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Sibling Relationships in Emerging Adulthood and in Adolescence

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In this study, 116 emerging adults and adolescents completed questionnaires and were interviewed about their relationship with a sibling. Respondents’ siblings and their mothers also rated the quality of the sibling relationship. Emerging adults were found to spend less time and to be less involved in joint activities with their siblings than adolescents, but they reported being more involved in emotional exchanges with and feeling more warmth toward their siblings. Conflict and rivalry were also reported by emerging adults to be less intense than by adolescents. Narrative analyses showed that emerging adults had a more mature perception of their relationship with their siblings. Unlike in adolescence, the quality of emerging adults’ relationships with their siblings was less related to their relationship with their parents. The results are discussed in the framework of changes in close relationships from adolescence to emerging adulthood.

Keywords: sibling relationships; adolescence; emerging adulthood; family relationships

The sibling relationship has been described as the most enduring of all familial relations, and, despite its secondary significance, it remains unique and influential (Bank & Kahn, 1997; Goetting, 1986). Sibling research in the past two decades has focused mainly on either childhood relationships among siblings or relationships among old-age siblings (Stewart, Verbrugge, & Beilfuss, 1998). The lack of an integrated picture of the developmental course of sibling relationships was indicated by Cicirelli (1995), who noted that the greatest gap in knowledge about the sibling relationship exists for the period of young adulthood (Cicirelli, 1995). This study set out to compare sibling relationships in emerging adulthood with those in adolescence by a
quantitative, as well as a qualitative, approach. In addition, we examined how the quality of relationships with parents was associated with the quality of sibling relationships during these two developmental periods.

What is the developmental course of sibling relationships? They include warmth and siblings’ involvement in each other’s lives, as well as conflict and rivalry, and are best described as emotionally ambivalent (Deater-Deckard, Dunn, & Lussier, 2002). During childhood, siblings are a fundamental part of most children’s social world. Emotional ties among siblings are strong, being intensely positive and negative. Siblings can be playmates, caretakers, sources of support, or major nuisances (Furman & Giberson, 1995). In particular, during early childhood, sibling relationships are characterized by property disputes (Ross, 1996) and competition for parents’ attention (Teti, 2002).

With age, sibling relationships undergo developmental transformations and become more egalitarian and more symmetrical (Buhrmester & Furman, 1990). Adolescents need to develop their own identity and separate emotionally from parents and show growing interest in the wider world, friends, and romantic partners. This development may lead to decreased interest in their siblings and joint activities (Dunn et al., 1994a) and a decline in both positive and negative interaction (Buhrmester & Furman, 1990). Early adolescents reported less companionship and less conflict with their siblings than did younger children (Cole & Kerns, 2001), and their relationships became less intensive (Buhrmester & Furman, 1990). Twelfth graders reported feeling more distant from and spending less time with their siblings and less affection, intimacy, and caring by siblings than 3rd, 6th, and 9th graders (Buhrmester & Furman, 1990). The decreased intensity was also reflected in less quarreling, antagonism, and competition, and issues of power and status became less relevant (Buhrmester & Furman, 1990, p. 1396). However, more recent findings suggest that, despite the growing distance and decrease in joint activities, the emotional attachment between siblings remains moderately strong throughout adolescence (Cole & Kerns, 2001). In their longitudinal study, Updegraff, McHale, and Crouter (2002) showed that approaching late adolescence, participants reported an increase in intimacy with their siblings. Moreover, findings by Tucker, McHale, and Crouter (2001) suggested that 13- and 16-year-olds described their older siblings as sources of support in social and scholastic issues, as well as in familial issues. In sum, the increased autonomy and emotional separateness from the family during adolescence is reflected also in a growing distance among siblings (Buhrmester & Furman, 1990). Still, evidence exists that, despite this increased distance in age, intimacy and caring between adolescent siblings...
may increase. Note, however, that the majority of studies on age differences in sibling relationships have been cross-sectional.

The transition into adulthood is characterized by further transformations in the life of young people and their families. During the first years of the third decade of life, termed as emerging adulthood (Arnett, 2000), young people start to move to a separate residence and invest in economic or educational endeavors and establish intimate relationships with a romantic partner. This is paralleled by decreased intensity of interactions with family members (Bedford, 1989; White & Riedmann, 1992). The nature of sibling interaction is voluntary rather than dictated by parental wishes or other external conditions (Stewart et al., 2001). Emerging adults reported lower levels of conflict with their siblings than adolescents, evinced in less quarreling, less antagonism, less competition, and less conflict related to power (Stewart et al., 2001). These results probably reflect the little time that emerging-adult siblings spend together, or show that emerging-adult siblings who do not get along well may simply choose to have little contact (Stocker, Lanthier, & Furman, 1997). Yet it would be incorrect to assume that, in the third decade of life, siblings become peripheral to each other’s lives. On the contrary, the reduction in conflict may be attributable to emerging-adult siblings’ greater ability to negotiate disagreements and their favoring negotiation over coercion (Laursen, Finkelstein, & Betts, 2001). This may contribute to an increased sense of closeness and warmth between them. Stewart et al. (1998) suggested that young adults may feel close to their siblings, though their relationship may not be intensive on a daily basis. College women reported as much emotional support from the sibling they rated as closest as they did from their mother (Cicirelli, 1980).

