

## RISK AND PROTECTIVE FACTORS FOR CHILDREN'S SUBSTANCE USE AND ANTISOCIAL BEHAVIOR FOLLOWING PARENTAL DIVORCE

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*Social networks and personal resources were examined as risk or protective factors for substance use and antisocial behavior in children five years after parental divorce. Children of divorce reported significantly more substance-using friends and less use of coping and social skills than children whose parents had not divorced. Findings suggest the importance of focusing on substance use as well as mental health outcomes in preventive interventions for children of divorce.*

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Children of divorced parents have been shown to exhibit more behavioral (e.g., misbehavior, aggression, delinquency) and emotional (e.g., depression, anxiety) problems than children of married parents (Amato & Keith, 1991a). Some longitudinal studies have found that the psychological adjustment of children of divorce increases with time (Edwards, 1987; Emery, 1988). However, children of divorce may continue to have poorer adjustment than their peers into adulthood (Amato & Keith, 1991b). The variability in children's adjustment after divorce indicates the potential importance of identifying risk and protective factors that may serve as a focus of preventive interventions.

Although there is considerable evidence of increased antisocial behavior and emotional distress in children of divorce, there is relatively little research on the levels and predictors of substance use among these youngsters. Since substance use is often correlated with antisocial behavior (Dono-

van, Jessor, & Costa, 1988) and emotional distress (Paton, Kessler, & Kandel, 1977), one might expect increased use on the part of children of divorce. Three recent studies provide some evidence that parental divorce may increase children's risk of premature substance use.

In a two-year prospective study, Flewelling and Bauman (1990) found significantly higher levels of substance use (alcohol, cigarettes, marijuana) in adolescents from single-parent and stepparent families than in adolescents from intact families. Similarly, a four-month longitudinal study by Short (*in press-b*) found that elementary school children of divorced parents reported more substance use (alcohol and cigarettes) than did children of married parents. Needle, Su, and Doherty's (1990) five-year longitudinal study of adolescents found that those who experienced parental divorce during adolescence reported greater overall drug involvement than either those whose parents had divorced

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during their childhood or those with continuously married parents.

One might expect that the risk factors for premature substance use by children of divorce would be similar to those for the general population (Hawkins, Catalano, & Miller, 1992). Further, several psychosocial risk factors, such as family conflict, poor family management, and parental substance use appear to occur in greater frequency in families with divorced parents (Guidubaldi, Cleminshaw, Perry, Nastasi, & Lightel, 1986; Temple et al., 1991) and may exacerbate the risk of children's substance use. In addition, a risk factor such as poor bonding to one's family may increase the likelihood of association with drug-using peers, itself another strong risk factor for initiation of substance use (Kandel, Kessler, & Margulies, 1978).

Parenting, social skills, and coping are potential protective factors for substance use because of their demonstrated relationships with the psychological symptoms identified in children of divorce. Stolberg and Bush (1985) found both direct and mediated positive effects of sound parenting on children's social skills, involvement in pro-social activities, and internalized psychopathology within three years of the divorce. Fauber, Forehand, Thomas, and Wierson (1990) found that an association between interparental conflict and behavioral problems of children of divorce was mediated primarily through the adolescent's perceived rejection by or withdrawal of the parent, and secondarily through coercive control by the parents.

These studies suggest that parenting may have both positive and negative effects on children's postdivorce adjustment and that parenting may be related to other risk and protective factors. Wills (1986) reported 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. There is also some evidence from teacher

reports that children of divorce engage in less productive, more rigid, and more passive coping than their peers (Kurtz, 1994).

The present study compared ethnically diverse middle-school children of divorced parents with children of married parents on several risk and protective factors associated with substance use and antisocial behavior. It was hypothesized that children of divorced parents would report higher levels of substance-using friends and family members and overprotective parenting (i.e., risk factors), lower levels of coping, social skills, and supportive parenting (i.e., protective factors), and more substance use and antisocial behavior than would children of married parents. It was also predicted that risk factors would be positively related, and protective factors negatively related, to the substance use and antisocial behavior of children of divorce.

## METHOD

### Sample

Study participants were 136 sixth- and seventh-grade students from two public middle schools in a southeastern city (population 110,000). The sample included 70 children of married parents who had never divorced and 66 children of parents who had been divorced or permanently separated for an average of 65.5 months ( $SD=44.9$  months; range: 3 months to 13 years) and had not remarried.

