Parent–Child Interaction Among Latina Adolescent Mothers: The Role of Family and Social Support

Josefina M. Contreras

Department of Psychology
Kent State University

Sarah C. Mangelsdorf and Jean E. Rhodes

Department of Psychology
University of Illinois at Urbana–Champaign

Marissa L. Diener

Family and Consumer Studies
University of Utah

Liesette Brunson

Department of Psychology
University of Illinois at Urbana–Champaign

This study examined family and social support correlates of parent–child interaction among Latina adolescent mothers. Mothers ($N = 49$) were videotaped in their homes interacting with their children (M age = 13 months) and interviewed regarding their social support. Consistent with existing models of the influence of social support on parenting, mothers who reported greater overall social support were more expressive across three observation tasks and more sensitive during unstructured play. In contrast, specific aspects of support (i.e., extent of support from grandmothers, child care support from partners and grandmothers), were negatively related to sensitivity during unstructured play. Results also indicated that the correlates of parent–child

Requests for reprints should be sent to Josefina M. Contreras, Department of Psychology, Kent State University, Kent, OH 44242–0001. E-mail: jcontrer@kent.edu

interactions varied across tasks. Findings are discussed in light of normative developmental issues, the participants' cultural background, and their fit with existing models.

Although the literature on adolescent parenting is growing, the preponderance of research to date has focused primarily on White and African American adolescent mothers, and remarkably little is known about factors related to parent–child interactions among Latino youth. Given that family structure and social network variables distinguish Latina adolescent mothers from other groups of adolescent parents (Becerra & de Anda, 1984; Wasserman, Rauh, Brunelli, García-Castro, & Necos, 1990), it is crucial to examine how these variables relate to parenting competence among young Latina mothers. Understanding these factors is particularly important in light of the fact that although adolescent birth rates among White and African American youth have declined recently, the rate for Latina adolescents has increased and has now surpassed that of African American and White adolescents (Ventura, Martin, Curtin, & Mathews, 1997). Moreover, Latinos are projected to become the largest minority group by the year 2010 (Day, 1996), represent the fastest growing segment of the population under the age of 21 (Aponte & Crouch, 1995), and are overrepresented among the poor (National Center for Health Statistics, 1997), suggesting that adolescent parenting among the Latino population will continue to be a serious problem. Thus, the goal of this study was to examine family and social support correlates of parent–child interaction among Latina adolescent mothers.

Social support has been highlighted as an important factor in current theoretical models of parenting competence (Abidin, 1992; Belsky, 1984), especially for those parenting under conditions of high stress or social risk such as young minority mothers (Wilcox, 1981). A positive association between social support and adjustment to parenthood has been documented for adults, and in some cases, for adolescent mothers (Chase-Lansdale, Brooks-Gunn, & Zamsky, 1994; Jacobson & Frye, 1991; Oyserman, Radin, & Saltz, 1994; Unger & Wandersman, 1985). However, recent studies raise questions regarding a simple, direct, and positive association between social support, especially support from grandmothers (the adolescents' mothers), and higher parenting competence among young mothers (Chase-Lansdale et al., 1994; Shapiro & Mangelsdorf, 1994; Spieker & Bensley, 1994; Unger & Cooley, 1992; Wise & Grossman, 1980). In a predominantly African American sample, adolescent mothers who relied more on their families for emotional and material support assumed fewer child care duties and had more negative feelings about their infants. High

grandmother involvement in child care was also associated with less favorable parenting behaviors among adolescents (Wise & Grossman, 1980). In a sample of African American and White adolescent mothers, emotional support from grandmothers was positively related to grandmothers' involvement in child care and negatively related to the adolescent's nurturance toward her infant (Oyserman et al., 1994). Research also suggests that adolescents' living arrangements can be associated with their parenting behaviors. Specifically, among African American youth, coresidence with grandmothers was associated with poorer quality of parenting, both independently (Chase-Lansdale et al., 1994; Spieker & Bensley, 1994; Unger & Cooley, 1992) and in interaction with maternal age at first birth (Chase-Lansdale et al., 1994).

Although the reasons behind these negative associations have not been determined, there are a number of plausible explanations. For example, they could be due to the fact that the young mother's reliance on her mother for support at the same time that she pursues her independence may increase mother–adolescent conflict (de Anda & Becerra, 1984; Richardson, Barbour, & Bubenzer, 1991), and negatively impact parenting. Disagreements about childrearing are also likely to increase conflict as well as parenting stress, and in turn negatively influence the young mothers' parenting behaviors (Abidin, 1992; Crnic, Greenberg, & Slough, 1986). Alternatively, the negative associations may be due to the fact that grandmothers become more involved early on if they perceive their daughters as less competent or less invested in the parenting role.

