

*Parental Divorce, Social Support, and
Depression of Adult Children*

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The increasing numbers of divorce since 1960s forced a great many children to experience parental divorce. More than one million children in the U. S. endured the parental divorce every year (Amato 1991a). Recent evidences support that the parental divorce is negatively related to offspring's outcomes (Hetherington and Kelly 2002; Wallerstein, Lewis, and Blakeslee 2000). Few studies, however, have investigated whether psychological vulnerability of adult children who experience parental divorce as a life event may be due to lack of social support. Several findings show that social support is associated with fewer depressive symptoms, thus it is likely that social support may reduce the impact of parental divorce on children's well-being in a long term. It is also unclear whether social support is related to psychological well-being based upon either main or buffering effect hypothesis.

I, thus, examine parental divorce, adult depression, and depression in terms of psychological vulnerability and role of social support in it. First, I propose that children of divorce are more likely to be depressed than children of intact. Second, it is suggested that social support may account for psychological vulnerability of children of divorce, thus the effects of parental divorce on adult depression may vanish or decrease if adult children receive social support. Furthermore, different types of social support, such as social relationship, social involvement, and intimate ties, will be used for specifying various social support effects in present study. Finally, I intend to test whether either buffering or main effect of social support on adult depression exist using product terms of social support and parental divorce.

PARENTAL DIVORCE AND ADULT DEPRESSION

It is in the family that macro social structure affects children's outcomes, but current trend that almost half of all those marrying divorce after all is likely to transform the conventional structure of family (Ross and Mirowsky 1990; Furstenfurg, Jr. 1990). Marital disruption is one of the major life events for not only parents themselves but also their children. Because principal life events have been treated as stressors that result in a drastic demand for behavior adjustment, they are stressful events arousing psychological vulnerability (Wheaton 1990). Parental marital disruption has a negative effect on offspring as well as parents. It is consistently indicated that parental divorce is negatively associated with children's outcomes. Children of divorce tend to show lower academic achievement and are paid less, indicating that they are likely to achieve lower socioeconomic status in adulthood (Jekielek 1997; Morrison and Cherlin 1995). Children of divorce are more likely to divorce and marry early than children of intact family, suggesting that some family characteristics may persist more than one generation (Amato and Cheadle 2005; Keith and Finlay 1993; Kiernan and Cherlin 1999). Underachievement and instable social relationships of children of divorce may be associated with psychological well-being of adult children as well.

Several studies documented that adult children of divorce report greater level of depression than adult children of intact (Amato and Keith 1991a; Aseltine, Jr. 1996; Cherlin, Chase-Lansdale, and MacRae 1998; Glenn and Kramer 1985; Keith and Finlay 1988; Ross and Mirowsky 1999). Some evidences showed that a majority of children would recover from the stressful parental divorce within years (Chase-Landale, Cherlin, and Kiernan 1995; Amato, Spencer, and Booth 1995). Despite it, the effect of parental

divorce may be associated with initial depressive symptoms when children are young, and depression may recur in adulthood according to life course perspective (Cherlin, Chase-Lansdale, and McRae 1998; Elder, Jr., and Liker 1982). It appears that underachievement and instable relationships discussed above result in depression after childhood, thus the distressing effect of parental divorce on adult psychological well-being persists throughout adulthood.

There are mainly three ways to explain the process that parental divorce affects well-being of adult children (Amato and Keith 1991a; Aseltine, Jr. 1996): (1) socioeconomic hardship perspective and (2) parental absence perspective, and (3) family and interpersonal conflict perspective. Divorce usually results in a decline of instrumental life quality, which is associated with psychological distress (Amato 1991a; Amato and Soblewski 2001). In the meanwhile this perspective provided inconsistent results according to family type after divorce, thus receives a modest support from the studies done so far (Amato 1993; Thompson, Hanson, and McClanahan 1994). Parental loss and family conflict perspective have received a relatively stronger support than socioeconomic hardship perspective (Amato and Keith 1991a; Amato 1993; Seltzer 1994; Vandewater and Lansford 1998). Even though both perspectives are slightly different each other, they commonly emphasize the role of sound relationship between parents and children and parental role as such a emotional resource for children, suggesting that children are inclined to be negatively influenced by parental divorce in terms of loss of emotional bond and basic human relationships. For this reason, it is possible that psychological vulnerability of children of divorce is because of a lack of psychosocial

resources for coping with parental divorce.

