Parenting Stress as a Mediator of the Relation Between Parenting Support and Optimal Parenting

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SYNOPSIS

Objective. This study assessed the direct and indirect relations between 2 types of social support — parenting support and general social support — and optimal parenting. Design. Self-report data were gathered from 165 married mothers of firstborn 4th-graders between the ages of 9 and 11 years. Widely accepted measures of warmth, monitoring, general psychological distress, parenting stress, and general social support were used. A measure of parenting support from family and friends was developed for this study. Results. Path analysis indicated that the relation between specific parenting support and optimal parenting was completely mediated by parenting stress and not by general psychological distress. The relation between general social support and optimal parenting was not completely mediated by either parenting stress or general psychological distress. Conclusions. This study integrated essential components from the social support, stress and coping, and parenting research. The authors identify parenting stress as a mediator of the relation between parenting support and optimal parenting by focusing on the specificity of social support and stress in the domain of parenting.

INTRODUCTION

Warm and involved parenting has a positive influence on child and adolescent social, emotional, and academic adjustment (Baumrind, 1993; Dornbusch, Ritter, Leiderman, Roberts, & Fraleigh, 1987; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, Lamborn, Dornbusch, & Darling, 1992). Although the effects of parenting practices on child and adolescent development have been studied extensively, still relatively little is known about factors that promote optimal parenting. There is, however, a recent movement to identify and describe the determinants of parenting (see Belsky & Vondra, 1989; Maccoby, 1992; Steinberg, 2001). More specifically, there has been a call to identify factors in parents’ lives that facilitate
warmth and monitoring, including contextual influences such as social support. In this study we addressed this issue by assessing the relations between two types of social support — general social support and specific parenting support — and optimal parenting.

Numerous authors have suggested that social support has a significant impact on parenting (Belsky & Vondra, 1989; Cochran & Brassard, 1979; Mcloyd, 1990; Powell, 1979). In his complex process model of the potential determinants of parenting, Belsky (1984) emphasized that contextual sources of stress and support were essential for the prediction of parenting. Moreover, he elaborated several possible processes by which social support affects parenting. According to Belsky, two distinct types of social support affect parenting practices: general social support and social support specifically for parenting. He further suggested that these two types of social support have distinct direct and indirect pathways to parenting. Belsky hypothesized that general social support (e.g., perceiving that a friend or family member is available to listen to one's frustrations) was indirectly related to parenting through parental psychological well-being, whereas parenting support (e.g., perceiving that a friend or family member was available to offer good parenting advice) was directly related to parenting. This study examined these potential differential relations by distinguishing between general social support and parenting support and by exploring the theoretically defined processes by which each type of social support is linked to optimal parenting. In specifying our models of social support and parenting, we relied heavily on Belsky's theoretical work and on the empirical literature focused on social support and parenting. Next we review the empirical literature, turning first to the relation between general social support and parenting practices.

General Social Support

Theorists in the domain of general social support have supported Belsky's (1984) position by also suggesting that the effect of general social support on parenting may be mediated through parental psychological well-being or distress (Kessler, Price, & Wortman, 1985; Simons & Johnson, 1996). However, relatively few empirical studies have tested this exact hypothesis. One study indicated that the relation between general social support and supportive parenting was mediated by depression (Simons, Lorenz, Wu, & Conger, 1993); that is, although general social support was significantly related to supportive parenting at the bivariate level, this relation was not significant when controlling for depression. At first glance, the results of this study appear to support Belsky's view; however, the specific analyses raise issues that may have affected the mediational findings.
In Simons et al.'s (1993) structural equation model the general social support latent construct was represented by only one manifest variable (maternal self-reported support), whereas the other latent constructs in the model were represented by multiple manifest variables. Therefore, the direct path between general social support and supportive parenting may have been underestimated, and thus it may have been relatively easy to eliminate this direct path when testing the mediational hypothesis.

Simons et al. (1993) appear to be the only authors who have reported results consistent with mediation. Most extant investigations of the relation between general social support and parenting have not tested for mediation, for a variety of reasons. For instance, several studies have reported a significant relation between general social support and optimal parenting (Colletta, 1979; Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Jennings, Stagg, & Connors, 1991); however, these studies did not include measures of parental psychological distress and thus did not allow for tests of possible indirect relations between general social support and parenting. Other studies have assessed relations among general social support, psychological distress, and parenting practices, but they either failed to meet the criteria for testing mediational models or did not focus on process-oriented models (Voydanoff & Donnelly, 1998; Wandersman, Wandersman, & Kahn, 1980; Weinraub & Wolf, 1983).

In general, the results from studies that have included constructs most relevant to this article have been somewhat inconsistent. For instance, some studies have yielded significant relations between general social support and parenting (Voydanoff & Donnelly, 1998; Weinraub & Wolf, 1983), whereas another study found no significant relation between general social support and parenting (Wandersman et al., 1980). Moreover, the relation between psychological distress and parenting was reported as significant in one study (Voydanoff & Donnelly, 1998) and not significant in another study (Weinraub & Wolf, 1983).