Social support among Latina mothers appears to differ from that of other mothers in the United States. Latina mothers tend to turn to family members more during times of stress, are more receptive to their childrearing advice, and tend to share child care responsibilities with members of the extended family more than other groups of parents (García-Preto, 1996; Keefe & Casas, 1978). Grandmothers appear to have a prominent and influential role within the extended family and are commonly in charge of childrearing when the mother is employed (Ramos-McKay, Comas-Díaz, & Rivera, 1988). Consistent with these cultural traditions, Latinos tend to establish new households in the same neighborhoods as their family of origin and reside in close proximity to extended family members, thus facilitating close and frequent contact (Keefe, 1984). Latina adolescent mothers (of Puerto Rican and Dominican origin) report lower levels of social support than African American adolescent mothers (Wasserman, Brunelli, Rauh, & Alvarado, 1994). However, when considering support from family members as opposed to support from any provider, pregnant and parenting adolescents of

Puerto Rican origin report higher levels of family support and closer family ties than African American adolescents (Dore & Dumois, 1990). Also, in comparison to Anglo adolescent mothers, Mexican American adolescent mothers report more daily contact with extended family members and perceive their own mothers as providing more support (Becerra & de Anda, 1984; de Anda & Becerra, 1984). In addition, young Latina mothers (of diverse origins) are more likely than African American adolescent mothers to be in long-term relationships with partners (de Anda & Becerra, 1984), but are also likely to report lower levels of child care and emotional support from them than their African American (Wasserman et al., 1994; Wasserman et al., 1990) and White peers (de Anda & Becerra, 1984).

Based on these differences in family and social network variables, and the apparent complexity of the relations between social support and parenting suggested by the social support literature, our examination of social support focused not only on overall support resources but also on support received from partners and grandmothers, on the role of specific types of support (i.e., child care), and on the family structure in which the support is embedded. Thus, this investigation examines how coresidence with grandmothers and various aspects of social support (i.e., amount of and satisfaction with overall support, support from mothers and partners, child care support) were related to young Latina mothers' parent–child interactions. Maternal behaviors were assessed in situations that imposed different demands on the mother to obtain samples of parenting behavior across both structured, routine child care tasks (i.e., feeding, structured play with a toy) and an unstructured task in which mothers played with their children without the aid of toys or prompts (unstructured play without toys).

We selected two variables (life events, language acculturation) to control for aspects of the social ecology of Latina adolescents that may be related to their parenting behaviors. Life stress is associated with adjustment among adolescent mothers (Leadbeater & Linares, 1992; McKenry, Browne, Kotch, & Symons, 1990). Similarly, level of acculturation (extent to which Latinos have taken on important aspects of the dominant culture, including language; Marín, Sabogal, VanOss Marín, Otero-Sabogal, & Perez-Stable, 1987) relates to (adult) Latina mothers' teaching behaviors, with more highly acculturated mothers (indexed primarily by their preference for English) relying more heavily on verbal strategies (i.e., praise, verbal inquiry) than less acculturated mothers (Planos, Zayas, & Busch-Rossnagel, 1995). These two variables were controlled for in multivariate analyses when they showed significant associations with maternal behavior.

Based on findings for African American and White adolescent mothers, we expected that young mothers who resided with their mothers or relied

on them for extensive support (and child care support in particular) would display less optimal parent–child interactions. Because the unstructured task imposed greater demands on mothers than the other two tasks, we expected that the predicted negative relations between support and parenting would be strongest for maternal behavior during this more demanding task.

METHOD

Participants

Participants were 49 young Latina mothers and their children. The mothers' mean age at the time of the birth of their child was 17.0 (SD = 1.4; range = 13.3–19.8 years; 90% < 19.0 years). At the time of the study, the mothers' mean age was 18.1 (SD = 1.5; range = 13.8–22.0 years; 88% < 20.0 years); their children ranged in age from 3.2 to 34.8 months (M = 13.1; SD = 7.8; 90% < 24 months). Thirty-nine percent of the children were girls and 61% were boys. Most of the mothers (92%) had a single child and 82% were never married. Fourteen percent (7) of the mothers had completed high school; of the 86% (42) who had not completed high school, 38% (16) were not enrolled in school at the time of the study. Sixty-one percent attended school on a part-time (10%) or full-time basis (51%). Over half (53%) of the mothers received some welfare benefits; 12% worked outside of the home (4% full-time; 8% part-time). Close to half (46%) of the participants' fathers had an eighth grade education or less, 28% had a partial high school education, and 26% had a high school diploma. Thirty-seven percent of the participants' mothers had an eighth grade education or less, 21% had a partial high school education, and 42% had a high school diploma. Fifty-seven percent of the participants lived with their mothers, 31% with a partner, and 12% in other living arrangements. Approximately half (45%) of the participants who did not reside with their mothers lived in the same neighborhood as their mothers; an additional 8% lived within a 1-hr ride. Most mothers were either first or second generation in the mainland U.S. (88%); half of them (51%) were of Puerto Rican origin, 41% of Mexican origin, and 8% of South American origin. All participants were bilingual or English speaking.

