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Childhood Residential Stability and Health at Midlife

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Objectives. This study examined the association between 2 dimensions of adults' self-rated health and residential stability in childhood.

Methods. Using data from the nationally representative survey Midlife in the United States, I assessed the impact of neighborhood and family stability on positive perceptions of global health and mental health in midlife.

Results. Neighborhood stability in childhood is associated with a significant increase in the likelihood that an individual will rate his or her global health highly in midlife. Both neighborhood and family stability are positively associated with good mental health in midlife.

Conclusions. These results demonstrate that both childhood family stability and adult social context are associated with health outcomes later in life. (*Am J Public Health.* 2003;93:1144–1148)

Increasing evidence suggests that childhood environment can have a lasting impact on the health of individuals. This impact is frequently conceptualized in terms of health inequalities that begin in childhood and accumulate over the life course.[1] The social context of childhood may serve to initiate health trajectories that either protect health or increase vulnerability over the life course.[2] Although we know that social networks offer protective health benefits, no single type of social support is universally beneficial.[3] This inconsistency is attributable to the fact that both the support provided by social networks and the social networks themselves often change over time.[4]

Childhood social networks are developed and maintained through multiple dimensions of residential stability, including living in the same neighborhood throughout childhood and having a stable family environment. Residential stability may increase children's community-based "social capital"—their connections to social and institutional networks—by giving them the opportunity to develop strong social and community ties. Strong social networks in childhood may carry over to adulthood, indirectly influencing an adult's ability to establish supportive social networks. For example, adults whose families were intact during childhood are more likely to marry and less likely to cohabit before marriage than adults who experienced family disruption in childhood.[5] In childhood, social networks are shaped by both residential and family stability. These 2 dimensions are frequently related: children in intact families experience lower levels of residential mobility than do those in single-parent families.[6]

To date, much of the research on the relationship between childhood environment and health has emphasized the relationship between negative childhood experiences and risk behaviors later in life. Frequent geographic moves during childhood are associated with increased alcohol and drug use among adolescents.[7,8] Family disruption and dissension are associated with an increased risk of poor health outcomes.[9–11] A large body of research has examined the relationship between negative childhood experiences and mental health.[12–16] No research has explicitly examined the association between residential change in childhood and both physical and mental health in adulthood. The present study addresses this gap by examining the extent to which childhood residential and family stability are associated with an individual's perception of good health at midlife.

METHODS

The National Survey of Midlife Development in the United States (MIDUS) was conducted in 1995 by the John D. and Catherine T. MacArthur Foundation Research Network on Successful Midlife Development. The MIDUS sample is based on a nationally representative sample of noninstitutionalized English-speaking adults, aged 25 to 74 years, residing in the coterminous United States. The sample used in the present analyses consists of the 2968 individuals who did not have missing data on any of the measures. To adjust for the disproportionate sampling of some population subgroups, all analyses are weighted (see Brim et al.[17] for a detailed description of the survey and weights).

The dependent variables were 2 dimensions of subjective health status: self-rated global health and self-rated mental health. Respondents were asked to rate their present global health on a scale of 0 (worst possible) to 10 (best possible). Good health was defined as a rating of 7 to 10 on this scale. For mental health, respondents were asked if their mental or emotional health was "poor," "fair," "good," "very good," or "excellent." Positive mental health was defined as a response of "very good" or "excellent" to this question. Three-quarters of the respondents (76.1%) reported that their global health was very good or the best possible. More than half (56.3%) reported very good or excellent mental health.

Table 1 presents a description of the independent variables included in the analysis. The key independent variables were 3 dimensions of the childhood environment: residential stability, family stability, and family poverty. Residential stability was a dichotomous variable representing whether a respondent reported changing neighborhoods not more than 2 times as a child. Most respondents (approximately 70%) reported changing neighborhoods fewer than 3 times. Family stability was a dichotomous variable representing whether respondents reported living with both biological parents through the age of 16 years.

