Cumulative Disadvantage Theory and Contingent Work: Race and Gender Comparisons

Gloria Jones Johnson, Department of Sociology, Iowa State University

W. Roy Johnson, Department of Management, Iowa State University

Abstract

We used data from the American Changing Lives (ACL) survey to determine the applicability of cumulative disadvantage theory to the concentration of African Americans and whites in contingent employment categories of part-time, temporary and contingent self-employment. Results indicate that African American men and women are more likely to be employed in contingent work categories of part-time and temporary, and less likely to be self-employed as compared to whites. Study findings support cumulative disadvantage theory's assertion that early advantages leads to further advantages, whereas early disadvantage leads to a cascade of additional risks and disadvantages.

Introduction

Structural changes in the United States' labor market over the past few decades have generated growing concern about contingent work -- the increasing use of nonstandard employer-employee contracts. Contingent work encompasses a variety of conditional and transitory employment arrangements that provide little or no job security for workers and generally provide low pay and few benefits (Belous, 1989). It refers to all jobs that involve nonstandard employer-employee contracts where a standard contract is assumed to be a full-time, permanent employment relationship (Blank, 2001). Polivka (1996) notes that the Bureau of Labor Statistics (BLS) in 1995 collected information on contingent work, defining it as "any job in which an individual does not have an explicit or implicit contract for long- term employment" (p.4). Studies of contingent employment consider low pay, uncertain tenure, and limited access to nonwage benefits to be the most important negative features of the worst part-time, temporary, and contract jobs (Belous, 1989; Blank, 1998; Callaghan & Hartmann, 1991; Kalleberg et al., 1997; Polivka, 1996).

Recent reports draw attention to the growth of "contingent" (Barker & Christensen, 1998; Polivka & Nardone, 1989), "externalized" (Pfeffer & Baron, 1988), and nonstandard employment (Blank, 1998; Casey, 1991). Various institutional economists and other labor market scholars have claimed that employers are increasingly dividing their workforce into a set of core permanent jobs, with high wages, good benefits, and long-term implicit employment contracts, and a set of peripheral or contingent jobs with low wages, few benefits, and no permanent connection between employer and employee (Bluestone, 1970; Doeringer & Piore, 1971). Spalter-Roth and Hartmann (1995) based their estimate of contingent work on how many employers a worker had over the year, and whether the worker worked full-time or year round. They found that 16% of all workers were employed in unstable jobs and another 13% were employed in

"questionable" jobs that were hard to classify as to whether they were stable or not (Spalter-Roth & Hartmann, 1995).

Kalleberg, Reskin and Hudson (2000) argue that standard employment arrangements are characterized by the exchange of a worker's labor for monetary compensation from an employer, with work done on a fixed schedule, usually full-time, at the employer's place of business, under the employer's control, and with the mutual expectation of continued employment. On the other hand, these investigators note that the term "nonstandard work" is used for other employment relations including part-time employment in an otherwise standard work arrangement, day labor, on-call work, temporary-help agencies, contract-company employment, independent contracting, and other self-employment (see Kalleberg et al, 1997 for definitions of these arrangements).

Although nonstandard work contracts have increased over the past two decades, we know very little about how these contracts are distributed by race/ethnic and gender groups. This study uses cross-sectional survey data from a nationally representative sample of the U.S. population to examine the concentration of African Americans and whites as well as, men and women in nonstandard work arrangements such as part-time, temporary and self-employment. Drawing from cumulative disadvantage theory, we determine the concentration of African American and whites in contingent or nonstandard employment arrangements. We discuss whether nonstandard work arrangements create socioeconomic disadvantages in employment that accumulate and shape economic inequality for African Americans.

Theoretical Framework

Cumulative disadvantage theory has its origin in Merton's (1968) description of how many scientists, afforded special opportunities early in their careers, were able to transform those opportunities into scientific prominence. Merton described the phenomenon of cumulative advantage in scientific careers as the "Matthew effect" (based on the gospel of Matthew 25:29) because the reward system in science favors those who have established reputations, especially those scientists deemed "eminent." The theory of cumulative advantage was originally developed to explain divergence with age for such outcomes as income, successful scientific careers, and labor market behavior (Merton, 1968; Rosenbaum, 1984; Crystal and Shea, 1990; Kerchoff, 1993). In brief, individuals with higher education have more health resources, such as a better ability to avoid chronic stressors and unhealthy lifestyles, which have beneficial, cumulative effects on health with increasing age.

