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DECISIONS

The Meaning of Work for Post-Retirement Employment Decisions

Ulrike Fasbender¹, Mo Wang², Jan-Bennet Voltmer¹ and Jürgen Deller¹

¹Leuphana University of Lüneburg, Germany

²University of Florida, Gainesville, Florida, USA

Please cite as: Fasbender, U., Wang, M., Voltmer, J.-B., & Deller, J. (2016). The meaning of work for post-retirement employment decisions. *Work, Aging and Retirement*. 2, 12-23.

doi:10.1093/workar/wav015

Authors' Note

Ulrike Fasbender, Leuphana University of Lüneburg, Institute of Strategic Human Resource Management; Mo Wang, Department of Management, Warrington College of Business Administration, University of Florida; Jan-Bennet Voltmer, Leuphana University of Lüneburg, Institute of Strategic Human Resource Management; Jürgen Deller, Leuphana University of Lüneburg, Institute of Strategic Human Resource Management.

The data used in this study are provided by the Federal Institute for Population Research in Wiesbaden, Germany.

Correspondence concerning this article should be addressed to Ulrike Fasbender, Leuphana University of Lüneburg, Institute of Strategic Human Resource Management, Wilschenbrucher Weg 84, 21335 Lüneburg, Germany. Phone: +49 176 96602125, E-mail: fasbender@leuphana.de

Abstract

Post-retirement employment has become an increasingly important form of labor force participation for both retirees and employers in the last decade. In order to understand post-retirement employment decision-making, the current study investigates the meaning of work and its relationship to post-retirement employment. Based on previous research, we examined four dimensions of the meaning of work (i.e., social, personal, financial, and generative meaning of work) relevant to predicting post-retirement employment. Population-representative data from the German Transitions and Old age Potential study ($N = 2,149$) were used to test the hypotheses. The results from binary logistic regression analysis indicated that the social and personal meanings of work were positively related to the likelihood to engage in post-retirement employment. Further, subjective economic status was found to moderate the relationship between the financial meaning of work and post-retirement employment. Exploratory analysis was conducted for post-retirement civil engagement and post-retirement family care in order to understand the broader role of the generative meaning of work. The findings of the present study extend previous research on late career decisions. The implications of these findings are discussed in terms of theoretical development and individual and organizational practices.

Keywords: bridge employment, identity theory, late career decisions, meaning of work, post-retirement employment, retirement, volunteering activities

The Meaning of Work for Post-Retirement Employment Decisions

Because the global population is aging, post-retirement employment has become an increasingly important form of labor force participation in the last decade. In addition to high costs for public pension funds, labor shortages are likely to occur as a result of the aging demographic transition processes (Deller & Pundt, 2014; Organization for Economic Cooperation and Development [OECD], 2006). Although the current legislation in Germany did not support post-retirement employment for many years (Deller & Pundt, 2014), an increasing number of people continue with some type of work activity after they have officially retired from their primary employment, as evidenced by the labor force participation trend for people older than 65 years of age from 1970 to 2013 in Germany (OECD, 2015). This growing trend of post-retirement employment is also visible in other industrialized countries, such as Austria, Finland, Japan, the UK and the USA (Cahill, Giandrea, & Quinn, 2013; Eurofound, 2012; Van Katwyk, 2012).

In the labor market, retirees comprise a hidden reserve that is often ignored in times of poor economic conditions (i.e., low labor demand). However, in times of good economic conditions (i.e., high labor demand), the lack of qualified workers can hinder economic growth (International Labour Office [ILO], 2010). One solution for addressing this challenge is to remove labor market barriers for older people (OECD, 2006). Furthermore, older people who continue to work after retirement have been found to be happier and healthier than their non-working counterparts (Kim & Feldman, 2000; Zhan, Wang, Liu, & Shultz, 2009). Therefore, empirical investigations regarding the decision-making of post-retirement employment among retirees are important for society in general, as well as for employers and retirees.

In the current study, we conceptualize post-retirement employment as a late career development stage (Froidevaux & Hirschi, in press; Kim & Hall, 2013; Wang & Shi, 2014),

which includes part-time jobs and self-employment (Beehr & Bennett, 2015; Shultz, 2003). As noted by numerous researchers (Catwright & Holmes, 2006; Chalofsky, 2003), work is more than securing economic support; work is a key element in life that involves important psychological and social aspects that extend beyond basic needs. Therefore, searching for the meaning of work may constitute an important motivation for older adults to continue participating in the workforce after their retirement (Atchley, 1989). Although research has already revealed different antecedents of post-retirement employment (e.g., demographic characteristics, job-related psychological variables, family-related variables, and retirement planning activities; Wang, Zhan, Liu, & Shultz, 2008), little is known regarding the role that the meaning of work plays in shaping post-retirement employment decision-making.

To address this gap, we investigate the predictive effect of the meaning of work on post-retirement employment decisions using population-representative data from the German Transitions and Old age Potential (TOP) study. We make two contributions to the literature. First, although many studies concentrated on the meaning of work for careers among younger and middle-aged persons (Beukes & Botha, 2013; Stebleton, 2012; Zhou, Leung, & Li, 2012), the current study explores the role of the meaning of work for post-retirement employment decisions. This focus is particularly relevant considering the current population aging trend. Specifically, based on previous research, we differentiate four types of the meaning of work (i.e., social, personal, financial, and generative meaning of work) for predicting post-retirement employment. Second, we investigate post-retirement employment as actual behavior. Several empirical studies have examined older workers' intentions to work during retirement (Jones & McIntosh, 2010; Lim & Feldman, 2003; Mariappanadar, 2013). However, these studies were limited by investigating only intentions or career plans. As such, the current study offers a more specific understanding regarding how the meaning of work may influence the actual post-retirement employment decision.