Comparisons of the Mexican and Puerto Rican participants on demographic variables (i.e., living arrangements, level of education, marital, work, and school status, number of children, reliance on welfare, number of pregnancies, and age) revealed only one significant group difference. Mothers of Mexican origin were more likely to be married than Puerto Rican

participants, $\chi^2(1, N = 45) = 7.3, p < .01$. Of the 49 mothers in the study, 9 were married. Of these, 7 were of Mexican origin (1 of these mothers was currently separated). Comparisons of married versus never married mothers on the principal criterion variables in the study (i.e., maternal and child behavior composites) yielded no significant mean differences. In addition, Puerto Rican and Mexican mothers did not differ on these variables. Given that neither country of origin nor marital status were related to maternal and child behavior as measured in this study, and given that marital status was the only group difference that was detected, the data for Mexican and Puerto Rican mothers were combined in subsequent analyses.

Procedure

Participants were recruited through a community agency and three high schools that served young mothers residing in a low-income community within a large, Midwestern city. Personnel at the sites contacted women fitting the criteria for inclusion into the study (i.e., parenting, Latina, under 20 years at the time of the birth, child under the age of 3 years with no major physical disabilities), and obtained their permission to be contacted by a female Latina psychologist. Although detailed records were not kept, personnel reported that with few exceptions, all women they approached agreed to be contacted. The study procedures were then explained by the psychologist and an appointment for a home visit was made at the mothers' convenience, with the restriction that a normal feeding would be observed. Seventy-nine percent of the participants contacted by the psychologist participated in the study. Of the mothers who did not participate, half initially agreed but could not be located later. Informed consent from the adolescent and one of her parents was obtained prior to initiating the research procedures.

During the home visit, mothers were interviewed and videotaped interacting with their children. Interviews were conducted in English by a bilingual interviewer; only occasional translation of specific words was needed for some of the participants. For the videotaped observation, mothers were told they could use the language of their choice. Most mothers spoke to their children in English; some used both English and Spanish. For their participation, mothers received a $10 gift certificate and a copy of the videotaped interaction.

Measures

Life stress. The Life Events Survey (Sarason, Johnson, & Siegel, 1978), a self-report questionnaire, was used to assess life stress. This measure,

adapted to the lives of minority adolescents through a focus group (Rhodes, Ebert, & Fisher, 1992), assessed the occurrence and valence of 34 major stressors and life events occurring in the past year. Events were rated on a 5-point scale ranging from 1 (*extremely negative*) to 5 (*extremely positive*). Adequate test–retest reliability (Pearson rs = .63 and .64 for two normative samples) has been reported for this measure (Sarason et al., 1978). The life stress score was obtained by totaling the weighted scores for the events experienced as negative. The obtained mean and standard deviation on this and all measures used in the study appear in Table 1.

Language acculturation. A shortened version of the Acculturation Rating Scale for Mexican Americans (Cuéllar, Harris, & Jasso, 1980) was used to index level of language acculturation. The measure consists of seven questions regarding language use and preference (e.g., What language do you speak with friends?; What is your radio or TV viewing preference?) rated on a 5-point scale ranging from 1 (*Spanish only*) to 5 (*English only*) with a midpoint of 3 (*Spanish and English about equally*). Language use and preference has been found to be a reliable and valid indicator of the acculturation process among Latinos in the U.S. (Marín et al., 1987; Norris, Ford, & Bova, 1996). In our sample, the internal consistency of the scale was high (α = .90), and scores were significantly associated with generation

TABLE 1

Means and Standard Deviations of Social Support, Maternal Behavior, and Control Variables

Variables	M	SD	Range
Network size	5.92	2.67	3–18
Satisfaction with support	4.05	0.51	3–5
Extent of support–mother	3.31	2.11	0–6
Extent of support–partner	2.41	2.24	0–6
Child care support	2.82	1.67	0–7
Satisfaction with child care support	4.36	0.69	3–5
Availability of child care support from:			
Mother[a]	69.4%		
Partner[a]	36.7%		
Overall expressivity[b]	5.23	1.29	3.2–7.8
Sensitivity–structured[b]	4.04	1.80	1.0–8.0
Sensitivity–unstructured[b]	4.36	1.65	1.3–7.7
Life events	5.20	3.68	0–13
Language acculturation	3.50	1.01	1.4–5.0

[a]Percentage of participants who perceived the individual as available to provide child care. [b]Values based on averaging of nonstandardized scales. Scales were standardized prior to averaging to create composites for analyses.

level, a commonly used validity criterion. First generation participants (born outside the mainland United States) scored significantly lower than those of second or later generations, $t(47) = -4.71$, $p < .0001$.

Social support resources.   The Social Support Network Questionnaire (Rhodes, Meyers, Davis, Ebert, & Gee, 1999), a modification and extension of the Arizona Social Support Interview Schedule (Barrera, 1981), was used to assess mothers' social networks. Mothers were asked to nominate individuals whom they perceived as available to provide each of six types of social support (emotional support, tangible assistance, cognitive guidance, positive feedback, socializing support, and child care support) to obtain a quantitative measure of support, and to rate their satisfaction with each type of support received to assess the perceived quality of the support. Adequate internal consistency ($\alpha = .89$ for the six support categories; .65 for the support satisfaction scale) and test–retest reliability (1 week test–retest, $r = .75$ for network size; .62 for average support satisfaction) have been demonstrated for this instrument (Rhodes et al., 1999), which has been used successfully with samples of minority adolescent mothers (Davis & Rhodes, 1994; Contreras, López, Rivera-Mosquera, Raymond-Smith, Rothstein, 1999). For example, extent of social support from partners was positively related to psychological adjustment among Puerto Rican adolescent mothers (Contreras et al., 1999).

