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## Predictors of Substance Use and Mental Health of Children of Divorce: A Prospective Analysis

Jerome L. Short

**ABSTRACT.** This short-term longitudinal study examined psychosocial influences on substance use and mental health among children of divorced parents. The sample consisted of ethnically diverse fifth and sixth grade students, and compared children of divorced parents (CODPs;  $N = 176$ ), who were an average of four years post-divorce, with children of married parents (COMPs;  $N = 213$ ) who had never divorced. CODPs reported more life stress, less problem-focused coping, and more substance-using friends and family members than COMPs. Further, these variables were significantly related to CODPs' greater reported substance use, aggressive behavior, and depression than COMPs cross-sectionally, and longitudinally, four months later. The results suggest the importance of including both substance use and mental health outcomes in preventive interventions for CODPs. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: [getinfo@haworthpressinc.com](mailto:getinfo@haworthpressinc.com)]

Children who experience parental divorce often exhibit more psychological problems than their peers for years after the parents have separated (Amato & Keith, 1991a; Kurdek, 1987). Studies have typically found that children of divorce experience greater levels of behavioral problems (e.g., misbehavior, aggression, and delinquency) and emotional problems (e.g., depression and anxiety)

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than their peers, and that the effect sizes for these problems are larger within two years of parental separation than after two years of parental separation (Amato & Keith, 1991a; Hetherington, Cox, & Cox, 1981). Some longitudinal studies have found that the psychological adjustment of children of divorce increases with time (e.g., Edwards, 1987; Emery, 1988). However, children of divorce continue to report poorer adjustment than their peers into adulthood (Amato & Keith, 1991b). The variability in children's adjustment after divorce suggests it is important to identify risk and protective factors that might be useful to modify in interventions with them.

Although there is considerable evidence of increased behavioral and emotional problems for children of divorce, there is relatively little research which examines the levels of, and predictors of, their substance use. One might expect increased substance use by children of divorce since substance use is often correlated with aggressive behavior (Donovan, Jessor, & Costa, 1988) and depression (Paton, Kessler, & Kandel, 1977). Two recent studies provide some evidence that parental divorce may increase children's risk of premature substance use. Flewelling and Bauman (1990) compared adolescents from intact, single-parent, and stepparent families in a two-year prospective study of substance use. They found significantly higher levels of substance use for adolescents from single-parent and stepparent families than for adolescents of intact families. These differences remained even when the effects of age, race, sex, and mother's education were partialled. Needle, Su, and Doherty (1990) conducted a five-year longitudinal study and found that adolescents who experienced parental divorce during adolescence reported greater overall drug involvement than peers who experienced parental divorce during childhood, and peers of continuously married parents. Regression analyses, controlling for family environment, peer influences, and personal adjustment factors at Time 1, indicated that divorce had negative effects on boys' substance use but not on girls' use, and custodial parents' remarriage led to increased substance use among girls and decreased reports of substance use consequences among boys.

One might expect that the risk factors for premature substance use by children of divorce may be similar to those for the general population. (For a review, see Hawkins, Catalano, & Miller, 1992).

Further, several of these psychosocial risk factors, such as family conflict, poor family management, stressful life events, and parent's substance use appear to occur in greater frequency in families with divorced parents (e.g., Guidubaldi, Cleminshaw, Perry, Nastasi, & Lightel, 1986; Sandler, Wolchik, Braver, & Fogas, 1991; Temple, Fillmore, Johnstone, Leino, & Motoyoshi, 1991) and may exacerbate the risk toward children's substance use. In addition, a risk factor such as low bonding to the family may increase the likelihood of association with substance-using peers which is another strong risk factor for children's initiation of substance use (Kandel, Kessler, & Margulies, 1978).

