

Prevalence and correlates of perceived workplace discrimination among older workers in the United States of America

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ABSTRACT

The workplace is one of the areas in which discrimination most frequently occurs. Despite increasing workforce participation among older adults and the adverse effects of workplace discrimination on the physical and psychological wellbeing of older adults, limited attention has been given to workplace discrimination against older workers. Based on a national survey of 420 older workers age 50 and above, this study first examined the prevalence of perceived workplace discrimination. Results indicated more than 81 per cent of the older workers encountered at least one workplace discriminatory treatment within a year. Prevalence of perceived workplace discrimination differed with age, gender, education, occupation and wage. The study further tested two competing hypotheses on the level of perceived workplace discrimination and found mixed support for both. As hypothesised (based on the social barriers theory), lower education and racial/ethnic minority status were positively associated with perceived workplace discrimination. As counter-hypothesised (based on the attribution-sensitivity theory), younger ages and being male were positively associated with perceived workplace discrimination. In examining the roles of supervisor and co-worker support, the study discovered that supervisor support was negatively associated with workplace discrimination. Finally, this study revealed a non-linear relationship between wages and perceived workplace discrimination, with the mid-range wage group experiencing the highest level of workplace discrimination.

KEY WORDS – perceived workplace discrimination, older workers, socio-demographic characteristics, social barriers theory, attribution-sensitivity theory.

Introduction

Discrimination has been defined as ‘a behavioural manifestation of a negative attitude, judgment, or unfair treatment toward members of a group’ (Pascoe and Richman 2009: 533). The workplace is one of the

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areas in which discrimination most frequently occurs (De Castro, Gee and Takeuchi 2008). Workplace discrimination refers to differences in treatment based on personal characteristics (*e.g.* age, race, gender, religion, sexual orientation, disabilities, political affiliation, and national or social origin), which impairs or nullifies fairness of treatment or opportunity in the workplace (*e.g.* Colella and Stone 2005; McMahon and Shaw 2005; Ragins and Wiethoff 2005; Tomei 2003). Discrimination in the workplace occurs at various levels and takes various forms. At the institutional level, discrimination against individuals can be found in hiring, training, promotion and firing (*e.g.* Cohen 2000; Roessler *et al.* 2007). At the interpersonal level, individuals may be subjected to micro-aggression, which includes prejudicial attitudes, affect and discriminatory behaviour in daily social interactions (Roberts, Swanson and Murphy 2004; Swim and Stangor 1998).

Most of the research on the discrimination experienced by older workers has focused on hiring, training and retention. Studies show that because of employers' stereotypical beliefs and attitudes about older workers' abilities and performances, older workers have often been discriminated against in hiring and retention (Altschuler 2004; Henkens 2005; Malul 2009; Marshall 1996; Roscigno *et al.* 2007). Research also indicates that older workers are *disadvantaged* in training (Simon 1996) and advancement opportunities (RoperASW 2002; Taylor and Urwin 2001). Workers between 55 and 64 years of age were offered training opportunities only a third as frequently as workers between 35 and 44 (Simon 1996). In an AARP survey of 2,518 workers aged 45–74, RoperASW (2002) found that 9 per cent of the respondents had been passed over for a promotion due to age.

Workplace discrimination, however, extends beyond hiring, training, promotion and retention. A review of the literature indicates a dearth of knowledge on other types of discriminatory treatment, *e.g.* sexual harassment, receiving unfair work assignments and being monitored more closely on the job than others. In addition, there is a lack of knowledge on the prevalence of workplace discrimination experienced by older workers at the national level. It is not clear to what extent older adults are discriminated against in the United States of America (USA) as a whole. It is also not clear the degrees to which older workers in different age, gender, racial/ethnic, educational, and wage groups encounter discrimination. Moreover, there is scant information on discrimination perceived by older workers in various occupations, although studies suggest that different occupations are differentially associated with discrimination in non-age-specific populations. For example, overweight women reported receiving less pay in sales and services occupations, but not in others

(DeBeaumont 2009); pregnant women are more likely to be regarded as warm but incompetent and experience more discrimination in masculine types of occupations (*e.g.* newspaper journalist) than in feminine types of occupations (*e.g.* newspaper editor) (Masser, Grass and Nesic 2007).

One of the important issues in perceived workplace discrimination concerns factors contributing to experiencing discrimination. The extant literature contains some information for the general (*i.e.* non-age-specific) population in this regard. In a national study of 1,728 Americans aged 18 years or older (Roberts, Swanson and Murphy 2004), respondents were asked whether they felt discriminated against at work due to race or ethnicity. Results showed that minority group statuses (*e.g.* Blacks and Hispanics) were related to higher levels of perception of discrimination. Likewise, in a study on workers of all ages in the United Kingdom (Wadsworth *et al.* 2007), respondents were asked about being unfairly treated on the basis of age, gender, race or ethnicity. Results indicated that minority group status (African Caribbean and Bangladeshi) was associated with work discrimination.

Nevertheless, there has been little attention on sociodemographic factors (*e.g.* gender, age, race/ethnicity, education and wages) associated with workplace discrimination among *older* workers. Only two studies have touched on some of these factors in the context of older workers. RoperASW (2002) reported that Africans, Hispanics, blue-collar workers and less-affluent workers were more likely to feel vulnerable to job losses than their counterparts of Whites, white-collar workers and more affluent workers. In a study of 7,225 working women in the USA, Gee, Pavalko and Long (2007) found perceived age discrimination peaked around age 55 and declined afterwards.

