

A LONGITUDINAL STUDY OF HOUSEHOLD CHANGE ON AFRICAN AMERICAN ADOLESCENTS

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Few studies have examined the effects of household change on adolescent development. We study household composition change and its effect on development, as measured by both internalizing symptoms and externalizing behaviors, in a sample of urban African American adolescents. Household change was defined based on the movement in or out of the household of one of the 2 most important adults adolescents named. We found 25% of adolescents reported changes in their household composition over the 4 years of high school. Youth who experienced change reported more internalizing symptoms and externalizing behavior than youth who did not experience change. Those reporting important people leaving their household had the greatest negative outcomes. © 2011 Wiley Periodicals, Inc.

Many different types of household changes may affect adolescent functioning. Separation, divorce, job or military duties, incarceration, or death can cause a parent, parental figure, or other important adult to leave the household. Alternatively, remarriage or cohabitation might cause such figures to enter the household. Researchers have found that family transitions during adolescence can produce

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negative effects including decreased likelihood of high school graduation (Painter & Levine, 2000; Pong & Ju, 2000; Wojtkiewicz, 1993) and lower academic achievement (Kurdek, Fine, & Sinclair, 1995; Zill, 1996). They conclude that time spent in a less stable family has negative effects on adolescents regardless of the amount of time they spent in the less stable family (Wojtkiewicz; Wolfinger, 2000; Wu & Martinson, 1993). This suggests that the transition itself may have a detrimental effect.

Fluctuations in household composition through divorce, remarriage, and cohabitation are primary sources of family instability in adolescents' lives. Divorce has been linked to reduced socioemotional well-being including depression (Aseltine, 1996; Garrison et al., 1997; Jekielek, 1998; Kirby, 2002), emotional distress (Aseltine), and perceptions of less parent-child closeness (Amato & Booth, 1996). In addition, adolescents whose parents have divorced are more likely to engage in risky behaviors such as smoking (Kirby; Tucker et al., 1995; Wolfinger, 1998), rebelliousness and delinquency (Fomby & Cherlin, 2007; Sampson & Laub, 1993, 1994), and early sexual activity (Capaldi, Crosby, & Stoolmiller, 1996; Wu, 1996; Wu & Thomson, 2001) compared with those from more stable families. Researchers suggest, however, that these disruptions in behavior after divorce are typically short-term and adolescents tend to adapt to changes in household composition over time (Buchanan, Maccoby, & Dornbusch, 1996; Fine & Schwebel, 1988).

The disparity in this research is that family context before the divorce may be more relevant for adolescent outcomes than the divorce itself. Aseltine (1996) concluded that many of the problems observed in children of divorce might have occurred before the parents' separation, possibly stemming from family conflict or parenting issues. Yet a substantial body of research in the stress and coping literature suggests that divorce and other transitions to a single-parent household are stressful life events for adolescents. For example, as a reaction to this stressful life event adolescents exhibit behavioral disorders and emotional distress (Cavanagh & Huston, 2006; Fomby & Cherlin, 2007; Wu & Thomson, 2001).

Other support for the premise that household transitions are important predictors of child outcomes are found in research demonstrating differential influences of household composition after divorce on adolescent adjustment. Hetherington and colleagues (Hetherington, 1993; Hetherington, Bridges, & Insabella, 1998; Hetherington & Clingempeel, 1992), for example, found that adjustment among early adolescents whose parents remarried was no better than their counterparts whose parents remained divorced. Children in stepfamilies, however, were at higher risk for psychiatric problems than were children of divorced but not remarried parents (Kasen, Cohen, Brook, & Hartmark, 1996). These studies suggest that transitions in family relationships and living arrangements because of divorce are stressors with which youth must cope.

