



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

The Influence of the Early Retirement Process on Satisfaction with Early Retirement and Psychological Well-Being

Citation for published version:

Potocnik, K, Tordera, N & Peiro, JM 2010, 'The Influence of the Early Retirement Process on Satisfaction with Early Retirement and Psychological Well-Being', *International Journal of Aging and Human Development*, vol. 70, no. 3, pp. 251-273. <https://doi.org/10.2190/AG.70.3.e>

Digital Object Identifier (DOI):

[10.2190/AG.70.3.e](https://doi.org/10.2190/AG.70.3.e)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

International Journal of Aging and Human Development

Publisher Rights Statement:

© Potocnik, K., Tordera, N., & Peiro, J. M. (2010). The Influence of the Early Retirement Process on Satisfaction with Early Retirement and Psychological Well-Being. *The International Journal of Aging and Human Development*, 70(3), 251-273. [10.2190/AG.70.3.e](https://doi.org/10.2190/AG.70.3.e)

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



Running head: EARLY RETIREMENT PROCESS AND ADJUSTMENT

Full Title: The influence of the early retirement process on satisfaction with early retirement and psychological well-being

Kristina Potočnik¹

Nuria Tordera¹

José María Peiró^{1,2}

University of Valencia¹

IVIE²

*Correspondence concerning this article should be addressed to Kristina Potočnik, Faculty of Psychology, Department of Social Psychology, Avda. Blasco Ibáñez 21, 46010 Spain. Phone number: +34963864964; Fax: +34963864668; E-mail address: kristina.potocnik@uv.es.

This study was supported by the research grant from the Ministerio de Educación y Ciencia, Research Project CONSOLIDER: SEJ 2006-14086/PSIC. The first author of the article was supported by the University of Valencia V Segles grant.

ABSTRACT

The present study explores the influence of the early retirement process on adjustment to early retirement, taking into account the roles of individual characteristics and social context in this process. We proposed a systematic model integrating perceived ability to continue working, organizational pressures toward early retirement and group norms about early retirement as antecedents of the early retirement process and subsequent satisfaction with early retirement and psychological well-being. In addition, we examined the moderating role of the voluntariness of the early retirement transition in the proposed model. Our hypotheses were tested using a sample of 213 early retirees. We found that while high organizational pressures were related to lower retirement age, low perceived ability to continue working and group norms favorable to early retirement were related to higher levels of early retirement intentions. Furthermore, group norms favorable to early retirement and low perceived ability to continue working predicted higher satisfaction with early retirement, both directly and indirectly, through early retirement intentions. Finally, satisfaction with early retirement was related to psychological well-being. However, when the sample was divided into subgroups of voluntary and involuntary early retirees, two different relationships were observed in each group. For instance, organizational pressures positively predicted satisfaction with early retirement in involuntary early retirees, whereas this relationship was negative in voluntary early retirees. In addition, income was positively related to retirement age in involuntary early retirees and negatively in voluntarily early retired.

KEY WORDS: early retirement; satisfaction with early retirement; psychological well-being, ability to continue working; group norms; organizational pressures.

The influence of the early retirement process on satisfaction with early retirement and psychological well-being

The average exit age from the labor force in the European Union has decreased from over 65 years of age half a century ago to around 61, according to a recent survey (Eurostat, 2008). In Spain recent statistics show that between 60,000 and 70,000 Spanish workers prematurely leave the labor market every year due to different early retirement plans. Similar patterns can be found in other EU countries (Siegrist, Wahrendorf, Von dem Knesebeck, Jürges, & Börsch-Supan, 2006), in the USA (Adams, Prescher, Beehr, & Lepisto, 2002) and in Australia (Everingham, Warner-Smith, & Byles, 2007).

Overall, this situation has led to extensive research on antecedents of early retirement decisions (e.g. Elovainio et al., 2005; Hardy & Hazelrigg, 1999; Henkens, 2000; S. Kim & Feldman, 1998; Lin & Hsieh, 2001; Sutinen, Kivimäki, Elovainio, & Forma, 2005; Taylor & Shore, 1995). Adjustment to retirement has also received considerable empirical study (e.g. J. E. Kim & Moen, 2002; Quick & Moen, 1998; Ross & Drentea, 1998; Szinovacz, 2003; Wang, 2007); however, relatively little research has been done on adjustment to early retirement in particular (Hardy & Quadagno, 1995; Isaksson & Johansson, 2000; Palmore, Fillenbaum, & George, 1984; Shultz, Morton, & Weckerle, 1998). Early retirement can be defined as retirement that occurs before the retirement age legally established by the state (for instance in Spain, 65 years).

Some studies have examined the effects of retirement timing (early, on-time and late) on the adjustment to retirement within a broader research context (e. g. Quick & Moen, 1998; Wang, 2007; Warr, Butcher, Robertson, & Callinan, 2004). Their findings are inconclusive, showing that those who retire early experience both better (Quick & Moen, 1998; Warr et al., 2004) and worse (Wang, 2007) adjustment to retirement compared to on-time retirees or

retirees who retired later than expected. These studies did not pay much attention to characteristics of the retirement process that could account for differences in the levels of retirement adjustment between on-time and off-time retirees. However, some of them examined the relationships between the characteristics of the pre-retirement job, such as job satisfaction, physical and psychological demands and stress, and on-time retirement adjustment (Quick & Moen, 1998; Wang, 2007). Nevertheless, there are virtually no studies looking at the nature of the early retirement process and its impact on adjustment to early retirement. However, understanding this process might be even more important in early retirement since work role exits that occur *off-time* (i.e. earlier than what is socially prescribed), may be perceived as more stressful or disruptive than role transitions that are normatively *on-time* (George, 1993).

The need for additional research on the links between the early retirement decision and adjustment to retirement was highlighted by Feldman (1994) and Isaksson and Johansson (2000). They argued that it is very difficult to understand adjustment to retirement without understanding the reasons for exiting the work role. For instance, different individual factors (e.g. attitudes towards work and retirement and health) and organizational characteristics, such as financial rewards and flexibility in managing older workers, have been suggested to influence the early retirement process in different ways (Feldman, 1994; Isaksson & Johansson, 2000), contributing to different levels of adjustment to early retirement.

With this in mind, the main aim of the present study is to simultaneously examine individual, group, and organizational-level antecedents of the early retirement process and their relationship with adjustment to early retirement. Following role theory, we argue that early retirement is a work role exit process (Adams et al., 2002; Ebaugh, 1988; Potočník, Tordera, & Peiró, 2009), during which the individuals are susceptible to different sources of role expectations at the individual, organizational and group levels, such as perceived ability

to continue working, organizational pressures toward early retirement and group norms about early retirement. Moreover, we examine satisfaction with early retirement as a specific indicator of adjustment, and psychological well-being as a more general indicator of adjustment, in order to get a broader view of adjustment to early retirement.

