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Emotional Support From Parents Early in Life, Aging, and Health

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The purpose of this study is to estimate the relationship between receiving emotional support from parents early in life and an individual's health in adulthood. Analysis of data from a nationally representative sample of adults ages 25–74 years suggests that a lack of parental support during childhood is associated with increased levels of depressive symptoms and chronic conditions in adulthood. These associations between early parental support and adult health persist with increasing age throughout adulthood. Personal control, self-esteem, and social relationships during adulthood account for a large portion of these long-term associations. These findings underscore the importance of adopting a life course perspective in studying the social determinants of health among adults.

An abundance of research evidence suggests that access to social support is critical for the maintenance of health and well-being (Berkman, Vaccarino, & Seeman, 1993). Indeed, the relationship between social support and health is evident throughout the life course. Children whose parents provide ample support report fewer psychological and physical symptoms during their childhood than do children who receive less parental support (Wickrama, Lorenz, & Conger, 1997). Similarly, the health of adults and older adults is predicted by contemporaneous levels of social support (House, Landis, & Umberson, 1988).

It is currently unclear, however, whether individuals who receive a lack of support early in life remain at an increased risk for experiencing poor health later in life. The concept of the life course trajectory (Elder, George, & Shanahan, 1996) suggests that different points of an individual's life course are intimately connected with one another. Significant events and conditions at one point in the life course may play a role in shaping the course of events and conditions experienced in subsequent years. Therefore, the seemingly parallel but independent findings involving the health effects of social support at various points in the life course of an individual may actually be closely linked. If this is the case, it will then be necessary to ascertain the mechanisms that work to direct those with poor support early in life on a trajectory leading to poor health later in life.

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The theoretical framework linking early parental support with later life health encompasses three related themes. First, we discuss the particular importance of social support received from one's parents early in life. Next, we examine the possibility that the health impact of early parental support persists in later life. Finally, we explore the extent to which the health effects of early parental support are explained by psychosocial processes.

Effects of Early Parental Support

Early parental support refers to gestures or acts of caring, acceptance, and assistance that are expressed by a parent toward a child. Support from parents received during childhood is thought to have significant and lasting health implications because the parent–child relationship serves as the context within which important health-enhancing social and psychological development takes place. For instance, if parents provide children with a caring and supportive environment, then children may generalize this learning experience. As they age, they may seek out environments in which social support is readily available (Caspi & Elder, 1988). Conversely, if parents are neither helpful nor available, then children may develop lifelong patterns of withdrawal from and avoidance of others (Bowlby, 1980). In other words, the parent–child relationship may influence the evolving structure and quality of one's network or convoy of social relations and support over the life course (Antonucci & Akiyama, 1987). Accordingly, problems in the development of this important social resource may compromise individual health and well-being (S. Cohen, Gottlieb, & Underwood, 2000).

Early parental support may also be an important influence on adult health because of its effects on the development of health-enhancing psychological resources. Specifically, during early life, a child's parents are often the primary source for developing a sense of self-worth and learning effective ways of exercising personal control (Brown & Harris, 1978; Leondari & Kiosseoglou, 2002). According to Richman and Flaherty (1986), the effects of early parental support on these psychological resources persist into early adulthood. This is important because research suggests that

high levels of self-esteem and personal control beliefs are positively associated with favorable mental and physical health outcomes, including psychological well-being, self-reported health, avoidance of health risk behaviors, recovery from illness, and longevity (Duncan & McAuley, 1993; Jenkins, Stanton, & Jono, 1994; MacDonald & Martineau, 2002; Rodin, Timko, & Harris, 1985).

Effects of Early Parental Support Over Time

Much of the current research on the effects of early parental support focuses on relatively immediate outcomes. For instance, early parental support has been found to predict adolescent problem behavior, such as substance abuse (Wills & Cleary, 1996), as well as psychological and physical symptomatology (Newcomb & Bentler, 1988). The potential long-term consequences of early parental support are also important to consider. Wickrama et al. (1997) suggested that early parental support establishes adolescent health on a favorable trajectory whereby the advantages accumulate with advancing years. Others have shown that within specific samples (e.g., current and former university students), support received from parents early in life is linked to psychological health during early adulthood (Luecken, 2000; Richman & Flaherty, 1986) and physical and mental health in midlife (Enns, Cox, & Clara, 2002; Russek & Schwartz, 1997).

