

## Parent–Child and Triadic Antecedents of Children’s Social Competence: Cultural Specificity, Shared Process

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Guided by theories of cultural participation, the authors examined mother–child, father–child, and triadic interactive behaviors in 141 Israeli and Palestinian couples and their firstborn child at 5 and 33 months as antecedents of children’s social competence. Four parent–child measures (parent sensitivity, child social engagement, parental control, dyadic reciprocity) and two family-level measures (cohesion and rigidity) were coded at each age. Children’s social competence was observed at child-care locations. Cultural differences were observed for parent sensitivity and child social engagement, and the large cultural differences in sensitivity observed in infancy were attenuated by the toddler age. Interactive behaviors correlated with culture-specific parenting practices, child-rearing goals, and sex-role attitudes. Mother–child reciprocity in infancy and child engagement with father and family-level cohesion at both time points predicted social competence. Maternal sensitivity in infancy facilitated social competence only among Israeli children. Paternal control in toddlerhood interfered with Israeli children’s social functioning but contributed to competence among Palestinians. Results underscore the links between early relational experiences and children’s adaptation to the social milieu.

*Keywords:* mothering, fathering, triadic interactions, social competence, culture

Socialization is a universal process. Every culture must prepare children to partake in group activities, handle interactions with nonkin adults and peers, create friendships, initiate social exchanges, cooperate, and learn meaningful information within a group context, abilities that form the foundation of human societies (Mead, 1934; Rogoff, 2003; Tomasello, 2007; Vygotsky, 1978). Such skills, collectively termed *social competence*, undergo significant development during the toddler years and are thought to evolve on the basis of the child’s early relationship with the caregiver (Schneider, Attili, Nadel, & Weissberg, 1989). It has been suggested that the competent functioning of children within the social world is shaped by their experiences with both mother and father as well as by the quality of their interactions within the family context (Fincham, 1998; Parke, 1996; Sroufe, 1996).

Although the link between parent–infant relatedness and children’s social development is central for theory, research, and intervention, several aspects have received less attention. First, few studies have addressed the relations between parent–infant interactions and toddlers’ social competence through use of direct

observations of children’s behavior in a peer-group setting. Second, a cross-cultural perspective on the relationship between early interactive behavior and children’s social skills requires much further research, and studies in non-Western societies are particularly rare. According to the “cultural pathways” model (Greenfield, Keller, Fuligni, & Maynard, 2003), specific parent–child interactive behaviors may promote social competence in some cultures but not in others, whereas other relational behaviors may impede social growth only in certain cultural settings; thus, there is a need to address antecedents of social outcomes in relation to specific cultural contexts. Third, although fathering is considered critically important for understanding child socialization, father–child interactions across societies have been observed in very few studies (Erkut, Szalacha, & García-Coll, 2005; Henderson, 1980). Finally, although family interactions afford infants their first experience in a multiperson interactive setting and are thought to reflect the culture-specific modes of social relatedness, cross-cultural observations of triadic interactions rarely exist (Kağitçibaşı, 1996). A comprehensive study of social development must therefore address parent–child antecedents of social competence across cultures, include both mothers and fathers, and observe children in parent–child interactions as well as triadic sessions.

The present study examined the interactive behaviors of parents and their firstborn child as predictors of children’s social competence in two cultures representing different orientations to child rearing and the family. We observed mother–child, father–child, and triadic mother–father–child interactions among Israeli and Palestinian families when the child was 5 and 33 months of age. Four parent–child interactive measures (parent sensitivity, child social engagement, parental control, and dyadic reciprocity) and two family-level measures (cohesion and rigidity) were coded at each age. Three goals guided the study: to examine differences in parent–child and triadic interactive behaviors related to child age,

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culture, and parent and child gender; to assess predictors of children's social competence at the child-care setting from dyadic and triadic interactive behavior; and to explore the relations between interactive behaviors and culture-specific parental attitudes, practices, and child-rearing goals.

### Interactive Behaviors Across Cultures

Cultural variations in mother–infant interactions have been of interest to researchers on human development for several decades (LeVine, 1973; Super & Harkness, 1997; Tronick, 1995; Whiting, 1963). Typically, studies assessed differences in discrete social behaviors and interpreted their findings within the well-known distinctions of individualism versus collectivism (Triandis, 1989) or independence versus interdependence (Markus & Kitayama, 1991). Mothers in Western cultures were shown to provide more active social behavior during interactions, that is, to gaze and vocalize more to their infants, present objects more frequently, situate infants in face-to-face positions, and induce higher levels of positive arousal. This “distal” style (Kartner et al., 2009; Keller et al., 2004) was thought to reflect an orientation that focuses on the discrete social behavior of each partner and was contrasted with a more “proximal” style, observed in African, Asian, or South American cultures, which is defined by the mother's placing the infant in physical proximity, keeping arousal at neutral levels, and maintaining continuous contact but focusing less on active social behaviors in the vocal, gaze, or facial-affective modalities (Richman et al., 1988; Sharma & Fischer, 1998; Whiting, 1963).

Several studies examined the expression of relational constructs across societies. Of these, parent sensitivity has received the most cross-cultural research in relation to social–emotional outcomes. Attachment theory, for instance, is based on the proposition that parent sensitivity facilitates attachment security and promotes social competence (Sroufe, 1996). Numerous studies support this hypothesis in non-Western cultures, such as Chile (Valenzuela, 1997), Mali (True, Pisani, & Oumar, 2001), Colombia (Posada, Carbonell, Alzate, & Plata, 2004), and Japan (Miyake, Chen, & Campos, 1985), in addition to Western societies. Others (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000) have argued that the definition of parent sensitivity is colored by the distal style that focuses on active parental social behavior and, thus, that its implications for social development may be more salient in Western societies. A similar difference may be observed for child social engagement, defined as the child's active involvement and initiation of social behavior (Marshall & Fox, 2006), which may be more encouraged by parents in Western cultures. On the other hand, constructs such as reciprocity or synchrony, which describe the give-and-receive aspect of social interactions and address the dyadic system rather than the behaviors of individual partners, are achieved in each culture via a different set of behaviors (Emde, 1992; Feldman, 2007c; Tronick, 1995) and may contribute to social competence across societies.

Another relational construct that may carry a different meaning across cultures is parental control, defined as parent-directed interactions that are guided by the parental agenda. Studies have shown that maternal controlling behavior predicts insecure attachment (Isabella, 1993), interferes with children's ability to engage in social interactions with strangers (Hobson, Patrick, Crandell, García Perez, & Lee, 2004), and results in maladaptive social

behavior (Wood, 2006). Yet, in more traditional societies, controlling parenting and parent-led dialogue may be a common mode of interaction (Klein, 1996), and in certain cultural settings, for instance, among low SES black families, parental control did not carry the same negative effects as it did in other social contexts (Ispa et al., 2004). Possibly, parent-led interactions may not be as harmful to social development in societies that place high emphasis on respect for elders as they are in societies that stress the child's autonomy and self-initiation as central child-rearing goals.

