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Family Structure and Mental Health: The Mediating Effects of Socioeconomic Status, Family Process, and Social Stress*

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Although numerous studies reveal differences in mental health by the structure of one's family of origin, there remains debate regarding the processes generating these patterns. Using a sample of young adults (19–21 years) in Miami-Dade County in Florida, this study examines the explanatory significance of three presumed correlates of family type: socioeconomic status, family processes, and level of social stress. Consistent with prior research, our results reveal higher levels of depressive symptoms among those from stepfamilies, single parent families, and single parent families with other relatives present, compared with mother-father families. All three presumed correlates make significant independent contributions to the prediction of depressive symptomatology. Substantial mediating effects also are observed for all three explanatory dimensions. Collectively, they completely or largely explain observed family type variations in mental health risk.

Shifts in the prevalence of various family forms, particularly increases in single parent households and stepfamilies over the past several decades (Fields and Casper 2001; Glick 1990), have spawned much interest in the effect of family structure on mental health. The resulting literature suggests that the composition of one's family of origin influences the risk of depression (Aseltine 1996; Garnefski and Diekstra 1997; Gilman et al. 2003; Gore, Aseltine, and Colton 1992; Spruijt and de Goede 1997). Moreover, it appears that the impact of family structure is not limited to childhood but influences psychological well-being over the life course (Amato 1991; Cherlin, Chase-Lansdale, and McRae 1998; Kuh et al. 2002; McLeod 1991).

Although there are exceptions (e.g., Fawzey et al. 1987; Hauser and Sweeney 1997; Patten

et al. 1997), the great majority of studies find mother-father families to afford the greatest protection against mental health problems (Adlaf and Ivis 1996; Albrecht, Amey, and Miller 1996; Aseltine 1996; Flewelling and Bauman 1990; Garnefski and Diekstra 1997; Gore et al. 1992; Needle, Su, and Doherty 1990; Spruijt and de Goede 1997; Suh, Schutz, and Johanson 1996). Fewer studies compare different forms of nonintact families; however, there is some indication that the absence of both parents provides the least protection (Adlaf and Ivis 1996; Albrecht et al. 1996; Spruijt and de Goede 1997) and that the mental health disadvantage may be greater for single parent than stepfamilies (Adlaf and Ivis 1996; Amey and Albrecht 1998; Aseltine 1996; Spruijt and de Goede 1997).

Although research reveals fairly consistent patterns in the relationship between family configuration and mental health, there is less agreement over the social, psychological, and economic mechanisms that may underlie these differences. Many studies focus on characteristics of family relationships, or "family

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processes," such as family cohesion (Kashani et al. 1987; McKeown et al. 1997; Needle et al. 1990) and perceived support from family members (Mason and Windle 2001; Patten et al. 1997; Swaim, Bates, and Chavez 1998). Indeed, there is evidence that such processes vary across family configurations and provide at least a partial explanation for observed mental health differences (Adlaf and Ivis 1996; Aseltine 1996; Farber, Felner, and Primavera 1985; McKeown et al. 1997; Turner, Irwin, and Millstein 1991). Another explanation receiving support centers on differences, particularly between single and two-parent families, in the level of socioeconomic resources (Albrecht et al. 1996; Flewelling and Bauman 1990; Gil, Vega, and Biafora 1998; McLanahan 1997; Spruijt and de Goede 1997).

A third prominent explanation focuses on differential exposure to social stress. However, studies examining this possibility tend to employ a limited range of indicators, most commonly negative life events experienced in the past year (e.g., Aseltine 1996; Barrera, Li, and Chassin 1995; Gore et al. 1992) and chronic strains (e.g., Gore et al. 1992). Such research has not considered other forms of stressors that predict mental health and that are likely to vary by family structure, such as lifetime exposure to major and potentially traumatic events (Turner and Avison 2003; Turner and Lloyd 1995; Wheaton 1999) and perceived discrimination (Pavalko, Mossakowski, and Hamilton 2003; Ren, Amick, and Williams 1999; Taylor and Turner 2002; Williams et al. 1997).

This study employs a more comprehensive assessment of variations in stress exposure to evaluate the stress hypothesis and consider its contribution relative to the other two prominent explanations for mental health differences across family types. The fundamental question is whether family type is associated with the subsequent mental health of children largely or wholly because it is a marker of elevated risk for low socioeconomic status (SES), problematic family relationships, and high levels of exposure to social stress.