The inconsistencies in the above-mentioned studies may be the result of differences in the specific measurement of the key variables. For instance, the use of different operational definitions of parenting may contribute to discrepant results. The previous studies reporting a significant relation between general social support and parenting used measures of parenting practices, such as warmth and monitoring (Voydanoff & Donnelly, 1998; Weinraub & Wolf, 1983). The study that reported no significant relation between general social support and parenting used a measure of subjective perceptions of competence in the parenting domain, or parenting self-efficacy (Wandersman et al., 1980). Thus, perhaps general social support is significantly related to parenting practices but not to perceptions of parenting competence.
In addition, different operational definitions of psychological distress may play a role in discrepant findings. Studies reporting a significant relation between psychological distress and parenting operationally defined psychological distress as feelings of depression, anxiety, and stress (Simons et al., 1993; Voydanoff & Donnelly, 1998). In comparison, the study that reported no significant relation between psychological distress and parenting measured psychological distress as the aggregate of stressful life events that occurred (Weinraub & Wolf, 1983). Perhaps the overall affect, mood, and feelings of the parent in response to stress have a significant effect on parenting practices but not on the amount of stressful events per se.

Parenting Support

The specific type of social support being investigated may also have a significant influence on relations among social support, psychological distress, and parenting behavior. Many researchers have suggested that, if social support is to be effective, it must match the needs of the support recipient (Cohen & Wills, 1985; Cutrona, Cohen, & Igram, 1990; Cutrona & Russell, 1990; Hobfoll, 1985; Weiss, 1974; Wood, 1984). Following this view, Cohen and Wills (1985) suggested that an effective measure of social support should match the stressful event. They also endorsed the idea of measuring the specific type of stress that corresponds with the target behavior. Applying this logic to the present issues, to assess the effects of social support and stress on parenting one might measure specific parenting support rather than general social support and parenting stress rather than general psychological distress. Perhaps, then, parenting support is the best possible contextual resource for facilitating optimal parenting practices or protecting against the effects of stress related to parenting.

Several studies have attempted to measure parenting support using a variety of operational definitions and methods of assessment. The results of this body of work have indicated that parenting support had a positive, direct relation with optimal parenting (Colletta, 1979; Jennings et al., 1991; Weinraub & Wolf, 1983). Other studies have found significant negative relations between parenting support and general psychological distress (Tetzloff & Barrera, 1987; Wandersman et al., 1980); however, these studies did not include measures of parenting stress.

Although the research on parenting support has moved the literature in an important direction, key methodological problems in this body of work remain. To our knowledge, researchers have not tested for possible mediators of the relation between parenting support and optimal parenting. In addition, the measures of parenting support that were developed for these studies typically consisted of only a few items, and the psychometric properties of the measures were insufficient, if even reported. Furthermore, the
sample sizes were relatively small for this type of correlational research. Taken together, such methodological weaknesses limit the internal validity and generalizability of the existing research in this area.

This Study

The process models examined in this study posit that social support is related to optimal parenting and that this relation may be mediated by maternal emotional functioning. This process was explored for two different types of social support: (1) general social support, and (2) parenting support. In addition, we investigated the effects of two different possible mediators: (1) parenting stress, and (2) general psychological distress. In keeping with the notion that the type of social support should match the need of the support recipient (Belsky, 1984; Cohen & Wills, 1985; Cutrona et al., 1990; Cutrona & Russel, 1990; Weiss, 1974; Wood, 1984), it was essential that the type of stress also fit with the type of social support. Thus, in this study, general psychological distress was tested as a potential mediator for the relation between general social support and parenting, because lower levels of general psychological distress should follow from general social support. We also tested the possibility that parenting stress would better mediate the relation between parenting support and optimal parenting practices. Explicit in our models was the assumption that using a stress variable that is specific to the parenting domain may be the key to understanding the process by which specific parenting support and optimal parenting practices are related.

In summary, the major aims of this study were to assess the direct and indirect relations of two types of social support and optimal maternal parenting by measuring general social support and parenting support as separate constructs with potentially different indirect relations with optimal parenting. We hypothesized that the relation between parenting support and optimal parenting would be mediated by parenting stress and not by general psychological distress (see Figure 1). Moreover, we hypothesized that the relation between general social support and optimal parenting would be mediated by general psychological distress and not by parenting stress (see Figure 2).

METHODS

Participants

Self-report data were gathered from 165 married mothers and their first-born fourth-graders (71 boys, 94 girls). The sample was primarily European American (95%). The age range of the mothers was 27 to 51 years, with
an average age of 37.57 years, $SD = 4.20$. The target children were between the ages of 9 and 11 years, $M = 9.64$, $SD = 0.54$. The mothers reported having an average of 2.5 children in their family. Three percent of the mothers had completed a graduate or professional degree, whereas 15% had received a master’s degree, 36% had obtained a bachelor’s degree, 19% had an associate’s degree, 26% had received a high school diploma, and 1% had not received a high school diploma. Sixty-eight percent of the mothers reported working full or part time, whereas 32% were homemakers. The an-
annual household incomes of the study participants ranged from $5,400 to $400,000, with an average annual income of $79,593, \( SD = $51,917 \).