Theoretical Background

Meaning of Work

For many decades, researchers have been investigating the meaning of work (Rosso, Dekas, & Wrzesniewski, 2010). Research from more than 50 years indicated that approximately 95 % of employees across different cultures and occupations would continue working even without a financial need (Baltes, Rudolph, & Bal, 2012). Studying the meaning of work represents its importance regarding the anthropological and sociological concern for work in society (Chalofsky, 2003). Following the research of Rosso et al. (2010), we define the meaning of work from the perspective of individual beliefs. Specifically, we view the meaning of work as a multi-faceted construct that describes the deeply rooted understanding of the benefits and the consequences of work. This construct is shaped by one's motives and values (Mor-Barak, 1995; Ros, Schwartz, & Surkiss, 1999), reflecting the extent to which people believe that work corresponds to certain outcomes that are critical for the fulfillment of their needs and values.

From an identity perspective, Pratt and Ashforth (2003) illustrated the importance of the meaning of work for the overall sense-making process of finding the purpose of one's existence. These authors focused primarily on a person's role, such as "What am I doing?," and membership, such as "Where do I belong?," to understand the meaning of work for the individual self-concept (Pratt & Ashforth, 2003, pp. 312-313). To actualize their desired identity, people make vocational decisions according to their perceived meaning of work.

In the literature on work motivation, several theories have been developed, such as Herzberg's (1966) motivator-hygiene theory, or Deci's and Ryan's (1985) distinction of extrinsic and intrinsic motivation. In addition to motivational theories, developmental approaches have been considered to be particularly important to understand work motivation of older adults. In their organizing framework of goals and motivation in later adulthood, Kanfer, Beier and Ackerman (2013) distinguished three fundamental motivational processes: motivation to work, motivation at work, and motivation to retire. Within this organizing

framework, the meaning of work can be classified as motivation to work. Following this classification, the concept of meaning of work has to be differentiated from the concept of meaningful work. While meaningful work addresses the meaning that is attached to the current job, the meaning of work refers to the meaning inherent to work per se (Froidevaux & Hirschi, in press).

Empirical research by Mor-Barak (1995) has revealed the meaning of work to be relevant for vocational decision-making. In developing the concept of meaning of work, Mor-Barak (1995) combined Alderfer's human needs theory (1969) and Erikson's developmental theory (1964) to create four factors of work meaning (i.e., social, personal, financial, and generative meaning of work). The social, personal, and financial meanings of work are based on the reference, growth, and existential needs within Alderfer's human needs theory (Mor-Barak, 1995). The social meaning of work reflects the need for social contact with others. The personal meaning of work reflects the need for growth and further development. And the financial meaning of work reflects the existential need to survive. However, as people become older, they develop the need of sharing their experiences and knowledge to the next generation (Erikson, 1969), which refers to the generative meaning of work. To tie in with and to extend the existing research from Mor-Barak (1995), the present study investigates the meaning of work for post-retirement employment decisions.

Meaning of Work and Post-Retirement Employment

Based on identity theory (Stryker & Serpe, 1982), we propose that the meaning of work is of high relevance for post-retirement employment decisions. Identity can be described as a social interaction between self and society (Stets & Burke, 2003). People take particular roles (e.g., work role) that influence behavior and decision-making according to their identity (Ashforth, 2001). Making sense of work helps determine one's identity and explain one's purpose of existence (Pratt & Ashforth, 2003). Specifically, in a vocational context, the meaning of work reflects the content of work role identity. As proposed by Feldman (1994),

the more a person's self-identity is tied to his or her work role, the more likely a person seeks employment in retirement. As such, the meaning of work operates as a guiding principle for vocational decision-making and behavior with regard to personal needs and values (Dendinger, Adams, & Jacobson, 2005; Mor-Barak, 1995; Ros et al., 1999; Rosso et al., 2010). In the following, we describe our hypotheses regarding the predictive effects of work meaning.

Social meaning of work. The social meaning of work captures acceptance and appreciation and having contact with others as well as fulfilling their expectations, describing a sense of belonging to a certain group (e.g., colleagues, family and friends, and organization). This sense of belonging is central to one's identity and one's perceived role in society (Pratt & Ashforth, 2003). If work is perceived as fulfilling the need for reference, it is likely that people will decide to continue working. When people grow older, they usually experience more loneliness by losing their social resources and by disengaging from social activities (Carstensen, 1992; Pinquart & Sörensen, 2001). Specifically, work provides an important opportunity for social engagement (Forbes, Spence, Wuthrich, & Rapee, 2015). Recently, research from Fasbender, Deller, Wang, and Wiernik (2014) found that people who experience their own aging process as social loss are more likely to engage in post-retirement employment. Consistent with this concept, maintaining social contact seems to be highly relevant for late career decision-making. Furthermore, the results from a qualitative study by Deller, Liedke, and Maxin (2009) indicated that appreciation and valuation seem to be important reasons for retirees to continue working. We therefore hypothesize that the social meaning of work will be positively related to post-retirement employment.

Hypothesis 1: The social meaning of work is positively related to post-retirement employment.

