

DIVERGENT PATHWAYS: AN ANALYSIS OF RACIAL DIFFERENCES IN RISK
OF RETIREMENT AND WORK DISABILITY AMONG AFRICAN AMERICAN
AND WHITE WOMEN IN THE LABOR FORCE IN LATER MIDDLE-LIFE

By

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Abstract of Thesis Presented to the Graduate School
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The purpose of the present is to explore the labor force exit patterns of African American and White women. Inattention has been give to racial disparities in the labor force exit behavior of African American and White women. Previous research on racial disparities in retirement behavior among men indicates that, compared to White men, African American men are more likely to exit the labor force via retirement or work disability. The present study uses five waves of panel data from the Health and Retirement study and the life course perspective to explore racial disparities in labor force exit behavior among women. Analyses suggest that African American women are disadvantaged relative to White women with respect to socioeconomic circumstances, family patterns, wealth, and health. Importantly, results from multivariate event history models indicate that, compared to White women, African American women are less likely to exit the labor force via retirement and are more likely to exit the labor force via

work disability as a result of their lower levels of human capital, wealth, and health.

Theoretical implications of the present study and policy relevance are also discussed.

CHAPTER 1 INTRODUCTION

The literature has shown evidence of race differences in retirement behavior. However, most of the research has overlooked women, with only a few exceptions. Researchers have found that African American women have more continuous patterns of work throughout the life course than White women (Belgrave, 1988), a finding opposite that found among men, which suggests that the race-retirement relationship may also vary by gender. This also underscores the need for further research on race differences in women's labor force exit pathways. The few studies that have explored race differences in women's retirement have used different cohorts and measurement strategies and have shown mixed results. For instance, Belgrave's (1988) study of women born between 1917 and 1921, used cross-sectional data and labor force participation rates (LFPRs) to demonstrate that African American women have more continuous patterns of labor force participation throughout the life course. Pienta, Burr, and Mutchler's (1994) cross-sectional analysis of the 1920 to 1929 birth cohort, on the other hand, operationalized women's labor force participation as full-time work, part-time work, or not working. They found no significant race differences in women's labor force statuses.

Although LFPRs have been the basis for much of the previous retirement research, LFPRs have masked important race differences that are revealed by further classifying individuals who have exited the labor force into disabled and nondisabled groups (Hayward, Friedman, and Chen, 1996). Distinguishing between retirees and the work disabled rather than relying solely on labor force participation rates may provide

additional insight into the race-retirement relationship among women and thus imply different policy targets. Further, Hayward and colleagues' (1996: S9) conclusion based on men's data that "Retirement is more of a White experience than a Black experience, while the reverse is true with regard to disability (among men)," underscore the importance of examining whether their findings hold true for women.

The present study explores racial differences in women's labor force exit patterns, using retirement, work disability, attrition, and death as competing outcomes, with attention to the intervening effects of sociodemographic characteristics, work and family histories, health, and wealth. The present study aims to address two primary research questions:

1. Do African American and White women have different rates of retirement and work disability in late midlife?
2. Do racial differences in women's labor force exit behavior stem from racial differences in human capital, health, and work histories?

Racial differences in education, economic resources, family patterns, and health over the life course are expected to contribute to divergent labor force exit pathways. Given African American women's higher labor market attachment throughout the life course (Belgrave, 1988; Brown and Pienta, 2002), lower rates of marriage, and fewer economic resources, relative to White women, African American women may be less likely to report exiting the labor force for retirement. Conversely, work disability rates may be higher among African American women, stemming from racial disparities in education and health.

CHAPTER 2 BACKGROUND

Life Course Framework and Retirement Behavior

Much of the previous research on retirement has been based on the retirement behavior of White men. However, retirement models based on the retirement of White men may be inadequate for explaining the retirement behavior of women, ethnic minorities, and the chronically poor or ill (Burr, Massagli, Mutchler and Pienta, 1996; Gibson, 1987; Pienta, Burr and Mutchler, 1994). Historically, these populations have been disadvantaged in terms of education, career mobility, income, wealth, and health. Given well-documented race differences in education, health, wealth, work and family histories, a cumulative disadvantage framework may be useful for devising a model of race and labor force exit patterns among women. The cumulative disadvantage framework is an extension of the life course perspective that asserts that social inequalities in later life are a result of the interaction of institutional arrangements and aggregated individual actions over time (Dannefer, 1991; O’Rand, 1996). Conceptually, the present study explores the possibility that race differences in labor force exit behavior may be a consequence of African American women’s greater lifelong disadvantage with respect to education, work and family characteristics, wealth, and health.