Procedure

Participants were recruited from several public school districts and private Catholic schools in a medium-sized, midwestern U.S. city. Potential participants were contacted either by giving the fourth-graders letters about the study to take home or by direct mailings to their home addresses, if provided by the particular school. The contact letters briefly described the study and instructed mothers to call the research office if interested. Five hundred thirty-seven mother–child dyads contacted the research office. Eligibility was determined by screening questions administered over the phone by research assistants. Participants were eligible if the fourth-grader was the oldest child in the family and the mother was currently married to the target child’s father and had never been divorced. Of the 537 who contacted the research office, 182 met the criteria, whereas 355 did not meet the criteria because they had an older child or were divorced or remarried. One hundred sixty-five (91%) of the eligible dyads completed the study; 13 dyads (7%) refused to participate after hearing more about the study, and 4 dyads (2%) dropped out of the study after repeatedly canceling the laboratory appointment.

A survey packet consisting of parenting questions was mailed to the mother, to be completed 1 week before attending the laboratory visit. This was done to reduce the amount of material the mother had to complete during the visit. Mothers and their children independently and separately completed self-report questionnaires during the laboratory visit. To ensure that all children understood the questions, the survey was read aloud by a research assistant. Participants were paid $30 for their participation in the study.

Optimal Parenting

We combined measures of warmth and monitoring used in previous studies to create a single construct of optimal parenting, as suggested by other researchers (Barber & Thomas, 1996; Robinson, Mandleco, Olsen, & Hart, 1995).

Warmth. Maternal warmth was measured with a parent version of the Acceptance subscale from the revised Child’s Report of Parental Behavior Inventory (Barber & Thomas, 1996; Gondoli & Silverberg, 1997). The original Child’s Report of Parental Behavior Inventory (Schaefer, 1965) was de-
veloped to assess children’s perceptions of parenting but was adapted to obtain parental ratings of parenting as well (Barber & Thomas, 1996; Fauber, Forehand, Thomas, & Wierson, 1990; Gondoli & Silverberg, 1997). The Acceptance subscale measures warm affect (e.g., “I smile at my child”) as well as nurturance and involvement (e.g., “I make my child feel like he or she is really important to me,” “I give my child a lot of care and attention”). Previous versions of the Acceptance subscale consisted of 10 items and had a 3-point Likert-type response scale that ranged from 1 (not like me) to 3 (a lot like me; Barber & Thomas, 1996; Gondoli & Silverberg, 1997). In this study we added 3 items to boost the reliability of the scale, which was modest in a similar study (Gondoli & Silverberg, 1997). The mothers were instructed to indicate how often they acted like each statement on a 5-point Likert-type scale that ranged from 0 (never) to 4 (always). The response scale was altered from the 3-point scale used by other researchers to a 5-point scale to increase the variability and internal consistency of responses. Higher scores indicated higher levels of acceptance. The internal consistency reliability for the 13-item scale was .88 in the present sample, a substantial improvement over the original 10-item version used in previous research (e.g., Gondoli & Silverberg, 1997, reported $\alpha = .78$ for mothers of seventh-graders).

**Monitoring.** The Monitoring subscale used in this study measures the mother’s knowledge of her child’s activities and acquaintances. The subscale items were based on previous research using similar items scored with a 3-point Likert-type response scale that ranged from 1 (not at all) to 3 (a lot; Barber & Thomas, 1996; Brown, Mounts, Lamborn, & Steinberg, 1993; Jacobson & Crockett, 2000). The response scale for the 9-item monitoring measure was altered from the 3-point scale used in previous research to a 5-point Likert-type scale to increase variability and internal consistency reliability. The responses ranged from 0 (never) to 4 (always), with higher scores indicating higher levels of monitoring. Sample items included “How often do you know the names of your child’s teachers?” and “How often do you know the parents of your child’s friends?” The internal consistency reliability was .73 for this study.

Previous research has indicated that highly similar measures of maternal acceptance and monitoring were significantly related (e.g., Barber & Thomas, 1996, reported $r(774) = .44, p < .05$) and loaded onto the same factor in an oblimin rotation factor analysis of multiple parenting subscales (Robinson et al., 1995). The Acceptance and Monitoring scales were also significantly related in this study, $r(163) = .34, p < .05$. Thus, on the basis of the suggestions of previous research and the empirical evidence in this study, we combined the Acceptance and Monitoring subscales to form a
22-item optimal-parenting scale. The internal consistency reliability of our optimal parenting scale was .87.

General Psychological Distress

Maternal general psychological distress was measured using the Symptom Checklist 90 Revised (SCL-90-R; Derogatis, 1983). The SCL-90-R is a 90-item measure of psychological distress. The measure includes nine subscales indicating various symptoms (e.g., depression, anxiety) and yields a total Psychological Distress scale. In this study we used the total Psychological Distress scale, which is calculated by adding the scores for each item and dividing by the number of items. The mothers were asked to "describe how much that problem has distressed or bothered you during the past seven days, including today" on a Likert-type scale that ranged from 0 (not at all) to 4 (extremely). Higher scores on the total scale indicated higher levels of psychological distress. For the present sample, the 90-item total Psychological Distress scale had an internal consistency reliability coefficient of .96.