Some types of coping and social support may serve a protective function and have been shown to be inversely related to substance use and psychological symptoms. Wills (1986) found that behavioral coping, cognitive coping, relaxation, and adult social support were negatively related to cigarette and alcohol use for a general sample of urban adolescents, cross-sectionally and longitudinally. However, measures of peer support, distraction coping, and aggressive coping were positively related to their substance use. For a sample of mother-custody divorced families, Kurdek and Sinclair (1988) found that children's externalizing coping which included ventilation of emotions and passive problem solving was related to more school problems. Support from peers and adults was related to fewer school problems. Sandler, Tein, and West (1994) conducted a cross-sectional and prospective longitudinal study of stress, coping, and psychological symptoms of children of divorce. They found evidence for a four-dimensional model of coping which included the factors of active coping, avoidance, distraction, and support. Further, they found significant negative paths from active coping (problem solving and cognitive restructuring) and distraction at Time 1 to internalizing symptoms at Time 2 (5.5 months later), while support seeking coping at Time 1 had a positive path to Time 2 depression. There is also some evidence that children of divorce engage in less productive, more rigid, and more passive coping than their peers, according to teacher's reports (Kurtz, 1994).

The following study was conducted to compare ethnically diverse elementary school children of divorced parents, an average of four years post-divorce, with children of married parents for their

reports of stress, coping, social networks, substance use, and psychological symptoms. Fifth and sixth grade children were selected because it was expected that approximately half of them would have recently initiated substance use based on estimates from other local school districts (Bush & Iannotti, 1992). It was hypothesized that children of divorced parents would report more life stress, less coping, more substance-using family members and friends, and more substance use and psychological symptoms than children of married parents. Further, it was hypothesized that life stress and the number of substance-using family members and peers would be positively related, and coping negatively related, to substance use and psychological symptoms for children of divorce.

## METHOD

### Participants

The participants were 389 fifth and sixth grade students, ages 9 to 13 (52% female), from a public school system in a southeastern city. The ethnicity of the sample was 45% African American (black), 37% European American (white), 12% Hispanic, 5% Asian American, and 1% other ethnicity. This was similar to the ethnicity for all students in the school district which was 48% African American (black), 29% European American (white), 15% Hispanic and 8% Asian American. The mother's educational level reports included 10% who completed less than 12 grades, 35% who graduated from high school, 9% who completed some college or technical school, 32% who completed college, and 14% who completed some graduate school. The father's educational level reports included 11% who completed less than 12 grades, 29% who graduated from high school, 7% who completed some college or technical school, 36% who completed college, and 18% who completed some graduate school. Slightly less than half of the children (42%) had experienced the permanent separation or divorce of their parents. Of the children of divorce, 70% lived with their mothers only, 19% lived with both parents separately, 8% lived with their fathers only, and 2% lived with family relatives, primarily grandparents,

but had regular contact with at least one parent. The parents in this sample were permanently separated or divorced for a mean of 57.3 months (standard deviation = 45.7 months; range = 3 months to 12 years). African Americans were overrepresented (59%) and European Americans were underrepresented (29%) in the divorced group compared to the married group ( $X^2(3) = 13.72; p < .01$ ). The level of education was significantly higher among the married parents than the divorced parents for both mothers ( $F(1,387) = 15.54, p < .01$ ) and fathers ( $F(1,387) = 49.77, p < .001$ ).

### Procedure

Children who were in the fifth and sixth grades ( $N = 742$ ) at ten public elementary schools in one school district received informational letters about the study and consent forms for participation to take home to their parents or guardians. The number of returned consent forms was 437 (59% of the student population). The children included in the present study had parents who indicated they were currently divorced or permanently separated one time since the child's birth and had not remarried ( $N = 151$ ), or had parents who indicated they had been continuously married since the birth of the child ( $N = 238$ ). The children whose parents had multiple marriages were excluded from the data analyses. The parents completed brief demographic questionnaires at home about their marital history and educational levels. The children completed their questionnaires, in small groups from individual classrooms, in the school cafeteria. Data collection was supervised by a professor and several graduate students who offered help to children completing their questionnaires. Nearly all of the children ( $N = 370$ ) completed a second questionnaire four months later in the same location. The children received candy bars for their participation.