In addition to extracting a measure of network size (total number of persons perceived as available to provide any type of support), we computed the number of people perceived as available to provide child care support and whether or not the adolescents specifically perceived their own mothers and partners as available to provide this support. Child care assistance was defined as temporary, informal care. The child care support variable reflected the number of people perceived as available to provide this kind of assistance, not the actual amount of support provided. We also computed the extent of support the participants perceived to be available from grandmothers and partners by totaling the number of types of support for which each provider was available. Thus, the extent of support variable could range from 0 (*the individual was not available to provide support*) to 6 (*the individual was available to provide all six types of support*). The internal consistency of this scale was adequate ($\alpha = .77$ for grandmothers; .86 for partners). Satisfaction with each type of support was rated using a 5-point scale ranging from 1 (*bad*) to 5 (*very good*). Satisfaction with overall support was calculated by averaging satisfaction scores across the six types of support ($\alpha = .73$).

Mother–child interaction. Mother–child interactions were assessed during feeding, and unstructured and structured play episodes using a modified version of the Egeland Feeding and Play Scales (Egeland, Dienard, Taraldson, & Brunquell, 1975). In the unstructured play episode, mothers were asked to play with their child as they normally would when playing without toys. In the structured episode, mothers were asked to teach their child how to play with a toy introduced by the researcher. The toys were selected to be slightly developmentally advanced for the children (i.e., rattle with a mirror for 3- to 6-month-olds; multicolored ring stack for 6- to 12-month-olds; simple shape sorter for 12- to 18-month-olds; complex shape sorter for 18- to 35-month-olds). Each of the play episodes lasted 5 min. For the feeding episode, mothers were told to feed their child as they would normally do; the first 5 min of feeding were coded.

Maternal behavior in all three episodes was coded using nine 9-point scales; seven of these were common to all three tasks: Sensitivity, Positive Affect, Negative Affect, Vocalizations, Control, Expressivity, and Physical Contact. The two task-specific scales were: Physical Stimulation and Quality of Instruction for the structured task, Physical Stimulation and Repertoire of Behaviors for the unstructured task, and Facility in Caretaking and Attitude Toward Feeding for the feeding episode. Child behavior in all tasks was coded using three 9-point scales: Positive Affect, Negative Affect, and Responsivity (for descriptions of maternal scales, see Isabella, 1993; for descriptions of child scales, see Shapiro & Mangelsdorf, 1994).

Different sets of coders rated maternal and child behavior; coders overlapped on at least 26% of the tapes. Coders were blind to the other data on the families and were trained on videotaped interactions collected during pilot testing of the study procedures. All of the coders had at least college level Spanish training that allowed them to understand all of the mothers' Spanish vocalizations; one coder was bilingual and of Latino origin. Due to low reliability, five maternal scales were dropped. These were: Control, Sensitivity, Facility for the feeding task, Negative Affect for the structured task, and Physical Stimulation for the unstructured task. For the remaining maternal scales (22 scales), percentage agreement ranged from 76% to 100% ($M = 89.5\%$), and interrater correlations ranged from .73 to .98 ($M = .87$). The lowest of these reliability indexes were for Quality of Instruction in the structured task (agreement = 76%; $r = .73$) and Sensitivity in the unstructured task (agreement = 77%; $r = .76$). Given the centrality of these constructs to our assessment of maternal behavior in each of these two tasks, we nonetheless retained these variables for subsequent analyses. One of the child scales, Negative Affect during feeding, was not retained because of its low interrater correlation. Agreement for the remaining child scales ranged from 71% to 94% ($M = 85\%$); interrater correlations

ranged from .65 to .96 (M = .79). The lowest reliability was for Responsivity in the structured task (agreement = 71%; r = .65). As with the maternal scales that showed acceptable, but relatively low reliability, we did not exclude Responsivity because this construct reflected a crucial aspect of the child's behavior with his or her mother.

Derivation of maternal behavior variables.   To reduce the number of maternal behavior variables, principal component analyses (varimax rotations) were conducted. Analyses were run separately for each task. Only components with alphas greater than .60 were retained for use in later analyses. Thus, the following scales were not retained: Physical Contact (all tasks), Physical Stimulation (structured task), Attitude Toward Feeding, and Negative Affect (feeding). The resulting factor structure was quite similar across episodes. For the structured and unstructured tasks, two main components emerged. Component 1, named *Maternal Expressivity*, included Vocalizations, Positive Affect, Expressivity, and (for the unstructured task only) Repertoire of Behaviors. This component reflected the level of verbal, facial, and gestural expression of emotion and positive affect displayed by the mothers in each task (αs = .82 and .92 for the structured and unstructured tasks, respectively). Component 2, labeled *Maternal Sensitivity*, included Control, Sensitivity, Negative Affect, and (for the structured task only) Quality of Instruction. This component reflected mothers' tendency to accurately read and respond to the child's signals, limit the exertion of control over the child, and express little negative affect (αs = .94 and .83 for the structured and unstructured tasks, respectively). For the feeding episode, a parallel Maternal Expressivity component emerged (αs = .91).