Moreover, one of the most widely-studied aspects of adjustment to (early) retirement has been voluntariness or volition in the retirement transition. For instance, past research consistently found that those who were forced to retire reported lower satisfaction (Herzog, House, & Morgan, 1991; Isaksson & Johansson, 2000; Shultz et al., 1998) and psychological well-being (Isaksson & Johansson, 2000; Warr et al., 2004). With this previous research in mind, our second aim is to explore the relationships between the early retirement process and adjustment to early retirement in terms of the voluntariness of the retirement transition.

Early retirement process and adjustment to early retirement: hypothesis development

According to role theory, retirement is viewed as a role exit during which the individuals abandon the role of the employee and start the transition to another role – the role of retiree (Ashforth, 2001; Quick & Moen, 1998; Riley & Riley, 1994). From this perspective, the process of leaving the work role is considered as a process of mutual disengagement for the role holders and the role set. Past research has suggested different sources of behavioral expectations about the roles that influence the process of role transition (Potočnik et al., 2009). For instance, the individual has his/her own expectations about the work role (Neal & Griffin, 2006). At the same time, social groups and organizations also transmit their work role expectations. However, most of the past research has not considered the impact of these role set expectations in the transition from the work role to the role of early retiree.

As highlighted by Neal and Griffin (2006), individuals tend to exhibit behaviors that are self-congruent, that is, congruent with their individual behavioral expectations. In the present study, we consider perceived ability to continue working as one of these individual

sources of role expectations. Individuals who perceive themselves as unable to continue working are more likely to give notice about intending to leave the work role and time their work role exit sooner. Along these lines, we first expect that participants who report low ability to continue working before taking early retirement experienced higher early retirement intentions (hypothesis 1) and retired earlier (hypothesis 2). Furthermore, the argument has been made that the retirement period is more likely to be viewed as more satisfying than the employment years by those who view retirement as an escape from an unpleasant role (Quick & Moen, 1998). Thus, according to role theory, retirement might be viewed as a relief for those employees who did not feel capable of continuing to work (Quick & Moen, 1998). Taking into account these arguments, we expect that low perceived ability to continue working predicts higher levels of satisfaction with early retirement (hypothesis 3).

Furthermore, following Yeatts, Folts, and Knapp (2000), organizations might develop negative human resource policies toward older workers, based on the argument that the value an individual has for the organization declines with his/her age. From this perspective, any investment in older workers is seen as a cost, and the organizational policy toward these workers is focused on promoting their exit, what makes organizations unpleasant for older workers. These types of practices generally belong to the so-called depreciation model (Yeatts et al., 2000). In addition, firing older workers is very costly for organizations; therefore, they prefer to implement different types of practices to pressure older workers to take early retirement. This organizational pressure is frequently coupled with an increasing tendency to employ younger workers, since a younger workforce is cheaper, and their contracts are more flexible compared to the contracts of older workers who usually have permanent contracts. Taking this situation into account, we suggest organizational pressures toward early retirement as a source of organizational expectations to exit the work role. Specifically, we argue that when organizations exerted high pressure toward early retirement, higher early

retirement intentions were experienced (hypothesis 4), and participants retired earlier (hypothesis 5). Moreover, we argue that higher organizational pressures are related to higher early retirement satisfaction as a result of leaving an unpleasant working environment (hypothesis 6).

Finally, groups of co-workers are also an important source of role expectations in organizations (Peiró & Meliá, 2003). Following this line of thought, we suggest that work mates' group norms toward early retirement have an influence on the early retirement process and adjustment to early retirement. For example, in the context of role exit, Ebaugh (1988) has pointed out the importance of groups and role networks as sources of social validation and invalidation, especially in the role exit stage she calls "escalation of doubts". Thus, we suggest that older workers most likely seek advice, opinions and support from others who form part of their network when they are faced with exiting the work role, in other words, retiring. Moreover, according to social identity theory (Turner, 1982), individuals categorize and define themselves as members of distinct social groups. Within these groups, context-specific group norms develop that are appropriate for the group members. In this way, group membership, such as membership in a group of co-workers, makes group members think, feel, behave and define themselves according to group norms (Terry & Hogg, 1996). Following this line of reasoning, we expect that group norms favorable to early retirement were related to higher early retirement intentions (hypothesis 7) and lower retirement age (hypothesis 8). In addition, as theories on group conformity (e.g. Allen & Wilder, 1977; Kelley, 1952) suggest, when group members conform to the group norms about early retirement, and thus act in accordance with their co-workers' group expectations, they experience more positive affective states. Therefore, we also expect that individuals who perceived group norms favorable toward early retirement report higher satisfaction with early retirement (hypothesis 9).

Previous research suggests that strong retirement intentions indicate subjective evaluations of a positive costs-benefit ratio of retirement and reflect mental preparedness for retirement, facilitating the transition into retirement and better adjustment to it (Van Solinge & Henkens, 2007). Accordingly, we expect a positive relationship between early retirement intentions and early retirement satisfaction (hypothesis 10). Moreover, retirement timing was also found to be an important factor in retirement satisfaction. There is evidence suggesting that people who retired at a lower age are more satisfied with retirement (Dorfman, 1989; Quick & Moen, 1998; Sharpley & Layton, 1998; Warr et al., 2004). Thus, we suggest a negative relationship between retirement age and satisfaction with early retirement (hypothesis 11). Finally, the exit from the workforce is one of the most critical processes in one's life, due to its impact on personal, social and organizational life (Elder, 1995; Elder & Johnson, 2003). Previous research has suggested that retirees who successfully undergo the transition to retirement experience better psychological well-being (Quick & Moen, 1998; Wang, 2007). One indicator of a successful transition is satisfaction with early retirement. Therefore, we expect that early retirees who experience higher satisfaction with early retirement report better psychological well-being (hypothesis 12). The summary of our hypotheses is shown in Figure 1.

PLEASE, INSERT FIGURE 1 ABOUT HERE

Moderating role of voluntariness of early retirement transition

Previous research has suggested that the voluntariness of retirement transition is an important factor in adjustment to (early) retirement (Isaksson & Johansson, 2000; Sharpley & Layton, 1998; Shultz et al., 1998). Nevertheless, past studies have mainly explored the differences in the levels of adjustment in terms of voluntariness of retirement transition, but

not its moderating role in the early retirement process and the adjustment to early retirement.

It is important to consider that the early retirement process and adjustment to early retirement might occur in a different way for the voluntarily retired compared to the involuntarily retired.