BACKGROUND

Variations in mental health have been linked with an array of social psychological processes in one's family of origin, including parental conflict and affection (Amato and Sobolewski 2001;

Barrera et al. 1995; Gilman et al. 2003), family conflict (Aseltine 1996), emotional detachment from parents (Catalano et al. 1992; Turner et al. 1991), perceived family support (Mason and Windle 2001; Pattern et al. 1997; Swaim et al. 1998), family cohesion (Kashani et al. 1987; McKeown et al. 1997; Needle et al. 1990), family adaptability (Garrison et al. 1990), parenting style (Aquilino and Supple 2001; Steinberg et al. 1991), and time spent with family (Adlaf and Ivis 1996). Evidence that family processes, as reported by both parents and children, vary by family structure raises the possibility that the link between family structure and mental health is an artifact of associated differences in the quality of family relationships. As illustrations, parents in first marriages report better parent-child relationships than do stepparents (Fine, Voydanoff, and Donnelly 1994), and adolescents in families with both parents present report greater family cohesion than their peers in other types of families (McKeown et al. 1997). Family processes also vary depending on whether other relatives reside in the household. For example, Chase-Lansdale and colleagues (1994) report lower parenting quality by mothers and grandmothers in families in which three generations live together. However, mothers who gave birth in their early teens are an exception to this pattern.

Several studies directly examine the mediating role of family processes, with results consistently indicating a reduction in the strength of the family structure-mental health association when family process variables are included in models. However, studies differ in the reported magnitude of this mediating effect. Some find family structure is not significant when quality of family relationships is controlled, leading to the conclusion that it is family process and not family composition that matters most for mental health (Adlaf and Ivis 1996; Farber et al. 1985; McKeown et al. 1997). However, other studies report significant family structure effects independent of assessed family relationships, suggesting that associated differences in family processes do not fully explain family type variations in mental health (Amey and Albrecht 1998; Gil et al. 1998; Needle et al. 1990; Turner et al. 1991).

Because childhood poverty is an established risk factor for mental health problems in adolescence and adulthood (Gilman et al. 2003; McLanahan 1997), the wide disparity in socioeconomic resources across family types raises

another plausible explanation for mental health differences. Approximately 30 percent of all children live in families with annual incomes below \$30,000; however, there are striking differences by family structure. Only 15 percent of children in two-parent families live in lowincome families, compared with 65 percent of single mother families, 45 percent of single father families, and 61 percent of households with neither parent present (Fields 2003). Household income also is associated with the residence of other relatives in the household, but the relationship depends on whether parents are also present. For example, between 12 and 15 percent of children living with their grandparents and parents have family incomes below the poverty level, compared with 30 percent of children living only with their grandparents (Fields 2003). Socioeconomic resources are less likely to play a central role in explaining the apparently higher level of psychological distress among individuals from stepfamilies, given that the median household income of stepchildren under age 18 (\$50,900) compares favorably with that of children living with both biological parents (\$48,200; Kreider 2003).

Although wide disparities in socioeconomic resources underscore their potential significance for understanding some of the observed family structure differences in mental health, accumulated evidence suggests that SES differences provide only a partial explanation (Albrecht et al. 1996; Amey and Albrecht 1998; Flewelling and Bauman 1990; Gil et al. 1998; Gore et al. 1992; McLanahan 1997; Sokol-Katz and Ulbrich 1992; Spruijt and de Goede 1997; Suh et al. 1996). This conclusion is supported by studies employing various indicators of SES, including parental education (Flewelling and Bauman 1990), family income (Amey and Albrecht 1998; Spruijt and de Goede 1997; Suh et al. 1996), income-to-needs ratio (Sokol-Katz and Ulbrich 1992), or a combination of indicators (Gil et al. 1998; Gore et al. 1992).

In contrast to research on SES and family processes, the possible role of differential exposure to social stress has received relatively limited attention. This is surprising given the implicit assumption that appears to underlie many investigations and perspectives, namely that living in a single parent family or experiencing family transitions such as divorce or remarriage can generate considerable stress. For example, stressors associated with living in a single parent family might include stigma and

reduced contact with the nonresident parent, along with a problematic economic circumstance characterized by financial strain and increased risk of exposure to violence. Although empirical examinations of stress as a mediator of the family structure-mental health relationship are relatively few, evidence makes it clear that greater exposure to negative life events (e.g., Barrera et al. 1995; Gore et al. 1992) and chronic strains (e.g., Gore et al. 1992; Turner, Wheaton, and Lloyd 1995) is predictive of worse mental health. Research also suggests that exposure to these sources of stress may vary by family composition (Aseltine 1996; Gore et al. 1992). For example, in their study of high school students in the Boston area, Gore and colleagues (1992) find that respondents in step- or single parent families, compared with those from mother-father families, report more life events occurring over the past year in their own lives, as well as the lives of friends and family members.