Parenting Stress

The parenting stress measure used in this study was adapted from the Parental Stress Items scale (Pearlin & Schooler, 1978). The original 7-item scale instructed mothers to show how much they are experiencing each of seven distressed feelings about parenting. A sample item asked “When you think of your experiences as a parent to this child, how worried do you feel?” For this study, we added 4 positively worded items to the measure to help reduce response bias and to increase the reliability of the scale (e.g., “When you think of your experiences as a parent to this child, how happy do you feel?”). The mothers responded on a 4-point Likert-type scale that ranged from 1 (not at all) to 4 (very much so). Higher scores indicate higher levels of parenting stress. The internal consistency reliability for our 11-item scale was .87.

General Social Support

General social support was measured with the Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck, & Hoberman, 1985). This measure consists of four subscales: (1) Appraisal (e.g., getting good advice from others), (2) Belonging (e.g., having someone to spend time with), (3) Tangible (e.g., practical help, such as borrowing money, or getting a ride), and (4) Self-Esteem (e.g., feeling valued by others). Each
subscale consisted of 10 items that combine for a total Support scale of 40 items. In this study we used the total Support scale as suggested by Simons et al. (1993). The original ISEL had a true—false response scale. In the version used for this study, mothers were asked to respond on a 4-point Likert-type scale that ranged from 1 (definitely false) to 4 (definitely true) to increase the variability of the scores (see Jacob, Windle, Seilhamer, & Bost, 1999). Higher scores on the ISEL indicated higher levels of social support. The total scale internal consistency reliability coefficient was .93 in this study.

Parenting Support

A measure of parenting support from extended family members and friends was developed for this research (see the Appendix). The measure was modeled after two measures of perceived general social support: (1) the ISEL (Cohen et al., 1985) and (2) the Perceived Social Support from Family and Friends measure (Procidano & Heller, 1983). Several items taken from the ISEL and the Perceived Social Support from Family and Friends measure were reworded to apply specifically to situations and behaviors in the parenting realm. Moreover, several additional items were created specifically to assess parenting support. The 38-item measure consisted of four subscales with theoretical underpinnings similar to the ISEL (Cohen et al., 1985). The four subscales were (1) Practical Support (10 items), (2) Informational Support (12 items), (3) Esteem Support (10 items), and (4) Venting Support (6 items). Although the parenting support measure comprised four theoretical subscales, it was designed to be used as a total parenting support scale, similar to the ISEL total scale. Mothers responded on a 4-point Likert-type scale with responses including 1 = strongly agree, 2 = agree, 3 = disagree, and 4 = strongly disagree. The item responses were recoded so higher scores indicated higher levels of parenting support.

We did not conduct an item-level principal-components analysis, because the sample size (N = 165) would not permit an accurate item analysis of the 38-item total scale (Tabachnick & Fidell, 1996). We used the LISREL 8.14 program to conduct a higher order confirmatory factor analysis at the subscale level (Jöreskog & Sörbom, 1993). The results suggested that the four subscales were significant manifest indicators of a single latent construct, parenting support. The chi-square for the model, $\chi^2(2, N = 165) = 5.88, p = .06$, the standardized root mean square residual (SRMR) value of .02, the adjusted goodness-of-fit index (AGFI) value of .91, and the comparative fit index (CFI) value of .99 indicated a sufficient model fit (Hu & Bentler, 1999). The factor loadings for practical support, $\lambda = .68$, informa-
tional support, $\lambda = .77$, esteem support, $\lambda = .89$, and venting support, $\lambda = .90$, were statistically significant. Correlation analyses indicated that the Practical and Informational subscales alone were significantly related to optimal parenting, $r(163) = .17$, $p < .05$. We conducted this analysis because the Esteem and Venting subscales, which were also significantly related to optimal parenting, $r(163) = .15$, $p < .05$, appear to share some overlap in content with the measure of optimal parenting. The internal consistency reliability for the 38-item total scale was .94. Taken together, these findings indicated that the parenting support subscales may be combined to produce a total score.

The Parenting Support total score showed evidence of good convergent and discriminant validity. Parenting support had a significant, positive relation with the total ISEL score, $r(163) = .53$, $p < .001$, suggesting that the newly developed measure was similar to other widely used social support measures. Yet the parenting support measure appeared to be distinguishable from general social support, because both measures were highly reliable, and the estimated correlation between true scores did not approach 1.0, $\rho = .57$, suggesting that the scales were not measuring identical constructs. We used the correction for attenuation equation to yield the estimated correlation between the true scores (Crocker & Algina, 1986). The true score correlation between parenting support and general social support indicated that 68% of the variance in the measure of parenting support was unique with regard to general social support. As expected, the parenting support measure was significantly related to general psychological distress, $r(163) = -.31$, $p < .001$. Parenting support also had a modest, positive relation with annual income, $r(163) = .16$, $p < .05$, suggesting that the two measures were related but distinguishable. The parenting support measure was not significantly related to mothers’ age, $r(163) = -.03$, ns; mothers’ highest degree earned, $r(163) = .11$, ns; or the number of children in the family, $r(163) = -.09$, ns. These findings suggest that the parenting support scale was not significantly related to constructs that theoretically should show no significant relation with social support.

