

FACTORS ASSOCIATED WITH ACADEMIC ACHIEVEMENT IN CHILDREN FOLLOWING PARENTAL SEPARATION

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Elementary school children who maintained their academic performance levels following separation of their parents were compared to those whose levels declined. Although no single measure could accurately predict children's academic adjustment, those who maintained performance levels spent significantly more time with both parents.

Many studies have documented the negative results of parental divorce on children (Emery, 1982; Felner, Primavera, & Farber, 1983; Guidubaldi & Perry, 1984; Hetherington, 1979; Hetherington, Cox, & Cox, 1978; Kurdek, 1981; Wallerstein, 1983), and reported that deterioration in school performance and behavior are among the most consistent outcomes associated with separation and divorce (Roseby & Deutsch, 1985).

The large-scale study conducted by the National Association of Elementary and Secondary School Principals and the Kettering Foundation (Brown, 1980; Lazarus, 1980; Zakariya, 1982) revealed a disproportionately large number of children from single-parent families in low achievement groups and a small proportion of these children in high achievement groups. Blanchard and Biller (1971) found that academic performance of boys with high father availability was superior, compared to boys with low father availability. A study cited by Dawson (1981) showed that children from one-

parent families exhibited poorer socioemotional development and lower academic achievement and that children from intact households had higher reading comprehensions than did those of divorced parents.

Reports of negative divorce-related impact on academic achievement by children, however, are not unvarying. For example, Fowler and Richard (1978) found no difference in intelligence or academic achievement between father-absent and father-present homes, while Hammond (1979, 1981) found that on a number of measures, including reading achievement, there were no significant differences between children of divorced parents and those of intact families.

Learning constitutes one of the central developmental tasks of children. Wallerstein and Kelly (1976, 1980), in examining the findings of their long-term study, suggested that life stresses such as parental separation may impose temporary interruption in the learning process and that this might lead to significant academic problems. Re-

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ceptivity to learning may be compromised by emotional distress. However, most children showed little or no change in their academic performances at school. In fact, some appeared to utilize the school experience as a support system and used the work structure and work load to help them keep "on track" academically.

In a more comprehensive multivariate study, Hetherington, Cox, and Cox (1978) reported that, compared to children of intact families, those in divorced families showed, during the first year after the divorce, more impulsive acting-out disorders, as well as more dependency, anxiety, depression, and difficulties in both social and academic settings. These findings also revealed that, two years after separation, most of the negative effects of divorce had weakened considerably: adjustment, coping patterns, and equilibrium had established themselves in the now single-parent families.

Nevertheless, in the comprehensive study by Guidubaldi, Perry, Cleminshaw, and McLaughlin (1983), there was considerable evidence that divorce accounts for many adverse social and academic effects independently of well-defined socioeconomic status (SES) measures. In a two-year longitudinal examination of the Guidubaldi and Perry (1985) study, results indicated that divorced-family status remains more powerfully related to maladjustment for boys than for girls. In general, divorced-family children displayed less social competence and lower ability in task-related behavior, both at home and at school.

These findings support earlier work by Radin (1981) and Shinn (1978) which showed that children, especially those from lower SES whose fathers were absent, tended to poorer academic performance than did their two-parent family counterparts. According to Lamb, Pleck, and Levine (1985), these findings reflected the fact that single-parent mothers, especially of lower socioeconomic class, are exposed to greater stresses, impeding their ability to guide and stimulate their children's learning.

In the realm of academic adjustment, successful coping is essential if children are to maintain at least one stable structure in their otherwise unstable environment. As stated by Stockard, Lang, and Wood (1985), students' grades are an important mechanism for advancement and success in life. Academic achievement, assuming it to be reflected by grades, is undoubtedly a major influence in children's lives. Also, whereas the family undergoes structural change during the long process of separation and divorce, school remains a stable and structured environment. Children of divorce appear to be at risk for the development of academic problems, as well as other serious disorders that such school failure may predict (Felner, Gillespie, & Smith, 1985). Yet many of these high-risk children do not fail (Curry & Russ, 1985; Felner et al., 1985; Guidubaldi, Perry, & Cleminshaw, 1983; Hammond, 1979; Wallerstein, 1983).

