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Social Cognitive Career Theory, the Theory of Work Adjustment, and Work Satisfaction of Retirement-Age Adults

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Abstract

Despite a recent increase in the number of adults who work past traditional retirement age, existing theories of vocational behavior have not yet received adequate empirical support. In a large sample of adults age 60–87, we evaluated the relationship between theorized predictors of work satisfaction proposed by Social Cognitive Career Theory (SCCT), work satisfaction as a predictor of continued work, as proposed by the Theory of Work adjustment (TWA), as well as the influence of reported experiences of discrimination on these relationships. While the results supported most of the predicted relationships, the effects of discrimination were stronger than the variables proposed by either SCCT or TWA for the present sample.

Keywords

Social Learning and Cognitive Theory; others (Career Theory); elderly employees; career/vocational education/guidance

Workforce statistics in the past two decades have indicated ever-increasing numbers of individuals who continue to work past retirement age (Authors, this issue). The majority of research regarding the application of vocational theory has focused on job choice, person-organization fit, and more recently mid-life career transitions. However, there is scant empirical evidence within existing vocational theory that can adequately explain vocational behavior and work satisfaction among older adults who remain in the workforce past traditional retirement age. Even Super's (1980) life-span developmental theory, which does directly address retirement as the final stage of vocational development, has viewed the primary tasks when reaching retirement age as disengagement and transition from worker to leisurite.

Although for some older workers, the choice to continue working is driven by a desire to remain engaged in a personally fulfilling career or to transition to a new career beyond retirement, for others this decision is driven by financial need (Authors, this issue). Thus, theoretical explanations of work/retirement decisions must consider issues of volition. As workers age, health and healthcare concerns may factor more prominently into their retirement decisions. Further, as the U.S. becomes more demographically diverse, it is important to ensure that theoretical models consider issues of race, gender, sexual orientation, culture, and discrimination, as well as age.

The goal of the present study is to explore selected components of both Social Cognitive Career Theory (SCCT: Lent, Brown, & Hackett, 1994; Lent & Brown, 2006, 2013) and the Theory of Work Adjustment (TWA: Dawis, England, & Lofquist, 1964) to determine their applicability to work satisfaction with older adults, with specific consideration of racial group membership and experiences of discrimination as personal and contextual determinants of both work and life satisfaction.

Theoretical Predictions

Social Cognitive Career Theory was initially developed to address the role of background variables, self-efficacy, and outcome expectations in the development of vocational interest, career choice, and work performance, and it has recently been extended to both work and educational satisfaction (Lent & Brown, 2006, 2013). The SCCT model of work satisfaction builds on Lent's (2004) initial integration of both domain-specific and global life satisfaction. This grew from an earlier study, in which Lent et al. (2005) found that for a sample of college students, self-efficacy predicted academic satisfaction, and that positive affectivity predicted both academic and social self-efficacy as well as life satisfaction but was not significantly related to academic satisfaction. Outcome expectations, contrary to theoretical prediction, did not significantly affect either academic or social satisfaction, although both types of satisfaction positively predicted life satisfaction. It was not clear, however, how strongly academic satisfaction is related to work satisfaction, regardless of age. In 2006, Lent and Brown cited an increased interest among vocational researchers in the relationship between dispositional factors in job satisfaction, and they proposed a model predicting that the following variables directly affect work satisfaction: personality/affective traits (extraversion, neuroticism, and conscientiousness), self-efficacy expectations, participation in and progress at goal-directed activity, work conditions and outcomes, and relevant environmental supports, resources, and obstacles. The model also predicted that personality/affective variables and environmental conditions directly affect self-efficacy expectations. To date, this model has not been directly tested with working adults, either in mid-life or of retirement age.

In 2013, Lent and Brown suggested that the SCCT self-management model could be applied to work transitions associated with the retirement process (i.e., bridge employment or the decision to delay or gradually retire), and the same predictive variables associated with work satisfaction may also be applicable to retirement outcomes. Specifically, conscientiousness and extroversion are traits that could influence an older worker to choose bridge employment over delaying retirement whereas work satisfaction may impact the decision to phase into retirement. Aside from personality traits, older workers may need adaptive skills to cope with changing life roles or self-efficacy to adjust their career plans based on potential barriers such as discrimination, economic concerns or health and healthcare issues.

