Stress, Parenting, and Children's Competence, page 1

Parents' Stressful Life Events and Social Networks:
Relations with Parenting and Children's Competence William L. Roberts Simon Fraser University Canadian Journal of Behavioural Science, 1989, 21, 132-146.

Stress, Parenting, and Children's Competence, page 2


#### Abstract

This paper focuses on relations between parents' stressful life events and social networks, parent-child interactions, and children's competence in preschool, in a sample of 30 normally functioning, two-parent families. It presents data relevant to several serious shortcomings in the current literature on stress and social networks. (1) Because research in this area has focussed on mothers and infants in maltreating families, it is unclear whether reported trends hold for fathers, families with older children, and families characterized by adequate parenting and low levels of stress. (2) Few reports distinguish between support from spouse, friends, and relatives. (3) Social networks, parenting, and children's behavior have seldom been examined concurrently, making it impossible to distinguish direct and mediated effects. In this study, mothers and fathers reported on stressful life events and social networks; family interactions were assessed by home observations, observer ratings, and parent self reports; and children's competence in preschool was assessed by teacher ratings. Stress was not strongly linked with parenting, although loss (deaths of relatives and friends) was associated across methods with decreased warmth for both parents. Structural and functional differences emerged for social support from spouse, kin, and friends. In addition, aspects of mothers' and fathers' social networks were each associated with the others' parenting. Partial correlation analyses were consistent with the view that effects of parental stress on child behavior were mediated by parent-child interactions, while social networks influenced children directly.


Parents' Stressful Life Events and Social Networks:
Relations with Parenting and Children's Competence

While there is an extensive literature on how parenting influences children's behavior (e.g., Maccoby \& Martin, 1983), there is relatively little research on factors that influence parenting. The most important contextual factors are generally thought to be work environments, social networks, levels of experienced stress, and quality of the marital relationship (Belsky, 1984; Bronfenbrenner, 1986). The impact of work in the present sample (as assessed by demographic variables and socio-economic status) has been discussed in an earlier article (Roberts, 1987). This paper focuses on relations between parents' stressful life events and social networks, parent-child interactions, and children's competence in preschool.

Social networks
Social networks have been linked to aspects of parenting which have been linked to children's dysfunctional or competent behavior. For example, a number of studies have reported that deficiencies in social networks (either in size or support) are related to abuse or neglect of infants and toddlers (e.g., Belsky, 1984; Crittenden, 1985; Garbarino, 1976; Smith, Hansen, \& Noble, 1980), and maltreated children are known to have a variety of deficits in social skills (George \& Main, 1979; Main \& George, 1985). In families that are not maltreating but are at risk to do so, deficiencies in social networks have been associated with higher levels of parental hostility and indifference and lower levels of behavioral responsiveness (Bronfenbrenner, 1986), while larger, more supportive social networks have been associated with less restrictive and more nurturant parenting (Belsky, 1984; Weinraub \& Wolf, 1983). All these aspects of parenting have been linked to social and instrumental competence in children (Baumrind, 1971; Maccoby \& Martin, 1983; Roberts, 1986; Roberts \& Strayer, 1987).

In addition to relations with parenting, it has been proposed that social networks directly influence children's behavior (Cochran \& Brassard, 1979). This is thought to occur because larger, more varied networks allow participation in more diverse experiences and also provide greater opportunities for modelling.

There are, however, serious shortcomings in the literature just reviewed. (1) The almost exclusive focus on mothers and infants in maltreating families and "at-risk" populations (Bronfenbrenner, 1986) leaves open the question of whether findings reported for these groups hold for families characterized by adequate parenting (Belsky, 1984), for father-child interactions or for families with older children, or whether mothers' and fathers' social networks have different relations to children's behavior. (2) Although it is thought that social support from spouse, relatives and friends may affect family interactions and child outcomes in different ways, few studies have distinguished between these sources of support (Bronfenbrenner, 1986). (3) Finally, few studies have concurrently assessed stress and social networks, parenting, and children's behavior (Belsky, 1984; Bronfenbrenner, 1986), making it impossible to separate direct and mediated relations between contextual factors and children's behavior.

## Stress

Not only do maltreating and "at-risk" families tend to be embedded in smaller, less supportive social networks, they typically experience many types of stressful life events. These stresses are reported to have a negative impact on mother-child relationships (Vaughn, Egeland, Sroufe, \& Waters, 1979), maternal warmth and responsiveness (Belsky, 1984), and children's competence (Garmezy, Masten, \& Tellegen, 1984). Because these negative effects are thought to be most apparent at relatively high levels of stress, it is unclear whether such trends hold in families characterized by low levels of stress and adequate levels of income and social support.

## Parenting and Children's Competence

Parenting. The aspects of parenting mentioned above lie along two fundamental, if complex, dimensions (Maccoby \& Martin, 1983; Roberts, 1986). The first is warmth, which includes both affection and behavioral responsiveness. For a wide range of families, parental responsiveness has been linked to secure attachments in infancy and to social and task competencies in preschool (Ainsworth \& Bell, 1974; Arend, Gove, \& Sroufe, 1979; Matas, Arend, \& Sroufe, 1978). Warmth as affection has also been associated with children's competence in early and middle childhood (Maccoby \& Martin, 1983; Roberts, 1986). The second dimension of parenting, control, includes both demandingness and the assertion of power to obtain compliance. Control has also been identified as an important determinant of children's competence (Baumrind, 1971).