In line with Ebaugh's (1988) role exit model, involuntary role exits are accompanied by little or no advance warning, creating the additional distress. Moreover, involuntary role exits tend to be stigmatizing and thus, individuals during the involuntary role transitions also have to cope with shame (Asforth, 2001). Finally, individuals facing involuntary retirement often exit work role with no clear alternatives, exacerbating the sense of discontinuity. Consequently, involuntary work role exits often represent a significant threat to one's identity, sense of meaning and control, leading to worse adjustment to the role exit. In fact, previous research consistently found that workers who were forced to retire early experienced this off-time transition as disruptive and psychologically stressful. For instance, involuntary early retired reported lower life satisfaction (e.g. Isaksson & Johansson, 2000; Shultz et al., 1998; Warr et al., 2004) and lower well-being (Isaksson & Johansson, 2000) compared to voluntarily early retired. Involuntary early retired also perceived themselves as less healthy than voluntary early retired (Isaksson & Johansson, 2000; Shultz et al., 1998). Moreover, Sharpley and Layton (1998) found that retirees who retired voluntarily were significantly less anxious, depressed, and stressed than those who retired involuntarily. In the present study we follow this previous evidence and predict poorer adjustment to early retirement for the involuntary compared to voluntarily early retired. In addition, applying multiple-group analysis, we expect a different pattern of relationships in each subgroup. However, the lack of empirical evidence regarding the moderating role of voluntariness of retirement transition in the proposed relationships prevents us from developing specific hypotheses in each subgroup.

Method

Sample and Procedures

Data were obtained through questionnaires given to a sample of early retirees studying in two university programs called “La Nau Gran” and “Universidad Senior” at the University of Valencia and at the Polytechnic University of Valencia, respectively. These are higher education programs addressed to people aged 55 or more, and the programs do not qualify for professional practice. Questionnaires were distributed among the participants by two of the authors who visited the courses after obtaining the approval from the Programs’ directors to access the classes. Individuals who had retired prematurely were asked for cooperation, guaranteeing confidentiality of the data. The questionnaires were completed in the classroom before the classes started. The final sample is composed of 213 early retirees. Twenty-nine percent of the participants are female, and 71% are males. The average age of the sample is 62.53 years ($SD = 4.51$). With regard to marital status: 72.9% are married, 9.0% are single, 6.8% are separated or divorced, and 11.3% are widowed. The level of education before early retirement was as follows: 37.6% had a University degree, 52.5% reported having finished high school, 9.4% had a basic education, and .5% had not studied at all.

With regard to the conditions in which the early retirement occurred, subjects retired at an average age of 58.05 ($SD = 3.80$). The average number of years retired is 4.41 ($SD = 3.82$). Sixty-three point two percent rated their early retirement as voluntary, and 36.8% rated it as obligatory. With regard to the level of income related to the retirement, 14.8% earn less than 1,200 Euros monthly, 47.4% earn between 1,200 and 2,000, 27.0% earn between 2,000 and 3,000 Euros, and 10.7% earn more than 3,000 Euros.

The participants had an average tenure of 37.68 years ($SD = 7.15$) before early retirement, and their monthly income while still working was, for 7.8% of them, less than 1,200 Euros, for 32.6%, it was between 1,200 and 2,000, for 38.9% it was between 2,000 and 3,000 Euros, and 20.7% earned more than 3,000 Euros per month. In terms of the positions held in the organizations they worked for, 23.1% were in management positions, 33.3% held

middle-level positions, 6.2% were supervisors, 17.9% were technical staff, 17.9% were qualified workers and 1.5% were non-qualified workers. Furthermore, 67.8% of the participants were working in the private sector and 32.2% in the public sector. Finally, 21.8% had worked in banks, 8.9% in telecommunications, 12.9% in education, 7.4% in healthcare, 6.9% in public administration, 7.9% in commerce, 10.4% in the car industry, 5.4% in civil construction, and 18.3% in other sectors.

Measures

Control variables

We controlled for two variables, level of income and health status. Both of them have been consistently related to different measures of retirement behaviors and/or intentions (e. g. Fronstin, 1999; Henkens & Tazelaar, 1997; Karpansalo, Manninen, Kauhanen, Lakka, & Salonen 2004; S. Kim & Feldman, 1998) and to retirement adjustment (e.g. J. E. Kim & Moen, 2002; Quick & Moen, 1998; Seccombe & Lee, 1986).

Health status was measured by applying a single item measure (“My health impeded or even kept me from going on with my work”), indicating participants’ perceptions about how their health had impaired or impeded their continuity at work. Participants replied using a 5-point response scale, ranging from 1 (totally disagree) to 5 (totally agree).

Level of income after retirement was measured by 4 categories. Participants were asked to rate their level of monthly income after retirement within the following 4 alternatives: 1) less than 1,200 Euros; 2) between 1,200 and 2,000 Euros; 3) between 2,000 and 3,000 Euros; and 4) more than 3,000 Euros.

Predictor variables

Perceived ability to continue working was measured by 3 items, developed by the authors of the present study. One example of the item is: “I felt I could have continued working efficiently at least until the age of 65.” Participants replied using a 5-point scale,

ranging from 1 (totally disagree) to 5 (totally agree). The reliability coefficient (Cronbach's alpha) was .69.

Organizational pressures toward early retirement were measured by a 3-item scale, developed for the purposes of this study. An example of the items was: "I felt forced by my organization to retire early". Participants evaluated each of the three statements on a 5-point response scale, ranging from 1 (totally disagree) to 5 (totally agree). The internal consistency coefficient (Cronbach's alpha) was .79.

Group norms were assessed by means of 3 items derived from Terry and Hogg's (1996) group norms scale and adapted to our study. The respondents were asked to rate their perceptions of their workmates' norms for taking early retirement (e.g. "In general, my co-workers thought that taking early retirement was a good thing to do"). Participants responded on a 5-point response scale, ranging from 1 (totally disagree) to 5 (totally agree). The internal consistency coefficient (Cronbach's alpha) was .79, which is similar to the reliability coefficients of this measure obtained in previous studies (Terry & Hogg, 1996; Terry, Hogg, & White, 1999).

Moderator variable

Voluntariness of early retirement transition was operationalized in terms of a dummy variable (1-voluntary early retirement). Participants were asked to indicate their overall perception of whether their transition to retirement was voluntary or obligatory. Similar operationalizations were also used in past research (Isaksson & Johansson, 2000; Shultz et al., 1998).

Criterion variables

Early retirement intentions were assessed by means of 2 items, derived from the items used by Terry and Hogg (1996) and Terry et al. (1999) and adapted to our study. Participants were asked to rate their level of intentions to retire early by replying to the following items: "I

had intentions to retire early” and “I was clearly decided to retire early”. Participants replied using a 5-point response scale, ranging from 1 (certainly not) to 5 (certainly). The Cronbach reliability coefficient was .96.

Retirement age. Subjects were asked to indicate how old they were when they retired (in years).

Satisfaction with early retirement was assessed by means of 5 items, adapted from Büssing, Bissels, Fuchs, and Perrar's (1999) measure. An example of the items was: “I like having retired early”. Participants replied using a 5-point scale, ranging from 1 (totally disagree) to 5 (totally agree). The alpha reliability coefficient was .92.