### Social Competence in Toddlers

During the toddler years, children's social competence undergoes significant growth, and by the end of the third year children are typically able to engage in peer interactions, join in group activities, begin to form friendships, cooperate with other children to achieve a goal, and function competently within a nonfamilial social context (Asher & Gottman, 1981; Erickson, 1963; Maccoby, 1992; Schneider et al., 1989). The development of social competence during the toddler years is enabled by the major strides in other domains, including symbolic thought, focused attention, empathy, and emotion regulation (Cicchetti & Beeghly, 1990; Cole, Martin, & Dennis, 2004; Kochanska, 1994; Posner & Rothbart, 1998; Sroufe, 1996), abilities that support the child's social engagement within the cultural context (Marshall & Fox, 2006).

Observing children's social competence at child care during the first stages of friendship formation and social cooperation may provide important insights into the child's early social development and its relational antecedents (Asher & Gottman, 1981; Dunn, 1991; Feldman, Masalha, & Alony, 2006), especially because most research on social competence focused on older children and utilized parental reports or sociometric measures, not direct observations. Moreover, the child-care setting provides a unique window with which to study cultural processes of socialization in the toddler years, including the emerging relationships with nonparental agents of socialization, the organization of one's behavior in the group, and the accepted ways interpersonal conflicts are handled (Corsaro & Schwarz, 1991).

The associations between the infant's relational experiences with the caregiver and the development of social competence are considered the cornerstone of theories of social–emotional growth, including attachment theory (Bowlby, 1969), psychoanalytic theory of affect (Winnicott, 1986), and theories of socialization (Maccoby, 1992) and morality (Hoffman, 2000). Most theories postulate that the mother's sensitive approach and the experience of reciprocal mother–infant interactions support children's adaptation to the social context. Furthermore, it has been suggested that the link between early caregiving and social competence is likely to be universal (LeVine & Norman, 2001; van IJzendoorn & Sagi, 2001) and that children of all cultures draw on their early experiences for the development of competent social functioning with adults and peers within their sociocultural context.

### The Israeli and Palestinian Societies: Parenting Attitudes and Practices

The Israeli and Palestinian societies differ on important dimensions of family life that likely shape the parents' interactive style and its contribution to children's social competence. The Palestinian society

is traditional in its orientation and is guided by strong family hierarchies, traditional sex-role attitudes, and emphasis on deference to elders (Abudabbeh, 1998; Al-Haj, 1989; Ben-Arieh, Khooury-Kassabri, & Haj-Yahia, 2006; Dwairy, 2004). Young families live in extended-family arrangements, infants are typically cared for by kin (El-Islam, 1983; Weisfeld, 1990), and traditional sex-role attitudes are endorsed even by young educated couples (Feldman, Masalha, & Nadam, 2001). Palestinian parents emphasize compliance and respect for elders as central parenting goals, and even dual-earner couples report low father involvement in housekeeping and child-care responsibilities (Feldman & Masalha, 2007; Smootha, 2004).

The Israeli society, in comparison, is more individualistic in its orientation. Couples live in nuclear family settings (Israel Central Bureau of Statistics, 2005), and young parents tend to express more egalitarian attitudes and to share child-care responsibilities (Feldman et al., 2001). Young infants are rarely cared for by kin, the nuclear family dwelling leads to less emphasis on the needs of the extended family, and relationships are less colored by respect for elders and are more child focused (Feldman et al., 2006). Israeli parents endorse child autonomy and self-expression as central parenting goals for their toddlers, and Israeli children tend to show less compliance with their parents than do Palestinian children (Ben-Arieh et al., 2006; Feldman & Masalha, 2007; Seginer, Shoyer, Hossessi, & Tannous, 2007). Such differences in parental attitudes, practices, and child-rearing goals are likely to be associated with the parent and child's interactive behaviors during parent-child and triadic interactions.

### The Present Study

In light of the above, the present study examined mother-child, father-child, and triadic interactive behaviors among Israeli and Palestinian couples and their firstborn child at 5 and 33 months. The age of 5 months was selected to allow infants some experience in the culture-specific mode of interactions, typically emerging at around three months of age (Klein, 1996; Stern, 1985). The age of 33 months, the last quarter of the third year, reflects a stage when toddlers are rapidly gaining social skills in a group setting (Schneider et al., 1989) and when children in the two cultures have already had some experience at child care. There were two primary goals and a third, more exploratory, goal in this study. The first goal was to examine the expression of four parent-child interactive measures—parent sensitivity, child social engagement, parental control, and dyadic reciprocity—across three dimensions: child age, culture, and parents. Across age, it was expected that with the marked development in the infant's social skills from infancy to the toddler stage, behaviors that reflect the child's active involvement in the interaction, such as child social engagement and dyadic reciprocity, would increase from 5 to 33 months. Across cultures, it was expected that measures addressing the active social behaviors of each partner, such as parent sensitivity and child engagement, would show a greater cultural difference than would those defining the dyadic atmosphere, such as dyadic reciprocity. Parent sensitivity and child engagement were expected to be higher in the Israeli group, due to the emphasis on active social behavior in that society as compared to the Palestinian society (Feldman et al., 2006). Across parents, previous studies have pointed to differences in the interactive styles of mothers and fathers, with mother-child interactions showing more synchrony and lower arousal and father-child interactions characterized by higher positive arousal

and greater social involvement (Feldman, 2003; Lamb, 1981; Parke, 1996). We thus expected interactions with mothers to show higher dyadic reciprocity and interactions with father to be marked by greater social engagement. We also explored differences related to child gender and to Parent Gender  $\times$  Child Gender  $\times$  Culture interactions. In particular, based on findings that Palestinian fathers provide more instrumental assistance to and expect better performance from their sons (Feldman et al., 2006), we hypothesized that higher paternal control would be observed for Palestinian fathers during interactions with sons than with daughters.

The second goal was to address parent-child and triadic antecedents of children's social competence at child care. Four sets of predictors of social competence were examined, from mother-child and from father-child interactive behaviors at 5 and 33 months. As to mother-child predictors, on the basis of the aforementioned theories that link reciprocal mother-infant interactions with the development of competent social functioning (Bowlby, 1969; Winnicott, 1986), we expected that mother-child reciprocity, particularly during the first months of life, would provide the foundation for the child's social skills and predict social competence. Father-child interactions have been characterized by higher positive arousal and greater involvement than have mother-child sessions (Feldman, 2003); thus, the child's social engagement with father was expected to predict competent social functioning at child care. Finally, research on the family has similarly emphasized the importance of cohesive and harmonious family interactions to children's social development (Davies & Cicchetti, 2004; Fincham, 1998), and, thus cohesive triadic interactions were expected to contribute to children's social competence at child care.

As to culture-specific predictors, maternal sensitivity in infancy was hypothesized to play a role in social development, but its contribution was expected to be greater in the Israeli group, in light of the greater emphasis on the active, "distal" mode of play in more individualistic societies (Keller et al., 2004). The parent-led, controlling parental behavior was expected to interfere with social competence among Israeli children but not to carry the same negative effect on the social skills of Palestinian toddlers.

The final goal was to explore the relations between parental attitudes, practices, and child-rearing goals that differentiate the parent-child and triadic interactive behaviors of the two cultures. We examined whether the parents' traditional sex-role attitudes, the availability of child care by kin, and the emphasis on respect for elders as a central child-rearing goal would be associated with greater parental control and family-level rigidity and whether more egalitarian sex role attitudes, emphasis on child creativity and self expression in the parent's child-rearing goals, and higher father involvement in child-care responsibilities would correlate with greater sensitivity, child engagement, and reciprocity. Such correlations, measured across both groups, may point to the links between specific parenting attitudes, practices, and child-rearing goals and specific interactive behaviors, regardless of the cultural context.