Personal meaning of work. The personal meaning of work captures having meaningful tasks and finding personal satisfaction in work (Mor-Barak, 1995). Specifically,

perceiving work tasks as significant and satisfying enables more productive employment (Steger, Littman-Ovadia, Miller, Menger, & Rothmann, 2013). Because meaningful and satisfying tasks foster intrinsic motivation, people are highly motivated to engage in creative and productive behavior in their surroundings (Gagné & Deci, 2005; Mor-Barak, 1995). Consequently, the personal meaningful of work strengthens work role identity and supports positive vocational outcomes. Therefore, we hypothesize that the personal meaning of work will be positively related to post-retirement employment.

Hypothesis 2: The personal meaning of work is positively related to post-retirement employment.

Financial meaning of work. The financial meaning of work refers to the existential needs to survive, in particular to earn money and to ensure material security (Mor-Barak, 1995). Additional income on top of the monthly received pension can serve as an external motivator for people to work after retirement. We therefore hypothesize that the financial meaning of work will be positively related to post-retirement employment. Further, we suggest that subjective economic status will influence this relationship. For retirees with a high economic status, the financial meaning of work may be less relevant in motivating them to work after retirement. However, for retirees with a low economic status, the financial meaning of work is likely to be highly relevant for their decision to work after retirement. Therefore, we hypothesize that the subjective economic status moderates the relationship between the financial meaning of work and post-retirement employment.

Hypothesis 3a: The financial meaning of work is positively related to post-retirement employment.

Hypothesis 3b: Subjective economic status moderates the relationship between the financial meaning of work and post-retirement employment in a way that the relationship is stronger for retirees with low subjective economic status.

Generative meaning of work. The generative meaning of work refers to teaching younger people at work, passing knowledge to the future generations, and making a contribution to society as a whole (Mor-Barak, 1995). Generativity seems to capture a high level integral meaning of work reflecting the perceived purpose of one's existence through work (Pratt & Ashforth, 2003). Previous qualitative research has suggested that taking responsibility above and beyond one's personal sphere is an important reason to continue working during retirement (Deller et al., 2009). A recent meta-analysis on age and work-related motives revealed an increasing importance of helping people or contributing to society for people with increasing age (Kooij, De Lange, Jansen, Kanfer, & Dikkers, 2011). From a development perspective, work can be viewed as a means of transmitting knowledge and experiences to the next generation (Mor-Barak, 1995). Interestingly, Mor-Barak's (1995) research findings did not support the predictive effect of the generative meaning of work. However, other research empirically supports the importance of the generative meaning of work. For example, research from Dendinger et al. (2005) supported the overall generative meaning of work as positively related to job satisfaction of working retirees. We therefore hypothesize that the generative meaning of work will be positively related to post-retirement employment.

Hypothesis 4: The generative meaning of work is positively related to post-retirement employment.

Meaning of Work and Post-Retirement Volunteering

Although there is a rising interest in understanding the antecedents and consequences of post-retirement employment, there are other non-work-related activities that are likely to be crucial for retirees need fulfilment and adjustment to retirement (Hesketh, Griffin, Dawis, & Bayl-Smith, 2015), such as post-retirement volunteering. Volunteering refers to unpaid work activities that are intended to benefit other people rather than providing financial gain (Wöhrmann, Fasbender, & Deller, in press; Zhan, Wang, & Shi, 2015). Post-retirement

volunteering includes civil engagement such as volunteering for a civic organization or taking care of people outside one's own family (Cihlar, Lippke, & Dorbritz, 2015). In this form of post-retirement volunteering, external people as non-family members benefit from retirees' engagement. Also, post-retirement volunteering includes direct family care, such as supervision of children and taking care of diseased or disabled people from the own family (Cihlar et al., 2015). Both forms of post-retirement volunteering reflect the importance of personal productivity as well as societal responsibility. It would be intriguing to understand whether the meaning of work for post-retirement employment is also related to retirees' post-retirement volunteering decisions. Because there is a lack of current research examining this relationship, the present study takes an exploratory approach to investigate the effects of meaning of work on post-retirement civil engagement and post-retirement family care. In particular, we pose the following research question:

Research Question 1: Does the perceived meaning of work relate to post-retirement volunteering?

The findings from addressing this research question may also help comparing and understanding the results related to post-retirement employment with regard to different dimensions of work meaning.

Method

Participants and Procedure

For our analysis, we used the data from the TOP study, a population-representative survey of adults aged 55 years to 70 years in Germany (Sackreuther, Schröder, & Cihlar, 2015). The TOP study investigates the transition from work to retirement in Germany. We analyzed the data from 2013 (i.e., the first and only available wave). Computer-assisted telephone interviews were conducted by trained interviewers using a standardized questionnaire. The sample was generated using the Gabler-Häder-Design, a method that equally combines listed and non-listed telephone numbers for random sampling (Sackreuther

et al., 2015). In total, 5,002 participants completed the interview. Given the research question, we used only the data from participants who were officially in retirement (i.e., individuals who were receiving an old-age pension at the time of the interview; Shultz & Wang, 2011). Therefore, the final sample size included 2,149 pensioners aged 60 to 70 years.

On average, participants were 66.4 years old ($SD = 2.51$) and 54.4 % were female ($n = 1,168$). For region (East vs. West Germany), 81.7 % lived in West Germany ($n = 1,755$). Regarding education, 3.1 % of the participants had only a primary or middle school education without additional vocational training ($n = 65$), 52.6 % of the participants had a medium level of education, including secondary school or vocational training ($n = 1,087$), and 44.3 % of the participants had a high level of education, including advanced vocational training or a university degree ($n = 916$). With regard to the participants' family situation, 74.7 % had a partner, and the participants had 1.76 children ($SD = 1.12$) on average. *T*-tests and chi-square tests showed that these sample characteristics are similar to other German representative samples of pensioners (i.e., the German Aging Survey; Engstler & Motel-Klingebiel, 2010). Further, in this particular age group, the TOP study contains nearly twice the number of pensioner participants as the German Aging Survey (Engstler & Motel-Klingebiel, 2010), supporting the population-representative nature of the data.