While the recent expansion of SCCT has added proposed influences on work satisfaction, the current theory does not indicate effects of either high or low work satisfaction on persistence in the current job, or on decisions to stop working. The TWA does directly address the impact of both the worker's satisfaction with the workplace and the employer, as well as the employer's satisfaction with the worker. This theory proposes that when both are

high, the employment relationship will continue as it is, but when one of these components is low, either the worker or the employer will make adjustments. While it may seem obvious that individuals who are satisfied with their jobs and whose employers are satisfied with them will tend to remain with the same employer, for older workers it is possible that additional factors become more salient. For example, the decision to continue working may be driven by financial needs or the need to retain healthcare benefits, or the decision to leave may be involuntary, related to financial stress on the employer, as in downsizing. In a study of the relationship between job satisfaction and delayed retirement across countries in the European Union (EU), Aristovnik and Jakli (2013) found that the relationship between job satisfaction and workforce participation of older adults was significant though weak, indicating that many other factors influence this decision. For example, in Slovenia an extremely generous early retirement benefit appeared to have encouraged larger numbers of workers to retire early there than in other countries. Job satisfaction also varied by job type, with highly qualified white-collar workers indicating higher levels of satisfaction than those in lower-level blue-collar jobs. Consistent with the predictions of SCCT, self-efficacy was related to job satisfaction, as older workers who did not anticipate being able to fulfill the requirements of their jobs in the future indicated lower satisfaction. The area in which older workers indicated the lowest level of satisfaction was the possibility of career advancement. Similarly, in a sample of 421 registered nurses aged 50 and older in Ontario, Canada, Armstrong-Stassen and Ursel (2009) found that perceived organizational support was related to opportunities for new training as well as advancement and was positively related to both job satisfaction and intent to stay. Thus, although the last stage of working life has been characterized as a period of slowing down and possibly lower ambitions for advancement and increased challenge, this may not be the case.

The effects of demographic variables can also affect job satisfaction in older workers. Aristovnik and Jakli (2013) found that men in general across the EU were more satisfied than were women, though this was not the case in all countries. Further, the factors influencing job satisfaction varied by age, with younger workers more focused on recognition and older workers more focused on finding meaning in their work. It is important to note that the measure of job satisfaction used in this study also included questions about harassment and discrimination. In a large sample of employees aged 50–75 across two Australian companies, von Hippel, Kalokerinos, and Henry (2013) found that stereotype threat related to age negatively affected job satisfaction, work mental health, and organizational commitment and increased intentions to resign or retire. The relationship between work satisfaction and retirement intentions may also vary by race. Based on the 2002 Health and Retirement Study, Burr and Mutchler (2007) found that similar percentages of Whites (90.7%), Blacks (88.9%), and Hispanics (91.2%) reported that they enjoyed going to work, although in reporting their plans for retirement, Blacks (25.4%) and Hispanics (23.4%) were more likely to report that they planned to stop work altogether, as compared to 18.7% of White respondents.

In the present study, we evaluated the following predictions of Social Cognitive Career Theory:

- H1** Life satisfaction and work satisfaction are positively related.

- H2a** Personality traits including extraversion, neuroticism, and conscientiousness will predict self-efficacy.
- H2b** Experiences of discrimination, as learning experiences, will predict self-efficacy beyond what is predicted by personality.
- H3** Self-efficacy will predict work satisfaction, after controlling for experiences of discrimination.
- H4** Though not directly addressed by existing models of SCCT, we also proposed that experiences of discrimination as learning experiences would predict both life satisfaction and work satisfaction.

Further, we tested the following prediction, based on the Theory of Work Adjustment:

- H5** Those who reported that they were currently looking for a new job will report lower levels of work satisfaction with their present jobs.

Although the motivation to work because of financial rewards and benefits including healthcare are consistent with the TWA, it is likely that this relationship may change as individuals begin to contemplate retirement. Although many younger people feel that they work because they “have to” rather than because they want to, those who reach an age at which they are expected to stop working may become less satisfied with their work but nonetheless remain in their jobs. Our final hypotheses accounts for this:

- H6** Work satisfaction will be lower for those individuals with lower levels of work volition; i.e., those who reported in that they would like to leave work altogether but were unable to do so because they needed either the money or health insurance.

Method

Sample

Data are from the Health and Retirement Study (HRS) 2008 and 2010 interview waves (HRS 2008b, HRS 2010, HRS 2012a, 2013a). For the purposes of this study, we used the HRS Core 2008 and 2010 Enhanced Fat Files from RAND (2013, for more information about this data see <http://www.rand.org/labor/aging/dataproduct.html>). The HRS is a nationwide longitudinal dataset of older adults in the United States that is primarily funded by the National Institute on Aging (NIA) with additional funding from the Social Security Administration (HRS, 2012a, 2013a). The NIA and the University of Michigan’s Institute for Social Research collaboratively manage this ongoing study (HRS, 2008a; NIA, 2007).