### Measures

*Life Stress.* Life stress was assessed with negative events unrelated to divorce from the General Life Events Schedule for Children (Sandler, Ramirez, & Reynolds, 1986). The children indicated "no" or "yes" as to whether each of 16 negative life events hap-

pened in the past three months. A "no" was scored 0 and a "yes" was scored 1. The child's score was a sum of the number of negative events that had happened. An example is "My mom or dad talked about having serious money troubles." Sandler et al. (1986) reported test-retest reliability of .76 over two weeks. In this study, the internal consistency coefficient was .80 for this scale.

*Coping.* Coping behaviors were assessed with a modified version of the Response Profile of the Coping Assessment Battery (Bugen & Hawkins, 1981). Items were chosen based on theoretical considerations and Wills's (1985) factor analysis and revision of the scale. The measure consisted of items reflecting coping behaviors one might use when presented with a problem. Examples of scale items were: "think about possible consequences of choices" (problem-focused coping), "talk with one of my friends" (support-seeking coping), and "tell myself it will be over in a short time" (emotion-focused coping). Children rated how much they did each strategy on a four-point scale ranging from 1 (not at all) to 4 (most of the time) for the previous four months. In this study, the internal consistency coefficients were .81 for problem-focused coping (5 items), .83 for support seeking (9 items), and .76 for emotion-focused coping (10 items).

*Substance-Using Family Members and Friends.* The number of family members in the home who were substance users was assessed by children's response to the questions "How many family members who live with you drink alcohol or smoke cigarettes?" The number of friends who were substance users was assessed by the response to the question "How many of your friends drink alcohol or smoke cigarettes?" The items were rated on a five-point scale from 1 (none) to 5 (four or more). The items and response choices are like those used by Wills, DuHamel, and Vaccaro (1995).

*Substance Use.* Substance use was assessed with fifteen items adapted from the Adolescent Alcohol Involvement Scale (Mayer & Filstead, 1979). Six items asked how often beer, wine or wine coolers, hard liquor, cigarettes, marijuana, and cocaine each were used on a five-point scale from 1 (never) to 5 (several times a week). Six additional items asked the age at which children's first use of these substances occurred on a five-point scale from 1 (never) to 5 (before age 10). Two items asked how often the children were in trouble with

adults for the use of alcohol and cigarettes and one item asked how many drinks of alcohol were usually consumed at one time on a five-point scale from 1 (none) to 5 (four or more). In this study, the internal consistency coefficient was .80 for the scale.

*Psychological Symptoms.* Depression was assessed with the ten-item short form of the Children's Depression Inventory (Kovacs, 1992). Each item was scored on a three-point scale from 1 (absence of the symptom) to 3 (definite symptom). Aggressive behavior was assessed with twenty items from the Aggressive Behavior subscale of the Child Behavior Checklist (CBCL; Achenbach, 1991). Each item was rated on a three-point scale from 1 (not true) to 3 (usually true). In this study, the internal consistency coefficients were .80 for depression and .82 for aggressive behavior.