Residential stability and family stability were hypothesized to represent 2 independent dimensions of childhood stability. The residential stability measure reflected the opportunity

TABLE 1—Independent Variables Used in the Analyses

Variable	Measures	Mean, % (n = 2968)
Childhood environment		
Residential stability	1 = moved 0 to 2 times; 0 = moved 3 or more times	70.4
Family stability	1 = lived with biological parents through age 16; 0 = other	74.3
Family poverty	1 = grew up "somewhat worse off" or "a lot worse off" than other families; 0 = other	3.3
Family structure		
Marital status	1 = married; 0 = other	68.1
Number of children	Range: 0–5	2.0
Social supports		
Positive relations with friends	Range: 1–4	3.2
Positive relations with extended family	Range: 1–4	3.4
Community support		
Neighborhood context	Range: 1–4	3.4
Religious participation	1 = attends service at least once a week; 0 = other	36.6
Control variables		
Sex	1 = male; 0 = female	43.3
Race	1 = Black; 0 = White or other	11.1
Household income	Household income in thousands ($)	46.4
Education		
Less than high school	Reference category	13.2
High school	1 = high school graduate; 0 = other	63.9
College degree	1 = college degree; 0 = other	23.1
Age, y		
25–34	1 = 25–34 years; 0 = other	26.0
35–44	1 = 35–44 years; 0 = other	28.0
45–54	Reference category	19.2
55–64	1 = 55–64 years; 0 = other	15.2
65–74	1 = 65–74 years; 0 = other	11.6

to develop ties to the community, and the family stability measure reflected the likelihood that respondents had the opportunity to develop positive family ties. Family instability was associated with a wide range of stressors (including financial stress) that may potentially damage or strain family relationships.

Because poverty was associated with increased residential mobility, I controlled for family poverty in childhood. Family poverty was a dichotomous measure indicating that the respondent reported growing up "somewhat worse off" or "a lot worse off" than the average family. A recent study found that retrospective reports of childhood social class were reliable.[18]

Additional independent variables included measures of current social context (family structure, social supports, community supports) as well as demographic and socioeconomic control variables. Family structure was measured in terms of marital status and number of biological children. A substantial body of research documents the protective health benefits of marriage.[19] Having children is associated with increases in the extent and types of social networks an individual experiences during his or her life course.[20]

The support provided by social networks was measured with 2 measures of positive relations with others: the respondent's positive relationships with friends and his or her positive relationships with extended family. Positive relationships with friends and extended family are associated with improved physical and psychological well-being. To the extent that positive relationships reflect a degree of integration in a social network, the positive impact of social support on an individual's physical and psychological well-being is interpreted as a direct effect, an overall benefit of that support.[21] In this context, strong support networks are associated with better health and better self-perceived health.

Positive relations with friends and extended family were measured with scales based on 4 questions: (1) How much do [your friends/your family] really care about you? (2) How much do they understand the way you feel about things? (3) How much can you rely on them for help if you have a serious problem? and (4) How much can you open up to them if you need to talk about your worries? Response categories ranged from 1 ("not at all") to 4 ("a lot").

A third group of social network measures represented current community support. Neighborhood context was measured in terms of perceived safety and social cohesion in the respondent's neighborhood. This measure was the average of the responses to 4 questions about perceptions of neighborhood safety and cohesion, which ranged from 1 ("not at all") to 4 ("a lot"). Religious coping and participation may help to offset the negative health impacts of the stress of living in a declining neighborhood.[22] To measure religious participation, I used a dichotomous measure representing whether the respondent reported attending a church service at least once a week. In addition, I controlled for demographic characteristics (sex, race, age) and socioeconomic status (household income, education) of the respondent.

RESULTS

Bivariate Correlations

Table 2 reports the correlations between the subjective health and social context measures. The 2 dependent variables, self-rated global health and self-rated mental health, were positively correlated (0.251). Significant correlations between global health and the social context measures ranged from −0.065

TABLE 2—Correlations for Self-Rated Health, Childhood Stability, and Social Context

	Global health	Mental health	Childhood residential stability	Childhood family stability	Childhood family poverty	Married	Number of children	Positive relations with friends	Positive relations with extended family	Neighborhood context	Religious participation
Global health	1.000										
Mental health	0.251	1.000									
Childhood residential stability	0.094	0.039	1.000								
Childhood family stability	0.033[a]	0.055	0.184	1.000							
Childhood family poverty	-0.039	-0.041	-0.062	-0.071	1.000						
Married	0.019[a]	0.072	0.006[a]	0.078	-0.010[a]	1.000					
Number of children	-0.065	-0.117	-0.057	0.005[a]	0.058	0.186	1.000				
Positive relations with friends	0.119	0.123	0.029[a]	-0.003[a]	-0.027[a]	-0.031[a]	-0.037[a]	1.000			
Positive relations with extended family	0.113	0.141	0.072	0.142	-0.041	0.071	0.085	0.378	1.000		
Neighborhood context	0.136	0.121	0.076	0.077	-0.053	0.150	0.088	0.261	0.243	1.000	
Religious participation	0.036	0.049	0.048	0.045	-0.003[a]	0.129	0.160	0.111	0.128	0.089	1.000

[a]Correlation is not statistically significant at the $P \geq .05$ level.