The children of married parents ranged from 11 to 14 years old ( $M=12.1$  years) and the majority were female (64%). Their ethnicity was 43% European American, 31% African American, 11% Hispanic, 11% Asian American, and 4% other. The educational level of the primary caretaking parents included 13% who had not completed high school, 31% who had completed high school only, 3% who had attended college without graduation, 33% who were college graduates only, and 20% who had attended graduate school. Family incomes ranged from \$18,000 to \$200,000, with a median of \$55,000.

The children of divorced parents ranged from 11 to 14 years old ( $M=12.3$  years) and the majority were female (68%). Their ethnicity was 62% African American, 18% European American, 9% Hispanic, 5% Asian American, and 6% other. The educational level of the primary caretaking parents included 15% who had not completed high school, 39% who had completed high school only, 26% who had attended college without graduation, 18% who were college graduates only, and 2% who had attended graduate school. Family incomes ranged from \$10,000 to \$150,000, with a median of \$35,000. Of the children of divorce, 76% lived with their mothers only, 12% with their fathers only, 6% with both parents separately, and 6% lived with other family members but had regular contact with at least one parent.

### Procedure

Children in the sixth and seventh grades at two public middle schools in one school district received informational letters about the study and consent forms to take home to their parents. The students included in the present study had parents who had been divorced or permanently separated once since the student's birth, or parents who indicated they had been continuously married since the birth of the participating student. Students who brought signed parental consent forms back to their teachers were eligible to participate. They completed their questionnaires in the school cafeteria under the supervision of a clinical psychologist and several doctoral students. They also took home questionnaires for their parents to complete about their marital history and educational levels, and returned these in sealed envelopes to their teachers. Each family received \$10 for its participation.

### Measures

*Substance-using friends and family members.* 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 number of family members in the home who were substance users was assessed by the response to the question, "How many family members who live with you drink alcohol or smoke cigarettes?" These items were rated on a scale from 1 (none) to 5 (four or more), similar to that used by Wills, DuHamel, and Vaccaro (1995).

*Coping.* Coping behavior was assessed via the 14 problem-focused and support-seeking items from the Response Profile of the Coping Assessment Battery (Bugen & Hawkins, 1981), plus 11 items added from an esteem-focused coping scale (Short, Lewis, & Cohen, 1993). Items were rated on a scale from 1 (never) to 4 (most of the time). Coefficient alphas in this study were .85 for problem-focused coping, .78 for support-seeking coping, and .83 for esteem-focused coping.

*Social skills.* The 22-item behavioral appropriateness subscale of the Evaluation of Social Skills with Youngsters (Matson, Rotatori, & Helsel, 1983) was used, with each item rated on a scale from 1 (not at all) to 5 (very much). The coefficient alpha was .93.

*Parenting behavior.* The Parental Bonding Instrument (Parker, Tupling, and Brown, 1979), a 25-item scale, was used to measure parental support and overprotection. Children were asked to rate the parent who spent the most time with them, using a scale, from 1 (very unlike parent) to 4 (very like parent) for the past three months. Coefficient alphas were .83 for parental support and .78 for parental overprotection.

*Antisocial behavior.* The 32-item externalizing scale of the Youth Self-Report form of the Child Behavior Checklist (Achenbach, 1991) was used. Each item was rated on a scale from 1 (not true) to 3 (often true). The coefficient alpha was .91.

*Substance use.* For this study, 14 items were adapted from the Adolescent Alcohol Involvement Scale (Mayer & Filstead, 1979). On a scale from 1 (never) to 5 (several times a week), use of seven items—beer, wine or wine coolers, hard liquor, cig-

arettes, inhalants, marijuana, and cocaine —was measured. Corresponding items elicited the age at which use of each of these seven substances first occurred, ranked on a scale from 1 (never) to 5 (before age 10). The coefficient alpha was .76 in this study.