RESULTS

Preliminary Analyses

Descriptive statistics, including means, standard deviations, and minimum and maximum scores for the study variables, are presented in Table 1. To test the mediational models proposed in the hypotheses, it was first necessary to establish significant bivariate relations among the independ-
TABLE 1
Descriptive Statistics for the Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal parenting</td>
<td>75.25</td>
<td>6.75</td>
<td>52.00</td>
<td>88.00</td>
</tr>
<tr>
<td>Parenting support</td>
<td>119.98</td>
<td>14.49</td>
<td>86.00</td>
<td>152.00</td>
</tr>
<tr>
<td>General social support</td>
<td>135.95</td>
<td>14.39</td>
<td>87.00</td>
<td>160.00</td>
</tr>
<tr>
<td>Psychological distress</td>
<td>0.28</td>
<td>0.27</td>
<td>0.00</td>
<td>1.71</td>
</tr>
<tr>
<td>Parenting stress</td>
<td>18.47</td>
<td>5.53</td>
<td>11.00</td>
<td>39.00</td>
</tr>
</tbody>
</table>

Note. N = 165.

ent, dependent, and mediator variables (Baron & Kenny, 1986). As depicted in Table 2, the correlation analyses indicated that the bivariate relations among the study variables were statistically significant and in the expected directions.

Mediator Models

We used the structural equation modeling approach to path analysis with observed to test the direct and indirect relations proposed in the hypotheses (Schumacker & Lomax, 1996). We used the LISREL 8.14 program to estimate relations among the variables, assess model fit, and compare models (Jöreskog & Sörbom, 1993). The progression of possible models to test was developed on the basis of theoretical considerations. The full model included the direct relation between the independent variable (parenting support or general social support) and the dependent variable (optimal parenting) and the indirect relations with the two potential mediators (parenting stress and general psychological distress). The two potential mediators were combined in the same model to strengthen the support for one mediator by ruling out the alternative hypothesis that the

TABLE 2
Intercorrelations Between the Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Optimal parenting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Parenting support</td>
<td>.17*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. General social support</td>
<td>.28***</td>
<td>.53***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Psychological distress</td>
<td>-.16*</td>
<td>-.31***</td>
<td>-.41***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Parenting stress</td>
<td>-.35***</td>
<td>-.33***</td>
<td>-.33***</td>
<td>.44***</td>
<td></td>
</tr>
</tbody>
</table>

Note. N = 165.

*p < .05, ***p < .001.
other distress variable was also a mediator. The next step was to determine whether the relation between the independent variable and the dependent variable was mediated. To test for mediation, we removed the direct path between the independent variable and the dependent variable by setting the path coefficient equal to zero and then assessing the fit of the model. Finally, it was necessary to verify whether both variables were responsible for the mediation by comparing the strength of the two indirect, mediational paths.

The fit of the models was assessed with the AGFI, SRMR, and CFI. These particular fit indexes were suggested as a good combination to assess the fit of models with small sample sizes (e.g., $N < 250$; Hu & Bentler, 1999). The AGFI is an absolute fit index that takes into account the degrees of freedom for the model and is based on a ratio of the sum of the squared differences between the observed and reproduced matrixes to the observed variances (Schumacker & Lomax, 1996). An AGFI value greater than .90 indicates a good-fitting model. The SRMR is an absolute fit index based on the square root of the mean squared differences between matrix elements in the observed and reproduced correlation matrixes (Schumacker & Lomax, 1996). The SRMR index indicated a good-fitting model if the value was less than .05. The CFI is an incremental fit index that is normed and noncentrality based (Hu & Bentler, 1999). A CFI value greater than .95 indicated that the model is a good fit. We determined the significance of the standardized path coefficients by comparing the $t$ ratio to a critical $t_{.05}$ of 1.96. The overall fit of the models was determined by using a combination of the results from the fit indexes, the chi-square statistic, the difference in chi-square, and the significance of standardized path coefficients.

Parenting Support Models

The first hypothesis proposed that the relation between parenting support and optimal parenting would be mediated by parenting stress and not by general psychological distress. To begin model testing, the full model was first specified. The full model included the direct relation between parenting support and optimal parenting and indirect relations through parenting stress and general psychological distress. The full model was just identified and thus fit perfectly. Therefore, it was necessary to examine the standardized path coefficients to determine the significance of the relations among the variables in the model (see Figure 3). The standardized path coefficient representing the direct relation between parenting support and optimal parenting was not significant when controlling for the relations with psychological distress and parenting stress. The direct path be-
between parenting support and optimal parenting at the bivariate level, $\gamma = .17$, was significantly reduced when controlling for parenting stress and general psychological distress, $\gamma = .06$. The paths between parenting support and the mediators, parenting stress and psychological distress, were negative and significant as expected. The error terms between parenting stress and general psychological distress were permitted to correlate because it was expected that the two distress measures would be related beyond the context of parenting support and optimal parenting. The standardized path coefficient indicative of this relation was positive and statistically significant. Although the standardized path coefficient for the relation between parenting stress and optimal parenting was negative and significant as expected, the path coefficient for the relation between psychological distress and optimal parenting was not significant and close to zero.

