, that of active childrearing (CP) and that of the empty nest (EN).

Because projective techniques have not been used before in lifespan studies of sibling relationships, the present study is exploratory. One possible set of predictions is that sibling relationships follow what David Schneider called the "hourglass effect" (Shanas, 1979) to describe the American kinship system. Accordingly, sibling affiliation should decrease during the childrearing years and increase during the empty nest; conflict should decrease during the empty nest; separation should increase during the childrearing years and decrease during the empty nest. Another set of possible predictions are based on the theoretical framework of depth psychology. If underlying feelings can be tapped, there might be considerable continuity in men's and women's feelings about their sibling during the CP and the EN periods. People might be less conscious of how they are thinking and feeling about them, however, and how these mental activities are affecting their day-to-day affect and behaviors.

Underlying feelings. An understanding of the quality of sibling relationships is most critical to any understanding of siblings as social support resources (Avioli, 1986), because brothers and sisters can be a source of stress (Ross & Milgram, 1982; Berezin, 1977) as well as comfort (Argyle & Furnham, 1983; Ross & Milgram, 1982; Cicirelli, 1980). A major problem in understanding the quality of the relationship is how to elicit
underlying feelings. Sibling research has relied exclusively on self-report data, with the result that people rarely mention any of the negative aspects of their relationships. This is in contrast to some unusual studies that also use self-report, but take pains to achieve a high degree of rapport and trust. Multiple interviews (Bank & Kahn, 1982), repeated group discussions (Ross & Milgram, 1982) and repeated observations (Abarbanel, 1983) provide ample evidence of the ambivalent and negative aspects of sibling relationships as well as the positive. These techniques, however, are difficult to use with rigorous controls and are extremely costly in terms of temporal and financial resources.

The projective technique used in this study, the Sibling Thematic Apperception Test (S-TAT), offers an alternative to the above forms of data-gathering. An adaptation of Henry Murray's TAT (Murray, 1943), it is efficient to administer, and provides systematic data on the private sibling experiences of adults based upon time-tested premises about projective processes.

Projection refers to "the naive or unconscious attribution of one's own feelings, attitudes or desires to others" (Morris, 1973). Applied to the TAT, it is assumed that when people tell stories to TAT cards, they are not necessarily aware of the feelings, attitudes, and desires in themselves that they project into their stories. Also, they are not aware that they are projecting, that is, attributing aspects of themselves into their
interpretations (Henry, 1956; Abt & Bellak, 1959).

The TAT is distinguished from other projective tests by the degree to which it gives insights into "dynamics" of interpersonal relationships, due to the nature of the pictures (Abt & Bellak, 1959). Therefore, it was ideal for the purposes of this study. Various modifications were made to assure that the thematic apperceptions described respondents' relationships to their target siblings.

Descriptive Categories. The underlying dimensions of the relationship that are compared at CP and EN periods are separation, affiliation, and conflict. These dimensions were chosen because they are recurrent sibling themes in empirical studies, clinical material, folklore, and literature. For instance, siblings need to separate psychologically (Siemon, 1980) and often do so geographically; people express strong feelings of closeness toward their siblings (e.g., Cumming & Schneider, 1961); and conflict, especially rivalry and resentment, persists (White, 1976), emerges (Ross & Milgram, 1980), or re-emerges (Berezin, 1977; Allan, 1977). Also, these three dimensions of sibling relationships correspond to the three general interpersonal needs of Murray (Murray, 1938), the "adient", "contrient", and "abient" needs, that lead to movement toward a liked other, toward a disliked other, and away from others, respectively. Similarly, Horney (1945) described three interpersonal tendencies or orientations: "toward", "against", "
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and "away from" others.

In this study a tendency or orientation toward siblings refers to a pull toward sibling based upon positive feelings, attitudes, and identifications demonstrated by apperceptions of affiliation: affection, admiration, concern, worry, desire to help, instances of help, enjoyment, sharing, etc. A tendency against siblings refers to a clashing of temperament, interests, or desires which could result in negative feelings and tension. It is demonstrated by apperceptions of interpersonal conflict: fighting, arguments, competition, jealousy, envy, resentment, dominance when it is not well-intentioned (for instance, aggressive dominance as opposed to nurturant dominance in Murray's [1938] classification scheme), and aggression in the sense of inflicting harm on another or transgressing another. A tendency away from siblings refers to functional, emotional, and attitudinal independence from or disinterest in the affairs and well-being of the siblings, demonstrated by apperceptions of separation: leave-taking, breaking away, aloofness, and trait oppositeness between sibling partners.

