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# Adaptation or Exploration? Understanding Older Workers' Plans for Post-Retirement Paid and Volunteer Work

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## ABSTRACT

Numerous investigations have sought to understand the types of individuals who engage in post-retirement work. However, little is known about why older adults are motivated to engage. The aim of the present article is to examine the extent to which two possible mechanisms—adaptation (adjusting to the loss of work role) and exploration (retirement as opportunity to engage in activities in line with personal values)—play a role in explaining planning for paid work or volunteering after retirement. Analyses are based on large-scale survey data collected in 2015 among older workers in the Netherlands ( $N = 6,278$ ). Results show that the large majority of older Dutch workers have plans for post-retirement paid and/or volunteer work. Moreover, both mechanisms appear to contribute to the understanding of post-retirement work plans, yet in different ways. Specifically, older workers who expect to miss latent work functions are more likely to have plans for post-retirement work, with their general values guiding the type of work they gravitate toward. Having plans for post-retirement paid work was more prevalent among older workers who attached more importance to personal growth, whereas having plans for volunteer work was more prevalent among older workers who had a stronger social orientation. Moreover, results suggest that men, more often than women, translate the anticipated loss of latent work functions into plans for post-retirement paid work. These insights regarding the motivational antecedents of post-retirement work plans are highly relevant in light of policy discussions of active and healthy aging.

The prototypical view of retirement as an abrupt and complete withdrawal from paid working life may have been adequate to describe retirement practices during the second half of the 20th century, at least for older male workers (Blöndal & Scarpetta, 1998). However, the nature of retirement has changed over time. Rather than a one-time, one-way irreversible transition from full-time employment to complete retirement, contemporary retirement patterns reflect a complex process that unfolds over time and can vary considerably from one individual to the next (Szinovacz, 2013).

There has been a great deal of speculation about retirement patterns, post-retirement lifestyles, and the civic engagement levels of cohorts who are soon to retire (Chambré & Netting, 2018). However, quantitative empirical evidence is scarce regarding the way in which late-career workers view their approaching retirement life stage and their plans for post-retirement paid and volunteer work activities.

Empirical research on this issue has a strong focus on actual engagement in post-retirement (un)paid work and its structural predictors, such as socio-demographic characteristics and individual resources (for reviews see Beehr & Bennett, 2015; Cahill, Giandrea, & Quinn, 2013; Morrow-Howell, 2010). Although that research has provided empirical evidence as to the types of individuals who are actively engaged in post-retirement paid work or volunteering, it has revealed relatively little in the way of understanding as to why pre-retirees are interested in post-retirement work. That is, about which motivational antecedents impact post-retirement work plans.

From a theoretical viewpoint, two central lines of thinking about post-retirement work and its motivational antecedents can be distinguished in the interdisciplinary retirement literature. The first is grounded in the gerontological literature on retirement decision making and adjustment, which suggests that retirement is

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predominantly viewed as a career exit (Hayward, Friedman, & Chen, 1998; Wang & Shi, 2014). Post-retirement work is considered to be an adaptive strategy; that is, as a way in which older individuals can deal with the perceived losses associated with one's exit from the workforce. Theoretically, this work is strongly based on role theory and identity theory (Fasbender et al., 2016; Zhan, Wang, & Shi, 2015). The underlying assumption associated with this perspective is that the more an individual's identity is tied to his or her work role, the more likely that person will be to seek employment once retired. Consistent with this approach, Fasbender et al. (2016) examined the relationship between the (financial, social, personal, and generative) meanings of work and post-retirement work. Zhan et al. (2015), theoretically building on role theory, explored the associations between more general work-related motivational orientations (status striving, community striving, and generativity striving) and post-retirement work engagement.

The second theoretical line of thinking stems from the field of industrial and occupational psychology, which focuses on retirement as an integral part of one's career. In this literature, retirement is viewed as a career developmental stage that can offer older individuals opportunities for growth and renewal (Wang & Shi, 2014). Theoretically, this work is derived from the protean career theory. The underlying assumption associated with this perspective is that individuals are self-directed, and that personal values and goals are crucial to understanding career-related decision making, including different forms of post-retirement work engagement (Briscoe & Hall, 2006). Consistent with this approach, Wöhrmann, Fasbender, and Deller (2016) examined the relationship between general values (self-enhancement, self-transcendence, conservatism, and openness to change) and post-retirement work intentions.

These two lines of reasoning look at post-retirement work engagement through a different lens—adaptation (i.e., an adjustment to role loss) versus exploration (i.e., a search for personal growth and development)—and each considers different types of motivational drivers (i.e., work-related drivers versus drivers based on general life values, respectively). The aim of the present article is to examine the extent to which these two lines of reasoning play a role in explaining men's and women's planning for paid work or volunteering after retirement. This investigative approach is designed to make three contributions to the literature. First, simultaneously focusing on the adaptation (i.e., adjustment to role loss) and exploration (i.e., search for personal development) mechanisms upon retirement will allow for determination of the relative importance of both types of drivers for understanding post-retirement work plans.

Second, previous studies on the motivational antecedents of post-retirement work engagement have primarily focused either on paid work (Fasbender, Deller, Wang, & Wiernik, 2014) or volunteering (Kaskie et al., 2008). A handful of studies, however, have suggested that it is important to study both types of work simultaneously, and by doing so, explore the extent to which predictors for the two differ (e.g., Fasbender et al., 2016; Wöhrmann et al., 2016; Zhan et al., 2015). This investigation builds on previous exploratory research on the topic (e.g., Fasbender et al., 2016; Zhan et al., 2015) by proposing a set of *a priori* hypotheses designed to examine a common set of antecedents that underlie plans for post-retirement (un)paid work.

Third, in recent reviews of the literature, the importance of paying attention to differences between men and women in the antecedents

of post-retirement work engagement has been suggested (Beehr & Bennett, 2015). Women are not only less likely than men to take up post-retirement paid employment (e.g., Dingemans, Henkens, & Van Solinge, 2017), but also, according to social role theory (Eagly, 1997, 2009), the impact of motivational antecedents on post-retirement work plans can be expected to differ as a function of gender. Yet, little is known about these gender moderation effects (for an exception, see Zhan et al., 2015). In this investigation, both theoretical and empirical attention will be focused on differences between men and women in the relationships between motivational factors and plans for post-retirement work.

This study is based on a large-scale, interdisciplinary data collection effort of more than 6,000 employed pre-retirees (birth cohorts 1950–1955) living in the Netherlands. Post-retirement work is defined as any form of paid or volunteer work that takes place after the individual's retirement. The older employees who participated in this study were asked to think about their future retirement and report any plans they had for paid or volunteer work. Paid work can refer to various forms of employment, either inside or outside of one's original career field. This work can be for the same employer, a different employer, or in self-employment. Volunteer work, in contrast, refers to any activity in which time is given to benefit another individual, group, or organization. Unpaid care work outside the context of volunteer organizations was not considered.