Psychological well-being was evaluated by means of 12 items (e.g. “Could you concentrate well on what you were doing over the past few weeks?”), adapted from the General Health Questionnaire (Goldberg, 1979). Participants used a 4-point response scale, ranging from 1 (more than usual) to 4 (much less than usual). Half of the items were reversed, so that higher scores indicated higher well-being. The Cronbach’s alpha coefficient was .88.

Since our variables were obtained from a single source, common method variance could inflate the association among them. To exclude this possibility, we carried out the Harman’s Single-Factor test - one of the most widely used techniques to address the issue of common method variance (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The basic assumption of this procedure states that if a substantial amount of common method variance is present, either a single factor will emerge from the factor analysis or one general factor will account for the majority of the covariance among the measures. We used confirmatory factor analysis (CFA) to address this hypothesis. The results confirmed that a single general factor did not explain our data as well as the theoretically predicted six-factor structure (see Table 1), in which organizational pressures, perceived ability to continue working, group norms, early retirement intentions, early retirement satisfaction and psychological well-being are

considered as different concepts and consequently measured independently from each other as separate factors.

PLEASE, INSERT TABLE 1 ABOUT HERE

Overview of analysis

First, we carried out descriptive calculations of means, standard deviations, reliability and correlations to get some insight into the relationships between the considered variables. We also applied two *t*-tests for independent samples to examine differences in satisfaction with early retirement and psychological well-being in terms of voluntariness of retirement transition. Second, we tested our hypotheses by applying path analysis. Due to the limited sample size, we used manifest variables. We submitted covariance and asymptotic covariance matrixes to analyze the proposed models and selected a maximum likelihood method of estimation as implemented by LISREL 8.3 (Jöreskog & Sörbom, 1999). The asymptotic covariance matrix was used due to the non-normal distribution of our data. Following MacCallum and Austin (2000), control variables were introduced as exogenous variables, with direct paths to all outcome variables.

Third, a multiple-group analysis was carried out to examine the moderating role of voluntariness of early retirement transition. We first fitted the proposed model (see Figure 1) to the groups of voluntarily and involuntarily retired separately via single sample analysis to examine whether the proposed baseline model fits well to each group under consideration. Once a baseline model is established for each group separately, invariance testing begins (Epitropaki & Martin, 2005; Standage, Duda, & Ntoumanis, 2005). First, the baseline model (proposed model in Figure 1) is tested for invariance across groups, in which all path coefficients are constrained to equivalence in both groups (fully-constrained model). Second,

all path coefficients are released so that they are freely estimated in both groups (the least restrictive model). Afterwards, the fit indices of both models are compared to see if fully-constrained model has a significantly worse fit than the least restrictive model. If this is the case, parameters are released one by one until the fits of these two models do not differ anymore. All the released parameters indicate a moderation of voluntariness of early retirement transition in their respective relationships. Following the recommendations by Hu and Bentler (1998), we use χ^2 , RMSEA (Root Mean Square Error of Approximation), CFI (Comparative Fit Index), and SRMR (Standardized Root Mean Residual) to evaluate the goodness of fit of the tested models.

To test the proposed hypotheses on the whole sample, the standardized coefficients are reported. However, the unstandardized coefficients are used in multiple-group analysis. While standardized coefficients are relevant to determine the relative importance of different paths within a group and are sample specific, unstandardized coefficients are expressed in terms of constructs' variance and, therefore, can be used to compare the same paths across groups (Hair, Anderson, Tatham, & Black, 1998). For all analyses, relationships are considered significant at the $p < .05$ level. However, relationships at the $p < .10$ level are also indicated to show trends in the data.

Results

Descriptive statistics

Means, standard deviations, and correlations among the variables are presented in Table 2. The t -test analyses showed that the voluntary early retired experienced higher satisfaction with early retirement ($t(211) = 5.33; p < .01$) and higher psychological well-being ($t(211) = 2.79; p < .01$) compared to the involuntary early retired participants.

PLEASE, INSERT TABLE 2 ABOUT HERE

Next, we turn to the path analyses results to test the proposed hypotheses.

Path analysis results

The fit indices for the proposed model (Figure 1) revealed an adequate fit to the data on the whole sample (see Table 3): Satorra-Bentler $\chi^2(6) = 10.03, p = .12$; RMSEA = .07; $.00 < \text{RMSEA} < .13$; CFI = .97; and SRMR = .04. The standardized parameter estimates are presented in Figure 2.

PLEASE, INSERT TABLE 3 ABOUT HERE

The control variables were not significantly related to any of the early retirement process and adjustment indicators. Furthermore, in accordance with our hypotheses, perceived ability to continue working was negatively related to early retirement intentions ($\beta = -.37$; $p < .01$) and to satisfaction with early retirement ($\beta = -.18$; $p < .05$), but we found a non-significant relationship with retirement age. Moreover, in agreement with our predictions, organizational pressures were negatively related to retirement age ($\beta = -.28$; $p < .01$). However, organizational pressures toward early retirement were not related to early retirement intentions or satisfaction with early retirement. Next, group norms about early retirement were positively related to early retirement intentions ($\beta = .33$; $p < .01$) and satisfaction with early retirement ($\beta = .19$; $p < .05$); however, they did not predict retirement age. Furthermore, early retirement intentions, but not retirement age, were positively related to satisfaction with early retirement ($\beta = .30$; $p < .01$). Finally, satisfaction with early retirement positively predicted psychological well-being ($\beta = .26$; $p < .01$).

PLEASE, INSERT FIGURE 2 ABOUT HERE

Moderating role of voluntariness of early retirement transition

To explore potential differences in the proposed relationships between early retirees who were forced to take early retirement and for early retirees who made this decision voluntarily, we examined the proposed model (Figure 1) separately for both groups of early retirees. Fitting the proposed model to each group separately, via single sample analysis, we found that a model fits well to each group (see Table 3), with the following goodness-of-fit for voluntarily early retired: Satorra-Bentler $\chi^2(6) = 9.57, p = .14$; RMSEA = .08; $.00 < \text{RMSEA} < .17$; CFI = .96; and SRMR = .04 and Satorra-Bentler $\chi^2(6) = 5.50, p = .48$; RMSEA = .00; $.00 < \text{RMSEA} < .17$; CFI = 1.0; and SRMR = .04 for involuntarily early retired. In the next step, we fitted a multiple-group model via invariance analysis, in which all parameters were constrained to be equivalent in both groups (fully constrained model). Next, we fitted a multiple-group model via invariance analysis in which all parameters were freely estimated in each group (the least restrictive model). As can be seen in Table 3, fully constrained model had significantly worse fit than the least restrictive model ($\Delta\chi^2(20) = 36.75; p < .05$). The modification indices for fully constrained model first suggested us that the parameter between income and retirement age could be released. However, the difference between the constrained model with this parameter released and the least restrictive model was still significant ($\Delta\chi^2(20) = 30.42; p < .05$). Therefore, we released a next parameter suggested by the modification indices, which was the parameter between organizational pressures and early retirement satisfaction. The difference between this model (constrained model with two parameters released) and the least restrictive model was not significant any more ($\Delta\chi^2(18) = 21.04; p = .28$). The final multiple-group model fitted adequately to the data: Satorra-Bentler $\chi^2(34) = 26.95, p = .81$; RMSEA = .00; $.00 < \text{RMSEA} < .06$; CFI = .90; and SRMR = .07.