### Method

#### Participants

The initial sample at 5 months included 100 Israeli couples (52 boys) and 62 Palestinian couples (33 boys) and their firstborn

child. Only dual-earner families in which both parents had at least 12 years of education, the child was healthy and born at term, and the infant was the first to both mother and father were included. All parents had graduated from high school, and most (83%) held a vocational or academic degree. At recruitment, all participating parents were employed in skilled or semiskilled professions. The average age of Israeli mothers was 27.7 years ( $SD = 3.93$ ) and of Palestinian mothers was 25.65 years ( $SD = 3.19$ ), and the age difference was significant,  $F(1, 161) = 11.81, p < .01$ . Thus, we examined correlations between maternal age and all study variables, and no significant relations were found in either group. On average, Israeli mothers had completed 15.25 years ( $SD = 1.69$ ) and Palestinian mothers had completed 14.68 years ( $SD = 1.35$ ) of education, with no cultural difference. Israeli fathers on average were age 30.37 years ( $SD = 4.99$ ) and had 14.54 years ( $SD = 1.64$ ) of education. Palestinian fathers on average were age 30.35 years ( $SD = 2.23$ ) and had 14.19 years ( $SD = 1.85$ ) of education. There was no difference in father age or education between cultures in father age or education. In terms of employment, 38% of Israeli and 42% of Palestinian mothers were employed in semiskilled professions (e.g., secretaries, teachers' aides), 15% of Israeli and 13% of Palestinian mothers were self-employed (e.g., own business, freelance writers), and the rest were skilled professionals (e.g., teachers, social workers, physicians). Among fathers, 18% of Israeli and 21% of Palestinian fathers were semiskilled professionals, 22% of Israeli and 26% of Palestinian fathers were self-employed, and the rest were skilled professionals. There were no cultural differences in professional status.

Israeli families were living in the Jerusalem and Tel Aviv areas and were recruited by nurses in well-baby stations in their immediate neighborhoods. Nurses introduced the study to those who fit the study criteria after screening the clinic's records for parental and infant physical and mental health complications. Of a pool of 110 approached, 100 agreed to participate. Ten mothers declined, citing father refusal or scheduling difficulties as reasons, and their well-baby clinic records showed no differences in demographic or health variables from those of the participating families. Israeli parents were all Jewish, and 95.5% of the parents were Israeli born. The remaining 4.5% were born in Western countries and had immigrated to Israel as children.

Palestinian families were recruited in the greater area of Nazareth in the northern part of Israel ( $n = 28$ ) and in Ramallah in the West Bank ( $n = 34$ ). Recruitment and data collection were conducted by mental health professionals who were members of each cultural community and were familiar with the extended families in their community. Seven families declined participation, and they were of background similar to the participating families. Religious composition was 90% Muslims and 10% Christians, with no differences between religions on any demographic or study variables. Arabs living within Israel and in the West Bank consider themselves Palestinians in terms of national identity and cultural heritage (Suleiman & Beit-Hallahmi, 1997), and because no differences were found for any study variable the two groups were combined into a single Palestinian group. According to a recent report (Smootha, 2004), 9% of Arabs in Israel are Christian and the number of Christians in the Ramallah and Bethlehem areas is higher than in other areas of the West Bank, ranging from 7% to 10%. The religious composition of the Palestinian group was thus

similar to those of the general populations in the subgroups' respective locations.

Home visits were conducted by members of each cultural community who were trained to conduct the study in Israel and Ramallah, and periodic meetings between the Israeli and Palestinian professionals were conducted. In the first visit, Israeli infants were 20.51 weeks ( $SD = 3.14$ ) and Palestinian infants were 21.32 weeks ( $SD = 3.98$ ), with no age difference. All infants were born at full term, with birth weight of 2,700 g and above, and had been in good health since birth.

Of the original 100 Israeli families, 86 families (44 boys) were seen again as toddlers (33.74 months,  $SD = 4.43$ ). Among Palestinians, 55 families were seen (29 boys) at the toddler stage (34.32 months,  $SD = 4.18$ ). There were no age difference between the groups. No differences emerged between families who were revisited and those who were not, and attrition was mainly related to inability to locate the families. All couples were still married at the second visit, and in 60% of the Israeli families and 62% of the Palestinian families a second child had been born. When children were age 5 months, Israeli mothers reported 34.7 hr ( $SD = 5.77$ ) and Palestinian mothers reported 35.6 hr ( $SD = 6.11$ ) of out-of-home employment. When children were age 33 months, Israeli mothers were employed 33.4 hr per week ( $SD = 6.55$ ) and Palestinian mothers were employed 32.17 hr weekly ( $SD = 8.26$ ), with no cultural differences. All fathers reported full-time employment at both assessments. The study was conducted between 1996 and 2000, during a relatively peaceful period in the region.

## Procedure

**Infancy.** Parents were contacted by a culturally matched interviewer, and a time was set when both parents were home and the infant was expected to be fed and rested. After they were interviewed, parents completed self-report measures. Following, two dyadic sessions were filmed (mother-child and father-child) in a counterbalanced order for approximately five minutes each. In order to observe parent-child and triadic interactions in their natural ecology, the interviewers instructed the parents to "play with your child as you usually do." Parents situated the child in any way they wished (e.g., on carpet, sofa, arm, infant seat). No toys were provided, but some parents used the infant's toys. Following the two parent-infant sessions, a 5-min triadic interaction was filmed. Parents were asked to play freely with the infant as they normally did.

**Toddler stage.** Assessment at the toddler stage included two home visits that together lasted about three hours. Within the same month, trained assistants observed the child at child care for about 1.5 hours.

**Home visits.** Visits were scheduled for the evening hours when both parents and child were home. Data pertaining to the present study were derived from the parent-child and triadic interactions in the home and from the observation at child care.

**Parent-child and triadic interactions.** Fifteen minutes of free play between the child and each parent were videotaped one after the other in a counterbalanced order. Parents and children were given a box of toys that were specifically selected, consistent with previous research, to elicit creativity and imagination (Feldman, 2007b; Keren, Feldman, Namdari-Weinbaum, Spitzer, & Tyano, 2005). Toys included two dolls, a bottle, a blanket, a tea set

(including two cups, two plates, sugar bowl, and creamer) and a boiler pan, a wallet, a colored necklace, a pair of plastic sunglasses, a sponge, three work tools, two small cars, a telephone, two pet animals and two wild animals, and a small tool set. A 10-min triadic family interaction was filmed following the two parent-child sessions.

**Observations at child care.** Visits at child care were coordinated to enable the observation of free play, structured “teaching” time, snack time, and outdoor play and lasted about 1.5 hours. All children attended out-of-home care at day-care centers or private child care or received family-based care, and no cultural differences were found in the distributions of type of care. The adult-to-child ratio varied from one adult per three children to one adult per nine children, with no cultural differences. Using the Nursery Assessment Scale (Feldman et al., 2006), a trained assistant followed the target child and provided a continuous written narrative of the child’s activities, entering the actual time every 5 min. The following information was entered prior to the beginning of the narrative assessment: description of the physical environment, adult-to-child ratio, child physical appearance, and child general mode of behavior (e.g., shy, energetic, tired). After completing this information, the assistant followed the target child and provided a detailed narrative of his or her activities. Assistants were instructed to pay special attention to the child’s encounters with peers (e.g., child plays alone, initiates contact, cooperates, engages in verbal or nonverbal dialogue, shows positive emotions, begins a conflict, shows aggressive behavior) and adults (seeks contact, keeps rules, cooperative, relies on adults for help, avoids adults, expresses emotions). The ongoing narrative was summarized offline into 28 scales, each ranging from 1 (*low*) to 5 (*high*). The instrument was developed during regular meetings in which the Israeli and Palestinian professionals and the two principal investigators (PIs) discussed the dimensions central to toddlers’ social competence in each culture and the scales that should be used to capture social competence at the child-care setting. Professionals from the two cultures also determined the behavioral expressions for each level on each scale (from 1 to 5).

