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Early Economic Hardship, Maternal Support, and Depressive Symptoms among Black Young Adults

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**Early Economic Hardship, Maternal Support, and Depressive Symptoms
among Black Young Adults**

by

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University of Alabama Birmingham, 2014

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ABSTRACT

Substantial associations between childhood economic hardship and adult mental health have been acknowledged within social science research. However, there is a scarcity of research examining this relationship among Black Americans, as well as the sociocultural factors that may assist Black Americans in dealing with the effects of childhood economic hardship. This study suggests that family structure, specifically maternal support, may be a significant resource for Black Americans in the face of early economic adversity and mental health outcomes. Using data from the National Longitudinal Study of Adolescent to Adult Health, a nationally representative sample of Black Americans, this study outlines a series of arguments linking childhood economic hardship, maternal support, and depressive symptoms among Black young adults. The results suggest some support for maternal support's involvement in moderating – or buffering - the harmful effects of childhood economic hardship on depressive symptoms of Black Americans, specifically the familial context in which the maternal support is perceived. Study limitations are identified and several promising directions for future research are discussed.

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CHAPTER 1: INTRODUCTION

There is a growing body of literature that examines early life circumstances as a possible fundamental cause of adult health outcomes (McLoyd, 1990; McLaughlin et al., 2007; Wickrama et al., 2008; Walsemann et al., 2009; Goosby, 2013). Life course theory has referred to the deleterious impact of early life disadvantage as the long-arm of childhood (Hayward and Gorman, 2004), which suggests that early life disadvantage may manifest in a variety of life domains, such as economic disadvantage and family instability, and create hardships that lead to a cumulative disadvantage over the life course (Pearlin et al., 2005; Schilling et al., 2008; Wickrama et al., 2013). Current research on childhood adversity and its effects on adult mental health has examined the role of socioeconomic disadvantage (McLoyd, 1990; Elder, 1998; Schafer et al., 2011). More specifically, early economic hardship, typically measured via household income and reception of social service benefits (McLoyd, 1990; Taylor, 2013; Wickrama et al., 2013) has been linked to depressive symptoms and overall negative mental health in adulthood (Williams and Collins, 1995; Ceballo and McLoyd, 2002; Schilling et al., 2008; Adkins et al., 2009; Wickrama et al., 2013).

Although the studies surrounding childhood economic hardship and adult mental health have made significant contributions to our knowledge on the role of early life adversity and adult health, there are several important limitations to this research area. First, much of the work linking childhood (dis)advantage and adult mental health has been examined among majority White samples or solely controlled for the effects of race, which ignores

the distinct experiences of communities of color in the U.S. (McLoyd, 1990). However, because Black Americans are exposed to different stressors throughout the life course (Ceballo and McLoyd, 2002; Williams, 2012; Bloome, 2014), examining the unique experience of early life adversity on the mental health of Black Americans may be a particularly important area of study. Second, few studies consider the role of socio-cultural phenomena, in buffering the deleterious impacts of adversity in early life (for exceptions see Walsemann et al., 2009; Henderson, 2016). This is significant because such phenomena may have a salutary impact on the negative effects of childhood adversity on adult mental health. Examining the moderating role of maternal support may be especially advantageous. A growing body of work examines the positive impact of social support on mental health broadly (Pearlin et al., 2005; Umberson et al., 2010; Thoits, 2011), and the beneficial effects of maternal support specifically. Social support, in form of maternal support, may provide both tangible and intangible aid and emotional support that buffers the negative effects of adversity on adult mental health (Cohen, 2004; Umberson et al., 2010). Moreover, maternal support unfolds throughout the life course and across a variety of family forms that may constrain or enhance the impact of maternal support available, thereby having a differential impact on adult mental health (Umberson et al., 2010).

The aim of this paper is to assess whether maternal support buffers (or moderates) the deleterious effects of early economic hardship on depressive symptoms in young adulthood in a nationally representative sample of Black Americans. A series of theoretical arguments linking early economic hardship, maternal support, and young adult depressive symptoms are discussed and a conceptual model is presented. Several hypotheses drawn from the conceptual model are tested using data from the National Longitudinal Study of Adolescent to Adult Health (Add Health), a nationally representative sample of Black

Americans. The results are presented and discussed in terms of the mechanisms through which maternal support buffers the negative effects of adolescent adversity across three different family structures. Study limitations are noted, and several directions for future research are recognized.

CHAPTER 2: EMPIRICAL AND THEORETICAL BACKGROUND

Childhood Adversity and Adult Mental Health among Black Americans

Life course theory suggests that early life experiences may have a far-reaching impact on a range of circumstances later in life (Preston et al., 1998; Hayward et al., 2004; Pearlin et al., 2005; Goosby, 2013; Wickrama et al., 2014). Often times, this impact is referred to as the long-arm of childhood (Hayward and Gorman, 2004). Hayward and Gorman (2004) discuss childhood conditions, specifically adverse circumstances, and how these circumstances influence adult physical health. Because childhood is a sensitive life period, it can be inferred that any biological or environmental disruptions may have long-lasting consequences after the event takes place (Hayward and Gorman, 2004; Schafer et al., 2011; Wickrama et al., 2014). Specifically, early adverse experiences may have a deleterious impact on health both directly and indirectly by: (a) decreasing access to resources (Burton, 2007; McLaughlin et al., 2007; Goosby, 2013), (b) increasing stressors that are unique to those experiencing economic hardship (McLoyd, 1990; Ross, 2000; Petterson et al., 2001; Wickrama et al., 2014), and (c) increasing and creating social isolation (McLoyd, 1990; Thoits, 2009). For example, Wickrama (2014) finds that economically disadvantaged families are more likely to experience an increase in stressful events, such as resource deprivation (i.e., lack of food and clothing), which may exacerbate challenges for an adolescent already dealing with a number of social changes. The increase in constant exposure to stressful family and environmental experiences may create feelings of social isolation and an increase in overall negative mental health consequences.

Much of the current work surrounding the effects of early economic strain either relies heavily on majority White samples, or simply controls for race-ethnic differences (McLoyd, 1990). Few studies examine the relationship between childhood adversity and adult mental health among Blacks (Gore et al., 2003; Adkins et al., 2009; Walsemann et al., 2009; Umberson et al., 2010; Henderson, 2016). This is surprising given Black Americans tend to be concentrated in the lower socioeconomic status (Bloome, 2014), which may lead to greater exposure to early adverse social and environmental factors compared to other racial-ethnic groups (McLoyd, 1990; Walsemann et al., 2009; Hummer and Hamilton, 2010; Umberson et al., 2010). The disproportionate rate in which Black Americans are impacted by adversity and disadvantage has been linked due to historical and continued discrimination (Vega et al., 1991; Williams et al., 1995; Adkins et al., 2009) that creates a lack of opportunity and resources (McLoyd, 1990; Gore et al., 2003; Walsemann et al., 2009). However, when race-ethnic differences are studied, it is not uncommon to examine the role of socioeconomic status (SES) in adulthood (Gore et al., 2003; Barrett et al., 2005; Goosby, 2013). Adult socioeconomic status has been found to mediate and moderate the association between childhood economic adversity and adult mental health for Blacks (McLaughlin et al., 2007; Walsemann et al., 2009; Goosby, 2013). For example, Gore et al. (2003) finds that educational and employment status mediates the relationship between childhood adversity and depressed mood among Black adults. However, socioeconomic status does not fully account for race variation (Umberson et al., 2010), and other socio-cultural factors may be relevant.