The present study examined how children of separated parents who failed to maintain their academic performance differed from those who succeeded in maintaining their academic standing.

METHOD

Subjects

Data were collected from 77 children and their separated or divorced parent. The group included 41 girls and 36 boys from 9 to 15 years old ($M = 11$ years, 5 months). At the time of parental separation, the children ranged in age from 6 to 14 years ($M = 8$ years, 5 months). Also at the time of separation, 46 of the children were in primary grades (one, two, and three), 27 were in intermediate grades (four, five, and six), and 4 were in upper grades (seven and eight). A mean of three years had elapsed between time of parental separation and time of data collection.

The participating parent was designated the "Academic Parent." This was the parent who, although not necessarily the custodial parent, routinely lived with the child throughout the academic year. The subjects

were children attending elementary schools in the Ottawa-Carleton region of Ontario, Canada. Those selected for inclusion were children: *a*) whose parents had been separated (natural or legal adoptive parents no longer living together) for at least ten months prior to the postmeasure of academic performance; *b*) who were in the last trimester of grade one or in grades two through eight at the time of parental separation (school grade data prior to the end of grade one are unavailable); *c*) who were in a regular grade class placement prior to separation; and *d*) who, if adopted, had been so prior to one year of age. Those excluded were children: *a*) who had experienced the death of a parent; *b*) whose parent had remarried or cohabitated with a new partner within ten months following the separation; *c*) who were hospitalized or had suffered a chronic illness preventing school attendance for more than one month during the academic year prior to the postmeasure; *d*) who were enrolled in a special program (e.g., learning disability, social adjustment); or *e*) who had an older sibling participating in the present research.

Procedure

Subjects were recruited through various channels: directly through the schools, or through area single-parent associations, local community center newsletters, or an advertisement placed in a widely distributed Ottawa newspaper.

The premeasure was the average of the grade points in reading, writing, and math academic subjects taken from the two trimester report cards preceding the parental separation (the actual date that one parent moved away from the family household, not the legal separation or divorce date). A minimum of ten months (the equivalent of one academic year) must have passed between time of separation and the next two consecutive trimester report cards.

A total of 433 responses were received, of which 77 became research subjects. The two most common reasons for noneligibil-

ity of the remaining 356 subjects were: 1) the child was not in school at time of the parental separation; and 2) the single-parent home did not result from marital breakup but rather from a parental death or from unwed mother status.

Upon receipt of the parent's consent form for participation in the study, the parent was contacted by phone, and a home and school visit followed. Each child's school achievement record was reviewed and grades before and after separation were obtained. The teachers of the participating children were asked to complete the Health Resources Inventory (HRI).

Measures

The Parent Information Questionnaire (PIQ) served to gather demographic data from the family during the home visit. Variables such as the child's age, grade, date of birth, and visitation patterns with the non-custodial parent, as well as parental employment and education, and other information pertaining to the separation were obtained.

The Home Environment Questionnaire (HEQ-1R) (Laing & Sines, 1982) consists of 91 true-false items designed to distinguish ten separable dimensions of the objective and verifiable psychosocial environments of children who live in single-parent families (Sines, Clarke, & Lauer, 1984). For the total group of single-parent families, the correlation between the rated social desirability of a "true" response to the items in HEQ-1R and the proportion of one-parent families responding "true" to those items was .32. Sines, Clarke and Lauer have demonstrated that HEQ scales are relatively independent and not significantly related to the age of the target child. Most of the scales are reasonably consistent internally, and several of the HEG scales have been found to be significantly related to several dimensions of children's clinically important behavior (Laing & Sines, 1982).

The Children's Separation Inventory (CSI) is a self-report instrument which con-

sists of 48 items divided into six scales, or attitudinal concerns. Reliability and validity studies of the CSI are based on the Children's Attitudes Toward Parental Separation Inventory (CAPSI). Test-retest reliability for the CAPSI total score is established at .83, with no differences in male and female scores (Berg, 1979, Kurdek & Berg, 1983). Roseby and Deutsch (1985) reported that CAPSI appears to have face validity in that the attitudinal problems are consistently agreed upon in the clinical literature as sources of stress.