Research on status attainment provides the background for the development of cumulative disadvantage theory. For instance, Ferraro and Kelley-Moore (2003) note that life course studies point to fairly permanent effects on health or status attainment resulting from early inequalities (Barker & Christensen, 1998; Wadsworth, 1991, 1997), however, other studies suggest that effects can be reversed (U.S. Department of health and Human Services, 1990). Cumulative disadvantage theory emphasizes that early advantage or disadvantage is critical to how cohorts become differentiated. Early risk

factors shape not only the economic trajectories in the short-term, but long-term outcomes as well (Ferraro & Kelley-Moore, 2003). Further, cumulative disadvantage theory posits that long-term change is anticipated, but the nature of the change is conceptually linked with earlier experiences, abilities, and resources (Elder, 1995).

Different economic trajectories arise from early inequalities in which some persons are advantaged in their early years, an advantage that may compound over time (Ferraro and Kelley-Moore, 2003). On the other hand, others are disadvantaged because of genetic or environmental factors, and these disadvantages also accumulate (Preston, Hill & Drevenstedt, 1998). Early advantages and successes lead to further advantage, whereas, others are disadvantaged early and face a cascade of additional risks to health, wealth, and well-being (Ferraro & Kelly-Moore, 2003). Evidence supports the effect of cumulative disadvantage on measures of IQ, income, and status attainment (Crystal & Shea, 1990; Kerckhoff, 1993; O'Rand, 1996; Rosenbaum, 1975, 1984).

The present study uses cumulative disadvantage theory as a theoretical lens to understand contingent or nonstandard work among white and African American workers, particularly part-time and self-employed workers. Blank (1998) defines part-time work in the United States as regularly working less than thirty-five hours per week (For a more extensive review of the literature on part-time work, see Blank (1990) and Tilly (1990). For a further review of the trends over time in part-time work, see Levenson (1995). Hotchkiss (1991) explores the accuracy of defining part-time work as less than thirty-five hours. Based on official monthly labor market surveys, respondents are divided into those who work part-time for "voluntary" or "involuntary" reasons (Blank, 1998). Involuntary part-time workers are those who are working part-time for economic reasons, such as work is slack, materials are in short supply, or they could find only part-time work, while voluntary part-timers are those who indicate they were looking for part-time work. Part-time workers are particularly prevalent in certain medical care and educational categories such as medical technicians and teachers within the professional services industries (Stratton, 1994).

Stratton (1994) argues that "involuntary" part-time workers are indeed different from voluntary part-time workers in their desire to move into full-time work. Involuntary part-time workers who desire full-time work but cannot obtain it are the fastest growing segment of the part-time work force and most are women (Tilly, 1991). The prevalence of part-time work and its increase over time have been attributed to the increasing need of organizations to cut costs and enhance operational flexibility (Belous, 1989). Diverse negative consequences of part-time work often result for the employee including relatively lower income, lack of job security and benefits, unpredictable work hours, decreased prospects for learning and promotion, lower career earnings trajectory, underutilization of competencies, and higher prospects for turnover (Bellman & Golden, 2000). Disadvantaged groups in the labor market, such as persons occupying the lower socio-economic levels, minorities and secondary earners (generally women) are over-represented in part-time employment (Sagie & Weisberg, 2001).

Voluntary part-time workers are disproportionately younger, female, and less educated, whereas, involuntary part-time workers are more likely to be male, younger, black and less skilled (Blank, 1997). In a study by Card and Krueger (1995), the majority of minimum-wage workers in 1990 were in part-time jobs. Blank (1997) notes that employers are more likely to exclude part-time workers completely from fringe benefit plans than to include them in some prorated fashion. Belous (1989) reports that only 21% of part-time workers receive health insurance through their employer, compared to 67% of full-time workers, and only 16% received a pension, compared to 54% of full-time workers. Moreover, part-time jobs are less likely than full-time jobs to provide unemployment insurance (Tilly, 1996).

Estimates indicate that about 90% of U.S. employers use temporary workers (Segal & Sullivan, 1997). Although the temporary work force as a whole has grown greatly, the most rapid growth in recent years has been in professional, technical, and managerial temporary workers. Explosive growth has occurred in the use of temporary professionals in the high-tech area, professionals who are highly educated–and skilled in new technologies (Egan, 1996). For example, high-tech companies such as Microsoft and Silicon Graphics, as well as telecommunications giants AT&T and Northern Telecom, have increased their reliance on temporary workers in roles such as computer systems analysts, computer programmers, engineers, and technical writers (Gallaga, 1996). Temporary workers typically are paid less, have fewer benefits than regular workers, and are often recruited, hired, and trained by temporary-staffing firms (Blank, 1998). Under the Employment Retirement Security Act, employers can exempt from pension plans workers employed fewer than 1,000 hours a year (duRivage 1986). The self-employed status of independent contractors and free-lancers exempt their clients from contributing to Social Security or unemployment insurance on their behalf (Gallaga, 1996).