The few prior studies that address this issue support the hypothesis that differences in exposure to social stress mediate the relationship between mental health and the configuration of one's family of origin. Gore and colleagues (1992) find that respondents in step- and single parent households report more depressive symptoms and that stressful events and chronic strains are predictive of depressive symptomatology. An analysis from the same study, utilizing a second wave of data, focuses more directly on mediating effects. Aseltine (1996) reports that a single item measuring respondents' assessments of financial problems plays the largest role in accounting for the elevated depressive symptoms of those from single parent families. Life events occurring in the past year to the respondent or her or his family exhibit a weaker mediating effect, but one that is stronger than that of family processes.

A limitation of this literature is its focus on recent life events as a means for indexing differences in stress exposure. As the review by Sandler and Guenther (1985) makes clear, the adequacy of life event checklists and the advisability of alternative approaches to measuring social stress have been actively debated for more than three decades. More recently, several researchers argue that recent life events alone, however adequately assessed, cannot meaningfully evaluate variations in stress exposure (McLean and Link 1994; Wheaton 1994). Consistent with this argument, research

indicates that, compared to life event checklists, multidimensional measures of stress exposure that add assessments of an array of chronic stressors and lifetime exposure to potentially traumatic events account for dramatically higher proportions of observed variation in mental health outcomes (Turner and Lloyd 1999; Turner et al. 1995; Wheaton 1994) and more of the disparity in such outcomes across SES, marital status, and gender (Turner et al. 1995). This latter finding implies that checklist measures may yield biased estimates of exposure for certain status categories. Recent evidence based on the present data set demonstrates that event checklists somewhat overestimate stress exposure among women relative to men while dramatically underestimating stress exposure among African Americans relative to whites and among persons of low SES relative to their more advantaged counterparts (Turner and Avison 2003).

A striking omission in the family and health literature is the virtual absence of studies of stress resulting from discrimination (Murry et al. 2001). There are at least two reasons to expect differences in discrimination to be implicated in the relationship between family structure and mental health. First, the clear race-ethnic differences in family structure (Fields 2003) and the greater exposure of nonwhites to all forms of discrimination (Kessler, Mickelson, and Williams 1999) suggest that individuals from single parent families are more likely to experience discrimination and suffer its negative effects on socioeconomic achievement. Differential exposure to discrimination also may stem from persisting stigma associated with various nontraditional family forms despite their increasing prevalence. Qualitative work has shown that single parents tend to be faced with both negative stereotypes and unfair treatment (Sidel 1998). Moreover, because over 60 percent of the recipients of public assistance are single mothers (Fields 2003), the highly stigmatized statuses of "single mother" and "welfare recipient" are closely connected in our culture, contributing to the stereotype of single mothers as "lazy" and "unmotivated" (Seccombe, James, and Walters 1998).

The general findings of this literature (suggesting that each of the three factors is implicated in the family structure—mental health association) raise questions about the complex causal relationships that are likely to link family composition, mental health, SES, family

processes, and social stress. Not only is family structure a determinant of SES, quality of family relations, and stress exposure, but each of these factors also may have had some influence on family composition. Introducing further complexity, bidirectional relationships are likely among SES, family processes, and stress exposure. For example, Murry and colleagues (2001) report that mothers' experiences with discrimination are negatively associated with supportive mother-child relationships. Correspondingly, it is clear that stress, particularly chronic stress, arises out of the context of people's lives, which is importantly, if partially, represented by the structure and processes of one's family context. While acknowledging this complexity, we argue that conclusions with respect to the meaning and implications of observed family structure differences in mental health can be advanced by the simultaneous consideration of all three prominent hypotheses, including assessment of their independent and joint explanatory significance. We need to know whether family type is simply a marker of elevation in risk for low SES, high stress exposure, or unsupportive family processes, or whether it represents a circumstance of independent significance.

Using data obtained from a large, representative community-based sample of young adults, this article examines variations in depression among individuals raised in two-parent biological families, single parent families, single parent families that include other relatives, and stepfamilies. Our primary focus is on evaluating the relative significance of the three major hypotheses that have been offered to explain family structure differences in mental health: associated family processes, economic disadvantage, and exposure to social stress. This latter hypothesis is assessed based on a more comprehensive assessment of differences in exposure than previously employed, including recent life events to self and significant others, chronic stress experienced in a variety of domains, lifetime exposure to major and potentially traumatic events, and perceived discrimination.

