Links Between Mothers’ and Children’s Social Competence and Associations With Maternal Adjustment

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Extended previous research on family factors related to children’s social competence by examining links between 3 domains of maternal social competence (social skills, social frames, network size) and 3 domains of children’s social competence (social skills, peer-rated social preference, and network size) in a sample of 78 mothers and their kindergarten children (42 girls, 36 boys). The mediational role of maternal social competence in the association between mothers’ depression and interpersonal sensitivity symptoms and children’s social competence was also tested. Results supported associations between all 3 domains of mothers’ and children’s social competence, with maternal social skills the most frequent predictor of children’s social competence. Gender differences suggested that maternal social competence was more strongly related to sons’ peer acceptance and daughters’ social skills. A mediational model received preliminary support for girls, with maternal psychological symptoms related to girls’ social competence via maternal social skills. Implications include the need for continued study of maternal social competence as a family factor related to children’s peer functioning and the development of family-based interventions for young children experiencing peer problems.

Children’s peer experiences are important predictors of concurrent and future psychological adjustment (Kupersmidt & Coie, 1990; Parker & Asher, 1987). As a result, substantial effort has been dedicated toward identifying factors that are related to the development of young children’s social competence and early peer relations. One recent direction of this research has been the impact of family factors on children’s peer experiences.

Previous investigations of the links between children’s peer experiences and family variables have concentrated on (a) social or relationship characteristics of the family or home environment and (b) parents’ (mostly mothers’) direct management of children’s social behaviors (Parke & Ladd, 1992). Research on family–social environmental behaviors has suggested that the parent–child relationship, as manifested throughattachment behaviors (Ellicker, Egeland, & Strouse, 1992), child rearing styles (e.g., authoritative, authoritarian; Baumrind, 1967; Maccoby & Martin, 1983), emotional expressiveness (Cassidy & Parke, 1989), and parent–child play behavior (Burks, Carson, & Parke, 1987; MacDonald & Parke, 1984), may influence children’s ability to develop and maintain adaptive peer relationships. Research has also demonstrated that parents may influence children’s social competence and peer acceptance by managing the structure of their children’s peer environment (Ladd, Proffet, & Hart, 1992), such as by initiating and monitoring children’s contact with peers (Ladd & Golter, 1988; Ladd & Hart, 1992). In sum, conclusions from these studies have highlighted the importance of parents’ role, via multiple pathways, in the development of children’s social competence.

Despite this recent focus on parental influences on children’s social competence, few investigations have considered a direct link between parents’ social and psychological functioning and children’s peer experiences. Building on prior research that predominantly focused on mothers, this study also examined links between maternal social and psychological functioning and their children’s social competence. It should be noted, however, that recent findings also suggest important and unique influences of fathers on children’s social and emotional development (Phares, 1996a, 1996b), and this may be an important area for additional research. In this study, two areas of maternal functioning were examined: maternal

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social competence and psychological symptoms. Although few investigations have examined the role of mothers' social competence, the association between mothers' psychological symptoms, particularly depression, and children's social competence has been demonstrated (Zahn-Waxler, Denham, Iannotti, & Cummings, 1992). This study extended prior work by testing whether the link between maternal psychological symptoms and children's social competence may be at least partially explained by the mediating role of mothers' social competence.

Therefore, a primary goal in this study was to examine the relation between mothers' and children's social competence. Such a relation would contribute to our understanding of children's early peer functioning for at least two reasons. First, maternal social competence may be a factor influencing previously studied family variables, such as mothers' interaction and relationship quality with their children and mothers' ability to manage children's peer contacts appropriately (Zahn-Waxler et al., 1992). Thus, maternal characteristics may be an important target area for intervention when children have social difficulties (Putallaz, 1987). Second, maternal characteristics may have a direct influence on children's social competence through modeling of appropriate and inappropriate social behavior (Putallaz, 1987).

Despite its potential, few investigations have previously examined how domains of maternal social competence are related to children's social competence. From available data, however, this is likely to be an important area of study. For instance, Rubin, Mills, and Rose-Krasnor (1989) examined mothers' social beliefs and attributions as one domain of mothers' social competence, and found that mothers who emphasized the importance of social skills were more likely than other mothers to have socially competent children. Finnie and Russell (1988) examined another domain of maternal social competence, mothers' social knowledge, and revealed that mothers with knowledge of more skillful solutions to hypothetically posed peer conflicts were more likely to have children with higher social status. These investigations provided preliminary evidence for a relation between maternal social competence and children's peer functioning.

In an effort to extend prior work, this study examined three additional domains of mothers' social competence. The first was mothers' social skills. Although intuitively plausible, little empirical evidence has demonstrated that mothers' social skills may influence children's social skills and peer acceptance. This idea has gained some initial support from the work of Putallaz (1987), who examined mothers' and children's social behavior in a laboratory setting. In that study, mothers who interacted with other mothers in a "feeling or agreeable manner" were more likely to have children who interacted with other children in a similar way, and less likely to have children who interacted with peers in a "disagreeable manner." In addition, mothers who expressed feelings and opinions when interacting with other mothers were likely to have children who were more accepted by peers (Putallaz, 1987). This study extended these findings by examining connections between mothers' social skills and children's social skills and their peer-rated social preference in a school setting.