Similarly, researchers have reported that cohabiting can produce negative effects for adolescents. Buchanan et al. (1996) found that the presence of an unmarried new partner in the home was associated with higher levels of several kinds of problems for adolescent boys, including more substance use, more school deviance, more antisocial behavior, lower grades, and lower school effort. Dunifon and Kowaleski-Jones (2002) found that adolescents living with a parent and a cohabiting partner performed lower on math scores than adolescents living with married parents. They also found that White children living with single parents performed lower on math tests than their counterparts living with married parents (Dunifon &

Kowaleski-Jones). African American children in their study who were living with a parent and a cohabiting partner reported higher levels of delinquency than their counterparts. When number of family structure changes was included as a control variable, no effect was found on either delinquency or math scores for either group (Dunifon & Kowaleski-Jones).

Additionally, the current research typically focuses on divorce and remarriage and does not consider household transitions involving adults who may not be the married parents of the youth. Although examining family transitions after divorce provides useful knowledge of the relationship between family structure and adolescent outcomes, this approach overlooks the effects of other members leaving or entering the household as well as families where the parents never lived together. Some studies have also addressed racial/ethnic differences and have found that in African American families, family structure might be different or might not be associated with adolescent outcomes in different ways. For example, Kreider and Fields (2005) indicate that in 2001, only 33% of African American children lived with two biological or adoptive parents, compared with 70% of non-Hispanic Whites, 63% of Hispanics, 80% of Asians, and/or Pacific Islanders. Other researchers also found household structure was not related to negative outcomes specifically for African American youth (Salem, Zimmerman, & Notaro, 1998; Zimmerman, Salem, & Notaro, 2000).

The difference in effect of family structure on White adolescents versus African American adolescents can be explained in many ways. Cohabiting unions and non-marital childbearing are much more common among minority and lower income families as compared with White and higher income families (Ellwood & Jencks, 2004). For African American children there is also a greater role of extended kin including grandmothers and others who can ease the emotional strain and increased burden of care caused by the departure of a parent or parental figure (Fomby & Cherlin, 2007). Also, African American women in general appear to provide more instrumental support to their kin in areas such as child care, transportation, and household work than do White women (Sarkisian & Gerstel, 2004). Yet most of the research on family structure change examines only the movement of parents. Thus, efforts to examine movement of important adults in youth lives will help fill a void in the literature on family structure and adolescent development.

Researchers have consistently noted the importance of the extended family in the African American family. The concept of family transcends the limits of biological parents and the traditional nuclear family. Therefore, to understand how family structure change may influence African American adolescent development, it may be critical to consider adults other than biological parents.

In the present study, we examined the effects of changes in adult household composition during high school on both internalizing symptoms and externalizing behaviors among African American adolescents. We focused on the two individuals with whom the adolescents identified as most important to them in 9th grade, then followed the youth over four years of high school to ask about changes in household composition involving these important referents. Internalizing symptoms (i.e., depressive symptoms, anxiety, and stress) and externalizing behaviors (i.e., drug use, risky sexual behaviors, delinquent behaviors, and cutting school) were the outcomes of interest for the study. Therefore, we hypothesized that any household composition change among the two more important adults would be associated with more negative adolescent outcomes.

METHOD

Sample

Our study comprised 850 students from the four main public high schools in the second largest school district in a Midwestern state. Students who had grade point averages of 3.0 and below were selected, because the association between school dropout and substance use was one of the original goals of the study. Students diagnosed by the school as being either emotionally impaired or developmentally disabled were not included in the study. African Americans and White adolescents were interviewed each year in high school beginning with the ninth grade. Because there are not enough White adolescents to conduct a race comparison for this study, only the African American respondents were included to understand adult household composition and the effects on adolescent outcomes. The wave 1 sample comprised 681 African American youth (80% of the total sample) with 615 respondents remaining in wave 4 (12th grade). This represents a 90% response rate. The sample included equal numbers of males and females. Information about transition in the household, however, was available for only 566 (83.0%) of the original African American sample.

Procedure

Trained interviewers conducted face-to-face interviews. Students were called from their regular classrooms and taken to private areas within the school to be interviewed. If after wave 1 they were no longer attending school or could not be found in school, then they were interviewed in a community location. Interviews lasted for 50–60 minutes. When the face-to-face portion of the interview was completed, students were asked to complete a self-administered series of questions about their substance use and sexual risk-related behaviors because of the sensitive nature of these topics to maximize the opportunity for accurate responses.

