A Life Course Study of Race and Ethnic Differences in Women's Labor Market Exit Patterns

Tyson Brown and David Warner
University of North Carolina at Chapel Hill

Do Black, Hispanic and White women experience different rates of retirement, work-disability, and death? If so, what are the specific life course factors underlying racial and ethnic differences in women's labor force exit behavior? Minority women follow very different social pathways than White women. Given well-documented racial and ethnic differences in a wide array of life circumstances including education, earnings, wealth, health, and work and family patterns (Newman, 2003)—and that these factors shape labor force behavior and mortality—White, Black and Hispanic women are likely to exhibit dissimilar retirement, work-disability, and death rates. This study explores the possibility that racial disparities in labor force exit behavior are a consequence of minority women's greater lifelong disadvantages with respect to socioeconomic circumstances, work and family patterns, and health.

The few studies that have explored this topic have measured labor market activity in different ways and have shown mixed results. For instance, Belgrave's (1988) study relied on cross-sectional data and labor force participation rates, and showed that Black women are more likely than Whites to be in the labor force. Pienta and colleagues' (1994) cross-sectional analysis, on the other hand, operationalized women's labor force participation as full-time work, part-time work, or not working; they found no race differences in women's labor force statuses. Flippen and Tienda (2000) found few race/ethnic differences in the likelihood women became employed, unemployed, retired, or exited the labor force over a 2-year period. The most comprehensive study to date (Flippen, 2005) investigated race/ethnic differences in transitions into full- and part-time employment, unemployment, retirement, partial retirement, and out of the labor market over a 6-year period, and reported that White, Black, and to a lesser extent, Hispanic women displayed similar labor market patterns.

Several limitations of extant research may have inhibited the detection and understanding of racial/ethnic disparities in women's labor market exit pathways. First, prior studies have not distinguished between women who voluntarily exit the labor force via retirement from those who ceased working due to 1) a work-disability, or 2) death. Importantly, overlooking work-disability and mortality transitions obscures striking race differences in men's labor market behavior (Hayward , Friedman, and Chen, 1996). Likewise, distinguishing between alternative pathways out of the labor force (i.e. retirement, work-disability, and death) is likely to provide additional insight into race differences in *women's* labor force exit behavior, and thus imply different policy targets.

Second, dynamic models of women's labor force exit behavior are rare. Much of the research relies exclusively on cross-section data, and the few studies that explore race differences in work transitions do so over relatively short periods of time. However, an understanding of race differences in labor force exit pathways likely requires analysis of prospective labor market transitions over extended periods of time. A third deficiency in the literature is the lack of information on specific life course factors underlying race differences in women's labor force exit pathways.

This study aims to begin to fill gaps in the literature by addressing these questions. We draw on life course themes and 10 years of panel data to examine race

differences in women's labor force exit pathways, using retirement, work-disability, and death as competing outcomes, with particular attention to the mediating effects of education, earnings, work and family patterns, wealth, and health.

Data and Methods

We use six waves of panel data from the 1992-2002 *Health and Retirement Study* to examine women's labor force withdrawal process. The *HRS* is a nationally representative survey of the non-institutionalized population, with oversamples of Blacks, Hispanics and residents of Florida. Spouses of age-eligible respondents were interviewed regardless of their own age eligibility. The *HRS* is comprised of four birth cohorts. The original *HRS* cohort targeted the population born between 1931 and 1941, and was first fielded in 1992. The second cohort comes from the *Assessment of Health Dynamics among the Oldest Old* study (AHEAD), started as a companion study to the *HRS* panel in 1993, covering those born before 1923. In 1998, the *AHEAD* and *HRS* were combined into a single panel and two additional birth cohorts were added to the sampling frame, those born between 1942-1947 ("War Babies" or WB) and those born between 1924 and 1931 ("Children of the Depression Age" or CODA). The combined panel is referred to simply as the *Health and Retirement Study* and covers the population born before 1947. Respondents and their spouses are reinterviewed every two years, on average.

Analytic Sample

In the present study, we make use of the Rand HRS Data file (Version E) (Rand 2006), a cleaned and streamlined version of the HRS, to construct our measures. We restrict our analysis to women included in the original HRS, CODA and WB cohorts. We do this for two reasons. First, because the AHEAD cohort was originally designed as a companion study, many of the labor force specific measures that are central to our analysis were not asked of these respondents until the study was merged with the HRS. Second, and more theoretically important, we are fundamentally concerned with labor force withdrawal and very few persons are working for pay at the older ages represented in the AHEAD cohort because most persons have exited the labor force by age 70 (Warner 2004). Limiting our analysis to these three cohorts means that our data are nationally representative of the population age 50 to 78.

We limit our analyses to women who have worked at least five years continuously and who were working for pay at age 50. Retirement is a normative life course transition only for those who are engaged in paid work beyond the early years of adulthood (Atchley 1982; Hatch and Thompson 1992). Limiting the analyses to those in the labor force at age 50 excludes women with little or no labor force participation (homemakers) and those, without work experience proximate to the normative age-graded period of retirement, for whom retirement is not a socially meaningful concept. This restriction eliminates 1652 respondents.