### Dutch Work and Retirement Context

In the Netherlands, most collective labor agreements settled between social partners (employer associations and trade unions) on the sector level require that employment relationships automatically end at the statutory public pension age. This age has been gradually rising from 65 in 2013, to age 67 in 2024. Full government pension benefits and occupational pensions for Dutch workers are available at this public pension age. Beyond these general circumstances, employers and employees are free to negotiate post-retirement paid employment. Employees who choose to remain in paid work following retirement would generally need to negotiate a new labor contract—frequently a fixed-term contract (Van Dalen, Henkens, & Oude Mulders, 2019)—or make the transition into self-employment. Importantly, individuals who return to the labor market after having retired will not be enrolled in an employer pension scheme. This is not inconsequential, given that job tenures for Dutch workers tend to be quite long, with job mobility being relatively low in the Netherlands, particularly among individuals at advanced ages (Chkalova et al., 2017).

The labor force participation rate among Dutch women is somewhat greater than the EU-28 average (Van Brakel & Merens, 2018). With respect to part-time work, however, Dutch women are employed at a rate that is substantially greater than that of other EU countries (74% versus 31%, respectively). Part-time work among Dutch males (23%) is significantly less common than that of Dutch women, but Dutch men work at a part-time rate that is appreciably greater than the EU-28 men's average, which was only 8% in 2017. Data from Statistics Netherlands (Schmeets & Arends, 2018; Statistics Netherlands, 2019) suggest that many older Dutch individuals are actively engaged in some form of post-retirement work, with 325,000 individuals over the age of 65 (10%) reportedly engaged in paid work (men: 14% and women: 7%). Furthermore, 1.3 million Dutch adults over the age of

65 (42% of the population) are reportedly engaged in an unpaid (volunteer) work arrangement, with no gender differences observed in the rate of volunteering.

## THEORETICAL BACKGROUND

One of the central questions older adults ask themselves when it comes to retirement planning is “What will I do after I retire?” (Adams & Rau, 2011). In the interdisciplinary retirement literature, two main ways of thinking about the mechanisms that drive individuals to make plans for post-retirement work are distinguished: (1) as an adaptation strategy, or (2) as an exploration strategy. In the following paragraphs, the theoretical mechanisms related to adaptation and exploration are described in detail, and hypotheses are derived regarding the motivational antecedents of post-retirement paid and volunteer work plans. Also, attention is paid to the hypothesized moderating role of gender.

### Adaptation

In the gerontological literature, retirement is predominantly viewed as a career exit. With regard to post-retirement employment, role theory is a commonly used theoretical framework to understand the drivers behind the decision to engage in work after retirement (e.g., Wang et al., 2008). From a role theoretical perspective, retirement can be considered a formal role change (Louis 1980). The process of one’s new role entry commonly begins prior to exiting the old role, and the process of role exit commonly endures even after one enters the new role (Ashforth, 2001; Damman & Henkens, 2016; Ebaugh, 1988). It can be expected that prior to retirement, individuals begin thinking about the consequences of their future role change, and they begin to make plans for post-retirement activities as a way of dealing with anticipated role-change consequences. As such, individuals who expect to miss the work role after retirement can be assumed to be relatively likely to make plans for post-retirement work engagement.

Other individuals can expect to miss the work role for different reasons; however, inasmuch as work serves different functions for different individuals (Beehr & Bennett, 2015). Several classifications have been proposed to capture the function or meaning of work (Henning et al. 2019; Rosso, Dekas, & Wrzesniewski, 2010). In their review article, Beehr and Bennett (2015) suggested that researchers who study post-retirement work explicitly examine the functions of employment as described by Jahoda (1997). In line with this suggestion, in this study, a distinction is made between the manifest and latent functions of work older employees might conceivably miss once they retire.

The manifest function of work lies in the financial benefit of employment. An overview of research by Fisher, Chaffee, and Sonnega (2016) shows that financial factors are among the most important reasons individuals postpone a complete withdrawal from the paid labor force. That being the case, the need for financial resources, as expressed by the older adult’s anticipated loss of the manifest function of the work, could motivate older employees to plan for paid work in retirement. Given that volunteer work does not generate income, it cannot compensate for anticipated (manifest) financial losses upon retirement, and therefore, no relationship is expected to exist between anticipated financial loss and plans for post-retirement volunteering. On the basis of these considerations, the following prediction is advanced:

Hypothesis 1: *Older workers who more strongly expect to miss the manifest function of work (i.e., income) after retiring will be more likely to make plans for post-retirement paid work.*

With regard to the latent functions of work, Jahoda (1997) specified five different possible benefits to individuals. Those benefits include: (a) a daily routine that structures one’s sense of time, (b) social contact with others, (c) a collective sense of purpose that leads one to feel useful, (d) the ability to remain active, and (e) a sense of work-related identity and/or status. Based on role theory, it can be hypothesized that workers who expect to miss these latent functions of work upon retirement will be increasingly likely to make plans for post-retirement employment (either paid or volunteer), inasmuch as both types of work provide opportunities for the continuation of role identities, routines, relationships, meaningful activity, and a sense of purpose (Moen & Fields, 2002). With respect to volunteering specifically, Cousineau and Misener (2019) point out that non-paid work for older adults is “a means of overcoming and making sense of the changes associated with retirement, particularly in their social connections, as well as the loss of purpose, identity, and meaningful time use associated with the exit from paid career work” (p. 69). On that basis, it is hypothesized that:

Hypothesis 2a: *Older workers who more strongly expect to miss the latent functions of work after retiring will be more likely to make plans for post-retirement paid work.*

Hypothesis 2b: *Older workers who more strongly expect to miss the latent functions of work after retiring will be more likely to make plans for post-retirement volunteer work.*

### Exploration

In the vocational literature stemming from the fields of industrial and occupational psychology, retirement is generally viewed in the context of an individual’s broader career goals and interests. Specifically, individuals are posited to progress through a sequence of stages that make up one’s total career cycle (Louis, 1980). In earlier models (e.g., Super, 1957) this progression was considered to be of a linear nature. That is, over the course of adulthood individuals were expected to experience four major career stages: exploration, establishment, maintenance, and the fourth and final stage—disengagement—during which time individuals prepare to transition out of the labor force and enter retirement. In contrast to Super’s (1957) model, Hall and Mirvis (1995) suggest in their work on protean careers that individuals go through a cyclic series of mini-stages of exploration, trial, mastery, and exit several times during the course of their career. That being the case, a new mini-stage cycle is likely to be triggered at the prospect of entering retirement (Kim & Hall, 2013). This so-called protean career process is assumed to be largely internally motivated, that is, by the individual rather than by the organization. According to Briscoe and Hall (2006), the two most important features of a protean career orientation are that one is self-directed and values driven. Self-direction is described as the degree to which an individual takes control of, and is in charge of, his or her own career (Mirvis & Hall, 1994). Being values driven, by comparison, means that the career

actor defines his or her own personal career values and subjective criteria for success (Briscoe & Hall, 2006).

Consistent with the protean career framework, in this study it is assumed that the notion of career self-direction will be a salient factor when leading up to the retirement transition, given that people can no longer rely on the organization to guide their post-retirement careers. This independence in career planning thereby makes self-direction essential. Accordingly, self-directed individuals can be expected to be relatively actively engaged in exploration and post-retirement activity planning. Thus far, no studies have appeared in the literature that have explored the impact of career self-directedness on planning for post-retirement paid work. Indirect support, however, comes from a study by De Vos and Segers (2013), which demonstrated that individuals who are more agentic in their career often intend to retire later. Taken together, these lines of thought led to the following hypothesis:

*Hypothesis 3: Highly career self-directed older workers will be more likely to make plans for post-retirement paid work.*

In light of the fact that self-directedness has not previously been theoretically or empirically linked to volunteering, and theoretical arguments can point in different directions, no formal a priori prediction was made regarding the relationship between those two constructs. On the one hand, it can be expected that individuals who carefully plan their career may be relatively likely to make life plans in general, which may also result in a higher likelihood to plan for post-retirement volunteering. On the other hand, given that self-directedness is conceptually linked to the paid work career and not volunteering, it may also be unrelated to plans for post-retirement volunteer work. Self-directedness will therefore be included in the volunteering model in order to: (a) gather preliminary empirical evidence on whether the two constructs are possibly related, and (b) maintain structural symmetry between predictor sets in the paid work and volunteering models.