The Role of Maternal Support

The link between social support and positive health has become widely accepted as a social fact (Umberson et al., 2010). However, the work of Ceballo and McLoyd (2002) suggests that social support systems may also serve as protective moderators of negative life stressors. That is, social support from significant others, i.e., friends and family, may provide socio-emotional support that is linked to positive physical and psychological wellbeing even in the face of stressful life events (Caldwell et al., 2002). In addition, a growing body of work has begun to examine the role of maternal support on child health outcomes (Taylor and Roberts, 1995; Caldwell et al., 2002; Ceballo and McLoyd, 2002; McLaughlin et al., 2007; Christie-Mizell et al., 2008; Hummer and Hamilton, 2010; Mcgee and Spencer, 2015). Much of this work suggests that maternal support may offer unique support that has beneficial effects on both the physical and psychological health of children (Taylor and Roberts, 1995; Ceballo and McLoyd, 2002). Specifically, work on maternal support and child mental health finds that maternal support may act as a protective mechanism that is associated with reduced perceived stress and depressive symptoms for offspring, including academic success, increasing autonomy, and decreasing problem behavior (Taylor and Roberts, 1995; Taylor et al., 1997; Caldwell et al., 2002; Ceballo and McLoyd, 2002; Christie-Mizell et al., 2008; Mcgee and Spencer, 2015). Moreover, maternal support may be particularly important for Black Americans given the well documented significance of kin and non-kin (i.e., fictive kinship) relationships in Black families (Taylor et al., 2013). Studies examining the role of maternal support finds mother figures often provide: (a) a sense of belonging (Brookmeyer et al., 2005), (b) social and economic resources (Ceballo et al., 2002), and (c) both informational (Caldwell et al., 2002) and emotional support (Christie-Mizell et al., 2008). For instance, Caldwell (2002)

and colleagues finds that African American mothers are integral to enhancing self-esteem and competencies in their children by socializing them with the tools to cope with the adverse effects of racial discrimination and stressful environments.

Surprisingly, there is a scarcity of work that explores the unique tools and strategies specific to Black mothers in relation to their child's well-being. When explored, this work often ignores some of the systemic difficulties specific to Black mothers due to the complex and historical context surrounding "good" mothering (Kelley, 2001; Hill, 2005). The work of Shirley A. Hill (2005) acknowledges the racialization of motherhood, where the "choice" of motherhood and the perceived benefits that follow are typically fraught with class privileges that neglect the impact of environmental stressors, such as economic disadvantage and racism, that are the realities for many women of color and simultaneously impacts their ability to mother. Furthermore, popular rhetoric surrounding the "mothering" of poor and racial-ethnic minorities is often portrayed negatively (i.e., welfare queen), often ignoring structural challenges for personal responsibility, and approaching these mothers and families from a deficit perspective. Such explanations rarely account for the heightened difficulty experienced by Black mothers due to racism and class disadvantage, nor do they acknowledge the unique ways in which these women persevere in the face of such challenges. Acknowledging the racialization of mothering and maternal support is significant because, although maternal support has been linked to positive outcomes, the pathways by which maternal support buffers early life disadvantage may be complex among Black Americans.

In addition, few studies examine the impact of timing of maternal support or when in the life course maternal support is received and its impact on mental health (Weinfield et al., 2000). In early periods of the life course, parents, particularly mothers, are the

primary agents of socialization and care of children; therefore, this may be the period in which children receive the most beneficial effect of the socio-emotional support received from mothers (Knoester, 2003; Umberson et al., 2010; Taylor et al., 1997; Caldwell et al., 2002; Simons et al., 2006; Wickrama et al., 2008; McGee et al., 2015). However, mothers may be able to provide their adult children with practical advice, as well as help them achieve a greater understanding of the circumstances and obstacles they have overcome in early life (Knoester, 2003). It is important to acknowledge timing, because it may entail different mechanisms of support that are significant to our understanding of the moderating role of maternal support. However, maternal support may also be influenced by the family structure due to the particular benefits, or constraints, caused by the familial context.

The Importance of Family Structure

American families have experienced a number of demographic changes in the recent past (Taylor et al., 1997 and McLanahan, 2004; Cherlin, 2010). These demographic changes include: decline in marriage rates, increase in rates of non-marital fertility, and increases in female-headed households (Jaynes and Williams, 1989; Taylor et al., 1997; and McLanahan, 2004). Although these trends impact all race-ethnic groups in America, Black families have been disproportionately affected by these changes (Taylor et al., 1997; Ceballo and McLoyd, 2002; Burton, 2007; Fomby et al., 2010; Hummer and Hamilton, 2010). Particularly for Black families, we have seen an increase in single motherhood (Burton, 2007) and intergenerational and extended family households, specifically grandparents and fictive, or non-biological, kin (Williams et al., 2010 and Taylor et al., 2013), as well as delays in marriage (Fomby et al., 2010; Hummer and Hamilton, 2010; Bloome, 2014). It is well documented that familial ties (both biological and fictive) have

been a salient source of social and emotional support in the Black community (Taylor et al., 1997).

Previous research suggests that individuals interconnected within strong family networks are less likely to succumb to the damaging effects of stress, and are more likely to experience positive mental health outcomes (House et al., 1988; Caldwell et al., 2002; and Taylor et al., 2013). Therefore, family structure may impact the availability of both tangible and intangible resources (Petterson and Albers, 2001; Bloome, 2014), the stability of the household (Fomby, 2010), and the ability for parents to be involved (Petterson and Albers, 2001; Sarkisian and Gertsel, 2004). For example, Bloome (2014) acknowledges how the vast inequalities in family income may be explained by examining how changes in family composition, specifically the rise of single mother households, shifts economic chances, thus limiting the amount of economic resources mothers may provide. Therefore, family structure may be an important factor to our understanding of the contexts in which maternal support works to buffering the effects of early life adversity on adult mental health.

Conceptual Model

Based on the theory and research reviewed to this point, two conceptual models are presented on the way(s) in which early life disadvantage and maternal support may be linked to adult depressive symptoms among Black Americans. In the first model, or the main effects model, early life adversity is posited to have positive association with adult depressive symptoms and multiple dimensions of maternal support –i.e., childhood and adulthood - is expected to be inversely association with depressive symptoms. However, the effects of early life disadvantage and maternal support are thought to be largely or completely independent of one another.

The second alternative model, suggests a more complex or interactive relationship between maternal support and early adversity. The second model, or the *stress-buffering* model, asserts that resources (i.e., maternal support) will help to reduce the impact of stressful events on depressive symptoms. In this sense, maternal support serves as an insulating factor, or *buffer*, between early disadvantage and depressive symptoms such that individuals who have more maternal support are less affected by early life circumstances. The buffering (or moderating) model is formulated as one involving an interaction – or crossproduct term – between maternal support and early economic disadvantage (i.e., adversity x maternal support). Because of the expected significance of family structure, each model will be tested by examining the relationship between adolescent economic hardship, maternal support, and young adult depressive symptoms by family structure- i.e. nuclear, female-headed, and extended households. This conceptual model can be seen in Figure 2.1.