The second domain of maternal social competence examined in this study was mothers' social frames, as measured by their recollections of their own childhood peer experiences. Putallaz, Costanzo, and Smith (1991) suggested that mothers' social framing of past peer experiences may be conceived as an interpretive lens for past and present social interactions and that social frames may influence how mothers model social behaviors to their children and interpret their children's social interactions (Putallaz, Klein, Costanzo, & Hedges, 1994). In this regard, maternal social frames seem to be most consistent with previous research on interpersonal schemas. Interpersonal schemas can affect mothers' social competence (Baldwin, 1992) and may perhaps influence children's social competence. As cognitive representations of interpersonal experiences, mothers' social frames also bear similarity to attachment theory in that both social frames and parent-child attachment may reflect internal working models of interpersonal relationships (Bowlby, 1973; Rudolph, Hammes, & Burge, 1995). However, prior research has not examined links between maternal social frames and parent-child attachment. It may be that mothers' social frames, which are presumed to derive mainly from mothers' early childhood social experiences with peers, are linked with mothers' own childhood experiences with her primary caregiver. Thus, social frames may be a derivative of parent-child attachment and may influence mothers' attachment with her own children and, subsequently, children's social competence. Indeed, previous work supported a link between mother-child attachment and children's social competence (e.g., Elicker et al., 1992; Waters, Wippman, & Sroufe, 1979).

Putallaz's work provides some initial support for a link between mothers' social frames and children's social competence. Specifically, findings suggested that mothers with social frames of a predominantly anxious-lonely valence, as indicated by their recollections of their own childhood peer experiences, were more likely than mothers with positive or negative social frames to have children with higher peer- and teacher-rated social competence, perhaps because anxious mothers have stronger intentions to foster positive peer experiences for their children (Putallaz et al., 1991). This study replicated and extended these findings by evaluating children's competence in home and school environments.

The third domain of maternal social competence included in this study was the size of mothers' social networks (House & Kahn, 1985). It was hypothesized that
mothers who had a greater number of friends might have children who are more accepted by their peers, possibly because these mothers would have increased opportunities for arranging peer contacts for their children. This is also consistent with the notion that mothers who lack adequate social networks (i.e., "insular mothers") may have children who are at greater risk for psychological difficulties, such as higher rates of behavioral disturbance (Wahler, 1990). Thus, it may be that mothers' lack of an adequate social network also influences children's social behavior. Indeed, some support for a link between mothers' social network and children's social competence is available. For instance, Homel, Burns, and Goodnow (1987) found that mothers with greater numbers of friends and greater involvement with community activities were more likely than other mothers to have children with large social networks and more adaptive social skills.

In summary, despite initial evidence suggesting a link between mothers' and children's social competence, no previous investigations have comprehensively and systematically examined this relation. Therefore, this study extended existing research by examining three domains of maternal social competence (social skills, social frames, and social networks) as potential predictors of children's social skills and peer acceptance.

In contrast to the relatively understudied role of mothers' social competence, considerably more attention has focused on associations between maternal psychological symptoms and children's peer acceptance. Specifically, numerous studies have found that maternal depressive symptoms are linked with children's social skills difficulties (Zahn-Waxler, Cummings, McKnew, & Radke-Yarrow, 1984) and lower peer status (e.g., Zahn-Waxler et al., 1992). Apart from depressive symptoms, however, little is currently known about other domains of maternal symptoms that may be related to children's social competence. For instance, Derogatis (1992) identified an area of adult maladjustment with a strong social component labeled interpersonal sensitivity. This included symptoms of self-doubt and discomfort in interpersonal contexts and related to measures of adult introversion and depression. This may be a particularly relevant domain of maternal adjustment related to children's social competence; however, this has not previously been examined.

Given the associations between mothers' psychological symptoms and children's social competence, it is important to understand the potential mechanisms through which symptoms of maternal depression or interpersonal sensitivity may affect the development of children's social competence. One possible mechanism may be through the mediating role of mothers' social competence in that the presence of maternal psychopathology may negatively influence mothers' social skills and, therefore, have a negative effect on children's social competence. Indeed, research suggested that maternal depressive symptoms are related to mothers' social behavior (e.g., Libet & Lewinsohn, 1973; Zahn-Waxler et al., 1992); however, no prior investigations specifically addressed such a mediational model. This model was examined in this study.

In sum, this study assessed the role of mothers' social competence as a predictor of children's social competence and examined mothers' social competence as one factor that may mediate the connection between mothers' psychological symptoms and children's social adjustment. This study was the first to comprehensively examine mothers' social competence by including three domains of mothers' social functioning (social skills, social frames—recollections, and social networks). In addition, to extend previous research on the role of mothers' psychological functioning, symptoms of both maternal depression and interpersonal sensitivity were included in this study. A multimodal assessment of children's social competence was conducted, including maternal report of children's social skills and social networks and peer-reported social preference.

Kindergarten children were the focus of this study, as children's entry into kindergarten is among the first universal experiences in which children have structured peer interactions. Also, this developmental period occurs at a time when parental influence on children's peer relations remains significant (Putallaz, 1987). Recognizing that mothers may have a different influence on boys and girls, preliminary analyses were conducted separately by sex or considered sex as an independent variable when warranted. Although no specific hypotheses could be generated given the lack of prior work in this area, it was anticipated that girls might exhibit more social competence similarities with their mothers than would boys, consistent with prior literature on same-sex modeling (Langlois & Downs, 1980).

