



Published in final edited form as:

Women Health. 2009 ; 49(5): 368–380. doi:10.1080/03630240903238743.

A Comparison of the Occurrence and Perceived Stress of Major Life Events in Black and White Women

Anissa I. Vines,

Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, 266 Rosenau Hall, CB#7435, Chapel Hill, NC 27599-7435, Office: (919) 843-1210, avines@email.unc.edu

Myduc Ta,

Department of Epidemiology, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599-7435, myduc@email.unc.edu

Denise Esserman, and

Department of Medicine, School of Medicine, University of North Carolina at Chapel Hill, 5034B Old Clinic Building, Office: (919) 843-2887, esserman@med.unc.edu

Donna D. Baird

National Institute of Environmental Health Sciences, P.O. Box 12233, Mail Drop A3-05, Research Triangle Park, NC 27709, Office: (919) 541-2786, baird@niehs.nih.gov

Abstract

Purpose—To describe the occurrence and perceived stress of major life events (MLE), and to investigate whether adjusting for socioeconomic status (SES) reduced race/ethnicity differences.

Methods—Black (n=639) and white (n=419) women aged 35–49 years responded to 14 MLE questions within the domains of employment, health, relationship, finance, residential change, and crime.

Main Findings—The total number of life events did not differ by race/ethnicity, but black women reported significantly more events in the domains of relationship, financial and residential change than white women. White women generally reported higher stress for a given event than black women, although for ‘residential change’ black women reported more severe stress than the white women.

Conclusions—Inclusion of both the occurrence and perceived stress of MLE can improve our understanding of how this stressor may affect health.

Introduction

Stress has been examined for decades as a risk factor for poor physical and mental health outcomes. Major life events (e.g. birth of first child, divorce) are forms of stress that occur as a result of “acute changes which require major behavioral readjustments within a relatively short period of time (Thoits, 1995).” Evidence suggests that women experience more non-traumatic life events than men (Hatch & Dohrenwend, 2007; Turner & Avison, 2003). However, the distributions of the number of life events and the stress associated with an event by race and social class have been explored less. The examination of the stress associated with major life events in addition to the number of life events experienced may be important in understanding how stress contributes to the racial/ethnic disparities that exist for many chronic health conditions. Results from early studies documenting racial differences in stress associated with life events are quite variable (Dohrenwend, 1969; Goldberg & Comstock, 1980), but many of the more recent studies have indicated that the prevalence of major life events is higher for

blacks than whites (Franko et al., 2004; Lu & Chen, 2004; Turner & Avison, 2003; Turner & Lloyd, 2004; Hunte and Williams, 2008). Whether these differences between racial/ethnic groups are maintained after adjusting for socioeconomic status (SES) (Thompson, 2002) has largely not been investigated.

Stress stemming from increased perceptions of injustice, increased inability to meet basic needs, and other unfortunate life events, may be more pronounced in black women than in white women because of social inequalities (Williams and Lawler, 2001). In African American women, experiences of discrimination and poverty are additional stressors (Schulz et al. 2000, 2006). African American women perceive high levels of racism with these perceptions not varying by income level or educational attainment (Vines et al. 2006). Further, inadequate income affects all aspects of daily life, including health (Schulz et al. 2000). Nearly a third (29.5%) of racial/ethnic minorities live in poverty compared with 9.2% of whites (Watson et al. 2002) and it is likely that this variation contributes to health disparities between Black and White women.

Women who have less income may be more susceptible to and affected by stress, particularly those stressors that threaten their social networks and daily life (Williams & Lawler, 2001). Compared to men, women are disproportionately placed in low wage jobs, have less satisfactory work hours and markedly different social roles within their family structure (Cooper 2002). In 2001, the majority of African American women employed had service occupations (27%) with administrative support jobs ranking second (23%). These structural inequalities can shape one's social environment and may lead to deleterious effects on health status (Carlisle 2001), especially among those who lack buffering resources such as family and social support (Mossakowski 2003).