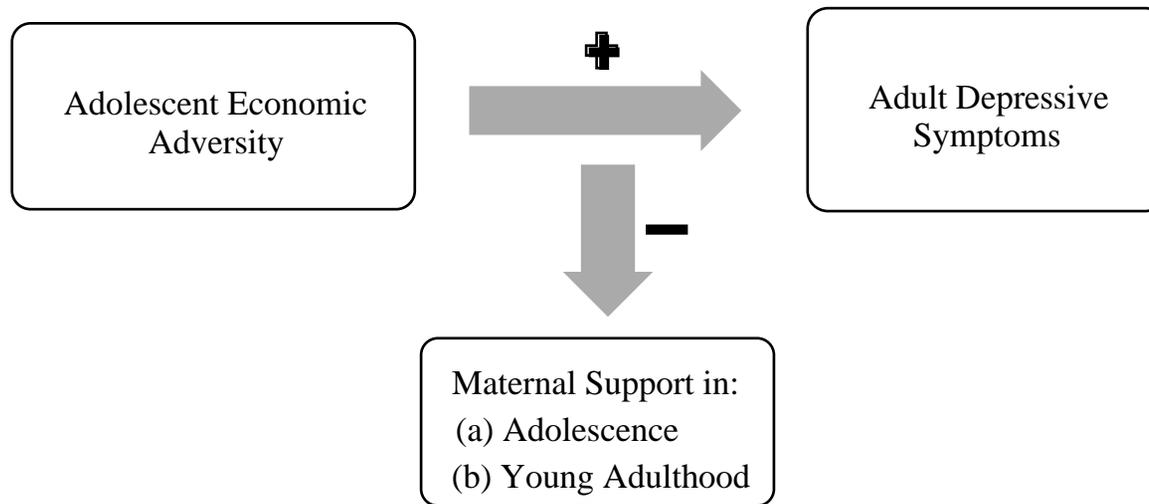


Figure 2.1 : Conceptual framework of adolescent economic adversity, depressive symptoms, and the moderating effects of maternal support

CHAPTER 3: DATA AND METHODS

Data for the present study came from the National Longitudinal Study of Adolescent to Adult Health, a nationally representative sample of adolescents (Harris et al., 2009). One of the key features of the Add Health data is that it includes the largest nationally representative sample of high schools with an over-sampling of racial minorities, such as Black Americans (Adkins et al., 2009; Harris et al., 2009). In 1994-95, Wave I data were derived from a complex-stratified cluster sampling, which yielded 20,745 respondents with a response rate of 79 percent from all participating schools. Wave IV was a follow-up study of the individuals in Wave I conducted in 2008, which yielded 15,701 respondents, or approximately 75% of the original Wave I respondents. The sampling methods of the Add Health have been described in detail elsewhere (Harris et al., 2009; Wickrama et al., 2014). I used in-home interview data from parents who responded to marital history questions in Wave I and adolescents who participated in Waves I and IV, which is young adulthood.

Variables

Depressive Symptoms. Depressive symptoms was measured using nine items derived from the Center for Epidemiologic Studies Depression Scale (CES-D) (Pettersen et al., 2001; Foster et al., 2008; Adkins et al., 2009; Walsemann et al., 2009; Wickrama et al., 2014), and were taken from Wave IV of Add Health. Respondents were asked how often in the past week (7 days) they: (1) were bothered by things, (2) could not shake off the blues, (3) felt as good as others, (4) had trouble concentrating, (5) felt depressed, (6) felt too tired,

(7) enjoyed life, (8) felt sad, and (9) felt disliked. Responses ranged from “0= never or rarely (less than one day)” to “3=most or all of the time (5-7 days).” Per convention, positive responses were reverse-coded, and the nine items were summed with a range of 0 to 27. The Cronbach’s alpha=.80.

Adolescent Economic Adversity. The key independent variable, adolescent economic adversity, is defined by a dichotomous variable 0= “no hardship” and 1= “any hardship,” from a series of six questions concerning early life economic disadvantage. The six items were taken from the parent interview data in Wave I of Add Health, and assessed whether anyone in the household ever received: (1) social security, (2) supplemental security income (SSI), (3) aid to families with dependent children, (4) food stamps, (5) housing subsidies. The sixth item is poverty threshold item (i.e., 1=below poverty 1994 poverty threshold vs. 0=above poverty threshold in 1995) derived from the total household income before taxes in 1994 and the 1994 US Census poverty level threshold (Wickrama et al., 2014).

High Maternal Support. Maternal support, which represents the respondent’s residential maternal figure, and not simply the respondent’s biological mother, is measured using two items. First, respondents were asked their level of satisfaction with their communication with their maternal figure (i.e., you are satisfied with the way you and your mother communicate with each other?). Responses ranged from 1=“strongly disagree” to 5=“strongly agree.” Second, respondents were asked how close they felt to their maternal figure (i.e., how close do you feel to your resident mother, or maternal figure?). Responses ranged from 1= “not at all” to 5= “very much”. These two items were summed, and due

to the skewed distribution of the variable the items were dichotomized 0= low/moderate maternal support (ranging from 2-9) and 1= high maternal support (a score of 10). In an attempt to capture the importance of timing in maternal support, these items were measured at both Wave I and Wave IV when respondents were aged 12-19 (i.e., adolescent maternal support) and 24 to 33 (i.e., adult maternal support), respectively.

Family structure. Family structure, which consists of nuclear, blended, femaleheaded, male-headed, and extended family households, was created using parent in-home interview data from Wave I. Using the household roster variable to determine number in household, household structure (i.e. which parental figures or significant others, if any, are in the household), and how individuals are related within each household, a family structure variable is the generated. A series of variables is then created using the aforementioned family structure variable to separate households into specific categories: nuclear, blended, female-headed, male-headed, maternal intergenerational, respondent's own nuclear, father or mother's girlfriend/boyfriend, respondent's own single-headed, and extended family households. A combined categorical family structure variable was then created that only consisted of- due to size of each subsample- nuclear, female-headed, and extended (including intergenerational) family households.

In addition, the models control for: gender (female=1), age (measured in years), and marital status in adulthood (measured in a series of dummy variables with single/never married serving as the reference category). Models also control for the nine-item Center for Epidemiological Studies Depression Scale (CES-D) at Wave I of Add Health as well as adolescent and adult paternal support. Paternal support was measured using the same questions asked of mothers (i.e., closeness and communication) at both Wave I and IV.

Items were reverse coded where necessary so that higher scores reflect more paternal support; due to the nature of the questions paternal support was only measured for the nuclear and extended family subsamples

Analytical Strategy

Data analysis progressed in several steps. First, the analytical sample was limited to Blacks or African Americans that were not missing on the dependent, independent, and control variables, as well as the sample weights in Waves I and IV of Add Health. In an attempt to retain as many cases as possible, respondents who were able to answer the questions on the maternal figure were kept, while all others were removed from the sample via casewise deletions. All variables, with the exception of adolescent economic adversity, adolescent maternal support, adolescent paternal support, and depressive symptoms in childhood was measured using Wave IV; all other items mentioned above were measured at Wave I. After the sample was restricted, I further restricted that sample based on family structure, specifically those within a nuclear, female-headed, and extended family household.