Sibling relationships in emerging adulthood are probably transformed to address the developmental changes and the progress taking place at this stage of life (Goetting, 1986). Consolidating a separate identity and feeling more confidence in one’s individuality and ability to value the shared and intertwined histories with his or her sibling (Teti, 2002) may change the nature of sibling relationships during this period. However, research on sibling relationships in emerging adulthood is sparse, therefore, not much is known about their nature and the extent to which they differ from sibling relationships in adolescence. In their study, Stocker et al. (1997) showed that emerging adults may still have ambivalent feelings—of warmth as well as conflict or rivalry—toward their siblings. Yet because of the decreased intensity in sibling relationships with age (Buhrmester & Furman, 1990), it is reasonable to examine whether the extent to which conflict and rivalry will be lower in emerging-adult siblings than in adolescent siblings. On the other hand, warmth between siblings may increase as day-to-day competition becomes
less intensive. As noted, Cicirelli (1980) indicated that emerging-adult college women felt that they could turn to their closest sibling when in need of advice and guidance. This attests to the addition of a new quality to the relationship between siblings. They can become a source of potential support, or an important source of advice, that can be relied on, despite the lower incidence of daily interaction or involvement (Seginer, 1998; Tucker, Barber, & Eccles, 1997). Examination of sibling relationships of emerging adults could then clarify what form they take compared with the relationships manifested by adolescent siblings. Moreover, a qualitative description of sibling relationships in emerging adulthood, as conducted in this study, could further highlight possible unique characteristics of sibling relationships during this developmental stage.

Sibling research has indicated two additional aspects that have to be considered when relationships between siblings are assessed: relative birth order, namely whether the sibling is younger or older, and gender of the sibling. Children’s experiences with siblings differ greatly depending on whether they are older or younger. Older siblings inherit some positions of authority and responsibility, and children were found to be satisfied more and to quarrel less with older siblings than with younger siblings (Buhrmester & Furman, 1990; Furman & Buhrmester, 1985). Older siblings were described as being more a source of support and advice (Seginer, 1998; Tucker et al., 1997). With regard to gender, women were perceived to be more involved in their close relationships than men, and the sister-sister relationship was described as the most intensive bond among siblings. In studies on siblings in childhood and adolescence, sister-sister pairs scored highest on warmth and intimacy (Dunn et al., 1994b), felt most similar, and served as close companions to each other (Buhrmester & Furman, 1990). Among early adolescence, female siblings were most likely perceived to generate emotionally supportive outcomes (Howe, Aquan-Assee, Bukowski, & Rinaldi, 2001). In contrast, participants in boy-boy sibling dyads reported less caring, less intimate exchange, and less coping resolution than participants in girl-girl dyads (Cole & Kerns, 2001). Therefore, for a better understanding of sibling relationships in emerging adulthood, the relative birth order and the gender of siblings have to be considered. The sibling literature also deals with mixed-gender relationships (Buhrmester & Furman, 1990; Cole & Kerns, 2001), but this study focused only in same-gender dyads.

Sibling relationships are an integral part of the family system. Theories emphasized the interrelatedness among relationships and suggested that the nature and pattern of one subsystem affect and sometimes even carry over into another subsystem in the family (Bowlby, 1973; Shulman & Collins,
Thus, a positive family atmosphere is likely to be related to warm sibling relationships, whereas a distressed atmosphere will probably be related to negative sibling relationships. In addition, Furman and Giberson (1995) suggested that conflicts with parents could increase the likelihood that children will be irritated and discharge their anger onto their siblings. Parents may influence their children’s interpersonal relationships directly by giving advice and intervening in their interactions and disputes (McHale, Updegraff, Tucker, & Crouter, 2000), or indirectly by modeling social behavior or regulating their children’s emotions and behaviors (Parke & O’Neil, 1999). Previous research showed that children, whose relationships with parents were characterized by warmth, reported exhibiting less hostility and rivalry and more affection toward their siblings (Stocker & McHale, 1992). In contrast, parental assertion of power was related to a higher frequency of conflict between siblings (Furman & Giberson, 1995). Also, differential treatment of children by parents and the manner in which parents responded to sibling conflicts were related to lower warmth among siblings (Furman & Giberson, 1995). Children are less likely to learn effective conflict-resolution strategies when parents manage their disputes (McHale et al., 2000).

With the advent of adulthood, relationships with the family undergo transformations. Emerging adults, at least in Western cultures, are expected to develop higher levels of individuation, displayed in the capacity to rely on oneself and to make independent decisions and follow through with them (Arnett, 2000; Hauser & Greene, 1991; Steinberg, 2002). This developmental task is achieved within a continuous close and supportive relationship with parents, when an emerging adult has the feeling that his or her parents give their blessing and acquiesce in his or her becoming a separate adult and developing a mature relationship with them (Frank, Avery, & Laman, 1988).

Thus, together with the growing distance from parents and the family, emerging adults are still quite concerned with meeting their parents’ expectations and are in need of parental assistance in coping with age-related demands (Youniss & Smollar, 1985). When parental availability, support, and respect for the emerging adult’s endeavor is not secured, they may have difficulty accomplishing the developmental tasks of this transitional stage (O’Connor, Allen, Bell, & Hauser, 1996). Difficulties in establishing a balanced and mature relationship with parents and the family may be reflected in relationships with siblings, because, as noted above, a relational pattern in one subsystem can be expressed in another. In addition, maturity is also reflected in the ability to understand the parents and their perspective (Frank et al., 1988; Shulman, Feldman, & Maurer, 2001). Such maturity, when
attained, may be well reflected in more mature and positive relationships with siblings too.

This study examined sibling relationships of Israeli youngsters. Relationships with close others and sibling relationships, in particular, reflect the social and economic characteristics of the culture in which they are embedded (Schneider, Smith, Poisson, & Kwan, 1997). Despite being a society with strong communal values, the Jewish culture in Israel more closely resembles the Western-individualistic culture (Katriel, 1991; Triandis, 1989). Though heterogeneous in culture, the Israeli Jewish family is mainly of a nuclear type, stressing democratic family relations and espousing individualistic values similar in many ways to other Western countries (Florian, 1989). Mutual commitment to family members is less strong than in traditional societies (Scharf & Hertz-Lazarowitz, 2003; Schlegel & Barry, 1991; Triandis, 1989). Likewise, as in other industrial societies, emerging adulthood is characterized by a prolonged period of autonomous exploration. Entry into adult roles and responsibilities is postponed (Arnett, 2000), allowing emerging adults to explore their family and sibling relationships also.