METHOD

Data

This article is based on data from a representative sample of young adults in a South

Florida community, most of whom had been studied five to seven years earlier (Vega and Gil 1998). Between 1998 and 2000, we interviewed 1.803 respondents between 18 and 23 years of age (92 percent were between 19 and 21 years), and all analyses presented here are based on data from those interviews. A noteworthy feature of this sample is its race-ethnic composition. The sample was drawn such that approximately 25 percent are of Cuban origin, 25 percent other Caribbean basin Hispanic, 25 percent African American, and 25 percent non-Hispanic white. Our approach in drawing this sample is in accord with a growing consensus in the field that race is more a social categorization akin to ethnic status than it is a biological categorization (Williams 1997; Williams, Spencer, and Jackson 1999) and that there are important cultural variations within ethnic statuses. In an effort to minimize the effects of such variations on results, we have distinguished Cubans from other Hispanics and limited inclusion within this latter category to Hispanics from countries in the Caribbean basin (i.e., Cuba, Columbia, Mexico, Dominican Republic, Nicaragua, Guatemala, and El Salvador). For the same reason, Haitians and other Caribbean blacks were not studied and are not included in the African American subsample.

Overall, 70.1 percent of those sampled were successfully recruited into the study. Most interviews were carried out face-to-face in the homes of respondents, with 30 percent conducted by telephone aided by mailed response booklets. Consistent with the bulk of evidence that inperson and phone interviews yield comparable data (Aktan et al. 1997; Midanik et al. 1999; Rohde, Lewinsohn, and Seeley 1997), our analyses revealed no association between interviewing mode and the presence versus absence of an affective or anxiety diagnosis (.25 and .27 prevalence for in-person and phone interviews, respectively; the difference is not significant, i.e., p > .05). Although we observed a slight difference in number of reported adversities across interviewing mode (8.4 versus 7.8 for in-person and phone interviews, respectively; p < .05), the fact that the higher stress exposure corresponds with a lower prevalence of disorder suggests an absence of bias associated with interviewing mode. A more detailed description of the sample and of study field procedures has been presented previously (Turner and Avison 2003; Turner, Taylor, and Van Gundy 2004). The study sample includes 1,751 respondents. For the present analyses, the data are weighted to population values with respect to gender and race-ethnicity.

Measures

Respondents were asked to indicate with which of the following family members they lived between the ages of 13 and 18: mother, father, stepmother, stepfather, grandmother, grandfather, aunt, uncle, sister, brother, foster parent, or other person. Because the data did not permit the determination of whether brothers, sisters, or "other persons" acted in caretaking roles and too few respondents reported living in foster families, these responses were not examined. As many combinations were too infrequent to permit separate analysis, they were collapsed, where possible, into four family types: mother-father families, single parent families, extended single parent families (i.e., single parent families that include other relatives), and families that include a stepparent.

We assess depressive symptomatology using a modified version of the 20-item Center for Epidemiologic Studies Depression Scale (CES-D; Radloff 1977). Rather than referring to the preceding week, this version asks respondents how often in the past month they experienced each of 20 symptoms. Response categories were "not at all," "occasionally," "frequently," and "almost all of the time." The use of a one-month time frame provides a larger sample of recent experience and conforms to the shortest period over which the community prevalence of depressive disorder has been estimated.

In the models presented in this article, the responses were coded 0 if "not at all" or "occasionally," 1 if "frequently," and 2 if "almost all of the time." This modified coding scheme was adopted based on two considerations. First, although the infrequent or mild experience of symptoms presumably involves some emotional discomfort, understanding discomfort does not represent a major research objective. The argument that subclinical depression or distress, like psychiatric disorders, is a substantively important subject for investigation is supported by compelling evidence that high levels of persistent symptomatology undermine the performance of such core social roles as parent, worker, and spouse/partner (Hardy, Woods, and Wall 2003; Lyons-Ruth et al. 1986; Oliver and Berger 1992; Stewart et al. 2003). Symptoms that are experienced only "occasionally" (or "1 or 2 days per week" where a one week reporting frame is employed) do not, we argue, materially affect such role performance. Second, analyses suggested a significant socioeconomic status and racial bias with respect to the tendency to report symptoms experienced only occasionally. African Americans and persons of lower SES were less likely to report occasional symptoms, compared with whites and the more socioeconomically advantaged (see Turner and Avison 2003; Turner et al. 2004). In the present data, the internal reliability is .82 for the scale of depressive symptoms.