Social support constitutes a potentially important issue in workplace discrimination. Although previous research has paid little attention to how social support at work can affect perceived workplace discrimination, providing support at work has been recommended time and again as a way to address workplace discrimination (*e.g.* Allan, Cowie and Smith 2009; Carr *et al.* 2007). It is understandable, as an antithesis to discrimination, workplace support may be able to prevent or reduce the occurrence of discrimination in the first place. Support at work can also help individuals to confront or resolve discrimination issues and prevent their re-occurrence. Still, support at work in the form of consultation may also assist individuals to gain different perspectives and reduce the possibilities of mistaking non-discriminatory incidences as discriminatory.

To bridge the gap in the extant literature, the present research has two objectives: (a) to investigate the prevalence of discriminatory treatment experienced by older workers in the USA based on a national data set, and

(b) to examine the correlates of workplace discrimination, including sociodemographics and social support. The study is significant in several ways. First, workplace discrimination is an issue of individual rights and social justice (Wood, Wilkinson and Harcourt 2008). Perceptions of workplace discrimination allow assessments of the degree to which individuals feel being treated fairly (Gee, Pavalko and Long 2007). Second, workplace discrimination is negatively related to employment outcomes. Workers who experienced age discrimination were less likely to remain employed than their non-discriminated counterparts (Cunningham and Sagas 2007; Johnson and Neumark 1997). Third, workplace discrimination is linked to adverse physical and psychological health outcomes. De Castro, Gee and Takeuchi (2008) found that exposure to racial discrimination at work predicted health conditions among Filipino Americans; Krieger *et al.* (2005) reported that racial discrimination was associated with psychological distress among low-income workers. Finally, recent years have witnessed an increase in older adult workforce participation. Between 1985 and 2004, older workers increased from 10.8 to 14.5 per cent of the labour force (Michello and Ford 2006). There are 26.1 million working adults aged 55 and older (US Bureau of Labor Statistics 2007) and baby boomers (*i.e.* those born between 1946 and 1964) now constitute 40 per cent of the US workforce (Russell 2007). Two-thirds of older adults intend to continue to work after retirement age (AARP 2003), and 70 million baby boomers will make up about 20 per cent of the entire population by 2020 (Butler 2002). Given the importance of workplace discrimination as an issue of human rights and social justice, the employment and health outcomes of workplace discrimination, the rising ageing workforce, and the lack of a comprehensive understanding of workplace discrimination among older adults, the present study is timely and will increase our understanding of older adults' work experience.

Conceptual framework

In studying ageing workforce (including workplace discrimination), different researchers have conceptualised older workers differently. Older workers have been defined as those age 45+ (Berger 2009; RoperASW 2002), age 50+ (Malul 2009; Mor-Barak 1995; Smyer and Pitt-Catsouphes 2007), and age 55+ (Kaye and Alexander 1995; Noonan 2005; Taylor 2007). Different industries also seem to have different ideas about what constitutes an older worker. Workers over 40 may be considered old in advertising (Duncan and Loretto 2004); workers over 30 may be thought so in information technology (BNET 2009). Typically,

however, older workers are referred to as individuals age 50 or over (BNET 2009; International Labour Office 2008), and this is thus how older workers are defined in this study.

The study's conceptual framework is based on the above-discussed literature on sociodemographics and support at work as well as two competing theories. *Social barriers theory* contends that minority members (e.g. racial minority group members) perceive more discrimination because they experience more social barriers, i.e. actual practices and prejudice. For example, compared with non-Hispanic whites, Hispanics attempting to purchase a house were 11–33 per cent less likely to receive help with mortgage from real estate agents (Zhao, Ondrich and Yinger 2006). For African American defendants in the criminal justice system, the bail is usually set 35 per cent higher than their white counterparts, controlling for the risk of fleeing and the severity of the crime (Free 1996). The social barriers theory postulates that experiencing discriminatory treatment should make members of minority groups more inclined to perceive discrimination than their majority counterparts. Previous studies (e.g. Schultz *et al.* 2000; Weitzer and Tuch 2004) have rendered support to this theory.

Attributional ambiguity theory, on the other hand, contends that when low-status group members are uncertain about whether discrimination is the cause of negative performance feedback, they are less likely to attribute their failures to discrimination because they are accustomed to negative reactions. Instead, it is higher-status group members, such as men and members of higher socio-economic status, who are inclined to attribute personal failures to external factors, including discrimination (Rodriguez 2008; Ruggiero and Major 1998). An experimental study by Ruggiero and Taylor (1995) provided support to this theory with findings that men are more likely than women to attribute their test failures to discrimination.

While attributional ambiguity theory focuses on explanations of failures in performance, not all perceived discrimination at work is necessarily related to performance, e.g. sexual harassment or racially condescending comments. It seems possible that individuals with higher socioeconomic status may be more sensitive to non-performance-related discrimination, as evidenced in Shaffer *et al.* (2000), which discovered that workers with higher education were more sensitive to gender discrimination at work. In the present study, therefore, we incorporated both attribution and sensitivity into an 'attribution–sensitivity theory', which contends that, due to attribution and/or sensitivity, individuals with higher social status will be more inclined to perceive workplace discrimination. To distinguish between higher and lower social status among older workers, this study

conceptualises 'lower status' as indicated by advanced age, being female, being a member of a minority racial/ethnic group, having lower education, and receiving lower wages.

Research questions and hypotheses

Based on the social barriers and attribution–sensitivity theories and the literature on sociodemographics and support at work, this study examines the following research questions and hypotheses: **RQ1**: What is the prevalence of perceived workplace discrimination among older workers? Under this research question, we further investigated the prevalence of discrimination in different groups defined by age, gender, race/ethnicity, education, wage, and occupation. **RQ2**: What sociodemographic factors are associated with workplace discrimination? We proposed two competing hypotheses based on aforementioned theories and empirical findings. **Hypothesis 1**: Perceived workplace discrimination is positively related to advanced age, being female, being a member of a minority racial/ethnic group, lower education, and lower wages. **Hypothesis 2** (counter hypothesis): Perceived workplace discrimination is positively related to younger age, being male, being a member of the majority group, higher education, and higher wages. **RQ3**: What is the relationship between support at work and perceived workplace discrimination? We hypothesized that support at work will be negatively associated with perceived workplace discrimination (**Hypothesis 3**).