In addition to race and social status, limited research is available on the severity of life events stress that women living in urban areas endure. Schultz et al. (2000) have found that women who live in an urban setting experience more life events than those who live in non-urban areas. Regardless of the place of residence for African American women, they tend to report more life events in comparison to white women living in an urban area (Schultz et al. 2000). A number of studies have examined life event stress in relation to mental health and pregnancy in women but have done so without examining the perceived stress associated with the life event (Rosnick et al., 2007; Lu and Chen, 2004).

Stress associated with major life events have been assessed as either a count of the life events experienced or how the stress associated with the life event was perceived (Landrine, Klonoff, Corral, Fernandez, & Roesch, 2006). Most of the early life events research used composite stress scores based on checklists or inventories in which the number of events was summed. This count or frequency of life events has been associated with higher morbidity (Dohrenwend, 1998). Recent studies have examined the number of life events in relation to the health of women, but they did not consider the perceived stress associated with each event (Lu & Chen, 2004; Rosnick, Small, McEvoy, Borenstein, & Mortimer, 2007). Perceived stress may be more informative in terms of assessing the magnitude of the stress effect on health because it accounts for variation in response by individuals who experience the same event but are affected differently (Landrine et al., 2006).

The goals of the present analyses were to describe the occurrence of major life events and the perceived stress of each reported event for black and white women. We did this by determining: (1) if a difference by race/ethnicity existed in the occurrence of major life events overall and within an event domain; (2) if a difference was observed by race/ethnicity in the perceived stress of the experienced event; and (3) if any observed differences in the occurrence and

perceived stress of the life events by race/ethnicity remained after adjusting for socioeconomic status.

Methods

Study population

Data for this study came from the National Institute of Environmental Health Sciences (NIEHS) Uterine Fibroid Study (UFS). The goal of the UFS was to determine the prevalence of uterine fibroids with ultrasound screening. Details on the study participants have been presented elsewhere (Baird, Dunson, Hill, Cousins, & Schectman, 2003), and a brief summary has been presented here. Women members of a large urban health plan who were 35 to 49 years of age (an age range when some chronic diseases begin to be manifest) were randomly selected from computerized medical rolls. Selected women were sent letters about the study and then contacted by phone to screen for eligibility (women were eligible if they were correctly identified as female and were between the ages of 35 and 49 years, received care at the study clinic and were able to respond to an interview in English). Of the random sample, 8% could not be screened and 5% were found ineligible. Enrollment was conducted from 1996 to 1999 with 1430 women participating (approximately 80% of those determined to be eligible). Information was collected following informed consent using telephone interviews, self-administered questionnaires, and a clinic visit. The Institutional Review Boards at the NIEHS and George Washington University Hospital approved the study protocol.

A majority of study participants (93%, $n=1323$) self-identified as non-Hispanic black or white, and the reported results were limited to these two groups. We excluded 179 women (14%) because they did not complete the self-administered questionnaire, the source of the life events data, and 86 women with incomplete life events data. Thus, a total of 1058 (60% black; 40% white) women were available for the analyses.

Major life events

A self-administered questionnaire with items comparable to those on the Holmes and Rahe life events scale (Holmes & Rahe, 1967) and crime against the respondent (e.g. robbery or assault), was completed. While the debate continues on the relevance of including change or undesirable life events (Cohen, Kessler, Gordon 1997), we included events that may be considered positive or negative, along with a question to determine the perceived stress associated with the event. For each event, respondents indicated if they had experienced the event (i.e. yes/no) in the past 12 months and the stress they felt (none; mild; moderate; severe) associated with each reported life event.

Socioeconomic status (SES) variables

Socioeconomic characteristics were ascertained from either a telephone interview (occupation) or self-administered questionnaire (education; income; household size). The 2000 Census Occupational Groupings (Fronczek & Johnson, 2003) were used to classify respondents based on self-report of their longest held occupation into two occupational groups – professional/management occupations and non-professional (e.g. service positions). All women in the study had worked at least one job. Total annual household income was adjusted based on the total number of people supported by the income and indexed to a household size of two. Adjusted total annual household income was categorized into four groups: < \$40,000 and/or receiving Medicaid; \$40,000–\$59,999; \$60,000–\$99,999; and \$100,000 or more. Educational attainment was classified into four categories: high school or less; some/junior college; college degree/college degree plus additional training; and post graduate degree. All three socioeconomic characteristics were used simultaneously in the analysis to adjust for SES.