## RESULTS

In preliminary analyses, analysis of variance was used to test whether children's reports of psychosocial factors, substance use, and symptoms differed by the demographic variables of gender, grade, and ethnicity. For the whole sample, boys reported less support seeking coping ( $F(1,387) = 11.41, p < .001$ ), more substance use ( $F(1,387) = 13.69, p < .001$ ), more aggressive behavior ( $F(1,387) = 14.13, p < .001$ ), and more depression ( $F(1,387) = 10.63, p < .01$ ) than girls did. Sixth graders reported less support seeking coping ( $F(1,387) = 4.64, p < .05$ ), more substance-using friends ( $F(1,387) = 4.15, p < .05$ ), and more substance use ( $F(1,387) = 3.88, p < .05$ ) than fifth graders did. There was one ethnic difference in the report of life stress ( $F(4,384) = 4.66, p < .001$ ). Post-hoc comparisons indicated that African Americans reported more life stress than European Americans ( $t(388) = 4.20, p < .001$ ). In addition, correlation coefficients were calculated to assess the relations between parent's educational levels (measured as years of formal education) and these same variables. Mother's educational level was significantly ( $p < .05$ ) negatively correlated with life stress ( $r = -.12$ ), depression ( $r = -.15$ ), and aggressive behavior ( $r = -.10$ ). Father's educational level was significantly negatively correlated with life stress ( $r = -.15$ ), depression ( $r = -.20$ ), aggressive behavior ( $r = -.15$ ), and substance use ( $r = -.13$ ).

Similar analyses were conducted for the children of divorce only for their reports of psychosocial factors, substance use, and symptoms by the demographic variables. Boys reported less support seeking coping ( $F(1,174) = 3.95, p < .05$ ) and more aggressive behavior ( $F(1,174) = 3.76, p < .05$ ). There was one ethnic difference in the report of life stress ( $F(4,171) = 3.76, p < .05$ ). Post-hoc comparisons indicated that African Americans reported more life stress than European Americans ( $t(175) = 2.15, p < .05$ ). There were no differences by grade level and no difference between children who experienced their parents' divorce less than two years ago and those who experienced their parents' divorce more than two years ago on any of the predictor or outcome variables. Parents' educational levels and number of months since the divorce occurred were uncorrelated with any predictor or outcome variables.

### Comparisons of Children of Divorce and Their Peers

To examine whether the psychosocial predictor and outcome variables differed between children of divorced parents and children of married parents, t-test comparisons of the Time 1 means were calculated and are presented in Table 1. At Time 1, children of divorced parents reported significantly more life stress, substance-using family members, substance-using friends, substance use, aggressive behavior, and depression, and less problem focused coping than children of married parents. At Time 1, 38% of children of divorce had ever drunk alcohol, 9% had smoked cigarettes, 1% had smoked marijuana, and 1% had used cocaine. For children of married parents, 23% had ever drunk alcohol, 4% had smoked cigarettes, 1% had smoked marijuana, and 1% had used cocaine.

T-test comparisons of the Time 2 means for the psychosocial predictor and outcome variables between children of divorced parents and children of married parents are presented in Table 2. At Time 2, children of divorced parents reported significantly more life stress, substance use, aggressive behavior, and depression, and less problem focused coping than children of married parents. At Time 2, 39% of children of divorce had ever drunk alcohol, 11% had smoked cigarettes, 2% had smoked marijuana, and 2% had used cocaine. For children of married parents, 31% had ever drunk alco-

TABLE 1. Means, Standard Deviations, and t-test Comparisons for Children of Married Parents and Children of Divorced Parents at Time 1

Variables	Children of Married Parents (N = 213)		Children of Divorced Parents (N = 176)		t (df = 387)
	Mean	SD (Range)	Mean	SD (Range)	
Life Stress	2.88	2.70 (0.0 - 11.0)	4.16	3.04 (0.0 - 14.0)	-4.44***
Problem-Focused Coping	2.46	0.76 (1.0 - 4.0)	2.26	0.76 (1.0 - 4.0)	2.36*
Support-Seeking Coping	1.95	0.52 (1.0 - 3.8)	1.95	0.56 (1.0 - 3.6)	0.02
Emotion-Focused Coping	2.11	0.50 (1.0 - 3.6)	2.14	0.52 (1.0 - 3.8)	-0.12
Number of Substance-Using Family Members	1.67	0.69 (1.0 - 5.0)	1.89	0.89 (1.0 - 5.0)	-2.77**
Number of Substance-Using Friends	1.21	0.69 (1.0 - 5.0)	1.47	1.04 (1.0 - 5.0)	-2.92**
Substance Use	1.19	0.44 (1.0 - 3.8)	1.35	0.59 (1.0 - 4.1)	-3.03**
Aggressive Behavior	1.33	0.32 (1.1 - 1.9)	1.46	0.38 (1.0 - 2.8)	-3.83***
Depression	1.31	0.28 (1.0 - 2.5)	1.40	0.30 (1.0 - 2.7)	-3.13***

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

hol, 8% had smoked cigarettes, 2% had smoked marijuana, and 2% had used cocaine.