Methods

Subjects. Subjects were randomly selected from an eligible pool, previously drawn from a midwestern town as part of another study (see Bedford, 1986a, for details). The eligibility requirements were that the potential respondent be between the ages of 30 and 69, married and living with his or her spouse,
that they own their home, that they have a living sibling of the same sex within three years of their age, and that they be either at the child-rearing or empty-nest stage of the family career. Fifteen subjects were drawn from each of the following eligible groups: child present men and women, and empty nest men and women. Derived from Duvall's (1977) stages of the family life cycle, "child present" stipulated that one or more of the respondents' children who are still minors had not yet left home (Duvall's stages 2 and 6), and "empty nest" stipulated that the respondents' children were all grown and no longer living at home (stages 7 and 8).

The target sibling was a same-sex, closely-spaced one because this sibling is just as likely to be preferred as not preferred to others (Adams, 1968). Thus, there was no a priori bias as to the valence of sibling affect. This choice also had an advantage because age-near, and especially same-sex siblings are most likely to have had the greatest access to one another in childhood (Bank & Kahn, 1982), and, to have had a highly charged relationship in childhood (Furman & Buhrmester, 1984; Koch, 1960; Tesser, 1980). This is important because it is, most likely, the accumulated influences of earlier interchanges that make relationships able to exist over long periods without interaction (Hinde, 1979).

Detailed demographic descriptions of subjects and their siblings appear elsewhere (see Bedford, 1986a, 1986b). On the
whole they were upper middle class professionals, predominantly Caucasian and Protestant, and in remarkably stable marriages. Their ordinal position in their family of origin was equally divided between first, second, and later born, and compared to their targeted sibling, slightly more subjects were younger than older. Most live too far from this sibling to make a round-trip visit in one day, and frequency of contact is slightly less than the norm of once a month.

Instruments. A detailed description of how the S-TAT was developed, justification for deviations from the TAT, and administration procedures appear elsewhere (Bedford, 1986b). The S-TAT consists of six stimulus cards, each of which depicts an interpersonal scene involving two figures. Two cards were designed to suggest each of the three descriptive categories - separation, conflict, and affiliation. In order to maximize the opportunity for respondents to identify with one of the figures and to project their attitudes and feelings about the targeted sibling into their stories, instructions to subjects specified that the figures were pairs of sisters (or brothers) of roughly the same age and the figures themselves were redrawn accordingly. Thus, stimuli for male respondents depicted pairs of men (Form M), and stimuli for female respondents depicted pairs of women (Form W), and the ages of the figures were matched as closely as possible. An original card was designed to depict an affiliative scene because the original TAT series had only one.
Procedure. Tests were administered individually by the investigator to respondents, in their home, office, or the investigator's office. After signing an informed consent form, a demographic questionnaire was administered orally in order to avoid misunderstandings, to make sure all questions were completed, and to establish rapport with the subjects. Next, the S-TAT was administered. Based on results of several pre-tests, the S-TAT procedure essentially followed the one set forth by Atkinson (1958), in which subjects were asked to write their responses rather than dictate them orally, but they were given a 5-minute rather than a 4-minute time limit for responding to each of the six stimulus cards. The order of stimuli presentation was counterbalanced among respondents. Instructions were read aloud to the subject, the exact wording of which was borrowed in part from Murray (1943) and in part from McClelland (1975). Subjects were instructed to write a story about each picture, after looking at it briefly. The stories were required to have the following parts (which were listed on a sheet of paper and given to them to refer to while writing): 1. What is happening? 2. What has led up to that? 3. What is being thought? What is wanted? By whom? 4. What will happen? What will be done?"

This formal interview lasted between 60 and 90 minutes. Another instrument, not discussed here, was then administered, followed by a debriefing period in which the examiner asked whether the subject had questions about the interview. At this
point, most subjects wanted to talk about their own sibling relationships.

Coding. Projective data in this study were not analyzed for personality assessment, as they are typically but, rather, for relationship assessment. The manifest content of each story was analyzed by means of a coding system designed specifically for this study. The development of the system is explained in detail elsewhere (Bedford, 1986b) and a detailed coding manual can be obtained from the author. Half of the protocols were coded by two coders which provided data for a measure of inter-rater reliability.