Method

Participants

Participants were 78 mothers and their children (42 girls, 36 boys). The ethnic composition of the sample was 60.3% (n = 47) Caucasian, 20.5% (n = 16) Hispanic, 11.5% (n = 9) African American, 7.6% (n = 6) Asian American or other. Participants were generally from upper middle-class backgrounds. Socioeconomic status, measured by the Hollingshead (1975) index, ranged from 25 to 66 (M = 53.60, SD = 10.49); Social Class 1 (major professional) = 36.0%, Social Class 2 (minor professional) = 34.7%, Social Class 3 (skilled worker) = 6.7%, Social Class 4 (semiskilled worker) = 2.7%, and Social Class 5 (unskilled worker) = 0%. All children were between 5 and 6 years old (M = 5.73 years, SD = 0.40); their mothers' ages ranged from 26 to 48 years (M = 36.62, SD = 4.79).
Procedures

Participants were recruited from three elementary schools in suburban Miami-Dade County, FL. Parents of kindergarten children (n = 256) were sent a letter informing them about the project and asking for permission to be contacted followed by a reminder letter for parents who had not yet responded. Of the 115 (44.9%) forms that were returned, 106 parents (92.2%) agreed to be contacted with information about the project. Of these, two children (1.8%) did not live with their mothers, 4 families (3.8%) declined to participate, and 22 families (20.8%) were unable to be contacted further for scheduling. This yielded a final sample of 78 participants.

Data were collected by home interview and school-based peer ratings. During the home interview, a trained graduate or undergraduate research assistant administered measures of mothers' social skills, social networks, recollections of childhood peer experiences (i.e., social frames), and psychological symptoms. Mothers also completed a questionnaire on their children's social skills and social networks.

School-based peer ratings were collected as part of a school-wide project conducted in each elementary school that included the sociometric assessment of all kindergarten children. A written proposal describing the purposes of this study and the sociometric nomination procedure was approved by the Miami-Dade County Public School Research Review Committee as well as the university Institutional Review Board. In addition, one investigator met with all school principals and kindergarten teachers to describe the investigation and answer questions and concerns. Each school and all teachers approved the sociometric assessment. Parents were also informed of the procedures of the school-based interview, and children were assured that their participation was voluntary. All children participated in the sociometric assessment; however, only data for target children with parental consent were subsequently accessed by the investigators for inclusion in study analyses. All other data remained anonymous.

Measures

Maternal social skills. Mothers' social skills were assessed using the Interpersonal Competence Questionnaire (ICQ; Buhrmester, Furman, Wittenberg, & Reis, 1988). Mothers completed the friend/acquaintance version of the ICQ in this study. Responses to 40 items on a 5-point Likert scale, ranging from 1 (I'm poor at this) to 5 (I'm extremely good at this) can be summed to form five (8-item) subscales: Initiation (of interactions and relationships), Assertion (of personal rights and displeasure with others), Self-Disclosure (of personal information), Emotional Support (of others), and Conflict Management (within close interpersonal relationships; Buhrmester et al., 1988). Mean scores were computed for each subscale with a possible range of 1 to 5.

Buhrmester et al. (1988) reported good psychometric properties for the ICQ in samples of similarly aged adults. Alpha coefficients of internal consistency ranged between .77 and .86 for the five subscales of interpersonal competence with a friend, suggesting good reliability. In this sample, internal consistency (alphas) ranged between .75 and .89. Buhrmester et al. (1988) also reported adequate test-retest reliability for all five subscales (rs = .69-.89) and, using confirmatory factor analysis, a good fit between the items of the ICQ and the expected five factors of social competency. Evidence supporting the concurrent and discriminant validity of this measure includes significant correlations between the ICQ and other measures of social competency (Buhrmester et al., 1988). For instance, the ICQ Initiation subscale significantly correlated with social reticence (r = -.69), popularity (r = .41), and loneliness (r = -.28). Finally, moderate correlations were reported between self- and peer-reported social competence on the ICQ, suggesting that the ICQ measures meaningful and observable social behavior (Buhrmester et al., 1988).

Maternal social frames-recollections. Mothers' social frames were assessed through maternal recollections of their childhood peer experiences (Putallaz et al., 1991; Putallaz et al., 1994). Mothers were asked to complete the following open-ended questions, which formed the Recollective Questionnaire (Putallaz et al., 1991):

1. Often people remember particular experiences from their childhood that characterize their interactions with other children. In thinking back to your childhood, please write a story that stands out in your mind. What does that story or episode mean to you? Why do you think it stands out in your mind?
2. Try to think back to the time you spent on the playground during your elementary school days; what was that experience like? Think back to the times you spent playing in the neighborhood; what were those experiences like? Think back to the time you spent in the classroom in elementary school; what was that experience like? (Putallaz et al., 1994)

As in previous studies (Putallaz et al., 1991, 1994), responses to these questions were coded independently by two raters as to their predominant theme (positive, negative, or anxious- lone). Putallaz et al. (1994) defined a positive theme as one "involving warm and happy memories of a close friendship, or acceptance by
a group of peers” (p. 407) Negative recollections included “nasty or negative peer experiences,” peer conflict, and being rejected by or rejecting of peers. An anxious–lonely theme was defined by the presence of feelings of “loneliness, anxiety, isolation, discomfort with peers, and/or a general sense of not belonging” (p. 407).