We estimate socioeconomic status using a composite score based on parents' income level, occupational category (Hollingshead 1957), and educational attainment. These data are from parental reports rather than the young adult participants, except where interviews with a parent could not be obtained. Thirty-minute parent telephone interviews were conducted in all instances in which both the participant and parent consented. A total of 1,200 parent interviews (66 percent) were completed. Scores on the three status dimensions were standardized, summed, and divided by the number of status dimensions for which data were available.

Family processes are assessed in terms of three dimensions. Positive family support is a scale of eight items ($\alpha = .90$) indexing the degree to which the respondent feels loved and cared for by her or his family. Family negativity is a scale of five items ($\alpha = .82$) measuring the extent to which the respondent feels that her or his family, for example, criticizes or places excessive demands on her or him. Family cohesion is a five-item scale ($\alpha = .86$) indicating the respondent's view of the degree to which family members share values, loyalty, and pride. Higher values on cohesion and positive family support indicate more supportive family relationships while higher values on family negativity reflect worse relationships.

The four measures of stress exposure employed in these analyses have been described in detail elsewhere (Turner and Avison 2003). They are lifetime major and potentially traumatic events, recent life events, chronic stress, and discrimination stress. *Life traumas* is a count of up to 41 events that the respondent has ever experienced, for example, experiencing or witnessing violence. The count includes seven items referring to the lifetime experience of major

forms of discrimination. Recent life events is a count of up to 33 events that have occurred in the past year, such as going on welfare. These include events occurring in the life of the respondent or her or his spouse/partner, parents, relatives, or close friends. Chronic stress is a count of up to 36 ongoing stresses. Everyday discrimination is measured by nine items referring to unfair treatment of a more chronic than episodic nature, such as being treated with less respect than others. The mean of responses to the items (ranging from 1 = never to 5 = almost always) is used in analyses.

We employ simple counts of events and stressors despite the obvious fact of substantial intraand interevent variability in stress-evoking
potential. As has been widely noted, "despite
repeated and widespread attempts to prove
otherwise, the best conclusion from the existing research concerning the effectiveness of differential weighting using current approaches
is that weighted indices do not generally increase
the correlation with outcomes, whether using
objective or (surprisingly) subjective weights"
(Turner and Wheaton 1995:43; see also Ross
and Mirowsky 1979; Shrout 1981).

The objection to subjective or self-reported weights is that they are sometimes confounded with outcomes and inevitably confuse stress exposure with coping ability. As Turner and Wheaton (1995) have argued, "the weight attached by a respondent to an event will be largely a function of her or his capacity, real or perceived, to resolve that event in emotional or practical terms" and "such capacity is a function of coping skills and of the availability of social and personal resources" (p. 44). Consistent with standard practice in the field, we count the total number of reported events, chronic stressors, and discrimination experiences to represent variations in objective cumulative exposure to adversity across individuals. We hypothesize a dose-response relationship between such exposure and level of depressive symptoms.

Analytic Strategy

We use ordinary least squares regression to model the association between family structure and depressive symptoms. As our previous discussion implies, we treat factors that have been shown to be correlated with family structure and depression as mediators of the family structure—mental health link. Because of our

interest in examining mediating effects, we enter variables in several steps. First, we regress depressive symptoms on gender and race-ethnicity. The next step adds family structure variables. Each of the three subsequent steps permits the test of a potential explanation for the association between family composition and mental health. While these three steps allow the separate consideration of the contributions of SES, family process, and social stress to the prediction of depression and in mediating the family structure-depression relationship, the final equation includes all the hypothesized mediators simultaneously. In addition to examining the hypothesized mediators' independent and joint contributions to explaining the family structure-depression association, we also consider potential interactions among SES, family process, and social stress.

RESULTS

Table 1 reports differences in depression and the hypothesized mediators by family structure. Respondents from single parent families that contain other relatives report the highest average levels of depressive symptoms, while those from mother-father families report the lowest levels. Race-ethnic differences in family structure are consistent with current demographic patterns. Significantly higher proportions of white and Cuban respondents (approximately two-thirds of each group) lived in mother-father families during adolescence, compared with African Americans and non-Cuban Hispanics. Both types of single parent families are more prevalent among African Americans than respondents from other race-ethnic groups; over half of African Americans grew up in single parent families. Race-ethnic differences in the prevalence of stepfamilies are less striking;