Measures

Post-retirement employment. Post-retirement employment was assessed using a single choice question: "Are you working at the moment? (Please think about any type of paid work. By employment, we mean any type of paid work, not depending on either time duration, income level or employment relationship)." The responses to this question were dichotomous (i.e., 0 = *no post-retirement employment*; 1 = *post-retirement employment*). Of the 2,149 participants, 513 (23.9 %) reported that they engaged in post-retirement employment including customer service and administrative jobs as well as technical and medical functions.

Post-retirement civil engagement. Post-retirement civil engagement was assessed using four items (Cihlar et al., 2015). The statements were introduced with the following sentence: “During the last three months, have you participated in any....” The items were presented as following: “voluntary activities, such as participation in an organization, initiative, or in a group,” “supervision of children outside your family,” “care of people outside your family,” and “any kind of help to friends, acquaintances or neighbors”. The responses to these questions were dichotomous (i.e., 0 = *no* and 1 = *yes*). We recoded the participants’ responses across the four items so that for participants who answered 1 to at least one of the four items, the post-retirement civil engagement score is coded as 1 (i.e., participated in at least one kind of post-retirement civil engagement during the last three months); for participants who answered 0 to all of the four items, they received a score of 0 (i.e., did not participate in any kinds of post-retirement civil engagement during the last three months). Of the 2,149 participants, 1,558 participants (72.5 %) reported that they engaged in at least one kind of post-retirement civil engagement during the last three months.

Post-retirement family care. Post-retirement family care was assessed using two items (Cihlar et al., 2015). Following the same introduction as for civil engagement, the items were presented as follows: “supervision of children from your family (children, grandchildren, or great-grandchildren),” and “care of diseased or disabled adults of your family”. The responses to these questions were dichotomous (i.e., 0 = *no* and 1 = *post-retirement family care*). We recoded the participants’ responses across the two items so that for participants who answered 1 to at least one of the two items, the post-retirement family care score is coded as 1 (i.e., participated in at least one kind of post-retirement family care during the last three months); for participants who answered 0 to both items, they received a score of 0 (i.e., did not participate in any kinds of post-retirement family care during the last three months). Of the 2,149 participants, 883 (41.1 %) reported that they engaged in at least one kind of post-retirement family care during the last three months.

Meaning of work. Meaning of work was assessed using ten items on a 4-point scale (1 = *strongly agree* to 4 = *strongly disagree*). In the present study, we recoded all items so that the higher values on the scale indicate a stronger endorsement of work meaning. The items were constructed especially for this survey based on the empirical research by Mor-Barak (1995) and the qualitative research by Deller et al. (2009). The statements were introduced with the following sentence: "For me personally, work means" The items were presented as follows: "having contact with others," "being accepted and appreciated," and "fulfilling expectations of others," for the social meaning of work ($\alpha = .50$), "having a meaningful task," and "finding personal satisfaction," for personal meaning of work ($r = .58$), "earning money," for the financial meaning of work, and finally, "teaching younger workers," "passing the knowledge to the next generation," "sharing ability with younger," and "contributing to society" for the generative meaning of work ($\alpha = .75$). Although scale reliabilities were partly unsatisfactory (likely due to the small number of items that were used of each scale; Cortina, 1993), confirmatory factor analysis supported the three factor structure for the social, personal, and generative meaning of work ($\chi^2 (24) = 158.91, p < .001; CFI = .95; RMSEA = .05; SRMR = .04$) compared to the one-factor solution ($\chi^2 (36) = 2728.73, p < .001; CFI = .89; RMSEA = .07; SRMR = .05$). Because the financial meaning of work was measured with one item only, it could not be included in the confirmatory factor analysis. Scale means were calculated and used for the following analyses.

Subjective economic status. The participants evaluated their economic status using a 4-point scale (1 = *very good* to 4 = *very bad*). The values were reversely coded so that the higher values on the scale indicated better economic status.

Control variables. We controlled for age, gender, region (East vs. West Germany), and education to achieve representativeness for the German population suggested by Sackreuther et al. (2015). Furthermore, partner status (0 = *no*, 1 = *yes*), number of children, pre-retirement employment status (0 = *previously not employed* to 1 = *previously employed*),

years in retirement, and self-reported health were used as control variables in the current study because previous research has shown that these variables are relevant predictors of post-retirement employment (Fasbender et al., 2014; Griffin & Hesketh, 2008; Wang et al., 2008). Specifically, the participants evaluated their health status using a 4-point scale (1 = *very good* to 4 = *very bad*). The values were reversely coded so that the higher values on the scale indicated greater health.

Results

Preliminary Analysis

The means, standard deviations, and correlations of all of the study variables are presented in Table 1. Among the control variables, post-retirement employment was significantly and positively correlated with being male ($r = .15, p < .01$), living in former West Germany ($r = .04, p < .05$), higher levels of education ($r = .09, p < .01$), number of children ($r = .13, p < .01$), better subjective health ($r = .12, p < .01$), the status of being previously employed ($r = .10, p < .01$), and post-retirement civil engagement ($r = .06, p < .01$). Post-retirement employment was significantly and negatively correlated with years in retirement ($r = -.12, p < .01$). Relevant to the meaning of work, post-retirement employment was significantly and positively correlated with the personal meaning of work ($r = .04, p < .05$).