The Maternal Sensitivity and Expressivity scores for each episode were derived by averaging the standardized scores on the variables loading highly on the respective component. Because Expressivity was significantly correlated across the three tasks (rs = .50, .52, and .61, all ps < .001), an overall Maternal Expressivity score was computed by averaging the standardized scores for each task. Sensitivity was not correlated across tasks; thus, the Sensitivity scores were not combined. In sum, three maternal composites were used in subsequent analyses: Maternal Expressivity across all tasks, Maternal Sensitivity in the structured task, and Maternal Sensitivity in the unstructured task.

Derivation of child behavior variables.   One overall child behavior score was derived for each observation episode by summing the standard-

ized scores on the three scales: Positive Affect, Negative Affect (reverse scored), and Responsivity within each episode. Thus, the resulting three variables reflect greater responsivity, more positive affect, and less negative affect displayed by the child during each episode (except for feeding in which the Negative Affect scale was not available). Alpha coefficients for these composite variables were .74 for the structured task, .77 for the unstructured task, and .60 for the feeding episode. Because child behavior during feeding and the unstructured task were not correlated, a composite variable reflecting child behavior across tasks was not computed.

RESULTS

Coresidence With Mothers and Maternal Behavior

Pearson and point biserial correlations among the main study variables are presented in Table 2. To examine associations between coresidence with mothers and maternal behavior, the three types of living arrangements in our sample (with mother, $n = 28$; with partner, $n = 15$; other arrangements, $n = 6$) were collapsed into two groups: those living with mothers ($n = 28$) and those in all other living arrangements ($n = 21$). The point biserial correlations between coresidence with mothers and the three maternal behavior variables were not significant, indicating that maternal behaviors did not differ across the two living arrangements. We then examined whether the interaction between maternal age at the birth of the child and coresidence was associated with maternal behavior (adolescents living with their mother were younger than those in other arrangements; $t[47] = 2.7; p < .01$) using regression analyses. In each of the three regressions, the age by coresidence interaction was entered after the two main effects were entered in the model. Neither age nor the interaction term were significant in any of the models. Thus, contrary to prior findings for African American adolescent mothers (Chase-Lansdale et al.,1994), among the young Latina mothers in our sample, coresidence, alone or in interaction with maternal age, was not associated with parent–child interactions.

Social Support and Maternal Behavior

Pearson correlations between the social support variables and the three maternal behavior variables (Table 2) indicated that Expressivity was significantly correlated with network size. Those adolescents who reported having more people available to provide support were more expressive

TABLE 2

Correlations Among Maternal Behavior and Social Support Variables

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Network size	—	-.02	-.19	-.03	.19	.02	-.15	-.12	.13	.34**	-.06	.32**
2. Satisfaction with support		—	.15	.28**	.18	.50****	.00	.27*	-.06	.23	.19	-.10
3. Extent of support–mother			—	.19	.32**	.08	.71	.21	.09	-.19	.19	-.38***
4. Extent of support–partner				—	.47****	.26*	.12	.66****	.07	.11	.26*	-.31**
5. Child care support					—	.14	.33**	.55****	-.17	-.02	.26*	-.21
6. Satisfaction with child care support						—	.17	.18	.04	-.09	.04	-.29**
7. Child care–mother[a]							—	.14	.14	-.18	.08	-.41***
8. Child care–partner[a]								—	.06	-.02	.26*	-.35**
9. Coresidence–mother[a]									—	-.07	-.15	-.18
10. Expressivity										—	.22	.41***
11. Sensitivity–structured											—	.15
12. Sensitivity–unstructured												—

Note. For sensitivity, boldfaced *r*s are significantly different from each other.

[a]Values reported are point biserial correlations.

*$p < .10$. **$p < .05$. ***$p < .01$. ****$p < .001$.

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during interaction with their children. Maternal Sensitivity during the structured task was marginally correlated with child care support, extent of support from partners, and availability of support from partners. Participants who reported having more people available to provide child care support, more extensive support from partners, and who perceived their partners as available to provide child care support tended to display greater sensitivity during structured play.

Maternal Sensitivity during unstructured play was positively correlated with network size. It is interesting to note that although a larger network size was related to greater sensitivity, other aspects of support were negatively correlated with sensitivity in this task. Extent of support from mothers and from partners, and satisfaction with child care support were negatively related to sensitivity. Participants who perceived their mothers or their partners as available to provide a wider variety of types of support displayed lower levels of sensitivity in this episode. Mothers who reported higher levels of satisfaction with the child care support they received were also less sensitive during this unstructured task. In addition, those who perceived their mothers or their partners as available to assist with child care displayed lower levels of sensitivity during unstructured play.