A series of Ordinary Least Squares regressions (OLS regression) models were run using the statistical program STATA: First, Model 1 examined the association between childhood economic adversity and adult depressive symptoms net of the sociodemographic variables and other covariates among Black Americans. Second, Model 2 adds the two measures of maternal support in both adolescences and adulthood to Model 1. Next, in Model 3, an interaction term between adolescent economic hardship and adolescent maternal support was added to Model 2. Model 4 examined the interaction term between adolescent economic adversity and adult maternal support and controlled for all covariates as well as childhood maternal support. Finally, Model 5 was the inclusion of both

interaction terms into Model 2. The five models previously mentioned were run on the following family structures: nuclear; female-headed; and extended family.

CHAPTER 4: RESULTS

Descriptive statistics for the overall sample and by family structure are presented in Table 4.1. On average, respondents report relatively low levels of depressive symptoms (mean of 6.35 with a range of 0-27), and roughly half of the respondents experienced some form of economic hardship in early adolescents (51%). Regarding maternal support, the majority of respondents report receiving high levels of maternal support in adolescences and adulthood, roughly 72% and 63% respectively. In terms of sociodemographic characteristics for the overall sample, 50% were women, the average age is 28 years old, and almost half have never been married (48%). There are several key differences by family structure worth noting: respondents in female-headed and extended families report higher levels of depressive symptoms compared to respondents in nuclear families (i.e., 6.46 and 6.64 vs. 5.83, respectively). In addition, respondents in non-nuclear families report experiencing more economic hardship in early life; over half of respondents in female-headed households and over two-thirds of respondents in extended families report experiencing adolescent economic adversity compared with only a quarter of respondents in nuclear families. Lastly, respondents in nuclear families report higher levels of maternal support in both adolescences and adulthood than respondents in the other family types; this is particularly pronounced for respondents in extended families during adolescences where only 37% report receiving high levels of maternal support versus 75% of respondents in nuclear families.

Table 4.2 presents a series of OLS regression models, estimating the net effects of economic adversity, maternal support and covariates on depressive symptoms in nuclear families. The results of Model 1 suggest that economic hardship in adolescence is positively related to depressive symptoms in young adulthood (Model 1: $b=2.14$, $p<.05$). These results are consistent with previous work on the relationship between childhood adversity and adult mental health (Gore et al., 2003; Adkins et al., 2009; Walsemann et al., 2009; Umberson et al., 2010; Henderson, 2016). With the inclusion of maternal support in Model 2, the association between childhood economic hardship and adult depressive symptoms is no longer significant. This could suggest that the presence of maternal support is beneficial in suppressing the negative effects of economic disadvantage on depressive symptoms in young adulthood, which proposes the possibility of maternal support providing the expected protective mechanisms. Moreover, I find that adult maternal support is inversely related to adult depressive symptoms ($b=-1.70$, $p=.05$), while maternal support in adolescents has no significant association.

Turning to the interactive, stress-buffering, models. The results reveal mixed support for the hypothesized role of maternal support in buffering the deleterious effects of early economic hardship on adult depressive symptoms. Specifically, the results of model 3, reveal that the link between adolescent economic hardship and young adult depressive symptoms is moderated by high levels of maternal support in adolescence (Model 3: $b= 5.60$, $p<.01$) net of covariates in respondents from nuclear families. The moderating role of adolescent maternal support is illustrated in Figure 4.1. Figure 4.1, reveals that in comparison with respondents with light to moderate maternal support, respondents with high maternal support in adolescents who experience any early economic hardship have lower levels of depressive symptoms.

Continuing with Model 4, which examines the stress-buffering role of adult maternal support on young adult depressive symptoms, I find no significant interactive effects. Lastly, Model 5 examines the interactive (buffering) role of maternal support in both adolescence and young adulthood net of covariates, on depressive symptoms in young adulthood. The results of model 5, suggests that the link between adolescent economic hardship and young adult depressive symptoms is weakened by the presence of high levels of maternal support in adolescence (Model 5: $b = -6.11$, $p < .01$), net of the interactive effect of adolescent maternal support and early economic hardship and other covariates. This suggests that the negative impact of adolescent economic hardship on depressive symptoms among Black young adults from nuclear family households, is weakened by the presence of high maternal support in adolescence. Figure 4.2 can be read using the same logic outlined above. Figure 4.1 reveals that, in comparison to those respondents who experience no hardship, those who experience any hardship in adolescence have high levels of depressive symptoms, but when those who experience hardship in adolescence also experience high maternal support in adolescence, depressive symptoms weaken considerably.

Table 4.3 presents the same series of OLS regression models for female-headed households. In the results of model 1, I find no significant relationship between childhood economic hardship and depressive symptoms in young adulthood. Model 2 shows no significant relationship between maternal support, for either adolescence nor young adulthood, and depressive symptoms in young adulthood. Finally, the results for the interactive stress-buffering models 3-5 are not significant; therefore maternal support does not seem to act as a stress-buffer for Black young adults from female-headed families.

Table 4.4 presents a series of OLS regression models for the outcome, depressive symptoms in young adulthood for respondents in extended family households. Models 15 follow the same structure as seen in Tables 4.2 and 4.3. In model 1, when examining the net effects of childhood economic hardship on depressive symptoms in young adulthood, there seems to be no significant relationship between hardship and adult depressive symptoms. Model 2 shows no significant link between maternal support, in both adolescence and young adulthood, and depressive symptoms in young adulthood. The interactive models 3-5 also show no significant link to depressive symptoms, which suggests that maternal support does not act as a significant stress-buffer for Black young adults from extended family households.

Table 4.1: Descriptive Statistics on Analytical Sample by family Structure, Weighted Data Add Health

	Range	All		Nuclear Family ^a		Female-Headed Family ^a		Extended Family ^a	
		Mean/%	St. Dev	Mean/%	St. Dev	Mean/%	St. Dev	Mean/%	St. Dev
<i>Dependent Variable</i>									
Adult Depressive Symptoms	0-27	6.35	0.21	5.83	0.28	6.46***	0.32	6.64***	0.26
<i>Key Independent Variables</i>									
Adolescent Economic Hardship ^b	0-1	51.21		23.24		55.96***		68.64***	
High Adolescent Maternal Support ^b	0-1 High	71.86		75.17		75.24		37.27***	
Adult Maternal Support ^b	0-1	62.90		69.26		61.18**		61.56***	
<i>Covariates</i>									
Depressive Symptoms W1	0-27	6.16	0.16	5.62	0.24	6.01***	0.23	6.48***	0.23
Adolescent Paternal Support ^b	0-1	94.76		95.99		---		94.60***	
Adult Paternal Support ^b	0-1	56.11		65.13		---		57.68***	
Age	24-33	28.40	0.22	28.43	0.24	28.25	0.21	28.46***	0.26
Female	0-1	50.21		50.31		52.16*		49.78***	
Cohabitation	0-1	22.96		19.31		24.29***		23.81***	
Other	Status	3.63		2.09		3.68**		4.03**	
Never Married	0-1	48.34		46.54		48.45***		49.95	
n			2251		646		603		819

Notes: Data come from Add Health; *p<.05; **p<.01; p***p<.001 ^a Mean differences by nuclear family. ^bReference: No hardship, low/moderate maternal support, and married.

Table 4.2: Ordinary Least Squares Models Estimating the Effect of Adolescent Economic Hardship and Maternal Support on Adult Depressive Symptoms among Black Young Adults.