The Single Parenting Questionnaire (SPQ) (Stolberg & Ullman, 1985) consists of 88 questions that are intended to assess aspects of single parenting having an impact on children's adjustment after parental divorce. The questions tap various aspects of a parent's interaction with the target child. Alpha coefficients for the scales range from .59 to .85; the total scale yielded an alpha coefficient of .85. Test-retest correlations ranged from .40 to .67 with .52 for the total score. There are significant correlations between all SPQ and Fisher Divorce Adjustment Scale scales (Stolberg & Ullman, 1985).

The Health Resources Inventory (HRI) is a teacher measure of primary-grade children's competency-related behavior (Gesten, 1976). This checklist was designed to temper the emphasis on pathology that is present in many comparable questionnaires. Teachers rate all 54 HRI items according to how well they describe children on a 5-point scale from not at all (1) to very well (5). Intercorrelations among individual HRI factors are positive and significant, ranging from a low of .28 to a high of .53. Test-retest reliability for the total score, or sum factors, was .87. Each component subscale proved to be internally consistent and each represented an important aspect of a broadly defined concept of competence in young school children.

The School Record Questionnaire (SRQ) recorded academic adjustment. The child's grade marks in reading, writing, and arith-

metic, together with the child's class placement, number of schools attended since kindergarten, and number of school grades repeated were retrieved from the child's report cards and Ontario School Record. To give grade marks a common framework, since marking schemes vary from school to school and within the school, the marks were converted to a 13-point scale whereby A+ = 1, A = 2, A- = 3, through D = 11, D- = 12, and F = 13; the latter three marks represented a failure. Each student's mark was first translated to the 13-point scale within each subject area (reading, writing, and arithmetic). The marks were then pooled to make one composite mark per subject per term.

Children whose average marks decreased more than one-third of a grade (e.g., B+ to B-) between pre- and postmeasures were placed in the Nonadjusted group. Those children whose marks did not fluctuate by more than one-third of a grade, or whose marks increased, were placed into the Adjusted group. This decision was based on a study conducted by the Research Committee of the Ottawa Board of Education (Parkin, 1987), in which grade marks in this population were found to be quite stable. The average fluctuation across three years of schooling did not exceed one-third of a grade mark (letter).

RESULTS

Fifty-four children were designated Adjusted and 23 Nonadjusted, while 65 of the Academic Parents were mothers and 12 were fathers.

As shown in TABLE 1, there were no significant differences between the two groups of parents. The two groups of children did not differ in terms of gender, age (8.40 years) or grade (3.25) at separation, number of friends, or amount of time spent at play. Statistical analyses did not result in differences between the observed and expected distributions of Adjusted and Nonadjusted children who were in the custody of same-sex parents.

Table 1
DEMOGRAPHIC CHARACTERISTICS OF ADJUSTED AND NONADJUSTED CHILDREN AND THEIR PARENTS

CHARACTERISTIC	N	\bar{X}	t	p <
Income				
Mother: Adjusted	54	20453=7285	0.56	NS
Nonadjusted	23	21673=9242		
Father: Adjusted	41	27621=6551	0.64	NS
Nonadjusted	15	28866=6303		
Education				
Mother: Adjusted	52	13.96=1.92	-0.87	NS
Nonadjusted	21	13.52=1.99		
Father: Adjusted	50	14.40=2.31	-1.91	NS
Nonadjusted	19	13.40=1.99		
Work hours/week				
Mother: Adjusted	44	34.48=10.14	1.82	NS
Nonadjusted	20	39.08= 6.89		
Father: Adjusted	44	39.39= 5.38	1.44	NS
Nonadjusted	17	43.85=12.32		

As indicated in TABLE 2, the groups did not differ on grade scores preseparation, which translate into a B - for the Adjusted group and a B for the Nonadjusted group. By design, the two groups did differ at post-separation, with the Adjusted group averaging a B, and the Nonadjusted a C.