Measures

The descriptive statistics for all study variables (i.e., mean, standard deviations, skewness, and Cronbach alpha) are reported in Table 1. All outcome measures (i.e., internalizing symptoms and externalizing behaviors) are assessed at year 4 of the study (12th grade), but we use year 1 measures for attrition analyses.

Changes in household composition. In year 1, youth indicated who they considered to be the two most important people in their lives while they were growing up. They also reported who lived in their household each year of the study. Change in household composition was based on the presence or absence of the two most important people through all 4 years of high school. Change in household composition was determined if the adolescent indicated that one of the most important people had left the home, entered the home, or both in any year of the study. If no change in the living situation occurred, then the participants were defined as having no household composition change. Therefore, if a student indicated a father as a most important person but they

Table 1. Mean, Standard Deviation, Skewness, and Cronbach Alpha for All Scale Measures at 12th Grade Year 4

Measure	Mean	Standard deviation	Skew	Cronbach alpha
Internalizing symptoms				
Depressive symptoms	1.81	0.93	1.44	.86
Anxiety	1.73	0.91	1.61	.88
Daily stress	2.49	0.62	-0.05	.80
Externalizing behaviors				
Skip class or day	1.96	1.76	1.85	N/A
Current marijuana use	1.97	1.75	1.78	N/A
Current alcohol use	1.42	1.30	1.77	N/A
Delinquent behaviors	1.28	0.46	2.92	.88
Sex and drug or alcohol use	1.51	0.84	1.94	N/A
Socioeconomic status (SES)				
SES	39.81	10.48	1.40	N/A

never lived with that father over the 4 years of high school, then this student was coded into the no change group.

Internalizing symptoms. Three measures were used to measure internalizing symptoms: depression, anxiety, and overall perceived stress. Reliability information is provided in Table 1. Depression and anxiety were measured by the Brief Symptom Inventory (Derogatis & Spencer, 1982). Each measure included six items using a 5-point scale, ranging from 1 (*not at all uncomfortable*) to 5 (*extremely uncomfortable*). The items refer to how uncomfortable youth felt during the past week about various feelings, such as nervousness or shakiness inside, feeling fearful, feeling lonely, and feeling hopeless about the future. Higher scores represent more symptoms. Cohen, Kamarck, and Mermelstein (1983) perceived stress scale was used as a measure of stress. This 11-item measure uses a 5-point frequency scale, ranging from 1 (*never*) to 5 (*very often*). Higher scores denote more stress.

Externalizing behaviors. Externalizing behaviors included five behaviors: cutting classes, alcohol use, marijuana use, delinquent behaviors, and risky sexual behaviors. Cutting whole days was measured by two items: one item asked youth how many days the respondent missed because she or he skipped or cut whole days over the last 4 weeks; and the other item asked youth how many times the respondent went to school, but skipped a class. Cutting whole days or classes were summed. Youth were asked how often they drank alcohol and used marijuana in the last 30 days on a 7-point scale, ranging from 1 (*0 times*) to 7 (*40+ times*). Delinquent behavior was measured by 17 items that assessed violent and nonviolent behavior. Example items included getting into a fight, using a knife or a gun, stealing, damaging property, or trespassing. These items were based on the last 12 months and used a 5-point scale, ranging from 1 (*0 times*) to 5 (*4 or more times*). Drug and alcohol use when having sex in the last year included a summary of two items that asked separately about drug use and alcohol use. The items used a 5-point scale, ranging from 1 (*never*) to 5 (*most of the time*).

Socioeconomic status. We assessed socioeconomic status (SES) with the highest occupational prestige score for either parent, using codes developed by the National Opinion Research Center (Nakao & Treas, 1990a,b). Mean occupational prestige scores within each major category defined by NORC are as follows: operators,

fabricators, and laborers, 33.38; service occupations, 34.95; farming, forest, and fishing occupations, 35.57; precision production, craft, and repair occupations, 38.51; technical, sales, and administrative support occupations, 40.43; managerial and professional specialty occupations, 62.24. SES scores in our sample ranged from 29.28 to 64.38 (mean = 40.06, standard deviation [*SD*] = 10.59).