The coding scheme thematically analyzed the S-TAT stories. Relationship "segments" were identified in a story and those that exemplified one of the three interpersonal orientations were scored. A total score for a subject consisted of a 3-tuple of numbers, composed of the three summed theme frequencies (affiliation, conflict and separation) that appeared in the six stories. Criteria for determining which theme to score was based on their definitions, and appear in the coding manual. Usually coding was straight-forward. For instance "These sisters are very different" exemplifies separation; "Brother R is arguing with Brother L", conflict; "She has come to her sister for advice", affiliation. When a segment did not meet the criteria for any of the themes, or when it was ambiguous it received no score. Inter-rater reliability scores were obtained on each of
three scores for each of the six stimuli using Pearson product moment correlations. All 18 scores were highly significant, ranging from .60 to .97. Thirteen of the 18 correlations were higher than .90 and only one was below .81. A single set of scores was easily arrived at by discussion between the two coders. All analyses were based upon these adjusted scores.

Results

Independence of the Themes. In order to determine whether the three themes should be analyzed separately or in some combination, their degree of independence from each other was assessed. Inter-correlations among total scores were computed using Pearson product moment correlations. The three correlations were low (ranging from -.23 to .09) and not statistically significant ($p > .05$). The theme scores appear to be orthogonal. In order to be certain that feelings of affiliation, conflict, and separation were unrelated regarding the targeted sibling rather than the total sibship generally, the above analysis was repeated with the sixteen subjects who had only the one, targeted sibling. Results were comparable, with correlations ranging from -.14 to .10 ($p > .05$).

Stimulus properties of S-TAT cards. Each of three pairs of cards were designed to elicit different themes. If this assumption was true, then each theme had approximately an equal probability of being elicited. If not, then the stimuli might be biased in favor of one theme over another and comparisons between
themes could not be made. Because figures in cards D and F were almost touching, they were expected to elicit the most affiliation themes; because the actions of figures appeared to be at cross purposes in cards B and E these cards were expected to elicit the most conflict themes; cards A and C were suggestive of separation themes because the figures were physically apart and were looking away from each other. To test this assumption a 3 x 3 (Card Pair x Theme) Analysis of Variance procedure was used with repeated measures on both factors. A significant Card Pair x Theme interaction ($F=20.59$, $df=4$, $p < .0001$) indicated that, as presumed, different card pairs did, in fact, elicit different themes. After computing one-way Analyses of Variance procedures for each card pair with repeated measures on theme, significant main effects were then subjected to the Scheffe Multiple Comparison Procedure in order to analyze how theme frequencies varied for each card pair. Results appear in Table 1. Only one prediction was supported unequivocally, and that was for card pair DF which, as expected, elicited affiliation themes more than the other two themes ($F=56.55$, $df=2$, $p=.0001$). Card pair AC, which was expected to elicit separation, favored no particular theme ($F=40$, $df=2$, $p=.67$). And card pair BE, which was expected to elicit conflict, elicited both conflict and affiliation equally ($F=15.89$, $df=2$, $p=.0001$).

In summary, the assumed card stimulus properties received only partial empirical support. One card pair unequivocally
supported the assumption. The other two pairs did not elicit the desired themes any more than they elicited other themes. Thus, while the cards used were reasonably successful in eliciting all three themes, they were not as discriminating as hoped for.

Within-theme, between-group comparisons. Because of the above-mentioned limitations on the stimulus value of the S-TAT cards, theme frequencies were not compared with each other. Separate comparisons were made between men and women and between child-status for each theme. Table 2 lists theme means and variances for each sex by child-rearing status combination.

Group differences were tested using a 2 x 2 (Sex x Child-Present Status) analysis of variance procedure on each of the three themes. Because of the violation of the homoscedasticity assumption, data were transformed by reducing outliers to the maximum value in the rest of the distribution. Because the ANOVA's on these data did not differ from those on the original data, only results using the original data are reported. They appear in Table 3.
Of the nine tests performed two are significant at the .05 level. Men and women are equally affiliative toward their sibling at both life phases. The same is true for conflict, but during both phases, women indicate more conflict in their sibling relationship than do men. The one difference found between the two life periods, is separation: the desire for distance from sibling is greater when children are still present in the home than during the empty nest.