In addition to using a multi-stage national area probability sampling methods, the HRS was designed to oversample Black, Hispanic, and residents of Florida to supplement the data (Heeringa & Connor, 1995). The Asset and Health Dynamics among the Oldest Old (AHEAD; individuals born in 1923 or earlier) and Early Baby Boomer (EBB; born between 1948 and 1953) cohorts were also oversampled for Black and Hispanic individuals; however, due to financial reasons the War Baby (WB; born between 1942 and 1947) and Children of the Depression Age (CODA; born between 1924 and 1930) cohorts were not

oversampled (HRS, 2011). Respondents were over 50 years of age when they began participating, and surveys are completed every two years (HRS, 2011). Data are collected by telephone as well as in person interviews, and proxy informants are interviewed when respondents are unable to complete the interview due to cognitive or physical limitations (HRS, 2008a). The 2008 data was collected from 17,217 respondents between February 2008 and February 2009 and the 2010 data was collected from 22,037 respondents between February 2010 and November 2011 (HRS, 2013b, 2013c). The response rate for the 2008 data ranged from 86.3% – 90.7% depending on the cohort (HRS, 2011), and the response rate for the 2010 data is not yet available. Additional information about the sample and methodology has already been reported (see Heeringa & Connor, 1995).

From an initial sample of all adults who participated in both the 2008 and 2010 waves of the HRS, we selected those who were at least 60 years old, completed the Psychosocial and Lifestyle Survey (the “leave-behind” questionnaire, Smith, Fisher, Ryan, Clarke, House & Weir, 2013) during either wave, and reported that they were working at least 20 hours per week at the time they completed the leave-behind questionnaire. The rationale for this was that age 59–1/2 is the earliest age at which individuals may begin withdrawing benefits from retirement savings plans, which may help a phased transition to either full retirement or to a bridge career. Further, although the earliest Social Security retirement age is 62, we wanted to include the largest possible sample of African American and Latino/Hispanic respondents, particularly given lower U.S. Bureau of Labor statistics (2013) indicated lower employment levels for older Blacks (43.1% of Blacks/African Americans aged 60–64 and 14.8% aged 65+) compared to Whites (53.4% aged 60–64 and 17.5% aged 65+), which is consistent with the full HRS dataset. This resulted in a final sample of 1,858, ranging in age from 60 to 87 ($M = 66.11$, $SD = 5.29$, median = 65.00). The genders were about evenly split, with 901 (48.5%) male and 899 (48.4%) female; 58 (3.12%) did not report their gender. Years of education ranged from 0 to 17 or more, with a mode of 12 ($n = 557$). Slightly less than half ($n=772$, 41.6%) of the sample had completed 12 years of education or fewer, with 428 (23.0%) completing one to three years of college, 243 (13.1%), reporting that they had completed 4 years of college, and 312 (16.79%) completing more than 16 years of education; 103 (5.5%) did not provide this information. The participants were predominantly White ($n=1,506$, 81.2%), 241 (13.0%) were Black, 52 (2.8%) reported some other race, and 58 (3.1%) did not respond to this question. This represents a slight over-representation of Blacks compared to the U.S. civilian workforce age 60 or older, in which 86.30% are White, and 7.97% are Black (U.S. Bureau of Labor Statistics, 2013). Of the White participants, 79 (5.4%) reported Hispanic ethnicity, while 3 Black participants (1.5%) and 17 participants who identified as some other race (39.5%) reported their ethnicity as Hispanic. The mean weekly hours of work for this sample was 38.02 ($SD=12.05$, median = 40.00). Note that although the HRS used the term “Hispanic” in interviews and reports, for the remainder of this paper we have substituted the term “Latino,” which is more consistent with current practice and has been used by other authors in a study using a prior HRS dataset (Ayalon & Gum, 2011).

Measures

Except as indicated, the measures are taken from the HRS Psychosocial and Lifestyle Questionnaire (Smith et al., 2013), which represents a set of both existing instruments and measures that were created specifically for the HRS based on prior studies.