Competence. Despite differences in theoretical orientations, there is a consensus in the socialization literature that competence for young children entails abilities to set and achieve goals (both individual and cooperative), to be planful, and to initiate and sustain positive social interactions with peers and adults (Ainsworth \& Bell, 1974; Baumrind, 1971; Block \& Block, 1980; Roberts, 1986). Competence is also thought to be accompanied by positive affect (Matas et al., 1978; Roberts \& Strayer, 1987). These domains of behavior are all clearly important, and deficits in them have been noted in the social networks and stress literature discussed earlier.

## Causality

The causal relations between contextual factors, parenting, and children's competence are complex and probably bidirectional. For example, it has been suggested that well-functioning families attract large and supportive social networks (Bronfenbrenner, 1986); that well-functioning individuals make good parents and good marriage partners (Belsky, 1984); that social networks may have direct as well as indirect effects on children (Cochran \& Brassard,

Stress, Parenting, and Children's Competence, page 6
1979); and that socially competent, purposive children are easier for parents and other adults to like and control. These suggestions are usually contrasted with the causal model that has commonly guided research in the field: that contextual variables influence parenting, that parenting influences children's competence, and that the associations between contextual variables and children's behavior are mediated by parent-child interactions.

These suggestions and models are most plausibly viewed as complimentary rather than mutually exclusive. A comprehensive causal model would incorporate (and indicate the strength of) bidirectional influences, both linear and nonlinear. (See Roberts, 1986, for a discussion of nonlinear relations between parenting and competence.)

While the research presented here does not compare causal models, its design makes its findings relevant to questions of causality. Because contextual factors, parenting, and children's competence are assessed concurrently, direct and mediated associations can be distinguished. In addition, because sources of social support are differentiated, these data can give some indication of the relative importance of these sources for family processes and child outcomes.

## Methods

## Subjects and Procedures

Thirty-five two-parent families volunteered for the study in response to letters distributed through day care centers and preschools in the metropolitan Vancouver area. Among the 30 families who completed the study, the average age of the 19 girls and 11 boys was 4.3 years (range, 3.0 to 5.8 ); 21 had at least one sibling, usually younger. The mean age of fathers was 34 , of mothers, 32 (range for both, 24 to 45). Mothers reported an average of 14 years of school, while fathers reported 16 (range for both, 9 to 21). Mean family income $(\$ 36,000)$ was $20 \%$ above the national average (range: $\$ 14,000$ to $\$ 77,000$ ). The Duncan Socio-Economic Index ranged from 11 to 92 , with a mean of 59 .

Each family was seen four times. Questionnaires on stress, social networks and parenting were dropped off and picked up on the first two visits. Home observations comprised the third visit, while additional child measures (described in Roberts \& Strayer, 1987) were administered during the fourth visit.

Stress
Each parent completed the Long Form of the Horowitz Life Events Inventory (Horowitz, Schaefer, Hiroto, Wilner, \& Levin, 1977). Following Rutter (1981), these events were grouped into nine a priori categories based on content, plus a tenth residual category. These were: (1) Loss (e.g., "death of your mother or father"; "loss of a close friend by death"); (2) Separation (e.g., "a move of your home to another town, province, or country"; "separation from your spouse due to job demands"); (3) Discord During Childhood (e.g., "intense arguments between your parents or other family members"; "divorce of your parents"); (4) Troubled Relationships (e.g., "troubles with your boss, or with other workers"; "a 'falling out' of a close friendship"); (5) Disappointments (e.g., "failing an important examination"; "the realization that you will never attain an important goal"); (6) Enduring Changes (e.g., "spouse beginning or stopping work"; "birth or adoption of a child"); (7) Fearful Events (e.g., "witnessing violence"; "an accident (automobile, at work)"); (8) Physically Noxious or Painful (e.g., "major dental work"; "a major illness or injury"); (9) Emotional Distress (e.g., "feelings of being overwhelmed by difficult life situations"; "feeling sad for more than three days"). Internal consistencies for these categories were not calculated because there is no reason to expect different life events to co-occur.

Due to low rates of incidence, no analyses by time of occurrence were attempted. Rather, scores for each category were derived by summing the number of time periods checked off for each item (within the last month, within the last 2 to 6 months, within the last 7 to 12 months, 1 to 2 years ago, more than 2 years ago). Thus chronic events (such as unemployment) which crossed
several time intervals were counted for each interval in which they occurred. Social Networks

The Tietjen Social Networks Questionnaire (Tietjen, 1978) provides information on the three dimensions (structure, location in time and space, and activities) thought fundamental for informal social networks (Cochran \& Brassard, 1979). Parents were asked to list up to 20 people "who are most important to you". Information was then requested about each person listed. Structural information included sex, time known, and relationship to respondent (spouse, relative, friend). Members of the network were located in time (frequency of contact) and space (within walking distance, within the metropolitan area, etc.). Assessed activities and relationships included help with household tasks, help with baby sitting, emotional support, and overall balance (i.e., do you give more than this person, about the same, or less?) .