### Psychosocial Predictors of Substance Use and Psychological Symptoms for Children of Divorce

To examine the psychosocial predictors of substance use and psychological symptoms for children of divorce only, zero-order

TABLE 2 Means, Standard Deviations, and t-test Comparisons for Children of Married Parents and Children of Divorced Parents at Time 2

Variables	Children of Married Parents (N = 204)		Children of Divorced Parents (N = 166)		t (df = 368)
	Mean	SD (Range)	Mean	SD (Range)	
Life Stress	2.72	2.40 (0.0 - 10.0)	3.36	3.04 (0.0 - 16.0)	-2.44*
Problem-Focused Coping	2.30	0.71 (1.0 - 4.0)	2.14	0.71 (1.0 - 4.0)	1.99*
Support-Seeking Coping	1.92	0.53 (1.0 - 3.5)	1.88	0.55 (1.0 - 3.4)	0.68
Emotion-Focused Coping	2.10	0.54 (1.0 - 3.7)	2.09	0.57 (1.0 - 4.0)	0.09
Number of Substance-Using Family Members	1.67	0.74 (1.0 - 5.0)	1.72	0.92 (1.0 - 5.0)	-0.51
Number of Substance-Using Friends	1.37	0.88 (1.0 - 5.0)	1.41	0.95 (1.0 - 5.0)	-0.36
Substance Use	1.22	0.38 (1.0 - 2.6)	1.34	0.56 (1.0 - 3.8)	-2.04*
Aggressive Behavior	1.32	0.37 (1.0 - 2.6)	1.45	0.42 (1.0 - 2.8)	-2.71**
Depression	1.31	0.28 (1.0 - 2.4)	1.39	0.30 (1.0 - 2.5)	-2.62**

\* $p < .05$ . \*\* $p < .01$ .

correlations were calculated between the Time 1 psychosocial predictors and Time 1 and Time 2 outcome variables and are presented in Table 3. Children's reports of the risk factors of life stress, the number of substance-using family members, and the number of substance-using peers at Time 1 were all significantly positively related to their reports of substance use, aggressive behavior, and depression at both Time 1 and Time 2. Their reports of the protec-

TABLE 3. Intercorrelations Between Time 1 Life Stress, Coping, and Number of Substance Users in Social Network and Time 1 (N = 176) and Time 2 (N = 166) Substance Use and Psychological Symptoms