Data Analytic Strategy

After assessing attrition effects, we compared youth with and without family changes on age, SES, and gender. Multiple analysis of covariance (MANCOVA) was used to investigate differences in change of household composition versus no change in the household over the 4 years of high school. Separate MANCOVAs were computed for internalizing symptoms (depression, anxiety, and stress) and externalizing (cutting class, delinquent behavior, risky sex behaviors, alcohol use, and marijuana use) behaviors. Covariates included those found in preliminary background differences. We conducted similar analysis based on the type of change that occurred by defining groups as leaving versus entering.

RESULTS

Attrition Analysis

Attrition analysis was conducted with the first wave of data to assess differences between those included in the analyses and those excluded due to missing data. Males and females were equally represented among those youth who remained in the study and those who did not ($\chi^2_{(1)} = 2.974$; n.s.). Youth in the study were younger at wave 1 ($\bar{x} = 14.51$, *SD* = .63) than youth without complete data ($\bar{x} = 14.82$, *SD* = .72; $t_{(679)} = 4.676$, $p < .01$). We found no SES differences between those who remained in the study and those who did not ($t_{(593)} = -1.372$, n.s.).

A series of analyses using analysis of variance (ANOVA) were conducted to determine if differences exist on the internalizing symptoms or externalizing behavior measures at wave 1 between those individuals who were included in the study versus those who were excluded due to missing data. We did not ask about perceived stress or drug and alcohol use during sex in year 1 of the study, so attrition analysis could not be done using these variables. We found the adolescents who remained in the study reported fewer internalizing symptoms than those excluded ($F_{2,673} = 3.185$, $p < .05$). Adolescents with complete data reported less depressive symptoms ($\bar{x} = 1.63$, *SD* = .69) than those without complete data ($\bar{x} = 1.80$, *SD* = .79; $F_{1,676} = 5.438$, $p < .05$). Similarly, respondents with complete data reported fewer anxiety symptoms ($\bar{x} = 1.57$, *SD* = .62) than those without complete data ($\bar{x} = 1.72$, *SD* = .72; $F_{1,676} = 5.587$, $p < .05$). No differences were found between the two groups for externalizing behaviors ($F_{4,466} = 2.216$, n.s.).

Household Change Characteristics

About 25% ($n = 143$) of the sample experienced a household transition that included a most important person. Overall, 6.7% ($n = 38$) experienced only one change, while 18.6% ($n = 105$) experienced two or more changes during the 4 years of high school. Of those who did experience some type of change, 58.0% ($n = 83$) had at least one

Table 2. The Combinations of the Two Most Important People Identified in the Ninth Grade as Related to Household Composition Transition Throughout High School

Persons identified	No change experienced		Change experienced	
	N (%)		N (%)	
Mother and father	196 (47.2)		61 (43.0)	
Mother and Stepfather	23 (5.5)		6 (4.2)	
Mother and grandmother	83 (20.0)		33 (23.2)	
Mother and aunt	16 (3.9)		6 (4.2)	
Mother and other ^a	75 (18.1)		21 (14.8)	
Father and other	9 (2.2)		6 (4.2)	
Other and other	13 (3.1)		9 (6.3)	

Note. $\chi^2(6) = 6.416$; n.s.

^aOther includes grandfather, uncle, cousin, great grandmother, godmother, godfather, sibling, grandparents, or friend, as these combinations were too small for comparison.

most important person leave, 13.3% ($n = 19$) had one most important person enter the home, 14.0% ($n = 20$) experienced one person leaving and one person entering, and 14.7% ($n = 21$) experienced more than one change that included both leaving and entering the home.