	Nuclear Family Household				
	Model 1	Model 2	Model 3	Model 4	Model 5
	b (SE)	b (SE)	b (SE)	b (SE)	b (SE)
Adolescent economic hardship	2.14 (1.06)*	1.94 (1.10)	6.55 (2.26)**	0.44 (1.58)	5.19 (2.75)
High adolescent maternal support		-1.70 (0.80)*	0.74 (0.64)		1.30 (0.70)
High adult maternal support				2.26 (0.84)**	-2.50 (0.88)**
Female	-0.44 (0.53)	-0.34 (0.47)	-0.48 (0.51)		
Adolescent paternal support	-2.92 (1.38)*	-3.06 (1.44)*	-3.10 (1.36)*	-3.35 (1.43)*	-3.60 (1.41)*
Adult paternal support	0.87 (0.46) 0.14				-0.35 (0.45)
Age	(0.13) 1.30	1.28 (0.59)*	0.80 (0.48)	1.36 (0.54)*	1.32 (0.55)*
Never Married	(0.58)* 1.19	0.13 (0.14)	0.18 (0.13)	0.12 (0.13)	0.17 (0.13)
Cohabitation	(0.85) 2.39	1.12 (0.52)*	1.18 (0.57)*	1.19 (0.54)*	1.01 (0.52)
Other status	(1.71)	1.06 (0.89)	0.90 (0.69)	1.21 (0.86)	0.90 (0.72)
Depressive symptoms WI		1.85 (1.84)	2.25 (1.80)	1.76 (1.83)	1.47 (2.01)
	0.27 (0.09)**	0.27 (0.09)**	0.29 (0.09)**	0.26 (0.09)**	0.29 (0.09)**
<i>Interactions^a</i>					
Economic hardship x High adolescent maternal support			-5.60 (2.14)**		-6.11 (2.13)**
Economic hardship x High adult maternal support				2.46 (1.79)	2.47 (1.79)
Intercept	-1.47	3.03	0.18	3.97	2.07
Adj. R ²	0.13	0.16	0.17	0.17	0.21

Notes: *p<.05; **p<.01; ***p<.001

Table 4.3: Ordinary Least Squares Models Estimating the Effect of Adolescent Economic Hardship and Maternal Support on Adult Depressive Symptoms among Black Young Adults.

	Female-Headed Family Household				
	Model 1	Model 2	Model 3	Model 4	Model 5
	b (SE)	b (SE)	b (SE)	b (SE)	b (SE)
Adolescent economic hardship ¹	0.91 (0.51)	0.97 (0.50)	0.80 (0.87)	1.08 (0.72)	1.10 (0.91)
High adolescent maternal support		-1.39 (0.71)	-1.70 (0.78)*		-1.50 (0.77)
High adult maternal support		-0.92 (0.56)		-1.03 (0.61)	0.69 (0.56)
Female					
Age	0.33 (0.54)	0.18 (0.58)	0.18 (0.55)	0.30 (0.58)	0.17 (0.57)
Never Married	-0.16 (0.19)	-0.25 (0.20)	-0.24 (0.20)	-0.19 (0.19)	-0.25 (0.20)
Cohabitation	-0.08 (0.70)	-0.77 (0.20)	-0.12 (0.64)	-0.18 (0.64)	-0.18 (0.59)
Other status	(0.66) 0.37 (1.36)	0.72 (0.60)	0.83 (0.63)	0.65 (0.62)	0.73 (0.60) 0.59
Depressive symptoms WI		0.55 (1.36)	0.54 (1.37)	0.42 (1.37)	(1.37)
	0.17 (0.07)**	0.16 (0.06)*	0.15 (0.06)*	0.17 (0.06)**	0.16 (0.06)**
<i>Interactions^a</i>					
Economic hardship x High adolescent maternal support					
Economic hardship x High adult maternal support			0.19 (1.01)		0.17 (1.00)
Intercept				-0.21 (0.80)	-0.41 (0.77)
Adj. R ²	9.11	13.49	12.83	10.55	13.49
	0.07	0.10	0.09	0.08	0.10

Notes: *p<.05; **p<.01; ***p<.001

Table 4.4: Ordinary Least Squares Models Estimating the Effect of Adolescent Economic Hardship and Maternal Support on Adult Depressive Symptoms among Black Young Adults.

	Extended Family Households				
	Model 1	Model 2	Model 3	Model 4	Model 5
	b (SE)	b (SE)	b (SE)	b (SE)	b (SE)
Adolescent economic hardship ¹ High adolescent maternal support	1.07 (0.90)	1.04 (0.94)	0.33 (1.21)	-0.13 (1.36)	-0.54 (1.72)
High adult maternal support		-0.45 (1.27)	-1.07 (0.88)		-0.74 (0.91)
Female		-0.27 (0.70)		-1.25 (1.07)	-1.01 (1.09)
Adolescent paternal support Adult paternal support	1.30 (0.95)	1.32 (1.00)	1.26 (0.90)	1.30 (0.96)	1.26 (0.92)
Age	-3.69 (1.77)*	-3.53 (1.79)	-3.65 (1.81)*	-3.45 (1.68)*	-3.45 (1.74)*
Never Married	-0.61 (0.69)	-0.51 (0.76) 0.21	-0.55 (0.69)	-0.50 (0.72)	-0.51 (0.72)
Cohabitation	0.23 (0.26)	(0.28)	0.23 (0.30)	0.23 (0.26)	0.23 (0.29)
Other status	-0.24 (0.93)	-0.27 (0.98)	-0.41 (0.94)*	-0.39 (0.92)	-0.51 (0.91)
Depressive symptoms WI	-0.77 (0.83)	-0.75 (0.85)	-0.78 (0.85)	-0.91 (0.87)	0.89 (0.90)
	-1.57 (1.19)	-1.48 (1.17) 0.20	-0.78 (0.85)	-1.45 (1.20)	-1.46 (1.23)
<i>Interactions^a</i>	0.21 (0.10)*	(0.10)	0.20 (0.10)*	0.21 (0.10)*	0.20 (0.10)*
Economic hardship x High adolescent maternal support Economic hardship x High adult maternal support					
Intercept			1.04 (1.81)		0.74 (1.73)
Adj. R ²				1.83 (1.61)	1.66 (1.61)
	1.04	1.87	1.90	1.61	2.06
	0.14	0.15	0.15	0.15	0.15