Assistants completed extensive training prior to observations at child care. First, they trained in using the instrument on pilot children not from the present sample. During training, two assistants observed each child, and their written narratives were compared in terms of the aforementioned criteria (e.g., encounter with peers, interactions with adults) until they were judged by the PIs and the research team to be reliable. Reliability of the narratives was examined for each 5-min unit on the basis of three criteria: all important information for later coding appears in both narratives, the level/degree of the described activity or emotion shows concordance (e.g., “child highly alert”), and both narratives included all social contacts the child made with adults and peers (reliability average = 94%). Next, assistants coded the written narratives of the pilot sample into the 28 scales, and only after they had reached proficiency in providing written narratives and had achieved 90% reliability in coding the narratives reliably into scales (measured between each assistant and the PIs) did their observations at child care begin. For interrater reliability, 27 observations (20%) were conducted by two assistants who provided separate narratives; for scoring of scales and reliability,  $r = .93$  (range = .88–.98). In an additional 15% of the cases, comparisons were made between the visiting assistant and an assistant coding the scales from the

narrative; interrater reliability, computed for each scale, had an average intraclass  $r$  of .90 (range = .83–.94). Factor analysis conducted on the 28 scales yielded three factors with eigenvalue of 2.5 and above. The first factor had an eigenvalue of 7.23, explained 29.28% of the variance, and included the following items (loading  $>.50$ ): child is sociable, is able to maintain physical proximity and active involvement with other children and adults, initiates social interactions, is accepted by peers, has high activity level, cooperates with adults and peers in various group contexts (e.g., indoors and outdoors), and is relaxed in the company of others. These codes were averaged to create the social competence factor ( $\alpha = .86$ ) used here as an outcome variable (the other two factors addressed aggressive behavior and dependence). Because the variables-to-subjects ratio was relatively high, we recomputed the factor analysis with only 16 measures. These factors had high loading on one of the three factors (social competence, aggression, dependence). Results of this factor analysis showed that the same factors loaded as those in the previous analysis loaded on social competence, and this lent support to the initial factor analysis. It is important to note that because the instrument was created by professionals from the two cultures and was designed to reflect the “universal” aspects of toddlers’ social functioning, the Social Competence scale used here indexed the shared skills expected of toddlers at this age in the two cultures.

## Measures

When their child was 5 months, parents completed the Parental Leave Inventory (PLI; Feldman et al., 2001; Feldman, Sussman, & Zigler, 2004), an instrument assessing sex-roles attitudes, career-family issues, and child-rearing practices and attitudes with items scored on a scale of 1 to 5. The following items showed marked cultural differences, were relevant to the development of parenting behavior, and were used in this study (Feldman & Masalha, 2007).

**Traditional attitudes.** A factor analysis of selected PLI items identified three factors: career centrality, family focus, and traditional attitudes. The traditional attitudes factor was used here and included the parents endorsing statements such as “Mothers should stay home when children are young” or “Raising children is the main purpose of a woman’s life.” Traditional attitudes showed marked cultural differences (Israeli,  $M = 3.09$ ,  $SD = 0.76$ ; Palestinian,  $M = 3.98$ ,  $SD = 0.64$ ),  $F(1, 232) = 144.4$ ,  $\eta^2 = .63$  (Feldman et al., 2001).

**Child care by kin.** Parents described child care while parents were at work, whether by a family member or another arrangement. Sixty-three percent of Palestinian infants as compared to only 14% of Israeli infants were cared for by kin,  $\chi^2(1, 162) = 14.89$ ,  $p < .001$ .

**Father involvement.** Parents rated the degree of father involvement on two items addressing housework responsibilities and child-care responsibilities. The two items were correlated ( $r = .78$ ,  $p < .01$ ) and averaged into a father involvement composite. Palestinian parents reported lower father involvement in household and child-care responsibilities,  $F(1, 323) = 54.13$ ,  $p < .001$ ,  $\eta^2 = .38$ , in line with the traditional sex roles.

**Child-rearing goals.** Parents were provided a set of attributes—honesty, persistence, self-expressiveness, creativity, compliance, and respect for elders—and were asked to rate the degree to which fostering each quality is an important parenting

goal. Self-expressiveness and creativity were highly correlated ( $r = .83, p \leq .000$ ) and averaged into “self-expressive child.” Compliance and respect were highly correlated ( $r = .88, p < .000$ ) and were averaged into “respectful child.” Israeli parents placed a higher value on “self-expressive child,”  $F(1, 323) = 43.11, p < .001, \eta^2 = .34$ , and Palestinian parents had higher endorsement for “respectful child,”  $F(1, 323) = 35.97, \eta^2 = .31, p < .001$ .

## Coding

**Parent–child interactions at 5 and 33 months.** Parent–child interactions were coded with the *Coding Interactive Behavior* manual (Feldman, 1998), a global rating system of parent–child interaction that includes 42 codes rated on a scale of 1 (*low*) to 5 (*high*) that are aggregated into several parent, child, and dyadic composites. For each code, the observer assigns a single score after viewing the entire interaction, and several viewings are required to complete the coding. The system has been validated in multiple studies of normative and high-risk children and has shown sensitivity to age, cultural background, interactive partner, biological and social–emotional risk, and the effect of intervention in both infancy (Feldman, 2007a; Feldman & Masalha, 2007; Feldman et al., 2001; Feldman, Weller, Sirota, & Eidelman, 2003) and the toddler stage (Feldman & Eidelman, 2009; Feldman & Klein, 2003; Feldman, Keren, Gross-Rozval, & Tyano, 2004; Keren et al., 2005). The following constructs were used in child–mother and child–father interactions at both ages. Composites, codes included in each composite, and internal consistency for this sample were as follows:

1. Parent sensitivity (5 months: mother  $\alpha = .93$ , father  $\alpha = .91$ ; 33 months: mother  $\alpha = .90$ , father  $\alpha = .88$ ). Parent acknowledgment of child signals, maintenance of visual contact, expression of positive affect, appropriate vocal quality, resourcefulness in handling child’s distress or expanding the interaction, consistency of style, and display of an affective range that matches the infant’s readiness to interact.
2. Child social engagement (5 months: mother  $\alpha = .85$ , father  $\alpha = .79$ ; 33 months: mother  $\alpha = .78$ , father  $\alpha = .74$ ). Child initiates interactive bids, vocalizes, shows positive affect, looks at parent or maintains joint attention, maintains alert state, and is focused on the interaction; interactions are judged to be child-led.
3. Parental control (5 months: mother  $\alpha = .81$ , father  $\alpha = .77$ ; 33 months: mother  $\alpha = .80$ , father  $\alpha = .75$ ). Parent’s physical manipulation of the child’s body; parent overriding behavior (interruption of child’s activities verbally or nonverbally and disregarding the child’s signals); interaction is judged to be parent-led rather than child-led.
4. Dyadic reciprocity (5 months: mother  $\alpha = .89$ , father  $\alpha = .87$ ; 33 months: mother  $\alpha = .86$ , father  $\alpha = .82$ ). Dyad engages in give-and-take play, interaction is synchronous, dyadic style is rhythmic and fluent, and parent adapts to child’s changing states or interactive cues.