Table 2 shows the combinations of the most important persons identified by respondents in the ninth grade by household transition type. Nearly half (46.1%, $n = 257$) of the respondents reported their mother and father as the most important persons in their life. Of those reporting their parents as most important, one fourth (25.5%, $n = 65$) indicated that their parents were never married, while 18.4% ($n = 47$) said that their parents were divorced, and 9.0% ($n = 23$) said that their parents were separated when they were in ninth grade. Thus, just over half (52.9%, $n = 135$) who list their parents as the most important people in their life were living in “non-intact” families at wave 1 of the study. The second most common combination of important persons reported was mother and grandmother (20.8%, $n = 116$). Other combinations of most important persons include: mother and sibling (8.3%, $n = 46$), mother and other (5.7%, $n = 32$), mother and stepfather (5.2%, $n = 29$), mother and aunt (3.9%, $n = 22$), other and other (3.9%, $n = 22$), mother and grandfather (3.2%, $n = 18$), and father and other (2.7%, $n = 15$). Several categories were combined into an “other” category that included stepmother ($n = 4$), adoptive mother ($n = 1$), godmother ($n = 8$), etc. We also tested the different combinations of most important persons to assess if the household changes were different based on the combination of persons identified and there were no differences found ($\chi^2_{(6)} = 6.416$; n.s.). Further, we found that 30.8% ($n = 44$) of those that experienced change were because of divorce, while 69.2% ($n = 99$) were not ($\chi^2_{(1)} = 4.763$; $p < .05$). We, therefore, do not consider our analysis of household composition change to be a proxy for divorce analysis.

Males and females were equally represented in households with and without transitions ($\chi^2_{(1)} = 2.543$; n.s.). Youth who did experience change were younger in the ninth grade ($\bar{x} = 14.47$, $SD = .61$) than youth in the group who did not experience change ($\bar{x} = 14.62$, $SD = .66$; $t_{(564)} = -2.509$, $p < .05$). Age was thus entered as a covariate in all subsequent analyses. SES did not differ across household change groups ($t_{(500)} = 1.469$, n.s.).

Table 3 includes the means (and SDs) for the change and no change groups for all outcome variables. We found youth who had experienced some change reported more

Table 3. Mean, Standard Deviation, and F-Test Results for Differences Across Household Transitions by Scaled Measures for Internalizing Symptoms and Externalizing Behaviors

Measure	Change \bar{x} (SD)	No change \bar{x} (SD)	Significance of univariate F-test
Internalizing symptoms			
Depressive symptoms	1.89 (.97)	1.75 (.91)	.098
Anxiety	1.77 (.90)	1.70 (.91)	.300
Daily stress	2.65 (.58)	2.42 (.63)	.000*
Externalizing behaviors			
Skip class or day	2.09 (1.94)	1.96 (1.74)	.501
Current marijuana use	2.09 (1.93)	1.87 (1.65)	.039*
Current alcohol use	1.59 (1.52)	1.41 (1.16)	.413
Delinquent behaviors	1.33 (.53)	1.23 (.37)	.107
Sex and drug or alcohol use	1.50 (.95)	1.30 (.63)	.001*

* $p < .05$.

internalizing symptoms than those who experienced no change ($F_{3,552} = 4.461$, $p < .05$). Univariate tests indicated ($F_{1,554} = 12.520$, $p < .05$) that adolescents who experienced household change were more likely to experience daily stress ($\bar{x} = 2.65$, $SD = .58$) than those that did not experience household change ($\bar{x} = 2.42$, $SD = .63$). No differences were found for depression ($F_{1,554} = 2.754$, n.s.) or anxiety ($F_{1,554} = 1.075$, n.s.).

Youth who experienced household change reported more externalizing behavior than those who experienced no change ($F_{5,439} = 2.902$, $p < .05$). Univariate tests showed ($F_{1,443} = 4.288$, $p < .05$) respondents in the household change group were more likely to use marijuana ($\bar{x} = 2.09$, $SD = 1.93$) than those who did not experience any change ($\bar{x} = 1.87$, $SD = 1.65$). Respondents that experienced household change were more likely to use drugs or alcohol while having sex ($\bar{x} = 1.50$, $SD = .95$) than those that did not experience any change ($\bar{x} = 1.30$, $SD = .63$; $F_{1,443} = 11.807$, $p < .05$). No differences were found for skipping school ($F_{1,443} = 0.453$, n.s.), alcohol use ($F_{1,443} = 0.670$, n.s.), or delinquency ($F_{1,443} = 2.608$, n.s.).