In several independent samples (i.e., Putalaz et al., 1991, 1994), this classification coding scheme yielded reliable ratings (Cohen’s k = .83) and three distinct groups of mothers’ recollections: positive (approximately 54%), negative (approximately 21%), and anxious–lonely (approximately 18%). In the current sample, two trained raters, uninformed to other aspects of the data set, coded all responses and had 94.9% agreement (Cohen’s k = .90). In the few instances of disagreement, discrepancies between raters were individually discussed and resolved with consensus. These ratings revealed a distribution of maternal social frames similar to previous research: positive (n = 48; 61.5%), negative (n = 15; 19.2%), and anxious–lonely (n = 15; 19.2%). These three groups of mothers, categorized by their recollective theme, were utilized in the analyses described later.

Putalaz et al. (1991, 1994) provided evidence for the validity of this assessment by comparing mothers’ recollective stories with scores from a brief recollective checklist of social competence during childhood. Positive recollective stories were significantly related to greater social competence (r = .59), whereas negative and anxious–lonely stories were related to lower social competence (rs = .38 and .54, respectively; Putalaz et al., 1994).

Mothers’ social networks. Mothers were asked to list the names of individuals who comprised their social network, excluding people who lived in the same home. Mothers were then asked to indicate the sex of each person and whether they were an acquaintance, occasional companion, friend, close friend, or relative. To obtain an index of mothers’ social competence, a total score was computed for the number of mothers’ friends and close friends (Homel et al., 1987).

Mothers’ psychological symptomatology. Mothers completed the 90-item Symptom Checklist–Revised (SCL–90–R; Derogatis, 1992). Responses on this measure are based on a 5-point Likert scale of symptom severity ranging from 1 (not at all) to 5 (extremely). Only the Depression (13 items) and Interpersonal Sensitivity (9 items; e.g., “Feeling that people are unfriendly or dislike you,” “Feeling very self-conscious with others”) subscales of the SCL–90 were used in the analyses for this study. Summed scores were computed and had a possible range of 13 to 65 on the Depression subscale and 9 to 45 on the Interpersonal Sensitivity subscale. The SCL–90–R is generally well regarded as a reliable and valid instrument of psychological distress. Good internal consistency was reported for both the Depression (α = .90) and Interpersonal Sensitivity (α = .84–.86) subscales, as well as good test–retest reliability for each of these subscales (rs = .75–.83; Derogatis, 1992).

Children’s social skills. Mothers rated their children’s social skills on the Social Skills Rating System, Parent (Elementary) Version (SSRS–P; Gresham & Elliot, 1990), which was designed to assess the frequency of children’s social skills in four domains of competency: Cooperation, Assertion, Responsibility, and Self-Control Skills. The SSRS–P has good psychometric properties, including internal consistency coefficient ratings ranging between .65 and .87, and good test–retest reliability is reported (rs = .77–.87) for the parent version of the SSRS.

In this study, mothers were asked to complete items from the SSRS–P that reflected children’s social behavior with peers (e.g., “Controls temper when arguing with other children”); items reflecting social behavior at home or with family members (e.g., “Keeps room clean and neat without being reminded,” “Congratulates family members on accomplishments”) were omitted. Therefore, 10 items were included from the Assertion subscale, 10 from the Self-Control subscale, and 2 items from the Responsibility subscale (i.e., “Introduces himself or herself without being told,” “Acknowledges compliments or praise from friends”); no items were included from the Cooperation subscale. Responses are rated on a 3-point Likert scale ranging from 0 (never) to 2 (very often), and mean scores for each subscale were computed.

Children’s social networks. To assess children’s social networks, mothers listed the names of their child’s playmates (excluding people who lived in the same home) and reported their sex and relationship to the child (i.e., acquaintance, occasional companion, friend, close friend, relative; Feiring & Lewis, 1989). A total score was computed for the number of children’s friends and close friends to obtain an index of children’s social networks.

Children’s peer relations. To assess children’s peer relations, school-based peer-ratings were conducted in each child’s classroom using a nominating procedure described by Asher, Singleton, Tinsley, and Hymel (1979). Photographs of each child were taken.

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After reviewing all of the pictures of same-sex children in their class, children were asked to pick the three classmates they "like most" and the three they "like least." These scores were standardized within sex and classroom and summed to form measures of peer acceptance ("like most") and peer rejection ("like least").

The difference between standardized peer acceptance and peer rejection scores was computed and then restandardized to form a measure of social preference (Coie, Dodge, & Coppotelli, 1982).

Peer nominations are widely recognized as valid indexes of children's peer relations. Research suggests that obtaining peer nominations using photographs is a reliable procedure for children as young as 4 years old (Asher et al., 1979). Indeed, Asher et al. reported adequate test-retest reliability using this procedure with two samples of preschool children ($r = .74–.81$).

**Results**

**Preliminary Analyses**

Table 1 displays a list of means and standard deviations for all variables used in this study. All variables were within normal ranges, and mean scores were generally consistent with other samples using these instruments. As a preliminary analysis, a series of $t$ tests and chi-square analyses were conducted to examine potential sex differences. Of the 13 variables examined, three significant effects were revealed. Mothers of girls rated their own social skills significantly higher than mothers of boys in the areas of conflict management, assertion, and disclosure (see Table 1).

Before examining the study hypotheses, preliminary analyses investigated the relation between the three domains of maternal social competence (maternal social skills, social frames, and size of social network). Modest relations were expected, suggesting that these variables were related but distinct. This was generally the case.