SOCIAL SUPPORT AND ITS IMPACT ON DEPRESSION

Because life events are experiences that compel the individual to readjust its role, several studies have demonstrated the counterbalancing role of social support for psychological well-being. Social support is defined as the sense of being someone important in the eyes of others, being cared and valued as a person, suggesting that it involves stable human relationships (Conwell 2004; Turner and Avison 1985). Because social support is mainly received through human relationships, social relationships and involvement based upon solidarity and collaboration may enhance social support (Edmonson 2003; Jacobson 1986). Numerous studies of social support and health have documented that social support is associated with psychological well-being (House, Umberson, and Landis 1988; Umberson, Chen, House, Hopkins, and Slaten 1996). Social support is positively related to mental health through emotional concern, instrumental help, information, appraisal companionship (Sherbourne and Hays 1990). There come to a consistent conclusion about the positive effect of social support on mental health but two issues are still unclear to determine: (1) whether buffering or main effect hypothesis is supported and (2) whether different impact of social support on life events is found.

The way that social support reduces depressive symptoms are explained in two ways: (1) buffering effect hypothesis and (2) main effect hypothesis. Buffering effect hypothesis suggests that social support only reduces depression level when specific life events or health risk factors are present, but main effect hypothesis posits that social support enhances the psychological well-being regardless of stress level (House, Umberson, and

Landis 1987; Suarez and Baker 1997; Thoits 1982). Both hypotheses have an empirical support to a certain extent. Singer and colleagues (1996) found that perceived availability of support played a protective role in preventing the negative effects of life events. Thoits (1984), however, provided the empirical evidence that emotional support had a significant negative main effect on changes in anxiety and depression but no buffering effect was found.

Social support is composed of multi-constructs, thus different types of social support may have different effects on psychological well-being (House 1987; Jacobson 1986; Turner and Marino 1994). In other words, even though the individual may benefit from social support on the whole, various types of social support might play a distinctive role in alleviating depressive symptoms dependent upon situations. Jackson (1992) documented that friend support and spouse support respectively alleviate different strains. Some study demonstrated that differential effect of social support is accounted for by diversity of participating groups (Greenberg, Seltzer, Krauss, and Kim 1997).

Considering mitigating effect of social support on psychological well-being, psychological vulnerability of children of divorce may be accounted for by insufficiency or loss of social support. Because contact with family is considered one of the critical social support (Ren, Skinner, Lee, and Kazis 1999), another type of social support may alleviate the deleterious effect of parental divorce on adult depression. Despite it, no studies have tested the coping effect of social support on depression of children of divorce. Some study used support and interpersonal variables to estimate intervening effects, but that research did not adopt a social support framework and social involvement

variables were not estimated (Ross and Mirowsky 1999). Two main issues of study of social support –main or buffer hypotheses and different effects of social support on depression- were not assessed either, in terms of moderating role of social support in depression of children of divorce.

Using nationally represented sample that include parental divorce information and various social support variables, I thus address each of these issues raised and extend understanding of social support and adult depression. I will test whether social support has a countering effect on depression of children of divorce. Testing the different effect of social support on depression, three types of social support are used: (1) Social relationship, (2) Social involvement, and (3) Intimate ties. I hypothesize that parental divorce in childhood is associated with high level of depression of adult child. If adult children receive social support benefit, undermining effect of parental divorce on adult depression will disappear or decrease; which indicates that social support moderates the disruptive effects of parental divorce on adult depression. It is hypothesized that the effect of social support on depression may be different according to the type of social support. Final hypothesis is that main effect is supported but buffering effect is not based upon previous studies.