Information in each of these areas was coded separately for relatives, friends (all non-kin) and spouses. For spouses, only information on activities was coded, i.e., the extent to which the spouse helped with household tasks and baby-sitting, and provided emotional support and a balanced relationship. Family Interactions

Parent-child interactions were assessed by home observations, observer ratings, and parents' self reports. Major constructs (warmth and control) were assessed across all three methods.

Home observations. Home observations lasted approximately three hours, from supper time until the child's bed time. Initiator and target individuals as well as behaviors were recorded on a small computerized encoder by a single observer (blind to parental self-report data and teacher reports of child behavior). A focal-individual sampling strategy was used, with 10-minute sessions alternating between the child and each parent. An average of 847 events were recorded for each family (range, 605 to 1,228 ), over a mean of 128 minutes of actual sampling time (range, 83 to 181 minutes).

The intention of the coding scheme was to provide a complete running record of family interactions, focussing on responsiveness, agonistic interactions and control, and responses to emotional upset. Social initiations (e.g., "non-verbal bid for attention or physical contact", "speaks") and social responses (e.g., "hugs, holds", "ignores, no response") were coded, as were directives, non-compliance, and responses to non-compliance (e.g., "acquiesces", "persists with directive, enforces", "hits"). Categories for coding agonistic exchanges were adapted from Strayer and Strayer (1976). Codes for the expression of affect are described in Roberts \& Strayer (1987); complete details are in Roberts (1984).

Measures of responsiveness and firmness for each parent were derived from lag analyses. Father Responsive and Mother Responsive indicate the probability of ignoring a child social initiation (values were reflected in analyses, in keeping with variable names). Father Firm and Mother Firm indicate the probability of reiteration or enforcement of a directive following child non-compliance.

Three reliability sessions totalling 300 minutes of observation time were conducted separately from the data-gathering sessions. Percent agreement and Kappa were calculated by comparing categories coded by the two observers at each second in the two records, thus placing a premium on inter-rater timing as well as agreement. Agreements divided by agreements plus disagreements equaled $79 \%(\kappa=.72)$.

Observer ratings. Following the home observation and reliability sessions, the observer(s) completed 46 Parent Rating Scales (Baumrind, 1970a, 1970b), rating both parents jointly (average inter-rater correlation $=.88$, range, .50-1.0). These scales were aggregated into three variables, following Baumrind (1971): Firm (e.g.,"Willingly exercises power to obtain obedience"; $\alpha=.84$ ), Warm (e.g., "Remains open and accessible"; $\alpha=.82$ ), and Responsive (e.g., "Has empathic understanding of child", "Encourages verbal give and take"; $\alpha=$
.77). (Responsive was called by Baumrind "Encourages Independence and Individuality".) Because of the unequal number of items comprising these variables, scores were expressed as a percentage of the possible total.

Parent self reports. Both mothers and fathers completed the Child Rearing Practices Q-Sort (Block, 1965), a 91-item set distributed across 7 categories ranging from "least descriptive" to "most descriptive" of their own parenting practices. Since factors reported by Block for families with older children had low inter-item correlations in this sample, two new scales for each parent were assembled rationally and tested empirically. The two scales Mother Strict and Father Strict contain items such as "I have strict, well-established rules for my child", while Mother Warm and Father Warm contain items such as "I express affection by hugging, kissing, and holding my child". Item-total correlations were .40 or better; Cronbach alphas ranged from .74 (Father Warm) to .78 (Father Strict). Scores on these self report variables were also expressed as a percentage of the total possible.

## Competence

Competence was assessed by having each child's preschool or day care teacher complete the Preschool Behavior Q-Sort (Baumrind, 1968), a 72-item set distributed across 9 categories, from "extremely characteristic" to "extremely uncharacteristic" of the child. For five cases this measure was completed individually by two teachers who knew the target child well. Their average correlation (.69) was almost identical with the reliability reported by Baumrind (1971).

Seven variables were derived from the Q-Sort. Four of these were derived from Baumrind (1971): Friendly (vs. Hostile to Peers; $\alpha=.86$ ), Cooperative (vs. Resistive with Adults; $\alpha=.92$ ), Purposive (vs. Aimless; $\alpha=.82$ ), and Achievement Oriented $(\alpha=.83)$. Two, Peer Competence $(\alpha=.84)$ and Ego Strength $(\alpha=.69)$, were derived from Waters, Wippman, and Sroufe (1979). Finally, a criterion Q-sort for competence was developed by having four child psychologists

Stress, Parenting, and Children's Competence, page 11 complete the sort for an ideally competent preschooler (based on their own understanding of that construct). The teachers' Q-Sort was correlated with this criterion as a measure of each child's overall competence.

Results

## Descriptive Results

Stress. As expected, levels of stress were moderate to low (see Table 1). The over-all rate (a mean of 59 responses over 113 events and 5 time periods) is comparable to that reported by Weinraub \& Wolf (1983) for a demographically similar sample of 14 mothers. However, this low rate made it impossible to analyse recent versus past events, as noted earlier.

Insert Table 1 about here

Social Networks. As Table 2 illustrates, parents reported fairly large and active social networks (an average of 12 persons, 4 of them seen at least once a week).