Methods

Data and sample

Data were derived from Midlife in the United States II (MIDUS II), a follow-up study of MIDUS I. Conducted in 1995, MIDUS I was based on a random national random digit dialling (RDD) sample of 3,487 non-institutionalised, English-speaking adults age 25–74 in the 48 contiguous states (Brim, Ryff and Kessler 2004). Of those, 2,257 were successfully contacted to participate in the MIDUS II study. Conducted between 2004 and 2006, MIDUS II included a telephone interview and two self-administered questionnaires (SAQs), with an overall response rate of 81 per cent for the SAQs (University of Wisconsin Institute on Aging 2007). Details about the sampling design and methods and the interview format were presented in Brim, Ryff and Kessler (2004). Among the 2,257 MIDUS II RDD sample, 1,457 were age 50 or above. Among them,

420 were working for pay for an employer, and they constituted the sample of the present study.

Measures

Workplace discrimination. This variable was measured by the aggregate score of a scale of six items, representing six types of workplace discrimination. The respondent was asked how often he or she had experienced the following: (a) unfairly given jobs no one else wanted, (b) watched more closely at job than others, (c) boss uses ethnic/racial/sexual slurs, (d) co-workers use ethnic/racial/sexual slurs, (e) ignored/not taken seriously by boss, and (f) co-worker with less experience and qualifications promoted before you. Each item was measured on a five-point Likert-type scale (1 = never, 2 = less than once a year, 3 = a few times a year, 4 = a few times a month, 5 = once a week or more; Cronbach's $\alpha = 0.74$). This measure was used as a continuous variable in the regression analysis. For the prevalence analyses, we created two types of dummy variables: (a) a dummy variable for each of the six types of workplace discrimination experienced within a year (0 = never experienced this specific type of workplace discrimination; 1 = ever experienced this specific type of workplace discrimination) and (b) a dummy variable for ever experienced any type of workplace discrimination within a year (0 = never experienced any type of workplace discrimination; 1 = ever experienced any type of workplace discrimination).

Age. Age was measured in years for the regression analysis. For the prevalence analysis, it was divided into two groups: (a) 50–64 and (b) 65+.

Gender and race/ethnicity. Gender was male (1) or female (2); and race/ethnicity was non-Hispanic White (1) or all others (0).

Education. For the regression analysis, education level was measured with a scale (1 = no school or 1–6 grades ... 12 = PhD or other doctoral-level degrees). For the prevalence analysis, it was divided into three groups: (a) high school or below, (b) some college or college graduate, and (c) some graduate education or a graduate degree.

Occupational category. MIDUS II contains nine occupational groups for the respondents' main jobs: (1) executive, administrative, and managerial; (2) professional specialty; (3) technician and related support; (4) sales occupation; (5) administrative support, including clerical; (6) service

occupation; (7) farming, forestry, and fishing; (8) precision production, crafts, and repair; and (9) operator, labourer, and military. Based on the types of work, occupational groups were further clustered into three categories in this study: (a) executive, managerial, and professional (original groups 1 and 2), (b) technical, clerical, service and sales (original groups 3–6), and (c) crafts, labour, and military (original groups 8 and 9).

Wage at last calendar year. For the regression analysis, two types of wage were used: actual wage and dummy wage variables. Actual wage in the analysis was converted into the unit of \$1,000. To create the dummy variables, wage was divided into three groups: wage group 1 = \$1,000 (the lowest wage in the sample) to \$22,499; wage group 2 = \$22,500–49,999; wage group 3 = \$50,000+. $Wage-Dummy_1 = 0$, if wage group = 1; $Wage-Dummy_1 = 1$, if wage group = 2 or 3. $Wage-Dummy_2 = 0$, if wage group = 1 or 3; $Wage-Dummy_2 = 1$, if wage group = 2.

Support at work. Two types of support at work were included. *Supervisor support* was measured by a five-point Likert-type scale of three items, including: ‘How often do you get the information you need from your supervisor or superiors?’, ‘How often do you get help and support from your immediate supervisor?’ and ‘How often is your immediate supervisor willing to listen to your work-related problems?’ (1 = never ... 5 = all of the time) (Cronbach’s alpha = 0.88). *Co-worker support* was measured by a five-point Likert-type scale of two items, including: ‘How often do you get help and support from your co-workers?’ and ‘How often are your co-workers willing to listen to your work-related problems?’ (1 = never ... 5 = all of the time) (Cronbach’s alpha = 0.61).

Control variables. *Number of work hours per week at main job* and *number of work hours at other jobs* were included as control variables, because correlation analyses (Table 1) indicate positive relationships between hours of work and perceived workplace discrimination. Since occupational category was found to be significant (Table 2), two dummy variables were created: *Occupation 1* (0 = executive/managerial/professional or technical/clerical/service/sales, 1 = crafts/labour/military); *Occupation 2* (0 = executive/managerial/professional, 1 = technical/clerical/service/sales or crafts/labour/military). *Marital status* was used as a control variable, because individuals with a spouse or partner may have better support in addressing issues of workplace discrimination and thus reduce its recurrences or they may be in a better position to acquire different perspectives on incidents at work.