Despite this growing appreciation for the long-term effects of early parental support, no other study has examined whether the long-term health effects of early parental support appear in the general population of adults. Moreover, no studies to date have examined whether the health effects of parental support received during childhood persist not only throughout young adulthood and midlife but also several decades later as people enter old age. It is possible that the psychosocial impairments resulting from inadequate parental support during childhood may give rise to similar psychosocial impairments during adulthood. These impairments may create new challenges throughout the life course, therefore exerting a lifelong deleterious effect on health and well-being (Harris, 2003). A similar course of persisting health effects is evident in the wake of parental abuse (Shaw & Krause, 2002); however, it is unclear whether associations between early parental support and health also persist throughout the adult life course.

Mediating Effects of Psychosocial Resources

As described earlier, a lack of parental support during childhood could disrupt the development of key psychosocial resources. More specifically, early parental support is believed to be linked to the development of current supportive social relationships, a sense of personal control, and a sense of self-worth. Each of these key psychosocial consequences of early parental support is strongly related to both mental and physical health outcomes (Axelsson & Ejlertsson, 2002; Bandura, 1995; House et al., 1988). These linkages are important for at least two reasons. First, they suggest that a significant proportion of any association between early parental support and health may be accounted for, or mediated by, psychosocial processes involving social relationships, personal control, and self-esteem.

In addition, it is important to note that because psychosocial consequences of early parental support—personal control, self-esteem, and social support later in life—are related to both mental and physical health, early parental support is likely to have an impact on both mental and physical health in adulthood. Although much of the literature on early parental support focuses only on mental health outcomes resulting from these early relationships (Enns et al., 2002; Luecken, 2000), a great deal might also be learned by studying the impact of early parental support on physical health status. Although some of the physical effects of poor parental support are likely to be apparent immediately, it is also possible that the ongoing distress created by the loss of control, esteem, and support may continue to erode health over time (McEwen, 1998). Unfortunately, most of the studies that have attempted to link physical health with early parental support have used samples recruited from universities, which tend to differ from the general population with respect to age and several socioeconomic variables (Luecken, 1998; Russek & Schwartz, 1997). Consequently, it is important to estimate the association between early parental support and later physical health status with more representative samples of the population.

Taken together, this review suggests that a lack of parental support during childhood may lead to poor personal control beliefs and low self-esteem as well as a lack of healthy social relationships during adulthood. Deficiencies in these psychosocial resources should then lead to poor health outcomes in adulthood. The extent to which this process persists throughout the entire span of adulthood and into early old age, however, is uncertain. To evaluate this conceptual framework, we tested the following hypotheses: (a) Lack of early parental support is associated with poor mental or physical health in adulthood; (b) the association between early parental support and adult mental and physical health persists with advancing age across the adult life course; and (c) lack of early parental support leads to poor mental and physical health in adulthood by negatively influencing self-esteem, personal control, and social relationships.

Method

Sample

The data for this study came from the National Survey of Midlife Development in the United States (MIDUS), 1995–1996 (Brim et al., 1996). Participants were a nationally representative, random-digit-dial sample of noninstitutionalized, English-speaking adults, ages 25–74 years, residing in the contiguous United States. Older adults and men were oversampled. The data were collected via an initial telephone interview and a follow-up mailed questionnaire, both of which were completed in 1995. Together, the estimated response rate for the entire MIDUS survey was 60.8% (Brim et al., 1996). The sample sizes, as well as the descriptive statistics presented below, were based on weighted data.

A total of 2,905 respondents served as the base sample. Approximately 56.2% of the sample was female. At the time of the survey, the average age of participants was 44.92 years ($SD = 13.54$), with 30.7% between the ages of 25 and 35 years (young adults), 52.2% between the ages of 36 and 60 years (middle-aged adults), and 17.1% between the ages of 61 and 74 years (young-old adults).

Measures

Early parental support. Emotional support received from one's parents during childhood was measured with two sets of items from the mailed questionnaire. The first set of items focused on the availability of emotional

support from the respondent's mother (or the woman who raised the respondent) during the years he or she was growing up. These same items were then asked with reference to the respondent's father (or the male caregiver during childhood): (a) "How much did she or he understand your problems and worries?"; (b) "How much could you confide in her or him about things that were bothering you?"; (c) "How much love and affection did she or he give you?"; (d) "How much time and attention did she or he give you when you needed it?"; (e) "How much effort did she or he put into watching over you and making sure you had a good upbringing?"; and (f) "How much did she or he teach you about life?" Each of these items was scored on a 4-point Likert scale that included 1 (*not at all*), 2 (*a little*), 3 (*some*), and 4 (*a lot*). A single score of parental support was created by summing these two subscales.