Notes: *p<.05; **p<.01; ***p<.001

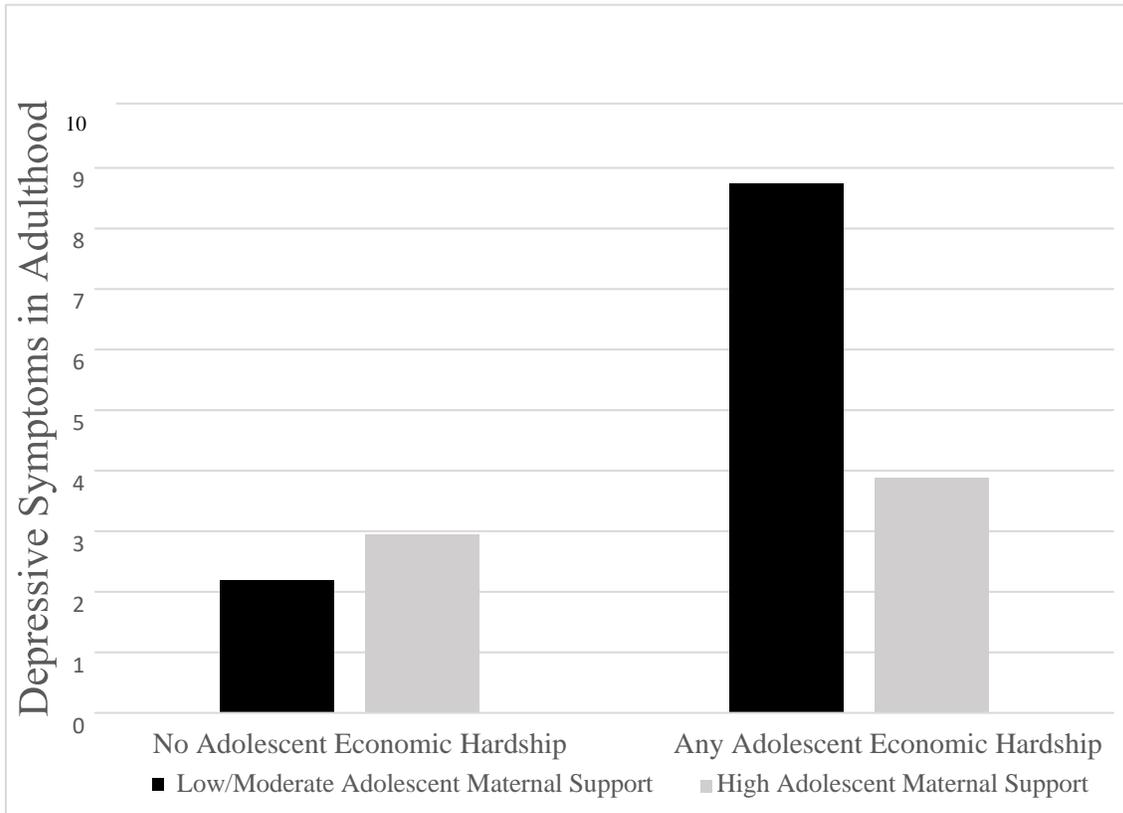


Figure 4.1: Interaction between Adolescent Economic Hardship and Adolescent Maternal Support on Adult Depressive Symptoms within Nuclear Family Households

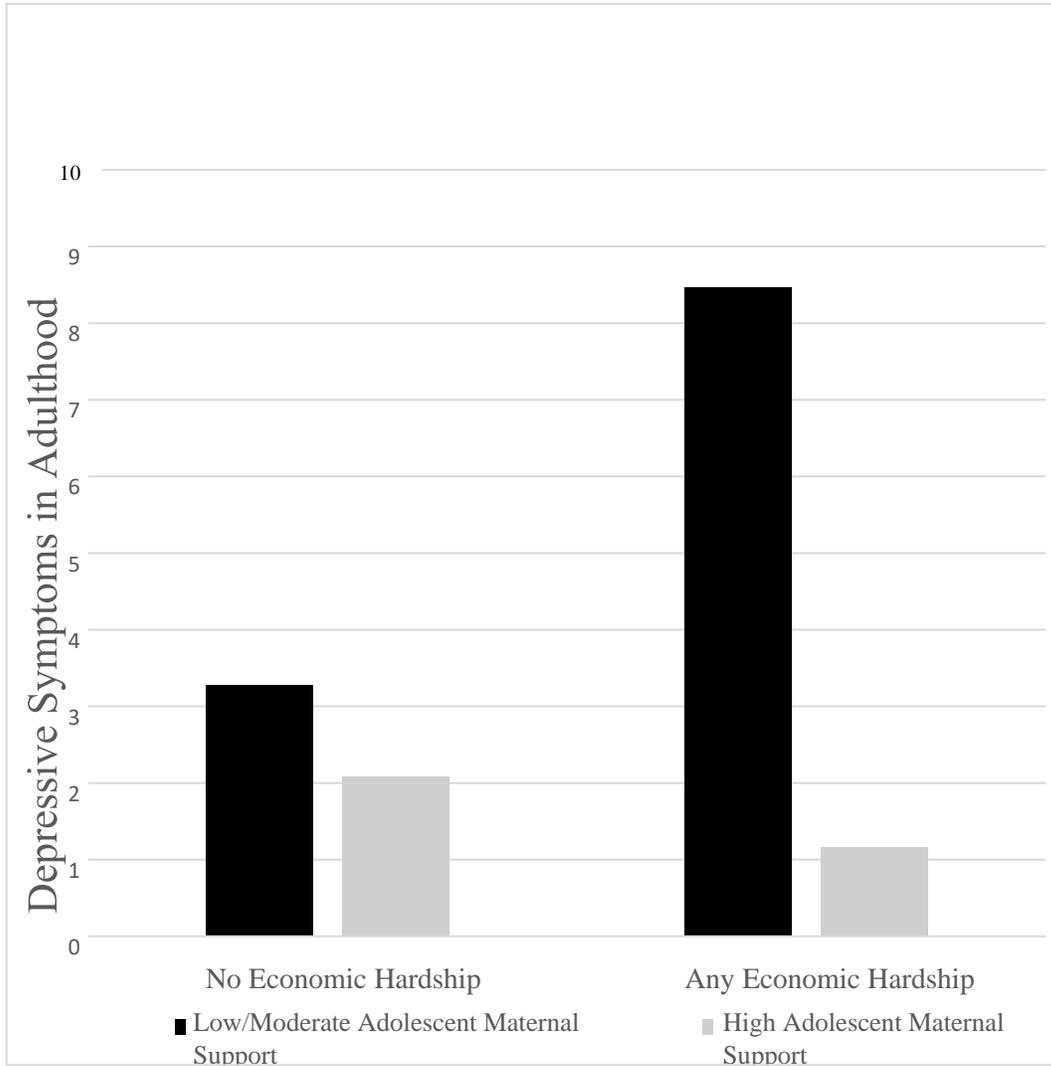


Figure 4.2: Interaction between Adolescent Economic Hardship and Adolescent Maternal Support on Adult Depressive Symptoms, Controlling for the Interaction between Adolescent Economic Hardship and Adult Maternal Support within Nuclear Family Households

CHAPTER 5: DISCUSSION

Life course research within sociology suggests that early life disadvantages may have detrimental consequences on later stages in life (Preston et al., 1998; Hayward and Gorman, 2004). These disadvantages, specifically early economic hardship, may lead to negative mental health outcomes, such as depressive symptoms, in adulthood (Schafer et al., 2011; Bloome, 2014; Wickrama et al., 2014). Much of the work examining this topic tends to examine the effects of socioeconomic status as a stress-buffer (Gore et al., 2003; Barrett et al., 2005; Goosby, 2013). Although the negative effects of early economic hardship on depressive symptoms has been consistent in previous studies, there has been little examination among Black Americans and the sociocultural factors that may be working to protect individuals from those negative effects. The present study examined whether maternal support plays a significant role in protecting the mental health of Black young adults from the deleterious impact of early economic hardship, as well as the importance of family structure in the transmission of these buffering effects in a nationally representative sample of Black Americans.