TABLE I. Correlation of study variables

	1	2	3	4	5	6	7	8
1. Age	–							
2. Education	–0.119*	–						
3. Wages during last calendar year	–0.296**	–0.004	–					
4. Hours of work at main job per week	–0.441**	0.035	0.3401**	–				
5. Hours of work at other jobs per week	–0.008	0.125*	0.088	–0.107*	–			
6. Supervisor support	–0.001	–0.017	–0.057	–0.116*	–0.009	–		
7. Co-worker support	0.027	0.032	0.027	–0.175**	0.053	0.425**	–	
8. Perceived workplace discrimination	–0.203**	–0.210**	–0.093	0.224*	–0.025	–0.430**	–0.283**	–

Significance levels: * $p < 0.05$, ** $p < 0.01$.

Analysis

To examine the prevalence of various types of workplace discrimination, we conducted both univariate frequency analyses and bivariate chi-square tests between and among various sociodemographic groups. Prevalence was defined as the percentage of individuals who have ever experienced a specific type (or any type) of workplace discrimination, ranging from less than once a year to once a week or more. For hypothesis testing, we first performed a correlation analysis of continuous variables (Table 1). Results showed $r = 0.44$ between age and hours of work at main job as the highest correlation, indicating no multicollinearity among the study variables. We then conducted ordinary least squares multivariate regression analyses with the workplace discrimination as the dependent variable. MIDUS II individual sample weights were used for all analyses in this study so that the results could be generalised to the US workforce.

Results

Sample characteristics

As shown in Table 3, respondents had a mean age of 57.8 (range: 50–81 years; standard deviation (SD) = 3.2). More than half (57.1%) were female. The majority (87.5%) were non-Hispanic White, and the rest (12%) included African, Hispanic, Asian, and Native Americans, and native Hawaiians or Pacific Islanders. The majority were married or cohabiting (73.8%). When respondents were grouped into three broad

TABLE 2. Prevalence of perceived workplace discrimination among older workers

Type of perceived workplace discrimination	Total sample	Age		Gender		Race/ethnicity		Education			Occupation			Wage		
		50-64	65+	Male	Female	Non-Hispanic White	All Others	No school - high school graduate	Attended college - college graduate	Attended graduate school - graduate degree	Executive, managerial and professional	Technical, clerical, service and sales	Crafts, labour and military	Low (\$1,000-22,499)	Mid (\$22,500-49,999)	High (\$50,000+)
		<i>Percentages</i>														
Unfairly given jobs no one else wanted	60.4	65.1***	37.7	65.3	57.0	55.8	61.1	61.2	61.9	58.6	59.9	61.2	63.1	44.9***	75.6	57.7
Watched more closely at job than others	38.2	40.9***	24.6	42.9	34.5	40.4	37.9	43.0	33.7	40.2	33.3	41.7	42.9	32.7**	50.8	33.1
Boss uses ethnic/racial/sexual slurs	17.7	19.7*	7.5	21.7	14.5	26.9	16.5	24.8*	15.9	13.2	12.4*	21.3	23.5	11.4***	28.5	12.1
Co-workers use ethnic/racial/sexual slurs	40.8	44.4*	23.2	53.2***	31.3	56.0*	38.4	46.7*	42.5	31.1	35.6	40.9	48.8	26.2***	52.8	41.7
Ignored/not taken seriously by boss	47.6	50.1**	35.3	53.1	43.4	62.7*	45.6	53.7	45.8	43.8	44.6	47.8	54.1	42.1*	57.7	44.0
Co-worker with less experience and qualification promoted before you	29.4	31.5*	18.8	30.6	28.4	33.3	28.6	31.4	28.6	28.3	27.8	31.9	29.3	26.2	36.1	27.0
Any of the above ¹	81.3	84.5**	65.7	85.5**	78.0	82.4	81.2	81.0	83.1	78.2	82.5	78.1	84.3	77.9***	88.5	85.2
N	420	346	74	188	232	367	53	128	182	110	181	144	90	112	129	144

Notes: Prevalence of each type of workplace discrimination indicates the percentage of individuals who have ever perceived the specific type of workplace discrimination within a year. 1. Prevalence indicates the percentage of individuals who have ever perceived any of the types of workplace discrimination within a year. Significance levels: In subgroup differences (e.g. between 50-64 and 65+), significance levels based on chi-square tests: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

TABLE 3. *Sample characteristics and subsample differences*

Sample characteristics	%
Age (years) ¹	57.82 (3.2; 50–81)
Gender:	
Male	42.9
Race/ethnicity:	
Non-Hispanic White	87.5
All others	12.5
Marital status:	
Married (or cohabiting)	67.3
Others	26.2
Education:	
No school or 1–6 grades	0
7–8 grades	0.6
Some high school	2.9
GED certificate	0.6
High school graduate	26.4
1–2 years of college	16.1
3+ years of college	3.1
Degree from 2-year college	6.5
Degree from 4- to 5-year college	17.6
Some graduate school	3.7
Master's degree	15.0
PhD/other professional degree	7.6
Education in three groups	
High school or below	30.5
Some college or college graduate	43.3
Some graduate education or graduate degree	26.2
Occupation:	
Executive, managerial and professional	43.7
Technical, clerical, service and sales	34.5
Crafts, labour and military	21.8
Wages during last calendar year (\$):	
Mean (SD; range)	46,348 (1,857; 1,000–200,000)
Median	39,564
Wages in three groups:	
Low (\$1,000–22,499)	26.4
Mid (\$22,500–49,999)	33.6
High (\$50,000+)	37.6
Hours of work at main job per week ¹	38.08 (0.69; 2–130)
Hours of work at other jobs per week ¹	1.47 (0.28; 0–45)

Notes: 1. Values are mean (standard deviation (SD); range). GED: General Educational Development. A GED certificate indicates the equivalent of a high school diploma. N = 420.

educational levels, 43.3 per cent had some college or are college graduates, followed by those with high school education or below (30.5%) and those with some graduate education or graduate degree (26.2%). In terms of occupation, 43.7 per cent of the respondents were from

the executive, managerial, and professional category, 34.5 per cent from the technical, clerical, service and sales category, and 21.8 per cent from the crafts, labour, and military category. Hours of work per week at main job ranged from 2 to 130 hours, with a mean of 38.1 hours ($SD = 0.69$).