A total of 2,783 respondents (95.8% of the base sample) had complete data for support received from both parents. An additional 122 respondents who were missing data for one parent who was absent from the household for most of their childhood were also included in the base sample. For these cases, the lowest possible support score was assigned for that missing parent on the basis of the assumption that if a parent was absent, he or she would be less able to provide support. Following procedures recommended by J. Cohen and Cohen (1983), we then created a dummy variable that was included in all regression analyses described below so as to control for potential differences between respondents with original data for two parents and those for whom a parental support score was assigned.

The internal consistency reliability for the mother subscale was .90, whereas the internal consistency reliability for the father subscale was .92. The correlation between the maternal and paternal subscales was .43. The mean parental support score per item across both parents was 2.94, or slightly less than 3 (*some*).

Depressive symptoms. Current depressive symptomatology was used as an indicator of psychological health. Respondents reported how often during the past 30 days they felt each of six different depressive symptoms, including "so sad that nothing could cheer you up," "nervous," "restless or fidgety," "hopeless," "that everything was an effort," and "worthless." Responses to each of these items were scored on a 5-point Likert scale ranging from 1 (*none of the time*) to 5 (*all of the time*). A total score was computed by summing responses to each of the items. Thus, higher scores indicate more depressive symptoms. Scores ranged from 6 to 30, with a mean of 9.51 ($SD = 3.89$). The internal consistency reliability estimate for this scale was .87.

Chronic conditions. There are obviously many possible ways to measure physical health status. In this study, we used a measurement approach that has been relatively well established in survey research (Liang, 1986): a count of self-reported chronic health problems. Respondents reported whether they had experienced or been treated for any of 27 chronic conditions (e.g., asthma, arthritis, thyroid disease, urinary problems, hypertension, and diabetes) in the past 12 months. Approximately 74.6% of respondents reported having at least 1 of the 27 conditions, and the average number of conditions across all respondents was 2.32 ($SD = 2.51$).

Emotional support. Respondents replied to four items concerning emotional support currently received from their families and four items concerning emotional support currently received from their friends. Respondents were asked, "How much do members of your family (not including your spouse or partner)/friends really care about you?"; "How much do they understand the way you feel about things?"; "How much can you rely on them for help if you have a serious problem?"; and "How much can you open up to them if you need to talk about your worries?" Each item was scored on a 4-point scale ranging from 1 (*not at all*) to 4 (*a lot*), and scales were constructed for both family support and friend support by summing scores for each item. Higher scores indicate that respondents received more emotional support. The mean level of emotional support from family was 13.65 ($SD = 2.50$), and the mean level of emotional support from friends was 12.83 ($SD = 2.74$). The internal consistency reliability estimates for the family and friend support scales were .83 and .89, respectively.

Negative interaction. Negative interaction is another indicator of the quality of one's social relationships, and it is also measured separately with reference to one's family and friends. Four items were used to create each of two scales measuring negative interaction with family and negative interaction with friends. These items were "How often do members of your family (not including your spouse or partner)/friends make too many demands on you?"; "How often do they criticize you?"; "How often do they let you down when you are counting on them?"; and "How often do they get on your nerves?" Each item was scored on a 5-point scale ranging from 1 (*never*) to 4 (*often*), and the two scales were formed by summing the four applicable items. Thus, higher scores indicate more negative interaction. The mean level of negative interaction with family was 8.60 ($SD = 2.52$), and the mean level of negative interaction with friends was 7.81 ($SD = 2.12$). The internal consistency reliability estimates for the family negative interaction and friend negative interaction scales were both .79.

Personal control beliefs. A sense of personal control was measured by using five items from Pearlin and Schooler's (1978) Mastery Scale, plus three additional items. Respondents were asked to indicate their agreement with the following statements: "I have little control over things that happen to me," "There is really no way I can solve the problems I have," "I sometimes feel I am being pushed around in my life," "There is little I can do to change the important things in my life," "I often feel helpless in dealing with the problems of life," "Other people determine most of what I can and cannot do," "What happens in my life is beyond my control," and "There are many things that interfere with what I want to do." Responses to each item were scored on a 7-point scale ranging from 1 (*agree strongly*) to 7 (*disagree strongly*). An index was constructed by adding together the scores for all eight items; higher scores reflect a greater sense of personal control. The internal consistency reliability estimate for this scale was .86.