On the basis of the protean career framework, it is assumed that individual values drive career decisions in such a way that older workers will adopt post-retirement career plans, such as paid or volunteer work, that are consistent with their personal value orientation (Wöhrmann et al., 2016). Within the protean career literature, there is a strong emphasis on core values of growth and freedom (Waters et al., 2014). Work and career transitions are considered to be an expression of the individual's search for personal development. This assumption is indirectly supported by research that has shown older adults who view aging as a period of personal growth are relatively likely to engage in post-retirement paid employment (Fasbender et al., 2014). On that basis, the following hypothesis is advanced:

*Hypothesis 4: Older workers who perceive personal growth to be more important in their life will be more likely to make plans for post-retirement paid work.*

In contrast to hypothesis 4, a relationship between plans for post-retirement volunteering and growth values is not expected to emerge. This is because previous research on volunteering has revealed that learning is rarely mentioned as a motive to contribute one's time (Dugied et al., 2013). Rather, it is expected that other-focused (i.e., altruistic) values will play a critically important role when it comes to the

likelihood of volunteering (Clary & Snyder, 1999). Indeed, individuals often volunteer because they feel it is important to help others and to contribute to society. Consistent with this notion, Fasbender et al. (2016) have shown that the generative meaning of work—conceptualized as sharing knowledge with future generations and contributing to society—is positively associated with post-retirement volunteering. Also, in a recent qualitative study on post-retirement volunteering, one of the main reasons individuals cite for volunteering is in order to “make a difference” (Cousineau & Misener, 2019, p. 71). That being the case, the following hypothesis is proposed:

*Hypothesis 5: Older workers who perceive it to be more important to make societal contributions will be more likely to make plans for post-retirement volunteer work.*

### The Role of Gender

Eagly's (1997) social role theory posits that gender differences in social behavior arise from the social division of labor. In western societies, men's greater participation in paid positions (of higher power and status) and the disproportionate assignment of nurturing roles to women, have created gender-typical work roles and stereotypes. The expectancies associated with gender roles act as normative pressures that foster plans and behaviors consistent with gender-typical roles. These gender-linked patterns are transmitted by society, and on that basis, become embedded in the individual's own plans and behaviors (Eagly, 2009).

In order to best understand the antecedents of older workers' plans for engagement in post-retirement work, it will be important to take the notion of gender-typical work roles into account (cf., Zhan et al., 2015). Post-retirement paid work, in particular, seems to be a typical male activity (see review by Sullivan & Al Ariss, 2019). This male connotation of engagement in post-retirement paid work may shape the gender role beliefs men and women develop during their pre-retirement years, which in turn, are reflected in their post-retirement plans and behaviors (Eagly & Wood, 2012). Even if women expect to miss the work role after retirement, and they are highly career self-directed and value personal growth, then they may still be relatively unlikely to make plans for engagement in post-retirement paid work. This is because the role of post-retirement paid worker may not fit well with their preconceptions of traditional gender roles. Furthermore, women may anticipate having limited access to post-retirement paid work opportunities (Loretto and Vickerstaff, 2013)—for instance, because of interrupted work histories—which is also likely to weaken the hypothesized relationships between motivational factors and plans for post-retirement paid work. As such, the following predictions are advanced:

*Hypothesis 6: Gender will moderate the association between the motivational factors (i.e., expecting to miss the manifest functions of work, expecting to miss the latent functions of work, career self-directedness, and personal growth values) and plans for post-retirement paid work in such a way that the relationships will be stronger for men as compared to women.*

With regard to volunteering, it is expected that gender will not moderate the hypothesized relationships between motivational factors and plans for post-retirement unpaid work. This proposition is advanced because

being engaged in volunteer work is a central activity for both men and women during retirement (Schmeets & Arends, 2018), and as such, does not have a typically male or female connotation. If older male and female workers expect to miss the latent functions of work after retirement, and hold dear the value of making societal contributions, they can therefore be expected to be equally likely to make plans for engagement in post-retirement volunteer work. Consequently, no specific gender moderation hypothesis is formulated for post-retirement volunteer plans.

## METHODS

### Participants and Data

This article is based on the first wave of the NIDI Pension Panel (Henkens et al., 2017). The Pension Panel is a prospective cohort study among older wage earners (60–65 years of age at baseline) who were members of three of the larger pension funds in the Netherlands (ABP, PfwZ, and bpfBOUW). These funds represent the following employment sectors: civil servants, education, health and home care, welfare, and construction. Taken together, these three pension funds represent approximately 48% of wage-employed workers in the Netherlands (De Nederlandsche Bank, 2015). Data for the first wave of the pension panel were collected during the period from May through November 2015. The study used a stratified data collection approach. In the first step, a sample was drawn from all organizations covered by the three pension funds. In the second step, within the selected organizations, a random sample was drawn from the population of older workers aged 60 years and over (i.e., birth cohorts 1950–1955) who were working at least 12 hours per week.

Selected older workers received a mailing from their pension fund at their home address. This mailing included a questionnaire, accompanied by a letter from a representative of the pension fund, and a cover letter from the investigators. Participants were offered the choice to use either the written questionnaire contained in the mailing, or to complete the questionnaire online. Of the 15,496 questionnaires that were mailed out, 6,800 questionnaires were returned (net response rate of 44%) (An analysis of response patterns revealed that members of older cohorts and women were more likely to participate in the investigation than others. There were also slight differences observed in participation rates across different employment sectors. However, no significant differences in response rates were identified for workers in small-, medium-, and large-sized organizations.). Older workers who received a shortened version of the questionnaire ( $n = 499$ ) were excluded from the sample, and workers who did not respond to any of the 10 items regarding their plans for retirement activities ( $n = 23$ ) were also eliminated, resulting in a final dataset containing 6,278 respondents. Item non-response was relatively low at 3%, and it never exceeded 8% for any single measure. Under these circumstances, less rigorous missing data procedures than, for instance, multiple imputation are generally acceptable (Little et al., 2014). Therefore, missing data was dealt with using single stochastic regression imputation (i.e., the “mi impute chained” command in Stata v. 15.0,  $m = 1$ ; Enders, 2010).

### Measures

#### Post-retirement work plans

To measure post-retirement work plans, participants were asked whether they had either vague or clear plans for post-retirement

volunteer work, and whether they had either vague or clear plans for post-retirement paid work. Participants' responses to these questions were used to create two dummy variables: (a) plans for post-retirement paid work, and (b) plans for post-retirement volunteer work (0 = no; 1 = yes). Some 76% of study participants reported having plans for post-retirement volunteer work, whereas 33% had plans for post-retirement paid work.