Race and Retirement Among Men

Given the sparse research on women’s retirement and race, much of our understanding of race differences in retirement come from studies of men. African American men have more discontinuous patterns of work history than White men

throughout the life course (Welch, 1990). Older African American men are more likely than White men to be outside of the labor force (Bound, Schoenbaum, and Waidmann, 1995; Hayward et al., 1996). Also, African American men are more likely to delay entry into the labor force, more likely to have gaps in employment histories, and more likely to permanently withdraw from the labor force. Disability is a major contributor to older African American men's lower labor force participation rates (Hayward et al., 1996). Wray (1996) found that in addition to health, job characteristics such as pension coverage, retiree health insurance, and spousal retirement benefits were partially responsible for African American's higher rates of disability. While there may be multiple plausible causes for racial differences in disability status (see Gibson, 1991; Parsons, 1980; Welch, 1990; Wilson, 1987), several studies have shown that health is a dominant and temporally proximate factor accounting for African American men's lower levels of labor force participation (Bound et al., 1995; Burr, Massagli, Mutchler, and Pienta, 1996; Hayward et al., 1996). Although previous research indicates that LFPRs may be more similar among African American and White women than they are among their male counterparts, African American women's poorer health, relative to White women, may place them at a greater risk of becoming work disabled.

Race, Health, and Disability

Health conditions are likely to provide additional insight into differences in the retirement behavior of women. African American women have poorer physical and self-rated health than White women. More specifically, compared to White women, African American women have a higher prevalence of diabetes, hypertension, heart disease, strokes, and functional loss (Blackwell, Collins, and Coles, 2002). A similar pattern emerges with respect to self-rated health, whereas 19% of White women between the

ages of 45 and 74 rate their health as either fair or poor, 35% of their African American counterparts do so (National Academy on an Aging Society, 1999). Given African American women's poorer health, and the finding that men with poorer health are more likely to be work disabled (Bound et al., 1995; Hayward, Friedman, and Chen, 1996), African American women may face a higher risk of work disability than White women. On the other hand, Pienta and Brown's (2001) study indicates that, for various reasons, health may have less of an impact on women's labor force participation than men's. An investigation of temporal antecedents of health disparities may provide a more complete understanding of the race-retirement relationship among women

Race, Wealth, and Retirement Behavior

Transitions into the "retired" status are also expected to vary by race and current socioeconomic position. Temporally proximate factors such as wealth are likely to intervene in the race-retirement behavior relationship. Previous research indicates that women with greater net worth are more likely to retire versus continue working (Brown and Pienta, 2002). Racial differences in wealth are great. While the median household net worth among Whites in 1990 was \$44,408, African American's median household net worth was \$ 4,604 (Eller, 1994). Even more striking is the fact that the racial gap in wealth is widest at lower levels of income. Among individuals in the lowest quintile of income in the U.S., the net worth of whites is 10,000 times higher than that of blacks (\$10,257 vs. \$1) (Eller, 1994). Race differences in home ownership and home value contribute substantially to racial disparities in the distribution of wealth (Quadagno and Reid, 1996). In 1994, whereas 64% of Whites owned their homes, only 43.4% of African Americans owned their homes (U.S. Bureau of Census, 1996). And, whereas the average home equity value for Whites was \$78,708 in 1992, African American's average home

equity value was \$36,658 (Angel and Angel, 1996). These findings suggest that African American women may be forced either to remain in the labor force to maintain a continuing source of income, or to delay retirement in order to accumulate wealth for later consumption during the retirement years.

Race, Family Characteristics, and Retirement Behavior

Race differences in family circumstances are also expected to contribute to racial disparities in retirement. African American women are less likely than White women to be married, and among married women, African American women are less likely to have a retired spouse (Brown and Pienta, 2002). Thus, given that unmarried women and women with a spouse in the labor force are less likely to be retired than married women with a retired spouse (Henretta and O’Rand, 1983; Henretta, O’Rand and Chan, 1993a; Henretta, O’Rand and Chan, 1993b), African American women should retire later. Earlier family circumstances also impact retirement behavior (Brown and Pienta, 2002). Family roles in early adulthood constitute initial pathways in the family life course that constrain later work-related roles (O’Rand, Henretta, and Krecker, 1992). Compared to White women of the 1931-1941 birth cohort, their African American counterparts are much more likely to have experienced either a non-marital first birth or post-marital single motherhood (Brown and Pienta, 2002). Therefore, we attended to the role of racial differences in early family histories in contributing to racial differences in work and family circumstances and ultimately retirement behavior of African American and White women.

Race, Work Characteristics, and Retirement Behavior

African American women’s work histories may mediate the effects of their disadvantaged familial and economic circumstances on retirement. Compared to White

women, African American women actually have more continuous patterns of labor force participation throughout the life course (Belgrave, 1988; Brown and Pienta, 2002). Moreover, African American women have comparable rates of pension coverage and pension wealth (Brown and Pienta, 2002). Among women workers, African Americans are more likely than Whites to be blue collar workers (Belgrave, 1988), who are more likely than white collar workers to retire (Brown and Pienta, 2002). Generally, African American women's work histories and the expected push and pull effects associated with such work circumstances indicate that African American women may be more likely than White women to retire. Thus, work characteristics may suppress racial disparities in retirement.

Race, Education, and Retirement Behavior

While the above text has focused on temporally proximate predictors of retirement behavior, the present study's cumulative disadvantage, life course framework points toward the utility of exploring the role of temporally distal life course conditions as determinants of more proximate circumstances and retirement behavior. Consequently, this study explored whether racial disparities in education may underlie racial disparities in health, and subsequent labor force exit pathways.