Therefore, on the basis of our multiple-group analysis we can conclude that voluntariness of early retirement transition moderates the relationships between income and retirement age on one hand, and organizational pressures and early retirement satisfaction on the other. For instance, retirement income was positively related to retirement age in those who were forced to take early retirement ($\beta = 1.50; p < .05$), and negatively related to retirement age in the sample of voluntary early retired ($\beta = -.125; p < .01$). In a similar way, organizational pressures positively predicted early retirement satisfaction in forced early retired ($\beta = .32; p < .01$), whereas this relationship was negative in early retirees who retired voluntarily ($\beta = -.12; p < .05$).

Discussion

The main aim of the present study was to test a meaningful model about the early retirement process and adjustment to early retirement. We examined the influence of role expectations in the work role exit process at the individual, group and organizational levels and their impact on satisfaction with early retirement and psychological well-being. The second aim was to examine differences in the proposed relationships in terms of voluntary and involuntary early retirement transition.

Our findings contribute to a better understanding of adjustment to early retirement in different ways. First, our findings emphasize the importance of role-exit expectations from the role-set, such as perceived ability to continue working (self-expectations), organizational pressures to retire early (organizational expectations) and group norms towards early retirement (group expectations), in the early work role exit. Second, our findings show that individual and group role expectations play a significant role in predicting satisfaction with early retirement, both directly and indirectly, through early retirement intentions. However, organizational expectations in terms of organizational pressures toward early retirement were not found to impact satisfaction with early retirement. Third, our results emphasize the

importance of the work role exit process on satisfaction with early retirement (Ashforth, 2001). Fourth, our results suggest that the process of early retirement and its relationship to adjustment to early retirement is not completely the same for those who were forced to take early retirement compared to the voluntarily early retired. Specifically, our findings show that the involuntary early retired earned higher incomes the later they retired, and they were more satisfied with early retirement as a consequence of escaping from high organizational pressures. In contrast, voluntary early retirees earn higher incomes the sooner they retire, and they experience higher satisfaction with early retirement as an outcome of low organizational pressures.

Our findings show that after controlling for the effects of health and income level, all the studied sources of role expectations have a significant influence on all aspects of work role exit, although in different ways. As predicted in hypotheses 1 and 7, we found that self and co-workers' group expectations about work-role exit have an impact on intentions. On the other hand, in line with our hypothesis 5 organizational expectations about the work role explain behaviors (retirement timing). In agreement with role theory, these findings give some support to the argument that early retirement can be seen as a relief for those who perceived themselves as not capable of continuing working (Quick & Moen, 1998). Our results also agree with the depreciation model (Yeatts et al., 2000), which argues that organizational policy towards older workers is focused on promoting their exit (Henkens, 2000; Lin & Hsieh, 2001; Remery, Henkens, Schippers, & Ekamper, 2003). Thus, we could argue that organizational pressures preceded the exit from the work force, making it an unpleasant working environment in which to continue working.

Furthermore, our results partially confirm our predictions regarding co-workers' influence on work-role exit, in that group norms favorable to early retirement were related to early retirement intentions, although not to actual work role exit. Congruent with social

identity theory (Turner, 1982), which argues that attitudes, behaviors and opinions of the reference group might become normative in individuals' actions, our results highlight that coworkers played an important role in participants' intentions to retire early. Our findings also give support to Ebaugh's (1988) role exit model, suggesting that older workers most likely tend to validate their opinions about prematurely exiting the work role in the network of their coworkers. Overall, our results support the importance of the reference group in the process of role elaboration (Graen & Scandura, 1987), specifically in the work role exit process.

Regarding adjustment to early retirement, our findings reveal that self-expectations and group-expectations play an important role in satisfaction with early retirement via two corridors, directly and indirectly, through early retirement intentions. On the one hand, in accordance with role theory (Quick & Moen, 1998), we found that early retirees who perceived low capacity to continue working adjusted better to early retirement (hypothesis 3). Furthermore, congruent with theories on group conformity (Allen & Wilder, 1977; Kelley, 1952), our findings show that early retirees who acted in accordance with their co-workers' group norms about early retirement experienced more positive affective evaluations of retirement in terms of satisfaction with early retirement (hypothesis 9). On the other hand, both role sets also contribute to satisfaction with early retirement through early retirement intentions. In line with our assumptions (hypothesis 10), higher intentions indeed reflect the subjective evaluation that the benefits exceed the costs of early retirement (Van Solinge & Henkens, 2007), which consequently leads early retirees toward better adjustment to early retirement. Finally, participants who went through a successful transition from employment to retirement, expressed in terms of higher satisfaction with early retirement, experienced better psychological well-being (hypothesis 12). According to the life course approach (Elder, 1995; Elder & Johnson, 2003), this finding supports the argument that the transition from

employment to retirement may impact post-retirement trajectories, such as individual well-being in retirement (Wang, 2007).

Corresponding to our second aim, we found that early retirees who perceived their retirement as involuntary experienced poorer adjustment to early retirement compared to early retirees who retired voluntarily, in terms of both satisfaction with early retirement and psychological well-being. These findings give additional support to past research that found higher life satisfaction and physical and mental health (e.g. Shultz et al., 1998), higher satisfaction with the retirement program, greater psychological well-being and health (Isaksson & Johansson, 2000), and less anxiety, depression and stress (Sharpley & Layton, 1998) among retirees who retired voluntarily compared to involuntarily retired individuals.

However, as a new contribution to this issue, the present paper has aimed to identify the avenues through which these differences in adjustment happen. In this line, our findings show a different pattern of relationships between income and retirement age on one hand, and organizational pressures and satisfaction with early retirement on the other. While on the whole sample income as a control variable did not have an influence on the early retirement process and adjustment, our multiple-group analysis results showed that a higher pension was related to later retirement timing in early retirees who took early retirement involuntary, whereas this relationship was just the opposite in the group of early retirees who retired voluntarily. These results might imply that early retirees who perceive their retirement as involuntary earn higher pensions because they worked longer, contributing more to social security, and, thus, delaying their retirement as much as they could. It is possible that because they worked longer their former organizations obliged them to take an early retirement. This conclusion cannot be firmly stated, however, since there were no differences between both groups in the relationships between organizational pressures and retirement timing.