Statistical analysis

Proportions were used to describe the major life events within each event domain (i.e. employment, health, relationship, financial, residence change, and crime). Comparisons between race/ethnicity and socioeconomic variables were made using the chi-square test of association. Conditional probabilities of perceiving a major life event as stressful were calculated at the level of each individual life event by race/ethnicity. Pearson's chi-square test or the Fisher's exact test (when necessary) was used to determine whether an association existed between race/ethnicity and each life event or corresponding level of perceived stress. Multiple logistic and multinomial regression models, adjusted for socioeconomic status variables (i.e. education; occupational status; adjusted total annual household income), were used to assess racial/ethnic differences in reported life events and related stress. No formal adjustments were made for multiple testing; however, because numerous comparisons were made for life events (overall, five domains and one for each individual event) and perceived stress (1 for each individual life event), caution was necessary in interpreting the results. Therefore, we considered results with $p \leq 0.01$ to have statistical significance, while results with $0.01 < p \leq 0.05$ were considered to have borderline statistical significance. All analyses were conducted using SAS version 9.1 (SAS Institute, Inc., Cary, North Carolina).

Results

In this study population, disparity in socioeconomic characteristics by race/ethnicity was notable. Among black women, nearly 50% had some post-high school training but no 4-year college degree, while more than half the white women had postgraduate degrees (Table 1). Comparing the adjusted annual household incomes, black women were over-represented at the income level of less than \$40,000 (48% vs. 12%) and under-represented at the income level of over \$100,000 (12% vs. 35%) in comparison to white women (p -value < 0.0001 for income). A larger percentage of white women were in professional/management occupations compared to black women, 75% and 35%, respectively ($p < 0.0001$).

About 20% of the participants in both racial groups did not report experiencing any of the 14 major life events within the past 12 months (Table 2). Overall, no significant difference was observed in the total number of life events reported within the past 12 months by race/ethnicity. However, 26% of black women reported 4 or more events compared with 21% of white women. For the domains of 'Relationship', 'Financial', and 'Residential Change', the number(s) of life events differed significantly by race/ethnicity ($p \leq 0.01$), with black women reporting more events than their white counterparts. However, these differences became non-significant with adjustment for SES. Examining individual life events within multiple-event domains, significant differences were identified in the 'Employment' and 'Relationship' domains. A greater percentage of black women reported a 'family member job loss' ($p < 0.01$), 'family member new job' ($p = 0.02$) and 'serious problems in marriage or other close relationship' ($p = 0.01$) than white women. On the other hand, more white women reported getting a new job ($p < 0.01$) than the black women. After adjusting for SES, a borderline significant difference remained within the relationship domain for the event, 'serious problems in marriage or other close relationship' ($p = 0.04$); the two family member employment events were no longer significant ($p > 0.05$).

The perceived stress differed significantly by race/ethnicity for many of the life events (Table 3). Among women who experienced employment, health, or relationship events, white women generally reported more stress associated with the event than black women. However, for financial, residential change, and crime events, more black women tended to perceive the stress of the event as severe in comparison to white women. This was especially evident for the event 'crime' that was perceived as severely stressful by 50% of black women and 23% of white women. Yet, the number of women experiencing crime was small and the racial/ethnic

difference was not statistically significant. The only event for which black women reported significantly higher stress than white women was 'residential change', and this difference was not explained by socioeconomic status.

Discussion

The primary objective of this study was to describe the occurrence of major life events and the perceived stress associated with the event in black and white women. Though comparative data are limited, the literature suggests that black women report more major life events than white women (Franko et al., 2004; Lu and Chen, 2004; Turner & Avison, 2003; Turner & Lloyd, 2004; Hunte and Williams, 2008) and this may be due to their overrepresentation in the lower socioeconomic stratum. In this study, black women had lower SES than white women, but they did not report significantly more life events overall. However, blacks did experience more specific events within the employment, relationship, financial, and residential change domains than white women. All of these differences were substantially weaker after adjustment for SES, except for 'serious problems in the marriage or other close relationship.' This finding is consistent with a study that reported black pregnant women to experience more partner-related events than white women after adjustment for socio-demographical characteristics (Lu and Chen, 2004).