Discussion

The major findings of this research are that EN participants did not feel any closer to their siblings than did CP subjects. Those still raising children, men and women, expressed more separation themes in their stories about their sibling relationship than did those again on their own. Conflict is a theme that women write about more frequently in stories about their sister, in general, than do men in stories about their brother. Another important finding is that the three themes of affiliation, conflict, and separation are orthogonal across subjects.

The finding of orthogonality of themes is consistent with Karen Horney's assumption that "normal" individuals integrate all three interpersonal tendencies in their behavior (toward,
against, and away from others), while disturbed individuals have a unidimensional approach, repressing or denying their contradictory tendencies. The present study found that the frequency of any one theme does not predict the frequency of another in describing feelings about a sibling. This supports Lowenthal, Thurnher, & Chiriboga's (1975) interpretation of their data about siblings, namely, that positive and negative qualities do not appear to be opposite poles of a single dimension, and it supports Bidelson's (1981) findings in a study of romantic relationships, that the need for isolation or independence and the need for intimacy with the same person is not a simple linear one. The present study also demonstrated that the desire for separation is not necessarily related to conflict.

The finding of constancy in affiliation and conflict in sibling relationships during the designated life periods supports the prediction that underlying feelings about siblings are fairly stable. Because this study is cross-sectional, group comparisons of the cohorts sampled (born between 1914 to 1954), merely suggest intra-individual change. Reminiscences, on the other hand, are a source of how individuals change over time, but objective experiences are modulated by current affect (Tobin, 1972), such as disapproval of earlier feelings, or they might be forgotten, or repressed (Gold, 1986). Other cross-sectional studies generally support stability of positive aspects of the relationship, but elicit too little data about the negative
qualities at any stage to be informative on these aspects (Lowenthal et al, 1975; Noberini et al, 1983; Mosatche et al, 1984). Studies that report changes in the relationship over time rely primarily on the reminiscences of old people (Ross, Dalton, & Milgram, 1980; Mosatche et al, 1983; Gold, 1986), indicating that, perhaps, it is people's conscious awareness of the relationships, or memories about it that vary systematically over the lifespan. More definitive results on intra-individual patterns must await studies that use longitudinal designs.

These two findings, suggesting that the affiliative and conflicting aspects of sibling relationships of men and women are the same at both life periods, contradict the changes found in interpersonal personality characteristics within family relationships and in general by Neugarten (e.g., 1977) and Gutmann (e.g., 1964). Gutmann attributed the changes to the demands that raising a family place upon them. Echoing the words of Jung (1933) thirty years earlier, his theory holds that the imperatives, of child-rearing require that women suppress their masculine (aggressive) aspects in order to respond appropriately to the emotional needs of their families, and that men suppress their feminine (affiliative, nurturant) aspects in order to provide for the physical needs of their families. After their children are grown, when there is no longer a need for such polarization, men and women can reclaim their suppressed nature. These findings originally came from the large, representative,
Kansas City sample, but Gutmann (1975, 1977) has since replicated the differences he found for urban American men in a series of cross-cultural studies.

The finding that separation is greater during the CP than the EN phase supports the validity of the hourglass effect for describing the American kin system. That separation was the dimension that differed between the two life periods sampled, suggests that, contrary to research findings and clinical intuitions that siblings are less close or less salient while raising children, men and women merely desire distance from their siblings. This need makes sense from a developmental perspective, in that it facilitates bonding with the family of procreation.

The finding that women express more conflict in the relationship at both periods than do men would seem to contradict nearly all sibling studies. Such studies, however, found sisters to be more affectionally close than brothers, having either not asked about conflict (e.g., Adams) or not elicited enough conflict data to warrant analysis (e.g., Gold, 1986). The one exception is Lowenthal and her colleagues' (1975) finding that both negative and positive feelings are greater for sisters than for brothers. In their study, sibling affect ratings were judgments made on in-depth interview data, which suggests that, at least where conflict is concerned, both studies might be tapping feelings that are not typically reported.
Conclusion

It is only in the 1980's that adult sibling relationships have become a focus of research (with a few notable exceptions such as Cicirelli's work). In a few short years, methodologies have been tested, and some important issues have been defined. The present study has contributed by its emphasis on the quality of sibling relationships and how to elicit that information, given its sensitive nature. The results need to be replicated on broader samples and with target siblings that vary in age-spacing and sex. The meaning of continuity and change in sibling relationships over the periods sampled and for men and women within those periods will have to be tested using a longitudinal design. By experimenting with other coding systems, systems that are more detailed, it might be possible to document at what level continuity and change occur. For instance, perhaps siblings sustain one level of affiliation but it gets transformed from affection to respect or vice versa. Finally, it would be ideal to do prospective in-depth case studies of pairs of siblings in order to learn whether patterns of constancy and change in the dynamics of sibling relationships is restricted to some types of relationships and not others. This kind of information has practical implications for evaluating and improving sibling relationships.
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References


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University, New Brunswick, New Jersey.