First, to examine the relation between mothers' social skills and social frames, a multivariate analysis of variance (MANOVA) was conducted utilizing mothers' scores on the five subscales of the ICQ as a set of dependent variables, compared across the three groups of maternal social frames (positive, negative, and anxious–lonely). As expected, a significant multivariate effect was revealed, Wilk's $F(10, 140) = 1.97, p < .05$. This effect was significant at a univariate level for conflict management, $F(2, 74) = 7.33, p < .001$, and assertion, $F(2, 74) = 3.91, p < .05$. Post hoc analyses indicated that mothers with positive social frames had greater levels of conflict management ($M = 3.76, SD = 0.51$) and assertion ($M = 3.46, SD = 0.64$) than mothers with anxious–lonely social frames (conflict management: $M = 3.18, SD = 0.51$).
Maternal social skills. First, the relations between maternal social skills and the three domains of children's social competence were examined. For children's social skills, a series of three multiple-regression analyses were conducted corresponding to the three subscales of the SRSS—P (Self-Control, Responsibility, and Assertion; see Table 2). The five variables of mothers' social skills (conflict management, emotional support, disclosure, initiation, and assertion) were entered in one block. Overall, as can be seen in Table 2, there were significant relations between mothers' and children's social skills; however, the pattern of results differed for boys and girls. For boys, a significant model was revealed for mothers' social skills entered as a block and boys' responsibility. In addition to this shared variance effect, significant proportions of unique variance suggested that greater levels of mothers' conflict management, initiation, and assertion were related to greater levels of boys' responsibility. For girls, a significant model was revealed between mothers' social skills and girls' assertion. Specifically, greater levels of mothers' conflict management, initiation, and disclosure, and lower levels of mothers' emotional support were related to higher levels of girls' assertion.

Similarly, the relation between mothers' social skills and children's peer-rated social preference was examined using multiple regression. Greater levels of maternal social skills (as a block) were related to high social preference scores for boys, but not for girls (see Table 3). In addition, a significant proportion of unique variance suggested that higher levels of mothers' emotional support skills and social initiation were related to higher social preference scores for boys (see Table 3).

Finally, the relation between mothers' social skills and the size of children's social networks was evaluated by regression analyses. For girls, greater levels of maternal social skills (as a block) were related to larger social networks. In addition, a significant pro-

### Table 2. Regression Results of Children's Social Skills on Mothers' Social Skills

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Self-Control</th>
<th>Responsibility</th>
<th>Assertion</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Boys¹</td>
<td>Girls¹</td>
<td>Boys¹</td>
</tr>
<tr>
<td></td>
<td>Δ r²</td>
<td>β</td>
<td>Δ r²</td>
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<tr>
<td>Mothers' Social Skills</td>
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<td>.34*</td>
</tr>
<tr>
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<td>.12</td>
<td>.33*</td>
</tr>
<tr>
<td>Disclosure</td>
<td>.11</td>
<td>.29</td>
<td>-.02</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>.16</td>
<td>-.33</td>
<td>-.02</td>
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<tr>
<td>Initiation</td>
<td>.38*</td>
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<td>.33*</td>
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<tr>
<td>Assertion</td>
<td>.08</td>
<td>-.25</td>
<td>.15</td>
</tr>
</tbody>
</table>

¹Full-model F(3, 29) = 1.99, ²Full-model F(5, 36) = 1.42, ³Full-model F(5, 29) = 2.93**, ⁴Full-model F(5, 36) = 1.22, ⁵Full-model F(5, 29) = 1.40.

*p < .05, **p < .01, ***p < .001.
Table 3. Regression Results of Children’s Social Preference and Social Networks on Mother’s Social Skills

<table>
<thead>
<tr>
<th>Predictor</th>
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<th>Social Network</th>
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<td>Girls*</td>
<td>Boys*</td>
<td>Girls*</td>
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<td>β</td>
<td>Δ r²</td>
<td>β</td>
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<td>Mothers’ Social Skills</td>
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<td>.36**</td>
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<tr>
<td>Emotional Support</td>
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<td>Initiation</td>
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<td>.47*</td>
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<tr>
<td>Assertion</td>
<td>–.08</td>
<td>–.13</td>
<td>–.05</td>
<td>.16</td>
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</tbody>
</table>

*p < .05, **p < .01, ***p < .001

Table 4. Means and Standard Deviations of Children’s Social Competence by Mothers’ Social Frame and Children’s Sex

<table>
<thead>
<tr>
<th>Social Skills</th>
<th>Responsibility</th>
<th>Self-Control</th>
<th>Assertion</th>
<th>Social Preference</th>
<th>Social Network</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td>M</td>
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<tr>
<td>Positive (Total)</td>
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<td>0.28</td>
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<td>Girls</td>
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<tr>
<td>Negative (Total)</td>
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<td>1.31</td>
<td>0.42</td>
<td>1.52</td>
</tr>
<tr>
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<td>0.45</td>
<td>1.52</td>
</tr>
<tr>
<td>Girls</td>
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<td>1.25</td>
<td>0.41</td>
<td>1.55</td>
</tr>
<tr>
<td>Anxious–Lonely (Total)</td>
<td>1.25</td>
<td>0.28</td>
<td>1.13</td>
<td>0.25</td>
<td>1.58</td>
</tr>
<tr>
<td>Boys</td>
<td>1.11</td>
<td>0.20</td>
<td>0.99</td>
<td>0.29</td>
<td>1.52</td>
</tr>
<tr>
<td>Girls</td>
<td>1.38</td>
<td>0.30</td>
<td>1.25</td>
<td>0.12</td>
<td>1.48</td>
</tr>
</tbody>
</table>

*Denotes a significant main effect for maternal social frames.