#### Functions of work

Following Jahoda (1997), a distinction was made between the manifest and latent functions of work. To evaluate the perceived importance of various functions of work, participants were asked to make independent ratings along six different work dimensions. Specifically, each individual was asked: “To what extent do you expect to miss each of the following aspects of your job when you retire?” Respondents provided ratings for: (a) money/income, (b) social contacts via work, (c) a clear daily schedule, (d) feeling productive, (e) social prestige, and (f) meaning something to others/society. Ratings were made using a 5-point Likert-type scale that indicated the degree to which individuals would miss each of the six functions (1 = very much; 5 = not at all). The items for each of the work functions were then reverse coded in such a way that higher values refer to greater expectations of loss. The answer to item (a) was used as a measure of missing the manifest work function. A composite mean score based on responses to items (b) through (f) was used as a measure of the extent to which participants anticipated missing the latent functions of work. Internal consistency reliability for the five-item latent work functions scale was found to be above threshold (Cronbach's  $\alpha = .87$ ).

#### Self-directedness

To assess the extent to which each individual manages his or her career in a proactive, self-directed manner, a single-item indicator was used. Using a 5-point Likert-type rating scale, participants were asked to indicate the extent to which they agreed with the following statement: “I always carefully planned my career” (1 = completely agree; 5 = completely disagree). Responses to this item were recoded in such a way that higher scores indicate stronger levels of career self-directedness.

#### Value: Personal growth

To assess the importance of personal growth in the participant's life, a 3-item scale was used based on the work of Steverink and Lindenberg (2006). Participants were asked to use a 5-point Likert-type scale to rate the importance of a series of values related to personal growth and self-development. A sample item included “Always learning new things.” (1 = very important; 5 = very unimportant). Scores for this measure were based on a mean score from the three items. The Cronbach's alpha value for the personal growth scale was .80. Scores for the scale were recoded in such a way that higher values indicate personal growth is particularly important to the individual.

#### Value: Societal contribution

To assess participants' perceived importance of making a contribution to society, a 3-item scale was used based on the work of Steverink and Lindenberg (2006). Participants used a 5-point Likert-type format to rate the importance of a series of values related to altruism and serving society. A sample item included the statement: “Helping to make the

world a better place." (1 = very important; 5 = very unimportant). Scores for this scale were based on a 3-item mean, with Cronbach's alpha found to be above threshold at .78. Scores were recoded in such a way that higher scores indicate this value is more important to the individual.

### Gender

Respondents' gender was used as a moderator variable in this study. Similar to year of birth, information on gender was drawn from the administrative records of the pension funds. For this study, gender was represented by a dummy variable (0 = male; 1 = female).

### Control variables

Previous research has shown that the retirement decision-making process is related to structural factors, such as socio-demographic characteristics and individual resources (for reviews see: Beehr & Bennett, 2015; Cahill, Giandrea, & Quinn, 2013; Griffin & Hesketh, 2008; Morrow-Howell, 2010; Sullivan & Al Ariss, 2019). Given that these structural factors may also be associated with the motivational antecedents that are central in this study, it is relevant to control for such structural factors in the analyses. By doing so, it is tested whether the motivational antecedents affect post-retirement work plans above and beyond a broad range of structural variables commonly studied in the interdisciplinary literature. More specifically, the following variables will be controlled for in the statistical models: partner's work status, education, health, wealth, pre-retirement occupation, employment sector, part-time work, and pre-retirement engagement in volunteering.

Partner's work status was represented by a categorical variable based on two separate questions: whether or not the older worker had a partner (0 = no partner), and if there was a partner, whether the partner was working or not (1 = partner not working; 2 = partner was working). Educational attainment was based on the 2011 version of the International Standard Classification of Education (ISCED), which ranges from 1 (primary education: ISCED 1) to 7 (university degree: ISCED 7 and 8). This variable was subsequently aggregated into three educational categories: low (levels 1–3), moderate (levels 4–5), and high (levels 6–7). Health status was assessed using a widely employed measure of self-rated health (Idler & Angel, 1990). Specifically, respondents were asked: "In general, would you say your health is..." (1 = excellent; 2 = very good; 3 = good; 4 = fair; or 5 = poor). This measure was recoded in such a way that higher values indicate better health. Wealth was a variable that indicates each participant's total accumulated household wealth (i.e., housing equity, assets, bank balances, and cash) in seven categorical levels that ranged from 1 (less than 5K euros) to 7 (more than 500K euros).

Given that previous studies have shown that pre-retirement occupation is significantly associated with post-retirement work intentions (Armstrong-Stassen & Staats, 2012), separate variables were included in this investigation to control for whether respondents had either a professional or managerial occupation. Having a higher professional position was coded as a dummy variable based on each respondent's occupational class. This is a nine-category questionnaire-based occupational classification developed by De Vries and Ganzeboom (2008), based on the Erikson and Goldthorpe (1992) social class scheme. This variable was coded as 1 for higher-level professionals, and 0 for all other categories. Managerial position, in contrast, was a dummy variable coded with a value of 1 if the worker stated he or she held a

supervisory position, and 0 if that was not the case. Employment sector indicates the type of industry or work sector in which the participant was employed. Five sectors were categorized on the basis of information reported from the pension funds: (a) civil servant, (b) education, (c) construction, (d) health and home care, and (e) social work.

In addition, there is evidence to suggest there exists a relationship between pre-retirement volunteering and post-retirement work engagement (Carr & Kail, 2013). To account for the fact that pre-retirement volunteers and part-time workers may experience more continuity in the retirement transition (Von Bonsdorff & Ilmarinen, 2013), part-time work and pre-retirement engagement in volunteering were controlled for as well. Part-time work was represented by a dummy variable based on the typical number of hours worked per week in the participant's main job. This variable was recoded in such a way that individuals who worked full-time (36 hours a week or more) were coded as 0, and individuals who worked 12–35 hours weekly were coded as 1. Pre-retirement volunteering was a dummy variable coded with a value of 1 if the worker had been involved in volunteer work, and 0 if that was not the case.

### Measurement model

To ensure that individual items for each of the multiple-item scales (latent work functions, personal growth value, and societal contribution value) loaded on their respective factors, a three-factor measurement model was computed. This confirmatory factor analysis revealed that each of the 11 indicators for these three scales loaded on their hypothesized latent constructs; moreover, no appreciable cross-loadings were observed. On the basis of recommendations by Steiger (2007), the overall goodness-of-fit for the measurement model was deemed to be reasonable ( $\chi^2 [44] = 2,237.88, p < .01$ ; CFI = .923; TLI = .904; RMSEA = .089, 90% confidence interval [CI] = .086–.092).

The hypothesized three-factor measurement model was then compared to two alternative models, one in which all items were specified to load on two latent factors, and another based on specification of a single latent factor. Observed fit indices for the two-factor model were as follows:  $\chi^2 [34] = 3,668.52, p < .01$ ; CFI = .873; TLI = .795; RMSEA = .130, 90% CI = .127–.134. Furthermore, goodness-of-fit indices for the single-factor model were:  $\chi^2 [45] = 16,438.54, p < .01$ ; CFI = .428; TLI = .301; RMSEA = .241, 90% CI = .238–.244. Two separate chi-square difference tests were then carried out to determine whether the hypothesized three-factor configuration was significantly superior to the one- and two-factor models. The three-factor model was, in fact, found to be a better fit to the data than the two-factor model,  $\chi^2_{\text{diff}} (10) = 1,430.64, p < .01$ . The hypothesized model was also shown to be superior to the single-factor model,  $\chi^2_{\text{diff}} (1) = 14,200.66, p < .01$ . Results of these two chi-square difference tests lead to the conclusion that the 11 items are best represented as three separate factors.