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Life Stress	—											
2. Problem-Focused Coping	-.10	—										
3. Support-Seeking Coping	.12	.46 <sup>c</sup>	—									
4. Emotion-Focused Coping	-.01	.46 <sup>c</sup>	.54 <sup>c</sup>	—								
5. Number of Substance-Using Family Members	.27 <sup>c</sup>	.00	-.05	.00	—							
6. Number of Substance-Using Friends	.08	-.16 <sup>a</sup>	-.11	-.01	.26 <sup>c</sup>	—						
7. T1 Substance Use	.26 <sup>c</sup>	-.15 <sup>a</sup>	-.16 <sup>a</sup>	-.04	.39 <sup>c</sup>	.60 <sup>c</sup>	—					
8. T1 Aggressive Behavior	.24 <sup>b</sup>	-.24 <sup>b</sup>	-.19 <sup>a</sup>	-.14	.39 <sup>c</sup>	.45 <sup>c</sup>	.54 <sup>c</sup>	—				
9. T1 Depression	.33 <sup>c</sup>	-.34 <sup>c</sup>	-.19 <sup>a</sup>	-.15 <sup>a</sup>	.23 <sup>b</sup>	.33 <sup>c</sup>	.38 <sup>c</sup>	.50 <sup>c</sup>	—			
10. T2 Substance Use	.21 <sup>b</sup>	-.11	-.07	-.02	.34 <sup>c</sup>	.28 <sup>c</sup>	.77 <sup>c</sup>	.43 <sup>c</sup>	.31 <sup>c</sup>	—		
11. T2 Aggressive Behavior	.16 <sup>a</sup>	-.06	-.15 <sup>a</sup>	-.17 <sup>a</sup>	.21 <sup>b</sup>	.23 <sup>b</sup>	.34 <sup>c</sup>	.53 <sup>c</sup>	.31 <sup>c</sup>	.44 <sup>c</sup>	—	
12. T2 Depression	.30 <sup>c</sup>	-.11	-.12	-.09	.17 <sup>a</sup>	.28 <sup>c</sup>	.40 <sup>c</sup>	.44 <sup>c</sup>	.51 <sup>c</sup>	.38 <sup>c</sup>	.43 <sup>c</sup>	—

<sup>a</sup> $p < .05$ . <sup>b</sup> $p < .01$ . <sup>c</sup> $p < .001$

tive factors of problem-focused coping and support-seeking coping at Time 1 were significantly negatively related to their reports of Time 1 substance use, aggressive behavior, and depression. Their report of emotion-focused coping was significantly negatively related to Time 1 depression. Both support-seeking and emotion-focused coping were related to Time 2 aggressive behavior. In addition, depression, aggressive behavior, and substance use were all moderately intercorrelated.

The total variation in measures of Time 1 scores of substance use, aggressive behavior, depression as accounted for by life stress, coping, and substance users in the social network was calculated with three separate hierarchical multiple regressions. The order of entry was based on stress and coping formulations (Lazarus & Folkman, 1984) that appraisals of stressors occur before appraisals of coping strategies. Also, the order of entry reflects the relative control that children have in determining their levels of each variable with the assumption that the later variables are more controllable and amenable to intervention. These regression results are presented in Table 4. In all three regressions, life stress was entered first and accounted for significant variance in substance use (7%), aggressive behavior (6%), and depression (11%). Problem-focused coping, support-seeking coping, and emotion-focused coping were entered second as a set and accounted for significant incremental variance in substance use (4%), aggressive behavior (6%), and depression (10%). Support-seeking coping was a significant predictor of substance use and aggressive behavior. Problem-focused coping was a significant predictor of aggressive behavior and depression. The number of substance-using friends and family members were entered third as a set and accounted for significant incremental variance in substance use (34%), aggressive behavior (21%), and depression (7%). In each equation, the number of substance-using friends was a significant predictor. The number of substance-using family members was a significant predictor for substance use and aggressive behavior only. Interactions between stress and coping variables were also tested and were non-significant.

TABLE 4. Multiple Regression Analyses with Time 1 Substance Use and Psychological Symptoms as the Criterion Variables (N = 176)

Predictor Variables	Substance Use			Aggressive Behavior			Depression		
	R <sup>2</sup> Change	F	B	R <sup>2</sup> Change	F	B	R <sup>2</sup> Change	F	B
(Step 1)									
Life Stress	.07	12.55***	.259***	.06	10.52**	.238**	.11	20.85***	.326***
(Step 2)									
Coping	.04	2.91*		.06	4.17**		.10	7.55***	
Problem-Focused			-.091			-.147*			-.264***
Support-Seeking			-.183*			-.161*			-.130
Emotion-Focused			-.105			.016			.039
(Step 3)									
Substance Users in Social Network	.34	52.99***		.21	27.33***		.07	8.61***	
Friends			.514***			.343***			.243***
Family Members			.218***			.256***			.083