In the 1995 Contingent Work Supplement, the Bureau of Labor Statistics distinguished between independent contractors who report they are wage and salary employees and those who report that they are self-employed. Self-employed independent contractors are more likely to work in higher status and "professional" occupations than are their wage and salary counterparts (Blank, 1998). Cohany (1996) notes that 7.3% of the workforce report that they are independent contractors, or that they work for such firms, while only 1.6% of workers say they are on-call to a particular firm. In general, independent contractors and self-employed workers are somewhat older and more likely to be white and male than other workers. They tend to work in a mix of jobs that are more likely to be in executive and administrative areas, sales, precision production occupations, construction, services, or finance and insurance, and less likely to be in manufacturing or wholesale and retail trade (Cohany, 1996; Polivka, 1996).

The economic restructuring of the 1980s and 1990s led to a sharp decline in both blue and white collar manufacturing jobs, pushing many men out of these full-time, stable and well-paying jobs and forcing them to compete for work with women, minorities, and other nonstandard workers who have traditionally been relegated to the more peripheral positions in the workforce. A growing body of empirical evidence indicates that nonstandard work is concentrated among women (Amott & Matthaei, 1991), that within

the nonstandard work world, women are particularly likely to be in part-time jobs (Kalleberg et al., 1987; Nollen, 1996), and that minority women and those of low economic class are overrepresented in the poorest nonstandard work arrangements (Nollen, 1996). For instance, two of the most important characteristics of contingent workers are their gender and race; contingent workers are slightly more likely to be women or blacks than non-contingent workers (Polivka, 1996). Growth in the service sector and nonstandard work arrangements is likely to affect minority groups and women, as well as a growing segment of those who previously would have belonged to the standard work force. Increases in divorce and single parenthood have made the earnings and benefits associated with most nonstandard working arrangements insufficient for women who are providing for themselves and their children. This study addresses several of these issues by examining the relationship between contingent work and socioeconomic status for whites and African Americans by gender.

Hypotheses

Based on the preceding literature (Amott & Matthaei, 1991; Kalleberg et al., 1987; Cohany, 1996; Nollen, 1996; Polivka, 1996; Tilly, 1996; Blank, 1997; Sagie & Weisberg, 2001), we expect a larger number of African Americans to be concentrated in part-time and temporary jobs compared to whites. We also expect more whites to be self-employed compared to African Americans. Because African Americans are more likely to be part-time and temporary workers, they suffer cumulative disadvantage in home ownership and the sources of their income compared to whites. Specifically, African Americans are more likely than whites to rely on governmental sources of income (e.g., Supplemental Security Income (SSI), welfare). The cumulative disadvantage of part-time and temporary work status leads to African Americans being less likely to own their homes compared to whites.

Methods

Design, Sample and Data Collection

This study uses data from the American Changing Lives (ACL) Study. The ACL is the oldest ongoing national study of a broad range of psychosocial determinants of population health, and of the role of these psychosocial factors in understanding social inequalities in health. Data collection began in 1986 with Wave 1 (ACL1), which obtained face-to-face interviews from a nationally representative probability sample of 3,617 adults aged 25 and older living in the contiguous United States, with African Americans and persons over age 60 over sampled. The overall response rate was 70% for households and 68% for individuals with multiple eligible respondents in some households. The completion of a 4th wave of data (ACL 4) means that the ACL cohort has now been followed for 15+ years. We restrict our analyses of the contingent work categories to ACL 1 (1986) because in subsequent data collections, variables such as hours of work, sources of income, and financial strain lacked large enough samples to perform race/gender analyses.

Measures

Self-employment was assessed based on the following question, "Are you self-employed, privately employed, or government employed?" A dummy variable was created in which self-employed was contrasted with private and government employed. Education was assessed by the question, "What is the highest grade of school or year of college you have completed?" Sex was represented as male (1) and female (0). Race was assessed by the question, "Are you white, black, American Indian, Asian or another race?" We created a dummy variable that contrasted whites with blacks; persons identifying as American Indian, Asian or another race were excluded from study analyses. Income was assessed by the question, "If we include the income from all sources and all of your (and your spouses's) earnings, what would your total income before taxes for the last 12 months add up to?" Total hours worked were assessed with the question, "Including paid vacation and sick leave, how many weeks altogether were you employed during the past 12 months?" Weeks employed were transformed into months to represent total hours worked. Full time/part time work status was created by coding those who worked 25 hours or less per week as part-time and those who worked more than 25 hours as full-time. We created a dummy variable that contrasted full-time with part-time employment. We included information on assets and other income sources of respondents and spouses such as rent, interests, dividends, social security, retirement/pension, unemployment, disability, alimony, child support, supplemental security income, ADC/welfare, food stamps and other non-job income. Information on whether the respondent owned his/her own home, rented or had a mortgage was included. Cross-tabulation and regression analyses were used to examine the relationship among variables.