Friends and kin differed in several respects. Kin were less likely to live in the local metropolitan area ( $51 \%$ of all kin vs. $86 \%$ of friends, $\underline{Z}=10.14$, $\mathrm{p}<.0001$ two-tailed; $30 \%$ of the sample reported no local kin). Thus kin are more stable network members, being included even when geographically distant. However, parents were more actively involved with friends (55\% of local friends were seen at least once a week vs. $33 \%$ of local kin, $\underline{Z}=4.44, \underline{p}<.0001$ two-tailed), a finding in contrast to reports of greater kin involvement in maltreating samples (Bronfenbrenner, 1986).

Insert Table 2 about here

Some kin/non-kin differences depended on parent's gender. For example, fathers' kin were more likely to provide child care than fathers' friends

Stress, Parenting, and Children's Competence, page 12
( $30 \%$ and $10 \%$, respectively, $\underline{Z}=3.82, \underline{p}<.0001$ two-tailed), while mothers' kin and friends were equally likely to do so ( $20 \%$ of each group).

Fathers' networks differed from mothers' in another way as well: while mothers received emotional support from both friends and kin, fathers apparently depended on friends alone. Thus mothers and fathers were equally likely to report that friends provided emotional support ( $28 \%$ of all friends), but fathers rarely reported that kin did so ( $2 \%$ of kin for fathers vs. $22 \%$ for mothers, $\underline{Z}=5.08, \underline{p}<.0001$ two-tailed).

Finally, it appears that children's developing social abilities may have an influence on the composition and activities of mothers' social networks. For mothers, age of child was positively correlated with number of friends ( $\underline{r}=.52$, $\underline{p}<.01$ ), number of friends within walking distance ( $\underline{x}=.46, \underline{p}<.05$ ), number of friends who baby sat ( $\underline{\mathrm{r}}=.41, \underline{\mathrm{p}}<.05$ ), and number of friends providing emotional support ( $\underline{\mathrm{r}}=.41, \underline{p}<.05$ ). Age was not consistently correlated with other aspects of parent or child behavior, perhaps due to the restricted range sampled.

Family interactions. Across methods, both mothers and fathers in this sample appeared warm, responsive and moderately controlling. During home observation sessions, less than $9 \%$ of child social initiations, on average, were overlooked or ignored. Rates of initial child compliance were fairly high, averaging $54 \%$, while $20 \%$ of all failures to comply elicited further parental directives or enforcement. Observer ratings and parent self reports indicated moderate to high levels of warmth and responsiveness (Roberts \& Strayer, 1987).

Competence. Because the seven Q-sort measures of competence were highly intercorrelated, they were grouped on the basis of a cluster analysis and aggregated using $\underline{z}$-scores. The cluster analysis yielded two distinct groups (illustrated in Roberts, 1986). The first, General Competence, seems to reflect purposive, planful behavior. It contained the correlation to the criterion
sorting, Baumrind's scale Purposive, and the scales developed by Waters et al., Ego Strength and Peer Competence. The second group, Cooperative-Task Oriented, seems to reflect compliant, socially appropriate behavior. It contained Baumrind's scales Friendly, Cooperative, and Achievement Oriented. These aggregate measures of competence showed moderate convergence ( $\underline{r}=.42$, p<.05).

## Contextual Factors and Parenting

Because of the large number of comparisons and the problem of false positives, only theoretically important associations that replicated across methods or content areas are reported below. This procedure is fairly conservative, excluding, for example, over half the statistically significant correlations between parenting and social network variables.

Stress and parenting. As in the maltreatment literature, stress was associated across methods with lower levels of warmth. However, this association was limited to only two categories of stress: loss and (for mothers only) disappointments. Paternal Loss negatively correlated with the home observation variable Father Responsive ( $\underline{r}=-.37$, $\underline{p}<.025$ ), the observer rating variable Warm ( $\underline{\mathrm{r}}=-.36, \underline{p}<.05$ ), and the self-report variable Father Warm ( $\underline{\mathrm{r}}=$ -.39, $\mathrm{p}<.025$ ). Maternal Loss negatively correlated with the home observation variable Mother Responsive ( $\underline{\mathrm{r}}=-.35$, $\mathrm{p}<.05$ ), the observer rating variables Warm and Responsive ( $\underline{r} s=-.42$ and -.46 respectively, both $\mathrm{ps}<.025$ ), and the self-report variable Mother Warm ( $\underline{r}=-.53$, $\underline{p}<.005$ ). Finally, Maternal Disappointments negatively correlated with Mother Responsive ( $\underline{r}=-.43$, $\underline{\mathrm{p}}<.025$ ), Warm ( $\underline{\mathrm{r}}=-.33, \underline{\mathrm{p}}<.05$ ), and Mother $\operatorname{Warm}(\underline{\mathrm{r}}=-.41, \underline{\mathrm{p}}<.025$ ). ( $\underline{\mathrm{P}}$ levels in this section reflect one-tailed tests.)

Associations with control were fewer and less consistent, although in the expected positive direction. Maternal Loss was associated with higher levels of the observer rating variable Firm ( $\underline{r}=.52, \underline{p}<.005$ ) and the self-report variable Mother Strict ( $\underline{\mathrm{r}}=.52, \underline{p}<.005$ ), a pattern that also held for Maternal Separations
(rs $=.42$ and .40 respectively, both $\mathrm{ps}<.025$ ). However, no stress category was associated with increased control across all three methods.