Self-esteem. Each respondent's self-esteem was measured with the following three items from Ryff's (1989) scales of well-being: "I like most parts of my personality"; "When I look at the story of my life, I am pleased with how things have turned out so far"; and "In many ways, I feel disappointed about my achievements in life." Responses to each item were scored on a 7-point scale ranging from 1 (*agree strongly*) to 7 (*disagree strongly*). Items 1 and 2 were reverse coded, and an index was constructed by adding together the scores for all three items; higher scores reflect greater self-esteem. The internal consistency reliability estimate for this scale was .59. Although this is considered somewhat low, it does not necessarily render this measure unreliable because the internal consistency reliability estimate depends not only on the interitem correlation but also on the number of items in the scale (Carmines & Zeller, 1979). In this case, the number of items (three) was relatively small.

Age. Age was scored continuously in years.

Demographics and health control. The relationships between early parental support, physical and mental health, psychosocial resources, and age were estimated after the effects of gender, race, education, and childhood health status were controlled statistically. Gender was represented as a binary measure (1 = male, 0 = female). Race was also represented as a binary variable (1 = White, 0 = other). The education measure reflected the highest grade or year of schooling completed and was coded with a 12-point ordinal scale ranging from 1 (*no school or some grade school*) to 12 (*doctoral or other professional degree*). Two single-item self-report measures of health were used to represent childhood health status. The first item asked respondents to rate their physical health at the time when they were 16 years old, and the second item asked respondents to rate their mental health at that same time. Response options ranged from 1 (*poor*) to 5 (*excellent*). Finally, a binary indicator of the availability of early parental support data was used to control for the possible effects of assigning early parental support scores for respondents with missing data for an absent parent.

Data Analysis Plan

The analyses for this study proceeded in three stages. The first stage of analysis corresponded to the first research hypothesis and involved estimating the association between early parental support and both physical and mental health. The following ordinary least squares multiple regression equation was used to test for these effects:

$$CH = a + b_1EPS + b_2Age + b_3Sex + b_4Race + b_5Education, \quad (1)$$

where CH represents the dependent variable and refers to current health (i.e., depressive symptoms or chronic conditions), EPS stands for early parental support, a is the intercept, and b_{1-5} are regression coefficients.

In the second stage of analysis, an interaction term (EPS × Age) was entered into Equation 1. The purpose of including the interaction term was to estimate the degree to which associations between early parental support and current health varied at different ages. If the interaction term was significant, this would mean that the associations between health and early parental support either diminished or grew with increasing age.

The purpose of the final stage of analysis was to determine the degree to which current psychosocial conditions, including social relationships, personal control, and self-esteem, accounted for, or mediated, the associations between early parental support and current health status. As discussed by Baron and Kenny (1986), the psychosocial resources measured in this study would be considered mediators of the association between early parental support and health if they were associated with both the main independent variable (early parental support) and the dependent variable (health). Therefore, to test the basic theoretical proposition that early parental support influences the development of important psychosocial resources, we regressed each psychosocial variable on demographic characteristics and early parental support. Then, to complete the evaluation of the mediating effects of the psychosocial resources, we included each as predictors in the basic models that estimated the main effects of early parental support on adult health (see Equation 1). If the contemporaneous psychosocial resources were important mediators of the relationship between early parental support and current health, the associations between early parental support (b_1) and current health status should have declined when these variables were added to the model. In addition, the statistical significance of each mediating variable can be formally assessed by following procedures outlined by MacKinnon, Warsi, and Dwyer (1995). Essentially, this is done by calculating the indirect effect between early parental support and the health outcome involving each psychosocial mediator and then dividing this by a standard error to test whether the indirect effect is significantly different from zero.

Results

Early Parental Support and Adult Health

Depressive symptoms. Associations between demographic control variables, early parental support, and adult health are shown in Table 1. As expected, most of the demographic control variables were significantly associated with current health status. Results from Table 1 also show that early parental support was inversely associated with depressive symptoms ($\beta = -.207$, $p < .001$). This finding means that adults who received little support from their parents while growing up were at an elevated risk for having depressive symptoms during adulthood. Squaring the partial correlation coefficient ($r = -.197$) revealed that early parental support accounted for approximately 4% of additional variance in depressive symptoms beyond that which was accounted for by each of the other predictors in the model.