All coding was conducted by two coders, one from each culture, who spoke both Hebrew and Arabic. They coded interactions from the two groups and were trained to 90% agreement on each of the 42 codes. To avoid familiarity, different coders analyzed the data at each age. Interrater reliability was computed for each of the 42 codes and was measured on 25 mother–child and 25 father–child interactions at each age that were coded separately by the two coders. Reliability for all codes from mother–child and father–child sessions averaged 93% (intraclass  $r = .92$ , range = .87–.98).

**Triadic family interactions.** Triadic interactions were coded, in line with previous studies, with the CIB family codes (Feldman, 2007c; Feldman et al., 2001, 2003). Codes assess the family as a single unit and include 15 scales. Twelve scales described pairs of opposite styles, and each end of the continuum was coded separately on a scale from 1 to 5. These scales included avoidance–involvement, autonomy–intrusiveness, activity–passivity, cooperation–competition, creative play–didactic play, and parent-oriented interaction–infant-oriented interaction. Three additional codes—positive affect, mutual gaze, and use of toys—were included. Family-level codes were constructed on the basis of the family systems perspective (Minuchin, 1985) and differed from the dyadic codes in that they addressed the family triad as a single functional unit and addressed the expression of each code within the triadic system, not in the behaviors of individuals or dyads. Coding of the two poles of the continuum was conducted separately because pilot data and previous research (Feldman, 2007a; Feldman et al., 2001, 2003) showed that the two ends are orthogonal (e.g., a triadic interaction can be characterized by low autonomy and low intrusiveness). Two constructs—cohesion and rigidity—were identified in line with previous research:

1. Family cohesion (5 months,  $\alpha = .84$ ; 33 months,  $\alpha = .80$ ) included family cooperation, autonomy, avoidance (negative), creativity, positive affect, and mutual gaze. Cohesion describes the warm, involved, and harmonious family style.
2. Family rigidity (5 months,  $\alpha = .77$ ; 33 months,  $\alpha = .70$ ) included family intrusiveness, competition, parent-led interaction, and didactic play.

Two coders, one from each culture, coded the interactions. Each coded sessions from the two cultures, and different coders analyzed data at each age. Coders were trained to 90% reliability on all codes prior to beginning the coding. Interrater reliability, conducted for 25 family sessions at each age for each scale, averaged 94% (intraclass  $r = .92$ , range = .85–.96).

## Results

Results are reported in three sections corresponding to the three study goals. In the first, parent–child interactive behaviors are assessed along three factors (i.e., age, culture, and parent), and triadic interactions are examined for age and culture differences. The second section presents four regression equations predicting children’s social competence from mother–child and father–child interactions at 5 and 33 months. The third section examines correlations between interactive behavior and parents’ attitudes and practices for Israeli and Palestinian families.

**Parent–Child and Family Interactive Behavior: Effects of Age, Culture, and Parent**

Prior to assessing differences related to age, culture, and parent, we examined differences related to child gender. No overall main or interaction effect was found, and thus subsequent analyses did not include child gender. A repeated-measures multivariate analysis of variance (MANOVA) with age (infant, toddler) and parent (mother, father) as within-subject factors and culture as between-subjects factor was computed for the four parent–child behaviors: parent sensitivity, child social engagement, parental control, and dyadic reciprocity. Following significant interactions, specific contrasts were tested. Results showed a significant overall main effect for age,  $F(4, 136) = 42.11, p < .01, \eta^2 = .45$ . Univariate tests (see Table 1) showed that sensitivity decreased as child social engagement, parental control, and dyadic reciprocity increased from 5 to 33 months.

An overall main effect was also found for parent,  $F(4, 136) = 8.91, p < .01, \eta^2 = .11$ . Univariate tests (see Table 1) showed higher sensitivity and reciprocity during interactions with mother and higher child engagement and parental control during interactions with father. A large overall effect was found for culture,  $F(4, 136) = 122.86, p < .01, \eta^2 = .61$ . The largest main effect for culture was observed for parent sensitivity (see Table 1), and a more moderate effect emerged for child social engagement; both were higher in the Israeli group. No cultural effects were found for parental control or dyadic reciprocity.

An overall Age  $\times$  Culture interaction effect,  $F(4, 136) = 21.13, p < .01, \eta^2 = .28$ , was found related to parent sensitivity. Among Israeli parents, sensitivity decreased from infancy to the toddler stage,  $F(1, 85) = 5.23, p < .05, \eta^2 = .05$ , whereas among Palestinian parents sensitivity showed a large increase from 5 to 33 months,  $F(1, 54) = 44.74, p < .01, \eta^2 = .33$ . Thus, whereas large differences emerged for parent sensitivity in infancy (Israeli:  $M = 4.10, SD = 0.99$ ; Palestinian:  $M = 2.41, SD = 0.75$ ),  $F(1, 158) = 84.22, p < .01, \eta^2 = .55$ , differences were no longer significant at the toddler stage (Israeli:  $M = 3.89, SD = 0.83$ ; Palestinian:  $M = 3.72, SD = 0.86$ ),  $F(1, 138) = 3.51, p > .05$ .

A repeated-measures MANOVA with age as the within-subject factor and culture as the between-subjects factor was computed for the two family-level interactive behaviors: cohesion and rigidity. An overall main effect was found for age,  $F(2, 138) = 7.72, p < .01, \eta^2 = .11$ . Univariate tests (see Table 1) showed that both cohesion and rigidity increased during the first years of parenting. An overall main effect was also found for culture,  $F(2, 138) = 12.22, p < .01, \eta^2 = .14$ , with lower cohesion and higher rigidity observed among Palestinian families.

To examine the hypothesis that paternal control among Palestinian fathers is higher during interactions with sons than with daughters at the toddler stage, we ran an ANOVA examining for father control with culture, parent gender, and child gender as between-subjects factors. Results showed a marginal effect for the three-way interaction,  $F(1, 136) = 3.69, p = .06$ . Examination of the mean showed that Palestinian fathers, but not Israeli fathers, showed greater control toward their sons ( $M = 2.29, SD = 0.66$ ) than their daughters ( $M = 1.92, SD = 0.54$ ),  $F(1, 54) = 3.98, p < .05, \eta^2 = .04$ .