The time parents spent with their children differed significantly between the

groups, in that the Adjusted children spent more time with their Nonacademic parents than did the Nonadjusted children (seven vs two days per month). The analysis of the HEQ total scores did not achieve statistical difference, revealing that the amount of intellectual stimulation available in the home did not differ between the groups.

A reliable difference on the Social Sup-

Table 2
SCORES FOR ADJUSTED (N=54) AND NONADJUSTED (N=23) CHILDREN

MEASURE	\bar{X}	t	p <
Grades preseparation			
Adjusted	6.29=3.02	-1.27	NS
Nonadjusted	5.42=1.98		
Grades postseparation			
Adjusted	5.48=2.14	4.45	.0001
Nonadjusted	7.82=2.00		
Time with nonacademic parent			
Adjusted	7.03=1.50	1.90	.03
Nonadjusted	2.01=1.25		
HEQ			
Adjusted	43.93=4.87	0.01	NS
Nonadjusted	43.91=5.26		
SSS			
Adjusted	25.33=2.56	-2.03	.023
Nonadjusted	26.60=2.44		
SPQ			
Adjusted	188.24=8.64	-.057	NS
Nonadjusted	189.43=8.14		
CSI			
Adjusted	7.35=3.93	-1.46	NS
Nonadjusted	9.34=5.98		
HRI			
Adjusted	19.78=5.66	1.45	NS
Nonadjusted	17.63=6.14		

HEQ = Home Environment Questionnaire; SSS = Social Support Scores; SPQ = Single Parent Questionnaire; CSI = Children's Separation Inventory; HRI = Health Resource Inventory.

port Score (a factor on the SPQ) countered expectations, suggesting that the parents of Nonadjusted children had more social support than the parents of Adjusted children. The analysis of the SPQ (tapping parents' views of their parent-child relationships), of the children's responses on the CSI, and of the children's scores on the HRI did not achieve statistical significance.

For a finer analysis of the data, multivariate correlational analyses were conducted; these examined associations between background and dependent variables, and group membership. First, Pearson correlation coefficients were calculated for all background and dependent variables. Next, all variables were entered into a discriminant function analysis to predict Adjusted and Nonadjusted group membership. This analysis proceeded in a stepwise manner based on minimizing the overall Wilks

lambda (Norusis, 1985). As presented in TABLE 3, the number of friends, social support, and total score on the SPQ were not significantly correlated with any other variable. For mothers, education and income levels were positively correlated with time spent with the noncustodial parent. Mothers' education was also positively correlated with income, the total score on the HEQ, and fathers' education level. Mothers' time at work was negatively correlated with their income and total score on the HRI.

For fathers, income was negatively correlated with time spent with the noncustodial parent, the total score on the HRI, and mothers' education. Fathers' time spent at work was positively correlated with the total score on the CSI and the time the child spent in play.

The discriminant function analysis

Table 3
CORRELATIONS BETWEEN DEPENDENT AND PREDICTOR VARIABLES

VARIABLE	NUMBER OF FRIENDS	PLAY TIME	NON-CUSTODIAL TIME	MATERNAL WORK TIME	MATERNAL EDUCATION	MATERNAL INCOME	PATERNAL WORK TIME	PATERNAL EDUCATION	PATERNAL INCOME	SOCIAL SUPPORT	HRI	CSI	HEQ
Number of friends													
Play time	.260												
Noncustodial time	-.045	-.041											
Maternal work time	.052	.250	-.036										
Maternal education	-.032	-.013	.328*	.055									
Maternal income	-.129	-.154	.356**	-.440**	.427**								
Paternal work time	-.041	.268*	-.303*	.173	-.109	-.261							
Paternal education	.011	.071	.037	.032	.392**	.044	.197						
Paternal income	.093	.218	-.389**	.077	-.321*	-.183	.129	.007					
Social support	.077	.042	-.106	.046	-.021	-.122	-.041	.035	.049				
HRI	-.041	-.010	.185	-.321*	.250	.272	-.007	.012	-.346*	-.143			
CSI	.043	-.053	-.311*	-.035	-.063	-.255	.334*	-.024	.011	-.033	-.187		
HEQ	.140	.004	.018	.003	.376**	.049	-.120	.256	-.146	.023	.093	-.011	
SPQ	-.092	-.010	.015	-.238	-.029	.207	.028	.093	-.007	.157	-.061	-.181	.017

HRI = Health Resource Inventory; CSI = Children's Separation Inventory; HEQ = Home Environment Questionnaire; SPQ = Single Parent Questionnaire.