Furthermore, whereas no relationship was observed between organizational role expectations and satisfaction with early retirement in the whole sample, our findings from subgroups of the voluntarily and involuntarily retired show that higher organizational pressures are related to higher satisfaction with early retirement in early retirees who retired involuntarily, whereas this relationship is just the opposite in early retirees who took early retirement voluntarily. In congruence with the depreciation model (Yeatts et al., 2000), we could argue that for those who were forced to retire early, high organizational pressures represented an unpleasant working environment. Therefore, these retirees might perceive escape from this negative context as a relief, thus reporting higher satisfaction with early retirement.

In summary, our findings highlight that early retirement process and adjustment to early retirement are in some ways different across the groups of voluntarily and involuntarily retired. Nevertheless, our findings show that early retirees in general timed their retirement earlier as a consequence of higher organizational pressures. This suggests that regardless of the overall perception of the voluntariness of retirement transition, organizations that pressured early retirees to retire played a key role in early work role exit. It is also interesting to note that retirement timing, related to satisfaction with retirement in past research (e.g. Quick & Moen, 1998; Sharpley & Layton, 1998), did not predict satisfaction with early retirement in the present study.

Limitations and direction for future research

The sample size in the present study was relatively small for Structural Equation Modeling, although this limitation is not as critical for the whole sample analysis as it is for the multiple-group analysis. Nevertheless, the recommendation by Bentler and Chou (1987), who suggest at least five cases per model parameter, was met in both groups in the multiple-group analysis. Moreover, the size of the two groups was unequal, which might have

increased the probability of committing a Type II error (Kaplan, 1995). In addition, the selectivity of the sample might also be a limitation of the present study, given that the data was collected from individuals participating in two university programs for elderly people. This fact might be related to certain pre-retirement attitudes that could influence some of the studied outcomes. Although we used a heterogeneous sample in terms of occupation, age, level of education and occupational level, future studies should employ random samples in order to avoid this limitation. Furthermore, the research design in this study was cross-sectional, where data was collected from a retrospective point of view, similarly to the designs employed in some previous studies about retirement and retirement adjustment (e.g. Davis, 2003; Shultz et al., 1998). Such retrospective responses are susceptible to cognitive consistency bias, such as recall bias, and, thus, have to be interpreted with caution. Some variables of the present study, such as retirement intentions, could be especially affected by such design. It is possible that participants' perceptions of their former retirement intentions are reflecting the way people make sense of their retirement experiences in order to be consistent with their present life. However, this could also be informative about how aspects of individuals' past experience relate to their current adjustment. Nevertheless, Beehr and Nielson (1995), in their longitudinal study, report high correlations between retirees' retrospective reports and their prior reports, which provides some support for the validity of these responses. Moreover, some of the variables, such as satisfaction with early retirement and psychological well-being, were not based on retrospective accounts. Future research should employ longitudinal designs to examine the hypothesis of this study, following older workers from employment to retirement. Finally, the aim of this paper was to analyze the role of overall perception of voluntariness of retirement in early retirement process and its impact on subsequent adjustment to this process. Future studies could also assess the reasons why the

transition to retirement was perceived as voluntary or obligatory and their impact on adjustment to retirement.

Our findings emphasize the need to address the early retirement process in order to understand adjustment to early retirement. On the basis of our findings, we can develop a model according to which adjustment to early retirement is influenced by early retirement intentions instead of retirement timing. Moreover, self-role expectations and group role expectations (informal role set) generate early retirement intentions, and also impact satisfaction with early retirement, whereas organizational expectations influence only the actual retirement timing (retirement age). Finally, our findings outline that early retirement transition and adjustment to early retirement are, to some extent, experienced differently by those who were forced to retire early compared to those who made this transition on a voluntary basis. In this line, our findings highlight that older workers who are being forced by their organizations to retire should consider this option in order to avoid a negative working environment. Future research could look at whether involuntary early retired individuals experience a positive/constructive satisfaction with early retirement or are possibly only experiencing some sort of resigned satisfaction. Along these lines, despite its limitations, our research makes a meaningful contribution to the understanding of adjustment to early retirement.

References

- Adams, G. A., Prescher, J., Beehr, T. A., & Lepisto, L. (2002). Applying work-role attachment theory to retirement decision making. *International Journal of Aging and Human Development*, 54, 125-137.
- Allen, V. L., & Wilder, D. A. (1977). Social comparisons, self-evaluation, and conformity to the group. In J. M. Suls & R. L. Miller (Eds.), *Social comparison processes: Theoretical and empirical perspectives* (pp. 187-208). Washington: Hemisphere.

- Ashforth, B. (2001). *Role transitions in organizational life: An identity based perspective*. Mahwah, NJ: Erlbaum.
- Beehr, T. A., & Nielson, N. L. (1995). Descriptions of job characteristics and retirement activities during the transition to retirement. *Journal of Organizational Behavior, 16*, 681-690.
- Bentler, P. M., & Chou, C. (1987). Practical issues in structural modeling. *Sociological Methods and Research, 16*, 78–117.
- Büssing, A., Bissels, T., Fuchs, V., & Perrar, K. M. (1999). A dynamic model of work satisfaction: Qualitative approaches. *Human Relations, 52*, 999-1028.
- Davis, M. A. (2003). Factors related to bridge employment participation among private sector early retirees. *Journal of Vocational Behavior, 63*, 55-71.
- Dorfman, L. T. (1989). Retirement preparation and retirement satisfaction in the rural elderly. *The Journal of Applied Gerontology, 8*, 432-450.
- Ebaugh, H. R. F. (1988). *Becoming an ex: The process of role exit*. Chicago: University of Chicago Press.
- Elder, G. H. (1995). The life course paradigm: Social change and individual development. In P. Moen, G. H. Elder, & K. Luscher (Eds.), *Examining lives in contexts: Perspectives on the ecology of human development* (pp. 101–139). Washington, DC: American Psychological Association.
- Elder, G. H., & Johnson, M. K. (2003). The life course and aging: Challenges, lessons, and new directions. In R. A. Settersten Jr. (Ed.), *Invitation to the life course: Toward new understandings of later life* (pp. 49–81). Amityville, NY: Baywood.
- Elovainio, M., Forma, P., Kivimäki, M., Sinervo, T., Sutinen, R., & Laine, M. (2005). Job demands and job control as correlates of early retirement thought in Finnish social and health care employees. *Work & Stress, 19*, 84-92.