Research Hypotheses

The life course perspective and the literature related to racial disparities in retirement have been instrumental in developing several research hypotheses regarding the labor force patterns of African American and White women in the labor force in 1992:

1. Poorer health may be associated with higher risks of exiting the labor force via work disability

2. African Americans may have higher risks of reporting an exit from the labor force via work disability as a result of their poorer health
3. African Americans may be less likely to report exiting the labor force via retirement as a consequence of their greater lifelong disadvantage in terms of education, family patterns, and economic resources.

CHAPTER 3 RESEARCH DESIGN AND METHODS

Data from waves 1 through 5 (1992 through 2000) of the Health and Retirement Study (HRS) are employed to investigate race differences in women's retirement. The HRS is a nationally representative panel study of Americans between the ages 51-61 in 1992, with oversamples of African Americans, Latinos and Floridians. Data were collected every two years via face-to-face (1992, and 1998) and telephone interviews (1994, 1996, and 2000), with response rates between 80 and 90 percent. The HRS is an ideal source for investigating retirement behavior because it has extensive measures of known correlates of retirement behavior such as sociodemographic factors, work and family histories, and measures of health and wealth.

Initial analyses are restricted to African American (n=1018) and White (n=4134) women between the ages of 51-61 in 1992. Since the primary focus of this study is on labor force exit behavior, subsequent analyses are further restricted to women who are in the labor force at the beginning of each interval.

Measurement of Labor Force Behavior

At each wave respondents were asked the question: "Are you working now, temporarily laid off, unemployed and looking for work, disabled and unable to work, retired, a homemaker, or what?" Since the primary focus of this study is on labor force exits, women in the labor force are included in analyses until they experience either (1) retirement (ceasing work for pay and not work disabled or unemployed or laid-off), or (2) work disablement (ceasing work for pay as a result of a disability). The present study

uses event history analysis, based on a total of 11,483 “exposure intervals.” Overall, there are 3,301 events, of which 2,762 are retirements, and 539 are exits due to a disability. Additional competing outcomes such as death and loss-to-follow-up were explored, but are not presented in this study.

Retirement is becoming an increasingly ambiguous concept. Consequently, the “retired” and “working” states are not exact. Although the majority of the “retired” group self-identifies as retired, a relatively small proportion of the “retired” group includes respondents who stopped working and self-identified as a “homemaker” or “other.” Further, the working group includes women who recently ceased working for pay, yet self-identify as either temporarily laid off or actively looking for work. While these states are loosely defined, they capture important race differences in labor force exit behavior that are masked by relying solely on LFPRs (see Hayward et al., 1996). And although respondents may reenter the labor force after reporting an exit via retirement or work disability, most do not, and this initial exit is a definite disruption in the respondent’s work history that marks the beginning of the process leading to a permanent exit from the labor force (Hayward et al., 1996).

Measurement of Sociodemographic Characteristics

Race is a key analytic variable and is measured as a dummy variable (1= African American; 0= White). Older women are more likely to be outside of the labor force instead of being full-time workers (Pienta et al., 1994) and are more likely to stop working as a result of a work disability (Daly and Bound, 1996). *Age* (measured in years) at baseline is included in the multivariate analysis as a control variable to account for this age effect. A time-varying measure of age is also included in the hazard models in order to approximate aging over *time*. Respondent’s *educational attainment* (measured in years

of formal education) is also included as a control variable because it is likely to influence an array of factors such as occupation, income, wealth, health (House and Williams, 2000), and subsequent labor force transitions.

Measurement of Health

Measures of physical health such as *hypertension, stroke, heart disease, diabetes, chronic lung disease, psychological problems, arthritis, and cancer* are included in the analyses. First, these were coded as dummy variables according to how the respondent answered the question, “Has a doctor ever told you that you have (had a) [condition].” A summary measure of the total number of the above conditions ever diagnosed is included in the analyses. A measure of the respondent’s *self-rated health* is also included (1=excellent, 2=very good, 3=good, 4=fair, 5=poor)

Measurement of Family Circumstances

Both present family circumstance and earlier social roles impact labor force behavior in later life (O’Rand et al., 1992). Previous research has shown that single parenthood experiences affect women’s retirement behavior (Brown and Pienta, 2002). Women typically enter single parenthood via one of two pathways. First, women may become single mothers as a result of a *nonmarital first birth* (1= nonmarital first birth; 0= otherwise). Second, when women with children divorce or become widowed we measure *post marital single parenthood* (1= post marital single parent; 0= otherwise). Given single mother’s relatively precarious economic circumstances, older women who have experienced single parenthood may need to continue working in order to amass sufficient savings for retirement. Further, racial disparities in rates of single parenthood may play a role in the race-retirement relationship.