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York: Academic.


A Comparison

Society of America.


Tobin, S. S. (1972). The earliest memory as data for research in


Table 1.

Assumed and Empirical Stimulus Properties of Card Pairs

<table>
<thead>
<tr>
<th>CARD PAIR</th>
<th>ASSUMED THEME</th>
<th>TESTED THEME</th>
<th>MEAN SCORE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A C</td>
<td>SEPARATION</td>
<td>AFFILIATION</td>
<td>3.29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONFLICT</td>
<td>3.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SEPARATION</td>
<td>3.62</td>
</tr>
<tr>
<td>B E</td>
<td>CONFLICT</td>
<td>AFFILIATION</td>
<td>4.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONFLICT</td>
<td>3.85</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SEPARATION</td>
<td>2.08*</td>
</tr>
<tr>
<td>D F</td>
<td>AFFILIATION</td>
<td>AFFILIATION</td>
<td>6.52*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CONFLICT</td>
<td>3.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SEPARATION</td>
<td>1.61</td>
</tr>
</tbody>
</table>

*This theme was significantly different from the others for the card pair indicated (p < .05).
Table 2.

Descriptive Statistics\(^1\) for Each Sex by Child Status Combination.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Child Status</th>
<th>Theme</th>
<th>Mean</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>CP</td>
<td>Affiliation</td>
<td>14.2</td>
<td>39.7</td>
</tr>
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<td></td>
<td></td>
<td>Conflict</td>
<td>11.7</td>
<td>38.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Separation</td>
<td>9.2</td>
<td>12.6</td>
</tr>
<tr>
<td>EN</td>
<td>Affiliation</td>
<td>15.7</td>
<td>66.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conflict</td>
<td>11.7</td>
<td>74.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Separation</td>
<td>7.0</td>
<td>10.7</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>CP</td>
<td>Affiliation</td>
<td>13.7</td>
<td>24.7</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Conflict</td>
<td>9.1</td>
<td>18.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Separation</td>
<td>8.4</td>
<td>18.1</td>
</tr>
<tr>
<td>EN</td>
<td>Affiliation</td>
<td>13.5</td>
<td>11.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Conflict</td>
<td>7.1</td>
<td>12.6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Separation</td>
<td>5.7</td>
<td>13.8</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\)All decimals are rounded to the nearest 10th.
Table 3.

**Analysis of Variance Table on Total Theme Frequency Scores**

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX (S)</td>
<td>1</td>
<td>186.05</td>
<td>6.601</td>
</tr>
<tr>
<td>CHILD STATUS (C)</td>
<td>1</td>
<td>38.27</td>
<td>1.36</td>
</tr>
<tr>
<td>S X C</td>
<td>1</td>
<td>22.05</td>
<td>0.73</td>
</tr>
<tr>
<td>BETWEEN SS</td>
<td>56</td>
<td>28.20</td>
<td></td>
</tr>
<tr>
<td>THEME (T)</td>
<td>2</td>
<td>697.71</td>
<td>24.252</td>
</tr>
<tr>
<td>T X S</td>
<td>2</td>
<td>30.35</td>
<td>1.05</td>
</tr>
<tr>
<td>T X C</td>
<td>2</td>
<td>37.67</td>
<td>1.31</td>
</tr>
<tr>
<td>T X S X C</td>
<td>2</td>
<td>2.22</td>
<td>0.08</td>
</tr>
<tr>
<td>WITHIN SS</td>
<td>112</td>
<td>28.77</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>179</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\[ p < .05. \]
\[ p < .0001. \]
Footnotes

1. Current address: The Kinsey Institute for Research in Sex, Gender, and Reproduction, Indiana University, Bloomington, IN 47405.


3. A relationship segment is a "referential unit" (Krippendorf, 1980), a unit that is defined by their reference to a particular phenomenon, in this case the sibling relationship. The reference could be either explicit or implicit.

A Comparison