The results of the present study suggest that the buffering effects of maternal support is most significant within the context of nuclear families. More specifically, high levels of maternal support in adolescence in nuclear families is associated with lower levels of depressive symptoms in Black young adulthood in the face of early economic hardship. This finding is consistent with prior research that suggests that maternal support plays a significant role in providing socioemotional support that is associated with positive mental

health outcomes (Caldwell et al., 2002; Taylor et al., 2013). These findings are also consistent with current studies surrounding the importance of stable family environments, which may offer high levels of protection against stressors that may negatively affect later mental health (Barrett et al., 2005; Carr et al., 2010). Why might this be the case? Maternal support may be most significant in nuclear, or two-parent, households because such families may have access to more resources than other types of household structures (Taylor et al., 1997; Ceballo and McLoyd, 2002; Fomby, 2010; Bloome, 2014). Specifically, two-parent families have access to, and are generally able to provide, more economic and socioemotional support than single-parent or extended family households (Taylor et al., 1997; Barrett et al., 2005; Burton, 2007; Bloome, 2014). Within this household structure, maternal figures may be provided with more economic and socioemotional support from their partner, which may lessen the mother's exposure to stressors (Burton and Tucker, 2009), thereby enabling her to provide more support to her child.

Additionally, I found that timing of maternal support in adolescence is most significant. It is possible that maternal support received in adolescence is most significant because this is the time when maternal figures spend most of their time and resources on their children (Caldwell et al., 2002; Knoester, 2003; Umberson et al., 2010). As we previously stated, mothers tend to be the primary agents of care within childhood and adolescence, where they are typically primarily responsible for providing children with socialization, emotional support, and giving them a feeling of inclusion (Taylor et al., 1997; Caldwell et al.,

2002; Simons et al., 2006; Wickrama et al., 2008; McGee et al., 2015). Because there is no consensus surrounding the operationalization of maternal support, it could that the dimensions of support measured here is most salient in early life, where one might expect to have more closeness and communication with the mother figure. In future studies, it may be beneficial to include measures of maternal support that are better representative of maternal support in young adulthood, such as practical advice, or financial support.

Finally, there were no significant stress-buffering effects for individuals from female-headed and extended family households. This may be explained by the structural constraints of such families compared to those from nuclear families (Williams, 2012; Bloome, 2014). Particularly within the scope of female-headed households, but also extended families as well, it may be more difficult for maternal figures to overcome the overwhelming challenges of economic hardship, which may lead to stress not only on the children, but for the maternal figure as well (Burton, 2007; Hummer and Hamilton, 2010). My results support that, although individuals from female-headed and extended households report relatively high levels of maternal support, they also report significantly more economic hardship as well. Such economic realities may be too severe or overwhelming for mothers to “protect” their children (Hill, 2005; Burton, 2007; Adkins et al., 2009; Bloome, 2014). It is also important to consider the ways in which motherhood has been historically and contemporarily defined and contextualized. Motherhood has often been racialized to accuse poor and racial-ethnic mothers of incompetency and inadequacies, in which they

are expected to adhere to the ideals of mothering that predominantly focus on middle and upper class White women (Kelley, 2001; Hill, 2005). To better recognize how mothering works within the context of Black family, further examination of these femaleheaded and extended family households should be performed.

It is important to note several limitations of the present study. These issues convey attentiveness in interpreting and generalizing these findings, but they also highlight important future directions for the field. First, economic hardship was measured predominantly using items surrounding social service benefits, and although this measure has been used prior (Wickrama et al., 2014), there is room to expound upon this measure by including more comprehensive items that capture various forms of disadvantage throughout early life. Second, as previously mentioned, the measure of maternal support is limited to two items that may be capturing a particular type of support, while also mainly portraying aspects of support that are typically perceived in earlier stages of development and life course. Future research may benefit from the development of measures that better represent maternal support in young adulthood, such as measures surrounding advice or providing emotional support during adverse times. Finally, because depressive symptoms are measured at young adulthood, it is possible that maternal support in adulthood may have protective effects that are unable to be examined due to the amount of time between measured support and measured outcome. Future studies may benefit from measuring depressive symptoms later in the life course, such as middle age, to better understand the effects of early adversity on adult mental health within Black Americans. In spite of

the limitations of this study, the findings illustrate the link between adolescent maternal support, early economic hardship, and depressive symptoms in young adulthood. The results suggest potential importance of specific dimensions surrounding adolescent maternal support, specifically within nuclear families, in buffering the negative effects of early economic hardship. This work adds to the previous work surrounding life course theory and the effects of early experiences on health broadly, while also adding to the evidence surrounding the impact of family on the mental health of Black Americans.

REFERENCES

- Adkins, D. E., Wang, V., Dupre, M. E., E. J. C. G. Van Den Oord, & Elder, G. H. (2009). Structure and Stress: Trajectories of Depressive Symptoms across Adolescence and Young Adulthood. *Social Forces*, 88(1), 31-60.
- Barrett, A. E., & Turner, R. J. (2005). Family Structure and Mental Health: The Mediating Effects of Socioeconomic Status, Family Process, and Social Stress. *Journal of Health and Social Behavior*, 46(2), 156-169.
- Bloome, D. (2014). Racial inequality trends and the intergenerational persistence of income and family structure. *American sociological review*, 79(6), 1196-1225.
- Brookmeyer, K. A., Henrich, C. C., & Schwab-Stone, M. (2005). Adolescents Who Witness Community Violence: Can Parent Support and Prosocial Cognitions Protect Them From Committing Violence? *Child Development*, 76(4), 917-929.
- Burton, L. (2007). Childhood Adultification in Economically Disadvantaged Families: A Conceptual Model. *Family Relations*, 56(4), 329-345.
- Burton, L. M., & Tucker, M. B. (2009). Romantic unions in an era of uncertainty: A post-Moynihan perspective on African American women and marriage. *The Annals of the American Academy of Political and Social Science*, 621(1), 132-148.
- Caldwell, C. H., Zimmerman, M. A., Bernat, D. H., Sellers, R. M., & Notaro, P. C. (2002). Racial Identity, Maternal Support, and Psychological Distress among African American Adolescents. *Child Development*, 73(4), 1322-1336.

- Carr, D., & Springer, K. W. (2010). Advances in families and health research in the 21st century. *Journal of Marriage and Family*, 72(3), 743-761.
- Ceballo, R., & Mcloyd, V. C. (2002). Social Support and Parenting in Poor, Dangerous Neighborhoods. *Child Development*, 73(4), 1310-1321.
- Cherlin, A. J. (2010). Demographic trends in the United States: A review of research in the 2000s. *Journal of Marriage and Family*, 72(3), 403-419.
- Christie-Mizell, C. A., Pryor, E. M., & Grossman, E. R. (2008). Child Depressive Symptoms, Spanking, and Emotional Support: Differences Between African American and European American Youth. *Family Relations*, 57(3), 335-350.
- Cohen, S. (2004, November). Social Relationships and Health. *American Psychologist*, 59(8), 676-684.
- Elder, G. H. (1998). The life course as developmental theory. *Child development*, 69(1), 1-12.
- Fomby, P., Mollborn, S., & Sennott, C. A. (2010). Race/ethnic differences in effects of family instability on adolescents' risk behavior. *Journal of Marriage and Family*, 72(2), 234-253.
- Foster, H., Hagan, J., & Brooks-Gunn, J. (2008). Growing up Fast: Stress Exposure and Subjective "Weathering" in Emerging Adulthood. *Journal of Health and Social Behavior*, 49(2), 162-177.
- Goosby, B. J. (2013). Early Life Course Pathways of Adult Depression and Chronic Pain. *Journal of Health and Social Behavior*, 54(1), 75-91.