## RESULTS

In preliminary analyses, analysis of variance was used to test whether children's reports of psychosocial factors, substance use, and antisocial behavior differed by the demographic characteristics of gender and ethnicity. Girls reported higher levels of problem-focused coping ( $F(1,134)=9.49$ ,  $p<.01$ ) and social skill use ( $F(1,134)=4.58$ ,  $p<.05$ ) than did boys. There were ethnic differences in level of parental support ( $F(3,132)=4.83$ ,  $p<.01$ ) and problem-focused coping ( $F(3,132)=3.33$ ,  $p<.05$ ). Post-hoc comparisons indicated that European-American children reported more parental support than African-American ( $t(135)=3.19$ ,  $p<.01$ ) and Asian-American ( $t(135)=3.00$ ,  $p<.01$ ) children. Post-hoc comparisons also indicated that Hispanic children reported higher levels of problem-focused coping than both African-American ( $t(135)=2.93$ ,

$p<.01$ ) and Asian-American ( $t(135)=2.51$ ,  $p<.05$ ) children.

In addition, correlation coefficients were calculated to assess the relations between children's age, parents' educational levels, and parental income and these same variables. Age was significantly ( $p<.05$ ) related to the number of substance-using friends ( $r=.34$ ), parental support ( $r=.24$ ), and substance use ( $r=.26$ ). Mother's educational level was significantly related to parental support ( $r=.28$ ), parental overprotection ( $r=-.21$ ), and antisocial behavior ( $r=-.27$ ). Father's educational level and family income were uncorrelated with the predictor and outcome variables. The pattern of results was similar for children of divorce alone. Because age and mother's education were significantly related to the outcome variables of substance use and antisocial behavior, they were included in later regression analyses. There were no gender differences in the outcome variables; therefore, gender was excluded from the later regression analyses.

### *Children of Divorce Compared to Peers*

TABLE 1 shows *t*-test comparisons of the means for the psychosocial predictor and

Table 1

MEANS, STANDARD DEVIATIONS AND *t*-TEST COMPARISONS FOR CHILDREN OF MARRIED ( $N=70$ ) AND CHILDREN OF DIVORCED ( $N=66$ ) PARENTS

VARIABLE	PARENTS MARRIED		PARENTS DIVORCED		<i>t</i> ( <i>df</i> =135)
	<i>M</i>	<i>SD</i> (RANGE)	<i>M</i>	<i>SD</i> (RANGE)	
Substance-Using Friends	1.41	1.03 (1.0 - 5.0)	2.06	1.50 (1.0 - 5.0)	-2.97**
Substance Using Family Members	1.71	0.71 (1.0 - 5.0)	1.85	0.86 (1.0 - 5.0)	-1.08
Problem-Focused Coping	2.96	0.69 (1.0 - 4.0)	2.70	0.76 (1.0 - 4.0)	2.00*
Support-Seeking Coping	2.52	0.66 (1.4 - 4.0)	2.27	0.62 (1.1 - 3.8)	2.16*
Esteem-Focused Coping	2.81	0.58 (1.2 - 4.0)	2.58	0.57 (1.5 - 3.8)	2.26*
Social Skills	4.09	0.58 (2.6 - 5.0)	3.70	0.76 (1.8 - 5.0)	3.36**
Parental Support	3.35	0.48 (2.1 - 4.0)	3.19	0.65 (1.6 - 4.0)	1.64
Parental Overprotection	1.98	0.45 (1.2 - 3.2)	2.06	0.61 (1.0 - 4.0)	-0.90
Substance Use	1.25	0.33 (1.0 - 2.5)	1.49	0.52 (1.0 - 3.5)	-3.32***
Antisocial Behavior	1.41	0.24 (1.1 - 1.9)	1.57	0.35 (1.0 - 2.8)	-3.32**

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

outcome variables between children of divorced parents and children of married parents. The divorce group reported significantly lower use of problem-focused coping, support-focused coping, esteem-focused coping, and social skills, and more substance-using friends, substance use, and antisocial behavior. Among the children of divorced parents, 54% reported having used alcohol (compared to 36% of the married-parents group), 29% cigarettes (compared to 9%), 10% inhalants (compared to 3%), 10% marijuana (compared to 0%), and 3% cocaine (compared to 0%). No significant differences were found in the number of substance-using family members, level of parental support, and parental overprotection.

### Psychosocial Predictors

Pearson correlations were calculated to assess the degree of relations between the psychosocial predictors and the outcome variables of substance use and antisocial behavior for children of divorce. Results are shown in TABLE 2. Children's psychosocial resources of problem-focused coping, support-focused coping, esteem-focused coping, social skills, and parental support were negatively related to substance use and antisocial behavior. Parental overprotection was positively related to antisocial behavior. In addition, substance use and antisocial behavior were positively related. Also, parental support was positively related, and parental overprotection nega-

tively related, to children's coping and social skills.