- Epitropaki, O., & Martin, R. (2005). From ideal to real: A longitudinal study of the role of implicit leadership theories on leader–member exchanges and employee outcomes. *Journal of Applied Psychology, 90*, 659-676.
- Eurostat. (2008). Population and social conditions. Retrieved November 13, 2008, from <http://europa.eu.int/comm/eurostat/>.
- Everingham, C., Warner-Smith, P. W., & Byles, J. (2007). Transforming retirement: Re-thinking models of retirement to accommodate the experiences of women. *Women's Studies International Forum, 30*, 512–522.
- Feldman, D. (1994). The decision to retire early: a review and conceptualization. *Academy of Management Review, 19*, 285-311.
- Fronstin, P. (1999). Retirement patterns and employee benefits: Do benefits matter? *The Gerontologist, 39*, 37-47.
- George, L. K. (1993). Sociological perspectives on life transitions. *Annual Review of Sociology, 19*, 353–373.
- Goldberg, D. (1979). *Manual of the General Health Questionnaire*. London: NFER- Nelson.
- Graen, G. B., & Scandura, T. (1987). Toward a psychology of dyadic organizing. *Research in Organizational Behavior, 9*, 175-208.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis (5th ed.)*. Englewood Cliffs, NJ: Prentice Hall.
- Hardy, M.A., & Quadagno, J. (1995). Satisfaction with early retirement: Making choices in the auto industry. *Journals of Gerontology: Series B: Psychological Sciences and Social Sciences, 50B*, S217-S228.
- Hardy, M. A., & Hazelrigg, L. (1999). A multilevel model of early retirement decisions among autoworkers in plants with different features. *Research on Aging, 21*, 275-303.

- Henkens, K. (2000). Supervisors' attitudes about early retirement of subordinates. *Journal of Applied Social Psychology, 30*, 833-852.
- Henkens, K., & Tazelaar, F. (1997). Explaining retirement decisions of civil servants in the Netherlands. *Research on Aging, 19*, 139-173.
- Herzog, R., House, J., & Morgan, J. (1991). Relation of work and retirement to health and well-being in older age. *Psychology and Aging, 6*, 202-211.
- Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterization model misspecification. *Psychological Methods, 3*, 424-453.
- Isaksson, K., & Johansson, G. (2000). Adaptation to continued work and early retirement following downsizing: Long-term effects and gender differences. *Journal of Occupational and Organizational Psychology, 73*, 241-256.
- Jöreskog K. G., & Sörbom, D. (1999). *LISREL 8.3 User's Reference Guide*. Chicago: Scientific Software Inc.
- Kaplan, D. (1995). Statistical power in structural equation modeling. In R. H. Hoyle (Ed.), *Structural equation modeling: concepts, issues, and applications* (pp. 100-117). London: Sage.
- Karpansalo M., Manninen P., Kauhanen J., Lakka T. A., & Salonen J. T. (2004). Perceived health as a predictor of early retirement. *Scandinavian Journal of Work Environment and Health, 30*, 287-292.
- Kelley, H. H. (1952). The two functions of reference groups. In G. E. Swanson, T. M. Newcomb, & E. L. Hartley (Eds.), *Readings in social psychology* (pp. 410-414). New York: Holt.
- Kim, S., & Feldman, D. C. (1998). Healthy, wealthy, or wise: Predicting actual acceptances of early retirement incentives at three points in time. *Personnel Psychology, 51*, 623-642.

- Kim, J. E., & Moen, P. (2002). Retirement transitions, gender, and psychological well-being: A life-course, ecological model. *Journal of Gerontology: Psychological Sciences, 57B*, P212–P222.
- Lin, T. C., & Hsieh, A. T. (2001). Impact of job stress on early retirement intention. *International Journal of Stress Management, 8*, 243-247.
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equations modeling in psychological research. *Annual Review of Psychology, 51*, 201-226.
- Neal, M. & Griffin, M. A. (2006). A model of self-held work roles and role transitions. *Human Performance, 19*, 23-41.
- Palmore, E., Fillenbaum, G., & George, L. (1984). Consequences of retirement. *Journal of Gerontology, 39*, 109-116.
- Peiró, J. M., & Meliá, J. L. (2003). Formal and Informal Interpersonal Power in Organisations: Testing a Bifactorial Model of Power in Role-set. *Applied Psychology: An International Review, 52*, 14-35.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J-Y., & Podsakoff, N. P. (2003). Common method bias in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879-903.
- Potočnik, K., Tordera, N., & Peiró, J. M. (2009). The role of human resource practices and group norms in the retirement process. *European Psychologist, 14*, 193-206.
- Quick, H. E., & Moen, P. (1998). Gender, Employment, and Retirement Quality: A Life Course Approach to the Differential Experiences of Men and Women. *Journal of Occupational Health Psychology, 3*, 44-64.
- Remery, C., Henkens, K., Schippers, J., & Ekamper, P. (2003). Managing an aging workforce and a tight labor market: views held by Dutch employers. *Population Research and Policy Review, 22*, 21-40.

- Riley, M. W., & Riley, J. W., Jr. (1994). Structural lag: Past and future. In M. W. Riley, R. L. Kahn, & A. Foner (Eds.), *Age and structural lag: The mismatch between people's lives and opportunities in work, family, and leisure* (pp. 15-36). New York Wiley.
- Ross, C. E., & Drentea, P. (1998). Consequences of retirement activities for distress and the sense of personal control. *Journal of Health and Social Behavior*, *39*, 317–334.
- Secombe, K., & Lee, G. R. (1986). Gender differences in retirement satisfaction and its antecedents. *Research on Aging*, *8*, 426-440.
- Sharpley, C. F., & Layton, R. (1998). Effects of age of retirement, reason for retirement, and pre-retirement training on psychological and physical health during retirement. *Australian Psychologist*, *33*, 119-124.
- Shultz, K., Morton, K. R., & Weckerle, J. R. (1998). The influence of push and pull factors on voluntary and involuntary early retirees' retirement decision and adjustment. *Journal of Vocational Behavior*, *53*, 45-57.
- Siegrist, J., Wahrendorf, M., Von dem Knesebeck, O., Jürges, H., & Börsch-Supan, A. (2006). Quality of work, well-being, and intended early retirement of older employees – baseline results from the SHARE study. *European Journal of Public Health*, *17*, 62-68.
- Standage, M., Duda, J. L., & Ntoumanis, N. (2005). A test of self-determination theory in school physical education. *British Journal of Educational Psychology*, *75*, 411-433.
- Sutinen, R., Kivimäki, M., Elovainio, M., & Forma, P. (2005). Associations between stress at work and attitudes towards retirement in hospital physicians. *Work & Stress*, *19*, 177-185.
- Szinovacz, M. E. (2003). Contexts and pathways: Retirement as institution, process, and experience. In G. A. Adams & T. A. Beehr (Eds.), *Retirement: Reasons, processes, and results* (pp. 6–52). New York: Springer.
- Taylor, M. A., & Shore, L. (1995). Predictors of Planned Retirement Age: An Application of Beehr's Model. *Journal of Applied Psychology*, *10*, 76-83.