In sum, research on sibling relationships in emerging adulthood is sparse, and the nature and the extent to which they differ from sibling relationships in adolescence needs to be further examined. Extending previous research, our research questions were examined by using quantitative, as well as qualitative, methods and comparing sibling relationships of adolescents and of emerging adults in non-North American cultural context. In addition, the linkage between sibling relationships and the relationships with parents in these two developmental periods was investigated. Three major questions were addressed in this study:

1. To what extent are sibling relationships in emerging adulthood different from those during adolescence? (We hypothesized that emerging adults will report less intensive relationships with their siblings than adolescents, but will report more warmth and less conflict and rivalry.)

2. What is the role of relative birth order and gender? (We also expected that, during adolescence and emerging adulthood, individuals will have warmer relationships with their older siblings than with their younger siblings and that more warmth and less conflict and rivalry will be found in sister-sister bonds than in brother-brother bonds.)

3. To what extent are relationships with parents associated with the quality of sibling relationships? (We hypothesized that more mature relationships with parents and being less dependent on the parents will be related to more warmth and less conflict in sibling relationships.)
METHOD

Participants

Participants in the study were 116 Israelis (64 females and 52 males). They consisted of 56 adolescents in the age range of 14 to 18 years old (M = 15.71 years, SD = 1.09) and 60 emerging adults in the age range of 21 to 25 years old (M = 23.8 years, SD = 1.69). Mean level of adolescents’ education was 10.0 years of schooling, and the standard deviation was 1.07. Mean level of emerging adults’ education was 13.36 years of schooling, and the standard deviation was 1.58. Participants were included in the study if they had a same-gender sibling within an age range of 4 years. Mean number of siblings in the present sample was 2.51, and the standard deviation was 1.32. In cases where a participant had more than one sibling within the age range of 4 years, the sibling closest in age was included in the study. Mean age of siblings of adolescent participants was 14.85 years, and the standard deviation was 3.64. Mean age of siblings of emerging-adult participants was 23.13 years, and the standard deviation was 3.90. Forty-eight participants (41%) had older siblings, and 68 had younger siblings (55.6% of the adolescents and 58.2% of emerging adults were the older siblings). Fifty-eight percent of the emerging adults lived with their families (parents and siblings), and the rest lived by themselves or with a romantic partner but lived relatively close to their families (up to a distance of a 1-hr drive). Only intact families were included in the study to avoid diverse sources of variation. The divorce rate in Israel is 8.5%, thus, including only intact families does not greatly compromise the representativeness of the sample. We also limited our choice of participants to same-sex pairs of siblings to allow examination of the research questions with a large enough sample. Siblings of different genders reported less conflict in their relationships than siblings of the same gender (Stock et al., 1997; Buhrmester & Furman, 1990; Furman & Buhrmester, 1985; Minnett, Vandell, & Santrock, 1983). To meet statistical power considerations, we decided to focus in this study on same-sex dyads only, rather than split the sample into smaller groups of various dyads.

Emerging adults were included after their consent was given. Adolescents were included after parental consent was given as well. Adolescents were recruited in their schools. Notices asking people in their 20s to participate in the study were posted on a university campus and at community centers in the Tel Aviv metropolitan area. After making contact, participants were interviewed at their homes. Participants were sampled in urban neighborhoods whose residents are lower middle-class and middle-class socioeconomic status. Respondents’ siblings, as well as mothers, rated the quality of the sibling
relationships. Eighty-five percent of eligible adolescents agreed to participate in the study.

Measures and Procedure

*Relationship Closeness Inventory.* A revised version was employed to assess two interaction indices. Interaction frequency represented the duration of contact (in minutes) with the sibling during a morning, an afternoon, and an evening in the preceding week. The total time of contacts, representing interaction frequency with the sibling, was calculated separately for an ordinary morning, afternoon, or evening in the preceding week. Berscheid, Snyder, and Omoto (1989) found reports of frequency of interaction to possess acceptable test-retest reliability across a period of 3 to 5 weeks (r = .81 for test-retest total scale reliability).

*Activity diversity.* Activity diversity described the number of different activities that a participant engaged in together with the targeted sibling separately in the preceding week. Participants identified activities from a 38-item checklist. Items were classified conceptually by two judges and were grouped to represent three different activities: emotional exchanges (3 items; e.g., discussed personal matters), outdoor activities (23 items; e.g., went to a restaurant), and indoor activities (12 items; e.g., watched television). The psychometric properties in the current sample are satisfactory (reliability for the total scales was .81) and resemble those reported by Berscheid et al. (1989).

*Index of Affective Relationships.* The Index of Affective Relationships (Takahashi & Nagima, 1994) was employed to measure intensity of affective relationships, namely confidence in the availability of the sibling targeted in this study. In its original form, this is a self-report instrument consisting of 18 statements describing affective desires to rely on or to be with a significant figure in the life of the adolescent. In this study, an adapted and shortened version of the instrument was used, comprising 13 items. For each item, respondents were asked to rate, on a scale from 1 (*never true*) to 5 (*always true*), the extent to which a statement characterized their relationship with the targeted sibling (e.g., “When I receive bad news, I want to be with my sibling,” “I want to share pleasant feelings with my sibling”). Mean score for affective intensity with the sibling was computed. Cronbach’s alpha in this shortened version, with regard to the sibling, was .76. The reliability and validity of the scale were demonstrated (Takahashi & Sakamoto, 2000).
Adult Sibling Relationship Questionnaire (ASRQ). The ASRQ (Stocker et al., 1997) was used to assess participants’ perceptions of their own behavior and feelings toward the targeted sibling, as well as their perceptions of their sibling’s behavior and feelings toward them. The questionnaire consists of 81 items grouped into 14 scales, representing three factors: Warmth included the Intimacy, Emotional-Support, Affection, Knowledge, Instrumental Support, Similarity, Admiration, and Acceptance scales. Conflict included the Dominance, Competition, Antagonism, and Quarreling scales. Rivalry included the maternal- and paternal-rivalry scales. Participants were asked to rate, on a level from 1 (hardly at all) to 5 (extremely much), the extent to which a statement characterized the relationship. Rivalry items were rated on a scale from 1 (neither sibling is favored) to 3 (parents usually favor one child over the other). Stocker et al. (1997) showed that the scales can be grouped into the three factors explaining 71% of the variance, and they provided evidence of its reliability and validity. The questionnaire was translated into Hebrew and then retranslated into English by two persons fluent in both languages. Internal consistencies of the 14 scales for the current sample were satisfactory, ranging from .65 to .91. A factor analysis also revealed a factor structure similar to that reported on the original sample.