Another objective of this study was to evaluate racial/ethnic differences in perceived stress for each event. Earlier work by Uhlenhuth and Paykel (1973) using an item checklist of major life events indicated a greater level of stress in blacks than whites. Surprisingly, the level of perceived stress in our study was generally higher for whites compared with blacks. The exceptions were for 'residential change' and 'crime', with blacks reporting more severe stress than whites. The latter finding is consistent with previous studies (Breslau et al., 1998; Turner and Lloyd, 2004). It is possible that the perceptions of stress may vary by race/ethnicity with stress not necessarily being lower among black women. Hunte and Williams (2008) have speculated in regard to stress from discrimination. They suggest that the racial/ethnic differences in stress may be related to socialization. Similar to discrimination stress, blacks in this study may have reported lower stress as a result of being concentrated in the lower SES tier, whereby their social environment may have conditioned them to not view the events as negative stressors, but rather as part of the daily norm. Another aspect of socialization includes the prominence of religion and/or spirituality as a means of coping with disruptive life factors (Ashing-Giwa & Kagawa-Singer, 2006). Black Americans have a history of turning to religion or using spiritual practices as a means of coping more than white Americans (Dilworth-Anderson et al., 2004). Literature has portrayed Black Americans as strong and resilient with less stress than white Americans because of their tendency to contend with events without the use of many resources while dealing with their own poor health (Dilworth Anderson et al., 2002). Understanding the role of coping in buffering the perception of stress will be an important aspect in future research.

The random selection of women from the membership of a large urban health plan was a major strength of the study in that we did not rely on volunteers or select groups. However, the findings from this study are limited because the generalizability of the results may not reflect the experiences of women living in a rural setting or those uninsured or never employed. A further limitation of this study that also exists with other studies of life events was that the women were asked to recall major events in their lives. Hence, the data reflected only a snapshot of the occurrences of major life events within a 12-month span. Although only select major life events were asked, the items included were reflective of events included in other studies (Lu and Chen, 2004; Holmes and Rahe, 19676). However, the lack of discrimination as a major life experience may have contributed to our findings of no difference in number of events and the perceived stress by race/ethnicity. In addition, the potential for social acceptability bias is

possible with respondents over- or under-rating their experience as stressful. However, the potential for such an occurrence was probably minimized with the use of a self-administered questionnaire that was mailed to the study participant.

Another potential shortcoming of this study may have been the combination of positive and negative events. An experience of at least one negative event has been shown consistently to be related to poor health in numerous study populations (Thoits, 1995). Yet, we did not attempt to classify events as either positive or negative because an event that is perceived as negative for one individual may not be considered the same by another person. For example, some individuals may perceive a divorce or change in employment status as a positive event in that the event reduces stress, while others may view this as negative since the structure of their life is altered by the change. Finally, while it would have been of interest to examine race \times SES interactions for life events and stress, these were not specified a priori and thus the sample size was insufficient to test for these interactions with adequate statistical power.

More comprehensive stress measures are needed. Although the assessment of life events stress is one of the initial forms of stress examined, the methods used to assess this particular type of stress vary. Generally, the measurement of life events stress involves a checklist of events that are considered reflective of major occurrences in one's life. However, the major shortcoming of the checklist format is its non-exhaustive listing of events. This poses a challenge when trying to insure that the measure is socially and culturally representative of events. Nevertheless, a strength of this study was the inclusion of perceptions of stress related to each event. As a result, we were able to show by going beyond just a checklist of events that the number of events experienced was only one component, and that more insight into the effects of stress can be obtained when the stress associated with an event is considered. Additionally, due to sample size constraints, it was not possible to examine factors associated with the perceived stress of an event.