Results

Demographics, employment status and employment information are shown in Table 1. More whites were self-employed and privately employed than African Americans; however, the percentage difference between the groups was much smaller for those employed in government. Women were more likely to be self-employed than men, while men were more likely to be employed in the private sector or government sector than women. White men and women were much more likely to be self-employed and privately employed than African American men and women, but they were only slightly more likely to be employed in government than African American men and women. White women were less likely to be self-employed than white men, but they were slightly more likely to be employed privately and by the government.

Further, Table 1 shows the mean age for men and women, both whites and African Americans, who were self-employed was slightly higher than those privately and governmentally employed. Among the self-employed, whites had the highest mean household income; the gap in mean household income was much smaller for those who were privately employed and governmentally employed. Only 8% of those working were self-employed, while 33% of those working were privately employed and 11% were governmentally employed. This pattern held for married respondents with employed spouses (11% of spouses were self-employed, 40% privately employed, and 12%

governmentally employed). Virtually no difference exists between the total hours worked per week for men and women within race and across employment sectors; however, white men and African American men work more hours per week than their female counterparts. Further, all race/gender groups approach the norm of working 40 hours per week across employment sectors.

Table 1: Demographic and Employment Characteristics of Workers by Race and Gender (ACL 1986)

	Self-employed	Privately-employed	Government-employed
Respondent by Race			
White	228 (80%)	737 (63%)	216 (56%)
African American	46 (16%)	391 (33%)	153 (40%)
Respondent by Sex			
Men	130 (45%)	623 (53%)	218 (56%)
Women	161 (55%)	558 (47%)	174 (44%)
Respondent by Race/Sex			
White Men	128 (47%)	359 (32%)	105 (28%)
White Women	100 (36%)	378 (34%)	111 (30%)
African American Men	22 (8%)	171 (15%)	44 (16%)
African American Women	24 (9%)	220 (19%)	94 (25%)
Age (in years) means			
White Men	44.6 (12.3)	39.2 (11.3)	39.9 (10.3)
White Women	43.7 (13.7)	40.0 (11.2)	42.4 (10.4)
African American Men	46.2 (11.7)	39.8 (10.3)	44.2 (11.7)
African American Women	42.3 (11.7)	41.0 (9.93)	40.8 (11.0)
Education (years) Mean			
White Men	13.5 (2.72)	13.1 (2.77)	14.0 (2.60)
White Women	12.7 (2.23)	13.1 (2.20)	14.3 (2.24)
African American Men	12.2 (3.23)	12.0 (3.00)	13.1 (2.68)
African American Women	12.2 (4.61)	12.2 (2.28)	13.7 (2.70)
Total Household Income			
White Men	45545	38919	34399
White Women	46242	38919	40060
African American Men	28648	31445	33810
African American Women	27626	25372	28187
Employment Status			
Respondent	291 (8%)	1181 (33%)	392 (11%)
Spouse	413 (11%)	1437 (40%)	438 (12%)

Total Hours per Week (mean)			
White Men	47.6 (21.5)	45.5 (9.71)	45.6 (12.3)
White Women	37.0 (20.4)	36.7 (13.1)	35.6 (13.0)
African American Men	49.5 (19.1)	43.5 (9.26)	43.7 (12.7)
African American Women	37.9 (20.7)	37.5 (10.0)	38.2 (10.3)

Table 2 reveals that white men and women were twice as likely to be self-employed compared to African American men and women. As expected, African American women and white women were more likely to be employed part-time compared to African American men and white men.

Table 2 Contingent Employment Percentage Rates by Race and Gender (ACL 1986)

	Self-Employment	**Part-Time Employment**
White Men	20.0%	8.9%
White Women	15.7%	31.5%
African American Men	10.4%	8.6%
African American Women	6.3%	21.3%

Table 3 presents sources of income by race and gender. Substantially more whites received rent, interest, dividend, social security, retirement, and/or pension, unemployment or disability income compared to African Americans. Women of both races were substantially more likely to receive alimony/child support, supplemental security income, ADC/welfare and food stamps than men, with African American women more likely to receive this source of income than white women.