DATA¹

Present paper uses the *1995 Survey of Aging, Status, and the Sense of Control* (ASOC) (Ross and Mirowsky 1999; Mirowsky and Ross 2001). These data are from national telephone probability sample of 2,592 U.S. households. Respondents were selected using a prescreened random-digit dialing method that decreased the probability of contacting a

business or nonworking number and decreased standard errors compared with the standard Mitofsky-Wksberg method while producing a sample with the same demographic profile. The ASOC survey had two subsamples designed to produce an 80% oversample which drew only from households with one of more adults aged 60 years or older. In the main sample, the adult 18 years or older was selected as respondent. In the oversample the senior 60 years or older was selected. The survey was restricted to English-speaking adults. Up to 10 call-backs were made to select and contact a respondent, and up to 10 call-backs were used to complete the interview once contact was made. Interviews were implemented with 71.6% of contacted and eligible persons: 73.0% for the main sample and 67.3% for the oversample. The final sample age range is from 18 to 95. Because the survey over-sampled respondents age 60 and older by 1.8, weight variable is used to retain the correct total numbers of respondents. ASOC sample is decently representative of the population, differing in the same ways as most surveys do in that it includes disproportionately more female, white, and middle-class.

MEASUREMENT

Table 1 shows the range, mean and standard deviation of all variables for the total sample by parental divorce status.

Dependent Variable

Depression is used to represent the psychological well-being (Ross and Mirowsky 1999). Depression is unpleasant subjective status that people generally want to avoid thus it includes feeling sad, demoralized, lonely, hopeless, or worthless status (Mirowsky and Ross 2003). In these data, depression is measured using a seven-item version of the

Center for Epidemiological Studies' scale of Depression. Respondents were asked "on how many days during the past week (0-7) have you: felt you just could not get going? Had trouble keeping your mind on what you were doing? Had trouble getting to sleep or staring asleep? Felt that everything was an effort? Felt lonely? Felt you could not shake the blues? Felt sad?" The first four items measure the malaise component of depression and the latter three measure mood. Level of depression is equal to the mean of all seven responses and range from zero to seven.

Explanatory Variables

Parental divorce is a main independent variable. It is measured by asking respondents, "thinking back to your childhood, were your parents divorced before 18 years old?" In order to control the effect of parental death, parental death was measured by asking the same question. Parental divorce and death is coded as a dummy variable. If parents were not divorced and dead, it is coded zero. Parental divorce is coded one and death of any parents is coded two. Even though marital discord prior to divorce is related to depression of adult children (Amato, Loomis, and Booth 1995), limited data hinder me from considering marital discord variable.

Three types of social support variable are administered to estimate different effects of social support on depression. For social relationship, respondents were asked about their agreement with the following statements: "I have someone I can turn to for support and understanding when things get rough," "I have someone I can really talk to," "I have someone who would help me out with things," and "I have someone who would take care of me if I were sick." Responses were coded from 1 to 4, where 1=strongly disagree,

2=disagree, 3=agree, and 4=strongly agree. The responses were averaged. Social involvement may contain both voluntary (informal) and involuntary (formal) participation but voluntary involvement is considered as social involvement here because individuals are more likely to receive emotional help and psychological support from it. Measuring social involvement of adult children, respondents were asked about “do you do volunteer work for a church, hospital, library, scouts, or other organizations,” and “do you ever participate in community service, neighborhood, or political organization.” If they do, it is coded one, otherwise zero. Intimate ties are measured using both marital status and marital quality of adult children. Measuring marital status, respondents were asked concerning their marital status. If they are intact, it is coded zero. Divorced or separated are coded one and never been married two. Benefits of marriage is from not only being married itself but also marital quality, marital quality is included to estimate subjective benefit of marriage (Wickrama, Lorenz, Conger, and Elder Jr. 1997). Marital quality variables were measured by asking married respondents, “How happy would you say you are with your marriage,” and “In the past 12 months, how often would you say that the thought of leaving your spouse crossed your mind?” Responses were initially coded from 1 (very happy) to 4 (very unhappy) for marital happiness question and from 1 (never) to 4 (often) for divorce proneness question. I recoded them inversely thus high scores indicate better marital quality.

Background Variable

Because I intend to estimate the association between parental divorce and depression, and protecting effect of social support variables, I control for socioeconomic variables known

to be covaried with explanatory variables. Gender 0=male; 1=female, Race 0=white; 1=non-white, Age in years, range 18 – 95, Education in years, range from 1-20 years, and Annual household income of exact dollar amount, range from \$600 to \$800,000.