Current marital status is central to understanding labor force behavior, especially in later life. Unmarried women are economically disadvantaged compared to married women and thus may delay retirement in order to accumulate wealth for later consumption during the retirement years. Also, among married women, it is important to differentiate between women with spouses in the labor force and women with spouses not in the labor force because spouses tend to exit the labor force at around the same time as one another (Henretta and O’Rand, 1983; Henretta, O’Rand and Chan, 1993). Thus, 3 dummy variables are included to capture current marital status: (1) *not married* (divorced, widowed, and never married), (2) *Married and spouse is in the labor force*, and (3) *Married and spouse is not in the labor force*. Dependent children are also likely to impact labor force participation (Pienta et al., 1994) because children tend to place economic burdens on the household and thus women with a *child under 21* may work longer in order to accrue sufficient savings for retirement and money needed to continue supporting a dependent child. *Number of household residents* may also influence household economic resources and labor force exit behavior.

Measurement of Midlife Work Characteristics

Wages² (average salary and or commission per week) are likely to influence labor force exit decisions. Workers with high wages may be less inclined to sacrifice the opportunity cost of forgoing a steady stream of income for retirement. As a proxy for labor market attachment, women’s baseline self-report of their average number of **hours worked per week** and **total years ever worked** are included. Women with greater work hours and years worked over the life course may continue to have a stronger labor market attachment into later midlife. On the other hand, women with substantial labor force experience over the life course may have greater economic resources to draw on for

retirement. **Occupations** stratify the labor force by allocating different resources, benefits and opportunities to workers. To account for this effect, occupations are divided into white collar, blue collar and service types of occupations. Further, a measure of the baseline job's **physical demands** (1=all/almost of the time; 2=most of the time; 3=some of the time; 4=none/almost none of the time) is included because when comparing work and non-work alternatives, older workers may view high levels of physical demands as a hurdle to labor force participation, making non-work alternatives more attractive. **Self-employment** differs from employment in organizations in many respects (Carr, 1996), which are likely to lead to disparate labor force participation rates. Other work-related factors that are likely to influence labor force behaviors of retirement-aged workers include: **pension eligibility status** (currently receiving or eligible to receive benefits; has pension coverage, but is not currently eligible; and no pension coverage), private pension wealth, and health insurance coverage. Self-reported **pension wealth** (measured as present value as of the interview year) is a summary of promised or received employer-provided pension benefits from as many as three current or prior jobs. **Health insurance** status is measured as: being uninsured; having employer-provided health insurance through one's own employer or a spouse's employer; and having health insurance from another source (i.e. private health insurance, or government provided health insurance).

Measurement of Midlife Economic Well-Being

An individual's income and assets are key indicators of economic well-being. Much like the expected wage effect, we speculate that higher levels of **household income** provide incentives that are likely to encourage one to remain in the labor force. While income is expected to be inversely related to likelihood of retiring, a household's **total non-housing assets** and **net value of primary residence** are likely to be positively

associated with retirement. Individuals from households with lower levels of net worth are expected to be more likely than those with more economic wherewithal to remain in the labor force. The distributions of pension wealth, household income, total non-housing assets, net value of primary residence and net worth are skewed, therefore, these variables are transformed by the natural logarithm in the multivariate models¹.

Analytic Strategy

Descriptive statistics are presented for White and African American women (Table 1). Racial differences in descriptive characteristics are calculated using t-test (continuous variables) and chi-square (categorical variables) statistics. Baseline labor force status percentages are presented for (1) the full sample, and (2) by race (Table 2). Next, health profiles of women by baseline labor force status are presented in Table 3. Then, proportional hazard models of worker's risk of becoming either retired (Table 4) or work disabled (Table 5) are estimated. A series of nested models are estimated in order to evaluate the direct and indirect effects of race and life course variables. Analysis of racial differences in attrition and death (not shown) indicated that among late middle-aged women in the labor force, African Americans have a higher risk of death than Whites, and similar rates of attrition. Analyses also check for the possibility of multicollinearity.

CHAPTER 4 RESULTS

Table 1 presents descriptive characteristics for a sample of African American and White women in the labor force in 1992 and reveals important racial differences in life course circumstances, which may affect labor force exit behavior. Compared to White women, African American women are disadvantaged in terms of educational attainment and health, more likely to have been a single parent, less likely to be married or have a spouse in the labor force, more likely to work in a blue collar job, more likely to be uninsured, and have less household income and non-housing assets.

Table 2 indicates that, overall, 63.3% of women were in the labor force at baseline; 27.9% were retired; and 8.8% of women were work disabled. Importantly, African American and White women appear to have similar rates of labor force participation. However, further classification of women who have exited the labor force reveals several important racial differences. Whereas African American women are much more likely than White women to report being work disabled (17.4% vs. 3.7%, $p < .01$), they are less likely to be retired (18.2% vs. 30.2%, $p < .01$).