In summary, an overall racial/ethnic difference in the number of life events was not found, but some specific events were differentially reported. Also, the perceived stress associated with major life events tended to be higher among whites than blacks. The majority of racial/ethnic differences identified did not remain after adjustment for SES. However, further study is needed to investigate if blacks tend to report events and perceive stress related to them differently than whites. This research goes beyond the current literature by examining differences in life events by race while accounting for individual events and socioeconomic characteristics. As a result, this research can be used to inform research on the social determinants of stress and health that may in turn delineate the underlying sources of racial/ethnic health disparities.

References

- Ashing-Giwa KT, Kagawa-Singer M. Infusing Culture into Oncology Research on Quality of Life. *Oncology Nursing Forum* 2006;S:31–36. [PubMed: 17202087]
- Baird DD, Dunson DB, Hill MC, Cousins D, Schectman JM. High cumulative incidence of uterine leiomyoma in black and white women: ultrasound evidence. *American Journal of Obstetrics and Gynecology* 2003;188:100–107. [PubMed: 12548202]
- Breslau N, Kessler RC, Chilcoat HD, Schultz LR, Davis GC, Andreski P. Trauma and posttraumatic stress disorder in the community: the 1996 Detroit Area Survey of Trauma. *Archives of General Psychiatry* 1998;55:626–632. [PubMed: 9672053]
- Carlisle S. Inequalities in health: contested explanations, shifting discourses and ambiguous policies. *Critical Public Health* 2001;11(3)
- Dilworth-Anderson P, Goodwin PY, Williams SW. Can culture help explain the physical health effects of caregiving over time among African American caregivers? *Journals of Gerontology Series B: Psychological Sciences and Social Science* 2004;59:S138–S145.

- Dilworth-Anderson P, Williams IC, Gibson BE. Issues of race, ethnicity, and culture in caregiving research: a 20-year review (1980–2000). *Gerontologist* 2002;42(2):237–272. [PubMed: 11914467]
- Dohrenwend BP. Discussion: first aid or euthanasia for psychiatric classification? *The American Journal of Psychiatry* 1969;(10 Suppl):39–41. [PubMed: 4953062]
- Dohrenwend BP. A psychosocial perspective on the past and future of psychiatric epidemiology. *American Journal of Epidemiology* 1998;147:222–231. [PubMed: 9482496]
- Franko DL, Striegel-Moore RH, Brown KM, Barton BA, McMahon RP, Schreiber GB, et al. Expanding our understanding of the relationship between negative life events and depressive symptoms in black and white adolescent girls. *Psychological Medicine* 2004;34:1319–1330. [PubMed: 15697058]
- Fronczek, P.; Johnson, P. Occupations 2000: A Census 2000 Brief. 2003 [Retrieved October 06, 2008]. from www.census.gov/hhes/www/oiindex/reports.html
- Goldberg EL, Comstock GW. Epidemiology of life events: frequency in general populations. *American Journal of Epidemiology* 1980;111:736–752. [PubMed: 7386449]
- Hatch SL, Dohrenwend BP. Distribution of Traumatic and Other Stressful Life Events by Race/Ethnicity, Gender, SES and Age: A Review of the Research. *American Journal of Community Psychology* 2007;40:313–332. [PubMed: 17906927]
- Holmes TH, Rahe RH. The Social Readjustment Rating Scale. *Journal of Psychosomatic Research* 1967;11:213–218. [PubMed: 6059863]
- Hunte H, Williams DR. The Association between Perceived Discrimination and Obesity in a Population-Based Multiracial and Multiethnic Adult Sample. 2008;98(12):1–8.
- Landrine H, Klonoff EA, Corral I, Fernandez S, Roesch S. Conceptualizing and measuring ethnic discrimination in health research. *Journal of Behavioral Medicine* 2006;29:79–94. [PubMed: 16470345]
- Lu MC, Chen B. Racial and ethnic disparities in preterm birth: the role of stressful life events. *American Journal of Obstetrics and Gynecology* 2004;191:691–699. [PubMed: 15467527]
- Moassakowski KN. Coping with perceived discrimination: does ethnic identity protect mental health? *Journal of Health and Social Behavior* 2003;44:318–331. [PubMed: 14582311]
- Rosnick CB, Small BJ, McEvoy CL, Borenstein AR, Mortimer JA. Negative life events and cognitive performance in a population of older adults. *Journal of Aging and Health* 2007;19:612–629. [PubMed: 17682077]
- Schulz A, Israel B, Williams D, Parker E, Becker A, James S. Social inequalities, stressors and self reported health status among African American and white women in the Detroit metropolitan area. *Social Science & Medicine* 2000;51:1639–1653. [PubMed: 11072884]
- Thoits PA. Stress, coping, and social support processes: where are we? What next? *Journal of Health and Social Behavior* 1995;Spec No:53–79. [PubMed: 7560850]
- Thompson VL. Racism: perceptions of distress among African Americans. *Community Mental Health Journal* 2002;38:111–118. [PubMed: 11944788]
- Turner RJ, Avison WR. Status variations in stress exposure: implications for the interpretation of research on race, socioeconomic status, and gender. *Journal of Health and Social Behavior* 2003;44:488–505. [PubMed: 15038145]
- Turner RJ, Lloyd DA. Stress burden and the lifetime incidence of psychiatric disorder in young adults: racial and ethnic contrasts. *Archives of General Psychiatry* 2004;61:481–488. [PubMed: 15123493]
- Uhlenhuth EH, Paykel ES. Symptom intensity and life events. *Archives of General Psychiatry* 1973;28:473–477. [PubMed: 4692144]
- Vines AI, Baird DD, McNeilly M, Hertz-Picciotto I, Light KC, Stevens J. Social correlates of the chronic stress of perceived racism among Black women. *Ethnicity & Disease* 2006;16:101–107. [PubMed: 16599356]
- Watson JM, Scarinci IC, Klesges RC, Slawson D, Beech BM. Race, socioeconomic status, and perceived discrimination among healthy women. *J Women's Health & Gender-Based Medi* 2002;11:441–451.
- Williams D, Lawler KA. Stress and illness in low-income women: the roles of hardiness, John Henryism, and race. *Women & Health* 2001;32:61–75.