RESULTS

Descriptive Result

The mean scores on explanatory variables are presented separately by parental divorce in Table 1. Most figures are not much different from ones of previous researches:

respondents whose parents are intact are more likely to be the socially advantaged. For respondents whose parents are divorced, they are more likely to be depressed, volunteer less, be involved in community less, female, non-white, younger, low-paid, and less educated. Concerning social relationship, children of divorce tend to have slightly more social relationships than children of intact ($p < .01$). It is unclear why children of divorce have much social relationships than children of intact. Marital status by parental divorce also presents a striking result. Respondents whose parents were intact are more likely to divorce than children of divorce: 31.8% of children of intact experienced divorce but 24.4% of children divorce did. One probable reason why this happens is that children of intact are older than children of divorce. Average age of children of divorce is 42.0, whereas mean age of children of intact is 54.3. I run the multinomial logit that uses respondents' marital status as dependent and parental divorce as independent variable. Without adjustment for age, odds that that divorced respondents over married respondents are 0.78 times for children who experience parental divorce, which is marginally significant ($z = -1.83, p = .067$). In the meanwhile, odds is changed insignificant ($b =$

1.156, $z = 1.02$, $p = .307$) with the adjustment for respondents age. Accordingly, because adult children of intact are older than ones of divorce and older adults are more likely to divorce, children of intact are relatively more divorced than children of divorce.

(Table 1 is about here)

Impacts of Parental Divorce on Depression

OLS regression is used for estimation in all models. Model 1 of Table 2 presents that adult children of divorce before they were 18 years old are more depressed than those from intact families. The relationship is significant with adjustment for parental death, sex, race, and family income: that is high level of depression reported by adult children of divorce is not solely because of effects of socioeconomic background factors. As shown in model 2, with adjustment for educational attainment, the association is reduced by 29% $((.193-.137)/.193)$ and in significance to $p < .10$. This result is almost identical to previous finding, indicating that education itself substantially mediates the association between parental divorce and offspring's depression (Ross and Miorowsky 1999).

Protecting Effects of Social Support and Association

As shown in Table 2, three kinds of social support variables are added to the original model respectively. In model 3, the addition of social relationship does not reduce the association, thus parental divorce is still related to more depressive symptoms. However, social relationship shows a significant countering effect on depression, suggesting that adult children may get psychological effect by having social relationships although it does not offset the effect of parental divorce. With the addition of social involvement variable to the original model, Model 4 reduces the original association by 12% $((.137-.123)/.137)$

and makes it insignificant. Social involvement offsets an impact of parental divorce on depression as well as shows a countering effect on depression. Differentiating the effect of volunteering and community service on depression, I run two regression analyses additionally (not shown here). With the adjustment for community involvement alone, the original association between parental divorce and depression does not vanish ($b = .136, p = .069$). On the contrary the effect parental divorce on depression is reduced to insignificant with the adjustment for volunteering ($b = .122, p = .101$). Both social involving behaviors show strong countering effects on depression (community service $b = -.162, p = .005$; volunteering $b = -.272, p = .000$).

Testing the effect of marital status, two separate models were analyzed. In the model 5, adults of divorce and non-married show more depressive symptoms but marital status does not reduce the original association. Because it is confirmed that married adult children is less likely to be depressed, I run the model 6 with the adjustment for the subjective marital quality only among married children. With the adjustment for marital happiness and divorce proneness, parental divorce is insignificant, indicating that marital happiness and divorce proneness have coping effect on depression. Additionally I ran two regression analyses with the adjustment of marital happiness and divorce proneness respectively to check their effects separately. Results (not shown) represent that the association between parental divorce and adult depression is insignificant in both models and they have a significant countering effect on depression (marital happiness $b = -.544, p = .000$; divorce proneness $b = -.375, p = .000$). This finding is consistent with previous one in that spouse support is the most effective source for buffering life stress (Jackson

1992). Accordingly, subjective intimate ties have a counteracting effect on depression, and accounts for psychological vulnerability of children of divorce.