The total variation in measures of substance use and antisocial behavior for children of divorce, as accounted for by the significant demographic and psychosocial predictors, were calculated with two separate simultaneous multiple regressions. These results are presented in TABLE 3. The number of substance-using friends and parental support were significant unique predictors of substance use; substance-using friends and parental overprotection were significant unique predictors of antisocial behavior.

### DISCUSSION

Children of divorced parents reported more substance use and antisocial behavior than did children of married parents. The differences in substance use and antisocial behavior were partially accounted for by more substance-using friends and less coping and social-skill use reported by children of divorce than by their peers. The relations between the number of friends who are substance users and children's substance use replicate results from a general sample of urban adolescents (*Wills et al., 1995*) and elementary-school children of divorce (*Short, in press-b*). Previous research has indicated an association between impaired parental monitoring and adolescents' membership in peer networks that support drug use (*Chassin, Pillow, Curran, Molina, & Barrera, 1993*), and divorced

Table 2

INTERCORRELATIONS BETWEEN SOCIAL NETWORKS, PERSONAL RESOURCES  
SUBSTANCE USE, AND ANTISOCIAL BEHAVIOR FOR CHILDREN OF DIVORCE (N=66)

VARIABLE	1	2	3	4	5	6	7	8	9	10
1. Substance-Using Relatives	—									
2. Substance-Using Friends	0.36**	—								
3. Problem-Focused Coping	-0.11	-0.24	—							
4. Support-Seeking Coping	-0.12	-0.32**	0.58***	—						
5. Esteem-Focused Coping	-0.17	-0.30*	0.79***	0.61***	—					
6. Social Skills	-0.11	-0.21	0.53***	0.37**	0.48***	—				
7. Parental Support	0.03	-0.39**	0.35**	0.42***	0.34**	0.61***	—			
8. Parental Overprotection	-0.14	0.22	-0.24	-0.21	-0.22	-0.16	-0.47***	—		
9. Substance Use	0.34**	0.74***	-0.33**	-0.41***	-0.40***	-0.36***	-0.54***	0.19	—	
10. Antisocial Behavior	0.21	0.58***	-0.34**	-0.29*	-0.41***	-0.30**	-0.53***	0.46***	0.49***	—

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

Table 3

MULTIPLE REGRESSION ANALYSES  
WITH SUBSTANCE USE AND ANTISOCIAL  
BEHAVIOR AS CRITERION VARIABLES FOR  
CHILDREN OF DIVORCE (N=66)

PREDICTOR	B	$\beta$
<b>Substance Use</b>		
Age	-0.014	-0.018
Substance-use—friends	0.218***	0.517***
Substance-use—family	0.092	0.126
Total coping	-0.157	-0.135
Social skills	0.013	0.016
Parental support	-0.284**	-0.293**
$R^2=0.61; F=15.46^{***}$		
<b>Antisocial Behavior</b>		
Age	0.004	0.009
Mother's educational level	-0.039	-0.115
Substance-using friends	0.092***	0.387***
Total coping	-0.064	-0.098
Social skills	0.002	0.003
Parental support	-0.117	-0.213
Parental overprotection	0.130*	0.222*
$R^2=0.50; F=8.32^{***}$		

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

families tend to have less parental supervision than intact families (*Amato & Keith, 1991a*).

Further, Steinberg (1987) has found that children of divorce report more susceptibility to pressure from friends to engage in deviant behavior. This may also help to explain the relation found in the present study between the number of substance-using friends and children's antisocial behavior. The number of family members who are substance users was also related to children's substance use. This may reflect family member's modeling substance use, or it may indicate the increased availability of legal and illegal substances in the home that makes it easier to initiate use. The initiation of substance use at an early age is important because it has been found to predict levels of subsequent use and to increase the risk of eventual substance abuse (*Hawkins, Lishner, & Catalano, 1985*).