A portion of unique variance indicated that mothers’ with higher levels of social initiation had daughters with larger social networks. No significant effects were found for boys.

Mothers’ social frames—reollections. Next, analyses examined the relation between mothers’ social frames—recollective theme and the three domains of children’s social competence. (When examining social frames, a categorical variable, main effects as well as sex interactions were explored in one analysis to maximize statistical power, rather than separate analyses by sex.) For children’s social skills, the three variables from the SSRS-P (Responsibility, Self-Control, and Assertion) were entered as a set of dependent variables in a 3 × 2 (Social Frame: Positive, Negative, Anxious–Lonely × Sex) MANOVA. No significant main effects or interactions were revealed. Table 4 presents the means and standard deviations for children’s social skills by mothers’ social frame or recollective theme and children’s sex.

A similar 3 × 2 ANOVA was conducted to examine children’s social preference scores. A significant main effect was revealed for maternal social frames, F(2, 69) = 3.69, p < .05. Post hoc analyses suggested that mothers with positive social frames were more likely to have children with higher social preference scores than mothers with negative social frames (Tukey’s HSD, df = 69, p < .05; see Table 4). No significant differences were revealed between these groups and mothers with anxious–lonely social frames.

Finally, an ANOVA was conducted for the size of children’s social networks. No significant interaction or main effects were found.

Mothers’ social network. The last domain of maternal social competence examined was the size of mothers’ social networks. Relations between mothers’ social network size and children’s social competence were examined using zero-order correlations (see Table 5). Results suggested that mothers with larger social networks had boys with larger social networks and were more accepted by peers. For girls, mothers’ larger social networks related to higher levels of assertion social skills as well larger social networks (see Table 5).
Mothers' Psychological Symptoms and Children's Social Competence

A second goal in this study was to examine a mediational model, which suggested that maternal social competence (specifically mothers' social skills) may mediate the relation between mothers' psychological symptoms and children's social competence. As a preliminary step in evaluating this mediational model, the data were analyzed to determine the variables of children's social competence for which mothers' psychological symptoms (i.e., depression and interpersonal sensitivity) was a predictor.

A series of five multiple regression analyses for each sex were conducted corresponding to the five outcome measures of children's social competence (i.e., self-control, responsibility, assertion, social preference, size of social network). In each analysis, the regression model included the two variables of mothers' symptoms (i.e., depression, interpersonal sensitivity) entered on one step.

Table 5. Zero-Order Correlations of Variables Within Each Domain of Children's Social Competence

<table>
<thead>
<tr>
<th>Children's Social Competence</th>
<th>Size of Mothers' Social Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Skills</td>
<td>Boys</td>
</tr>
<tr>
<td>Responsibility</td>
<td>-.09</td>
</tr>
<tr>
<td>Self-Control</td>
<td>-.04</td>
</tr>
<tr>
<td>Assertion</td>
<td>-.05</td>
</tr>
<tr>
<td>Peer Relations</td>
<td></td>
</tr>
<tr>
<td>Social Preference</td>
<td>.29*</td>
</tr>
<tr>
<td>Size of Social Network</td>
<td>.47***</td>
</tr>
</tbody>
</table>

Note: n = 78 for all correlations.
*p < .05. **p < .01. ***p < .001 (one-tailed).

Table 6. Analysis of Partial Variance Results of Girls' Social Competence on Mothers' Symptomatology and Mothers' Social Skills

<table>
<thead>
<tr>
<th>Girls' Social Competence</th>
<th>Assert</th>
<th>Social Network</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predictor</td>
<td>Δ r²</td>
<td>R²</td>
</tr>
<tr>
<td>Step 1: Mothers' Symptoms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>.21**</td>
<td>.21</td>
</tr>
<tr>
<td>Interpersonal Sensitivity</td>
<td>-.23</td>
<td>-.02</td>
</tr>
<tr>
<td>Step 2: Mothers' Social Skills</td>
<td>.31**</td>
<td>.52</td>
</tr>
<tr>
<td>Conflict Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disclosure</td>
<td>.54**</td>
<td></td>
</tr>
<tr>
<td>Emotional Support</td>
<td>.34</td>
<td></td>
</tr>
<tr>
<td>Initiation</td>
<td>-.16</td>
<td></td>
</tr>
<tr>
<td>Assertion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.
related to lower levels of mothers’ social skills (see Table 7).

The final step in the investigation of the mediational model was to conduct a series of analyses of partial variance between variables of mothers’ social skills, psychological symptoms, and children’s social skills for which preliminary support of the mediational relations was established. The results from the analyses listed earlier suggested that mothers’ psychological symptoms were related to three outcome variables of children’s social competence (boys’ self-control, girls’ assertion, and girls’ social network size), establishing links between the independent and dependent variables in the model (Baron & Kenny, 1986). Of these, two outcome variables (girls’ assertion and social network) were also related to the potential mediator (mothers’ social skills). Thus, analyses of partial variance were conducted to determine whether the strength of the relation between mothers’ psychological symptoms and each of the girls’ social competence variables would decrease once the effects of mothers’ social skills were entered into the regression model (Baron & Kenny, 1986).

As can be seen in Table 6, maternal depression and interpersonal sensitivity were entered on the first step and the five subscales of maternal social skills on the second step. The results generally supported a mediating hypothesis. Specifically, for both outcome variables maternal social skills was a significant predictor of girls’ social competence after maternal psychological symptoms had been entered into the model. In addition, the relation between maternal symptoms and each variable of girls’ social competence was substantially diminished (β final) after maternal social skills was entered into the model.