- Gore, S., & Aseltine, R. H. (2003). Race and Ethnic Differences in Depressed Mood Following the Transition from High School. *Journal of Health and Social Behavior*, 44(3), 370.
- Harris, K.M., C.T. Halpern, E. Whitsel, J. Hussey, J. Tabor, P. Entzel, and J.R. Udry. 2009. The National Longitudinal Study of Adolescent to Adult Health: Research Design [WWW document]. URL: <http://www.cpc.unc.edu/projects/addhealth/design>.
- Hayward, M. D., & Gorman, B. K. (2004, February). The Long Arm of Childhood: The Influence of Early-Life Social Conditions on Men's Mortality. *Demography*, 41(1), 87-107.
- Henderson, A. K. (2016). The Long Arm of Religion: Childhood Adversity, Religion, and Self-perception Among Black Americans. *Journal for the Scientific Study of Religion*, 55(2), 324-348.
- Hill, S. A. (2005). *Black intimacies: A gender perspective on families and relationships*. Rowman Altamira.
- House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*, 241(4865), 540.
- Hummer, R. A., & Hamilton, E. R. (2010). Race and ethnicity in fragile families. *The Future of Children*, 20(2), 113-131.
- Kelley, R. D. (2001). *Yo'mama's disfunkcional!: Fighting the culture wars in urban America*. Beacon Press.
- Knoester, C. (2003). Transitions in Young Adulthood and the Relationship between Parent and Offspring Well-Being. *Social Forces*, 81(4), 1431-1458.

- Mcgee, E., & Spencer, M. B. (2015). Black Parents as Advocates, Motivators, and Teachers of Mathematics. *The Journal of Negro Education*, 84(3), 473.
- McLanahan, S. (2004). Diverging destinies: How children are faring under the second demographic transition. *Demography*, 41(4), 607-627.
- Mclaughlin, A. E., Campbell, F. A., Pungello, E. P., & Skinner, M. (2007). Depressive Symptoms in Young Adults: The Influences of the Early Home Environment and Early Educational Child Care. *Child Development*, 78(3), 746-756.
- Mcloyd, V. C. (1990). The Impact of Economic Hardship on Black Families and Children: Psychological Distress, Parenting, and Socioemotional Development. *Child Development*, 61(2), 311.
- National Research Council Committee on the Status of Black Americans, Jaynes, G. D., Williams Jr, R. M., Jaynes, G. D., Jaynes, G. D., & Williams, R. M. (1989). *A common destiny*.
- Pearlin, L. I., Schieman, S., Fazio, E. M., & Meersman, S. C. (2005). Stress, Health, and the Life Course: Some Conceptual Perspectives. *Journal of Health and Social Behavior*, 46(2), 205-219.
- Petterson, S. M., & Albers, A. B. (2001). Effects of Poverty and Maternal Depression on Early Child Development. *Child Development*, 72(6), 1794-1813.
- Preston, S. H., Hill, M. E., & Drevenstedt, G. L. (1998). Childhood conditions that predict survival to advanced ages among African-Americans. *Social Science & Medicine*, 47(9), 1231-1246.
- Ross, C. E. (2000). Neighborhood Disadvantage and Adult Depression. *Journal of Health and Social Behavior*, 41(2), 177.

- Sarkisian, N., & Gerstel, N. (2004). Kin support among Blacks and Whites: Race and family organization. *American Sociological Review*, 69(6), 812-837.
- Schafer, M. H., Ferraro, K. F., & Mustillo, S. A. (2011). Children of Misfortune: Early Adversity and Cumulative Inequality in Perceived Life Trajectories. *American Journal of Sociology*, 116(4), 1053-1091.
- Schilling, E.A, Aseltine, R.H., and Gore, S. (2008). The Impact of Cumulative Childhood Adversity on Young Adult Mental Health: Measures, Models, and Interpretations. *Social Science and Medicine*, 66(5), 1140-1151.
- Simons, R. L., Simons, L. G., Burt, C. H., Drummund, H., Stewart, E., Brody, G. H., Cutrona, C. (2006). Supportive Parenting Moderates the Effect of Discrimination upon Anger, Hostile View of Relationships, and Violence among African American Boys. *Journal of Health and Social Behavior*, 47(4), 373-389.
- Taylor, R. D., & Roberts, D. (1995). Kinship Support and Maternal and Adolescent Well-Being in Economically Disadvantaged African-American Families. *Child Development*, 66(6), 1585.
- Taylor, R. J., Jackson, J. S., & Chatters, L. M. (1997). *Family life in black America*. Sage.
- Taylor, R. J., Chatters, L. M., Woodward, A. T., & Brown, E. (2013). Racial and Ethnic Differences in Extended Family, Friendship, Fictive Kin, and Congregational Informal Support Networks. *Family Relations*, 62(4), 609-624.
- Thoits, P. A. (2009). Sociological Approaches to Mental Illness. *A Handbook for the Study of Mental Health*, 106-124.
- Thoits, P. A. (2011). Mechanisms Linking Social Ties and Support to Physical and Mental Health. *Journal of Health and Social Behavior*, 52(2), 145-161.

- Umberson, D., Crosnoe, R., & Reczek, C. (2010). Social Relationships and Health Behavior Across the Life Course. *Annu. Rev. Sociol. Annual Review of Sociology*, 36(1), 139-157.
- Vega, W. A., & Rumbaut, R. G. (1991). Ethnic Minorities and Mental Health. *Annual Review of Sociology*, 17(1), 351-383
- Walsemann, K. M., Gee, G. C., & Geronimus, A. T. (2009). Ethnic Differences in Trajectories of Depressive Symptoms: Disadvantage in Family Background, High School Experiences, and Adult Characteristics. *Journal of Health and Social Behavior*, 50(1), 82-98.
- Weinfield, N. S., Sroufe, L. A., & Egeland, B. (2000). Attachment from Infancy to Early Adulthood in a High-Risk Sample: Continuity, Discontinuity, and Their Correlates. *Child Development*, 71(3), 695-702.
- Wickrama, K. A., Conger, R. D., Lorenz, F. O., & Jung, T. (2008). Family Antecedents and Consequences of Trajectories of Depressive Symptoms from Adolescence to Young Adulthood: A Life Course Investigation. *Journal of Health and Social Behavior*, 49(4), 468-483.
- Wickrama, K., Kwon, J. A., Oshri, A., & Lee, T. K. (2014). Early Socioeconomic Adversity and Young Adult Physical Illness: The Role of Body Mass Index and Depressive Symptoms. *Journal of Adolescent Health*, 55(4), 556-563.
- Williams, D. R., & Collins, C. (1995). US Socioeconomic and Racial Differences in Health: Patterns and Explanations. *Annual Review of Sociology*, 21(1), 349-386.
- Williams, D. R., Costa, M., & Leavell, J.P. (2009). Sociological Approaches to Mental Illness. *A Handbook for the Study of Mental Health*, 268-290.

Williams, D. R. (2012). Miles to go before we sleep racial inequities in health. *Journal of health and social behavior*, 53(3), 279-295.