Hypothesis Testing

We applied a binary logistic regression analysis to estimate the relationships between the meaning of work and post-retirement employment using Mplus 7.0 (Muthén & Muthén, 2012). Because the dependent variable is dichotomous, the independent variables either increase or decrease the likelihood of an individual engaging in post-retirement employment. We conducted the analysis in three steps. First, we estimated the effects for the control variables on the dependent variable (Model 1). Second, the effects for the meaning of work variables were estimated in addition to the control variables (Model 2). Third, the interaction

term between the financial meaning of work and the subjective economic status was added to the model (Model 3). The effect sizes and the model comparison results are presented in Table 2.

Overall, the hypothesized model (Model 3) showed a significantly better fit than Model 1 ($\Delta -2 \log \text{likelihood} = 44.85, p < .01, \Delta df = 5$) and Model 2 ($\Delta -2 \log \text{likelihood} = 5.97, p < .05, \Delta df = 1$). Furthermore, the overall pseudo R^2 was .15 for predicting post-retirement employment. Thus, we conclude that it is relevant to use the meaning of work to explain post-retirement employment behavior.

Regarding the control variables, gender ($B = 0.52, p < .01, OR = 1.67$), number of children ($B = 0.21, p < .01, OR = 1.23$), subjective health ($B = 0.51, p < .001, OR = 1.67$), and the status of being previously employed ($B = 0.31, p < .05, OR = 1.36$) were positively related to post-retirement employment. The subjective economic status ($B = -0.22, p < .01, OR = 0.80$) and years in retirement ($B = -0.12, p < .01, OR = 0.88$) were negatively related to post-retirement employment. No significant effects were found for age, region, education, or partner status as control variables.

Hypotheses 1 to 4 addressed the relationship between the meaning of work and post-retirement employment. The regression coefficients suggested that the social meaning of work was positively related to post-retirement employment ($B = 0.25, p < .05, OR = 1.29$). This result supports Hypothesis 1 and indicates that retirees who endorsed higher levels of social meaning of work were more likely to engage in post-retirement employment. Further, the personal meaning of work was positively related to post-retirement employment ($B = 0.42, p < .01, OR = 1.52$), supporting Hypothesis 2. This indicates that retirees who endorsed higher levels of personal meaning of work were more likely to engage in post-retirement employment. The regression coefficient suggested that the financial meaning of work ($B = -0.02, p > .05, OR = 0.98$) did not significantly predict the likelihood of engaging in post-retirement employment, not supporting Hypothesis 3a. However, results also showed that the

subjective economic status moderated the relationship between financial meaning of work and post-retirement employment ($B = -0.25, p < .01, OR = 0.78$). As shown in Figure 1, we plotted the interaction values of one standard deviation above and below the subjective economic status. The interaction pattern showed that retirees who reported high financial meaning of work were more likely to engage in post-retirement employment when they also reported a low subjective economic status versus a high subjective economic status, supporting Hypothesis 3b. Finally, although we predicted a positive effect for the generative meaning of work, it was negatively related to post-retirement employment ($B = -0.37, p < .01, OR = 0.78$). Therefore, Hypothesis 4 was not supported.

Exploratory Analysis

We conducted an exploratory analysis to investigate whether the perceived meaning of work relates to post-retirement volunteering referring to Research Question 1. According to Table 1, among the four dimensions of meaning of work, post-retirement civil engagement was positively correlated with personal ($r = .07, p < .01$), social ($r = .10, p < .01$), and generative meaning of work ($r = .15, p < .01$). Post-retirement family care was positively correlated with personal ($r = .07, p < .01$), and generative meaning of work ($r = .10, p < .01$). Results of binary regression analyses were presented in Table 3 for post-retirement civil engagement and in Table 4 for post-retirement family care. Results regarding the control variables suggested that retirees living in former West Germany ($B = 0.43, p < .01, OR = 1.53$), having higher education ($B = 0.21, p < .01, OR = 1.24$), and reporting better health ($B = 0.27, p < .01, OR = 1.31$) were more likely to participate in post-retirement civil engagement. With regard to the meaning of work, the financial meaning of work was negatively related to the post-retirement civil engagement ($B = -0.16, p < .05, OR = 0.85$), whereas the generative meaning of work was positively related to the post-retirement civil engagement ($B = 0.46, p < .01, OR = 1.59$).

For post-retirement family care, male retirees were less likely to engage compared to female retirees ($B = -0.39, p < .01, OR = 0.68$), while the number of children increased the likelihood of engaging in post-retirement family care ($B = 0.46, p < .01, OR = 1.59$). Among the four meaning of work dimensions, the generative meaning of work was positively related to post-retirement family care ($B = 0.25, p < .05, OR = 1.29$).

Discussion

In the present study, we examined the meaning of work to understand post-retirement employment decision-making. We used data from a large representative sample to test the hypotheses. Among the control variables, the retirees who had previously worked, were male, had more children or had better subjective health were more likely to engage in post-retirement employment. The retirees who spent more years in retirement and reported better economic status were less likely to engage in post-retirement employment. These findings largely replicated previous research conducted using Germans samples (Fasbender et al., 2014; Wöhrmann et al., in press) and studies using samples from other countries (Griffin & Hesketh, 2008; Wang et al., 2008; Zhan et al., 2015).