Discussion

This study was the first to examine comprehensively the role of maternal social competence as an important factor in the development of children’s social competence and peer relations. Following a decade of research examining the role of the family on children’s early peer experiences, the results from this study suggested an important extension of previous findings and new directions for the inclusion of maternal social competence in future investigations of family influences on children’s social competence. In this study, the relations between three domains of mothers’ social competence and three domains of children’s social competence were examined, and differences in these links were explored for boys and girls. Finally, the importance of maternal social competence was further highlighted by an investigation of the potential mediating effect of maternal social skills on the relation between mothers’ psychological symptoms and children’s social competence.

The results from this study provided good preliminary evidence that mothers with high levels of social competence have children who are more social competent and more accepted by peers. This is consistent with previous literature that suggested intergenerational similarities for other constructs of psychological functioning such as aggression (Eron, 1982; Huesmann, Eron, Littwitz, & Walder, 1984) and withdrawal or depression (Adrian & Hammen, 1993; Zahn-Waxler et al., 1992). Indeed, researchers have also noted possible mechanisms by which social competence may be transmitted from mother to child, for example, via genetic predisposition for social inhibition (Rowe, 1989) or by observational learning (e.g., modeling, response evocation; Patafias, 1987; Patafias & Heflin, 1990). It may also be that maternal social competence is an antecedent to family factors previously associated with children’s early peer experiences, such as mothers’ social management behaviors (e.g., initiating, monitoring) of their children’s contacts or characteristics of the mother–child relationship (e.g., attachment, play behavior; Parke & Ladd, 1992).

Although previous literature has provided initial empirical support for the relation between mothers’ and children’s social competence, these prior findings have been limited by the assessment of social competence in a specific context (i.e., laboratory setting; e.g., Putallaz, 1987; Putallaz et al., 1991). This study corroborated and extended these findings by presenting data that support relations between mothers’ social abilities and children’s experiences with peers in a naturalistic environment.
This study investigated links between mothers' and children's social competence with an assumption that mothers' social competency may influence children's social functioning. However, it should be noted that this direction of influence is only one of several possible models of transmission. For example, consistent with a transactional model (Hammen, Burge, & Adrian, 1991), mothers and children may exert reciprocal influences on each other's social behavior, as has been demonstrated in the parent–child associations of other psychological characteristics such as depressive symptoms (Hammen et al., 1991). In addition to providing support for a general link between mothers' and children's social competence, the results also revealed some interesting links between specific domains of mothers' social competence and children's social functioning. Of the three domains of maternal social competence included in the current investigation (social skills, frames, and social networks), maternal social skills was most frequently related to children's social competence. Specifically, the results suggested that mothers' social skills were a possible contributor to children's social skills, acceptance among classroom peers, and the number of playmates in their social network. These results are consistent with the notion that mothers' social skills may have a generalized influence on children's social behavior and peer acceptance.

In addition to the overall association between mothers' social skills and children's social competence, preliminary evidence also suggested certain social skills may be especially potent as predictors of children's social outcomes. Specifically, mothers' social initiation skills were most strongly and frequently linked to children's social skills, social preference, and social network size. This was consistent with prior research that emphasized the importance of children's initiation skills for developing new friendships (Putallaz & Wasserman, 1990) and suggested that mothers' modeling of this skill may be especially important for children's social competence. Future research is needed, however, to further examine the roles of specific maternal social skills.

This study also linked maternal social frames with children's acceptance or rejection by peers. Specifically, maternal recollections of their own childhood peer experiences were related to the peer experiences of their children. In as much as mothers' social frames may stem from accurate memories of past social experiences, this finding may support a potential intergenerational transmission of peer acceptance (Putallaz et al., 1991). Regardless of mothers' recollective accuracy, however, the results appear to confirm that mothers' internal representations of childhood peer interactions may play an important role in their children's peer functioning. Alternatively, it should be noted that children's ongoing peer experiences may have served as a possible memory cue or trigger for mothers' memories, evoking recollections of similar types of experiences from mothers' own childhoods, thereby influencing this link. However, in this study, as in Putallaz's work, mothers were not only asked to report a childhood recollection but also to report the meaning and significance attributed to these experiences (i.e., "What does this story mean to you? Why do you think it stands out in your mind?"). In scoring mothers' responses on this measure, coders were trained to utilize these interpretations of each recollection as the primary determinant for classifying mothers. As a result, it was less likely that mothers' social frames were influenced by children's social competence, although this issue of direction of effect remains an important area for further investigation.

The results in this investigation also presented an interesting contrast with previous work on social frames. Specifically, in Putallaz et al.'s (1991) study, mothers with anxious–lonely social frames were most likely to have children with greater levels of peer acceptance. In this data, however, accepted peers were most likely to have mothers with positive social frames; children whose mothers had anxious–lonely social frames tended to have social preference scores below the sample mean. There are several possible explanations for these findings. First, from an attachment perspective, our results were consistent with previous work on a link between mothers' anxious attachments and poorer social outcomes for their children (Waters et al., 1979). Indeed, it may be that social frames are a derivative of mothers' internal working models and may also be related to mothers' attachment to their children. Further work on the relation between mother–child attachment and maternal social frames is needed. Second, it is possible that differences between these results and former work is related to the measurement of children's social competence in a laboratory setting (Putallaz et al., 1991) where children are exposed to a smaller group of new peers as opposed to a larger group of familiar peers in a school setting. Perhaps mothers with anxious social frames have children who better excel at forming new friendships or in smaller groups but experience greater difficulties among a larger group of peers or over more extended periods of time. Further study is warranted on the association between maternal social frames and children's social competence in varying environments.