In the current study, the ASRQ was also completed by the targeted sibling and by mothers. Psychometric properties (internal consistencies and factor structure) for siblings’ and mothers’ ratings of siblings’ relationships were similar to those of the participants. The only exception was with regard to mothers’ rating of competition, which yielded a somewhat lower internal consistency of .59.

Psychological Separation Inventory. For the Psychological Separation Inventory (Hoffman, 1984), two indices from the questionnaire were used to assess the quality of the relationship with parents and were completed only by target participants: functional dependence, measuring dependence on parents in managing and directing one’s practical and personal affairs (e.g., “When I’m in a difficult situation, I consult with my parent on what to do”), and conflictual dependence, measuring the extent of freedom from excessive guilt, anger, mistrust, and resentment in relation to parents (e.g., “I feel like I am constantly at war with my parent”). Participants completed these inventories, with regard to their mother and to their father. Participants were asked to rate on a scale from 1 (low) to 5 (high) the extent to which a statement characterized their relationship with a respective parent. Higher scores indicated higher dependence on parents. Cronbach’s alphas for the functional dependence subscale were .87 for fathers and .84 for mothers. Cronbach’s alphas for conflictual dependence were .89 for fathers and .90 for mothers.
Sibling perception interview. In addition, participants were interviewed and asked to speak for 5 minutes about their sibling, relating “what kind of person your brother or sister is?” “how you get along together,” and “have you experienced any change in your relationship in recent years?” The verbal samples were tape recorded and transcribed verbatim and were rated independently by two raters. The 5-point, 1 (low) to 5 (high), rating scales were as follows: positive perception of the relationship (the extent to which the relationship was described as positive and special), friendship (the extent of perceiving sibling as peer, personal disclosure, giving and receiving support in the relationships), similarity (extent of perceived similarity to sibling in interests, characteristics, behavior, etc.), difference (extent of perceived difference from sibling in appearance, characteristics, behavior, etc.), individualization (the extent to which one expresses oneself authentically within the sibling relationship), and separateness (the extent to which differences are acceptable and respected in the relationship).

The transcripts were also assessed on a 3-point scale for the extent to which change had occurred in the relationship in the recent years: 1 (no change), 2 (positive change), and 3 (negative change). In addition, the organization and coherence of the description of the sibling were coded: (a) a constricted and feeble description of the sibling or a banal description, focusing on activities rather than describing the relationships; (b) a flooded and incoherent description of the sibling, with wide fluctuations, deviating frequently to recent interactions that induced anger; and (c) an organized, coherent description of the sibling, with the participant being able to see his or her part in the relationship, and signifying its positive and negative aspects.

The two coders (the first and the third authors) rated independently all the transcripts, with intraclass correlations among raters ranging between .66 and .89. Agreement, with regard to the Organization and Coherence scales, was only $\kappa = .60$. All disagreements were conferenced to consensus.

RESULTS

We first describe age (adolescent or emerging adult), gender, and relative birth-order (older or younger) differences with regard to quantitative and qualitative aspects of siblings’ interactions and relationships. Then, we report on the linkages between the quality of relationships with parents and with siblings. In all the analyses, residence (living or not living with family) was controlled as a covariant in analyses of variance and was entered first in regression analyses. Place of residence was not found to be related to any of the dependent variables.
Quality of Relationship With Siblings in Adolescence and in Emerging Adulthood

**Interaction frequency.** An age (adolescent or emerging adult) × gender × relative birth order (older or younger) MANOVA was conducted to assess the mean levels of interaction frequency across age, gender, and relative birth order. Interaction frequency across morning, afternoon, and evening was the dependent variable. One main effect of age was found, $F(3, 112) = 2.84, p < .05, \Delta \eta = .08$. Univariate ANOVAs revealed a significant age difference with regard to interaction frequency in the afternoon $F(1, 114) = 6.33, p < .05, \Delta \eta = .06$. Emerging adults spent less time with their sibling on an ordinary afternoon than adolescents did, $M = 65.00$ min ($SD = 122.19$) versus $M = 163.94$ min ($SD = 216.62$), respectively.

**Activity diversity.** An age (adolescent or emerging adult) × gender × relative birth order (older or younger) MANOVA was conducted to compare the mean level of activity diversity across age, gender, and relative birth order. Two main effects emerged for age, $F(3, 98) = 7.58, p < .001, \Delta \eta = .19$, and gender $F(3, 98) = 5.35, p < .01, \Delta \eta = .14$. In addition, a significant interaction of age × gender × relative birth order was found $F(3, 98) = 4.26, p < .01, \Delta \eta = .12$. Follow-up ANOVAs and simple main effects of age, gender, and relative birth order on each index of activity diversity are presented in Table 1.