Social networks and parenting. Only two consistent relations emerged, one for each parent. Kin involvement was associated with greater observed firmness in fathers. Observed firmness correlated with number of kin providing information on child rearing ( $\underline{\mathrm{r}}=.55$, $\underline{p}<.01$ for father's kin, $\underline{r}=.36$, $\mathrm{p}<.05$ for mother's kin), with number of kin providing goods and services ( $\underline{\mathrm{r}}$ $=.54, \underline{p}<.01$ for father's kin, $\underline{r}=.52, \underline{p}<.01$ for mother's kin) and with number of mother's kin providing household help ( $\underline{r}=.38, \underline{p}<.05$ ) and baby sitting ( $\underline{\mathrm{r}}=.44$, p<.05).

For mothers, a large and active network of friends for fathers was associated with lower levels of the self report variable Mother Warm. This held for fathers' total friends ( $\underline{\mathrm{r}}=-.46, \underline{\mathrm{p}}<.05$ ), same-sex friends ( $\underline{\mathrm{r}}=-.47, \underline{p}<.01$ ), friends in the metropolitan area ( $\underline{r}=-.50, \underline{p}<.01$ ), friends seen at least once a week ( $\underline{\mathrm{r}}=-.40, \underline{p}<.05$ ), and friends providing emotional support ( $\underline{\mathrm{r}}=-.51$, $\mathrm{p}<.01$ ). It is not possible to tell, of course, whether paternal involvement outside the family has a negative impact on maternal warmth, or whether outside paternal involvement is a response to a generalized lack of maternal affection.

Support from spouse. No consistent relations were found between support from spouse and parent-child interactions.

## Parenting and Child Competence

Because nonlinear relations were expected (Roberts, 1986), polynomial regressions were used to assess relations between parenting and children's competence. These analyses indicated that warmth variables were the most important predictors of General Competence. Five of these six variables (the observation variable Father Responsive, the observer rating variables Warm and Responsive, and the self-report variables Mother Warm and Father Warm) showed sigmoidal (or rise-and-plateau) relations with General Competence, and

Stress, Parenting, and Children's Competence, page 15 each of these regression functions accounted for $61 \%$ to $69 \%$ of the variance in General Competence.

The best predictor of Cooperative-Task Oriented was the observer rating variable Firm. It had an inverted-U relation accounting for $22 \%$ of the variance in Cooperative-Task Oriented.

## Contextual Factors and Child Competence

Stress. Although Maternal Loss and Maternal Disappointments were both negatively associated with General Competence (as well as with measures of maternal warmth), partial correlation analyses were consistent with the idea that the effects of parental stress on children's behavior are mediated by parenting. When the self report variable Mother Warm was partialled from General Competence, the correlation with Maternal Loss declined from -. 57 to $-.16(\underline{Z}=1.79, \underline{p}<.04)$. That is, before partialling Maternal Loss accounted for $32 \%$ of the variance in General Competence; after partialling, for only $3 \%$. Likewise, the correlation between Maternal Disappointments and General Competence declined from -. 54 to $.03, \underline{Z}=2.30$, $\underline{p}<.02$.

Social Networks. Children's scores on Cooperative-Task Oriented (but not General Competence) were consistently related to aspects of parents' social networks. The most important variables were those assessing child care and emotional support from husbands; most of these associations were positive, but some were negative. Cooperative-Task Oriented was correlated with number of mother's kin providing child care, $\underline{\underline{r}}=.40$, $\underline{p}<.05$; with number of mother's friends providing child care, $\underline{r}=.33$, $\mathrm{p}<.10$; with number of father's kin providing child care, $\underline{\mathrm{r}}=-.49, \underline{\mathrm{p}}<.01$; and with frequency of emotional support from husband, $\underline{\mathrm{r}}=.51, \underline{p}<.01$.

Because these network variables were intercorrelated, they were entered into a stepwise multiple regression analysis. The most important predictors of Cooperative-Task Oriented were child care by father's and mother's kin and emotional support from husband (standard regression coefficients were -.38,

Stress, Parenting, and Children's Competence, page 16
.40 and .31 , respectively), accounting for $51 \%$ of the variance.
Supporting the contention that social networks directly affect children, these networks variables were not affected by partialling the strongest parenting variable (Firm). In a second stepwise regression, child care by fathers' and mothers' kin and emotional support from husband accounted for $69 \%$ of the variance in the residuals of Cooperative-Task Oriented (standard regression coefficients were $-.38, .25$, and .53 , respectively).

## Discussion

By contributing basic descriptive and functional data on parental social networks in adequately functioning families with a preschool child-- a group for which information is extremely sparse-- this study speaks to the shortcomings in the literature noted in the introduction.

To What Extent Do Trends Observed In The Maltreatment Literature Occur For Normal Families With Older Children?

Both descriptive and functional differences in social networks emerged for this middle-class sample.