The third domain of mothers' social competence investigated in this study was social networks. Because the size of mothers' social networks could influence mothers' opportunities to arrange or initiate social contacts for their children or provide opportunities for the modeling of appropriate social skills, it was anticipated that mothers' social networks would be related to children's social competence. Indeed, the strongest link emerged between mothers' social network size and the number of their children's playmates. In addition, moth-
ers' social network size was also related to boys' social preference and girls' assertion. Clinically, the results offer directions for intervention by suggesting that the enhancement of mothers' own social network may have beneficial effects on children's social and psychological functioning (Wahler, 1990). Consistent with prior work on insular mothers, interventions designed to help improve mothers' social network may also be beneficial in improving mothers' ability to monitor and manage children's behavior (Wahler, 1990), including social behavior.

Another contribution of this study was the preliminary finding that mothers' social competence may affect children's social functioning differently for boys and girls. For instance, mothers' social competence was more frequently related to their sons' peer acceptance and less related to social skills or social networks. Indeed, all three domains of maternal social competence were significantly linked to boys' social preference amongst peers. In contrast, for girls, maternal social competence was more frequently related to their daughters' social skills, particularly assertion. It may be that modeling of social behaviors occurs most readily between parents and children of the same sex (Langlois & Downs, 1980). This may explain the tendency for mothers' social skills to be related more strongly to their daughters' social skills than their sons'. This underscores the need for future investigations of the role of fathers' social competence on boys' and girls' social competence, particularly in light of suggestions that fathers may have a stronger and unique impact on children's peer relationships (Doyle & Markiewicz, 1996; Parke, Cassidy, Burks, Carson, & Boyum, 1992). The connection between mothers' social competence and sons' peer acceptance may suggest that the link between mothers' and sons' social competence may be mediated by a mechanism other than modeling, perhaps maternal parenting behavior (Putallaz & Hefflin, 1990). Overall, although sample size did not permit further testing of sex differences in this study, the results suggest possible sex-specific links for study in future research.

A final goal in this investigation was to examine the role of maternal social competence in conjunction with the effects of mothers' psychological symptoms on children's social competence. When mothers' depressive and interpersonal sensitivity were related to children's social competence, the data supported the mediational role of maternal social skills. This has important implications for clinical work with children experiencing peer problems and mothers presenting with psychological distress, in that mothers' social skills may be an important target for intervention when considering the impact of maternal depression on children's social functioning. This study was the first to offer evidence for these complex associations between mothers' social, psychological functioning and children's social competence, despite the modest sample sizes available for this type of analysis. As such, these results indicate the need for future replications of this mediational model utilizing larger samples that might permit structural equation modeling. In addition, future investigations would benefit from examining populations with more severe presentations of maternal psychopathology.

Although this investigation provided some important contributions, several limitations of the study should be noted. First, consistent with prior research suggesting that parents, particularly mothers, are reliable reporters of children's social functioning, this study utilized mother-report measures of children's social skills and social networks. Because mothers also self-reported their own social functioning, there was a potential bias toward significance due to method variance. This was likely minimized, however, by the use of statistical analyses (i.e., multiple regression) that accounted for shared method variance. Indeed, the results from analyses appeared to be discriminant, in that not all subscales of mothers' and children's social skills were significantly related. In addition, significant findings were also revealed between mothers' social competence and peer-reports of children's social preference. Nevertheless, additional research utilizing spouse report or observational methods of measuring mothers' social skills and teacher report, father report, and observation of children's social functioning is needed.

A second potential limitation is the possible differences in mothers' self-report of their own social skills and their actual, observable social behavior. Indeed, mothers' report of their social skills in this study may better reflect maternal beliefs of their social strengths and weaknesses as opposed to a laboratory-based study where actual behavior may be observed. However, this investigation aimed to assess more generalized social behavior of mothers rather than behavior that may be contextually dependent. To accomplish this, a self-report measure was selected with established concurrent validity with observable social behavior to minimize this possible problem of self-report. Nevertheless, future examinations may benefit from utilizing several methods of measuring maternal social skills.

Future research should also include examinations of the mechanisms by which mothers' social competence affects children's peer functioning. For instance, mothers' sociability may influence mother-child relationship quality or the frequency of mothers' initiation and monitoring behavior during children's social contacts, thus affecting children's social competence. The interacting role of fathers' social competence and parenting behaviors, along with maternal factors, on children's social competence is also clearly in need of further study. Similarly, future investigations should include an examination of ethnicity as a factor that may influence the nature of relations between parent-child social competence. Although the sample size available in this study was comparable to other studies of its kind (e.g., Ladd &
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Golter, 1988; Putalazz et al., 1991), future studies that continue to investigate such complex associations may benefit from the use of larger samples.

Overall, the results from this study suggest the importance of considering maternal social competence as an influential factor in children's social competence and early peer relations. Clinically, these results begin to shed light on an area that may be targeted by interventions to address young children's peer problems. For instance, family-based models of treatment may be useful for young children experiencing peer difficulties, and at risk for future adjustment problems. In addition, maternal social competence may need to be more carefully considered in treatment, as less competent mothers may need more instruction in assisting their children socially.

References


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