All interactive measures showed medium-level stability from 5 to 33 months in the two cultures ( $r = .39-.54, p < .001$ ), and the

**Table 1**  
*Parent–Child and Family Interactive Behaviors Across Ages, Parents, and Cultures*

Interactive behavior	5 months						33 months						Effect size ( $\eta^2$ )						
	Israeli			Palestinian			Israeli			Palestinian			Univariate <i>F</i>		Age	Parent	Culture		
	M (SD)	Father, M (SD)	Mother, M (SD)	Father, M (SD)	Mother, M (SD)	Father, M (SD)	Mother, M (SD)	Father, M (SD)	Mother, M (SD)	Father, M (SD)	Mother, M (SD)	Father, M (SD)	Age	Parent	Culture				
Parent–child interaction																			
Parent sensitivity	4.12 (1.03)	4.08 (1.03)	2.61 (0.96)	2.19 (0.69)	3.97 (0.91)	3.81 (0.85)	3.72 (0.89)	3.72 (0.76)	3.72 (0.76)	3.72 (0.85)	3.72 (0.85)	3.72 (0.76)	17.65**	7.88**	132.11**	.16	.10	.63	
Child social engagement	3.25 (0.77)	3.38 (0.94)	2.95 (0.68)	2.86 (0.87)	3.69 (1.19)	3.77 (1.08)	3.21 (0.92)	3.45 (0.96)	3.45 (0.96)	3.21 (0.92)	3.21 (0.92)	3.45 (0.96)	15.72**	3.71*	29.14**	.15	.04	.30	
Parental control	1.62 (0.67)	1.67 (0.64)	1.76 (0.72)	1.78 (0.72)	1.89 (0.83)	1.88 (0.71)	1.96 (0.85)	2.12 (0.83)	2.12 (0.83)	1.89 (0.83)	1.88 (0.71)	2.12 (0.83)	3.94*	3.86*	1.16	.04	.04	.04	
Dyadic reciprocity	3.12 (0.93)	2.91 (0.85)	2.92 (0.91)	2.78 (0.79)	3.96 (1.07)	3.61 (0.99)	3.96 (1.04)	3.63 (0.94)	3.63 (0.94)	3.96 (1.07)	3.61 (0.99)	3.63 (0.94)	62.06**	6.98*	2.05	.41	.06	.06	
Triadic interactions																			
Cohesion	3.74 (1.12)	3.32 (1.01)	4.01 (1.15)	3.82 (0.97)	4.73* (9.66**)	4.73* (9.66**)	4.73* (9.66**)	4.73* (9.66**)	4.73* (9.66**)	4.73* (9.66**)	4.73* (9.66**)	4.73* (9.66**)	4.73*	9.66**	.05	.12	.12	.12	.12
Rigidity	1.85 (0.76)	2.43 (0.82)	2.54 (0.74)	2.96 (0.83)	5.11* (10.74**)	5.11* (10.74**)	5.11* (10.74**)	5.11* (10.74**)	5.11* (10.74**)	5.11* (10.74**)	5.11* (10.74**)	5.11* (10.74**)	5.11*	10.74**	.05	.13	.13	.13	.13

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

magnitude of the correlations did not differ between groups as tested with *r*-to-*z* transformation and Fisher *Z* tests. Similarly, correlations were found between interactive behaviors during child–mother and child–father interactions both in infancy (*r* = .37–.59, *p* < .01) and the toddler stage (*r* = .42–.62, *p* < .01), and no differences were found in the magnitude of the correlations.

**Predicting Children’s Social Competence at Child Care**

Prior to assessing the predictors of social competence, we examined mean-level differences in social competence across cultures. Mean social competence equaled 3.10 (*SD* = 0.79) for Israeli toddlers and 3.21 (*SD* = 0.76) for Palestinian children. There was no cultural difference, indicating that children from the two cultures reach similar levels of social competence at about the same age. However, because the measure of social competence used here was created by professionals from the two cultures and reflected the shared aspect of social skills required of toddlers at this age, the findings are not surprising. Four hierarchical regressions were computed predicting social competence from mother–child and from father–child interactive behaviors at both infancy and toddlerhood. In each model, culture was entered in the first step, to partial out variance related to cultural differences. Following, the centered parent–child interactive behaviors—parent sensitivity, child engagement, parental control, and dyadic reciprocity—were entered in the next four steps (Aiken & West, 1991). Parent sensitivity and child social engagement, for which cultural differences were found, were entered prior to parental control and dyadic reciprocity, which showed no cultural differences. Dyadic parent–child interactive behaviors were entered before the two family-level triadic constructs and cohesion, in line with the family perspectives (e.g., Davies & Cicchetti, 2004) suggesting that dyadic relationships in the family shape the family-level interactive behaviors. For comparability between the dyadic and triadic measures, cohesion, which is theoretically linked to sensitivity, was entered before rigidity, which is associated with parental control. The four interaction terms of each interactive behavior and culture

were entered in the final four steps to assess the moderating role of culture on each interactive behavior. Results of the four models appear in Table 2.

As seen, significant predictors of toddlers’ social competence from mother–infant interaction included mother–infant reciprocity, family cohesion, and the interaction of mother sensitivity and culture. Father–infant predictors at 5 months included infant social engagement with father and triadic cohesion. A follow-up examination of the interaction of mother sensitivity and culture was computed for each culture (Aiken & West, 1991). The interaction was significant in the Israeli group, slope = 4.02, *t*(81) = 2.62, *p* < .01, but not in the Palestinian group, slope = 0.76, *t*(49) = .35, *p* > .10 (*ns*). These data indicate that for Israeli children, the greater maternal sensitivity experienced in infancy, the greater the child’s social competence at child care. Such associations, however, were not found for Palestinian children.

As shown in Table 2, mother–toddler predictors of social competence included triadic family cohesion and a marginal contribution of dyadic reciprocity. Father–toddler predictors included child social engagement, family cohesion, and the interaction of father control and culture. Follow-up of the interaction of father control and culture showed that among Palestinian children, an associations emerged between father control and social competence, slope = 3.22, *t*(49) = 1.96, *p* < .05, indicating that the higher the paternal control, the greater the child’s social competence. Among Israeli children, the association was significant but in the other direction. Children experiencing higher paternal control displayed poorer social competence at the child-care setting, slope = –3.72, *t*(81) = –2.11, *p* < .05.

**Correlations Between Interactive Behaviors and Parental Attitudes and Practices**

Associations between parental attitudes and child-rearing practices and the four parent–child and two family interactive behaviors are presented in Table 3. Because these factors showed differences between cultures, results are presented for the two groups separately. Interactive behaviors were averaged across age, due to

Table 2  
*Predicting Children’s Social Competence by Maternal and Paternal Interactive Behaviors at 5 and 33 Months*

Predictor	Mother–infant interaction			Father–infant interaction			Mother–toddler interaction			Father–toddler interaction		
	β	Δ <i>R</i> <sup>2</sup>	Δ <i>F</i>	β	Δ <i>R</i> <sup>2</sup>	Δ <i>F</i>	β	Δ <i>R</i> <sup>2</sup>	Δ <i>F</i>	β	Δ <i>R</i> <sup>2</sup>	Δ <i>F</i>
Culture	–.12	.02	0.94	–.19	.03	1.92	–.14	.03	1.76	–.11	.02	0.99
Parent sensitivity	.19	.03	2.11	.19	.03	2.18	.18	.03	2.32	.13	.01	1.26
Child social engagement	.17	.03	2.86	0.32*	.07	4.62*	0.21	.04	3.55	0.34*	.08	5.76**
Parental control	–.11	.02	1.87	–.20	.03	2.41	–.22	.03	2.65	–.22	.04	3.15
Dyadic reciprocity	.32*	.06	4.22*	.09	.01	0.85	.27*	.05	3.63†	.11	.01	0.78
Triadic cohesion	.27*	.05	3.97*	.31*	.06	4.86*	.28*	.04	3.88*	.30*	.06	4.28*
Triadic rigidity	–.14	.03	2.44	–.11	.01	0.93	–.09	.01	0.87	–.18	.03	2.84
Sensitivity × Culture	.39*	.06	4.13*	.24	.02	1.88	.20	.02	1.24	–.25	.02	1.86
Engagement × Culture	–.07	.00	0.14	.23	.02	1.15	.12	.01	0.95	.24	.02	1.92
Control × Culture	–.12	.01	0.87	–.26	.02	1.64	.09	.00	0.12	–.46*	.08	6.17**
Reciprocity × Culture	.19	.02	1.05	.18	.01	1.07	.28	.02	1.93	.06	.00	0.26