Job Stressors and Job Satisfaction Scale—Following Lent and Brown (2002), we defined *work satisfaction* as both overall satisfaction with one's work and satisfaction with individual job facets, such as pay, job security, and opportunity for promotion. We measured this using the 7-item job satisfaction items from the HRS *Job Stressors and Job Satisfaction* scale. The items are coded from 1 = strongly disagree to 4 = strongly agree, with 5 = does not apply (Smith et al., 2013). This scale was modeled after the Quinn and Staines (1979) Quality of Employment Survey (QES), which measures both satisfaction with specific job facets as well as overall satisfaction. Psychometric analysis done with participants from the 2006, 2008 and 2010 HRS indicated the alpha coefficient for the Job Satisfaction scale has remained .80 through these waves of data (Smith et al., 2013). The Job Stress and Job Satisfaction scale as well as the Job Content Questionnaire (JCD) were both developed using QES items (Karasek, Brisson, Kawakami, Houtman, Bongers, & Amick, 1998; Mezuk, Bohnert, Ratliff, & Zivin, 2011). Concurrent validity of the JCD was evaluated by correlating it with similar scales as well as with participants' age and education using data from the QES, and the two-factor loading pattern provides evidence of factorial validity (Karasek et al., 1998; Karasek & Theorell, 1992). The developers of the Survey of Health Ageing and Retirement in Europe (Siegrist, Wahrendorf, von dem Knesebeck, Jürges, & Börsch-Supan, 2006) and the National Study of the Changing Workforce (Beutell, 2013) used the QES to create job satisfaction measures, which have been used with older adults.

Satisfaction with Life Scale—The variable *life satisfaction* is defined as an individual's evaluation of the quality of her or his life (Diener, Emmons, Larson, & Griffin, 1985). We measured this using the Satisfaction with Life Scale (SWLS), and the purpose of the SWLS is to assess how individuals evaluate the quality of their lives (Diener, et al., 1985). This 5-item scale is coded from 1 = strongly disagree to 7 = strongly agree with higher scores suggesting greater satisfaction. Diener and colleagues reported the SWLS had a coefficient alpha of .87 with a sample of college students and the coefficient alphas ranged from .88 – .89 for the 2006, 2008, and 2010 waves of HRS (Smith et. al, 2013). The SWLS correlated with the Life Satisfaction Index, (LSI, Adams, 1969), suggesting convergent validity (Diener et al., 1985). Additional evidence for reliability, convergent validity, and construct validity were provided in a review conducted by Pavot and Diener (1993) using diverse samples, including older adults. They found that the SWLS had a positive correlation with similar measures and the SWLS is associated with self-esteem, marital status, and health (Pavot & Diener, 1993). Further, the SWLS has been used to assess life satisfaction and quality of life among older adults across cultures (McAuley, Konopack, Motl, Morris, Doerksen, & Rosengren, 2006; Utsey, Payne, Jackson, & Jones, 2002).

Current Ability to Work—Lent and Brown (2006), defined self-efficacy as “personal beliefs about one's capability to perform particular behaviors necessary to achieve valued school or work goals or, more generally, to perform tasks requisite to success in one's work

or school context” (p. 239). We measured *self-efficacy* using the participants’ responses to four separate questions about their perceived ability perform requirements of their current jobs, and to specifically manage the physical, cognitive, and interpersonal demands of their work. Participants responded to each question using a 10-point scale, with 0 indicating that they were unable to work in the specified area at their current job, and 10 indicating high confidence in their ability to perform the related tasks. Scores from the four scales are summed to create an overall index of perceived work ability. These items were taken from the Work Ability Index (WAI) developed by Ilmarinen and Rantanen (1999) to promote work ability among older adults. The purpose of the WAI is to assess “How good is the worker at present and in the near future, and how able is he or she to do his or her work with respect to work demands, health, and mental resources?” (Ilmarinen & Tuomi, 1992, p. 8). An international study of the WAI provided evidence of reliability with coefficient alphas that ranged from .54 to .79 depending on the country, with a mean alpha of .72 (Radkiewicz & Widderszal-Bazyl, 2005). This sample consisted of approximately 38,000 nurses, but specific demographic data was not provided. Coefficient alpha in both HRS 2008 and 2010 was .96 (Smith et al., 2013). Lastly, Radkiewicz and Widderszal-Bazyl (2005) provide evidence of construct validity by correlating the WAI with physical and mental health assessments.

Midlife Developmental Inventory—*Personality/affective variables* are defined as the *extraversion, neuroticism, and conscientiousness* scales from the Midlife Developmental Inventory (MIDI: Lachman & Weaver, 1997), which is based on the “Big 5” components of personality. The MIDI items are coded from 1 = a lot to 4 = not at all (Smith et al., 2013). This instrument also includes openness, agreeableness, and agency but these are not included as they were not part of Lent and Brown’s (2006) model. Using a sample of adults between the ages of 30 and 70, the internal consistency reliability of the MIDI subscales ranged from .72 to .81; extraversion, neuroticism, and conscientious scales correlated with the NEO short form (.75, .70, and .81, respectively), suggesting convergent validity; and divergent validity was tested by comparing the subscales of the MIDI and NEO short form (Lachman & Weaver, 1997). Psychometric analysis done with participants of from the 2006, 2008 and 2010 HRS waves indicated the alpha coefficients for extraversion, neuroticism, and conscientiousness ranged from .74–.75, .70–.72, and .66–.73, respectively (Smith et al., 2013). Further, the MIDI was used with middle age and older adults in the Midlife in the United States (MIDUS) study (Lachman, 2001).