Descriptive differences. Contrary to some reports from the maltreatment literature (Bronfenbrenner, 1986), these families were more actively involved with friends than with kin (even with proximity held constant), and friends were as important as kin in terms of support delivered to the family (as indicated in Table 2). Thus these families seem to be able to assemble relatively large and supportive informal networks in addition to the kin networks that they acquire by birth and marriage. This ability to supplement or replace kin may be especially important because of the mobility of these predominantly middle-class families, nearly one-third of whom had no locally resident kin.

Functional differences. Social network variables were less widely related to parent-child interactions in this sample than in maltreating samples. For example, although many aspects of fathers' friendships were (negatively) related to maternal warmth, this pattern held for self-reported warmth only,
and not for observed maternal responsiveness or rated parental affection. In contrast, social network variables in maltreating samples have frequently been associated with salient features of maternal behavior-- abuse and unresponsiveness-- as well as self-reports and observer ratings of warmth and responsiveness (Belsky, 1984; Bronfenbrenner, 1986; Lyons-Ruth, Connell, Zoll, \& Stahl, 1987).

Stress. The negative impact of loss on fathers' and mothers' behavioral responsiveness and warmth (assessed across methods) is consistent with Bowlby's (1980) view that the effects of bereavement are among the most severe and long lasting that we experience.

However, overall findings indicate that stress had few strong relations to parenting, in contrast to the maltreatment literature, where such findings are often robust. This pattern of weak findings was apparently not due just to the restricted range of the stress variables, because the strongest relations were shown by Losses, the stress category with the smallest variance.

Thus current results are consistent with the contention that the effects of stress and social networks are most apparent in groups experiencing high levels of stress (Belsky, 1984; Bronfenbrenner, 1986) and that the effects of stress and social networks on parenting are less pronounced when stress is low and networks are adequate. Such a conclusion fits Belsky's (1984) view of parenting as a buffered system.

To What Extent Do Trends Observed For Mothers and Infants Hold For Fathers and Father-Child Interactions?

Three findings indicate the necessity of including fathers as well as mothers in contextual assessments of parenting and children's competence.
(1) The presence of maternal kin in this sample was always positively related to parent-child interactions and child outcomes. In contrast, the presence of paternal kin was sometimes problematic. Fathers reported receiving little emotional support from their kin, and child care by fathers' kin
had important negative associations with children's competence.
These findings add to scattered reports that social networks sometimes exert negative influences on parenting (Belsky, 1984; Bronfenbrenner, 1986; Crittenden, 1985). The underlying mechanisms are not known. Bronfenbrenner (1986) has suggested that large networks, networks with troubled members who need assistance themselves, or networks whose members are critical rather than approving, may constitute a net drain on parents' emotional and material resources. Current findings indicate that kin may be more problematic than friends (who are more easily excluded from social networks if necessary) and that negative influences may depend in part on parents' gender, with paternal relationships more problematic than maternal.
(2) Aspects of each parent's network were associated with interactions between the child and the other parent. The presence of a large and supportive network of friends for fathers was associated with lower levels of self-reported maternal warmth, while the presence of maternal kin was associated with greater observed firmness in fathers. Thus research aimed at understanding contextual determinants of parenting needs to examine the networks of both parents, not mothers only.
(3) Mothers' (but not fathers') networks appear to be sensitive to child characteristics, specifically, to children's age, which was positively correlated with many aspects of mothers' friendships. Older children's spontaneous play relationships may bring mothers into contact with neighbors who also have young children, leading to the eventual exchange of services, especially child care services and emotional support. On the other hand, as children grow older, parents may deliberately arrange peer play experiences for their children, utilizing the resources available to them in their network of acquaintances and friends. In either case, it appears that, in comparison to fathers, mothers' social networks are more affected by the advent of parenting, a finding that
applies to their careers as well (Roberts, 1987). Thus causal models relating contextual and family characteristics may differ for mothers and fathers. The Importance Of Differentiating Sources of Support

The many descriptive and functional differences reported above emphasize the importance of Bronfenbrenner's (1986) contention that sources of support need to be differentiated. Not only is it important to distinguish friends and kin in parents' social networks: it appears from current findings that these two groups sometimes function differently for mothers and fathers. These differences merit attention in future research on contextual influences on parenting.

## How Important is Support From Spouse?

Support from spouse was not consistently linked to parent-child interactions in this sample. On the other hand, emotional support from husband was an important predictor of children's cooperative, task-oriented behavior in preschool, suggesting that some aspects of parents' marital relationships may directly influence their children (perhaps by modelling, or simply by providing a benign climate for normal development).

While current findings do not support Belsky's (1984) very plausible contention that support from spouse is more important than support from other sources, standard regression coefficients were consistent with the idea that support from spouse influences children's competence as strongly as support from friends and relatives. It may be that the relative importance of these sources depends on the domain in which they are evaluated. Do Social Networks Show Direct Associations With Children's Behavior?

Although Belsky (1984) and Bronfenbrenner (1986) conclude that relations between social networks and children's behavior are largely mediated by parenting, current partial correlation and regression results give more support to Cochran and Brassard's (1979) contention that such effects can also be direct. The importance of child care variables in the regression equations

Stress, Parenting, and Children's Competence, page 20
lends further support to this view, because child care provides a common opportunity for direct interactions between children and non-parental adults. Future Directions

Current findings support suggestions by Belsky (1984) and Bronfenbrenner (1986) that social networks can have negative as well as positive associations with parenting and children's competence. Future research needs to assess the conditions under which these negative relations occur, as a prelude to understanding the causal relations involved.