To further examine the effects of household change, we compared youth who experienced different types of change. We found that youth who experienced at least one important person leaving ($n = 100$) reported more internalizing symptoms than those who experienced no change ($F_{3,511} = 3.013$, $p < .05$). Univariate tests indicated ($F_{1,513} = 8.003$, $p < .05$) respondents who experienced an important person leaving reported more daily stress ($\bar{x} = 2.64$, $SD = .55$) than youth who experienced no change ($\bar{x} = 2.42$, $SD = .63$). No differences were found for depression ($F_{1,513} = 1.519$, n.s.) or anxiety ($F_{1,513} = 0.374$, n.s.). Youth who experienced at least one identified most important person leaving did not report more externalizing behavior compared with those who experienced no change ($F_{5,409} = 1.485$, n.s.).

We found no difference for youth who experienced at least one most important person entering ($n = 37$) compared with youth who did not experience a change on either internalizing symptoms ($F_{3,448} = 0.403$, n.s.) or externalizing behavior ($F_{5,368} = 0.516$, n.s.). We did not find differences for youth who experienced more than one direction of change (leaving and entering; $n = 18$) for internalizing symptoms ($F_{3,429} = 0.222$, n.s.) or for externalizing behavior ($F_{5,356} = 0.704$, n.s.).

DISCUSSION

The results indicate that experiencing changes in household composition through the high school years can be detrimental to the African American adolescents in our study. African American adolescents from families that experienced a household composition change during the 4 years of high school reported more stress. Our results did not support those of other researchers who found adolescents who experience a change reported more depression or anxiety (Aseltine, 1996; Kirby, 2002). Household composition changes were associated with marijuana use and risky sexual behaviors. These findings are consistent with other researchers (Buchanan et al., 1996; Sampson & Laub, 1993, 1994). Overall, our results suggest that household change involving individuals most important to the adolescent leaving can be stressful but not psychologically threatening; however, any change can be detrimental with regard to specific problem behaviors. The differences are likely due to our focus on African American adolescents. Household transitions were less likely to occur due to marital disruption, as was often the case in previous studies. In addition, the presence of extended family members within African American families, especially women, may be a protection against depressive symptoms and anxiety.

Our findings extend research that suggests that loss in a household due to divorce is a stressful event that has negative consequences for adolescents (Hetherington & Clingempeel, 1992). We extend the research on the effects of divorce on adolescent development by considering the broader conceptualization of household change regardless of the reasons for the transition. We also considered stress associated with key individuals entering as well as leaving the household based on the hypothesis that change is disruptive and stressful in either direction. Notably, we found that having an important person leaving the household was more stressful than having an important person entering.

Transitions that involved important people entering the household were not associated with internalizing symptoms or externalizing behaviors. This contradicts past research, which indicate that remarriage and cohabiting should have a negative effect on adolescents (Buchanan et al., 1996; Hetherington & Clingempeel, 1992; Kasen et al., 1996). The difference, however, could be that in our study, the person entering the household was previously identified by the adolescent as being a very important person in their upbringing. Remarriage and cohabiting may be different because this may not be a person the adolescent would identify as a most important person in raising them.

Studies of divorce or separation may not adequately capture the complex relationships that occur in African American households. There is a greater role of extended kin in the upbringing of African American children, including grandmothers who can ease the emotional strain and increased burden of care caused by the departure of a parent or another important person in the adolescent's life (Fomby & Cherlin, 2007). Thus, studying parents alone as family units may not adequately represent the most important people raising African American adolescents. Although nearly half our respondents listed their mother and father as the combination of two most important persons raising them, over half of them did indicate different combinations of persons they consider most important in their upbringing. Our results support past research on African American families that suggests that kinship relationships extend beyond the nuclear family (Salem et al., 1998; Wojtkiewicz, 1993; Wolfinger, 2000; Wu & Martinson, 1993; Zimmerman et al., 2000).