Table 1. Descriptive Characteristics of Women in the Labor Force at Baseline by Race

	White (n=2515)	African American (n=635)	
Sociodemographic and Health Measures			
Age (mean)	55.5	55.4	***
Education (mean)	12.6	12.0	***
Self-Reported Health Status (mean)	2.2	2.8	***
# of Diagnosed Conditions (mean)	1.0	1.2	***
Arthritis (%)	36.8	36.7	
Psychological Problems (%)	6.6	5.8	
High Blood Pressure (%)	27.4	51.2	***
Diabetes (%)	5.5	12.6	***
Cancer (%)	7	4.6	***
Lung Disease (%)	4.8	3.8	**
Heart Problems (%)	6.4	7.1	
Stroke (%)	1.0	1.9	***
Family Circumstances			
Marital Status			
Married w/ spouse in Labor Force (%)	51.9	28.5	***
Married w/ spouse out of Labor Force (%)	16.3	13.4	***
Unmarried (%)	31.8	58.1	***
Kid in HH LT 21 yrs old	15.9	21.9	***
# HH Residents	2.4	2.8	***
Nonmarital First Birth (%)	8.6	25.7	***
Post Marriage Single Parenthood (%)	30.4	40.2	***
Job Characteristics and Work History			
Wage/ Week (mean)	\$441.20	\$369.14	***
Work Hours/ Week (mean)	37.0	35.9	**
Pension Wealth (median)	\$ 33,747.00	\$ 42,288.00	**
Years Employed Over Life Course (Mean)	26.2	27.3	**

Table 1 (continued).

	White (n=2515)	African American (n=635)	
Occupation (%)			
White collar	29.6	20.3	***
Blue collar	19.4	30.8	***
Service sector	51.0	48.9	
Self employed (%)	14.6	7.3	***
Pension Status (%)			
Covered by a pension	47.1	47.1	
Eligible for Pension	11.2	13.1	
No pension	41.7	39.8	
Health Insurance Status (%)			
Employer health insurance	75.9	71.7	***
Other health insurance	10.0	10.3	
No health insurance	14.1	18.0	***
Economic Well Being			
Net Value of Primary Res. (median)	\$50,000.00	\$22,000.00	***
Non-Housing Assets (Median)	\$46,580.00	\$6,000.00	***
HH Income (median)	\$39,000.00	\$24,000.00	***

*p<.10; **p<.05; ***p<.01.

Note - T-test (continuous variables) and chi-square (categorical variables) statistics are used to compare descriptive statistics across the two samples.

Table 2. Baseline Labor Force Status by Race

Labor Force Status	Total	Whites (%)	African Americans (%)
ILF	63.3	63.0	64.4
Work-Disabled ***	8.8	3.7	17.4
Retired ***	27.9	30.3	18.2

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

Results presented in Table 3 indicate that health profiles of women vary by baseline labor force status. Women in the labor force have the best health (e.g. they have the

lowest prevalence of hypertension, diabetes, cancer, lung disease, heart problems, strokes, arthritis and psychological problems, and they have the highest self-rated health), followed by retired women. As expected, women who report being work disabled have the poorest health profiles. Since analyses of labor force exits will draw solely upon women in the labor force at baseline, it is worth noting the presence of a healthy-worker selection bias.

Table 3. Measures of Physical and Self-Rated Health by Baseline Labor Force Status

	ILF	Retired	Work-Disabled
# of Diagnosed Conditions (mean) a***, b***, c***	1.0	1.3	2.6
Self-Rated Health (mean) a***, b***, c***	2.3	2.7	4.3
High Blood Pressure (%) a***, b***, c***	29.6	35.8	51.4
Diabetes (%) a***, b***, c***	6.2	9.8	21.5
Cancer (%) a*, b***, c***	6.5	7.2	12.0
Lung Disease (%) a**, b***, c***	4.6	5.2	20.6
Heart Problems (%) a***, b***, c***	6.1	8.6	30.2
Stroke (%) a***, b***, c***	1.1	1.8	9.6
Arthritis (%) a***, b***, c***	36.4	42.0	70.5
Psychological Problems (%) a***, b***, c***	6.3	11.7	38.7

*p<.10; **p<.05; ***p<.01

a Denotes statistically significant different mean values between individuals ILF and Retired

b Denotes statistically significant different mean values between individuals ILF and Work Disabled

c Denotes statistically significant different mean values between work-disabled and retired individuals

Nested model strategy

Tables 4 and 5 present results from the multivariate proportional hazard models of the impact of race on rates of retirement or exiting the labor force due to a disability, respectively. Both tables employ a nested model strategy in order to explore how life course factors may intervene in the race-labor force behavior relationship. Model 1

includes measures of race and age at baseline. Model 2 adds covariates to estimate the effects of time and education. Model 3, the base model, adds measures of baseline health in order to estimate the effects of physical and subjective health on labor force exit behavior, and to explore whether health intervenes in the race-labor force behavior exit relationship. Model 4 adds measures of work characteristics to the base model in order to explore the impact of work variables on retirement and their role in the race-retirement relationship. Model 5 adds measures of prior single parenthood experiences to the base model in order to explore whether earlier family circumstances impact subsequent labor force behaviors and their role in the race-retirement relationship. Single parenting and current family circumstances are added to the base model in order to explore the direct effects of family characteristics, as well as the direct and indirect effects of earlier single parenting circumstances and race on labor force exit behavior (Model 6). Next, economic measures are added to the base model (Model 7). Model 8 is the fully specified model.