Table 1
Regression of Depressive Symptoms and Chronic Conditions on Early Parental Support (EPS)

	Dependent variable			
	Depressive symptoms		Chronic conditions	
Predictor	Main effects model	Interaction model	Main effects model	Interaction model
Gender[a]				
β	−.094***	−.094***	−.113***	−.113***
B	−0.733	−0.732	−0.562	−0.562
pr	−.098	−.098	−.116	−.116
Education				
β	−.091***	−.090***	−.108***	−.110***
B	−0.146	−0.146	−0.111	−0.113
pr	−.094	−.093	−.110	−.112
Race[b]				
β	−.012	−.011	−.016	−.007
B	−0.120	−0.116	−0.040	−0.040
pr	−.012	−.012	−.006	−.008
Age				
β	−.083***	−.084***	.195***	.197***
B	−0.024	−0.024	0.036	0.036
pr	−.084	−.085	.193	.195
Childhood physical health				
β	−.001	−.001	−.014	−.014
B	−0.006	−0.006	−0.039	−0.038
pr	−.001	−.001	−.012	−.012
Childhood mental health				
β	−.125***	−.124***	−.054*	−.056*
B	−0.475	−0.472	−0.130	−0.136
pr	−.106	−.105	−.045	−.047
Availability of EPS data[c]				
β	−.076***	−.075***	−.032	−.034
B	1.503	1.487	−0.395	−0.428
pr	−.076	−.075	−.031	−.034
EPS				
β	−.207***	−.207***	−.079***	−.079***
B	−0.099	−0.099	−0.024	−0.024
pr	−.197	−.197	−.076	−.076
EPS × Age[d]		0.0003		0.001
N	2,819	2,819	2,865	2,865
R^2	.102	.102	.080	.081

[a] Coded as 1 = male, 0 = female. [b] Coded as 1 = White, 0 = other. [c] Coded as 1 = original data for two parents, 0 = parental support score was assigned. [d] Unstandardized coefficients are reported for the multiplicative term because standardized estimates are meaningless in this context.
* $p < .05$. *** $p < .001$.

Chronic conditions. The results of parallel analyses with chronic conditions as the outcome variable are presented in the fourth column of Table 1. These results also showed an inverse relationship between early parental support and chronic conditions during adulthood ($\beta = -.079$, $p < .001$). Although statistically significant, the size of this effect was rather small. Squaring the partial correlation coefficient ($r = -.076$) revealed that early parental support explained less than 1% additional variance in the number of chronic conditions after the effects of the other predictors in the model were accounted for.

Early Parental Support, Adult Health, and Age

An estimate of the modifying effects of age on the association between early parental support and depressive symptoms is reported in the third column of Table 1. As these results showed, the multiplicative term EPS × Age was nonsignificant. This is an indication that the associations between early parental support and adult depressive symptoms did not vary according to the current age of respondents. Similar nonsignificant results were found when the measure of chronic conditions was the dependent variable (see the rightmost column of Table 1). Typically, nonsignificant findings are of little interest in psychosocial research. However, in the present study, these nonsignificant multiplicative terms suggest that the associations between early parental support and adult health neither dissipated nor increased with advancing age but rather persisted for decades.

Psychosocial Mediators

The final stage of analysis assessed the degree to which a set of current adult psychosocial factors mediated the associations between early parental support and adult health. A correlation matrix including each of the potential mediators as well as the other major study variables appears in Table 2.

As a first step in testing for mediating relationships, the measures of personal control, self-esteem, and social relationships were regressed on the demographic characteristics and early parental support (see Table 3). Each of the demographic control variables was associated with at least one of the potential mediators. The results from Table 3 also show that early parental support was positively associated with adult personal control ($\beta = .160$, $p < .001$), self-esteem ($\beta = .248$, $p < .001$), and contemporaneous support from family ($\beta = .399$, $p < .001$) and friends ($\beta = .236$, $p < .001$) and was inversely associated with negative interaction from family ($\beta = -.221$, $p < .001$) and friends ($\beta = -.062$, $p < .01$). Squaring the partial correlation coefficients for each of these associations revealed that early parental support accounted for the most amount of variance in levels of current support from family members (14.29%) and the least amount of variance in negative interaction with friends (0.34%).