As can be seen, emerging adults reported more emotional exchanges with their siblings than adolescents did. In contrast, adolescents reported more outdoor and indoor activities with their siblings than emerging adults. As can be seen, females reported more emotional exchanges with their sisters than males with their brothers. Finally, a third set of follow-up ANOVAs comparisons yielded two significant differences. Adolescent females reported less emotional exchanges with older sisters than with younger sisters, $F(1, 114) = 6.44, p < .05, \Delta \eta = .06, M = 4.50$ ($SD = 0.92$) versus $M = 5.30$ ($SD = 1.18$) respectively, and adolescent males reported more involvement in outdoor activities with older brothers than with younger brothers, $F(1, 113) = 8.60, p < .01, \Delta \eta = .08, M = 27.53$ ($SD = 3.43$) versus $M = 25.16$ ($SD = 1.42$), respectively.

**Affective intensity.** An age (adolescent or emerging adult) × gender × relative birth-order (older or younger) analysis of variance was conducted to compare mean level of affective intensity across age, gender, and relative birth order. The main effects were not significant. One significant interaction of age X gender was found, $F(1, 114) = 4.32, p < .05, \Delta \eta = .04$. Post hoc comparisons revealed that adolescent males reported higher affective intensity in
TABLE 1: Activity Diversity With Siblings in Adolescents and Emerging Adults, Males and Females: Means, Standard Deviations, and F Levels

<table>
<thead>
<tr>
<th></th>
<th>Adolescents (n = 56)</th>
<th>Emerging Adults (n = 60)</th>
<th>Boys</th>
<th>Girls</th>
<th>F age</th>
<th>F gender</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
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<tr>
<td>Emotional exchanges</td>
<td>2.37</td>
<td>.53</td>
<td>2.59</td>
<td>.44</td>
<td>2.36</td>
<td>.50</td>
</tr>
<tr>
<td>Outdoor activities</td>
<td>13.02</td>
<td>1.19</td>
<td>12.48</td>
<td>1.36</td>
<td>12.97</td>
<td>1.65</td>
</tr>
<tr>
<td>Indoor activities</td>
<td>6.30</td>
<td>.86</td>
<td>5.76</td>
<td>.68</td>
<td>6.00</td>
<td>.94</td>
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</table>

*p < .05. **p < .01. ***p < .001.
their relationship with their brothers than young adolescent females reported regarding their relationship with their sisters, $M = 3.34$ ($SD = 0.68$) versus $M = 3.15$ ($SD = 0.68$), respectively. In contrast, emerging adult females reported higher affective intensity in their relationship with their sisters than adolescent males did regarding their relationship with their brothers, $M = 3.41$ ($SD = 0.55$) versus $M = 3.09$ ($SD = 0.58$), respectively.

**Quality of sibling relationship.** An age (adolescent or emerging adult) gender relative birth-order (older or younger) MANOVA with repeated measures was conducted to assess the mean level of the quality of sibling relationship across age, gender, and age of sibling, with three levels of repeated measures (report by respondent, sibling, or mother) within each relationship quality index. One main effect emerged for age, $F(3, 112) = 12.03$, $p < .001$, $\Delta \eta = .26$, and one for the repeated measure, $F(6, 110) = 5.14$, $p < .001$, $\Delta \eta = .22$. The first set of follow-up ANOVAs revealed age differences on factors of conflict and warmth. Means, standard deviations, and $F$ levels are presented in Table 2. As can be seen, relationships of emerging adults with their siblings were described by three raters (respondents, siblings, and mothers) to be warmer and less conflictual than relationships of adolescents with their siblings.

The second set of follow-up ANOVAs revealed one significant difference on the factor of rivalry, $F(2, 220) = 3.33$, $p < .001$. Post hoc comparisons revealed that mothers described higher levels of rivalry between their children than did respondents and their siblings, $M = 0.64$ ($SD = 0.66$) versus $M = 0.31$ ($SD = 0.49$) and $M = 0.39$ ($SD = 0.48$), respectively.

Together, reports from the three sources of information, namely participants, their siblings, and their mothers, showed that emerging adults had warmer and less conflictual relationships with their siblings than adolescents had. Pearson correlations among the different reporters (self and sibling, self and mother, sibling and mother) were warmth .65, .54, and .60, respectively; conflict .68, .48, and .65, respectively; and rivalry .22, .12, and .23, respectively. Thus, the three reporters perceived similarly the warmth and conflict in the sibling relationships, whereas their perception regarding rivalry in the relationships was less similar. This probably reflected each individual’s inner subjective feelings, which could be less explicit than warmth and conflict.

**Qualitative rating of the relationship.** An age (adolescent or emerging adult) gender relative birth-order (older or younger) MANOVA was conducted to assess the mean levels of the qualitative ratings of the relationship between siblings across age, gender, and relative birth order. One main effect of age was found, $F(3, 113) = 3.04$, $p < .001$, $\Delta \eta = .16$. Univariate ANOVAs
revealed a significant age difference with regard to the level of positive description of the relationship, \(F(1, 114) = 18.35, p < .001, \Delta \eta = .10\). Emerging adults provided more positive descriptions of their sibling than adolescents did, \(M = 1.92 (SD = 1.10)\) versus \(M = 1.35 (SD = 0.74)\), respectively.