Retirement behavior among African American and White women

Risk ratios of retirement presented in Table 4 indicate that African American are less likely than White women to retire (Models 1-4). As hypothesized, familial and economic factors over the life course intervene in the race-retirement relationship. For instance, controlling for prior single parenting circumstances (Model 5) and current family circumstances (Model 6) eliminates racial disparities in retirement. Similarly, once measures of economic security are included in the model, African American and White women appear to have similar rates of retirement (Model 7).

Analyses presented in Table 4 reveal a number of other important predictors of retirement behavior. Whereas older women, self-employed women, and women with greater pension wealth, non-housing assets, or net value of primary residence are more

Table 4. Risk Ratios from Proportional Hazard Models of Retirement

	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	MODEL 7	MODEL 8
VARIABLES								
African American	.89**	.88**	.87**	.86**	.90	1.04	1.01	1.09
Age	1.16***	.99	.99	.95***	.98	.98*	.98	.94***
Time		1.18***	1.18***	1.23***	1.18***	1.18***	1.18***	1.23***
Education		1.0	1.0	.98**	1.0	.99	.98**	.97***
Health Measures								
Number of Diagnosed Conditions			1.02	1.03	1.03	1.03	1.03	1.04*
Self-Rated Health			1.02	1.04	1.02	1.03	1.04*	1.06**
WORK CHARACTERISTICS								
Wage / Week				1.0				1.0
Hours / Week				.99***				.99***
Log of Pension Wealth				1.02***				1.02***
Years Worked Over Life Course				.99***				.99***
Occupation								
Blue collar				1.11				1.12
Service				1.01				1.0
White Collar				d				d
Self employed				1.27***				1.19**
Pension Status								

Table 4 (continued).

	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	MODEL 7	MODEL 8
Covered by pension				1.11**				1.12**
Eligible for pension				1.22***				1.23***
No pension				d				d
Health Insurance Coverage								
Uninsured				.91				.99
Other Health insurance				1.0				1.04
Employer-provided				d				d
FAMILY CIRCUMSTANCES								
Post Marital Single Parenthood					.80***	.92*		.95
Non-marital 1st Birth					.91	.87**		.89
Current Marital Status								
Unmarried						.74***		.74***
Married (Spouse in Labor Force)						1.17***		1.05
Married (Spouse Not in Labor Force)						d		d
Child under 21						.91		.89*
Number of HH Residents						.93***		.93***
ECONOMIC WELL-BEING								
Log of HH Income							1.01	.98
Log of Non-housing Assets							1.04***	1.03***

Table 4 (continued).

	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	MODEL 7	MODEL 8
Log of Net Value of Primary Residence							1.02***	1.01**
Intercept	9.830	10.640	10.88	10.37	10.46	10.22	10.93	9.85
Model X2	-6718.62	-6542.44	-6541.03	-4964.09	-6525.19	-6480.21	-6505.34	-4910.81
D.F.	2	4	6	13	8	12	9	26

*p<.10; **p<.05; ***p<.01.

d Denotes reference group

likely to retire, women with greater work hours per week, greater work tenure over the life course, greater number of household residents, and ever single mothers are less likely to retire. Women who are eligible to receive their pension are more likely than women without a pension to retire. Controlling for current marital status indicates that compared to married women with a spouse in the labor force, unmarried women are less likely to retire, and married women with a spouse in the labor force are more likely to retire. Also, part of the single parent effect is mediated by current marital status. Diagnostic measures do not indicate severe multicollinearity in the models of retirement.

Work disability among African American and White women

Table 5 presents the relative risk ratios of exiting the labor force as a result of a work disability. As hypothesized, African American women have a significantly higher risk than White women of reporting an exit from the labor force due to a disability (RR=2.03, $p < .01$) (Model 1). Controlling for educational attainment (Model 2), results in a modest reduction in African American's excess risk (RR= 1.74, $p < .01$). Adding baseline measures of health (Model 3) reveals several important findings: (1) women with a greater number of health conditions and poorer self-rated health are more likely to report exiting the labor force due to disability, (2) African American women's excess risk or work disability is substantially reduced (RR= 1.74, $p < .01$ to RR=1.28, $p < .05$), and (3) education's effect size is somewhat reduced (RR= .84, $p < .01$ to RR= .90, $p < .01$)-- indicating that education's effect on rates of work disablement partially operate via health measures. These findings lend support to the notion that African American women's excess risk of work disability is partially a function of their poorer health, as well as the idea that racial disparities in educational attainment, in part, underlie racial differences in both health and labor force exit behavior in later life.