It is possible that some of the discrepancies between our results and those of others are related to our different sample characteristics. Most research on family change includes predominantly White samples. The household composition changes examined in our study may be more detrimental for White children, because traditional (i.e., nuclear) family compositions are more normative and extended family involvement is less likely than for African American families (Salem et al., 1998; Zimmerman et al., 2000). Most of the literature reviewed in the introduction included a representative sample of both African Americans and Whites, or sometimes an oversample of minorities (Wolfinger, 2000). We explored within-group differences of household transitions among African American families that allowed us to consider the family context for this group.

African American families tend to include a larger social support network and kinship ties than the White American families. Dunifon and Kowaleski-Jones (2002) suggest that African American families have access to parenting resources outside the context of a traditional marriage; therefore, children of single parents have more protection, resulting in less detrimental outcomes than their White counterparts. In their study, African American children spent less time in married couple or “intact” families and more time in single parent households than White children (Dunifon & Kowaleski-Jones). Yet they did not find any association between household structure and adolescent outcomes. These results are similar to others who also found that household structure was not related to negative outcomes for African American youth (Salem et al., 1998; Zimmerman et al., 2000). Fine and Schwebel (1988) also suggest that African American children adjust to single-parent situations more successfully than their White counterparts. They note the following three distinct characteristics of the African American community compared with the White community: greater extended family support, how children are viewed, and greater acceptance of single parenthood (Fine & Schwebel).

Limitations

Several limitations of this study should be noted. First, the study included a sample of youth at risk for high school dropout. Thus, the results may not be generalizable to the wider African American population, but it may be particularly relevant for youth who are vulnerable for negative outcomes because of their lower grade point average (GPA). Yet it is noteworthy that by the 12th grade, the distribution of GPA in the sample was more normally distributed with several students above a 3.0 GPA (Zimmerman, Caldwell, & Bernat, 2002). The consequence of restricting our sample may limit the variance available to explain and reduce our chances of finding effects. We did, however, find effects, which suggests the results may be quite robust. Second, we captured household change only during the high school years. The changes occurring at an earlier or later age could have different effects. Nevertheless, few researchers have studied household change over any 4-year period. Our study suggests further research on household change, regardless of the cause, may be informative for building knowledge about adolescent development. Third, all of our data are based on self-report. We do, however, use trained interviewers for the interview portion of our questionnaire and the more sensitive information such as drug use and sexual risk behaviors are self-administered. This may help reduce reporting bias and improve the validity of our data.

Our attrition analysis indicated that youth included in our study were younger than those who dropped out of our study and were not available for analysis over 4 years. Although the respondents that remained in the study were younger, the difference between average ages is 3 months. This age difference is likely minimal over 4 years. We also found that our respondents who reported no change in household composition were slightly older than those that reported change at the first year. Again, the difference is minimal and likely does not influence the results across 4 years. Adolescents who remained in our study also reported fewer internalizing symptoms than those with incomplete data. It is possible that our respondents who dropped out of the study would have made our results, suggesting that household composition change affects internalizing symptoms even stronger, as our subjects reported fewer symptoms at baseline than those who left the study.

Rather than assessing the family as a defined unit of two parents, we asked the respondents to indicate which two people were most important in raising them and then analyzed the influence these individuals' leaving or entering the household had on the adolescents' outcomes. Changes in household composition during high school were associated with increased daily stress, marijuana use, and risky sexual behavior in a sample of urban African American adolescents in a Midwestern city. Understanding the impact of household transitions during high school in a broader and more generalizable population could help school counselors and developmental psychologists assist adolescents to cope better with such inevitable changes.

Nevertheless, this is one of the first studies to conceptualize family change in ways not necessarily tied to marriage, divorce, or separation, and it also examines the effects of entry as well as loss in the household. Our results suggest that further research in this area is both necessary and warranted. This research could include more representative samples, a comparative design for ethnicity to examine possible norm differences across groups, and obtain more in-depth information about the reasons why significant individuals leave or enter the household. Urban youth are faced with many stressors, but none may be more vital for their healthy development than their family experience. This study suggests that household change may be an important stressor that we need to know more about if we are to fully understand the effects of social and family environment on adolescent development. We hope this study will be a beginning for programmatic research on household structural change and adolescent development.

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