Current findings also indicate the need to differentiate major constructs in future research. The fact that only certain types of stress (chiefly loss) were related to decreased parental warmth and responsiveness supports Rutter's (1981) contention that different types of stressful events need to be analysed separately. The importance of Bronfenbrenner's (1986) contention that sources of social support need to be distinguished has already been discussed. Current findings also indicate the necessity of distinguishing mothers' and fathers' networks and point to the importance of fathers and fathers' networks for understanding family interactions and children's behavior.

Finally, and perhaps most importantly, the present research suggests that some aspects of social networks may have substantial direct associations with children's behavior, and that measures of parental social networks merit inclusion in studies of the determinants of children's competence.

Stress, Parenting, and Children's Competence, page 21

## References

Ainsworth, M., \& Bell, S. (1974). Mother-infant interaction and the development of competence. In K. Connolly \& J. Bruner (Eds.), The growth of competence (pp. 97-118). New York: Academic Press.

Arend, R., Gove, F., \& Sroufe, L. (1979). Continuity of individual adaptation from infancy to kindergarten: a predictive study of ego-resiliency and curiosity in preschoolers. Child Development, 50, 950-959.

Baumrind, D. (1968). Manual for the preschool behavior Q-Sort. Institute of Human Development, University of California, Berkeley.

Baumrind, D. (1970a). Mother rating scales. Institute of Human Development, University of California, Berkeley.

Baumrind, D. (1970b). Father preschool rating scales. Institute of Human Development, University of California, Berkeley.

Baumrind, D. (1971). Current patterns of parental authority. Developmental psychology monographs, 4, 1-103.

Belsky, J. (1984). The determinants of parenting: A process model. Child Development, 55, 83-96.

Block, J. (1965). The child-rearing practices report (CRPR): a set of Q items for the description of parental socialization attitudes and values. Unpublished manuscript, Institute of Human Development, University of California, Berkeley.

Block, J., \& Block, J. (1980). The role of ego-control and ego-resiliency in the organization of behavior. In W. Collins (Ed.), Development of cognition, affect, and social relations. Minnesota symposia on child psychology (Vol. 13, pp. 39-102). Hillsdale: Erlbaum.

Bowlby, J. (1980). Attachment and loss: Vol. 3. Loss, sadness, and depression. New York: Basic Books.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. Developmental Psychology, 22, 723-742.

Cochran, M. \& Brassard, J. (1979). Child development and personal social networks. Child Development, 50, 601-616.

Crittenden, P. (1985). Social networks, quality of child rearing, and child development. Child Development, 56, 1299-1313.

Garbarino, J. (1976). A preliminary study of some ecological correlates of child abuse: The impact of socioeconomic stress on mothers. Child Development, 47, 178-185.

Garmezy, N., Masten, A., \& Tellegen, A. (1984). The study of stress and competence in children: A building block for developmental psychopathology. Child Development, 55, 97-111.

George, C., \& Main, M. (1979). Social interactions of young abused children: Approach, avoidance, and aggression. Child Development, 50, 306318.

Horowitz, M., Schaefer, C., Hiroto, D., Wilner, N. \& Levin, B. (1977). Life event questionnaires for measuring presumptive stress. Psychosomatic Medicine, 39, 413-431.

Lyons-Ruth, K., Connell, D., Zoll, D., \& Stahl, J. (1987). Infants at social risk: Relations among infant maltreatment, maternal behavior, and infant attachment behavior. Developmental Psychology, 23, 223-232.

Maccoby, E. \& Martin, J. (1983). Socialization in the context of the family: parent-child interaction. In P. Mussen (Ed.), Handbook of child psychology, Vol. 4: E. Hetherington (Vol. Ed.), Socialization, personality and social development (pp. 1-102). New York: Wiley.

Main, M. and George, C. (1985). Responses of abused and disadvantaged toddlers to distress in agemates. Developmental psychology, 21, 407-318.

Matas, L., Arend, R., \& Sroufe, L. (1978). Continuity in adaptation: quality of attachment and later competence. Child Development, 49, 547-556.

Roberts, W. (1984). Family interactions and child competence in a preschool setting. Unpublished doctoral dissertation, Simon Fraser University,

Burnaby, B.C.
Roberts, W. (1986). Nonlinear models of development: an example from the socialization of competence. Child Development, 57, 1166-1178.

Roberts, W. (1987). Two-career families: Demographic variables, parenting, and competence in young children. Canadian Journal of Behavioural Science, 19, 347-356.

Rutter, M. (1981). Stress, coping and development: Some issues and some questions. Journal of Child Psychology and Psychiatry, 22, 323-356.

Smith, S., Hanson, R., \& Noble, S. (1980). Social aspects of the battered baby syndrome. In J. Cook \& R. Bowles (Eds.), Child abuse: Commission and omission (pp. 205-226). Toronto: Butterworths.

Strayer, F., \& Strayer, J. (1976). An ethological analysis of social agonism and dominance relations among preschool children. Child Development, 47, 980-989.

Tietjen, A. (1978). Social networks as informal support systems for urban families in Sweden. Unpublished doctoral dissertation, Cornell University, Ithaca, New York.