Depressive symptoms. These psychosocial variables were then added to the base models that estimated associations between early parental support and adult depressive symptoms and chronic conditions in order to test the degree to which they mediated these relationships (see Table 4). The second column of Table 4 simply shows the association between early parental support and depressive symptoms after the effects of a set of control variables were accounted for. The statistic reported in this column is slightly different than that reported in the second column of Table 1 because of the listwise deletion of some cases resulting from missing data on the mediating variables.

In the third column of Table 4, the psychosocial variables are added. The findings from this model showed that respondents who reported having a strong sense of control had relatively few depressive symptoms ($\beta = -.289$, $p < .001$). High self-esteem was also associated with diminished depressive symptoms ($\beta = -.277$, $p < .001$). To a lesser degree, levels of emotional support from family ($\beta = -.042$, $p < .05$) and negative interaction with family ($\beta = .075$, $p < .001$) were also associated with depressive symptoms in the expected directions. However, neither friend-based emotional support nor negative interaction with friends was significantly associated with depressive symptoms.

The combined mediating effects of these psychosocial variables can be assessed by observing how the effect of early parental support on adult depressive symptoms changes when the psychosocial variables are added to the model. A comparison of the second and third columns of Table 4 shows that the association between early parental support and depressive symptoms declined by 72% when the psychosocial variables were added (from −.209 to −.059). Essentially, this means that the psychosocial variables explained almost three fourths of the association between early parental support and adult depressive symptoms. We should also note that inclusion of the mediators increased the percentage of explained variance in depressive symptoms from 10.2% to 34.5%. Based on additional hand calculations designed to test the statistical significance of a mediating relationship, it appears that the mediating effects of personal control, $z = -7.21$, $p < .001$; self-esteem, $z = -9.82$, $p < .001$; family emotional support, $z = 2.12$, $p < .05$; and family negative interaction, $z = -3.60$, $p < .001$, were each significantly different from zero.

Chronic conditions. The degree to which the psychosocial variables mediated the association between early parental support and chronic conditions is shown in the last two columns of Table 4. When the psychosocial factors were added to the base model, the association between early parental support and chronic condi-

Table 2
Correlation Matrix of Major Study Variables

Variable	1	2	3	4	5	6	7	8	9	10
1. Early parental support	—									
2. Age	.05**	—								
3. Personal control	.16***	−.10***	—							
4. Self-esteem	.27***	.01	.53***	—						
5. Family emotional support	.39***	.12***	.23***	.27***	—					
6. Friend emotional support	.21***	.03	.25***	.24***	.37***	—				
7. Family negative interaction	−.24***	−.16***	−.22***	−.24***	−.41***	−.16***	—			
8. Friend negative interaction	−.07***	−.12***	−.16***	−.12***	−.16***	−.14***	.44***	—		
9. Depressive symptoms	−.23***	−.11***	−.46***	−.50***	−.26***	−.16***	.26***	.16***	—	
10. Chronic conditions	−.09***	.20***	−.28***	−.27***	−.06**	−.07***	.12***	.07***	.36***	—

** $p < .01$. *** $p < .001$.

Table 3
Regression of Psychosocial Resources on Early Parental Support (EPS)

Predictor	Personal control	Self-esteem	Family emotional support	Friend emotional support	Family negative interaction	Friend negative interaction
Gender[a]						
β	.080***	.058**	−.089***	−.172***	−.111***	.035
B	1.649	0.410	−0.452	−0.953	−0.565	0.150
pr	.083	.061	−.098	−.176	−.116	.035
Education						
β	.176***	.148***	.008	.083***	−.008	.033
B	0.755	0.216	0.009	0.095	−0.008	0.029
pr	.180	.153	.009	.085	−.008	.032
Race[b]						
β	.056**	−.009	.042*	.068***	−.067***	−.054**
B	1.546	−0.084	0.280	0.499	−0.459	−0.305
pr	.058	−.009	.046	.070	−.070	−.054
Age						
β	−.109***	.005	.072***	.004	−.128***	−.094***
B	−0.083	0.001	0.013	0.001	−0.024	−0.015
pr	−.110	.005	.078	.004	−.131	−.092
Childhood physical health						
β	.066**	−.015	.024	.013	−.024	−.035
B	0.769	−0.058	0.067	0.039	−0.070	−0.084
pr	.058	−.013	.022	.011	−.022	−.030
Childhood mental health						
β	.047*	.119***	.088***	.045*	−.082***	−.052*
B	0.470	0.411	0.217	0.122	−0.205	−0.108
pr	.039	.101	.079	.038	−.070	−.042
Availability of EPS data[c]						
β	.063**	.063**	.080***	.085***	−.074***	−.029
B	3.264	1.086	1.013	1.174	−0.938	−0.306
pr	.062	.062	.084	.084	−.074	−.028
EPS						
β	.160***	.248***	.399***	.236***	−.221***	−.062**
B	0.203	0.107	0.123	0.080	−0.069	−0.016
pr	.153	.236	.378	.223	−.210	−.058
N	2,754	2,863	2,819	2,832	2,809	2,831
R^2	.099	.116	.192	.094	.110	.029