\*p < .05. \*\*p < .01. \*\*\*p < .001

### *Longitudinal Prediction of Substance Use and Psychological Symptoms for Children of Divorce*

The total variation in Time 2 outcome measures of substance use, aggressive behavior, depression as accounted for by Time 1 scores on the criterion, life stress, coping, and substance users in the social network was calculated with three separate hierarchical multiple regressions similar to the previous regressions. In all three regressions, Time 1 criterion was entered first and accounted for significant variance (21% in substance use, 24% in aggressive behavior, and 25% in depression). Time 1 life stress, coping, and social network variables were entered in three additional steps and accounted for no significant incremental variance in any of the outcome variables at Time 2.

### *DISCUSSION*

The goal of this study was to examine whether children of divorce differed from their peers in reports of substance use and mental health and to examine whether these differences might be accounted for by several psychosocial risk and protective factors. The first notable finding is that children of divorced parents reported more substance use, aggressive behavior, and depression than children of married parents at both Time 1 and Time 2. These findings are consistent with previous research (Amato & Keith, 1991a; Flewelling & Baumann, 1990) and the differences found for substance use were similar in magnitude to the differences typically found for aggressive behavior between children of divorce and their peers.

The differences in these outcome variables are partially accounted for by more life stress, less problem-focused coping, and more substance-using family members and friends reported by children of divorce than their peers. The relations between stress and these negative outcome variables are similar to previous research for both children of divorce (Sandler et al., 1994) and children of alcoholics (Chassin, Pillow, Curran, Molina, & Barrera, 1993). The stressful events chosen were general events, so the effects of stress may be even greater with the inclusion of divorce-specific stressful events.

Children's coping appeared to be a protective factor as it was correlated negatively with symptoms and substance use. This is consistent with Sandler et al.'s (1994) findings that active coping (problem-solving and cognitive restructuring) had a significant prospective negative relation to depression five months later for children of divorce. Also, the children of divorce in this study reported less problem-focused coping than their peers. The differences found for problem-focused coping, but not support-seeking and emotion-focused coping, may be due to the level of effort involved in these types of coping, with problem-focused coping presumably requiring more sustained effort. Mazur, Wolchik, and Sandler (1992) have found that children's negative appraisals about divorce events were related to fewer coping efforts and more depression. It may also be the case that divorced parents model ineffective coping for their children. For example, Holloway and Machida (1991) found that divorced parents who used the most avoidant coping also used the least effective parenting techniques with their children.

The findings of relations between the number of friends who are substance users and children's substance use is consistent with Wills et al.'s (1995) findings for a general sample of urban adolescents. Chassin et al. (1993) have found evidence that both children's negative affect and impaired parental monitoring were associated with adolescents' membership in peer networks that support drug use behavior. These are plausible causes for children's substance use in divorced families, since some research has found that children of divorce tend to have less parental supervision and more internalizing problems (Amato & Keith, 1991a) than their peers. Wallerstein (1983) has suggested that children perceive parental divorce as a form of parental rejection. Perhaps when children fail to get, or to perceive, adequate parental support they spend more time with peers who also have less parental monitoring. Further, Steinberg (1987) has found that children of divorce report more susceptibility to pressure from friends to engage in deviant behavior. The initiation of substance use at an early age is important because it has been found to predict levels of subsequent use and increases the risk of eventual substance abuse (Hawkins, Lishner, & Catalano, 1985). In addition, the number of family members who are substance users was also related to children's substance use.

This may reflect family members' modeling substance use or it may indicate the increased availability of alcohol and cigarettes in the home that makes it easier to initiate substance use.

There were no differences between children of divorce and peers in the number of substance-using family members and friends at Time 2. The number of substance-using family members reported by children of divorce appeared to decline over time. Perhaps some family members became sensitized to the image they presented to these children and stopped or developed other ways to deal with stress. The number of substance-using peers reported by children of divorce stayed approximately the same while apparently increasing for their peers.