(number of children) to 0.136 (neighborhood context). Global health was not significantly correlated with marriage (0.019) or with childhood family stability (0.033). The correlations between the social context measures and mental health were all significant at the $P=.05$ level and ranged from −0.117 (number of children) to 0.141 (positive relationships with family). When one looks specifically at the childhood stability measures, childhood residential stability had a stronger correlation with global health (0.094) than with mental health (0.039). Childhood family stability was significantly associated with mental health (0.055) but not with global health (0.033). Childhood family poverty was negatively associated with good health, both global (−0.039) and mental (−0.041). Correlations among the independent measures are also reported in Table 2.

Multivariate Results: Global Health

In Table 2, rating one's global health as well was positively and significantly correlated with childhood residential stability and positively but not significantly correlated with family stability. The first column in Table 3 presents the odds ratios (ORs) for the logistic regression of self-rated global health on childhood residential stability and other factors. In the multivariate model, the positive association between residential stability and global health remained highly significant (OR=1.42). The association between global health and family stability was not significant and was slightly negative (OR=0.98). The association between family poverty and global health was negative (OR=0.88) and not significant.

The family structure measures, marital status (OR=0.92) and number of children (OR=0.93), were both associated with a slight decrease in the odds that a respondent rated his or her global health highly. However, social supports outside the home were associated with good health. Positive relationships with friends (OR=1.23) and family (OR=1.26) were highly significantly associated with good health. Good health was significantly associated with living in a safe and cohesive neighborhood (OR=1.38). Religious participation was positively associated with better health, but this relationship was not significant. Of the demographic and socioeconomic variables, being male (OR=1.20), being Black (OR=1.28), having a higher household income (OR=1.01), and having a high school (OR=1.49) or college (OR=1.57) education were significantly associated with good health. No significant age differences in subjective reports of global health were found in this model.

Multivariate Results: Mental Health

The second column in Table 3 shows the ORs for the logistic regression of self-rated mental health on childhood residential stability and other factors. Looking back to Table 2, both childhood residential stability and family stability were significantly correlated with good mental health. In the multivariate model, the associations between these childhood stability measures and mental health were positive but not significant. The relationship between childhood family poverty and mental health was slightly negative (OR=0.98) and not significant.

However, all of the adult social context measures were significantly associated with positive mental health: being married was associated with a significant increase in the likelihood that an individual will rate his or her mental health highly (OR=1.19). Having more children was associated with a significant decrease in that respondent's likelihood of perceiving him- or herself to have better mental health (OR=0.89).

Social supports outside the home were associated with better mental health; positive relationships with friends (OR=1.17) and family (OR=1.43) were both highly significant. Community support was also important; good mental health was significantly associated with both neighborhood context (living in a safe and cohesive neighborhood; OR=1.28) and religious participation (attending church at least once weekly; OR=1.19). In regard to the demographic and socioeconomic variables, respondents with higher

TABLE 3—Results of Logistic Regression of Self-Rated Global and Mental Health on Childhood Stability and Selected Factors

	Good Global Health (OR [95% CI])	Positive Mental Health (OR [95% CI])
Childhood environment		
Residential stability	1.42 (1.18, 1.72)***	1.03 (0.87, 1.22)
Family stability	0.98 (0.80, 1.20)	1.08 (0.90, 1.29)
Family poverty	0.88 (0.56, 1.37)	0.98 (0.64, 1.50)
Family structure		
Marital status	0.92 (0.75, 1.13)	1.19 (0.99, 1.43)*
Number of children	0.93 (0.87, 1.00)**	0.89 (0.84, 0.95)***
Social supports		
Positive relations with friends	1.23 (1.07, 1.41)***	1.17 (1.04, 1.33)**
Positive relations with extended family	1.26 (1.09, 1.47)***	1.43 (1.25, 1.64)***
Community support		
Neighborhood context	1.44 (1.23, 1.70)***	1.28 (1.10, 1.48)***
Religious participation	1.09 (0.90, 1.33)	1.19 (1.01, 1.41)**
Control variables		
Male	1.20 (1.00, 1.45)**	1.13 (0.96, 1.33)
Black	1.28 (0.96, 1.71)*	0.95 (0.74, 1.23)
Household income	1.01 (1.00, 1.01)***	1.01 (1.00, 1.01)***
Education		
Less than high school	1.00	1.00
High school	1.49 (1.16, 1.92)***	1.96 (1.54, 2.50)***
College degree	1.57 (1.14, 2.16)***	2.90 (2.16, 3.89)***
Age, y		
25-34	1.26 (0.95, 1.67)	1.45 (1.13, 1.85)***
35-44	1.15 (0.89, 1.49)	1.10 (0.88, 1.38)
45-54	1.00	1.00
55-64	0.97 (0.72, 1.31)	0.95 (0.73, 1.24)
65-74	1.17 (0.84, 1.62)	0.85 (0.64, 1.14)