[a] Coded as 1 = male, 0 = female. [b] Coded as 1 = White, 0 = other. [c] Coded as 1 = original data for two parents, 0 = parental support score was assigned.
* $p < .05$. ** $p < .01$. *** $p < .001$.

tions declined by approximately 71% (from −.090 to −.026), and the percentage of explained variance in chronic conditions increased from 8.1% to 14.8%. Based on hand calculations, it appears that the key psychosocial mediators of this relationship were personal control, $z = -5.28$, $p < .001$; self-esteem, $z = -5.65$, $p < .001$; and negative interaction with family, $z = -2.70$, $p < .01$.

Discussion

The findings from this study are noteworthy for several reasons. First, the results of this study lend support to the general idea that the current mental and physical health of adults is influenced by contemporaneous psychosocial conditions as well as earlier life psychosocial conditions dating back to childhood, such as parental support. These results are consistent with those of previous studies with smaller, restricted samples (Parker, 1983; Richman & Flaherty, 1986; Russek & Schwartz, 1997). It is important that the current research also extends previous findings in this area by suggesting that associations between early parental support and health are evident and invariant across much of the adult life span, at least into early old age. People with abundant support during childhood are likely to have relatively good health throughout adulthood, whereas people with inadequate support while growing up are likely to have poorer health as adults. The fact that associations between early parental support and health are evident in adulthood and do not appear to diminish with advancing age underscores the importance of assuming a life course perspective when studying psychosocial determinants of health.

The results from this study are also important because they provide some preliminary insight into factors that link early social conditions with adult health and well-being. In this study, we found that the relationship between early parental support and adult health is largely due to associations between these early relationships and important psychosocial resources. Personal control, self-esteem, and family relationships (both received support and negative interaction) accounted for most of the relationship between early parental support and adult depressive symptoms. Personal control, self-esteem, and, to a lesser extent, negative

Table 4
Regression of Depressive Symptoms and Chronic Conditions on Early Parental Support and Current Psychosocial Resources

	Dependent variable			
	Depressive symptoms		Chronic conditions	
Predictor	Main effects model	Mediator model	Main effects model	Mediator model
Early parental support				
β	−.209***	−.059**	−.090***	−.026
B	−0.100	−0.028	−0.028	−0.008
pr	−.199	−.061	−.086	−.024
Personal control				
β		−.289***		−.142***
B		−0.110		−0.035
pr		−.278		−.124
Self-esteem				
β		−.277***		−.141***
B		−0.304		−0.101
pr		−.269		−.124
Family emotional support				
β		−0.042*		.037
B		−0.064		0.037
pr		−.041		.032
Friend emotional support				
β		.031		−.015
B		0.043		−0.014
pr		.034		−.015
Family negative interaction				
β		.075***		.062**
B		0.114		0.061
pr		.074		.054
Friend negative interaction				
β		.026		.042*
B		0.047		0.050
pr		.028		.040
N	2,613	2,613	2,643	2,643
R^2	.102	.345	.081	.148

Note. Models were estimated after the effects of gender, education, race, age, childhood physical health, childhood mental health, and we controlled for availability of early parental support data.
* $p < .05$. ** $p < .01$. *** $p < .001$.

interaction (with both family and friends) accounted for a large portion of the relationship between early parental support and adult physical health.