Hours of work per week at additional jobs ranged from 0 to 45 hours, with a mean of 1.47 ($SD = 0.28$). Wages during the last calendar year ranged from \$1,000 to \$200,000, with a mean of \$46,348 ($SD = \$1,857$) and a median of \$39,564.

Prevalence of workplace discrimination

The second column of Table 2 displays the prevalence of ever perceiving each type of workplace discrimination and the prevalence of ever perceiving any type of workplace discrimination. Prevalence ranged from a high of 60 per cent for being unfairly given jobs no one else wanted to a low of 18 per cent for boss using ethnic/racial/sexual slurs. More than 81 per cent of the respondents reported having experienced any type of workplace discrimination at least once within a year. The remainder of Table 2 shows the prevalence of workplace discrimination among age, gender, race/ethnicity, education, occupation, and wage groups or categories. For each type of the perceived workplace discrimination and for perceiving any type of workplace discrimination, the age gradients are constantly negative, with the 50–64 group reporting higher prevalence than the 65+ group. A significantly higher proportion of men than women reported that ‘co-workers use ethnic/racial/sexual slurs’. Men had a higher frequency of experiencing any type of workplace discrimination. Interestingly, a significantly higher proportion of non-Hispanic White than minority groups reported that ‘co-workers used ethnic/racial/sexual slurs’ and that they were ‘ignored/not taken seriously by boss’. Educational difference was significant in the prevalence of ‘boss uses ethnic/racial/sexual slurs’ and ‘co-workers use ethnic/racial/sexual slurs’. Occupational difference was also significant in the prevalence of ‘boss uses ethnic/racial/sexual slurs’, with the executive, managerial and professional category having the lowest and the crafts, labour, and military category the highest. Wage differences were significant for the most part. It appears that respondents with last year’s wages between \$22,500 and \$49,999 reported the highest prevalence of all types of perceived workplace discrimination (except ‘co-worker with less experience and qualification promoted before you’) and for experiencing any type of workplace discrimination within a year; those with last year’s wages between \$1,000 and \$22,499 reported the lowest.

TABLE 4. Correlates of perceived workplace discrimination among older workers (based on regression analyses)

Independent/control variable ¹	Model 1	Model 2
Age (in years)	-0.079* (0.036)	-0.092* (0.039)
Gender (Ref: male)	-1.28* (0.473)	-1.283** (0.470)
Race/ethnicity (Ref: all others)	-1.194 (0.640)	-1.616* (0.639)
Educational level	-0.259* (0.106)	-0.193 (0.105)
Wage	-0.023** (0.007)	-
Wage 1	-	-2.603*** (0.732)
Wage 2	-	2.174*** (0.537)
Supervisor support	-0.615*** (0.084)	-0.599*** (0.088)
Coworker support	-0.190 (0.165)	-0.204 (0.172)
Marital status	-0.268 (0.493)	-0.590 (0.496)
Occupation 1	-1.001 (0.611)	-0.524 (0.632)
Occupation 2	-0.955 (0.582)	0.605 (0.574)
Hours of work at main job	0.056** (0.022)	0.060** (0.022)
Hours of work at other jobs	0.032 (0.040)	0.024 (0.039)
R ²	0.360	0.379
R _{adj} ²	0.331	0.347

Notes: 1. Dependent variable: perceived workplace discrimination. Ref: reference category.
Significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

Correlates of workplace discrimination

Table 4 presents findings from regression analyses for hypothesis testing. Results from Model 1 indicate mixed support for Hypotheses 1 and 2. Lower education, racial/ethnic minority status and lower wages were associated with higher prevalence of perceived workplace discrimination, controlling for marital status, occupational categories, and hours of work at main job and other jobs. Such finding rendered partial support to Hypothesis 1. Younger ages and being male, on the other hand, were associated with higher prevalence of perceived workplace discrimination and therefore Hypothesis 2 (counter hypothesis) was partly substantiated. Hypothesis 3 also received mixed support. Individuals with higher supervisor support perceived less workplace discrimination, but co-worker support made no difference.

The prevalence analyses discussed above indicated the mid-range wage group had the highest prevalence in perceived workplace discrimination, suggesting a non-linear relationship between wages and perceived workplace discrimination. To capture such potential non-linear relationship, we created Model 2 by replacing the wage variable with two dummy variables (*see* Methods section). Results from regression analysis confirmed that mid-range wage (\$22,500–49,999) was positively associated with perceived workplace discrimination, controlling for other study variables.

Discussion

Although the *Age Discrimination in Employment Act* of 1967 aims to protect individuals age 40+ from employment discrimination based on age, the present study shows that as high as 81 per cent of workers 50+ still experienced discrimination in multiple areas in the USA. For each type of the perceived workplace discrimination, the age gradients were constantly negative, with the 50–64 group reporting higher prevalence than the 65+ group (Table 2). Such finding coincides with Gee, Pavalko and Long (2007), which shows among older workers age discrimination peaks in the fifties and declines afterwards. The fact that the 50–64 group experienced more workplace discrimination than those age 65+ may reflect an effect of self-selection on the part of older workers, because discriminated workers at retirement age would be more likely to retire than non-discriminated retirement-age workers and discriminated pre-retirement-age workers. To look for other possible reasons for the age difference in perceived workplace discrimination, we conducted chi-square tests and *t*-tests to compare these two age groups. Results (not shown) indicate that the 50–64 age group was more likely to be male, having mid-range wages, and having longer hours of work. Since these characteristics were positively associated with workplace discrimination (Table 4), it is understandable that the 50–64 age group would have a higher level of perceived workplace discrimination.