### Analytic Approach

In terms of an analysis plan, descriptive statistics were first computed, which was followed by a set of inferential analyses. Logistic regression analyses were used to examine the antecedents of post-retirement paid and volunteer work plans. To start, structural control variables were entered into the models (Model 0). In the next step, the motivational factors were added to the models. In order to explore the relative importance of the two motivational mechanisms, we examined various

sub-models at this step, in which we either first entered the adaptation variables (Model 1a), or the exploration variables (Model 1b). The model, including both the adaptation and exploration variables, is labeled Model 2. In the final step, interaction terms between gender and the motivational variables were added (Model 3). For all blocks entered into the regression models, chi-square difference tests were used to assess improvements in model fit across hierarchical levels. All analyses for this investigation (except for the measurement model) were carried out using Stata v. 15.0 (StataCorp, 2017). The measurement model was estimated using AMOS v. 23 (Arbuckle, 2014).

## RESULTS

### Descriptive Analyses

Pearson product-moment correlations, mean scores, and standard deviations for all study variables are shown in Table 1. The magnitude of correlations between predictor variables was found to be only moderate. Multi-collinearity was assessed by calculating the variance inflation factor (VIF) for each predictor. The largest VIF (1.54) was found for gender, thereby discounting the existence of multi-collinearity.

### Hypothesis Testing

Model fit statistics for the various logistic regression models are shown in Figure 1. Focusing on the top panel of Figure 1 (paid work), the change in BIC scores for both the 1A and 1B routes in the figure revealed roughly equivalent improvements to the model. In the bottom panel (volunteer work), however, the change in BIC scores for the two analytic routes revealed that the approach in which exploration was entered first (1B) had a greater impact on model fit than the model in which adaptation was entered first (1A). Also seen in the figure, chi-square difference tests revealed that the hypothesized model—including the motivational factors (Model 2)—resulted in a better fit than the basic model (Model 0), which included only structural control variables.

Results of the logistic regressions are reported in Table 2. This table presents odds ratios as well as average marginal effects for each of the different models estimated (When interpreting effects from the two logistic regression models, care was taken to avoid an exclusive reliance on *p*-values to determine predictor impact. Odds ratios and average marginal effects were also considered. For a discussion of concerns regarding an over-reliance on *p*-values, the interested reader is directed to a paper by Wasserstein and Lazar (2016).).

Hypotheses 1 and 2 explore the *adaptation mechanism* and posit associations between the functions of work and post-retirement work plans. Hypothesis 1 specified that respondents who anticipated missing the manifest function of work (i.e., income) upon retirement would be more likely to have plans for post-retirement paid work (H1). In line with this hypothesis, the results revealed that higher scores on the manifest function of work item increased the odds of plans for post-retirement paid work (odds ratio [OR] = 1.17, CI = 1.10–1.23, *p* < .001). Unexpectedly, the anticipated loss of manifest work functions was also related to post-retirement plans for volunteering. Higher scores on the manifest function of work measure decreased the odds of plans for volunteer work (OR = 0.91, CI = 0.86–0.97, *p* < .01).

Hypotheses 2a and 2b specified that respondents who expected to miss the latent functions of work upon retirement would be more likely to have plans for post-retirement paid and volunteer work. Findings also supported these hypotheses. Higher scores on the latent function of work measure increased the odds of plans for post-retirement paid work (OR = 1.57, CI = 1.46–1.68, *p* < .001) and volunteer work (OR = 1.14, CI = 1.06–1.24, *p* < .001).

Hypotheses 3 through 5 explored the *exploration mechanism* and posited associations between a protean career orientation and post-retirement work plans. Hypothesis 3 specified that higher levels self-directedness would be positively related to having plans for post-retirement paid work; however, the findings failed to support this prediction. Higher scores on the self-directedness dimension did not

**Table 1. Pearson Product Moment Correlations, Means, and Standard Deviations for all Study Variables (N = 6,278)**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Gender	—														
2. Education	.12**	—													
3. Health	.02	.09**	—												
4. Wealth	-.08**	.21**	.15**	—											
5. Higher Professional	-.05**	.33**	.05**	.13**	—										
6. Manager Position	-.24**	.09**	.04**	.11**	-.04**	—									
7. Part-time Worker	.53**	.09**	-.04**	-.00	-.02	-.26**	—								
8. Pre-ret Volunteer	-.05**	.14**	.06**	.09**	.01	.07**	.00	—							
9. Manifest	.12**	-.21**	-.19**	-.25**	-.11**	-.09**	.04**	-.09**	—						
10. Latent	.20**	.00	.01	-.01	.01	-.03*	.10**	.01	.20**	—					
11. Self-directedness	-.06**	-.10**	.01	.02	-.01	.04**	-.08**	-.02	.04*	.06**	—				
12. Personal Growth	.12**	.29**	.13**	.04**	.13**	.08**	.01	.10**	-.02	.15**	.09**	—			
13. Societal Contribution	.12**	.10**	.06**	.01	.02*	.02*	.07**	.26**	-.02	.22**	.08**	.42**	—		
14. Plans for Paid Work	-.09**	.13**	.06**	-.03*	.10**	.11**	-.09**	.04**	.06**	.18**	.03*	.21**	.10**	—	
15. Plans for Volunteer Work	.08**	.12**	.01	.03*	-.02	.00	.05**	.26**	-.05**	.09**	-.03**	.06**	.31**	.03*	—
<i>Mean</i>	0.45	4.62	3.20	4.09	0.08	0.25	0.52	0.34	3.00	2.50	2.80	3.47	3.44	0.33	0.77
<i>SD</i>	0.50	1.75	0.86	1.78	0.27	0.43	0.50	0.47	1.13	0.87	0.93	0.65	0.59	0.47	0.43

Note. \**p* < .05. \*\**p* < .01.