We also tested the direct relation between parenting support and optimal parenting while controlling for mothers’ years of education, mothers’ age, annual income, number of children in the family, and gender of the target child. The results suggested that there was essentially no difference between the direct relation before, $\gamma = .17$, and after, $\gamma = .20$, controlling for the sociodemographic variables. For the sake of parsimony, the sociodemographic variables were not included in the subsequent analyses.

Next, we tested the mediation model by eliminating the direct path between parenting support and optimal parenting (see Figure 4). In essence, the path coefficient between parenting support and optimal parenting was compared to zero. The chi-square for the model was not significant, $\chi^2(1, N = 165) = 0.06, p = .43$, indicating an appropriate model fit. The CFI value of 1.00,
the SRMR value of .02, and the AGFI value of .98 concurred with the chi-square results, suggesting a good fitting model. The chi-square statistic and fit index values suggested that the direct path was not significantly different from zero, an indication of complete mediation. The results to this point implied that the direct relation between parenting support and optimal parenting was mediated through psychological distress and parenting stress, or at least one of the two mediators. The standardized path coefficient between parenting stress and optimal parenting increased slightly compared with the full model. The path between general psychological distress and optimal parenting was still not significant and close to zero. Given the differing magnitude of the path coefficients between each proposed mediator and optimal parenting, it appeared that parenting stress, and not general psychological distress, may have been the source of the mediation of the relation between parenting support and optimal parenting.

After examining the results that generally supported mediation, we attempted to address the hypothesis that parenting stress mediated the relation between parenting support and optimal parenting, whereas general psychological distress did not. A nonlinear constraint was imposed on the mediation model to test whether one indirect, mediational path was stronger than the other. The constraint set the product of the indirect paths through parenting stress equal to the product of the indirect paths through general psychological distress. The chi-square statistic for the model was significant, suggesting that the model was a poor fit, \( \chi^2(2, N = 165) = 6.31, p = .04 \). The difference in chi-square compared with the prior mediation model was significant, suggesting that the nonlinear constraint model fit significantly worse than the mediation model, \( \chi^2(1, N = 165) = 6.25, p < .05 \).
The CFI value of .94, the SRMR value of .05, and the AGFI value of .90 indicated that the model did not fit well. Taken together, the evidence suggested that the two mediational paths were significantly different from each other and that one mediator was significantly better than the other.

To further explore the evidence supporting one mediator over the other, we tested the need for each path linking the mediator to the dependent variable by eliminating the path from the model and assessing the fit of the more parsimonious model. Only the path between general psychological distress and optimal parenting was removed without compromising the fit of the model. The chi-square for the model was not significant, $\chi^2(2, N = 165) = 0.63, p = .73$, and, when compared to the mediation model, the more parsimonious model did not fit significantly worse, $\chi^2(1, N = 165) = 0.57, ns$. The CFI value of 1.00, the SRMR value of .02, and the AGFI value of .99 suggested a good-fitting model as well. The results indicated that the path coefficient representing the relation between general psychological distress and optimal parenting was not significantly different from zero. The mediation of the relation between parenting support and optimal parenting thus appeared to be due to the indirect relation through parenting stress, and not general psychological distress, as hypothesized.

We conducted additional analyses to test whether these patterns would hold for independent models of the two components of optimal parenting, warmth and monitoring, and the two contexts of parenting support, family and friends. The results indicated that the same patterns hold for the relations between parenting support and warmth, parenting support and monitoring, parenting support from family and optimal parenting, and parenting support from friends and optimal parenting. Thus, it appears that the composite variables used in the main analyses did not have a significant impact on the results.

General Social Support Models

The second hypothesis proposed that the relation between general social support and optimal parenting would be mediated by general psychological distress and not by parenting stress. The full model included the direct relation between general social support and optimal parenting and indirect relations through general psychological distress and parenting stress (see Figure 5). The full model was just identified and therefore was a perfect fit. The path coefficient for the direct relation between general social support and optimal parenting remained significant in the context of the full model. The direct relation between general social support and optimal parenting at the bivariate level, $\gamma = .28$, was slightly reduced when controlling for the mediators, $\gamma = .20$. The path coefficients between general so-
cial support and the possible mediators, general psychological distress and parenting stress, were negative and significant. The path coefficient linking the error terms between general psychological distress and parenting stress was positive and significant. Parenting stress had a significant negative relation with optimal parenting. However, once again, general psychological distress was not significantly related to optimal parenting.

We also tested the direct relation between general social support and optimal parenting while controlling for mothers' years of education, mothers' age, annual income, number of children in the family, and gender of the target child. The results suggested that there was essentially no difference between the direct relation before, $\gamma = .28$, and after, $\gamma = .29$, controlling for the sociodemographic variables. For the sake of parsimony, the sociodemographic variables were not included in the subsequent analyses.

Next, we tested the mediation model of the relation between general social support and optimal parenting. The path coefficients changed only slightly compared with the full model. The significant chi-square, $\chi^2(1, N = 165) = 6.26, p = .01$; the AGFI value of .82; the SRMR value of .05; and the CFI value of .94 indicated a poorly fitting model. These findings suggested that the relation between general social support and optimal parenting was not completely mediated by parenting stress, as hypothesized, yet the relation was also not completely mediated by general psychological distress. Thus, general social support had a significant direct relation with optimal parenting when controlling for parenting stress and general psychological distress.