TABLE 1. Means of Variables by Family Structure

	Mother-Father Families (N = 973)	Single Parent Families (N = 384)	Single Parent Families + Other Relative(s) (N = 168)	Stepfamilies (N = 226)
Depressive symptoms	3.256 ^{b, c, d}	3.979 ^{a, c}	5.009 ^{a, b}	4.234ª
	(3.91)	(4.39)	(4.99)	(5.02)
Female	.464 ^{c, d}	.490 ^d	.551ª	.577 ^{a, b}
White	.690 ^{g, h}	.167 ^h	.016 ^{f, g, h}	.127
Cuban	.627 ^{g, h}	.160 ^h	.070 ^{e, h}	.143
Other Hispanic	.559 ^{e, f, h}	.205 ^h	.079 ^{e, h}	.156 ^h
African American	.353 ^{e, f, g}	.329e, f, g	.218 ^{e, f, g}	.100g
Socioeconomic status	.196 ^{b, c}	205 ^{a, d}	$340^{a, d}$.103 ^{b, c}
	(1.00)	(.88)	(.82)	(.90)
Family negativity	2.867 ^{c, d}	2.943°	3.131 ^{a, b}	3.002a
	(.95)	(.89)	(.96)	(.95)
Positive family support	4.466b, c, d	4.250 ^a	4.258a	4.272a
	(.59)	(.72)	(.76)	(.67)
Family cohesion	3.337b, c, d	3.124ª	3.081ª	3.186a
	(.55)	(.60)	(.63)	(.59)
Lifetime traumas	7.210 ^{b, c, d}	10.278ª	10.483a	9.899ª
	(5.08)	(5.43)	(5.23)	(5.20)
Chronic stress	8.237 ^{b, c}	9.012ª	9.039a	8.494
	(4.62)	(4.92)	(4.95)	(4.45)
Recent life events	3.502b, c, d	4.197ª	4.036a	4.200a
	(2.83)	(3.17)	(2.74)	(3.12)
Everyday discrimination	1.910 ^{b, c}	2.061a	2.057ª	1.991
	(.57)	(.64)	(.63)	(.63)

Note: Standard deviations are in parentheses; p < .05.

^a Significantly different from mother-father families.

^b Significantly different from single parent families.

^c Significantly different from single parent families with other(s).

^d Significantly different from stepfamilies.

e Significantly different from whites.

f Significantly different from Cubans.

⁸ Significantly different from non-Cuban Hispanics.

h Significantly different from African Americans.

however, a significantly higher proportion of non-Cuban Hispanics lived in a stepfamily, compared with African American respondents. Significant differences in gender by family type also are found; a higher percentage of respondents from extended single parent families or stepfamilies are female. These findings emphasize the importance of controlling for gender and race-ethnicity in subsequent analyses.

Bivariate results are generally consistent with all three explanatory hypotheses. Relative to mother-father families, other family types tend to be disadvantaged by relatively high levels of social stress and less supportive relationships with family members. Except for the results for stepfamilies, the findings on SES are also consistent with the argument that family structure differences in depression arise from variations in economic circumstance.

The results of the regression of depressive symptoms on family structure and hypothesized

mediators are presented in Table 2. As shown in model 1, reporting more symptoms is significantly associated with being female and nonwhite. Controlling for gender and race-ethnicity, model 2 indicates that young adults who were reared in single parent families, including those that contain another relative, and stepfamilies report significantly more depressive symptoms than those from mother-father families. It is noted that the difference between the two types of single parent families falls short of statistical significance (p = .11; analyses not shown). Model 2 reveals modest declines in the race-ethnicity coefficients, suggesting that the higher level of symptoms among nonwhites, particularly African Americans, can be partially attributed to race-ethnic differences in family structure.

Model 3 indicates that, not surprisingly, higher SES of family of origin is associated with reporting significantly fewer depressive symptoms.

TABLE 2. Ordinary Least Squares Regression of Depressive Symptoms on Family Structure and Hypothesized Mediators, Unstandardized Coefficient (standard error)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Single parent family ^a		.100*	.056	.029	.008	039
		(.05)	(.05)	(.05)	(.05)	(.04)
Single parent + other relative(s) ^a		.216**	.167*	.117†	.142	.078
		(.07)	(.07)	(.06)	(.06)	(.06)
Stepfamily ^a		.116*	.110†	.046	.041	.016
		(.06)	(.06)	(.05)	(.05)	(.05)
Female	.324***	.315***	.317***	.307***	.337***	.327***
	(.04)	(.04)	(.04)	(.04)	(.04)	(.04)
Cuban ^b	.227***	.214***	.102†	.175***	.203***	.111*
	(.06)	(.06)	(.06)	(.05)	(.05)	(.05)
Other Hispanic ^b	.311***	.291***	.171**	.227***	.233***	.134*
	(.06)	(.06)	(.06)	(.05)	(.05)	(.05)
African American ^b	.482***	.425***	.308***	.387***	.306***	.240***
	(.06)	(.06)	(.06)	(.06)	(.05)	(.06)
Socioeconomic status			1 40***		_	096***
			(.02)			(.02)
Family negativity				.164***	_	.072***
				(.02)		(.02)
Positive family support				209***	_	161 ***
				(.04)		(.04)
Family cohesion				078†		001
				(.04)		(.04)
Lifetime traumas					.013**	.009*
					(00.)	(00.)
Chronic stress					.040***	.030***
					(00.)	(00.)
Recent life events					.027***	.026***
					(.01)	(.01)
Everyday discrimination					.166***	.132***
					(.03)	(.03)
R-squared	.08	.09	.11	.19	.23	.27