Table 1

Characteristics of Women by Race/Ethnicity (n=1058)

Characteristic	Black Women (n=639) %	White Women (n=419) %	p-value [‡]
Education			<0.0001
≤ High school	21.1	3.1	
Some/junior college	47.9	8.6	
College degree/plus additional training	19.6	32.9	
Post graduate degree	11.4	55.4	
Adjusted Total Household Income			<0.0001
< \$40,000	47.6	12.2	
\$40,000 – \$59,999	14.9	11.9	
\$60,000 – \$99,999	21.8	40.1	
> \$100,000	12.4	34.8	
Missing	3.4	1.0	
Number of Persons Supported by Income			<0.0001
1	20.8	33.7	
2	28.3	26.5	
3	21.3	15.0	
≥ 4	28.5	24.8	
Missing	1.1	0	
Occupational Status			<0.0001
Professional/Management	34.7	75.2	
Non-professional (service positions)	65.3	24.8	

[‡]Based on chi-square test of association.

Table 2

Distribution of the Number of Major Life Events Experienced within the Past 12 Months Overall and within Event Domain by Race/Ethnicity

Life Event Domain [^]	Black Women (n=639)		White Women (n=419)		Adjusted p-value ^{††}
	%	n	%	N	
Total Events (14)					0.16
No events	21.1	135	23.2	97	0.73
1 event	21.8	139	21.0	88	
2 events	17.7	113	21.0	88	
3 events	13.2	84	14.8	62	
≥ 4 events	26.3	168	20.5	84	
Employment (5)					0.63
No events	52.1	333	49.2	206	0.68
1 event	22.2	142	24.1	101	
≥ 2 events	25.7	164	26.7	112	
Individual Employment Events					
Self job loss	6.1	39	8.4	35	0.16
Family member job loss	13.8	88	6.0	25	<0.01
Self/family member looking for new job	36.9	236	38.2	160	0.68
Self new job	15.0	96	25.1	105	<0.01
Family member new job	16.4	105	11.5	48	0.02
Health (3)					0.18
No events	62.0	396	63.5	266	
1 event	30.7	196	32.0	134	
≥ 2 events	7.4	47	4.5	19	
Individual Health Events					
Self major accident, operation or illness	12.8	82	11.7	49	0.58
Child major accident, operation or illness	6.4	41	3.8	16	0.07
Close friend/relative major accident, operation or illness	27.5	176	25.5	107	0.47
Relationship (3)					0.01
					0.06