Regarding the meaning of work, we found that the social and personal meanings of work were positively related to post-retirement employment. Consistent with the literature on identity theory (Stryker, 1980; Stryker & Serpe, 1982), continuity theory (Atchley, 1989; Wang, 2007; Wang et al., 2008), and role theory (Ashforth, 2001; Wang, 2007; Wang et al., 2008), these findings emphasized the importance of work role identity for retirees. Depending on the specific content of work role identity (e.g., the endorsement of different dimensions of work meaning), retirees decided whether to engage in post-retirement employment or not. Future research should expand the investigation on identity-related variables to predict post-retirement employment decisions.

Further, the current study showed mixed results for the financial meaning of work. The findings did not support the predicted main effect for the financial meaning of work on

post-retirement employment. However, consistent with our hypothesis, the subjective economic status moderated the relationship between financial meaning of work and post-retirement employment in a way that retirees with high financial meaning of work and low subjective economic status were more likely to work after retirement than those with high subjective economic status. Hence, the financial meaning of work seemed to be rather a hygiene factor in motivating people to work past retirement if their economic status is not considered. This highlights the importance of financial context for individual decisions to work after retirement. In this context, it would be intriguing to know whether it is the subjective economic status that drives the financial meaning of work to be relevant for late career decision-making or vice versa. Future research should investigate this relationship in more detail and pay attention to environmental factors as well as previous organizational settings that are likely to influence the relationship between meaning of work and post-retirement employment.

Surprisingly, we found that retirees who strongly endorsed the generative meaning of work were less likely to engage in post-retirement employment. At a first glance, this finding contradicts the previous notion that generative meaning of work is relevant for continuing voluntary and work activities after retirement (Deller et al., 2009) and contributes to post-retirement life and work satisfaction (Dendinger et al., 2005; Pundt, Wöhrmann, Deller, Shultz, 2015). However, our results differ from previous work, likely, due to different conceptualizations of variables and work settings being examined. Dendinger et al. (2005) investigated retrospective reasons for work but not its actual meaning. They also focused on retirement attitudes rather than actual post-retirement employment. Further, Deller et al. (2009) have simultaneously investigated both paid and voluntary work activities, while Pundt et al. (2015) only studied retirees working for a non-profit organization. The findings from our exploratory analysis contribute towards a more fine-grained understanding of the effect of generative meaning of work. While the generative meaning of work was found to be

negatively related with post-retirement employment, it was positively related with post-retirement civil engagement and post-retirement family care. This indicates that retirees engaging in post-retirement employment may be more likely to serve their egoistic needs rather than contributing to societal needs and common good. Thus, the current finding patterns helped to clarify the role of the generative meaning of work in late career decision-making.

Theoretical and Practical Implications

The findings of the present study extend previous research on late career decisions. There are important implications for theory and practice. Theoretically, the present study is among the first to examine how the meaning of work is related to the decision to engage in post-retirement employment. Our findings are consistent with the role of work meaning as a guiding principle for vocational decision-making and behavior for retirees (Dendinger et al., 2005; Mor-Barak, 1995; Ros et al, 1999; Rosso et al., 2010).

Furthermore, our findings have added to the literature on identity theory (Stryker, 1980; Stryker & Serpe, 1982). Specifically, we expanded the research concerning the work role identity. Although previous research addressed the importance of work role identity, it primarily focused on the shift from the role of worker to the role of retiree (Mariappanadar, 2013; Taylor, Shultz, Spiegel, Morrison, & Greene, 2007; Zaniboni, Sarchielli, & Fraccaroli, 2010). Expanding on this literature, the current study shed light on the content of the work role identity by investigating different dimensions of work meaning. Further, in addition to the previous work that revealed the role of work meaning for job seeking behavior (Mor-Barak, 1995) or retirement attitudes (Dendinger et al., 2005; Pundt et al., 2015), we investigated the meaning of work for late career decisions. Also, our findings highlight that the meaning of work is relevant for post-retirement volunteering decisions. In particular, the findings from our exploratory analysis emphasized the generative meaning as part of the work role identity of people engaging in civil and family care activities.

Practically, the identified relationships between work meaning and post-retirement employment help promote positive individual and organizational outcomes, such as planning late career paths and organizational recruitment strategies. First, understanding what work personally means to people can help make appropriate late career decisions and enhance retirement adjustment (Hesketh et al., 2015). Individuals can discuss their personal meaning of work with close friends, family, and relevant colleagues. Furthermore, career counsellors should investigate the meaning of work when they discuss the late career decisions of their clients. Second, organizational recruitment strategies can be derived from the current findings. People who strongly endorse the meaning of work (especially regarding the social and personal meaning of work) can be identified as accessible human capital. For internal recruitment, organizations can use methods to assess the individual work meaning of their employees. Analyzing their relevant target group helps organizations plan and efficiently apply human resource strategies at a later point. For example, strategies for retaining employees could include communicating relevant benefits of working after retirement or training supervisors to be aware of the different dimensions of work meaning and their relevance in the workplace. For external recruitment, organizations can use the knowledge concerning the meaning of work to create target group specific marketing actions outside their company (e.g., using advertisement to address the personal and social meaning of work and its concrete components).