* $p < .05$; ** $p < .01$; *** $p < .005$.

yielded the following eight variables as significant predictors of a child's adjustment status: fathers' employment time, fathers' education level, mothers' time spent at work, mothers' income level, social support, number of friends, HEQ total score, and HRI total score ($r = .5759$, $p = .0026$). This function resulted in a 78.26% correct classification.

DISCUSSION

In general, the results of the present study support previous research. Nevertheless, there were some notable exceptions. As in most previous work, approximately one-third of the children experiencing parental separation demonstrated a significant decline in academic performance, while two-thirds showed no dramatic change in either direction.

One feature of the study, the nature of the subject population, requires examination prior to an in-depth analysis of the results. Although many families were contacted, the limited number of volunteers participating indicates that a very select group of subjects was studied. A significant idiosyncrasy of this population was their relatively high SES compared to populations in other investigations. In the present study, the average income and education levels placed the subjects mostly in the middle and upper-middle SES. In contrast, many studies in the area of divorce report low to low-middle income levels, and lower levels of education (Felner, Ginter, Boike, & Lowen, 1981; Gesten, 1976; Roseby & Deutsch, 1985; Sines, 1983). Children participating in this investigation were also functioning relatively well. That is, both Adjusted and Nonadjusted children were functioning at average grade levels prior to separation, and even though Nonadjusted children suffered a significant decrease in their grades, they remained well above failing marks. As suggested by Rutter (1981), good academic grades may act as a buffer to certain adversities and to stressful life events. Thus, in this group of children it

may have been more difficult than in the population at large to detect adversities brought on by parental separation.

Most reports have suggested that boys usually do more poorly than girls in terms of social and behavioral functioning (Garmezy & Rutter, 1983). However, in the present study there were no sex or grade effects detected. This finding is in keeping with the research both of Reinhard (1977), and of Kurdek, Blisk, and Siesky (1981) who found no difference between boys and girls or between early and late latency children in academic reactions to parental separation.

The finding of Warshak and Santrok (1983), that Adjusted children were in the custody of same-sex parents significantly more often than were Nonadjusted children, was not supported. In the present study, most parent-child pairings involved mother-custody families and all cases of father-child pairings were cases of joint custody. Conceivably, the limitations imposed by the population pool and the differences in methodology of the present study resulted in the discrepant findings.

It is possible that same-sex child-custodial pairing is secondary to the time that the child spends with both parents, together with the availability of both parents. In the present study, as in others (Hess & Camara, 1979; Hetherington et al., 1978; Wallerstein & Kelly, 1980), the evidence indicates that the availability of two parents is a prominent feature of adjustment. The phenomenon of same-sex pairing between child and custodial parent may have more of an impact on child-parent relationships or on social competence than on academic achievement.

Adjusted children spent significantly more time with the Nonacademic parent than did their Nonadjusted counterparts. The fact that a child is spending more time with a Nonacademic parent may also reflect less premarital stress, inasmuch as frequent visits with the child by the other parent are not a source of contention. An integral part of this parenting role is the ability of the noncustodial parent to maintain a constant and mu-

tually satisfying relationship with the child. A current relationship with the ex-husband, for example, is a strong predictor of the divorcee's adjustment (*Nelson, 1981*), and the divorcee's adjustment is in turn an important variable in the child's adjustment (*Wallerstein & Kelly, 1980*). The correlation analyses from the present study substantiated these findings, indicating that the more time a child spent with the custodial parent the healthier was the child's attitude toward the marital breakup. Similarly, the correlations revealed that the less time the father spent at work, the better was the child's attitude toward the parental separation.