Note. For the entire model, *R*<sup>2</sup> total = .32, *F*(13, 126) = 4.15, *p* < .01; *R*<sup>2</sup> total = .31, *F*(13, 126) = 4.06, *p* < .01; *R*<sup>2</sup> total = .28, *F*(13, 126) = 3.77, *p* < .01; *R*<sup>2</sup> total = .37, *F*(13, 126) = 5.53, *p* < .01.  
 † *p* < .10. \* *p* < .05. \*\* *p* < .01.



their individual stability, but because there were mean-level differences across age we examined the pattern of associations for each age separately and compared the differences using *r*-to-*z* transformations. The magnitudes of the correlations were the same.

As seen, the patterns of associations were mainly similar in the two societies, with minor variations, but none of the correlations differed significantly as measured by *r*-to-*z* transformation and Fisher *Z* tests. Traditional sex-role attitudes were related to higher parental control and family-level rigidity and to lower parent sensitivity and child engagement. Endorsement of a respectful child in the parent's child-rearing goals was similarly related to higher control and rigidity. Emphasis on expressive child correlated with parental sensitivity and child engagement, low parental control, and low family rigidity among Palestinian families. Child care by kin was not associated with interactive behaviors among Israeli families but was associated with lower sensitivity and higher family rigidity among Palestinian families. Father involvement in both cultures was related to higher parent sensitivity, lower parental control, higher reciprocity, and higher family cohesion. The findings therefore demonstrate that parental attitudes, practices, and child-rearing goals that differentiate the two cultures also account for variability within each culture.

### Discussion

The present study is among the first to examine parent-child interactive behaviors as antecedents of children's social competence from a cultural perspective and to include mother, father, and the triad within a longitudinal design. Three goals guided the study: to address differences in interactive behaviors related to age, culture, and parent; to examine predictors of social competence from dyadic and triadic interactions; and to test correlations between interactive behaviors and culture-specific dimensions of parenting. Results highlight the important ways in which interactive behaviors are shaped by the child's age, the cultural context, and the interacting partner. The findings similarly point to the infant's reciprocity with mother, engagement with father, and harmonious experience in the triad as important contributors to

toddlers' social competence in the two cultures. Associations also emerged between culture-specific parenting attitudes and the interactive behaviors more typical of that culture, but the links found between parental attitudes and interactive behavior in the two societies suggest that these associations are independent of the cultural context. Most important, the findings point to culture-specific pathways from early interactive behavior to children's social competence. Mother sensitivity in infancy contributed to social competence only in the Israeli group, whereas father control during the toddler stage had an opposite effect in the two societies (i.e., it facilitated social competence among Palestinian toddlers and interfered with the social development of Israeli toddlers). These findings raise important questions with regard to the applicability of theoretical propositions and empirical findings across a variety of cultural contexts and underscore the need for a broader cultural perspective that can provide a fuller understanding of children's development within the social context.

As to the first study goal, the largest main effect was observed for cultural differences in interactive behavior and was mainly observed for maternal sensitivity in the infancy period. Consistent with much cross-cultural research in infancy (Keller et al., 2004; Richman et al., 1988; Whiting & Edwards, 1988), the mother's interactive behavior followed the distal style (marked by "active" social behavior in the gaze, touch, vocal, and affective modalities) in the more individualistic Israeli society, and higher sensitivity was found in this group in infancy. Social engagement, the child's active involvement and initiation of social behavior, was similarly higher in the Israeli group at both time points. Emphasis on active social behavior, a face-to-face position, and the consideration of play as a unique context that is separated from the stream of daily life and aims to "teach" infants new skills is typical of parenting in Western societies during the first months of life (Kartner et al., 2009; Keller et al., 2004). Such style is thought to be guided by the philosophy that social exchanges occur between separate individuals who coordinate their behavior in relation to each other (Feldman et al., 2006), as opposed to the proximal style, which is based on the centrality of physical contact during the first months of life (Tronick, 1995). The lack of cultural difference for dyadic reci-

Table 3  
Correlations Between Parents' Attitudes and Practices With Parent-Child and Family Interactive Behavior

Variable	Traditional sex roles	Child care by kin	Father involvement	Child-rearing goals: Respectful child	Child-rearing goals: Expressive child
<b>Israeli</b>					
Parent sensitivity	-.35**	.04	.34**	-.26*	.32*
Child social engagement	-.26*	-.10	.22	-.24*	.38**
Parental control	.32**	.06	-.25*	.20	-.26*
Dyadic reciprocity	-.11	.05	.34**	-.26*	.18
Triadic cohesion	-.18	-.13	.32*	-.19	.25*
Triadic rigidity	.35**	.17	-.14	.28*	-.17
<b>Palestinian</b>					
Parent sensitivity	-.44**	-.31*	.47**	-.33*	.29*
Child social engagement	-.37**	-.11	.33*	-.36*	.41**
Parental control	.29*	.18	-.34*	.29*	-.39**
Dyadic reciprocity	-.19	-.12	.44**	-.17	.22
Triadic cohesion	-.22	-.23	.35*	-.21	.24
Triadic rigidity	.42**	.28*	-.21	.38**	-.33*

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

procity, a measure that indexes the dyadic atmosphere and the partners' adaptation to each other's rhythms, supports the position that mutuality is achieved in each culture by a different set of behaviors but that the degree of its expression may be similar across cultures (Emde, 1992; Tronick, 1995).

In addition to cultural difference, an Age  $\times$  Culture interaction was found for sensitivity: Although sensitivity decreased in the Israeli group, it increased markedly among Palestinian parents from infancy to toddlerhood, and by the toddler stage, the large differences in parent sensitivity were no longer significant. Whereas parents in more individualistic societies may decrease their active involvement to make room for the child's growing autonomy, in more traditional societies the toddler stage may be a point at which parents increase their active social behavior after the period of infancy, when interactions were mainly directed to soothe the infant, maintain physical contact, and reduce negative arousal (Briggs, 1972). At this time, parent-child interactions in more Western societies move from the face-to-face position and those in more traditional societies shift from the full-contact position to interactions that build on positions of joint attention to toys and aim to increase children's mastery, problem-solving skills, and creative-symbolic expression. The attenuation of cultural differences with age may also suggest that when infants first enter the social world, the culture-specific modes of relatedness are "encoded" and that such differences may later decrease. This hypothesis requires much further research in longitudinal cross-cultural studies.