Given that the direction of the correlations between the support variables and sensitivity tended to differ for the structured and unstructured tasks, we directly compared these correlations across the two tasks. Fisher's r to Z transformations (Hays, 1981) and significance tests indicated that seven of the eight correlations were significantly different from one another (significantly different correlations appear boldfaced in Table 2).

Multivariate Associations Between Social Support and Maternal Behavior

Hierarchical regressions were conducted to examine the relative contributions of the different social support variables to the maternal behavior variables. Two types of models were constructed, one including overall aspects of social support and the other child care support in particular. Because we wanted to examine the contributions of support received from mothers and partners above and beyond that of overall support resources, in both types of models, support resources (i.e., network size and number of people available to provide child care support, respectively) were entered first followed by ratings of satisfaction with support (satisfaction with overall support and with child care support, respectively). Support from individual providers (extent of support available

from mothers and partners, and availability of child care support from mothers and partners, respectively) was entered as a block in the last step.

Pearson correlations among the predictors in the models (Table 2) revealed one significant association among the predictors used in the regressions examining overall support. Extent of support from partners was modestly correlated with overall support satisfaction. For the child care models, child care support was significantly correlated with availability of this support from mothers and partners. Participants who reported their mothers or partners as available to provide child care support also reported a greater number of people as available to provide this support. These intercorrelations were not high enough to preclude inclusion into the models, and an examination of the Variance Inflation Factors indicated that multicollinearity was not a problem in our regressions (Neter, Wasserman, & Kutner, 1985). Nonetheless, it is important to point out that given that we entered the variables into the models hierarchically, for intercorrelated pairs of variables, the extent of the contribution of the variable entered last may be slightly underrepresented in our models. None of the other intercorrelations were significant, and language acculturation was not correlated with any of the social support variables.

To determine the need to include control variables in the models, analyses were run to examine possible associations between maternal behavior and background variables (i.e., maternal and child age, child gender, work and school status, educational level, welfare reliance, life stress, and language acculturation). Only one significant association was found. Language acculturation was significantly correlated with Maternal Expressivity ($r = .35$, $p < .01$), with those scoring higher displaying greater expressivity. Language acculturation was used as a control variable in models examining Maternal Expressivity.

Results of the regressions predicting Maternal Expressivity (Table 3) indicated that after controlling for language acculturation, network size remained significantly associated with expressivity. Thus, mothers who reported a larger network were more expressive during interaction with their children. Satisfaction with overall support (Step 3) accounted for a marginally significant percentage of additional variance in Maternal Expressivity. Extent of support from individual providers did not explain a significant percentage of the remaining variance. None of the child care support variables were related to Maternal Expressivity.

Results of the overall social support model predicting Maternal Sensitivity in the structured task (Table 4) indicated that after entering network size and satisfaction with support, extent of support from partners was no

TABLE 3
Hierarchical Regressions Predicting Maternal Expressivity From Support Variables

	$R^2 \Delta$	B	β
Overall support model			
Step 1: Language acculturation	.12**	.26	.34**
Step 2: Network size	.08**	.08	.29**
Step 3: Satisfaction with support	.05*	.34	.23*
Step 4: Extent of support from:	.03		
Mother		−.06	−.16
Partner		.03	.09
	Overall R^2/adjusted R^2 = .28/.20***		
Child care support model			
Step 1: Language acculturation	.12**	.26	.34**
Step 2: Child care support	.00	−.01	−.03
Step 3: Satisfaction with support	.00	−.05	−.05
Step 4: Availability of child care support from:	.02		
Mother		−.23	−.15
Partner		−.14	−.09
	Overall R^2/adjusted R^2 = .15/.05		

*$p < .10$. **$p < .05$. ***$p < .01$.

longer marginally associated with sensitivity during this task. Similarly, the child care support model indicated that after entering child care support resources, availability of child care support from partners did not add to the prediction of Maternal Sensitivity in this task.

Results of the model predicting Maternal Sensitivity in the unstructured task from overall support variables indicated that network size was significantly and positively related to sensitivity. Adolescents who reported a greater number of people as available to provide any type of support displayed greater sensitivity during this task. Extent of support from individual providers, entered at Step 3 of the model, added significantly to the prediction. Extent of support from both providers was negatively related to sensitivity even when entered after network size and satisfaction with overall support. Adolescents who perceived their own mothers as available to provide extensive support displayed less sensitive behavior during unstructured play. Extent of support from partners was also negatively associated with sensitivity, although this association was only marginally significant.