More contact with both parents may also add to the academic input in children's learning, since it gives them access to the scholastic aptitudes and attitudes of both parents. *Kalter (1987)* noted the importance of the father's availability in the separation-individuation process of a child's development. The absence of a second emotionally involved parent figure to facilitate development and act as a buffer to the child's potentially powerful relationship with the other parent (usually the mother) is an important factor in the development of separation-individuation issues. Difficulties with separation may lead to difficulties in academic performance.

Svanum, Bringle, and McLaughlin (1982) and *Lamb, Pleck, and Levine (1985)* argued that increased paternal involvement must be viewed and understood only in the context of family circumstances and the reasons for his increased involvement. It is true that reasons for involvement vary greatly; however, regardless of the specific reason, for a child, maintenance, regularity, and frequency of contact are the tangible factors in the continuity of the parent-child relationship. The actual contact is a first step in establishing the relationship itself and its continuance determines the quality of the relationship. In summary, children who maintained contact with both parents after a separation managed to sustain academic performance, compared to

those children who did not enjoy such a relationship with both parents.

There was no evidence that Adjusted children had more stimulating psychosocial home environments than did Nonadjusted children. In part, this lack of relationship may be explained by the select nature of the subject group. It is more common for children of higher socioeconomic profiles, as were those of the present group, to have greater access to varied psychosocial and educational opportunities. Hence, the high stratum population of the total group might have buffered differences between Adjusted and Nonadjusted groups.

Contrary to predicted outcome, results revealed that parents of Nonadjusted children had more social contacts than the parents of Adjusted children. This may, in effect, be reporting the amount of time the parent was spending away from the Nonadjusted child. As revealed in the findings, the Adjusted children spent significantly more time with the noncustodial parents and hence it may be that, given their ex-partners' involvement with the children, the custodial parents required less outside support. The parents of Nonadjusted children on the other hand, may have had to rely on external supports for relief in parenting and, in so doing, spent less time with their children, who consequently spent less total time with both parents.

Parents of Adjusted children did not rate their parent-child relationships better than did the parents of Nonadjusted children. Further research to determine the effect of perceived ability in a parenting role as a protective factor in child development is required.

Although not many reliable differences appeared between the Adjusted and Nonadjusted groups of children and their parents, several significant correlations revealed other important relationships. For example, the less time the mother spent at work, the greater was the child's school-rated competency. Results also revealed that the higher the father's income, the lower

the child's competency. This may well have been because fathers (who made up 84% of the noncustodial parents) with high incomes spent less time with their children, as suggested by the negative correlation between fathers' incomes and noncustodial parent time with children. Alternatively, one could argue that children may have had greater contact with the Nonacademic parent when they were more competent. The Nonacademic parents may, as did the teachers, have perceived these children as more competent and found it easier to be with them. Direction of this effect is difficult to ascertain and remains to be established.

In summary, 30% of the children in the present study experienced a marked decrease in their academic performance following parental separation, and this was evident three years later. Access to both parents seemed to be the most protective factor, in that it was associated with better academic adjustment. Also revealing were the significant correlations indicating that mothers with more education provided better psychosocial home environments and that their children spent more time with the noncustodial parent. Correspondingly, the less time a mother spent at work, the more competent was the child. Moreover, data revealed that noncustodial parents (mostly fathers) were very influential in their children's development. For example, not surprisingly, fathers who spent more time at work made more money and spent less time with their children. Of greater importance was the finding that the less time fathers spent at work the better adjusted were their children's views of the separation. These data also support the interpretation that the more time a child spends with the noncustodial parent the better the overall adjustment of the child.

The discriminant function analysis revealed that no single factor could adequately predict a child's adjustment. Rather, specific characteristics concerning each parent and the child are important. It is suggested that follow-up studies examine these

factors using a more heterogeneous group. It would also be of interest to study children's grades at the time of the data collection to determine whether they remain lowered or return to the preseparation level. Such information would help determine whether academic performance regains strength more quickly than do children's sense of self-worth and emotional stability. One might also want to examine more closely the parent's own level of personal adjustment and perceived ability in parenting as potential factors in increasing resiliency in high risk children.

