How do retirement dynamics influence mental well-being in later life? A 10-year panel study
by Dingemans E, Henkens K

This paper takes an innovative approach by applying fixed-effects analysis to investigate whether intra-individual changes in the work status in later life are associated with changes in mental well-being after retirement. The results show that bridge employment can function as a control maintenance strategy for involuntary retirees and prevent negative changes in self-efficacy and life satisfaction.

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Key terms: bridge employment; fixed-effect model; involuntary retirement; life satisfaction; mental health; mental well-being; older employee; older worker; panel study; retirement; self-efficacy; well-being

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How do retirement dynamics influence mental well-being in later life? A 10-year panel study

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Objectives Empirical studies have consistently shown the negative impact of involuntary retirement on mental well-being. However, few studies have thus far investigated the degree to which post-retirement work affects late-life outcomes. The present study improves our understanding of the impact of retirement on the self-efficacy and life satisfaction among older adults by focusing on the combined impact of retirement voluntariness and participation in post-retirement work.

Methods By using panel data on retirement behavior in the Netherlands, we estimated fixed effects and multi-level models to explain (intra-)individual changes in self-efficacy and life satisfaction over a 10-year period in which most participants made the transition to retirement.

Results The results indicate that involuntary retirement is associated with decreases in both self-efficacy and life satisfaction in later life. Whereas involuntary retirees who participate in bridge jobs show no changes in life satisfaction, those involuntary retirees without bridge jobs experience a decline in life satisfaction. In addition, we found enhanced levels of life satisfaction for voluntary retirees in bridge employment. The association with self-efficacy was less pronounced.

Conclusion These results suggest that the characteristics of the retirement process influence changes in mental well-being in later life. Specifically, bridge employment alleviates the negative consequences of involuntary retirement and even seems to enhance post-retirement well-being for voluntary retirees.

Key terms bridge employment; fixed-effect model; involuntary retirement; life satisfaction; mental health; older employee; older worker; self-efficacy.

The current research explores changes to the mental well-being of individuals that coincide with the transition from the career job to retirement, which for some older adults is a gradual process that includes a form of post-career employment before they fully retire. Given the increased diversity of retirement trajectories, it is important to develop a better understanding of how retirees evaluate their post-retirement well-being depending on their retirement context. Although older adults are increasingly encouraged to prolong their working lives (1), opportunities to remain employed may be limited and/or not under the volitional control of the individual worker. Indeed, approximately 20–30% of older adults perceive the departure from their career job to have been forced upon them, for instance due to organizational pressure or health-related problems (2, 3). However, career exit, whether forced or voluntary, does not necessarily mean permanent withdrawal from the work domain. Retirement increasingly contains post-retirement transitions in and out of the workforce, often referred to as “bridge employment” (4). Nonetheless, while the mental well-being of retirees has been examined in relation to retirement voluntariness (5, 6) and bridge employment (7), few studies have thus far focused on the combined impact of these retirement transition characteristics (8).

Empirical studies have consistently shown that involuntary retirement negatively influences late-life outcomes leading to difficulties adjusting to retirement and declining life satisfaction (9) as well as the adoption of
unhealthy lifestyles (10) including smoking and problematic drinking behavior (11). Although an abrupt and unanticipated nature of involuntary career exit is often argued to complicate the successful transition to retirement, some studies have concluded that the lack of a sense of personal control over the retirement decision is specifically responsible for these negative changes in late-life outcomes (12, 13). Such a lack of personal control over the retirement transition may lower one’s self-efficacy, defined as an individual’s belief in their ability to reach desired goals and overcome specific problems in life (14, 15), which may eventually lead to feelings of sadness and depression in retirement (16–18). Therefore, gaining additional insights into changes in self-efficacy conditional on the retirement context, and investigating how they may subsequently influence satisfaction in later life are important research avenues. In this research, we hypothesize that compared with non-retirement and voluntary retirement, involuntary retirement is associated with decreases in self-efficacy and life satisfaction (Hypothesis 1).

Some older adults start to participate in bridge employment after either voluntary or involuntary career exit. In the scientific literature, bridge employment is often defined as paid work among those who receive a pension income (19). It provides older workers with the opportunity to adapt gradually to a life without work and this has been shown to affect post-retirement mental health positively (20). Additionally, bridge employees may benefit from their jobs in the form of gaining work-related rewards and a better work–life balance (21). Based on these assumptions, we hypothesize bridge employment to be beneficial for well-being in late life (Hypothesis 2).