Results from the regression model using child care support variables (Table 4) indicated that after entering child care support resources, satisfaction with child care support added a marginally significant amount of variance to the prediction of sensitivity in the unstructured task. Greater

TABLE 4
Hierarchical Regressions Predicting Maternal Sensitivity From Support Variables

	Maternal Sensitivity					
	Structured Task			Unstructured Task		
	$R^2 \Delta$	B	β	$R^2 \Delta$	B	β
Overall support model						
Step 1: Network size	.00	−.02	−.06	.10**	.10	.32**
Step 2: Satisfaction with support	.04	.36	.19	.01	−.15	−.09
Step 3: Extent of support from:	.06			.16***		
Mother		.06	.13		−.12	−.29**
Partner		.09	.20		−.10	−.25*
	Overall R^2/Adjusted R^2 = .10/.02			Overall R^2/Adjusted R^2 = .26/.20***		
Child care support model						
Step 1: Child care support	.07*	.15	.26*	.04	−.11	−.21
Step 2: Satisfaction with support	.00	.00	.00	.07*	−.34	−.27*
Step 3: Availability of child care support from:	.02			.18***		
Mother		.00	.00		−.68	−.37***
Partner		.33	.17		−.58	−.33**
	Overall R^2/Adjusted R^2 = .09/.01			Overall R^2/Adjusted R^2 = .29/.23***		

*$p < .10$. **$p < .05$. ***$p < .01$.

satisfaction with child care support was marginally associated with lower levels of sensitivity during this task. In the final step of the regression, availability of child care support from individual providers accounted for a significant percentage of additional variance on sensitivity, and both availability of support from mothers and from partners made significant contributions to the regression. Participants who perceived their mothers or partners as available to provide child care support displayed lower levels of sensitivity during unstructured play.

Relations Between Maternal and Child Behavior

In the next set of analyses we explored the extent to which child behavior during the three observation episodes was related to the levels of sensitivity and expressivity displayed by the young mothers. Pearson correlations

indicated that maternal expressivity was associated with child behavior during all episodes. More expressive mothers had children who displayed more responsivity and positive affect during the feeding ($r = .35, p < .02$), and structured ($r = .29, p < .05$) and unstructured ($r = .50, p < .001$) tasks. Maternal sensitivity during the structured task was significantly correlated with child behavior during this task ($r = .43, p < .01$), but not during the other two episodes. Similarly, maternal sensitivity during the unstructured task was significantly correlated with child behavior within the same task ($r = .50, p < .001$), but not across tasks.

Correlates of Child Behavior

Analyses were then performed to examine possible direct associations between child behavior and residential patterns and social support variables. T tests indicated that children's behavior during feeding varied according to type of living arrangement. Children who lived with their maternal grandmothers displayed more positive, responsive behavior during feeding than those in other living arrangements, $t(45) = -3.43, p < .001$. In addition, child care support was significantly correlated with child behavior during the unstructured task ($r = -.31, p < .05$). Children whose mothers reported more people as available to provide child care support displayed lower levels of responsivity and positive affect during the unstructured task.

DISCUSSION

This study investigated associations between family and social network variables and behavioral indexes of parent–child interaction among adolescent Latina mothers. Some of our findings are consistent with existing models of parenting (Abidin, 1992; Belsky, 1984) that propose a positive influence of social support on parenting. For example, a larger social network was associated with greater maternal expressivity across the three observation episodes and sensitivity during unstructured play. However, other results are inconsistent with these models. For example, young mothers who perceived their mothers and partners as available to provide child care support displayed lower levels of sensitivity during unstructured play. In addition, those who reported that their own mothers were available to provide extensive support also interacted with their children in a less sensitive manner. Thus, although overall support resources (i.e., network size) were positively associated with maternal sensitivity (as well as greater expressivity across all tasks), more specific types of support were nega-

tively related to sensitivity. These findings highlight the unique associations that different sources and types of support can have with the parenting behaviors of young mothers. The negative associations between grandmother support and sensitivity are consistent with previous findings suggesting that White and African American adolescent mothers who rely heavily on their mothers for support function less sensitively with their children (Oyserman et al., 1994; Shapiro & Mangelsdorf, 1994).

Although the reasons behind these negative associations have not been determined, a number of explanations are plausible. It may be that mothers who display lower sensitivity during unstructured play rely more heavily on others to take on part of the parenting role and thus have had fewer opportunities to practice or develop their parenting skills. Adolescents' reliance on their mothers may be a function of their mothers' motivation to become involved in childrearing. For example, some grandmothers may communicate to their daughters that they are better able to parent the adolescent's child, and may force the adolescent to accept their involvement. Alternatively, grandmothers' involvement may be motivated by the need to compensate for actual parenting weaknesses displayed by the young mothers. The extent of grandmother support may also be a function of the adolescents' own level of involvement and investment in the parenting role, in that some may not consider themselves the primary caretaker of their child. However, if this were the case, one would expect that school attendance or employment (indexes of involvement in roles other than parenting) would have been related to lower sensitivity, which was not the case in this sample. Alternatively, the young mothers' overall level of competence or maturity could influence the initial level of support they receive, their judgments of the child care support they eventually receive, and their reliance on support from their mothers. Given the separation–individuation task of adolescence (Blos, 1967), the reliance of the less sensitive mothers on their own mothers for extensive support may also be an indication of their lower level of overall competence. Similarly, because of Latino traditions regarding a limited role of fathers in childrearing (Shorris, 1992), the negative association between partner child care support and sensitivity may further suggest that this association is due to the young mothers' lower levels of competence, in that partners may become involved in childrearing in response to the adolescent mothers' adjustment difficulties.