Experiences of Discrimination—To measure discrimination, we used four scales from the HRS Psychosocial and Lifestyle Questionnaire, as described below:

Chronic Work Discrimination: The Chronic Work Discrimination Scale indicates the frequency with which participants perceived unfair treatment in a range of work situations, consisting of 6 items on a 6-point scale ranging from 1= never to 6= almost every day. The development of this scale was influenced by the research of Williams, Yu, Jackson, and Anderson (1997). According to Williams (2014), his Chronic Work Discrimination and Harassment scale was modeled after the Perceived Racism Scale (PRS) developed by McNeilly and colleagues (1996). Unlike prior measures of discrimination, Williams and

colleagues modified the items to capture perceived workplace discrimination defined as unfair treatment, regardless of racial group. Consistent with findings of prior studies focused on racism, however, this study found that Blacks reported higher levels of work place stress than did White participants. The coefficient alpha for the 2010 HRS Chronic Work Discrimination Scale is .81 (Smith et al., 2013). Utsey (1998) reported that the PRS was found to have a direct correlation with other racism scales, thus providing further evidence of convergent validity. In addition, the factor loadings of .58 to .74 for the Racism on the Job subscale is also evidence of construct validity.

Everyday Discrimination: Everyday discrimination is represented by a 5-item scale indicating how often the participant experiences discrimination in her or his daily life, also on a 6-point scale, ranging from 1= almost every day to 6 = never, and reverse coded. This scale was also developed from the Everyday Discrimination subscale of the Detroit Area Study Discrimination Scale (Williams et al., 1997). The purpose of Everyday Discrimination scale was to assess minor, chronic, and routine experiences of unfairness. As with workplace discrimination, Williams et al. found that Blacks reported higher levels of everyday discrimination than did Whites, and that this variable moderated the relationship between race and health status. Coefficient alpha for this scale using HRS data is .80 (Smith et al., 2013). Taylor, Kamarck, and Shiffman (2004) reported a coefficient alpha of .80 for older Black adults, and Krieger, Smith, Naishadham, Hartman, and Barbeau (2005) reported a Cronbach alpha of .88 for Black and Latino individuals between the ages of 25 and 64. Krieger et al. also used the Everyday Discrimination scale to validate their Experiences of Discrimination scale, and reported a correlation of .56 with the frequency subscale and a correlation of .61 with the situation subscale, suggesting convergent validity. Taylor et al. (2004) found that the Everyday Discrimination scale also correlated with negative affect, social conflict, and perceived stress suggesting construct validity.

Attributions of Everyday Discrimination: The purpose of the Attributions of Discrimination Scale is to allow participants to report the perceived reasons for their experiences, including ancestry or national origin, gender, race, age, weight, physical disability, other aspect of physical experience, sexual orientation, and other. Participants may check as many as apply. These questions were taken from Kessler, Michelson, and Williams (1999) and are discrete variables that have been used in conjunction with Everyday Discrimination and Major Experiences of Lifetime Discrimination scales.

Major Experiences of Lifetime Discrimination—To capture the cumulative effects of discrimination, we used the Major Experiences of Lifetime Discrimination scale, which allows participants to report whether they have ever been unfairly treated in six specific areas (yes or no), including: employment (unfairly dismissed, not hired, or denied a promotion), housing, bank loan, or treatment by police. The score on this measure is the number of affirmative responses. Items were drawn from the Major Experiences (i.e., lifetime discrimination) scale from the Williams et al. (1997) Detroit Area Study Discrimination Scale (Smith, et al., 2013). The Major Experiences subscale correlates with the Everyday Discrimination scale and has a coefficient alpha of .63 for older Black adults (Taylor, et al, 2004). The coefficient alpha ranged from .52 to .71 for Latino and Black

adults, respectively (Krieger et al., 2005). In addition, Krieger et al. (2005) reported correlations of .65 and .61 between the Major Experiences scale and their Experiences of Discrimination frequency and situation subscales, suggesting convergent validity.

Statistical Analyses and Results

The descriptive statistics, including means, standard deviations, and correlations among the variables are provided in Table 1. About half ($n = 992$, 53.4%) of the participants reported experiencing some type of everyday discrimination. Of these, 106 (10.7%) reported experiencing discrimination based on ancestry or national origin, 164 (16.5%) based on gender, 88 (8.9%) based on race, 341 (34.4%) based on age, 18 (1.8%) based on religion, 33 (3.3%) based on weight, 40 (4.0%) based on physical disability or other physical characteristic, 4 (0.4%) based on sexual orientation, and 47 (4.7%) based on financial status.