REFERENCES

- Berg, B. (1979). *Children's Attitudes Toward Parental Separation Inventory*. Dayton, OH: University of Dayton Press.
- Blanchard, R.W., & Biller, H.B. (1971). Father availability and academic performance among third-grade boys. *Developmental Psychology, 4*, 301-305.
- Brown, F. (1980). A study of the school needs of children from one-parent families. *Phi Delta Kappan*, April, 537-540.
- Curry, S.L., & Russ, S.W. (1985). Identifying coping strategies in children. *Journal of Clinical Child Psychology, 14*(1), 61-69.
- Dawson, P. (1981, July). *The effect of the single-parent family on academic achievement*. Unpublished manuscript. (ERIC Document Reproduction service No. ED 241604).
- Emery, R.E. (1982). Interparental conflict and the children of discord and divorce. *Psychological Bulletin, 92*, 310-330.
- Farber, S.S., Primavera, J., & Felner, R.D. (1983). Older adolescents and parental divorce: Adjustment problems and mediators of coping. *Journal of Divorce, 7*(2), 59-75.
- Felner, R.D., Gillespie, J.F., & Smith, R. (1985). Risk and vulnerability in childhood: A reappraisal. *Journal of Clinical Child Psychology, 14*(1), 2-4.
- Felner, R.D., Ginter, M.A., Boike, M.F., & Cowen, E.L. (1981). Parental death or divorce and the school adjustment of young children. *American Journal of Community Psychology, 9*, 181-191.
- Fowler, P.C., & Richard, H.C. (1978). Father-absence, educational preparedness and academic-achievement: A test of the confluence model. *Journal of Education Psychology, 70*, 595-601.
- Garnezy, N., & Rutter, M. (1983). *Stress, coping and development in children*. New York: McGraw-Hill.
- Gesten, E.L. (1976). A health resources inventory: The development of a measure of the personal and social competence of primary-grade children. *Journal of Consulting and Clinical Psychology, 44*, 775-786.