- Terry, D. J., & Hogg, M. A. (1996). Group norms and the attitude-behavior relationship: a role for group identification. *Personality and Social Psychology Bulletin*, 22, 776-793.
- Terry, D. J., Hogg, M. A., & White, K. M. (1999). The theory of planned behaviour: Self-identity, social identity and group norms. *British Journal of Social Psychology*, 38, 225-244
- Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 15-40). Cambridge, UK: Cambridge University Press.
- Van Solinge, H., & Henkens, K. (2007). Involuntary retirement: The role of restrictive circumstances, timing, and social embeddedness. *Journal of Gerontology: Social Sciences*, 62B, S295-S303.
- Yeatts, D. L., Folts, W. E., & Knapp, J. (2000). Older workers' adaptation to a changing workplace: Employment issues for the 21st century. *Educational Gerontology*, 26, 566-582.
- Wang, M. (2007). Profiling Retirees in the Retirement Transition and Adjustment Process: Examining the Longitudinal Change Patterns of Retirees' Psychological Well-Being. *Journal of Applied Psychology*, 92, 455-474.
- Warr, P., Butcher, V., Robertson, I., & Callinan, M. (2004). Older people's well-being as a function of employment, retirement, environmental characteristics and role preference. *British Journal of Psychology*, 95, 297-324.

Table 1

Goodness of fit indices for Harman Test

Model	χ^2	df	p	χ^2/df	RMSEA		
					(90% CI)	SRMR	CFI
1 factor	1869.82	342	.00	5.47	.19 (.18-.19)	.20	.49
6 factors	457.75	327	.00	1.40	.05 (.04-.07)	.08	.92

Table 2

Means, Standard Deviations, and Pearson Correlations for the studied variables

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Health	2.03	1.55	-								
2. Income	2.34	0.86	-0.16*	-							
3. Ability to continue working	3.41	1.15	-0.16*	-0.08	(.69)						
4. Organizational pressures	2.81	1.41	-0.09	0.11	0.27**	(.79)					
5. Group norms	3.58	1.06	-0.03	0.25**	-0.24**	-0.15*	(.79)				
6. Early retirement intentions	2.84	1.55	-0.02	0.13+	-0.45**	-0.23**	0.48**	(.96)			
7. Retirement age	58.05	3.80	-0.06	-0.09	0.05	-0.26**	0.08	0.12	-		
8. Early retirement satisfaction	4.09	0.98	-0.01	0.15*	-0.37**	-0.14+	0.37**	0.47**	0.02	(.92)	
9. Psychological well-being	2.76	0.50	-0.05	0.04	-0.13+	-0.18*	0.18*	0.10	0.16*	0.28**	(.88)

Note. Alpha reliabilities appear in the parenthesis along the diagonal. + $p < .1$. * $p < .05$. ** $p < .01$.

Table 3

Goodness of fit Tests and fit Indices for the Tested Models

		RMSEA					
		χ^2	<i>df</i>	<i>p</i>	(90% CI)	SRMR	CFI
1	Whole sample	10.03	6	.12	.07 (.00-.13)	.04	.97
2	Voluntarily early retired	9.57	6	.14	.08 (.00-.17)	.04	.96
3	Involuntarily early retired	5.5	6	.48	.00 (.00-.17)	.04	1.00
4	Multiple-group model (fully constrained)	42.66	36	.21	.05 (.00-.18)	.13	.76
5	Multiple-group model (the least restrictive)	5.91	16	.99	.00 (.00-.00)	.05	.95
6	Final multiple-group model (2 parameters released)	26.95	34	.81	.00 (.00-.06)	.07	.90

Figure captions

Figure 1. Conceptual model

Figure 2. Standardized parameters for the conceptual model. * $p < .05$. ** $p < .01$.

Figure 1

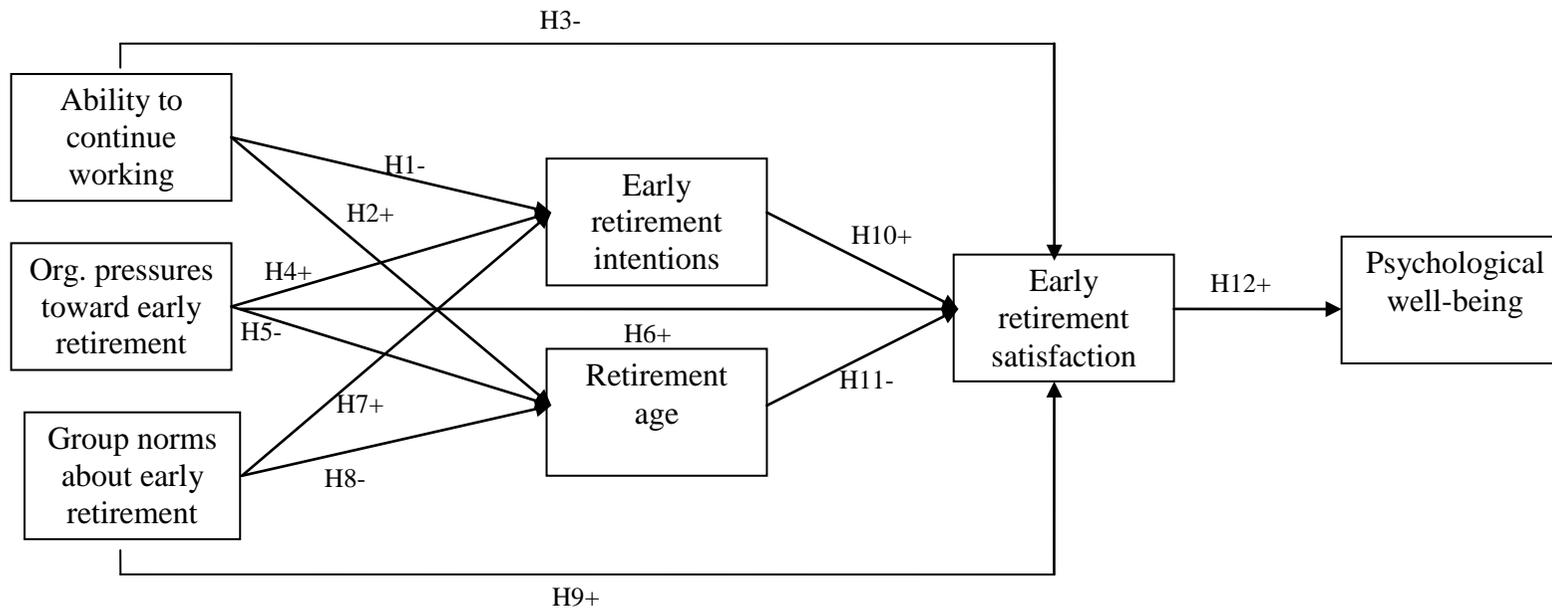


Figure 2