(Table 2 is about here)

Testing Buffering and Main Effects of Social Support on Depression

It remains unclear whether social support has either buffering or counterbalancing (main) effect on depression. Determining which perspective receives empirical support, joint occurrence of parental divorce and each social support should be added and check the change of social support coefficients (Thoits 1984). If the product terms of social support and parental divorce explain the psychological vulnerability of individuals to parental divorce, in other words, if buffering effect hypothesis is supported, two points should be detected: (1) product terms should be significant and (2) R-square of equation containing joint occurrence should be greater than the original model (Thoits 1984). I ran four separate regression analyses including product terms of parental divorce and social support to model 3-6 in table 2. In all models, coefficients of social support remain significant almost same size with similar significance level except community service in model 4, whereas product terms are insignificant without exception, suggesting that joint occurrence of parental divorce and social support does not absorb the variance explained by the support indicator in original model. This result is consistent with what Thoits found (1984). Furthermore, adjusted R-squares of joint occurrence models decrease or modestly increase although product term is added respectively, which indicates that there is no difference of protection effect of social support regardless of presence of parental divorce². In short, findings in regression analyses with product terms of social support

and parental divorce is likely to support counterbalance (main) rather than buffer (moderating) perspective.

DISCUSSION

The main purpose of the present study is to examine the psychological vulnerability of adult children of divorce and social support as a protecting effect. I test four hypotheses to investigate main objective. I find the evidence that parental divorce is associated with a high level of adult depression with the adjustment for socioeconomic variables, indicating that psychological vulnerability of adult children of divorce is not entirely determined by background variables. On the whole, social support may decrease depressive symptoms regardless of type. Findings present that social support is likely to decrease the depressive symptoms in all models. If adult children child volunteer, participate in community service, and report better marital happiness and less divorce proneness, the parental divorce coefficients vanish to insignificance. Social relationship and marital status show counterbalancing effect on depression as well, but they do not alter size and significance of parental divorce coefficients. There being no evidence of buffering effect, main effect hypothesis is supported. It suggests that social support is likely to counterbalance the effects of parental divorce irrespective of joint occurrence of parental divorce and social support. Therefore all hypotheses get substantial empirical evidence.

Social support commonly has a protecting effect of adult depression, but its effect on psychological vulnerability is varied according to types of social support. Why does social relationship and marital status fail to offset the effect of parental divorce, but social involvement and marital quality render it happen? Since divorce is a part of family life

through which children lose kinship network and marks the end of one distinct stage in one's personal life and the beginning of another, family members should set up new rules and accept the changing role to overcome it (Ahron 1994). For this reason, social involvement may have stronger effect to overcome the negative part of parental divorce in that it may render them have new roles based upon human relationship, yielding the vanishing results. In addition, according to matching theory by Jackson (1992), the source of support should correspond to the source of the stress to work as alleviating role. Because marital quality as the source of support is matched to the source of the stress, it is probable that marital quality mitigate the stress from parental divorce. Whether adult children are married or not does not change the parental divorce coefficient because marriage is not always linked to decent social support.

No marital discord variable keeps me from testing the association between parental divorce and adult well-being. Divorce unusually plays a role in extricating children from parental conflict in some case (Jakielek 1998), thus divorce itself might not be associated with adult depression or even enhance mental health in some studies (Amato, Loomis, and Booth 1995). If social support is interacting with parental marital discord prior to divorce, the effect of social support on parental divorce would be changed. Estimating social relationship, interaction with friends, sibling, and relatives are probable sources of social support, whereas excessive missing values do not provide appropriate information.³

This paper contains a noteworthy policy implication, recalling the number of children of divorce. Even though the divorce rate is slightly decreasing currently, there are still a

great number of children who live a new life in a different setting. As shown in table 2, socioeconomic background variables do not completely account for psychological vulnerability from parental divorce, which means that emotional and relational help besides socioeconomic one are needed to cope with divorce stress. With this context, social involvement including volunteering and community service is an actual way to be considered. Further investigation concerning social involvement which operates to reduce depression is required.