Finally, another reason why the results of this study are notable is that most studies to date have concentrated only on the mental health consequences of parent–child relationships (see Felitti et al., 1998, for an exception). The findings from the current study suggest that exposure to parental support in childhood appears to be associated with indicators of both psychological and physical health. Nonetheless, it is important to note that early parental support appears to be more strongly linked to mental health than physical health problems. This finding may be related, in part, to differences in how mental and physical health problems develop and become manifest over the life course. As Kessler, Davis, and Kendler (1997) showed, exposure to interpersonal adversity during childhood, such as lack of early parental support, promotes early onset psychological disorder, which in turn sets in motion a cycle of recurring disorder over the life course. In contrast, the link between an early life social condition and physical health throughout adulthood is likely to be less pronounced—or more difficult to detect—because physical health typically changes more slowly (Ross & Wu, 1996). Despite these differences, however, findings from the current study highlight the importance of considering early social environments when one is studying the lifelong development of both mental and physical health problems.

In evaluating the findings from this study, one should consider several limitations. First, data about parental support received during childhood were collected from adults at one point in time. Therefore, given the age range in our sample (25–74 years), some study subjects were asked to recall events that may have occurred up to a half century ago. Simply because of the passage of time between childhood and adulthood, some adults may have trouble remembering events or conditions from their childhood. In addition, this study design allows for the possibility of confounding between the study's health outcomes and reports of early parental support (Maughan & Rutter, 1997). In particular, one could argue that respondents' current health status may differentially influence how they respond to questions about their past social environments.

Despite these concerns about the accuracy of self-reported long-term recall of childhood experiences, there is mounting evidence that bias in recalling experiences from childhood may not be as great as some fear (e.g., Bernstein et al., 1994). In fact, after reviewing the literature, Brewin, Andrews, and Gotlib (1993) concluded that claims about the unreliability of retrospective reports of adverse childhood experiences were "exaggerated" (p. 82). Other findings in the literature provide evidence for the accuracy of retrospective reports of early parental support, in particular. Using the Parental Bonding Instrument (Parker, Tupling, & Brown, 1979), Parker (1983) showed that retrospective ratings of early parental support made by adult children were corroborated by separate reports from their parents. Furthermore, both of these ratings, rather than just the ratings from adult children, were significantly associated with levels of depression in the adult children. Of course, this level of corroboration does not prove that retrospective reporting of early parental support is always accurate, because a parent's retrospective rating of the support that he or she provided to a child could also be influenced by the adult child's current health status. Unfortunately, however, without three or more waves of data it is not possible to disentangle the direction of effects between reports of early parental support and adult health.

The study's findings regarding age associations are also limited because of the cross-sectional nature of the data. In particular, as noted above, all data for this study were collected at one point in time from respondents of various ages. Therefore, conclusions about how age may have modified the associations between early parental support and adult psychosocial resources and health have been made by evaluating across, rather than within, individuals. It is impossible with this type of study to distinguish between true age effects and those that are due to cohort or period differences across the sample. For this reason, caution should be used in applying findings from these data to the experiences of individuals as they progress through adulthood.

An additional study limitation involves potential confounders of the association between early parental support and adult health. One factor that was not accounted for in this study was a respondent's family history of mental or physical health problems. It is possible that at least some of the association found between a lack of early parental support and adult health problems was actually due to the parents' health problems during each respondent's childhood.

Finally, the scope of the current study did not allow for the examination of other closely related and important research questions. For example, the degree to which the effects of support from a nonparental source compare with the effects of parental support was not assessed in the current study. The measure of early parental support in the current study did not distinguish between support from a biological parent and support from some other adult responsible for child rearing (e.g., stepparent, grandparent). To understand more completely the influence of social support received during childhood on health throughout the life course, researchers should examine the impact of support from various sources.

Investigators interested in pursuing this area should also explore other potential mediating and moderating processes of the association between early parental support and adult health. For instance, people who received inadequate support from their parents during childhood may be prone to developing destructive health behaviors throughout their lives or cultivating poor marital relations and poor relations with their own children or parents when they reach adulthood, each of which could affect their mental and physical health. Conversely, an examination of resilience factors that enable people to avoid the potentially negative consequences of exposure to inadequate early parental support should also be embarked on in the future.

Despite these limitations, this work has important implications for the study of aging and health. The findings from this study, if corroborated by others, have potentially far-reaching implications for improving the physical and mental health of older adults. Instead of considering the impact that only contemporaneous psychosocial resources and experiences may have on the physical and mental health of adults and older adults, health practitioners may need to cast a much broader net that encompasses earlier life conditions dating as far back as childhood. Demonstrating that the impact of social relationships early in life may extend for several decades is consistent with the life course approach to psychosocial aging research, a need that has been prominently recognized (George, 1996).

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