Gender difference was significant in only one type of workplace discrimination, with men more frequently reporting ‘co-workers use ethnic/racial/sexual slurs’. Such finding contradicts Rospenda, Richman and Shannon (2009), which discovered higher prevalence of sexual harassment among women in a non-old-age-specific population. Since encountering racial, ethnic and sexual slurs was asked in the same question in the MIDUS II survey, it is impossible to compare sexual harassment alone. Further study is needed to delineate the gender differences in racial/ethnic and sexual mistreatment.

Educational gradients were found to be negative for the most part. Workers with the lowest education reported the highest prevalence of perceived workplace discrimination and those with the highest education reported the lowest. Such finding is similar to RoperASW (2002), in which 25 per cent of all the respondents aged 45–74 reported that having higher education resulted in better treatment from employers, whereas 53 per cent of those with a post-graduate education reported receiving preferential treatment. How does higher education lead to less workplace discrimination? Multiple pathways are possible. As a form of human capital (Sullivan and Sheffrin 2003), education provides more resources for

better job performance and therefore highly educated older adults may be less likely to be discriminated against. Older adults with higher education may also occupy higher positions and command more respect. In addition, due to the self-selection process, they may also be more likely to work, or continue to work, in settings in which old age is viewed more positively, *e.g.* executive, managerial or professional jobs. More research along these lines is needed to fully comprehend the role of education in perceived workplace discrimination among older workers.

As hypothesised under the social barriers theory, lower education and racial/ethnic minority status were positively related to perceived workplace discrimination. As counter-hypothesised under the attribution-sensitivity theory, younger ages and being male were positively associated with perceived workplace discrimination. These findings suggest that both theories are limited and neither can fully explain perceived workplace discrimination among older workers.

Although it is intuitive that support at work should lessen perceived workplace discrimination, this study is the first we know of that actually observes such a relationship. It is understandable that workplace support, which represents an antithesis to workplace discrimination, may prevent or reduce the latter in the first place. Workplace support can also assist individuals in resolving discrimination issues and prevent their re-occurrences. Still, support at work in the form of consultation may also enable individuals to acquire different perspectives and reduce the likelihood of mistaking non-discriminatory incidents as discriminatory.

Findings revealed that supervisor support was more essential than co-worker support in alleviating perceived workplace discrimination. Due to the lack of similar previous research, it was impossible to make comparisons. However, such results are in line with the job satisfaction literature, which demonstrates the important role of supervisor support in enhancing job satisfaction (*e.g.* Chou and Robert 2008). It is understandable that supervisors, with their power and authority in the work setting, are more critical than co-workers in reinforcing the rules of employment equality and in shaping a more positive organisational climate. Although not a focus of the study, the relative importance of correlates of perceived workplace discrimination was also assessed (analysis not shown). In terms of absolute effect size, supervisor support has the strongest effect on perceived workplace discrimination, followed by wage, hours of work at main job, gender (male), age, and race/ethnicity. Such findings again attest to the importance of supervisor support. Due to the lack of related information in the MIDUS data, it is impossible to examine the mechanisms with which supervisor support influences workplace discrimination. Nevertheless, this is a topic worth pursuing.

The present study discovered a non-linear relationship between wages and perceived workplace discrimination, with individuals with mid-range wages (\$22,500–49,999) experiencing more discrimination than the other two wage groups. This finding was not predicted by either hypothesis. It is plausible that mid-range wage earners may have the ‘worst’ of both worlds, in the sense that they may experience more social barriers than the high wage earners (based on the social barriers theory) but they may also be more inclined to attribute failures to discrimination and are more sensitive to discrimination than the low-wage earners (according to the attribution–sensitivity theory). Future research should help to identify the causes behind such a nonlinear relationship.

An alternative approach to examining the role of mid-range wages on perceived workplace discrimination is to look at the polarisation of the labour market. In the past two decades, due to technological changes, international trade, and the off-shoring of jobs, the USA and other industrialised nations (*e.g.* members of the European Union) have experienced a decline of middle-skill occupations, such as sales, office and administrative workers, operators and production workers (Autor 2010). Is it possible that mid-wage (middle-skill) employees encounter or perceive higher levels of workplace discrimination than employees at the high and low ends of wages or skills because their job market is shrinking? If so, to what extent and through what mechanisms? These intriguing questions have not been answered in the current literature, and await future exploration.

The study has several limitations. First, in the MIDUS II survey, encountering ethnic, racial and sexual slurs was included in the same question, thus precluded distinctions among them in the analyses. Second, although the study sample was nationally representative, the sizes of the minority group ($N=53$) and age 65+ group ($N=74$) were small, which might have caused limited within-group variations. Third, the dearth of detailed information on the supervisor organisational conduct and interactions with employees in the MIDUS data precluded further analysis on how supervisor support affects perceived workplace discrimination.

Despite these restrictions, this study represents a first comprehensive study of the prevalence and correlates of discrimination against older workers in the USA. The study showed that the majority of older workers experienced workplace discriminatory treatment in multiple domains. As older adults are increasing their workforce participation, how to change the organisational climate, enhance organisational justice and reduce workplace discrimination against older workers deserve more attention.