Further, post-retirement work is argued to be especially beneficial for involuntary retirees. Involuntary withdrawal from the workforce may motivate retirees to regain a sense of personal control in the work domain (22), thereby trying to prevent negative changes in self-efficacy and life satisfaction after retirement. Therefore, we suggest that negative consequences of the involuntary retirement transition could be mitigated by control maintenance strategies. One such strategy for retirees is to engage in bridge employment (23, 24). We, thus, hypothesize that engagement in bridge employment alleviates the negative consequences of involuntary retirement on mental well-being outcomes (Hypothesis 3). We will also explore the degree to which the relationship between retirement and life satisfaction can be explained by changes in self-efficacy. This is done in order to disentangle whether changes in life satisfaction relate to retirement beyond the potential changes in perceived control over one’s life.

Most previous research that examined the relationship between retirement and mental well-being has limitations as it was carried out in the absence of a non-retired control group (12, 13), and most studies focused exclusively on general measures of well-being (7). First, the absence of a non-retired control group may raise concerns about the occurrence of self-selection bias; changes in the mental well-being may be age-related, which may determine the entrance into retirement. Second, the dependent variable is often limited to individuals’ general evaluation of life. While it is often assumed that the individual’s ability to control the retirement transition is important for late life well-being (23), we know of no studies that have investigated the impact of retirement and bridge employment on self-efficacy. Moreover, many studies have compared older adults’ well-being before and after retirement, but we are not aware of studies which have explicitly detailed the dynamics of change. Hence, the present 10-year panel study is designed to examine the (intra-)individual changes in the mental well-being of voluntary and involuntary retirees conditional on their engagement in bridge employment by focusing on the specific aspects of self-efficacy and life satisfaction (18).

**Methods**

**Study population**

This study is based on data derived from the Work and Retirement Panel study carried out by the Netherlands Interdisciplinary Demographic Institute (NIDI). The first wave of research was conducted in 2001 (T1). Older adults aged ≥50 years who were employed in three large Dutch multinationals and a sample of Dutch government employees were asked about their work situations and plans for retirement. In total, 2403 of the 3899 individuals originally contacted completed the survey (response rate: 62%). A follow-up survey conducted in 2006–2007 (T2) asked participants about changes to their employment status. Of the surviving and traceable wave 1 participants (N=2240), 1678 individuals responded (response rate: 75%). Among T2 participants, a third wave of data collection in 2011 (T3) yielded information on 1276 participants (response rate: 76%). The analytical sample used herein consists of those respondents who participated in ≥2 waves of the study and for whom information on well-being and the retirement characteristics was available; we have information at two time points (T1 and T2) for 426 individuals and at three time points (T1, T2 and T3) for 1189 individuals (N_{T1}=1615).

**Measurements**

**Outcome variables.** Self-efficacy was measured in each wave by using a shortened version of the General Self-Efficacy Scale (GSES-2) as presented by the Longi-
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tudinal Aging Study Amsterdam (LASA) project (14, 25), with the following items: “If I absolutely want something, it usually goes wrong”; “If I make plans, I am convinced I will succeed in executing them”; “If I get the impression that something is complicated, I don’t start on it”; “I doubt myself”; and “I have difficulty solving the problems I face in life”. Likert-scaled responses ranged from 1 (totally disagree) to 5 (totally agree). The items were rescaled such that a high score corresponded to high levels of self-efficacy. The mean score for these items was calculated in order to construct the scales (Cronbach’s alpha per wave: 0.64, 0.66, and 0.71, respectively).

Life satisfaction was measured by using three items that were drawn from the Satisfaction with Life Scale (26): “The conditions in my life are excellent”; “So far, I have gotten the important things I want in life”; and “In most ways, my life is close to my ideal”. The 5-point Likert-scaled responses were rescaled to range from 1 (totally disagree) to 5 (totally agree). For each wave, a scale was constructed by calculating the mean score of the three items (Cronbach’s alpha per wave: 0.71, 0.74, and 0.73, respectively).