Given the correlational and cross-sectional nature of our study, the direction of the effects is not clear, and we cannot rule out any of these alternative explanations. Prospective assessment of psychological and parenting competence would help clarify the dynamics explaining the relations among these variables. Inclusion of measures that make the distinc-

tion between perceptions of availability of support and amount of support received would be helpful, as would the inclusion of grandmothers' and partners' reports of their involvement in child care and perceptions of the quality of the adolescents' parenting behaviors. Assessing whether the young mothers perceive themselves to be the primary caretaker of their child would also be helpful in ruling out some of the alternative explanations.

The fact that the social support correlates of sensitivity varied for the structured and unstructured tasks underscores the need to assess parent–child interaction across different contexts that impose varying demands on parents. The unstructured task increased the need to generate activities and to engage in these activities in a way that was flexible and sensitive to the child's responses, making this task more demanding. It is understandable, then, that those mothers who appeared to be relying more on others for child care encountered more difficulties in this task. In fact, children whose mothers reported more people as available to provide child care support were less responsive to their mothers during this task. It is possible that mothers who received more child care support had less experience interacting with their children and were thus less capable of generating appropriate activities and interactions during the unstructured task. If so, they may have been less able to elicit positive responses from their children during this task.

In contrast to the findings for social support, our results for coresidence with grandmothers are not consistent with recent findings for African American and White adolescent mothers, which document a negative relation between coresidence and parenting quality (Chase-Lansdale et al., 1994; Spieker & Bensley, 1994; Unger & Cooley, 1992). However, the independence of these variables in our study is consistent with Latino cultural traditions. The negative association found for African American and White families is presumed to stem from grandmothers' greater involvement in childrearing when the adolescent resides with her. However, Latino traditions encourage involvement of grandmothers in the childrearing of their grandchildren regardless of living arrangements, and Latinos tend to establish their new households in the same neighborhood as their parents (Keefe & Casas, 1978; Ramos-McKay et al., 1988). Thus, in this context, level of involvement of grandmothers in childrearing could be independent of living arrangements as it is both expected and facilitated by physical proximity even in noncoresiding families. Nonetheless, further studies are needed to replicate this finding.

In this investigation, level of language acculturation was positively related to the adolescents' maternal expressivity. Mothers who scored higher on the language acculturation measure interacted with their chil-

dren in a more verbal fashion and displayed higher levels of positive vocal and gestural expressions. This finding is consistent with research on maternal teaching behaviors, which has shown that adult Latina mothers use more nonverbal (e.g., modeling, visual cues) and fewer verbal strategies (e.g., praise) than Anglo mothers (Laosa, 1980). Among these mothers, there is a positive association between acculturation level (primarily indexed by the preference for English) and the use of praise and verbal inquiry (Planos et al., 1995). The lack of association between language acculturation and Maternal Sensitivity, the other criterion variable in our study, is also consistent with findings from the only other study (Fracasso, Busch-Rossnagel, & Fisher, 1994) examining associations between acculturation and maternal sensitivity among (adult) Latina mothers, which found these variables to be unrelated. Given the small number of available studies and the fact that no prior studies have included adolescent mothers, further research examining maternal behaviors and acculturation among Latina mothers is clearly needed to confirm these relations. In our investigation, much as in past investigations, we relied on language use and preference to index acculturation level. Although language use and preference has been found to be a valid measure of the extent to which Latinos have taken on important aspects of the dominant culture (Marín et al., 1987), and was related to generational level in our sample, it is important for future studies to include measures that tap the different aspects of the acculturation process. By assessing additional variables such as cultural practices and values we may be better able to understand which aspects of the acculturation process influence the parent–child interactions of Latina mothers.

Our results suggest that some adolescents may benefit from intervention programs that focus on helping them and their mothers negotiate their new roles. Successful negotiation of roles within the adolescent mother's family may enable her to derive benefits from the support provided by her family and at the same time develop her parenting skills. Although intervention programs generally do not directly address the participants' relationships with their parents (Chase-Lansdale, Brooks-Gunn, & Paikoff, 1991), given Latino traditions that encourage grandparents' involvement in childrearing, it would be important to work with the family to arrive at ways in which they can support the development of the adolescent and her child. Validating the positive role family members can play in the adolescents' adjustment seems crucial in this family and cultural context.

Finally, it is important to note that the results of this study must be viewed in the context of a relatively small sample and thus, a low subject-to-analyses ratio and low statistical power. Replication of these results with larger samples of young Latina mothers is important. In addition,

larger samples that allow for analyses of subgroups of younger and older adolescent mothers as well as different subgroups of Latinos (e.g., Mexican, Puerto Rican, Cuban) would be useful.

In sum, this study examined family and social support correlates of parent–child interactions among adolescent Latina mothers. Results suggest caution when attempting to generalize theoretical models from adult to adolescent parenting populations, and call for the examination of the processes that lead to the negative associations observed between aspects of grandmother support and adolescent mothers' parenting behaviors. The findings also highlight the importance of assessing parent–child interactions in different contexts, as the correlates of these interactions can vary across interactional contexts.

ACKNOWLEDGMENTS

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