Assessments of change were collapsed into two categories: (a) positive change; (b) negative change; or (c) no change. A chi-square analysis revealed a significant difference between emerging adults and adolescents, \(\chi^2(df = 1) = 8.57, p < .05\). Emerging adults provided more descriptions of positive change (22 emerging adults vs. seven adolescents), whereas adolescents provided more descriptions of negative change, no change, or a feeling of decrease in the closeness (27 adolescents vs. 19 emerging adults). The following transcripts illustrate the different accounts of change in the two age groups:

- The age difference between us is 3 years. As kids, we were like cat and mouse. All the time I wanted to be with her, and she didn’t want to be with me. I tried to be like her, and it didn’t help. We didn’t have a good relationship. I think the change emerged with our becoming more mature. It was a process, and our relationship became better and better and closer. (Emerging adult female)

- We get along, but once it was better. We shared the same room and the relationship was much closer. The relationship is still good but we hardly talk. Once we played basketball together. Now, he’s mostly with his girlfriend. So no time is left, but it’s OK. We have a good relationship. He protected me; we were close. I miss him, but nothing can be done. (Adolescent male)

Assessments of organization and coherence of the siblings’ descriptions were also collapsed into two categories. These were a coherent and balanced description of the sibling and an incoherent and nonbalanced description, expressed respectively through a constricted and meager description and a

<table>
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<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Warmth</td>
<td>3.17</td>
<td>0.57</td>
<td>3.43</td>
</tr>
<tr>
<td>Conflict</td>
<td>2.67</td>
<td>0.58</td>
<td>2.13</td>
</tr>
<tr>
<td>Rivalry</td>
<td>0.42</td>
<td>0.35</td>
<td>0.48</td>
</tr>
</tbody>
</table>

*p < .05. **p < .001.
flooded and muddled description. A chi-square analysis revealed a significant difference between emerging adults and adolescents $\chi^2(df = 1) = 5.82, p < .05$. Emerging adults provided more coherent and balanced descriptions of their siblings (42 emerging adults vs. 27 adolescents), whereas adolescents provided less coherent and less balanced descriptions (28 adolescents vs. 17 emerging adults). Examples of coherent and less coherent descriptions are as follows:

- My brother is a very honest and sincere person, very ambitious, and I would say Spartan. We get along very well. We always did. He’s my best friend. We help each other-technical things, ideas, and so on. Over the years, our relationship was very close. Of course, there are ups and downs. For example, when he has a girlfriend or I have. It is understandable. But when one of us is down, we support each other. A close and sincere relationship. To some extent, we are similar, but we are also different. We have totally different interests, but this does not prevent us from having a common language. (Emerging adult male)

- He looks OK. He gets me on edge, but overall he is OK. I can sit with him and laugh but only when he is by himself. But when I join his friends, he gets very angry. We’re very different. He likes quiet people, and I’m different. I like the crowd. Once, we used to fight a lot. I don’t remember why. For example, if I touched his computer, it would drive him crazy. Not any more. I don’t discuss any personal matters with him. It’s not that I don’t feel comfortable, but I don’t discuss with him. If I need help, I’ll turn to friends. (Adolescent male)

In all, the emerging adults described a more positive relationship with their siblings. The qualitative accounts provided a broader insight into the diverse ways in which the emerging adults and the adolescents portrayed their relationship with their siblings and the changes that the relationship had undergone and was still undergoing. In particular, emerging adults were capable of accepting and understanding the changes and of feeling close to their siblings despite the inevitable widening distance.

The distinction between adolescents’ and emerging adults’ accounts of their relationships with their siblings was further demonstrated when reading the entire accounts of a respondent, resembling the holistic analysis described by Lieblich, Tuval-Mashiach, and Zilber (1998). An adolescent male said the following:

- Sometimes my sib is nice and sometimes irritates me and gets on my nerves. In the past we hated each other. He hit me and I couldn’t hit him back. We used to quarrel a lot; I don’t remember about which issues. . . . when all the family go out to the beach, we play together, but not too much. We don’t usually have heart-to-heart talks. We play together if there is a missing player in
games. If I have a problem, I’ll keep it to myself, or I’ll turn to my friends. I wouldn’t tell my brother.

By contrast, an emerging adult female said the following:

– I have a very special bond with her. It is always my sister, not my friends, not my parents. I tell her all the secrets and all the problems. It is very important to me to listen to what she says, and she helps me very much in decision making... I feel that we stabilize each other. Even if I feel a little moody, I can call her and I get a lot of energies. We don’t hide anything. I can’t imagine my life without her, without her presence.

Linkage Between Relationship With Parents and Relationship With Siblings

Multiple regressions were conducted to determine the linkages between quality of relationship with parents and relationship with siblings. To control for possible contributions of respondents’ age and gender, relative birth order, and joint or separate residence, hierarchical regressions were performed in which these demographic variables were entered in the first step. In the second step, the variables representing quality of relationship with fathers and mothers were entered. Because correlations between respondents’ reports regarding the relationships with mothers and fathers were high (Pearson’s $r = .71$ and $.61$ for conflictual and functional dependence, respectively), we constructed new composite scales that averaged across mothers’ and fathers’ scores. In the third step, interactions between quality of relationship with parents and age of respondent (emerging adult vs. adolescent), as well as gender, were entered in an exploratory manner (stepwise method). The significant results are presented in Table 3.

Results show that, after entering the demographic variables (none of them contributed significantly to the prediction), level of conflictual and functional dependence on parents explained 7% to 23% of the quality of relationship with the sibling as perceived by the respondent. A higher level of functional dependence was related to more warmth in sibling relationships and less rivalry, whereas higher levels of conflictual dependence were related to higher levels of conflict and rivalry among siblings. In addition, a significant interaction between functional dependence on parents’ and respondents’ age was found. In line with this significant interaction, correlations between functional dependence and the quality of sibling relationships were computed separately for the emerging adults and the adolescents groups. Correlations between functional dependence and conflict in sibling relationships were $r = .28$ ($p < .05$) among adolescents and $r = .09$ (n.s.) among emerging
TABLE 3: Summary of Multiple Regression Analyses for Variables Explaining Quality of Sibling Relationships

<table>
<thead>
<tr>
<th></th>
<th>Warmth (Respondents’ Report)</th>
<th>Rivalry (Respondents’ Report)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>ΔF</td>
</tr>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.64 (5,101)</td>
<td>.08</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflictual dependence</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>Functional dependence</td>
<td>.27**</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Conflict (Respondents’ Report)

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>ΔF</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.38*** (5,101)</td>
<td>.24</td>
<td></td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflictual dependence</td>
<td>.30***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional dependence</td>
<td>.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Functional dependence age</td>
<td>.92**</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td>.39</td>
</tr>
<tr>
<td>Step</td>
<td>Conflict (Mothers' Report)</td>
<td>Conflict (Siblings' Report)</td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td>β</td>
<td>ΔF</td>
<td>ΔR^2</td>
</tr>
<tr>
<td>Step 1</td>
<td>3.78** (5,101)</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>Step 2</td>
<td>.49 (2,99)</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.001</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td>6.70** (1,98)</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>.96**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** The numbers in the parentheses are degrees of freedom.