Limitations and Future Research

The present study has some limitations. Most of those limitations are directly related to the archival nature of the data set we used. First, one potential limitation of our study is the use of cross-sectional design. It prevents us from making causal interpretations of the current findings. The potential reverse (and reciprocal) relationships need additional investigation because it can be argued that the post-retirement work status could change the meaning of work over time (e.g., to reduce cognitive dissonance; Festinger, 1957). However, according to

the motivation literature (Barrick, Mount, & Li, 2013), the meaning of work (i.e., the deeply rooted understanding of the benefits and consequences inherent to work) is rather stable over time, thus alleviating the concerns of potential reverse causation. Further, our outcome variables were assessed as objective statuses of actual post-retirement employment and volunteering behavior (i.e., work status, volunteering, and family care during the last three months) rather than intentions or subjective perceptions. Although self-report measures have shortcomings (Podsakoff, MacKenzie, & Podsakoff, 2003), it is unlikely that self-report produces systematically biased or inaccurate answers to these measures of statuses (Spector, 1994; Zhan et al., 2015). Nonetheless, longitudinal data are needed to further test the causal relations between work meaning and post-retirement work.

Second, although we aimed to cover different dimensions of work meaning in the current study, the measurement reliabilities were partly unsatisfactory, which is likely to have underestimated the predictive effects. In addition, the financial meaning of work was measured using only a single item, which again might introduce considerable unreliability. Given the archival nature of the TOP data, more reliable measures of each dimension of work meaning were not available. Consequently, the present measurement of work meaning was certainly not exhaustive. Future research should extend the current findings in applying more reliable measures and therewith, improving the measurement quality.

Third, in the present study, post-retirement employment was examined as a dichotomous variable. As suggested by previous researchers (Wang et al., 2008; Zhan et al., 2013), post-retirement employment can be specified in different types of employment (in the same career field vs. a different field) or in different employers (same employer vs. different employer vs. self-employment). Also, different types of work activities (e.g., manufacturing work or health services) might be relevant to understand the effect of meaning of work on individual's late career decision-making. The present study was not able to investigate post-retirement employment in detail because the data set did not provide information concerning

the types of post-retirement employment and employer-based subgroups were too small to warrant meaningful analysis. Therefore, additional research is needed to examine differentiated effects of work meaning on different types of post-retirement employment.

Fourth, although the data we used were representative for the German population (i.e., retirees in this particular age group), the results are limited in generalizability to other countries because the retirement institution (e.g., social security and employment-related legislations) might differ across countries. Comparative studies with different socio-economic and cultural settings are necessary for exploring the societal-level boundary conditions of the predictive effects of work meaning.

In sum, our findings support the importance of work meaning for late career decisions as well as the relevance of studying this issue in more detail. To improve the understanding of the psychological mechanisms underlying the effect of the meaning of work on post-retirement employment, it would be important for future research to assess the motives and values that shape the beliefs regarding the meaning of work and provide a more direct motivational account of post-retirement employment decision-making.

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Table 1

Means, standard deviations, and correlations for all of the variables (N = 1,699-2,148)

Variable	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.
<i>Control variables</i>																			
1. Age	66.38	2.51	-																
2. Gender (1 = male)	0.46	0.50	-.02	-															
3. Region (1 = West Germany)	0.82	0.39	-.03	.02	-														
4. Education	5.22	1.52	.04	.30**	-.13**	-													
5. Partner (1 = yes)	0.75	0.43	-.05*	.25**	-.02	.11**	-												
6. Number of children	1.76	1.12	.03	.04	-.01	.00	.13**	-											
7. Subjective health	3.03	0.65	.01	.03	.05*	.12**	.03	.02	-										
8. Subjective economic status	3.24	0.71	-.01	.09**	.15**	.16**	.14**	-.06*	.21**	-									
9. Pre-retirement employment	0.63	0.48	.02	.09**	.05*	.10**	.00	.02	.09**	.05*	-								
10. Years in retirement	4.56	3.61	.52**	-.05*	-.04	-.03	-.02	-.06**	-.08**	.01	-.09**	-							
<i>Meaning of work</i>																			
11. Social	3.34	0.52	-.01	-.03	-.07**	-.06**	.02	.01	.03	-.03	.06**	-.04	-						
12. Personal	3.74	0.43	.08**	-.06**	.01	.03	.00	.02	.10**	.10**	.08**	.00	.39**	-					
13. Financial	3.22	0.90	-.09**	-.02	-.05*	-.05*	-.01	.01	.03	-.09**	.02	-.09**	.24**	.18**	-				
14. Generative	3.46	0.54	.00	-.01	.00	.02	.02	.05*	.07**	.04	.06**	-.03	.49**	.46**	.16**	-			
<i>Dependent variables</i>																			
15. Post-retirement employment	0.24	0.43	-.03	.15**	.04*	.09**	.03	.13**	.12**	-.01	.10**	-.12**	.02	.04*	.00	-.02	-		
16. Post-retirement civil engagement	0.73	0.45	-.04	.08**	.06**	.15**	.07**	.05*	.09**	.06**	.01	-.05	.07**	.10**	.04	.15**	.06**	-	
17. Post-retirement family care	0.41	0.49	-.03	-.08**	-.02	-.05*	.06*	.23**	-.02	-.05*	.01	-.07**	.07**	.04	.01	.10**	-.03	.05*	-

* $p < .05$; ** $p < .01$.