Table 5. Risk Ratios from Proportional Hazard Models of Work Disability

	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	MODEL 7	MODEL 8
VARIABLES								
African American	2.03***	1.74***	1.28**	1.44***	1.21	1.16	1.06	1.28*
Age	.97**	.90***	.89***	.84***	.89***	.89***	.89***	.84***
Time		1.06***	1.06***	1.13***	1.06***	1.06***	1.06***	1.13***
Education		.84***	.90***	.93***	.90***	.99**	.93***	.94***
Health Measures								
Number of Diagnosed Conditions, W1			1.18***	1.19***	1.16***	1.15***	1.15***	1.14***
Self-Rated Health, W1			1.85***	1.86***	1.83***	1.82***	1.77***	1.80***
WORK CHARACTERISTICS								
Wage / Week				1.0				.99
Hours / Week				1.01*				1.01**
Log of Pension Wealth				.98				.99
Years Worked Over Life Course				.98***				.98***
Occupation								
Blue collar				1.08				1.10
Service				.99				.99
White Collar				d				d
Self employed				.51***				.54**
Pension Status								
Covered by pension				1.19				1.22

Table 5 (continued).

	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	MODEL 7	MODEL 8
Eligible for pension				1.45*				1.51**
No pension				d				d
Health Insurance Coverage								
Uninsured				1.28*				1.17
Other Health insurance				1.94***				1.72***
Employer-provided				d				d
FAMILY CIRCUMSTANCES								
Post Marital Single Parenthood					1.35***	1.20*		1.20
Non-marital 1st Birth					1.23*	1.25*		1.17
Current Marital Status								
Unmarried						.99		.68**
Married (Spouse in Labor Force)						.69***		.67***
Married (Spouse Not in Labor Force)						d		d
Child under 21						1.25*		1.47***
Number of HH Residents						.93*		.90**
ECONOMIC WELL-BEING								
Log of HH Income							.95***	.95
Log of Non-housing Assets							.97***	.97**
Log of Net Value of Primary Residence							.98**	.99

Table 5 (continued).

	MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6	MODEL 7	MODEL 8
Intercept	1.14	1.09	.74	1.59	1.03	.55	.17	.70
Model X2	-1993.54	-1953.42	-1821.17	-1435.67	-1814.35	-1804.83	-1804.95	-1415.46
D.F.	2	4	6	13	8	12	9	26

*p<.10; **p<.05; ***p<.01.

d Denotes reference group

Racial disparities in family patterns and wealth also underlie racial disparities in rates of work disability. Once either measures of family circumstances (Model 6) or economic well being (Model 7) are controlled for, African American and White women appear to have similar rates of work disability. Importantly, measures of work, family, and economic circumstances impact rates of work disability. Women with more years of employment throughout the life course are less likely to become work disabled. Compared to married women with a spouse outside the labor force, married women with a spouse in the labor force have a lower risk of becoming work disabled. Also, self-employment, older age, and higher values of household income, non-housing assets and net value of primary residence are associated with lower risks of work disability. Diagnostic measures do not indicate severe multicollinearity in disability models.

CHAPTER 5 DISCUSSION

Much like previous research on labor force exit behavior, results from the presents study suggest that an array of life course factors are central to the distribution of older workers across the alternative destination statuses of retirement, and work disability (Hayward, Grady, Hardy, and Sommers, 1989; Szinovacz, DeViney, and Davey 2001). However, this study is among the first to utilize longitudinal data to demonstrate that race is an important predictor of labor force status and labor force exit behavior among women in late midlife. As hypothesized, among women in the labor force in late middle age, African Americans have lower rates of retirement and higher risks of work disability as a result of racial differences in circumstance throughout the life course.

Results from proportional hazard models demonstrate that racial disparities in labor force exit behavior stem from racial differences in human capital, health, and wealth across the life course. In the case of retirement, racial differences in family and economic circumstance appear to underlie racial disparities. Compared to White women, African American women are more likely to have ever been single parents, be unmarried, have more household residents, and are less likely to be married to a spouse in the labor force--all of which are associated with lower rates of retirement. Once family characteristics are controlled for, African American and White women have similar rates of retirement. Household non-housing assets and net value of primary residence also intervene in the race-retirement relationship. Importantly, racial differences in these two measures are

prominent, and African American and White women with equivalent levels of economic resources appear to have comparable rates of retirement.

Racial disparities in rates of work disability are even more pronounced. Results suggest that African American women are approximately twice as likely as White women to exit the labor force via work disability. Both temporally distal and proximate factors intervene in the race-work disability relationship. For instance, racial differences in educational attainment account for a significant share of racial disparities in work disability. Also, more contemporaneous factors such as physical and self-rated health are, in part, a function of education, and account for a substantial portion of the race gap in rates of work disability. While some researchers have suggested that racial disparities in work disability are a consequence of economic incentives, lack of attractive employment, or social desirability, this study's findings suggest that African American women's disproportionately high rates of work disability are primarily a consequence of their poorer health.

While health differences between the two groups account for a substantial portion of the race gap in work disability, residual racial disparities in work disability remain. One reason that the health disparities may not have completely accounted for the race gap in work disability may be due to under-reporting of health conditions among African American women. Compared to White women, African American women have far fewer economic resources, are more likely to be uninsured, and are less likely to have employer provided insurance. Consequently they are likely to receive infrequent and inadequate health care. African American's lower rates of contact with health care providers may

significantly mask unrecognized health problems, and thus understate the full effect of doctor-diagnosed conditions in the race-work disability relationship.