The significant relations between children's risk and protective factors and their substance use and symptoms have implications for preventive interventions with children of divorce. The results of this study suggest the importance of focusing on delaying and reducing substance-use by children of divorce in preventive interventions which has not been a goal of previous interventions (Grych & Fincham, 1992). The findings from this study suggest that this may be partly influenced through reducing stress and involvement with substance-using peers and family members. Further support was also provided for the efficacy of interventions for children of divorce (e.g., Pedro-Carroll, Cowen, Hightower, & Guare, 1986; Stolberg & Mahler, 1994) that have increased levels of problem-focused, emotion-focused, and support-seeking coping to the level of children from married parents, which in turn were related to better psychological adjustment.

It is important to develop more sophisticated models to explain the adjustment of children to divorce. For example, Lengua, Wolchik, and Braver (1995) examined divorce adjustment from Bronfenbrenner's (1979) ecological perspective. They found that factors at the microsystem level (e.g., parenting behaviors, family relationships, social support) and the ecosystem level (e.g., financial resources, parent's adjustment) accounted for significant variance in adjustment, and factors at the ontogenic level (e.g., children's age, gender, misconceptions about divorce) did not. In this study, coping, an ontogenic variable, did account for significant variance in substance use and symptoms. The microsystem and

ecosystem levels were also partially examined in this study with measures of parent's educational levels, life stress, and the social network. There still was a large portion of the variance unexplained in substance use and psychological symptoms which suggests that attention must be given to other possible influences in children's adjustment. Various parenting variables that may be considered in a larger conceptual model include non-custodial parenting, parental visitation, parental monitoring, parental pathology, and types of parenting, such as supportive, rejecting, and coercive behaviors (Thomas & Forehand, 1993). Some other child-focused variables to be considered include social skills, social support, locus of control, self-esteem, and divorce-related cognitions which have been shown to be related to psychological adjustment (Grych & Fincham, 1992).

Further research is needed to better understand how stress, social networks, and coping affect children's adjustment after parental divorce. Since this study is correlational in nature, one cannot determine the directions of causation. Even longitudinal data has limitations in determining cause and effect since it is likely there is bidirectionality between psychosocial stressors or resources and psychological adjustment. This study did not detect evidence that the psychosocial predictors could account for residual change in the outcome variables over a four month time period, and so other theoretical models may also account for the findings. Experimental studies in the context of planned interventions with family members and friends would provide greater evidence of causation. Also, the present findings are subject to possible bias and distortion associated with the use of self-report measures. The use of multiple informants about children's relationships and behaviors or controlled observation of family exchanges would add to the validity of children's self-reports.

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## Parents' Marital Status, Father-Daughter Intimacy and Young Adult Females' Dating Relationships

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**ABSTRACT.** The affective relationships of young adult females and their fathers were investigated for effects on dating relationships, dating anxiety, and interpersonal trust. Ninety-six college females, 66 with married parents and 25 with divorced parents, completed questionnaires about father-daughter intimacy, dating satisfaction, dating anxiety, and trust. It was hypothesized that females with divorced vs. married parents, and females scoring lower on the intimacy scale, regardless of family structure, would experience less father-daughter intimacy, lower dating satisfaction and trust, and higher dating anxiety. Multivariate analysis of variance showed that females with divorced vs. married parents experienced significantly less intimacy with their fathers but similar levels of trust, anxiety, and satisfaction. Comparisons of females high and low in father-daughter intimacy showed no differences in trust, anxiety, or dating satisfaction. The relative importance of parents' marital status versus other factors relevant to divorce (e.g., intimacy, presence of a stepfather) will be discussed. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: [getinfo@haworthpressinc.com](mailto:getinfo@haworthpressinc.com)]

Divorce has become a common occurrence in the lives of children today. At least two out of five children will see their parents

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