Vaughn, B., Egeland, B., Sroufe, L., \& Waters, E. (1979). Individual differences in infant-mother attachment at 12 and 18 months: Stability and change in families under stress. Child Development, 50, 971-975.

Waters, E., Wippman, J., \& Sroufe, L. (1979). Attachment, positive affect, and competence in the peer group. Child Development, 50, 821-829.

Weinraub, M., \& Wolf, B. (1983). Effects of stress and social supports on mother-child interactions in single- and two-parent families. Child Development, 54, 1297-1311.

Stress, Parenting, and Children's Competence, page 24 Author Notes

This research was supported in part by grants from Simon Fraser University, the Province of British Columbia Youth Employment Program, and Health and Welfare Canada Grant 6610-1315 to Janet Strayer. Preparation of this article was supported by Social Sciences and Humanities Research Council of Canada Postdoctoral Fellowships 456-83-2517 and 457-84-0040 to William Roberts.

I gratefully acknowledge the help and kindness of the parents, children, and teachers whose generous cooperation made this research possible.

Correspondence should be sent to W. L. Roberts, Department of Psychology, University College of the Cariboo, Kamloops, BC, Canada. Email: WLRoberts@Cariboo.bc.ca Canada.

Stress, Parenting, and Children's Competence, page 25
Table 1.
Stressful Life Events: Descriptive Statistics

| Variable | Mean | S.D. | Range |
| :--- | :---: | :---: | :---: |
| Emotional Distress (18 items) | 11.1 | 8.8 | $0-41$ |
| Enduring Changes (20 items) | 9.8 | 4.3 | $0-26$ |
| Troubled Relationships (17 items) | 8.2 | 5.3 | $0-24$ |
| Separation (8 items) | 2.8 | 1.9 | $0-7$ |
| Physically Noxious /Painful (4 items) | 2.7 | 2.0 | $0-8$ |
| Disappointments (6 items) | 1.3 | 1.4 | $0-6$ |
| Discord During Childhood (5 items) | 1.3 | 1.2 | $0-6$ |
| Loss (7 items) | 1.1 | 1.1 | $0-4$ |
| Fearful Events (4 items) | 1.0 | 1.1 | $0-4$ |

Note: Maximum scores can exceed total items because of multiple time periods.
Results are pooled across parents (mother-father differences were nonsignificant) and time periods (due to low rates of incidence).

Table 2.
Social Networks: Descriptive Statistics
Variable $\quad$ Mean S.D. Range

Structure:

| Total kin | 5.0 | 3.5 | $0-12$ |
| :--- | :---: | :---: | :---: |
| Total friends | 7.2 | 4.1 | $0-20$ |
| \% same-sex friends | $66.4 \%$ | 21.3 | $0-100$ |
| \% interconnectedness (friends) | $30.3 \%$ | 29.3 | $0-100$ |

Frequency of Contact
Seen at least once a week:

| Kin (total) | .8 | 1.4 | $0-5$ |
| :--- | ---: | :--- | :--- |
| Friends (total) | 3.4 | 2.7 | $0-14$ |

Seen " 2 or 3 times a month":
Kin (total)
$\begin{array}{lll}.8 & 1.4 & 0-5\end{array}$
Friends (total)
$\begin{array}{lll}1.6 & 1.8 & 0-6\end{array}$
Location:
Living in metropolitan area:

| Kin (total) | 2.3 | 1.6 | $0-10$ |
| :--- | :--- | :--- | :--- |
| Friends (total) | 6.1 | 2.4 | $0-12$ |

Living beyond metropolitan area:
Kin (total)
$2.2 \quad 2.3 \quad 0-10$
Friends (total)

| 1.0 | 1.4 | $0-7$ |
| :--- | :--- | :--- |

(table continues)

Variable
Mean S.D. Range
Activities and Services (provided at least once/month):
Child rearing information:

| Kin (total) | .6 | 1.1 | $0-6$ |
| :--- | ---: | :--- | :--- |
| Friends (total) | 1.6 | 2.3 | $0-11$ |

Information on goods \& services:

| Kin (total) | .7 | 1.2 | $0-4$ |
| :--- | ---: | :--- | :--- |
| Friends (total) | 1.9 | 2.1 | $0-11$ |

Household help:

| Kin (total) | .7 | 1.2 | $0-5$ |
| :--- | ---: | ---: | ---: |
| Friends (total) | 1.1 | 1.5 | $0-5$ |

Baby sitting:

| Kin (total) | .6 | 1.0 | $0-4$ |
| :--- | :--- | :--- | :--- |
| Friends (total) | .9 | 1.3 | $0-5$ |

## Affective Factors:

Emotional support (at least once/month):

Kin (total)
Friends (total)
Balanced relationship:

| Kin (total) | 4.1 | 3.1 | $0-11$ |
| :--- | :--- | :--- | :--- |
| Friends (total) | 5.8 | 3.6 | $0-13$ |

Note: For Emotional Support From Kin, mothers' mean $=1.0$, fathers' mean $=.07$, $\underline{t}(31.1)=-3.77, \underline{p}<.001$. Other categories are pooled across parents because motherfather differences were nonsignificant.