Finally, results from the present study are also significant from a cross-national or cross-cultural perspective, given that workplace discrimination

against older workers exists in many countries: from developed countries, such as the United Kingdom, Canada, Germany, Japan and Australia to developing countries, such as India, China, Peru, Bangladesh and Uganda (Chou forthcoming). Societies not only differ in cultural values, which affect the patterns of discrimination at work (Marshall and Walker 1999; Wu, Lawler and Yi 2008), but also vary in legislative protections against such discrimination. Findings from the present study provide a stepping stone towards a global understanding of workplace discrimination against older workers.

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References

- AARP. 2003. *Staying Ahead of the Curve 2003: The AARP Working in Retirement Study*. AARP, Washington DC.
- Allan, H. T., Cowie, H. and Smith, P. 2009. Overseas nurses' experiences of discrimination: a case of racist bullying? *Journal of Nursing Management*, **17**, 7, 898–906.
- Altschuler, J. 2004. Beyond money and survival: the meaning of paid work among older women. *International Journal of Aging & Human Development*, **58**, 3, 223–39.
- Autor, D. 2010. *The Polarization of Job Opportunities in the U.S. Labor Market – Implications for Employment and Earnings*. The Center for American Progress, Washington DC.
- Berger, E. D. 2009. Managing age discrimination: an examination of the techniques used when seeking employment. *The Gerontologist*, **49**, 3, 317–32.
- BNET 2009. *Business Dictionary*. Available online at <http://dictionary.bnet.com/definition/older+worker.html> [Accessed November 23 2009].
- Brim, O. G., Ryff, C. D. and Kessler, R. C. 2004. The MIDUS National Survey: an overview. In Brim, O. G., Ryff, C. D. and Kessler, R. C. (eds), *How Healthy Are We?: A National Study of Well-being at Midlife*. University of Chicago Press, Chicago, 1–36.
- Butler, R. N. 2002. The study of productive aging. *Journals of Gerontology: Psychological Sciences and Social Sciences*, **57**, 6, S323–323.
- Carr, P. L., Palepu, A., Szalacha, L., Caswell, C. and Inui, T. 2007. 'Flying below the radar': a qualitative study of minority experience and management of discrimination in academic medicine. *Medical Education*, **41**, 6, 601–9.
- Chou, R. J. Discrimination against older workers: current knowledge, future research directions, and implications for social work. *Indian Journal of Gerontology* (forthcoming).
- Chou, R. J. and Robert, S. A. 2008. Workplace support, role overload, and job satisfaction of direct care workers in assisted living. *The Journal of Health and Social Behavior*, **49**, June, 208–22.
- Cohen, S. 2000. *Race, Gender, and Discrimination at Work*. Westview, Boulder, Colorado.
- Colella, A. and Stone, D. L. 2005. Workplace discrimination toward persons with disabilities: a call for some new research direction. In Dipboye, R. L. and Colella, A. (eds),

- Discrimination at Work: The Psychological and Organizational Bases*. Lawrence Erlbaum Associates, Mahwah, New Jersey, 227–53.
- Cunningham, G. B. and Sagas, M. 2007. Examining potential differences between men and women in the impact of treatment discrimination. *Journal of Applied Social Psychology*, **37**, 12, 3010–24.
- De Castro, A. B., Gee, G. C. and Takeuchi, D. T. 2008. Workplace discrimination and health among Filipinos in the United States. *American Journal of Public Health*, **98**, 3, 520–6.
- DeBeaumont, R. 2009. Occupational differences in the wage penalty for obese women. *Journal of Socio-Economics*, **38**, 2, 344–9.
- Duncan, C. and Loretto, W. 2004. Never the right age: gender and age-based discrimination in employment. *Gender, Work and Organization*, **11**, 1, 95–115.
- Free, M. D. 1996. *African Americans and the Criminal Justice System*. Garland Publisher, New York.
- Gee, G. C., Pavalko, E. K. and Long, J. S. 2007. Age, cohort and perceived age discrimination: using the life course to assess self-reported age discrimination. *Social Forces*, **86**, 1, 265–90.
- Henkens, K. 2005. Stereotyping older workers and retirement: the managers' point of view. *Canadian Journal on Aging*, **24**, 4, 353–66.
- International Labour Office 2008. *Conditions of Work and Employment: Issues for Older Workers*. Information Sheet, OW-1. International Labour Office, Geneva. Available online at <http://www.ilo.org/public/english/protection/condtrav/pdf/infosheets/ow-1.pdf> [Accessed 20 March 2009].
- Johnson, R. W. and Neumark, D. 1997. Age discrimination, job separations, and employment status of older workers: evidence from self-reports. *Journal of Human Resources*, **32**, 4, 779–811.
- Kaye, L. W. and Alexander, L. B. 1995. Perceptions of job discrimination among lower-income, elderly part-timers. *Journal of Gerontological Social Work* **23**, 3/4, 99–120.
- Krieger, N., Smith, K., Naishadham, D., Hartman, C. and Barbeau, E. M. 2005. Experiences of discrimination: validity and reliability of a self-report measure for population health research on racism and health. *Social Science & Medicine*, **61**, 7, 1576–96.
- Malul, M. 2009. Older workers' employment in dynamic technology changes. *Journal of Socio-Economics*, **38**, 5, 809–13.
- Marshall, V. W. 1996. *Issues of an Aging Workforce in a Changing Society: Cases and Comparisons*. Monograph Series: Issues of an Aging Workforce. University of Toronto, Centre for Studies of Aging, and CARNET, the Canadian Aging Research Network, Toronto, Canada.
- Marshall, V. W. and Walker, A. 1999. Older workers and retirement issues – introduction (Part II). *Ageing International*, **25**, 3, 10–13.
- Masser, B., Grass, K. and Nestic, M. 2007. 'We like you, but we don't want you': the impact of pregnancy in the workplace. *Sex Roles*, **57**, 9/10, 703–12.
- McMahon, B. T. and Shaw, L. R. 2005. Workplace discrimination and disability. *Journal of Vocational Rehabilitation*, **23**, 3, 137–43.
- Michello, F. A. and Ford, W. F. 2006. The unemployment effects of proposed changes in Social Security's 'normal retirement age'. *Business Economics*, April, 38–46.
- Mor-Barak, M. E. 1995. The meaning of work for older adults seeking employment: the generativity factor. *International Journal of Aging and Human Development*, **41**, 4, 325–44.
- Noonan, A. E. 2005. 'At this point now': older workers' reflections on their current employment experiences. *International Journal of Aging and Human Development*, **61**, 3, 211–41.
- Pascoe, E. A. and Richman, L. S. 2009. Perceived discrimination and health: a meta-analytic review. *Psychological Bulletin*, **135**, 4, 531–54.