Results of Hypothesis Tests

As shown in Table 1, the bivariate relationships were in the directions predicted by theory, as described by hypotheses 1–4. Work satisfaction had a small but positive bivariate relationship with life satisfaction. The personality variables of extroversion and conscientiousness had small positive relationships with self-efficacy, while neuroticism had a small negative relationship. Self-efficacy, as predicted, was positively related to work satisfaction, as well as to life satisfaction. However, the three discrimination variables (chronic work discrimination, everyday discrimination, and lifetime discrimination) had stronger bivariate relationships with job satisfaction than did any other variable. Further, discrimination was more strongly associated with job satisfaction than with life satisfaction. Chronic work discrimination and everyday discrimination had small negative relationships with self-efficacy, while the relationship between lifetime experiences of discrimination and self-efficacy were not significant. All three types of discrimination had small negative relationships with life satisfaction.

To explore whether experiences of discrimination affected self-efficacy after controlling for the effects of personality (Hypothesis 2a), we conducted a hierarchical multiple regression predicting self-efficacy from the personality variables extroversion, neuroticism, and conscientiousness in the first step and the three discrimination variables in the second step. Hierarchical or sequential regression is an appropriate analysis when the order of entry is determined by theoretical considerations and allows the researcher to determine the contribution of one or more variables after controlling for those entered earlier in the model (Tabachnik & Fidell, 2007). The set of personality variables accounted for a significant but small proportion of the variance in self-efficacy, $F(3, 1617) = 59.84$, $p < .001$. The addition of the discrimination variables accounted for an additional 4% of the variance, $F(3, 1614) = 21.92$, $p < .001$. When all variables were in the model, extroversion and neuroticism were significant among the personality variables, and chronic work discrimination and everyday discrimination both had small effects. Neither conscientiousness nor lifetime experiences of discrimination affected self-efficacy.

Table 3 shows the results of a hierarchical multiple regression predicting work satisfaction from self-efficacy, after controlling for the three discrimination variables (Hypothesis 3).

The set of discrimination variables accounted for a significant proportion of the variance in work satisfaction $R^2 = .23$, $F(3, 1616) = 159.61$, $p < .001$, with chronic work discrimination most strongly affecting job satisfaction. Self-efficacy, while a significant predictor, accounted for only an additional 2% of the variance in work satisfaction after controlling for experiences of discrimination.

To further explore whether the effects of discrimination varied by race and ethnicity, we conducted a MANOVA comparing the experiences of the three types of discrimination by racial and ethnic group. We found no significant main effects for chronic work discrimination or everyday discrimination, but as may be expected, Black participants reported significantly greater levels of discrimination over their lifetimes than did White participants, $F(2, 1586) = 7.89$, $p < .001$. There was also a significant interaction by ethnicity for lifetime discrimination, $F(2, 1586) = 3.61$, with Latino ethnicity increasing the lifetime incidence of discrimination for White respondents and lowering the reported incidence for Blacks who reported Hispanic ethnicity. There were no interaction effects for the other measures of discrimination.

To determine the effect of work satisfaction on plans to change jobs (Hypothesis 5), we compared the levels of work satisfaction between those who reported in 2010 that were currently looking for a new job and those who were not. The results were consistent with predictions, with the mean work satisfaction of those who were currently looking a new job ($M = 2.67$, $SD = .51$) significantly lower than that of those who were not ($M = 3.12$, $SD = .56$), $t(1, 343) = -7.10$, $p < .001$. The mean difference in reported chronic work discrimination was also significant, with those looking for another job reporting higher levels of work discrimination ($M = 1.99$, $SD = 1.08$) than those who were not looking ($M = 1.55$, $SD = .77$); Levene's test was significant for this comparison, indicating unequal variances between the two groups, $t(88.20) = 4.94$, $p < .001$.

Hypothesis 6 predicted that those with lower work volition would report lower work satisfaction. In the 2010 cohort, 692 (75.0%) participants reported that they would like to stop working altogether but needed the money, while 231 (25.0%) said that this was not true. As expected, those in the first group reported significantly lower work satisfaction ($M = 3.08$, $SD = .60$) than those in the second group ($M = 3.37$, $SD = .55$), $t(880) = -5.56$, $p < .001$. A somewhat smaller percentage of White participants (79.8%) reported staying in their jobs because they needed money, compared with 82.9% of Black participants, $\chi^2 = 11.62$, $p < .009$. Among individuals over age 65, this difference was no longer significant (67% of Whites and 73.9% of Blacks).