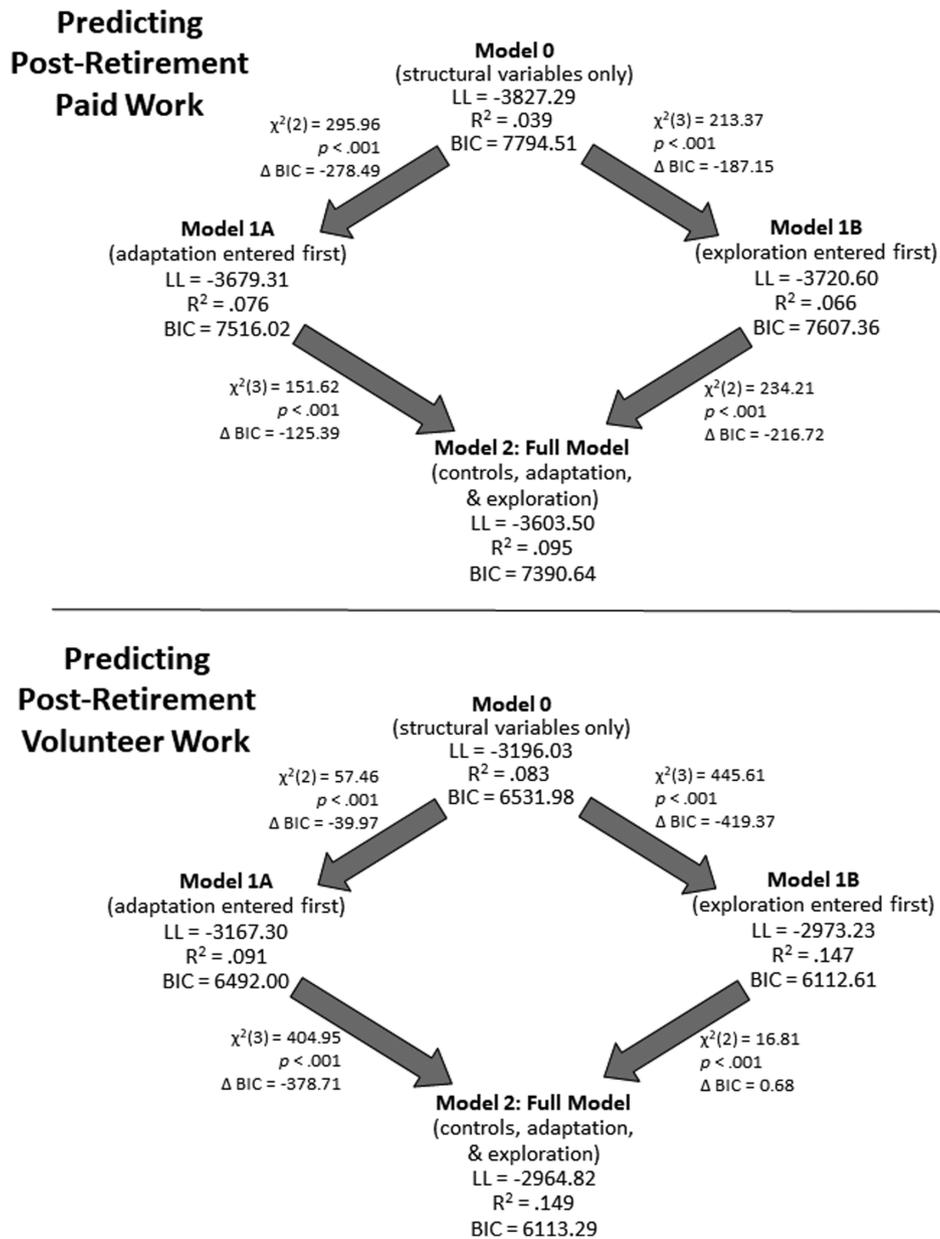


Figure 1. Fit statistics for models explaining post-retirement paid work (top panel), and post-retirement volunteer work (bottom panel).

increase the odds of plans for paid work (OR = 1.01, CI = 0.95–1.07, *ns*). Similarly, hypothesis 4 specified that personal growth values would be positively related to having plans for post-retirement paid work, which is a finding that was supported. Higher scores on the personal growth values scale increased the odds of plans for post-retirement paid work (OR = 1.79, CI = 1.61–1.99,  $p < .001$ ). For post-retirement plans for volunteering, no formal hypothesis had been advanced regarding self-directedness and personal growth values. Yet, the results revealed statistically significant effects for these two predictors. Higher scores on the self-directedness dimension (OR = 0.90, CI = 0.84–0.96,  $p < .01$ ) and higher scores on the personal growth dimension (OR = 0.64, CI = 0.57–0.72,  $p < .001$ ) were, in fact, associated with a decreased chance of plans for post-retirement volunteer work.

Hypothesis 5 specified that the perceived importance of making a contribution to society would be positively related to having plans for post-retirement volunteering, which is a prediction that was confirmed. Higher scores on social orientation substantially increased the odds of plans for post-retirement volunteer work (OR = 3.65, CI = 3.19–4.18,  $p < .001$ ). Inspection of the average marginal effects provides a better understanding of the effect sizes for the studied relationships. In particular, missing latent work functions and personal growth values were found to be strongly related to plans for post-retirement paid work, whereas the social orientation measure was found to be strongly related to plans for post-retirement volunteering.

In a final analytical step, additional regression models were estimated for post-retirement paid and volunteer work. These

**Table 2. Results of Logistic Regression Analyses Explaining Plans for Post-Retirement Paid and Volunteer Work (N = 6,278)**

	Paid Work		Volunteer Work	
	Odds Ratios (95% CI)	Average Marginal Effects (95% CI)	Odds Ratios (95% CI)	Average Marginal Effects (95% CI)
<b>Control variables</b>				
Gender (1 = female)	0.55 (0.47–0.64)***	–0.12 (–0.15–0.09)***	1.33 (1.12–1.59)***	0.04 (0.02–0.07)**
<b>Partner status</b>				
No partner (reference)	—	—	—	—
Non-working partner	0.77 (0.65–0.91)**	–0.05 (–0.08 to –0.02)**	0.76 (0.63–0.91)**	–0.04 (–0.07 to –0.01)**
Working partner	1.04 (0.88–1.23)	0.01 (–0.02–0.04)	0.95 (0.79–1.15)	–0.01 (–0.04–0.02)
<b>Educational level</b>				
Low (reference)	—	—	—	—
Moderate	1.37 (1.15–1.64)***	0.06 (0.03–0.09)***	1.37 (1.14–1.64)***	0.05 (0.02–0.08)***
High	1.75 (1.45–2.13)***	0.11 (0.07–0.14)***	1.61 (1.30–1.98)***	0.08 (0.04–0.11)***
Health	1.13 (1.06–1.21)***	0.02 (0.01–0.04)***	0.97 (0.90–1.05)	–0.00 (–0.02–0.01)
Wealth	0.91 (0.88–0.95)***	–0.02 (–0.02 to –0.01)***	1.01 (0.98–1.05)	0.00 (–0.00–0.01)
Higher professional (1 = yes)	1.67 (1.36–2.07)***	0.10 (0.06–0.14)***	0.72 (0.56–0.92)**	–0.05 (–0.09 to –0.01)**
Managerial position (1 = yes)	1.49 (1.30–1.70)***	0.08 (0.05–0.10)***	0.95 (0.81–1.11)	–0.01 (–0.03 to 0.02)
Part-time worker (1 = yes)	0.89 (0.77–1.02)	–0.02 (–0.05 to 0.00)	0.93 (0.79–1.09)	–0.01 (–0.04 to 0.01)
Pre-retirement volunteer (1 = yes)	1.02 (0.90–1.16)	0.00 (–0.02–0.03)	3.58 (3.03–4.26)***	0.20 (0.17–0.22)***
<b>Motivational factors</b>				
<b>Anticipated loss of functions of work</b>				
Manifest	1.17 (1.10–1.23)***	0.03 (0.02–0.04)***	0.91 (0.86–0.97)**	–0.01 (–0.02 to –0.00)**
Latent	1.57 (1.46–1.68)***	0.09 (0.08–0.10)***	1.14 (1.06–1.24)***	0.02 (0.01–0.03)***
<b>Protean career orientation</b>				
Self-directedness	1.01 (0.95–1.07)	0.00 (–0.01–0.01)	0.90 (0.84–0.96)**	–0.02 (–0.03 to –0.01)**
Personal growth	1.79 (1.61–1.99)***	0.11 (0.09–0.13)***	0.64 (0.57–0.72)***	–0.07 (–0.09 to –0.05)***
Societal contribution	1.03 (0.92–1.15)	0.01 (–0.02–0.03)	3.65 (3.19–4.18)***	0.20 (0.18–0.22)***
Constant	0.01 (0.01–0.02)***		0.14 (0.08–0.25)***	
Cox and Snell Pseudo R <sup>2</sup> :	.095		.149	