Educational attainment was expected to play a key role in the race-work disability and race-retirement relationship. However, important historical structural arrangements may be muting the effect of education, most notably, racially segregated schools and institutional racism. Women in this sample were born between 1931 and 1941, and thus received ‘separate and unequal’ education prior to the implementation civil rights legislation. Consequently, even among White and African American women with the same number of years of education, African American women likely received sub-par education. Furthermore, institutional racism resulted in fewer opportunities for these African American women, relative to White women, at a given level of education or skill. Clearly, racial differences in labor force exit patterns reflect socioeconomic and health disparities.

Given the importance of understanding labor force exit behavior within the context of decisions and circumstances throughout the life course (Hayward et al., 1996; O’Rand et al., 1992; Szinovacz, DeViney, and Davey, 2001), the present study investigated racial differences across an array of factors. In addition to racial disparities in retirement behavior, education, and health, dramatic racial differences in work and family circumstances, and economic well being were observed for this cohort of women. African American women were disadvantaged, relative to White women, in many respects. For example, compared to White women, African American women have substantially higher rates of nonmarital first births and post marital spells of single parenthood, are more likely to be a blue collar workers, less likely to be self-employed or working in a white

collar job, less likely to have employer-provided health insurance or a spouse in the labor force, more likely to be uninsured or unmarried, and have less household net worth and income. Pension wealth and total years worked represent two features that African American women actually fare better on than White women.

This study extends upon Belgrave's (1988) study in several key respects. First, the use of a nationally representative sample makes national inferences possible. Second, this study distinguishes between types of non-participation (e.g. retirement and disability), revealing striking racial disparities that would have been masked by relying on labor force participation rates. Third, rather than relying solely on cross-sectional data, this study uses longitudinal data to explore women's dynamic labor force exit patterns. Further, the present study includes measures of a wide array of life course circumstances, instead of relying solely on temporally proximate "pull" factors.

Findings from the present study are suggestive of both similarities and differences in race-labor force exit behavior relationship among women and men. Among women, African Americans appear to have higher risks than Whites of exiting the labor force via work disability as a result their poorer health, a findings similar to that among men. In the case of retirement, however, whereas African American women have lower rates than White women, African American males have higher rates of retirement, relative to White men (Hayward et al., 1996). This is likely a result of greater racial similarities in labor force histories among women than men.

The literature on women's retirement more generally, as well as race differences, may benefit from future studies that explore the impact of marital transitions and spousal labor force transitions on labor force exit behavior. Additionally, there is a dearth of work

on women's risk of reentry into the labor force from alternate labor force statuses. Future research on retirement ought to consider exploring the inter-connectedness of transitions across multiple domains such as family, health, work, and economics (Szinovacz, DeViney, and Davey, 2001).

It is worth noting that although analyses are based on data collected between 1992 and 2000, analyses do not explicitly focus on period effects. The United States experienced great economic and social changes during this time span. For example, the economic depression of the early 1990's preceded the sustained economic boom of the later 1990's. Welfare reform legislation was also passed during this time period (1996). While a myriad of macro-level factors may have influenced women's labor force exit behavior, the effects of such phenomena are difficult to isolate and are beyond the scope of this study.

Findings from the present study are an important first step in documenting and understanding racial disparities in women's labor force exit behavior. Further, they highlight the importance of distinguishing between forms of non-participation--retirement and work disability, and lend support to the notion that racial differences in the labor force exit behavior among women in later midlife are a consequence of different circumstances throughout the life course.

The subject matter of this paper is timely and important amid concerns over the increasing dependency ratio, as the United States deliberates revising the Social Security Retirement system, and as the labor force is becoming increasingly gray, brown, and female. Findings that health problems contribute to higher risks of labor force withdrawal via work disability support the notion that health affects worker productivity and

consequently the demand for and supply of market labor services (Deleire and Manning, 2002). Thus, social and economic costs of health impairments exist. In view of that, preventative poverty and health policy initiatives that focus on improving population education and health, especially among vulnerable populations, may reduce involuntary labor force exits via work disability, and contribute to an increase in labor force participation and economic productivity. In light of the forecasted declining role of Social Security income in the well being of older Americans, policies that emphasize financial education including issues related to expected time-horizon, savings and investments, and future income and expenses may become increasingly critical for labor force optimization and the long-term financial security of older women.

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BIOGRAPHICAL SKETCH

Prior to receiving his Master of Arts in sociology with a minor in statistics, Tyson Brown earned his Bachelor of Arts in sociology with minors in business administration and gerontology at the University of Florida. Concurrent to earning his Master of Arts degree, he was a research trainee at the Institute on Aging. After completing his master's degree, Tyson began his Ph.D. coursework at the University of North Carolina at Chapel Hill in the Department of Sociology and an NIA-funded research traineeship at the Carolina Population Center.