Table 3 Sources of Income by Race and Gender (ACL 1986)

	White Men	**White Women**	**AA Men**	**AA Women**
Rent/interest /dividend	570 (64%)	829 (60%)	12 (29%)	126 (16%)
Social Security	311 (35%)	729 (53%)	128 (33%)	320 (42%)
Retirement/pension	246 (27%)	409 (30%)	87 (22%)	118 (15%)
Unemployment/Disability	84 (9%)	94 (7%)	37 (9%)	45 (6%)
Alimony/Child Support	10 (1%)	74 (5%)	6 (1%)	61 (8%)
Supplemental Security Income	18 (2%)	51 (4%)	24 (6%)	109 (14%)
ADC/Welfare	11 (1%)	45 (3%)	13 (3%)	116 (15%)
Food Stamps	20 (2%)	70 (5%)	32 (8%)	219 (28%)

Other Income, Non-Job	116 (13%)	173 (13%)	50 (13%)	67 (9%)

Table 4 shows that substantially more whites own their homes than African Americans, who were more likely to rent. Virtually no difference existed in having a mortgage for men and women within race.

Table 4: Homeownership /Mortgage by Race and Gender (ACL 1986)

Race/Gender Group	Own Home	Rent Home	Have Mortgage
White Men	669 (74%)	185 (21%)	343 (51%)
White Women	1015 (73%)	325 (23%)	416 (41%)
African American Men	199 (51%)	167 (43%)	103 (52%)
African American Women	356 (46%)	366 (47%)	165 (46%)

Discussion and Conclusion

The major limitations of this study are its reliance on cross-sectional data and the lack of additional measures of contingent work such as temporary agency workers, contract workers, on call workers, and independent contractors. Longitudinal data on the contingent work force by race and gender would update the findings of this study. Despite limitations, results support study hypotheses that African American men and women are more likely to be employed in the contingent work categories of part-time and temporary, and less likely to be self-employed compared to whites. Because part-time and temporary work are contingent jobs characterized by low earnings, poor job security and limited access to non-wage benefits (Blank, 1998), results imply African Americans are likely to suffer cumulative disadvantage in terms of economic well-being. The concentration of African Americans in contingent employment can explain the cumulative disadvantages they experience in homeownership and nongovernmental sources of income. Findings are consistent with cumulative disadvantage theory's assertion that early advantages leads to further advantages, whereas, early disadvantage leads to a cascade of additional risks to health, wealth, and well-being (Ferraro & Kelley-Moore, 2003).

Results show that across employment sectors and compared to white men and women, African American men and women attained lower mean educational levels, reported lower mean household incomes, and worked slightly fewer hours per week than whites.

These findings suggest race and gender disadvantage for African Americans compared to whites in the social and economic resources that are needed to build and sustain a high quality of life. Findings are consistent with the cumulative disadvantage theory that posits early risk factors shape not only the economic trajectories in the short-term but also in the long-term (Ferraro & Kelley-Moore, 2003). For example, African American men and women are less likely to receive income from rent, interest, dividends, social security, retirement and/or pension compared to white men and women. On the other hand, they are substantially more likely to receive income from welfare and food stamps than white men and women.

Data on income sources reveal that white women may be advantaged by receiving economic resources such as retirement, pension, unemployment, disability, and social security, but disadvantaged by receiving ADC-welfare and food stamps. The concentration of women in part-time work compared to men may lead to cumulative disadvantage in the long-term. Future research should examine gender differences in cumulative disadvantage and cumulative advantage over the life course in employment status, and economic well-being. The similarity in findings for African Americans and whites by employment status, employment status by sectors, and mean education suggest that contingent employment needs to be included in research on status attainment. Using life course studies, future research should also investigate whether the effects of contingent and nonstandard employment are fairly permanent, or whether they can be reversed. Further, additional research is needed on race/gender differences in the long-term trends and socioeconomic effects of self-employment to establish the link between self-employment and small business ownership, self-employment and poverty rates, self-employment and tax codes and self-employment and social insurance programs.

Minorities and women are more likely to be employed in contingent work; therefore, the relationship between perceived racial discrimination and contingent work merits investigation. Future research also needs to examine the cumulative effect on health of employment in contingent work, in which workers are not provided fringe benefits such as health insurance, paid or unpaid leaves, or pensions. The cumulative disadvantage of not having access to health related benefits through the job could have devastating effects on health outcomes, especially among African Americans. Additionally, future research should take into account social contextual factors such as neighborhood effects, rural/urban effects, and should include other categories of contingent work such as independent contractors, involuntary part-time work, on-call work and workers of temporary agencies.

Please direct all correspondence to Gloria Jones-Johnson, Department of Sociology, Iowa State University, Ames, Iowa 50011; gjj@iastate.edu.

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