Children's coping and social skills appeared to act as protective factors insofar as they were related negatively with substance use and antisocial behavior. Also, the children of divorce reported less problem-focused coping, support-seeking, and esteem-focused coping than did their peers. Mazur, Wolchik, and Sandler (1992) have

found children's negative appraisals about divorce events to be 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 lack of differences found here in reports of parental support and overprotection by children of divorce compared with their peers is consistent with previous research. Hetherington, Cox, and Cox (1982) found that mothers' restrictive behavior declined and supportive behavior increased over a two-year postdivorce period. In this study, parents reported that their divorces or permanent separations occurred an average of five years earlier. Thus, parenting deficits attributable to the stresses of divorce may have dissipated for many parents by the time of the study. Parental support was related positively to children's coping and social skills, a finding consistent with previous research (*Stolberg & Bush, 1985*), and negatively to substance use and antisocial behavior. Thus, parental support continues to be a protective factor many years after divorce. Also, parental overprotection was positively related to antisocial behavior, suggesting that parenting may have negative effects when it does not encourage children's personal responsibility and self-control.

The significant relations between children's risk and protective factors and their substance use and antisocial behavior have implications for preventive interventions with children of divorce. They underscore the importance of delaying and reducing substance use among children of divorce, goals that have not been a major focus of most interventions with this population (*Grych & Fincham, 1992*). The present findings suggest that these goals may be influenced positively by seeking to reduce involvement with substance-using friends

and family members and by enhancing coping and social skills. In one recent preventive program, increased levels of problem-focused coping, assertiveness, and self-esteem were associated with reductions in substance use, antisocial behavior, and anxiety (*Short, in press-a*). The present study also provides support for the efficacy of interventions with parents that attempt to increase parental support and foster children's autonomy and self-care (*Stolberg & Mahler, 1994; Wolchik et al., 1993*).

Further research is needed to clarify the processes by which 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. Experimental studies and longitudinal assessment in the context of planned interventions with family members and friends would provide greater evidence of causation. In addition, the present findings are subject to possible bias and distortion associated with the use of self-report measures. Use of multiple informants with respect to children's relationships and behavior, or controlled observation of family exchanges, would add to the validity of children's self-reports.

## REFERENCES

- Achenbach, T.M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 profile*. Burlington: Department of Psychiatry, University of Vermont.
- Amato, P.R., & Keith, B. (1991a). Parental divorce and the well-being of children: A meta-analysis. *Psychological Bulletin, 110*, 26-46.
- Amato, P.R., & Keith, B. (1991b). Parental divorce and adult well-being: A meta-analysis. *Journal of Marriage and the Family, 53*, 43-58.
- Bugen, L.A., & Hawkins, R.C. (1981, August). *The coping assessment battery: Theoretical and empirical foundations*. Paper presented at the annual meeting of the American Psychological Association, Los Angeles.
- Chassin, L., Pillow, D.R., Curran, P.J., Molina, B.S.G., & Barrera, M. (1993). Relations of parental alcoholism to early adolescent substance use: A test of three mediating mechanisms. *Journal of Abnormal Psychology, 102*, 3-19.
- Donovan, J.E., Jessor, R., & Costa, F.M. (1988). Syndrome of problem behavior in adolescence: A replication. *Journal of Consulting and Clinical Psychology, 56*, 762-765.
- Edwards, J.N. (1987). Changing family structure and youthful well-being: Assessing the future. *Journal of Family Issues, 8*, 355-372.
- Emery, R.E. (1988). *Marriage, divorce, and children's adjustment*. Newbury Park, CA: Sage Publications.
- Fauber, R., Forehand, R., Thomas, A.M., & Wierson, M. (1990). A mediational model of the impact of marital conflict on adolescent adjustment in intact and divorced families. *Child Development, 61*, 1112-1123.
- Flewelling, R.L., & Bauman, K.E. (1990). Family structure as a predictor of initial substance use and sexual intercourse in early adolescence. *Journal of Marriage and the Family, 52*, 171-181.
- Grych, J.H., & Fincham, F.D. (1992). Interventions for children of divorce: Toward greater integration of research and action. *Psychological Bulletin, 111*, 434-454.
- Guidubaldi, J., Cleminshaw, H.K., Perry, J.D., Nastasi, B.K., & Lightel, J. (1986). The role of selected family environment factors in children's postdivorce adjustment. *Family Relations, 35*, 141-151.
- Hawkins, J.D., Catalano, R.F., & Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin, 112*, 64-105.
- Hawkins, J.D., Lishner, D., & Catalano, R.F. (1985). Childhood predictors and the prevention of adolescent substance abuse. In C.L. Jones & R.J. Battjes (Eds.), *Etiology of drug abuse: Implications for prevention* (NIDA Research Monograph No. 56, DHHS Publication ADM 85-1335, pp. 75-126). Washington, DC: U.S. Government Printing Office.
- Hetherington, E.M., Cox, M., & Cox, R. (1982). Effects of divorce on parents and children. In M. Lamb (Ed.), *Nontraditional families* (pp. 233-288). Hillsdale, NJ: Erlbaum.
- Holloway, S.D., & Machida, S. (1991). Child-rearing effectiveness of divorced mothers: Relationship to coping strategies and social support. *Journal of Divorce and Remarriage, 14*, 179-201.
- Kandel, D.B., Kessler, R.C., & Margulies, R.S. (1978). Antecedents of adolescent initiation into stages of drug use: A developmental analysis. *Journal of Youth and Adolescence, 7*, 13-40.
- Kurtz, L. (1994). Psychosocial coping resources in elementary school-age children of divorce. *American Journal of Orthopsychiatry, 64*, 554-563.
- Matson, J.L., Rotatori, A.F., & Helsel, W.J. (1983). Development of a rating scale to measure social skills in children: The Matson Evaluation of Social Skills with Youngsters (MESSY). *Behaviour Research and Therapy, 21*, 335-340.
- Mayer, J., & Filstead, W.I. (1979). The adolescent alcohol involvement scale: An instrument for measuring adolescents' use and misuse of alcohol. *Journal of Studies on Alcohol, 40*, 291-300.
- Mazur, E., Wolchik, S.A., & Sandler, I.N. (1992). Negative cognitive errors and positive illusions for negative divorce events: Predictors of children's psychological adjustment. *Journal of Abnormal Child Psychology, 20*, 523-542.