Note. All models control for employment sector.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

models included the interaction terms between the motivational variables and gender. The results of this analysis (Table 3) revealed that gender moderated the predictive association between expectations of missing the latent functions of work and post-retirement paid work plans (OR = 0.81, CI = 0.71–0.93;  $p < .01$ ). This interaction effect is plotted in Figure 2. Specifically, based on the logistic regression coefficients, functions were plotted separately for men and women regarding the predicted probability of plans for post-retirement paid work. These functions corresponded to the mean-centered values for the five levels of latent work functions. The interaction pattern demonstrates that the positive effect of missing the latent functions of work on post-retirement paid work plans was stronger for men than it was for women. In contrast, the moderating effect of gender was not significant for the association between the manifest function of work and post-retirement paid work plans, the relationship between personal growth values and post-retirement paid work plans, and the relationship between self-directedness and post-retirement paid work plans. Thus, hypothesis 6 received only partial support. In the model for volunteering, none of the interactions of gender and motivational factors were statistically significant.

## DISCUSSION

With the pending retirement of members of the large post-war cohorts, policy makers have focused increased attention on strategies that might encourage adults to stay active and lead healthy lives well into old age. Findings from this study—conducted among pre-retired older workers in the Netherlands—reveal that a considerable proportion of late-career workers are interested in post-retirement work (either paid or unpaid). The findings also highlight the fact that there exists a great deal of heterogeneity among individuals nearing retirement in terms of their ideas regarding work engagement following retirement. The aim of the present study was to gain a better understanding of the factors that drive older male and female workers to make plans to be engaged in paid and volunteer work after retirement. More specifically, this study was designed to improve our understanding of the extent to which adaptation and exploration mechanisms are of importance for explaining differences in plans for post-retirement work engagement among pre-retirees.

### Theoretical and Practical Implications

The theoretical implications of this study contribute to the extant literature in three ways. First, a novel integrative theoretical framework was employed that simultaneously focused on adaptation and

**Table 3. Results of Logistic Regression Analyses Explaining Plans for Post-Retirement Paid and Volunteer Work—Model 3 Interactions ( $N = 6,278$ )**

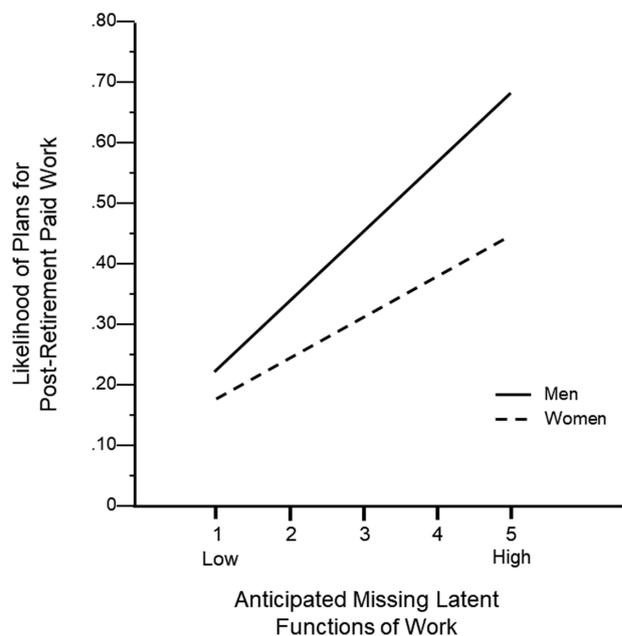
	Paid Work	Volunteer Work
	Odds Ratios (95% CI)	Odds Ratios (95% CI)
<b>Main effects</b>		
Gender (1 = female)	0.70 (0.27–1.84)	1.66 (0.60–4.61)
Anticipated loss of functions of work		
Manifest	1.18 (1.09–1.27)***	0.94 (0.86–1.02)
Latent	1.73 (1.57–1.90)***	1.11 (1.00–1.24)*
Protean career orientation		
Self-directedness	1.00 (0.92–1.09)	0.87 (0.80–0.96)**
Personal growth	1.87 (1.63–2.15)***	0.67 (0.58–0.78)***
Societal contribution	0.96 (0.83–1.10)	3.65 (3.08–4.33)***
<b>Interactions</b>		
Anticipated loss of functions of work		
Manifest by gender	0.98 (0.88–1.09)	0.95 (0.84–1.06)
Latent by gender	0.81 (0.71–0.93)**	1.07 (0.91–1.25)
Protean career orientation		
Self-directedness by gender	1.03 (0.91–1.16)	1.07 (0.93–1.23)
Personal growth by gender	0.90 (0.74–1.11)	0.89 (0.71–1.11)
Societal contribution by gender	1.20 (0.97–1.50)	1.00 (0.76–1.32)
Cox and Snell Pseudo $R^2$ :	.097	.149

Note. All models take into consideration all control variables.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

exploration as mechanisms that underlie plans for post-retirement work. Previous research has either focused on planning for work activities after retirement as a strategy for dealing with the loss of a work role (e.g., Fusbender et al., 2016; Schlosser et al., 2012), or as a career developmental stage in which individuals' personal intrinsic values serve as a source of direction (e.g., Wöhrmann et al., 2016). Thus far, however, these two mechanisms have only been examined in separate investigations.

By incorporating both adaptation and exploration mechanisms into a single methodological framework, it was possible to paint a more complete picture of the drivers of post-retirement work plans. In support of the *adaptation hypothesis*, it was found that having plans for post-retirement work (both paid and unpaid) was more prevalent when older workers anticipated a greater loss of latent (non-financial) work functions. Moreover, older workers who expressed concerns about losing the manifest (financial) work function were found to be more likely to plan for paid work, and less likely to plan for volunteer work. Taken together, these findings support the conclusions drawn by Fusbender et al. (2016), who found an association between the non-financial meaning of work and engagement in post-retirement paid work. In support of the *exploration hypothesis*, findings from this study suggest that general life values drive post-retirement work plans. Specifically, those who were more "ego centered" (i.e., who pursue a path dictated by personal growth values) were more likely to anticipate pursuing paid employment in retirement, whereas those who were more "other centered" (i.e., with a strong social orientation) were more likely to anticipate pursuing volunteer work. However, results failed to establish a relationship between elements of the protean career orientation and work plans. It had been assumed that self-directedness, which has previously been shown to be salient in career planning



**Figure 2. Moderating role of gender on the association between missing latent functions of work and post-retirement paid work.**

(Kyndt et al., 2014), also plays a role in planning for post-retirement work, which is an assumption that was not supported. Importantly, career self-directedness did not translate into greater plans for active engagement in post-retirement paid work.