Note. The dependent variables are based on subjective reports of global and mental health. See Table 1 for a detailed summary of the dependent variables. OR = odds ratio; CI = confidence interval.
Source. National Survey of Midlife Development in the United States (MIDUS).[17]
*$P<.10$; **$P<.05$; ***$P<.01$. Results are 2-tailed.

household incomes (OR = 1.01) and those with high school (OR = 1.96) or college (OR = 2.62) education were significantly more likely to report better mental health. Younger respondents, those aged 25 to 34 years, were significantly more likely (OR = 1.45) to report good mental health.

DISCUSSION

Two key findings can be drawn from the analyses. First, I found a significant association between childhood stability and an individual's self-perceived health at midlife. Residential stability in childhood had a strong, significant, positive association with global health. Family stability appeared to have a stronger association with mental health than with global health, although this relationship diminished and was not significant after control for the adult social context. Family poverty in childhood was associated with comparable decreases in the likelihood of better health in midlife, both global and mental. Although the effects of family stability and poverty are likely mediated by the social and economic contexts of adulthood, the positive association between residential stability and global health persisted in the multivariate model.

The finding that neighborhood context was significantly associated with better subjective health is also important. After control for an individual's socioeconomic status, perceptions of a safe and cohesive neighborhood were significantly associated with better health perceptions. Although neighborhood quality and socioeconomic status are undoubtedly intertwined, this finding suggests that they are not synonymous. And although negative social environments can affect health by exposing people to chronic stress,[23] positive social environments may offer individuals the opportunity for more social supports.

A number of potential limitations should be noted. First, the focus of this study was midlife, with a sample population between the ages of 25 and 74 years. Over such a broad range of midlife, one would expect to find age variations in health perceptions. For instance, Roberts[24] found that global health items may elicit more optimistic health reports among younger persons; age-comparative items may elicit more optimistic health reports among older persons. In the present analysis of global health, no significant variations by age were found. Second, despite the use of weights to make the sample more representative of the US population, the undersampling of individuals with less than a high school education may have led to an underrepresentation of the effects of childhood poverty. Similarly, because the data were retrospective, we could not be certain whether certain childhood characteristics were underrepresented owing to mortality.

Social relationships may affect health via a number of potential pathways, including improving psychological well-being, promoting health behaviors, and increasing knowledge about and access to health services. A stable childhood environment may be associated with health later in life through any or all of these pathways. Children raised in stable environments will likely grow up to create stable social environments as adults. Frequent moves as a child may make it more difficult to form new relationships or make an individual less likely to invest in social networks. Family stability may help a child feel more comfortable in the social environment or may help a child develop social skills. Stable

childhood environments might also affect adult health to the extent that they influence an individual's sense of control over his or her environment.

Another possible pathway for the effect of childhood environments on health at midlife is through their impact on health behaviors over the life course. Childhood poverty is associated with poor health behaviors as well as detrimental psychosocial characteristics.[25] However, this association does not appear to hold in the MIDUS sample. In additional analyses (not shown), I included measures of positive health behaviors (nonsmoker, normal weight, nondrinker). The inclusion of these measures had no significant effects on the results presented in Table 3.

Additional research should examine the effects of childhood stability on access to health care, both in childhood and over the life course. Residential stability in childhood may influence the quality and continuity of health care that a child experiences. Highly mobile families are less likely to have a regular health care provider for their children.[26] To the extent that childhood stability may shape adult social skills, the childhood environment may influence an individual's access to health information through social networks.

This study focused on the relationship between childhood stability and positive health. However, the reverse of these findings holds for negative health outcomes. Childhood stability is negatively associated with a low perception of self-rated health in midlife; social support is negatively associated with a poor perception of mental health. These findings suggest potential interventions across the life course. Residential instability in childhood is a risk factor that can easily be screened for. In addition, public health professionals should work with pediatricians and educators to identify residentially mobile children and connect them with appropriate care. Increased awareness of the potential effects of residential instability in childhood—regardless of family type—may have positive consequences for adult health outcomes. ■

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