 $[\]dagger p < .10; *p < .05; **p < .01; ***p < .001$

Note: Log (depressive symptoms + 1); N = 1,751.

^a Mother-father families = reference group.

^b White = reference group.

Moreover, SES provides a partial explanation for the elevated symptoms faced by those in single parent families, particularly those that do not include other relatives. The coefficient for this family form falls by 44 percent and is no longer significant. In contrast, the coefficient for extended single parent families declines by only 23 percent and remains statistically significant. As anticipated, SES plays a smaller role in accounting for the worse mental health of those from stepfamilies; the coefficient declines by only 5 percent and remains marginally significant. It is also noted that, although all the race-ethnicity coefficients are significant in model 3, SES partially mediates the relationship between race-ethnicity and depressive symptoms. The coefficients for Cubans, other Hispanics, and African Americans fall by 52, 41, and 28 percent, respectively. The SES measure is a composite of parental education, occupational status, and household income. Additional analyses (not shown) examined the independent contribution of each component to the association between family structure and mental health. The results indicate that no one indicator of parental SES plays a particularly important role, and the mediating effect exerted by the combined measure is larger than that of any individual component.

As expected, model 4 reveals that more negative family support and lower levels of positive family support are associated with reporting significantly more depressive symptoms. Although the effect of family cohesion is in the expected direction, the coefficient is not significant. Compared with SES, family processes account for a larger proportion of the higher symptoms among respondents from single parent families and stepfamilies. The coefficients for single parent families and stepfamilies decline by 71 and 60 percent, respectively. Although family processes, as measured here, cannot completely account for the higher symptoms of respondents from extended single parent families, the coefficient for this family type falls by 46 percent. Additional analyses (not presented) reveal that the positive aspects of family process play a larger role in generating these mediating effects than the negative dimension. Results also suggest that family process partially explains race differences in depressive symptoms; coefficients for Cubans, other Hispanics, and African Americans decline by 18, 22, and 9 percent, respectively.

Model 5 indicates that stress exposure not

only is associated with depressive symptoms but also contributes substantially toward explaining the elevation in symptoms reported by those in step- and single parent families. Reporting more lifetime traumas, chronic stress, recent life events, and everyday discrimination is associated with having more depressive symptoms. Moreover, virtually all of the higher symptomatology experienced by respondents from single parent families and nearly two-thirds of the higher symptomatology observed among those from stepfamilies can be attributed to their relatively greater exposure to social stress. Comparing the results from models 3 through 5 for these two family forms suggests that the mediating effect of differences in social stress is greater than that of either SES or family processes. Although a considerable reduction also is observed in the coefficient for extended single parent families (i.e., 34 percent), this decline is somewhat smaller than that observed with the inclusion of family process variables (i.e., 46 percent). Further analyses (not presented) reveal that the higher level of lifetime traumas experienced by respondents in single parent families and stepfamilies plays a larger role than other stress dimensions in explaining their higher level of depressive symptoms. Stress also mediates the association between race-ethnicity and depressive symptoms, primarily for African Americans and non-Cuban Hispanics (i.e., 28 and 20 percent declines in the coefficients, respectively), indicating that these groups experience worse mental health, in part, as a result of their greater exposure to stress, particularly lifetime traumas. With all the hypothesized mediators included in model 6, the higher mental health risk among all family types relative to two-parent families is either totally or largely explained.

The models presented examine the independent and joint contributions of SES, family process, and social stress to the explanation of the family structure—mental health association. However, it is likely that these factors interact to influence mental health. For this reason, we also examine models that include interactions among SES, family process, and social stress. The results (not shown) indicate that SES interacts not only with the positive dimensions of family process but also with social stress. The protective effects of family support and cohesion are greater at higher levels of SES, while the detrimental effects of recent life events and everyday discrimination are greater among the

more advantaged. In addition, social stress interacts with the negative dimension of family process; the association of depressive symptoms with traumas, chronic stress, and recent life events is weaker among those reporting high levels of family negativity. Although the finding of significant interaction effects is intriguing, caution is required in their interpretation; the models from which they are derived hold constant other factors associated with depressive symptoms, a condition unlikely to be found in the population.