Primary explanatory variables. Retirement voluntariness and engagement in bridge employment were the explanatory factors of interest in this study. By design, all participants were working in their career jobs in wave 1. In waves 2 and 3, participants were asked to specify whether they had taken retirement between survey waves to exit their career job. Subsequently, the retirees in the sample were asked whether the retirement from their career jobs was voluntary or involuntary (partly or completely involuntary). For both waves, two dummy variables were constructed to indicate voluntary and involuntary retirement. The reference category consisted of those older adults still working in their career jobs. The degree of involuntariness (partly or completely involuntary retirement) was found to have no incremental explanatory power. In addition, retirees were asked whether they were participating in paid work at the time of measurement (yes or no). Again, two dummy variables were constructed for waves 2 and 3 to indicate full retirement and engagement in bridge employment, treating career workers as the reference group.

Covariates. The covariates in this study comprised three time-varying predictors measured in all three waves, namely, partner status, health status, and financial resources, which were all found to be important correlates in the explanation of late life well-being (eg, 6, 27, 28). We asked participants whether they lived with a partner (1) or not (0). Health status was assessed by asking participants whether they had to deal with long-term health problems (1) or not (0). Personal monthly income was measured differently across waves. In the first wave, net salary information was provided by the company. In the second and third waves, participants were asked to indicate their personal monthly net income based on the following seven categories: (i) <1000, (ii) 1000–1500, (iii) 1500–2000, (iv) 2000–2500, (v) 2500–3000, (vi) 3000–3500, and (vii) ≥3500 euros. The information derived from wave 1 (converted from Dutch guilders to euros) was then divided into these seven categories. In addition, for each wave, the income midpoints were taken and corrected for inflation (29). Missing values on the covariates have been imputed by using multiple imputation with chained equations in Stata, version 12 (StataCorp LP, College Station, TX, USA).

Statistical analysis. We described the sample by presenting the means and standard deviations (SD) for the three waves separately. We then used fixed-effects analysis (30) in which we regressed intra-individual changes in self-efficacy and life satisfaction on changes in the retirement process and the other covariates over the 10-year observation period. This approach to panel data has been shown to eliminate stable individual effects so that consistent and unbiased coefficient estimates can be obtained (31). A consequence of the fixed-effects approach is that only time-varying predictor variables could be investigated. Time-invariant characteristics such as sex and educational attainment were excluded because they cannot explain intra-individual changes in mental well-being. Nevertheless, we tested (i) whether the relationship between retirement and well-being was different for men and women and (ii) for different pre-retirement work-related characteristics, such as the occupational level and sector (private versus public sector jobs).

Moreover, in the appendix (www.sjweh.fi/data-repository.php), we present multilevel or mixed-effects models in which also between-person variation is included in the estimation procedure (32). These models are generally more efficient compared to the fixed-effects approach, but coefficients might be biased due to endogeneity problems (31). The significant Hausman tests indeed provide evidence for the multilevel estimates being biased and, therefore, we based our main results on the outcomes of the fixed-effects models.

The estimation of fixed-effects and multilevel models requires the data to be in long-file format, which consists of N×t observations (N=4845). Due to attrition in the third wave of data (N=426), the final data set consists of 4419 observations. Sensitivity analyses revealed that attrition was related to neither our well-being variables nor the retirement transition characteristics. First, we investigated the main effects of involuntary retirement and bridge employment on self-efficacy and life satisfaction. Second, we investigated the combined impact of these retirement characteristics on the two dependent
variables. Finally, we explored the degree to which the relationship between retirement and life satisfaction could be explained by changes in self-efficacy.

Results

The sample used in the present study is described in table 1. Although the average level of self-efficacy and life satisfaction was relatively high, the levels declined significantly (P<0.05) throughout the study period. In addition, we found life satisfaction and self-efficacy to be moderately correlated, respectively per wave: \( r=0.35 \), \( r=0.36 \), \( r=0.40 \). At the start of the study in 2001, all participants were employed in their career jobs. During the five-year follow-up, 60% of the sample retired. Another five years later, 82% of respondents had retired. Of the group of retirees, 29% perceived their retirement to have been forced, while one in five engaged in bridge jobs.

Self-efficacy. The fixed-effects analyses that were used to investigate changes in self-efficacy are shown in table 2. In this table, model 1 provides the results for the association between retirement voluntariness and changes in self-efficacy (Hypothesis 1). We found that the involuntary transition from career job to retirement was related to a decline in self-efficacy compared with those who remain working in the career job, while those who perceived their retirement transition to have been voluntary experienced no significant changes in this regard. Model 2 presents the results of the effect of bridge employment on changes in self-efficacy (Hypothesis 2) and shows that whether older adults participate in bridge employment or not has no impact on their levels of self-efficacy. Model 3 presents the results for the combined effects of involuntary retirement and bridge employment on self-efficacy (Hypothesis 3). These results indicate that those who involuntarily transitioned from work to full retirement suffered a small negative change in self-efficacy. A similar effect size was found for involuntary retirees who engaged in bridge employment, but this was not found to be significant. Additionally, we did not find significant changes in self-efficacy for those who retired voluntarily.