Table 2

Results of binary logistic regression analysis for post-retirement employment ($N = 1,620-1,647$)

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE</i>	OR	<i>B</i>	<i>SE</i>	OR	<i>B</i>	<i>SE</i>	OR
Intercept	-1.28**	0.06		-1.30**	0.07		-1.31**	0.07	
<i>Control Variables</i>									
1. Age	0.05	0.03	1.05	0.04	0.04	1.04	0.04	0.04	1.04
2. Gender (0=female, 1=male)	0.47**	0.13	1.61	0.51**	0.13	1.67	0.52**	0.13	1.67
3. Region (0=east, 1=west Germany)	0.28	0.16	1.32	0.31	0.16	1.36	0.30	0.16	1.34
4. Education (ISCED-1997)	0.05	0.04	1.06	0.04	0.04	1.05	0.04	0.04	1.05
5. Partner (0=no, 1=yes)	-0.03	0.15	0.97	-0.01	0.15	0.99	-0.01	0.15	0.99
6. Number of children	0.20**	0.05	1.22	0.22**	0.06	1.24	0.21**	0.06	1.23
7. Subjective health	0.52**	0.10	1.69	0.51**	0.10	1.67	0.51**	0.10	1.67
8. Subjective economic status	-0.24**	0.09	0.79	-0.25**	0.09	0.78	-0.22**	0.09	0.80
9. Pre-retirement employment status	0.32*	0.13	1.38	0.30*	0.13	1.35	0.31*	0.13	1.36
10. Years in retirement	-0.12**	0.03	0.89	-0.12**	0.03	0.88	-0.12**	0.03	0.88
<i>Meaning of Work</i>									
11. Social				0.26*	0.15	1.29	0.25*	0.15	1.29
12. Personal				0.42*	0.18	1.52	0.42**	0.18	1.52
13. Financial				-0.04	0.07	0.96	-0.02	0.07	0.98
14. Generative				-0.37**	0.14	0.69	-0.37*	0.14	0.69
<i>Interaction</i>									
15. Financial X subjective economic status							-0.25**	0.10	0.78
<i>Model fit</i>									
-2 loglikelihood		1690.70			1651.82			1645.85	
Δ -2 loglikelihood (Δ <i>df</i>)					38.88** (4)			5.97* (1)	
Pseudo R ²		0.13**			0.15**			0.15**	

Note. Unstandardized estimates are shown. OR = odds ratio.

* $p < .05$. ** $p < .01$.

Table 3

Exploratory results of binary logistic regression analysis for post-retirement civil engagement (N = 1,620-1,647)

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	OR	<i>B</i>	<i>SE</i>	OR
Intercept	-1.01**	0.06		-1.03**	0.06	
<i>Control Variables</i>						
1. Age	-0.01	0.03	1.00	-0.01	0.03	0.99
2. Gender (0=female, 1=male)	0.07	0.13	1.08	0.11	0.13	1.12
3. Region (0=east, 1=west Germany)	0.41**	0.14	1.51	0.43**	0.14	1.53
4. Education (ISCED-1997)	0.21**	0.04	1.24	0.21**	0.04	1.24
5. Partner (0=no, 1=yes)	0.16	0.13	1.17	0.13	0.14	1.14
6. Number of children	0.10	0.05	1.10	0.09	0.05	1.09
7. Subjective health	0.30**	0.09	1.34	0.27**	0.10	1.31
8. Subjective economic status	-0.01	0.08	0.99	0.06	0.09	0.95
9. Pre-retirement employment status	-0.11	0.12	0.90	-0.17	0.12	0.85
10. Years in retirement	-0.03	0.02	0.97	-0.03	0.02	0.98
<i>Meaning of Work</i>						
11. Social				0.18	0.14	1.20
12. Personal				0.12	0.15	1.13
13. Financial				-0.16*	0.07	0.85
14. Generative				0.46**	0.14	1.59
<i>Model fit</i>						
-2 loglikelihood	1873.17			1808.20		
Δ -2 loglikelihood (Δ <i>df</i>)				64.97** (4)		
Pseudo R ²	0.06**			0.09**		

Note. Unstandardized estimates are shown. OR = odds ratio.

* $p < .05$. ** $p < .01$.

Table 4

Exploratory results of binary logistic regression analysis for post-retirement family care (N = 1,620-1,647)

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	OR	<i>B</i>	<i>SE</i>	OR
Intercept	-0.33**	0.05		-0.32**	0.05	
<i>Control Variables</i>						
1. Age	0.02	0.03	1.00	0.02	0.03	1.02
2. Gender (0=female, 1=male)	-0.38**	0.12	1.08	-0.39**	0.12	0.68
3. Region (0=east, 1=west Germany)	-0.12	0.14	1.51	-0.12	0.14	0.88
4. Education (ISCED-1997)	-0.05	0.04	1.24	-0.05	0.04	0.95
5. Partner (0=no, 1=yes)	0.25	0.13	1.17	0.25	0.13	1.28
6. Number of children	0.47**	0.05	1.10	0.46**	0.05	1.59
7. Subjective health	-0.05	0.08	1.34	-0.07	0.09	0.93
8. Subjective economic status	-0.10	0.08	0.99	-0.10	0.08	0.91
9. Pre-retirement employment status	0.05	0.11	0.90	0.04	0.11	1.04
10. Years in retirement	-0.05	0.02	0.97	-0.05	0.02	0.95
<i>Meaning of Work</i>						
11. Social				0.04	0.13	1.04
12. Personal				0.04	0.15	1.04
13. Financial				-0.05	0.06	0.95
14. Generative				0.25*	0.12	1.29
<i>Model fit</i>						
-2 loglikelihood	2113.47			2071.19		
Δ -2 loglikelihood (Δ <i>df</i>)				42.28** (4)		
Pseudo R ²	0.10**			0.11**		

Note. Unstandardized estimates are shown. OR = odds ratio.

p* < .05. *p* < .01.

Figure 1

Subjective economic status moderates the relationship of financial meaning of work and post-retirement employment