- Needle, R.H., Su, S., & Doherty, W.J. (1990). Divorce, remarriage, and adolescent drug involvement: A longitudinal study. *Journal of Marriage and the Family*, 52, 157-169.
- Parker, G., Tupling, H., & Brown, L.B. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, 52, 1-10.
- Paton, S., Kessler, R., & Kandel, D.B. (1977). Depressive mood and adolescent illegal drug use: A longitudinal analysis. *Journal of Genetic Psychology*, 131, 267-289.
- Short, J.L. (in press-a). Evaluation of a substance abuse prevention and mental health promotion program for children of divorce. *Journal of Divorce and Remarriage*.
- Short, J.L. (in press-b). Predictors of substance use and mental health of children of divorce: A prospective analysis. *Journal of Divorce and Remarriage*.
- Short, J.L., Lewis, J.W., & Cohen, D.M. (1993). *Self-esteem focused coping and family stressors*. Poster presented at the Fourth Biennial Conference on Community Research and Action, Williamsburg, VA.
- Steinberg, L. (1987). Single parents, stepparents, and the susceptibility of adolescents to antisocial peer pressure. *Child Development*, 58, 269-275.
- Stolberg, A.L., & Bush, J.P. (1985). A path analysis of factors predicting children's divorce adjustment. *Journal of Clinical Child Psychology*, 14, 49-54.
- Stolberg, A.L., & Mahler, J. (1994). Enhancing treatment gains in a school-based intervention for children of divorce through skill training, parental involvement, and transfer procedures. *Journal of Consulting and Clinical Psychology*, 62, 147-156.
- Temple, M., Fillmore, K.M., Hartka, E., Johnstone, B., Leino, V., & Motoyoshi, M. (1991). A meta-analysis of change in marital and employment status as predictors of alcohol consumption on a typical occasion. *British Journal of Addiction*, 86, 1269-1281.
- Wills, T.A. (1986). Stress and coping in early adolescence: Relationships to substance use in urban school samples. *Health Psychology*, 5, 503-529.
- Wills, T.A., DuHamel, K., & Vaccaro, D. (1995). Activity and mood temperament as predictors of adolescent substance use: Test of a self-regulation mediational model. *Journal of Personality and Social Psychology*, 68, 901-916.
- Wolchik, S.A., West, S.G., Westover, S., Sandler, I.N., Martin, A., Lustig, J., Tein, J., & Fisher, J. (1993). The children of divorce parenting intervention: Outcome evaluation of an empirically based program. *American Journal of Community Psychology*, 21, 293-331.