Life Event Domain [^]	Black Women (n=639)		White Women (n=419)		Adjusted p-value ^{††}
	%	n	%	N	
No events	62.8	401	70.9	297	
1 event	26.8	171	19.3	81	
≥ 2 events	10.5	67	9.8	41	
Individual Relationship Events					
New romantic relationship	11.9	76	11.2	47	0.32
Serious problems in marriage or other close relationship	27.7	177	20.8	87	0.04
Divorce or breakup of primary relationship	10.5	67	10.0	42	0.49
Financial (1)					
Significant loss of spendable income	22.9	146	14.8	62	< 0.01
Residential Change (1)					
Changed/moved residence	19.1	122	12.7	53	< 0.01
Crime (1)					
Robbery or assault	4.7	30	5.3	22	0.64 [‡]

[^] The total number of events within each domain is listed in parentheses.

[†] Unadjusted association between race/ethnicity and the number of life events by domain

[‡] Adjusted only for annual family household income because of limited sample size

^{††} Adjusted for SES (education, household income, and occupational status)

Table 3
Level of Stress Associated with Major Life Events among Women Experiencing the Events

Major Life Event	Black Women				White Women				Adjusted p-value ^{††}			
	n	None	Mild	Moderate	Severe	n	None	Mild		Moderate	Severe	
		Perceived Stress Level (%)					Perceived Stress Level (%)				P-value [†]	
Employment												
Self job loss	39	2.6	12.8	41.0	43.6	35	0.0	8.6	51.4	40.0	0.75	0.34 ¥
Family member job loss	88	12.5	29.6	43.2	14.8	25	0.0	16.0	52.0	32.0	0.04	0.30 ¥
Self/family member looking for new job	236	18.6	39.4	28.0	14.0	160	10.0	36.9	40.0	13.1	0.03	<.01
Self new job	96	18.8	35.4	28.1	17.7	105	9.5	25.7	50.5	14.3	<.01	0.14
Family member new job	105	43.8	34.3	16.2	5.7	48	25.0	35.4	29.2	10.4	0.07	0.06
Health												
Self major accident, operation or illness	82	3.7	23.2	31.7	41.5	49	0.0	8.2	51.0	40.8	0.03	0.11
Child major accident, operation or illness	41	4.9	22.0	34.2	39.0	16	0.0	12.5	31.3	56.3	0.61	0.98 ¥
Close friend/relative major accident, operation or illness	176	1.7	19.9	38.1	40.3	107	0.9	14.0	51.4	33.6	0.16	0.17
Relationship												
New romantic relationship	76	22.4	36.8	29.0	11.8	47	6.4	38.3	44.7	10.6	0.08	0.38
Serious problems in marriage or other close relationship	177	0.6	15.3	41.2	42.9	87	0.0	5.8	42.5	51.7	0.08	0.09
Divorce or breakup of primary relationship	67	6.0	16.4	37.3	40.3	42	0.0	2.4	38.1	59.5	0.02	0.20 ¥
Financial												
Significant loss of spendable income	146	1.4	24.7	33.6	40.4	62	1.6	27.4	37.1	33.9	0.81	0.98

Major Life Event	Black Women				White Women				Adjusted p-value ^{††}		
	n	None	Mild	Moderate	Severe	n	None	Mild		Moderate	Severe
Residential Change											
Changed/moved residence	122	13.9	27.1	26.2	32.8	53	3.8	12.2	62.3	20.8	<.01
Crime											
Robbery or assault	30	3.3	10.0	36.7	50.0	22	4.6	36.4	36.4	22.7	0.06

[†] Unadjusted association between race/ethnicity and the frequency distribution for level of stress.

^{††} Race/ethnicity association with frequency distribution for level of stress adjusted for SES (education, household income, and occupational status)

[‡] Adjusted only for annual family household income due to limited sample size.