Table 1. Descriptive Results by Parental Divorce

	Range	Mean	Standard Deviation	Means by Parental Divorce ^a	
				Children of Intact (N=2137)	Children of Divorce (N=391)
Dependent Variable					
Depression	0 – 7	.881	1.281	.832	1.083 **
Explanatory Variable					
Parental Divorce ^b	0 – 2	--	--	--	-- --
Social Relationships	1 – 4	3.288	.512	3.279	3.352 **
Volunteering	0 – 1	.402	.490	.419	.309 ***
Community Involvement	0 – 1	.400	.490	.406	.379
Marital Status ^b	0 – 2	--	--	--	-- --
Marital Happiness	1 – 4	3.749	.522	3.764	3.688 +
Divorce Proneness	1 – 4	3.516	.835	3.556	3.333 ***
Background Variables					
Female	0 – 1	.586	.493	.583	.578 ***
Non-White	0 – 1	.133	.340	.115	.208 ***
Age	18 – 95	52.568	18.703	54.326	42.018 ***
Family Income (\$1,000)	.6 – 80	42.181	45.326	42.605	41.007
Education	1 – 20	13.274	2.737	13.389	12.882 ***

+p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001

^a Asterisks indicate a significant difference between mean score between groups.

^b Parental Divorce and Marital status are coded as nominal variables : (0) non-divorced, (1) divorced, and (2) any parents death for Parental Divorce; (0) married, (1) divorced or separated, and (2) never-married for Marital Status

Table 2. Regression of Adult Depression on Childhood Parental Divorce, Social Relationship, Social Involvement, and Intimate Ties

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Parental Divorce ^a	.193 *	.137+	.155 *	.123	.134+	.058
	(.075)	(.074)	(.073)	(.074)	(.074)	(.075)
Parental Death ^a	.253	.189	.225	.184	.173	.175
	(.222)	(.219)	(.216)	(.219)	(.217)	(.250)
Female	.244 ***	.218 ***	.263 ***	.224 ***	.181 ***	.244 ***
	(.053)	(.052)	(.052)	(.052)	(.052)	(.054)
Non-White	.110	.083	.047	.068	.037	.010
	(.081)	(.080)	(.079)	(.079)	(.079)	(.087)
Age	-.004 **	-.006 ***	-.008 ***	-.005 ***	-.007 ***	-.004 *
	(.001)	(.001)	(.001)	(.001)	(.002)	(.002)
Family Income	-.002 ***	-.002 **	-.001 *	-.001 *	-.001 +	-.001 *
	(.001)	(.001)	(.001)	(.001)	(.001)	(.001)
Education	-- --	-.080 ***	-.071 ***	-.066 ***	-.076 ***	-.062 ***
		(.010)	(.010)	(.010)	(.010)	(.011)
Social Relationships	-- --	-- --	-.431 ***	-- --	-- --	-- --
			(.051)			
Volunteering	-- --	-- --	-- --	-.249 ***	-- --	-- --
				(.055)		
Community Service	-- --	-- --	-- --	-.099 +	-- --	-- --
				(.056)		
Divorced ^b	-- --	-- --	-- --	-- --	.388 ***	-- --
					(.061)	
Non-Married ^b	-- --	-- --	-- --	-- --	.257 ***	-- --
					(.080)	
Marital Happiness	-- --	-- --	-- --	-- --	-- --	-.243 ***
						(.039)
Divorce Proneness	-- --	-- --	-- --	-- --	-- --	-.348 ***
						(.061)
Constant	1.009 ***	2.14 ***	3.549 ***	2.079 ***	1.996 ***	3.852 ***
	(.093)	(.171)	(.237)	(.171)	(.174)	(.262)
Adjusted R ²	.025	.050	.077	.061	.067	.133

Note: Unstandardized regression coefficients, with standard error in parenthesis are shown.

+p < 0.10; *p < 0.05; **p < 0.01; ***p < 0.001

^a Omitted category is intact parent.

^b Omitted category is married.

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¹ More detailed information about data is available on webapp.icpsr.umich.edu/cocoon/ICPSR-STUDY/03334.xml.

² Because all product terms are insignificant and no evidence is found to support buffering hypothesis, I do not include the regression results. Full regression results including product terms are available on request.

³ In order to measure interaction with friends and relatives, respondents were asked 'how often do you visit in person with friends or relatives including visits with neighbors or social lunches with co-workers?' Among 2,592 respondents, only 89 (3% of whole sample) reported their information, thus I do not include this variables as social involvement or social relationship variable.