The second theoretical contribution of this study involved examining plans for post-retirement work (both paid and unpaid) in relation to a common set of antecedents. Use of this combined approach revealed that the motivational antecedents of post-retirement work plans differ considerably depending on the nature of the work one plans to pursue. On the basis of the model fit statistics (Figure 1), and the magnitude of the average marginal effects (Table 2), it can be concluded that the adaptation mechanism is somewhat stronger than the exploration mechanism in explaining planning with respect to post-retirement paid work. With respect to volunteering, however, the exploration route (1B) was clearly superior to the adaptation route (1A). In sum, these findings suggest that while anticipated role loss has an impact on plans for post-retirement paid work, its impact on volunteering is much more limited. The exploration mechanism seemed powerful in both models, yet the two values investigated were found to affect older worker's plans in different ways.

The third theoretical contribution of this study involved creating a better understanding of the extent to which systematic gender differences exist in the factors that shape plans for post-retirement activities (cf., Zhan et al., 2015). In this study, evidence was found for the moderating role of gender in the relationship between motivational antecedents and post-retirement paid work plans. Specifically, men were shown to have a stronger tendency than women to deal with the anticipated loss of latent work functions by making plans for post-retirement paid work. Given the “breadwinner” role men have traditionally been expected to pursue, and the nurturing and social role ascribed to women (Eagly, 1997), continuing in paid employment after retirement represents a somewhat natural transition pathway for men. This may be less true for women. Indeed, women have traditionally been expected to provide more informal caregiving and domestic tasks relative to men, and retirement often entails an intensification of these caregiving and domestic commitments (Loretto and Vickerstaff, 2013), thereby limiting women's ability to engage in late-life paid work or volunteering. As a result of these different societal roles, women may benefit from a broader range of opportunities and activities that allow them to compensate for the loss of work functions. This may be particularly true in the Dutch context, where part-time work during all stages of the life course is highly common for women. Empirical support for this explanation, in part, comes from a study by Eismann, Verbeij, and Henkens (2019), who found that women were more likely than men to plan for both social and leisure activities after leaving the workforce.

From an applied organizational perspective, the relationships identified between motivational drivers and plans for post-retirement work could help to inform recruiting strategies designed to attract retirees to paid positions or volunteer work. More specifically, older workers who expect to strongly miss the manifest and/or latent functions of work could be identified as members of a group targeted for recruiting at a later point in time. During the recruiting stage, information regarding the older worker's life values and interests could help to better match particular individuals to specific jobs. Late career workers with a strong focus on personal growth values would conceivably be more likely to be interested in paid work, whereas those with a strong social orientation would conceivably be more interested in volunteering. Toward that end, it would be helpful if organizations could find ways to provide suitable pathways to continued employment (be it paid or unpaid) as a

way of helping older adults achieve their late-life, employment-related plans and goals. Increasing person-environment fit in this manner will likely have not only a positive effect on hiring practices, but also on retaining older adults in paid or unpaid positions.

Also from an applied perspective, the findings from this investigation suggest that planning (from a worker's point of view) may be a critical step when it comes to post-retirement work engagement. Plans are in effect behavioral intentions—they represent an indication of an individual's readiness to pursue a particular behavioral strategy. In practice, however, there is often a gap between individuals' plans and their actual behaviors. This failure to pursue a particular employment strategy may reflect a change in preferences, but it also may reflect restricted opportunities for post-retirement paid or volunteer work. Regarding the latter, Dingemans, Henkens, and Van Solinge (2016) have shown that actual engagement in post-retirement employment is strongly influenced by opportunities and restrictions in the social context in which the retirement process unfolds. Moen and Flood (2013) found similar results for volunteering, in the sense that voluntary engagement appeared less attainable for members of disadvantaged groups. Policy makers and those who counsel older workers should realize that even though individuals may be willing to take up post-retirement paid or volunteer work, they may not always be capable of doing so. Moen and Flood (2013) also found that the most effective recruiting method to fill volunteer positions is the “personal ask.” Older adults are less likely to be asked to volunteer compared to younger adults; however, those older adults who are asked have been found to be willing to volunteer at rates that are much higher than those who are not (Morrow-Howell, 2010).

### Limitations and Future Research Directions

The present study is not without limitations. One potential limitation involved the study's cross-sectional design. That is, predictor variables (motivational factors) and the outcome variable (post-retirement work plans) were measured concurrently, and consequently, it was not possible to draw unambiguous conclusions regarding causality. Future rounds of this panel study may offer researchers the opportunity to investigate the dynamic aspects of planning for post-retirement work engagement, including actual engagement in post-retirement paid and volunteer work. By examining the data longitudinally, it may be possible to disentangle the impact of structural and motivational factors on actual post-retirement work engagement, thereby resolving this potential endogeneity issue.

Second, this study was limited by the nature of the questions and measurement instruments included in the survey. The outcome variable—plans for post-retirement work—was assessed on the basis of two dichotomous variables. However, as suggested by previous investigators (e.g., Wang et al., 2008), post-retirement paid work can take many forms: in the same or a different career field, with the same or a different employer, or in self-employment. Volunteer work can take many forms as well (Morrow-Howell, 2010). This study did not allow for the detailed investigation of these various employment options. That being the case, additional research is warranted that examines the differential effects of motivational factors on plans for different types of post-retirement paid and unpaid work. Future studies might profitably use more finely-tuned measures of the protean career orientation than those used in this investigation. The lack of support for the salience of

the role of self-directedness in explaining post-retirement work plans may have to do with the fact that the self-directedness measure used in this investigation lacked sufficient sensitivity. Another possible explanation for the lack of an observed relationship between these variables could have stemmed from the fact that the outcomes of career planning and career self-directedness may be rather heterogeneous. Whereas some older workers may feel that “they have done their time” and have “earned” their retirement, others may want to continue working because they either expect to miss the latent or manifest functions of work, or because they are driven by personal growth aspirations. Testing the validity of these assumed relationships will require further investigation. The use of a large random sample of wage-employed older workers is an important strength of this study. That said, however, a third possible limitation follows from our research design. The sample was drawn from the administrative records of the three largest and arguably most stable pension funds in the Netherlands. As a consequence, older workers with stable careers are overrepresented, and pension inadequacy among respondents could be expected to be relatively low.

Further, this study was bounded by its geographical location and specific national institutional setting. As a result, it is unclear to what extent the existing mandatory retirement rules in the Netherlands had an impact on the findings, particularly with regard to the relative importance of the various drivers. One interesting direction for future research would be to replicate the study in a national setting without mandatory retirement rules. It could be expected that in such contexts, late-career workers would have more agency when it comes to extending their work life. As a result, the adaptation mechanism (i.e., adjustment to loss of the work role) in such national settings may be less important in explaining plans for post-retirement work, whereas the exploration mechanism may take on even greater significance.

### CONCLUSION

Without question, many older adults plan to work after their departure from regular career employment. However, findings from this study suggest that the type of post-retirement work that individuals plan for will depend on not only the employment opportunities that exist for older workers, but also on their own personal values and motives. Those with a strong need to supplement their late-life income stream(s) can be expected to plan for paid employment. Those whose motivational antecedents are designed to recover the non-financial lost functions of work would be likely to engage in any type of post-retirement work. Their general values appear to guide the type of work they gravitate toward. As the retirement landscape in the 21st century continues to evolve and take shape, insights regarding the motivational antecedents of post-retirement work plans should have implications not only for policy discussions regarding active and healthy aging, but they should also help inspire the creation of employment pathways designed to ensure older workers can find financial security and personal fulfillment, as needed.

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