- Guidubaldi, J., Cleminshaw, H., Perry, J.D., & McCouglin, C.S. (1983). The impact of parental divorce on children: Report on the nationwide NASP study. *School Psychological Review, 12*(3), 300-323.
- Guidubaldi, J., & Perry, J.D. (1984). Divorce, socioeconomic status, and children's cognitive-social competence at school entry. *American Journal of Orthopsychiatry, 54*, 459-468.
- Guidubaldi, J., & Perry, J.D. (1985). Divorce and mental health sequelae for children: A two-year follow-up of a nationwide sample. *Journal of American Academy of Child Psychiatry, 24*, 531-537.
- Guidubaldi, J., Perry, J.D., & Cleminshaw, H. (1983). The legacy of parental divorce: A nationwide study of family status and selected mediating variables on children's academic and social competencies. B. B. Lahey and A.E. Kazdin (Eds.), *Advances in Clinical Child Psychology, 7*, 109-151.
- Hammond, J.M. (1979). Children of divorce: A study of self-concept, academic achievement, and attitudes. *The Elementary School Journal, 8*(2), 55-62.
- Hammond, J.M. (1981). The effects of divorce on children's self-concept, academic achievement, school behaviors and attitudes. *Scientific Paedagogia Experimentalis, 18*(1), 70-81.
- Hess, R.D., & Camara, K.A. (1979). Post-divorce family relationships as mediating factors in the consequences of divorce for children. *Journal of Social Issues, 34*(4), 79-96.
- Hetherington, E.M. (1979). Divorce: A child's perspective. *American Psychologist, 34*, 851-858.
- Hetherington, E.M., Cox, M., & Cox, R. (1978). Aftermath of divorce. In J.M. Stevens, & M.M. Mathews (Eds.), *Mother-child relationships* (pp. 149-176). Washington, DC: National Association for Young Children.
- Kalter, N. (1987). Long-term effects of divorce on children: A developmental vulnerability model. *American Journal of Orthopsychiatry, 57*, 587-600.
- Kurdek, L.A. (1981). An integrative perspective on children's divorce adjustment. *American Psychologist, 36*, 856-866.
- Kurdek, L.A. & Berg, B. (1983). Correlates of children's adjustments to their parents' divorces. In L.A. Kurdek (Ed.), *Children and Divorce*. San Francisco: Jossey-Bass.
- Kurdek, L.A., Blisk, D., & Siesky, A.E. (1981). Correlates of children's long-term adjustment to their parents' divorce. *Developmental Psychology, 17*, 565-579.
- Laing, J.A., & Sines, J.O. (1982). The Home Environment Questionnaire: An instrument for assessing several behaviorally relevant dimensions of children's environment. *Journal of Pediatric Psychology, 7*, 425-449.
- Lamb, M.E., Pleck, J.N., & Levine, J.A. (1985). The role of the father in child development. In B. Lahey & A. Kazdin (Eds.), *Advances in Clinical Child Psychology* (pp. 229-266). New York: Plenum Press.
- Lazarus, M. (1980). One parent families and their children. *Principal, 60*, 31-37.
- Nelson, G. (1981). Moderators of women's and children's adjustment following parental divorce. *Journal of Divorce, 4*(3), 71-83.
- Norusis, M.J. (1985). *SPSSX Advanced Statistics Guide*. New York: McGraw-Hill.
- Parkin, M. (1987). Fluctuation of marks in the Ottawa Board of Education schools. Unpublished manuscript. Ottawa Board of Education.
- Radin, N. (1981). The role of the father in cognitive, academic, and intellectual development. In M.E. Lamb (Ed.), *The role of the father in child development* (pp. 379-428). New York: John Wiley.
- Reinhard, D.W. (1977). The reaction of adolescent boys and girls to the divorce of their parents. *Journal of Clinical Child Psychology, 6*(2), 21-23.
- Roseby, V., & Deutch, R. (1985). Children of separation and divorce: Effects of social role-taking group intervention on fourth and fifth graders. *Journal of Clinical Child Psychology, 14*(1), 55-60.
- Rutter, M. (1981). Stress, coping and development: Some issues and some questions. *Journal of Child Psychiatry, 22*, 323-356.
- Shinn, M. (1978). Father absence and children's cognitive development. *Psychology Bulletin, 85*, 295-324.
- Sines, J.O. (1983). *H.E.Q., Manual for administration and scoring*. University of Iowa, Iowa City: Department of Psychology.
- Sines, J.O., Clark, W.M., & Lauer, R.M. (1984). Home Environment Questionnaire. *Journal of Abnormal Psychology, 12*, 519-529.
- Stockard, J., Lang, D., & Wood, J.W. (1985). Academic merit, status variables and students' grades. *Journal of Research and Development in Education, 18*(2), 12-20.
- Stolberg, A.L., & Ullman, A.J. (1985). Assessing dimensions of single parenting: The single parenting questionnaire. *Journal of Divorce, 8*(2), 31-124.
- Svanum, S., Bringle, R.G., & McLaughlin, J.E. (1982). Father absence and cognitive performance in a large sample of six to eleven year-old children. *Child Development, 53*, 135-143.
- Wallerstein, J. (1983). Children of divorce: The psychological tasks of the child. *American Journal of Orthopsychiatry, 53*, 230-243.
- Wallerstein, J., & Kelly, J. (1976). The effects of parental divorce: Experiences of the child in later latency. *American Journal of Orthopsychiatry, 46*, 256-269.
- Wallerstein, J., & Kelly, J. (1980). *Surviving the breakup*. New York: Basic Books.
- Warshak, R.A., & Santrock, J.W. (1983). The impact of divorce in father-custody and mother-custody homes: The child's perspective. In L.A. Kurdek (Ed.), *Children and divorce: New directions for child development*. San Francisco: Jossey-Bass.
- Zakariya, S.B. (1982). Another look at children of divorce. *Principal, 62*, 34-37.