- Ragins, B. L. and Wiethoff, C. 2005. Understanding heterosexism at work: the straight problem. In R. L. Dipboye and Colella, A. (eds), *Discrimination at Work: The Psychological and Organizational Bases*. Lawrence Erlbaum Associates, Mahwah, New Jersey, 177–201.
- Roberts, R. K., Swanson, N. G. and Murphy, L. R. 2004. Discrimination and occupational mental health. *Journal of Mental Health*, **13**, 2, 129–42.
- Rodriguez, M. S. 2008. Perceived discrimination: multiple measures and the intersections of race and gender. *Journal of African American Studies*, **12**, 4, 348–65.
- Roessler, R. T., Neath, J., McMahan, B. T. and Rumrill, P. D. 2007. Workplace discrimination outcomes and their predictive factors for adults with multiple sclerosis. *Rehabilitation Counseling Bulletin*, **50**, 3, 139–52.
- RoperASW. 2002. *Staying Ahead of the Curve: The AARP Working in Retirement Study*. Available online at http://assets.aarp.org/rgcenter/econ/d17773_multiwork_1.pdf [Accessed 5 November 2008.]
- Roscigno, V. J., Mong, S., Byron, R. and Tester, G. 2007. Age discrimination, social closure and employment. *Social Forces*, **86**, 1, 313–34.
- Rospenda, K. M., Richman, J. A. and Shannon, C. A. 2009. Prevalence and mental health correlates of harassment and discrimination in the workplace: results from a national study. *Journal of Interpersonal Violence*, **24**, 5, 819–43.
- Ruggiero, K. M. and Major, B. N. 1998. Group status and attributions to discrimination: are low- or high-status group members more likely to blame their failure on discrimination? *Personality and Social Psychology Bulletin*, **24**, 8, 821–37.
- Ruggiero, K. M. and Taylor, D. M. 1995. Coping with discrimination: how disadvantaged group members perceived the discrimination that confronts them. *Journal of Personality and Social Psychology*, **68**, 5, 826–38.
- Russell, R. 2007. Riding the gray wave. *Occupational Health and Safety*, **76**, 8, 16 and 18.
- Schultz, A., Williams, D., Israel, B., Becker, M., Parker, E. and James, S. A. 2000. Unfair treatment, neighborhood effects, and mental health in the Detroit metropolitan area. *Journal of Health and Social Behavior*, **41**, 3, 314–32.
- Shaffer, M. A., Joplin, J. R. W., Bell, M. P., Lau, T. and Oguz, C. 2000. Gender discrimination and job-related outcomes: a cross-cultural comparison of working women in the United States and China. *Journal of Vocational Behavior*, **57**, 3, 395–427.
- Simon, R. 1996. Too damn old. *Money*, **25**, 7, 118–26.
- Smyer, M. A. and Pitt-Catsouphes, M. 2007. The meaning of work for older workers. *Generations*, **31**, 1, 23–30.
- Sullivan, A. and Sheffrin, S. M. 2003. *Economics: Principles in Action*. Pearson Prentice Hall, Upper Saddle River, New Jersey.
- Swim, J. K. and Stangor, C. 1998. *Prejudice: The Target's Perspective*. Academic Press, San Diego, California.
- Taylor, P. 2007. Older workers and the labor market: lessons from abroad. *Generations*, **31**, 1, 96–101.
- Taylor, P. and Urwin, P. 2001. Age and participation in vocational education and training. *Work, Employment & Society*, **15**, 4, 763–79.
- Tomei, M. 2003. Discrimination and equality at work: a review of the concepts. *International Labour Review*, **142**, 4, 401–18.
- University of Wisconsin Institute on Aging 2007. *Mid-life in the United States: A National Study of Health and Well-being*. University of Wisconsin Institute on Aging, Madison, Wisconsin.
- US Bureau of Labor Statistics 2007. News: The employment situation: September 2007. US Bureau of Labor Statistics, Washington DC.
- Wadsworth, E., Dhillon, D., Shaw, C., Bhui, C., Stansfeld, S. and Smith, A. 2007. Racial discrimination, ethnicity and work stress. *Occupational Medicine*, **57**, 1, 18–24.
- Weitzer, R. and Tuch, S. A. 2004. Race and perceptions of police misconduct. *Social Problems*, **51**, 305–25.

- Wood, G., Wilkinson, A. and Harcourt, M. 2008. Age discrimination and working life: perspectives and contestations: a review of the contemporary literature. *International Journal of Management Reviews*, **10**, 4, 425–42.
- Wu, C., Lawler, J. J. and Yi, X. 2008. Overt employment discrimination in MNC affiliates: home-country cultural and institutional effects. *Journal of International Business Studies*, **39**, 5, 772–94.
- Zhao, B., Ondrich, J. and Yinger, J. 2006. Why do real estate brokers continue to discriminate? Evidence from the 2000 housing discrimination study. *Journal of Urban Economics*, **59**, 3, 394–419.

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