In the same cohort, 424 (52.4%) individuals reported that they continued working because of the need for health insurance, while 385 (47.6%) said this was not the case. Those who kept working for health insurance also reported somewhat lower work satisfaction ($M = 3.01$, $SD = .56$) than those who did not have this need ($M = 3.29$, $SD = .58$), $t(773) = -6.92$, $p < .001$. A significantly lower percentage of White participants (48.4%) reported that they were staying in their jobs because of the need for health insurance than did Blacks (72.7%), $\chi^2 = 26.41$, $p < .001$. Somewhat surprisingly, this difference remained statistically significant

among those who would be eligible for Medicare, with 29.4% of Whites and 56.7% of Blacks age 65 or older reporting this reason for remaining in their jobs, $\chi^2 = 9.66, p < .01$.

A hierarchical multiple regression predicting work satisfaction based on the stated need to keep working either for money or health insurance was also significant at the initial step, $F(2, 726) = 27.28, p < .001$. However, this model accounted for only 7% of the variance in work satisfaction. The addition of self-efficacy and chronic work discrimination to the model accounted for an additional 20% of the variance in job satisfaction, $F(4, 724) = 68.38, p < .001$. Nonetheless, chronic work discrimination ($\beta = .41, p < .001$) continued to be a stronger predictor than self-efficacy ($\beta = .14, p < .001$) after controlling for the effects of “job lock,” or a stated need to keep working despite a desire to stop.

Discussion

The results of this study do provide some support for the applicability of both SCCT and TWA to older working adults, particularly regarding work satisfaction. As predicted, self-efficacy and life satisfaction were positively related to work satisfaction, and the personality variables extroversion and neuroticism had the expected relationships with self-efficacy. Contrary to predictions, conscientiousness was not significantly related to self-efficacy. Also, though significant, the relationship between the other two personality variables and self-efficacy was small. Thus, while it is possible that these traits affect confidence in one's ability to meet the requirements of work, other factors are more salient, at least for older working adults.

The variable showing the strongest relationship with work satisfaction for older adults in the present study was chronic work discrimination, which was not part of the SCCT model. Although the participants were 81.2% White, over half of the participants in this sample reported some type of daily discrimination, with the largest proportion of the total sample attributing this discrimination to age. This suggests a need to broaden models of work satisfaction and work behavior to more directly consider the effects of discrimination based on a wide range of factors. For those who have faced lifelong discrimination based on gender, race, ethnicity, sexual orientation, disability, or other factors, adding age discrimination creates an additional dimension of multiple minority status. For older White men, in particular, it is possible that the experience of age discrimination may be the first time they have faced identity-based discrimination. Using data from the 2006 HRS, Ayalon and Gum (2011) found that the effect of everyday discrimination on life satisfaction, though significant for all groups, was higher for Whites. The authors proposed that this was because Black older adults, and to a lesser extent Latinos, had greater resilience in the face of discrimination because they had a lifetime to develop coping skills.

As predicted by the TWA, work satisfaction was positively related to intentions to leave one's current job. This suggests that although retirement age is associated with planning to either decrease working hours or to stop work altogether, older adults who are happy in their work may in fact tend to work longer. Further, although a perceived need to continue working for either money or health insurance slightly decreased work satisfaction, the effect size was small compared to self-efficacy and particularly chronic work discrimination. Thus,

even though older adults may feel that they have to keep working, this may be only somewhat related to whether or not they enjoy their work, and in fact this may not be much different from the feelings of many younger workers. As noted by Blustein (2006), work has long been viewed as necessary for survival but only those in the higher social classes may have full volition to choose not only how long to work but also the type of work that is available to them. It therefore is possible that the perceived need to work is viewed as constant, for all but the most privileged groups.

It is not clear why even for those of full Medicare retirement age the need for health insurance remained a common reason for staying in a job despite the desire to stop working, or why this reason was significantly more frequently cited by Black participants age 65 or older. U.S. Census data (2013) indicate that the rate of poverty among Blacks and Latinos remains approximately twice those of non-Latino Whites. Therefore, it is possible that those with lower incomes are more likely to be financially unable to match employer-provided healthcare benefits through a combination of Medicare and supplemental insurance coverage. It remains to be seen whether the Affordable Care Act will affect the perceived need of older adults to remain in the workforce for the purposes of retaining health insurance.