*p < .05. **p < .01. ***p < .001.
adults. Thus, among adolescents, functional dependence was significantly related to less conflict with siblings, whereas, among emerging adults, the relationship with parents was not associated with conflict in the relationship with siblings according to respondents’ perception.

Additional analyses predicting siblings and mothers perceptions of sibling relationships were conducted. Results revealed that after entering the demographic and relationships with parents’ variables, the interaction of functional dependence and age explained 4% of conflict in sibling relationships as perceived by respondents’ siblings and 5% of conflict in sibling relationships as reported by mothers. As among the study participants, the significant interaction (see Table 3) of functional dependence with age in respondents’ siblings showed that functional dependence was (marginally) related to lower levels of conflict among siblings in the adolescents group, \( r = .21 \) (\( p < .10 \)), but not in the emerging-adults group, \( r = .09 \) (n.s.). In contrast, with regard to maternal report of siblings conflict, the interaction suggested that functional dependence was related to a higher level of conflict between siblings in the emerging-adults group, \( r = .27 \) (\( p < .05 \)), but not in the adolescent group, \( r = .15 \) (n.s.). The levels of functional dependence were low to moderate among adolescents (\( M = 2.54, SD = .64 \)) and among emerging adults (\( M = 2.16, SD = .69 \)).

Thus, functional dependence was related to lower levels of conflict between siblings among the adolescents’ group according to respondents and their siblings’ reports and to higher levels of conflict among emerging adults according to mothers’ reports.

**DISCUSSION**

The above results showed that the emerging adults spent less time and were less involved in joint activities with their siblings than adolescents were. On the other hand, they reported being more involved in emotional exchanges, such as discussing personal matters, and feeling more warmth toward their siblings. Conflict and rivalry, which often color sibling relationships, were also reported by the emerging adults to be less intense in comparison with reports of the adolescents. Together, these results indicate that emerging adults were physically more distant from their siblings but, emotionally, felt closer to each other. Increasing distance may possibly make it easier to attend to the others’ ideas or needs. This emergent pattern of siblinghood recalls to some extent the kind of relationship transformation that adolescents are expected to achieve with their parents as they grow older. The growing independence from parents allows the emergence of a sense of
closeness and warmth establishing a pattern of autonomous relatedness (O'Connor et al., 1996) or having a better understanding of their parents and showing more empathy for them (Frank et al., 1988; Shulman et al., 2001).

These changes in the relationships can also explain the lower levels of conflict and rivalry found in the current study among emerging adults. Adolescent siblings spend more time together, are less capable of resolving conflicts, and are less at ease exchanging intimate and emotional information. It is possible that experiencing lesser daily contacts allows emerging-adult siblings to become more attentive to the needs of each other and become less involved in conflicts. It is also possible that the increased capability of emerging adults to resolve disagreements with peers (Laursen et al., 2001) is also reflected in the relationships that they have with their siblings.

The narratives that respondents provided further highlighted the quality of sibling relationships in emerging adulthood. Emerging adults were able to provide a more coherent and integrative perception of their siblings. They better understood their siblings’ wishes and needs, respected emergent needs, such as a growing involvement in a romantic relationship, and did not experience it as a sign of distancing. Also, emerging adults could better reflect on changes that occurred in their relationships with their siblings and perceive the positive aspect of the changes. This can be understood as part of the greater socioemotional and cognitive maturity of emerging adults. Similarly, it may reflect the less ambivalent relationship that emerging adults have with their siblings. Coherence is the best predictor of one’s state of mind with regard to attachment (Main & Goldwyn, 1998). However, it could also reflect developmental differences in individuals’ abilities to provide coherent descriptions of relationships as they mature. Additionally, adolescents were sampled in schools, thus, they may have been more representative than the emerging adults, who may have been self-selected on the basis of verbal fluency.

Nevertheless, as our results showed, emerging adults described more warmth and fewer conflicts in their relationships with their siblings than did adolescents. In addition, developmental changes entail changes in relationships (Shulman, 1995). Whereas adolescents perceived the change (in their narratives) as deterioration in the quality of relationship, the emerging adults were able to perceive change as a potential for a new quality in the relationship.

From the findings of this study, as well as from previous research on sibling relationships in childhood and adolescence, it seems that sibling relationships undergo continuous changes during different developmental periods. During childhood, siblings are close to each other and feel intense positive and negative feelings toward each other. Early adolescence carries a
growing interest in the peer world. At this stage, the investment in time and, emotionally, in friends at the expense of siblings may take place (Updegraff et al., 2002). Approaching late adolescence and emerging adulthood, siblings still make a high investment in their peers; however, during emerging adulthood, despite the decrease in time that siblings spend together, they may become a target of intimacy and a source of support and advice. Yet as our findings are not based on longitudinal data, this possible pattern has to be tested.