We conducted additional analyses to test whether these patterns would hold for the two components of optimal parenting, warmth and monitor-
ing. The results indicated that the relations between general social support and warmth and between general social support and monitoring were not mediated by parenting stress and general psychological distress. Once again, it appears that combining warmth and monitoring into a single construct of optimal parenting did not significantly influence the results.

Further examination of the general psychological distress variable indicated that it was not normally distributed. The distribution of scores for the variable was positively skewed and leptokurtic. Efforts were made to statistically transform the distribution of the general psychological distress variable; however, these efforts were not sufficient to completely normalize the distribution. Moreover, a retest of the mediator models with the transformed general psychological distress variable yielded similar results. Thus, the unexpected lack of relation between general psychological distress and optimal parenting may have been the result, in part, of problematic distributional characteristics of the general psychological distress variable in the current sample.

**DISCUSSION**

This study assessed direct and indirect relations between two types of social support — parenting support and general social support — and optimal parenting. The results suggest that the relation between parenting support and optimal maternal parenting was a function of parenting stress and not general psychological distress. We were able to identify parenting stress as a mediator of the relation between parenting support and optimal maternal parenting by focusing on the specificity of social support and stress in the domain of parenting. The relation between general social support and optimal maternal parenting was not mediated by parenting stress or general psychological distress. We now elaborate the significance of these findings.

Parenting Support

The mediated relation found between parenting support and optimal maternal parenting was consistent with our hypotheses and offers insight into the functions of social support. Parenting support was associated with more optimal maternal parenting practices, and this relation was mediated by less stress in the parenting role. On the basis of these patterns, it is possible that increasing mothers' parenting support has the utility to improve the lives of both mothers and their children.
Mothers can develop an enhanced social support base for parenting by means of community parenting interventions. Such interventions may increase the perception that parenting support is available by helping to make community resources for parenting more accessible, encouraging parenting group affiliations, or directly providing formal parenting support. For instance, family-related intervention strategies focusing on parents of children with attention-deficit/hyperactivity disorder have typically emphasized the fundamental aspects of social support as part of the intervention. Intervention studies have reported that group-level parent-training programs and multifamily group therapy are related to improvements in parenting skills and reductions in parenting stress (Anastopoulos, Shelton, DuPaul, & Guevremont, 1993; Greenfield & Senecal, 1995; Ralph, Oman, & Forney, 2001). The positive effects of such group interventions may be the result of systematic emotional and informational parenting support as well as a sense of cohesiveness or global emotional support. The findings of this study suggest that such relatively low cost and accessible interventions may also be effective for nonreferred children and their parents.

General Social Support

As expected, the relation between general social support and optimal maternal parenting was not mediated by parenting stress. Contrary to our expectations, however, the relation between general social support and optimal maternal parenting was also not mediated by general psychological distress. In interpreting the latter finding, two explanations seem likely. First, perhaps we misspecified our model, and general social support is only directly associated with optimal parenting. However, given the significant bivariate relations among general social support, optimal parenting, and general psychological distress, it is likely that the relation between general social support and optimal parenting may be influenced by general psychological distress in a manner that was not detected with the present analyses. It was also possible that mediation was not detected in this study because the distribution of the general psychological distress variable was positively skewed and leptokurtic, and these problematic characteristics prevented a robust multivariate analysis.

One possible reason for the problematic distributional characteristics of the general psychological distress measure was that the measure may have been somewhat inappropriate for use in a nonclinical sample. The SCL-90-R is a screening checklist used to assess the presence of general psychological symptomatology (Derogatis, 1983). The skewness and kurtosis statistics suggested that the majority of the mothers in our sample were not
experiencing the symptoms listed on the SCL-90-R. Furthermore, the content of the specific items may have been too extreme to measure low-level, generalized emotional distress as it existed in our sample. In a similar study, Simons et al. (1993) used the SCL-90-R Depression subscale with seemingly better results. However, the sample used in Simons et al.’s study had recently experienced severe economic strain and may have been more likely to be distressed at clinical levels than the present sample. The low levels of general psychological distress experienced by the sample in this study may have contributed to the lack of mediation for the general psychological distress construct. Simons et al. used a spouse report and an observer rating as indicators of their depression construct. In addition, the depression construct was given an empirical advantage in their structural models because of the use of a single manifest indicator for the social support construct, as discussed previously. These factors most likely contributed to the SCL-90-R results being more interpretable in Simons et al.’s study.

Given the results that Simons et al. (1993) reported, we conducted a series of additional analyses retesting our mediation models using only the Depression subscale of the SCL-90-R as the measure of general psychological distress. These additional analyses yielded a lack of significant results similar to our major analyses; that is, the path coefficient between the Depression subscale and optimal maternal parenting was not significant. Future studies focusing on parenting in non clinical, nonreferred samples may benefit from using measures of nonclinical psychological or emotional distress. Moreover, similar research may benefit from use of measures of well-being rather than operationally defining the presence of well-being as a lack of general psychological distress.