The findings of the present study suggest that although both SCCT and the TWA have at least preliminary support for their application in cross-cultural groups (Authors, this issue), the experience of discrimination for older adults may become more universal. We therefore recommend the inclusion of measures of discrimination for all groups, regardless of race, ethnicity, or gender. The participants in the present study additionally reported discrimination based on religion, weight or other physical characteristic, sexual orientation, and financial status. The finding that particularly chronic work discrimination affects both self-efficacy and work satisfaction indicate a need for additional study to further explore the nature of workplace discrimination and factors that may either increase or prevent these experiences for older adults in particular. Although the popular press and some empirical study has recently focused on the issue of workplace bullying, an exhaustive literature review found only very little addressing this issue with older adults (Powell, 2010). As the working population ages, this becomes more urgent. The present study addressed only the SCCT model of work satisfaction, but additional study may continue to evaluate the other SCCT models with older workers.

The results provide preliminary support vocational psychologists and counselors who conceptualize cases from the theoretical frameworks of SCCT and the TWA, but they may also consider incorporating specifically asking their clients about perceptions of ageism as well as workplace discrimination based on other personal attributes. This may be of particular importance for White men, who may be having their first encounter with discrimination and may ironically be less prepared to cope with the effects of discrimination on their sense of ability and work satisfaction than are women and members of other minority groups. Further, ageism may compound the negative effects of other types of discrimination, based on factors including but not limited to gender, race, ethnicity, and sexual orientation.

This study was limited by the self-report nature of the instruments, as well as by the availability of variables, which were already defined by the existing data set. Further, the publicly available data from the HRS masks detailed information regarding race, ethnicity, and occupational details. This limited the demographic analysis that was possible, and it did not allow further analysis of the data by occupational category, which may have revealed differences between those in blue-collar compared to white collar occupations or those requiring substantial physical effort, for example. We also were not able to determine based on the available data whether individuals who planned to leave their jobs were searching for another job in the same field or whether they were changing fields, for example searching for bridge employment or an encore career. Although the data set includes individuals with a wide range of educational levels, the average level of education of those in the present study is somewhat higher than that of the general population, which might be expected for individuals who agree to participate in longer-term research projects. Thus, the results may not generalize to groups with lower average levels of education, who may also perceive more limited occupational opportunities. Finally, we were particularly interested in evaluating the theoretical proposals of SCCT and the TWA with individuals of retirement age, but our results may not represent the predictors of job satisfaction and persistence of adults who are nearing retirement age but for whom leaving the workplace completely would not be a near-term consideration.

In conclusion, the increased numbers of older working adults have challenged the fields of counseling and vocational psychology to expand their scope to address the needs of older adults who remain in the workforce beyond traditional retirement age. As noted in the other two papers in this special section (Authors, this issue), the forms of continued work vary from full-time to part-time, and older workers may remain in the same vocation with a current employer or may change jobs, type of work, or both. Understanding the sometimes unique needs of this workforce is important for both researchers and practitioners, and the results of ongoing study may further support both continued productivity of these older workers as well as their satisfaction and retention.

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Table 1

Correlations among study variables

	1	2	3	4	5	6	7	8	9	10	11
1. Age	1	-.189**	.053*	.127**	.055*	-.106**	.095**	-.135**	-.162**	-.060**	-.072**
2. Hours worked		1	-.008	-.019	.013	.018	-.032	.053*	.089**	-.014	.000
3. Life Satisfaction			1	.272**	.218**	-.160**	.079**	.213**	-.158**	-.180**	-.111**
4. Work Satisfaction				1	.237**	-.037	-.049*	.257**	-.458**	-.311**	-.162**
5. Extroversion					1	-.038	.309**	.288**	-.103**	-.156**	.031
6. Neuroticism						1	-.370**	-.154**	.129**	.160**	.035
7. Conscientious							1	.130**	-.032	-.055*	.052*
8. Self-Efficacy								1	-.204**	-.250**	-.031
9. Chronic Work Discrim									1	.436**	.208**
10. Everyday Discrim										1	.273**
11. Lifetime Discrim											1

Table 2

Hierarchical Multiple Regression Predicting Self-Efficacy from Personality and Discrimination Variables.

Predictor	Job Satisfaction	
	R^2	β
Step 1	.10	
Extroversion		.29***
Neuroticism		-.15***
Conscientiousness		-.03 ns
Step 2	.04	
Chronic Work Discrim		-.07**
Everyday Discrim		-.16***
Lifetime Discrim		.029 ns
Total R^2	.14	

**
 $p < .01$

***
 $p < .001$

Table 3

Hierarchical Multiple Regression Predicting Job Satisfaction from Self-Efficacy after Controlling for Experiences of Discrimination

Predictor	Job Satisfaction	
	R^2	β
Step 1	.23***	
Chronic Work Discrim		-.39***
Everyday Discrim		-.12***
Lifetime Discrim		-.05*
Step 2	.02***	
Self-Efficacy		.16**
Total R^2	.25***	

*
p < .05

**
p < .01

***
p < .001