Adolescents live in the family and spend much of their time within the family arena, thus, disagreements, conflicts, and power assertions are probably inevitable, whereas emerging adults spend significant amounts of time away from the family. Therefore, causes of conflicts may be less common. Lower levels of conflict can also stem from the process termed deidentification, namely actively striving not to be like the sibling, as a way of dealing with feelings of rivalry (Schacter, 1982; Schacter & Stone, 1987; Teti, 2002). Completing carving out a special niche in the family and developing a distinct identity may contribute to lowering the level of conflicts of emerging adults. In addition, because of the distance apart, siblings may feel that to maintain the relationship with the sibling, they have to invest in it emotionally and express warmth. The higher incidence of positive feelings and the sense of availability (Goetting, 1986) may help siblings to keep their sense of closeness. Conceptually, sibling relationships in emerging adulthood in most Western cultures can be considered open-field relationships (Laursen & Williams, 1997) despite the siblings common genetic and family background. Participants in open-field or voluntary relationships cooperate as long as exchanges are rewarding for both partners (as indicated among emerging adults). If social exchanges become inequitable, partners may prefer to keep their distance and decrease interaction as much as possible (Gold, Woodbury, & George, 1990). However, keep in mind that this is not necessarily true in traditional societies, where continuous commitment to family members is indispensable (Schlegel & Barry, 1991).

Contrary to our expectations, the siblings' relative age, older or younger, and gender did not affect sibling relationships in emerging adulthood. This is in contrast to previous studies, where relative age and gender were related to the quality of sibling relationships (Buhrmester & Furman, 1990). It is possible that, with age, sibling relationships become more egalitarian, and relative age, namely whether the sibling is older or younger, becomes less relevant (Buhrmester & Furman, 1990, p. 1396). Regarding gender, participants of this study were same-sex siblings. Sister-sister pairs were found to have the highest levels of warmth and intimacy (Buhrmester & Furman, 1990; Dunn et al., 1994a) and were different from other sibling gender constellations. It is
possible that cross-gender siblings are the least close, whereas brother-brother pairs, which were examined in this study, are capable of developing a strong sense of closeness. Some support for this explanation was found in this study. The adolescent brother-brother pairs described a high sense of affective proximity, similar to that described by older sister-sister pairs. However, future studies are required to assess the role of gender in sibling relationships in emerging adulthood.

Previous research has documented the role of the quality of the parent-child relationship in siblings' behavior toward each other. In general, less conflictual relationships with parents were associated with less hostile sibling relationships (Furman & Giberson, 1995; Stocker & McHale, 1992). The results of this study reveal that the association between the quality of relationships with parents and siblings is more complex and is related to the age of the offspring. On the one hand, in keeping with the existing body of research, conflictual dependence on parents found in this study was related to higher levels of conflict and rivalry, as reported by respondents and their siblings. On the other hand, functional dependence was related to higher levels of reported warmth and lower levels of rivalry. It is possible that functional dependence also represents a form of relatedness and joint consultations with parents (O'Connor et al., 1996), which has positive aspects too. Accordingly, it is understandable why it is positively related to warmth and negatively to rivalry. In addition, in the Israeli context, despite its Western culture, continuous close relationships of Israeli youngsters with their parents, consulting them, and receiving help can be expected. Unlike in more individualistic cultures, this close relationship is not associated with negative outcomes and even evinced good relationships and positive outcomes (Scharf, Mayseless, & Kivenson-Baron, 2004).

However, this association proved to be age related. Whereas adolescents' functional dependence on parents was associated with lower levels of conflict, emerging adults' functional dependence was not significantly associated with levels of perceived conflict in sibling relationships. Because of maturational processes and decreased daily interactions, emerging adults may be able to perceive and understand their siblings and have fewer conflicts with them regardless of their relationships with their parents. This suggests that, during emerging adulthood, the nature of interaction between siblings per se becomes an important factor in the quality of the relationship and resembles findings reported by Stocker et al. (1997, p. 218).Sibling relationships in emerging adulthood may begin to attain an autonomous status that is not directly related to other relationships in the family but resembles the type of relationship that siblings have when the family of origin is no longer intact or even alive (Goetting, 1986).
Nevertheless, when maternal rating of siblings level of conflict was considered, it was significantly related to functional dependence among emerging adults, but not among adolescents. We speculate that, whereas emerging adults may feel free to oscillate between autonomous behavior and relatedness with regard to their parents, it might be more difficult for mothers at this stage of life. For them, expressions of dependency among emerging adults may be perceived as more problematic and reflecting less maturity and, therefore, may also be related to conflict in the sibling relationships. This notion will have to be tested in future studies.

A number of limitations of this study should be addressed. Our results demonstrated differences between sibling relationships of adolescents and emerging adults, yet the study was cross-sectional in nature. A longitudinal study is needed to rule out alternative explanations. Moreover, the current results pertain only to relationships with the closest sibling and are restricted to same-sex siblings, thus, generalization is limited. In addition, only two aspects of parent-child relationships were included. A wider examination of parent-child relationships could further highlight the extent to which sibling relationships in emerging adulthood are or are not related to the quality of relationships with parents. This study was conducted in a unique cultural context and examined participants from intact middle-class families, thus, the generalizability of its findings to other contexts and social groups needs to be further explored. In the Israeli culture, there is centrality of the family, and members are expected to be close (Seiffge-Krenke & Shulman, 1990). In addition, the country is not large, and this fact quite often allows interactions between kin not living together, unlike the situation on the North American continent. Therefore, generalization of these findings must be treated with caution. On the positive side, findings were based on quantitative and qualitative data. Moreover, some of the data were collected from three sources—respondents, their siblings, and their mothers—and the findings based on the three sources were similar.

In sum, our results augment the sparse research that exists on sibling relationships in emerging adulthood. Similar to previous findings, these results show that sibling relationships in emerging adulthood are less intensive but warmer. More specifically, relationships with siblings become less ambivalent and more mature, recalling the relationships between parents and children during this developmental stage. In addition, emerging adults' relationships with their siblings become more autonomous and less related to the quality of relationships with parents. Future research could further highlight how relationships with siblings at each developmental stage are embedded within the changes that individuals experience with regard to self and close others.
REFERENCES


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