DISCUSSION

The starting point for this study was the accumulated evidence that the type of family in which one grows up is associated with differences in risk for mental health problems. Our goal was to confirm this linkage within a large and ethnically diverse cohort of young adults and to assess the relative significance of the three principal explanatory hypotheses that have been offered: differences in socioeconomic resources, family processes, and exposure to social stress.

Consistent with prior research, we found lower levels of depressive symptoms among young adults from mother-father families compared to all other family forms. We began our consideration of potentially contributing factors with bivariate analyses. We found that respondents from step- and single parent families tend to report more stressful events and less supportive family relationships than those from mother-father families. Although differences in socioeconomic resources between stepfamilies and mother-father families do not reach significance, single parent families clearly have fewer resources than other family types. Regression analyses continued to provide support for each of the three explanations. The significantly higher level of depressive symptoms reported by those from step- and single parent families is partially explained by the separate consideration of associated differences in socioeconomic resources, family processes, and social stress. Taken together, the three hypothesized mediating factors either wholly or largely explain observed differences in depressive symptoms between those from mother-father and other family forms.

Importantly, for two of the contrasts with mother-father families—single parent families

that do not contain other relatives and stepfamilies—the largest mediating effects are found for social stress. Controlling for stress exposure alone, the coefficients for these family configurations are reduced by 92 and 65 percent, respectively, and they are no longer significant. Although the coefficient for those living in an extended single parent family remains significant, it is reduced by approximately a third. All measures of stress examined in this study—lifetime traumas, recent life events, chronic stress, and everyday discriminationare significant predictors of depressive symptoms. However, analyses in which each stress dimension is considered separately indicate that it is lifetime exposure to major and potentially traumatic events that is of primary explanatory significance.

In light of prior work attributing the relationship between family structure and mental health to microlevel dynamics within families, our findings on differential exposure to stress are particularly noteworthy. The results suggest that family structure can be viewed not only as a marker of family processes that are associated with mental health but also as an indicator of the degree of stress that tends to be encountered by individuals in differing family contexts. Although our study reveals the central importance of stress, particularly potentially traumatic events, work is needed that examines the social processes leading to differential stress exposure by family type. As illustrations, single parent families may tend to be embedded in neighborhood and school contexts that expose them to greater risk of violence, while the absence of biological ties and clear norms regarding roles in stepfamilies may create conditions that increase the risk of violence within the family.

Despite clear evidence of their independent mental health significance, the three broad explanatory constructs are hardly independent from one another. For example, there is evidence that stress tends to diminish the quality of family relationships (e.g., Conger et al. 1994; Murry et al. 2001), suggesting that stress may influence mental health partially through the erosion of supportive family ties. This could explain the findings of prior work which, in the absence of stress measures, led to the conclusion that differences in family processes explain variations in mental health by family structure (e.g., Adlaf and Ivis 1996; Farber et al. 1985; McKeown et al. 1997). Clearly, much remains

to be learned about the causal associations linking family structure, SES, social stress, family processes, and mental health.

In addition to illuminating risk/protective factors that mediate the family structure-mental health link, this study raises questions about the significance of the presence of extended family members within single parent families. Living in a single parent family is associated with greater risk of depressive symptoms relative to mother-father families, regardless of the presence of other adult relatives. This contrasts with findings from research on substance use; relative to peers from mother-father families, young people from single mother families are at significantly greater risk, but this is not true for those living in households with additional adult family members (Suh et al. 1996). It appears that the availability of additional adult monitoring and support matters for substance use risks but not for depression.

We have examined two types of single parent families but are unable to comment on variations in mental health risk across a range of other family constellations (e.g., single parent families that include grandparents versus other adult relatives, never-married compared with divorced or widowed single parents, and families containing stepmothers versus stepfathers). In addition, the interview responses from which our family categories were created refer to household members present when the respondent was between age 13 and 18. They do not capture changes in the living circumstances of study participants occasioned by leaving home for college or for other reasons, changes that also may be relevant to mental health.

Although it may be premature to foreclose on the matter, one interpretation of these results is that family type is of little or no direct mental health significance. Rather, it is reliably linked to mental health risk because it is a marker for differences in the three risk/protective factors examined. The implications of this possible conclusion are that preventive interventions should focus on efforts to strengthen family processes and to develop practical strategies for reducing the high levels of stress to which adolescents within some family types tend to be exposed.

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