In addition to that for cultural differences, a large main effect was found for age and a milder effect emerged for parent gender. With age, children became more socially engaged, in terms of the initiation of social bids, vocalizations, expression of positive affect, social alertness, and the maintenance of a creative and exploratory focus. As a result, both child social engagement and dyadic reciprocity, which develop with the child's growing involvement, increased. These behaviors showing age-related increases also yielded parent gender differences; children were more socially engaged with father and displayed higher reciprocity with mother. Previous research described higher reciprocity with mother and higher positive arousal and playful engagement with father as the typical modes of interactions with each parent (Feldman, 2003; Lamb, 1981; Parke, 1996), and the present data confirm these findings in two cultures with different orientations to the role of the father. In accordance with the family system's notions, interactive behaviors were individually stable between child-mother and child-father, and all interactive behaviors were individually stable from infancy to the toddler stage in the two cultures. The consistency of interactive behavior is among the central propositions of attachment theory (Bowlby, 1969), which suggests that repeatedly experienced early relationships provide the foundation for the development of brain structures and mental schemas that support social adaptation, and the findings support such consistency across two cultures and several interactive contexts. Possibly, the lasting impact of these early interactive behaviors rides on their consistency, which over time and multiple partners consolidates into the child's mode of functioning within the social world.

In terms of the second study goal, the findings point to three infancy antecedents of toddlers' social competence in the two cultures; mother-infant reciprocity, infant engagement with father,

and cohesion in the triad. The criterion variable, social competence, did not show mean-level differences, as the measure was constructed to reflect the shared social skills of children in the two societies. In terms of the predictors, it is of interest that the typical mode of interaction with each parent—reciprocity with mother and engagement with father—contributed to children's social growth. The infant's synchrony with mother is known to predict social-emotional outcomes, including affect regulation, empathy, attachment security, and behavior adaptation (Feldman, 2007c; Jaffe, Beebe, Feldstein, Crown, & Jasnow, 2001), and the present findings highlight the contribution of mother-infant reciprocity to the development of social competence with peers. The fact that reciprocity predicted social competence in both cultures may suggest that the specific manner by which reciprocity is achieved is less important to social growth than the experience of mutuality it affords. Social engagement with father at both infancy and the toddler stage was a meaningful predictor of social competence. Consistent with previous research (Cabrera, Tamis-LeMonda, Bradley, Hofferth, & Lamb, 2000), these results emphasize the important contribution of the father to children's socialization, especially to children's ability to cooperate with nonkin adults and peers, be social leaders, and engage in social activities. Research on fathering lags significantly behind that of mothering, and less research has followed outcomes of father-infant interactions. Nearly no research is available on fathering in non-Western cultures and none on fathering in Palestinian society. The findings that different components in the maternal and paternal behaviors predicted social competence point to the need to examine mothering and fathering as independent contexts for children's social growth. Finally, family-level cohesion during triadic interactions emerged as a unique predictor of social competence in each of the four models. These findings concur with perspectives on the family process as a separate setting with an independent contribution to social-emotional development (Fincham, 1998). It appears that a more positive experience within the triad, the first social context that requires adaptation to a multiperson social system (Gordon & Feldman, 2008), prepares children to function more competently with adults and peers within a multiperson nonfamilial setting.

Mother sensitivity in infancy and father control in toddlerhood were linked to social competence in culture-specific ways. Mother sensitivity predicted social competence only in the Israeli group, consistent with much research on the contribution of sensitivity to social adaptation (Sroufe, 1996). Possibly, mothers who encourage social communication; elaborate the child's interactions; and gaze, vocalize, and show positive affect that is adapted to the child's signals during the period of the infant's initiation into the social world (Stern, 1985), that is, mothers who are considered sensitive in Western societies, prepare their children better for a cooperative, well-regulated functioning within such societies. Yet, the data also point to the limitations of the sensitivity-adaptation link and indicate its predictive utility mainly in the context of more individualistic societies. Among Palestinian toddlers, no difference emerged between children who experienced high or low maternal sensitivity, suggesting that the behaviors that compose sensitivity as it is currently defined may not serve as vehicles of social growth in that society.

The effects of father control were similarly culture specific, with opposite effects on social competence in the two societies. The father's role in societies guided by patriarchal hierarchies, tradi-

tional gender roles, low father involvement, and an emphasis on respect for elders, as in the Palestinian society (Abudabbeh, 1998), may differ from its role in societies that promote child autonomy and a less clear distinction between the maternal and paternal roles. Paternal control in more traditional societies may reflect paternal involvement and surveillance and the father assuming an active role in his child's life. Such an active role may be especially important for fathers in traditional societies during the toddler years, when the physical proximity between mother and child recedes and new opportunities for father-led interactions with his toddler are enabled. Father control was especially pronounced in the interactions of Palestinian fathers and their sons, consistent with the findings that Palestinian fathers are more invested in their sons' mastery than their daughters' (Feldman et al., 2006). Among children in Israel, where cultural norms require more initiative and self-starting behavior, those whose fathers showed higher control were less socially competent. The findings, therefore, highlight the fact that components in the parental style that foster development in one culture may have negative consequences in another. In this respect, it is important to note that, at present, 96% of the studies on early development come from North America or Europe (Celia, 2004). This implies that most current knowledge of human development, as well as the theoretical frameworks available to interpret it, are based on behaviors observed in highly specific contexts. A broader cultural perspective and research in multiple cultures are therefore critical in order to understand the relational antecedents of social development across societies and test their associations with parental beliefs, cultural norms, and child-rearing practices.

The third study goal explored the associations between culture-specific parenting dimensions and parent-child interactive behaviors. In both cultures, more traditional sex-role attitudes and higher emphasis on respect in the parent's child-rearing goals were associated with higher parental control and triadic rigidity, and higher father involvement and emphasis on child expressiveness correlated with higher sensitivity, engagement, and triadic cohesion. Although preliminary, these findings suggest that cultural norms and attitudes, particularly those related to parenting and gender roles, are already likely to shape the interactions between parents and their children at the earliest stages of family formation. These findings may lend some support to perspectives that hold that cultural differences in social behavior reflect deeper cultural philosophies on the construal of the self and its relation to the social world (Jahoda, 1986; LeVine, 2002; Markus & Kitayama, 1991). Finally, it is important to note that the same family factors that differentiated the two cultures also accounted for individual variability within each culture. This finding may suggest that the links between specific attitudes (e.g., more traditional gender-role attitudes and tighter parental control) are observed across societies and are not expressed only within certain cultural settings.

Limitations of the study relate to the fact that a cross-cultural focus may ignore within-culture differences. Although the analyses controlled for culture, it is possible that patterned differences in unknown subcultural groups were not detected. We tried to minimize this risk by collecting a uniform sample in each society that included only dual-earner, educated, middle-class parents and their firstborn child, but the possible oversight of different subgroups remains a study limitation. Because the sample included only middle-class families, generalizability of the findings requires replication in lower SES families. Similarly, due to the small

number of Christian families in the Palestinian sample, it is possible that differences between Muslims and Christian were not detected. Finally, the fact that the coders and interviewers could not be blind to the cultural membership of the families is a study limitation that may have biased the findings in some way.

Interactive behaviors assessed longitudinally and measured across cultures may be important for broadening current theories of social-emotional development. Further research should assess relational patterns across cultural and subcultural groups; follow infants' relationships with mother, father, and the family across childhood and adolescence; address the longitudinal relations between interactions with parents, close friends, and intimate partners; and test culture-specific and universal predictors of children's competencies in the social, emotional, self-regulatory, cognitive, and moral domains.

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