We further limit our analysis to White, Black and Hispanic respondents given our interest in race differences in women's labor force withdrawal. We also omit respondents missing information on key explanatory variables such as occupational characteristics and health insurance, including those that did not provide financial data. Generally, less

than 3% of the respondents are missing on any of the measured employed in our analysis. Where missingness is greater than 3%, we retain all of the cases in our analysis by including a dummy variable coded 1 for a missing response to a given variable and setting the respondent equal to the mean. Our final analytic sample contains 8,326 women, about half of whom are working for pay.

Analytic Strategy

We conduct our analysis in two stages. First, we explore whether there are race differences in the labor force status of women at first observation by estimating a multinomial logit model predicting membership in each status. This allows use to ascertain whether there is differential left censoring among the women in our sample, where certain racial/ethnic groups are more or less likely to be in the labor force at first interview.

In the second stage of analysis, we examine the risk of labor force withdrawal. We transform our data into a person-interval file limited to women observed to be working for pay (N=14,072 intervals) and estimate a series of discrete-time hazard models. We use a competing-risks framework where we estimate separate models for exiting via retirement, disability or death (Allison 1995). For each transition-specific model (e.g., retirement), respondents remain at risk of exiting until they experience that transition or are right-censored via end observation, attrition, or another transition (e.g., disability or death). For each model, we explored non-linearities in the age-specific transition risks and found none, nor did we uncover any evidence of non-proportionality by race. Note that analyzing person-intervals as individual observations does not affect the value of the likelihood function and consequently does not inflate significance tests (Allison 1995: 108).

Dependent Variables

This study focuses on movement between labor force states, where transitions are identified by changes in reported labor force status between interview waves. At each interview, respondents were asked to indicate whether they are "working for pay now, temporarily laid off, unemployed and looking for work, disabled and unable to work, retired... [or] a homemaker." Respondents were able to identify up to three labor force statuses. The RAND HRS file reconciles these self-identified states, assigning priority to paid work over other statuses and to retirement over disability.

We classify respondents as *in the labor force* if they report working for pay, or that they are unemployed and looking for work. Among those not working for pay, we classify them based on their self-report of labor force status combined with self-report information about how their health affects their ability to work for pay (Hayward and Grady 1990). We considered respondents to be *disabled* if they identify as disabled or if they identity as retired but indicate that a health condition prevents them from "working altogether." We code the remaining respondents as *retired*, which includes those who report being retired without a health condition that limits their ability to work, as well as those who indicate being a homemaker or unemployed and not looking for work. For our multinomial analysis we create a categorical measure of labor force *Origin Status*, where 1 = "in the labor force," 2 = "disabled," and 3 = "retired." For the analysis of labor force

withdrawal, we combine these labor force designations with information on mortality. Comparing labor force status between interviews, we create three dummy variables coded 1 when a respondent moves from *in the labor force* to (1) *Retired*, (2) *Disabled or* (3) *Dead*. Respondents are identified as *deceased* based on information provided by interviews with pre-identified proxies or a probabilistic positive match with the National Death Index in 1995, 2000, or 2002 (HRS 2002).

Independent Variables

Demographic variables include race and ethnicity (dummy variables for Black and Hispanic), a time-varying measure of age, and dummy variables to indicate whether respondents are age 62 or age 65 to capture the age-eligibility criteria of Social Security and many employer-sponsored pensions. Respondents are coded 1 for *Age62* and *Age65* if they will reach this age before their next interview; otherwise respondents are coded 0. Marital status, spousal labor force status, and # of dependents in the household are the family variables. SES and financial indicators include education, logged IRA assets, and logged household income and non-housing assets.

Health indicators include measures self-rated health, number of chronic conditions and functional limitations. A number of work-related variables are used including occupation type, job stability, job characteristics, firm size, early retirement incentives, pension indicators, and health insurance coverage. Other control variables used in the discrete-time hazard models of labor force withdrawal include indicators of whether respondents were self-employed, unemployed, working part-time, or experienced a prior labor force exit.

Results

Findings from this study indicate that minority women are at a significant disadvantage, compared to White women, in terms of educational attainment, work and family histories, income, wealth, and health, and that these racial and ethnic disparities result in racial and ethnic differences in women's labor force exit patterns. Results from multinomial logistic regression models of baseline labor force status show that minority 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 and ethnic differences. Whereas Black and Hispanic women are much more likely than White women to be work-disabled, they are less likely to be retired.

Discrete-time hazard models of labor force withdrawal show that women's labor market exit pathways are diverse and vary by race and ethnicity. We find that while minority and White women have comparable retirement transition rates, Blacks and Hispanics are more likely to exit the labor market due to a work-disability. Additionally, Blacks are more likely than Whites to exit the workforce due to death. Health disparities are the primary reason for race differences in risks of work-disability and death. Minority and White women exhibit similar rates of retirement, work-disability and death after accounting for a wide array of life course factors.