Limitations

This study included some methodological shortcomings. It is important to note that we used only maternal self-report measures. This particular limitation raises two critical issues. First, the strong reliance on self-report measures may have created method variance in the proposed models. Hence, it is impossible to partial out the effects of the method of measurement. Second, it is possible that the measure of optimal parenting reflects perceived competence in the parenting role rather than actual competence. The use of observational methods and multiple informants in future studies would adequately address both of these issues.

Although the proposed models in this study impose a theoretical direction of effects, it would be problematic to infer causation from these results, because the design is cross-sectional. We conducted analyses to rule out al-
ternative hypotheses of the direction of effects, but we cannot rule out the possibility that the direction of effects may actually be in the reverse order (e.g., optimal parenting leads to increased social support). Path analysis results may provide important insight into the mechanisms by which social support and parenting are related, but these effects must be considered exploratory.

Conclusions

These relations were detected in a nonclinical, relatively advantaged sample of mothers. Much of the previous research on the topics of social support and parenting have included more specialized samples of mothers, usually suffering from emotional distress and confronting adverse life circumstances. The stress-buffering hypothesis suggests that the relation between social support and parenting practices may differ depending on the level of stress (Cohen & Wills, 1985; Simons & Johnson, 1996). A possible interpretation of this effect is that the relation between social support and parenting holds only for individuals with high levels of stress. This study generalizes the influence of social support on parenting to middle-class married mothers living in relatively more favorable circumstances. Our results thus suggest that parenting support from family and friends is important for parenting practices, regardless of varying life circumstances. In other words, a mother does not need to suffer from clinical emotional distress or severe life stress to experience the benefits of social support.

The measure of parenting support created for this study may make an immediate contribution to the field by increasing interest in the conceptualization of parenting support as a construct. Analysis of previous literature on parenting support used in the development of the new scale was beneficial for reliability and validity. It is also possible that the ability to detect mediation in this study was due to the specificity of the parenting support measure. Focusing specifically on social support and stress in the context of parenting links the broad parenting literature with the specificity of measurement theory embedded in the stress and coping literature. The newly developed measure of parenting support may encourage further tests of models of specificity in the domain of parenting. For instance, the parenting support scale may be used in future investigations of spouse support for parenting versus family and friend support for parenting. Belsky (1984) identified social support from the spouse as the primary support system for parents, yet the results of this study suggest that social support from family and friends has a significant impact on parenting as well. Thus, the approach laid out in this study, matching the context of the me-
diator with the type of support, extends insight into the determinants of parenting.

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REFERENCES


APPENDIX

Parenting Support From Family and Friends

The items in each subscale are listed separately. The administered measure consisted of all 38 items listed in random order. An R indicates that the response was reverse coded.

Instructions

Some people receive a lot of support for parenting from their family members and others do not. We would like to learn about the parenting support you receive from your extended family members (not including your husband) and friends. Read each statement below and decide whether you strongly agree (1), agree (2), disagree (3), or strongly disagree (4) with the statement.

Practical Support

1. My friends would pick my child up from school if I needed them to.
2. My family members would baby-sit for my child if I needed them to.
3. If I needed them to, my friends would help me with my daily chores to make parenting easier.
4. Members of my family would loan me $100 if I needed it for my child.
5. If I were sick, my friends would help me with the day-to-day care of my child.
6. My friends would baby-sit for my child if I needed them to.
7. If I needed them to, my family members would help me with my daily chores to make parenting easier.
8. If I were sick, my family members would help me with the day-to-day care of my child.
9. My family members would pick my child up from school if I needed them to.
10. My friends would loan me $100 if I needed it for my child.

Informational Support

1. Members of my family are good at helping me solve parenting problems.
2. I get good ideas about parenting from my friends.
3. Members of my family offer good advice about how I should set limits for my child.
4. My friends are very knowledgeable when it comes to parenting issues.
5. My family members have good ideas about activities for my child and I to share.
6. My friends are able to give helpful hints as to how I should deal with the moodiness of my child.
7. I get good ideas about parenting from my family members.
8. My friends are good at helping me solve parenting problems.
9. My family members are very knowledgeable when it comes to parenting issues.
10. My friends have good ideas about activities for my child and I to share.
11. My family members are able to give helpful hints as to how I should deal with the moodiness of my child.
12. My friends offer good advice about how I should set limits for my child.

Esteem Support

1. Members of my family would say that I am doing a good job as a parent.
2. My friends often criticize my parenting practices. R
3. My family members express confidence in me as a parent.
4. I feel comfortable when confiding in my friends about parenting issues.
5. My family members listen to my parenting concerns without being judgmental.
6. My friends would say that I am doing a good job as a parent.
7. My family members often criticize my parenting practices. R
8. My friends express confidence in me as a parent.
9. I feel comfortable when confiding in my family members about parenting issues.
10. My friends listen to my parenting concerns without being judgmental.

Venting Support

1. I have family members that I could go to with a parenting problem and not feel funny about it later.
2. I have friends I can talk to when I just want to blow off steam about parenting issues.
3. I can talk openly with my family members about parenting problems that I may have.
4. I have friends that I could go to with a parenting problem and not feel funny about it later.
5. I have family members I can talk to when I just want to blow off steam about parenting issues.
6. I can talk openly with my friends about parenting problems that I may have.