The three models in table 2 also show that there is an age-related effect, implying that self-efficacy declines with increasing age. In additional analyses (data not shown, but on request available from the first author), we also tested whether the age effect and the relationship between the retirement characteristics and self-efficacy were different for men and women and for different pre-retirement work-related characteristics, such as the occupational level and sector. The results showed that voluntary full retirement was slightly less beneficial for women compared with men. Civil servants experienced small decreases in self-efficacy after voluntary retirement, while no such effects were found for multinational employees. No effects were found regarding the pre-retirement occupational level.

Life satisfaction. The results of the fixed-effects analyses that examined changes in life satisfaction are presented in table 3. In this table, model 1 presents the results for the association between retirement voluntariness and changes in life satisfaction (Hypothesis 1). We found that involuntary career exit was associated with a decline in life satisfaction, while voluntary career exit was found to be unrelated to changes in life satisfaction. Model 2 provides information on the effect of bridge employment on changes in life satisfaction (Hypothesis 2). The results show that, in general, changes from career work to bridge employment were not related to changes in life satisfaction. However, bridge employment was found to play a role in the relationship between retirement and well-being, as is shown in model 3 of table 3. The findings in model 3 confirmed the impact of involuntary full retirement on life satisfaction (Hypothesis 3); the transition from career job to involuntary full retirement without participation in bridge employment was associated with a decline in life satisfaction. By contrast, those who involuntarily transitioned from their careers to retirement and engaged in bridge jobs did not experience such a decline. In addition, we found that bridge employment after voluntary retirement was related to an increase in life satisfaction compared with older adults who remain active in their career jobs. In model 4, self-efficacy was added into the equation, and this seemed to have a positive impact, meaning that increases in self-efficacy were related to increases in life satisfaction. At the same time, although slightly reduced, the effects of the retirement characteristics on life satisfaction remained after controlling for changes in self-efficacy.

Furthermore, the models in table 3 provide evidence of a substantial positive effect of changes in partner status, while only small effects were found for the changes in health status and age. Again, we tested the interaction effects between age and the retirement transition characteristics on the one hand, and gender and pre-retirement work characteristics (occupational level and sector) on the other hand (data not shown, but on request available from the first author). As with self-efficacy, we found that voluntary full retirement was less beneficial for women compared with men. No significant effects were found for the pre-retirement work characteristics.

Generally, in terms of Cohen’s \( d \), we found relatively small but systematic effects for the relationship between retirement and our well-being measures, self-efficacy, and life satisfaction. Similar results were found in the multilevel models, which are presented in the appendix of this manuscript. Again, the results are most...
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pronounced for life satisfaction and show that bridge employment after involuntary retirement buffers the negative impact of involuntary retirement, while for voluntary retirees life satisfaction is enhanced when they participate in bridge jobs.

Discussion

This 10-year follow-up study investigated the impact of retirement voluntariness and participation in bridge employment on the levels of self-efficacy and life satisfaction among retirees compared with those who remained in their career jobs. The main aim of the paper was to investigate explicitly the interaction between the voluntariness of retirement and bridge employment in the explanation of changes in well-being. We found that, in general, involuntary retirement is related to small decreases in self-efficacy and life satisfaction in later life. When we zoomed in at the combined impact of the voluntariness of retirement and bridge employment participation, we found that bridge employment alleviates the negative consequences of an involuntary retirement transition on late life well-being. Particularly, involuntary full retirees experienced a drop in life satisfaction, whereas those involuntarily retired but in bridge jobs did not seem to experience such a decline.

Table 1. Descriptive statistics. Source: NIDI Work and Retirement Panel (2001–2011). [SD=standard deviation.]

|                      | Wave 1 (N=1615) | Wave 2 (N=1615) | Wave 3 (N=1189) |
|----------------------|-----------------|-----------------|-----------------|
|                      | Mean | SD  | N   | Mean | SD  | N   | Mean | SD  | N   |
| Life satisfaction    | 3.72 | 0.63| 1615| 3.65 | 0.62| 1615| 3.64 | 0.59| 1189|
| Self-efficacy        | 3.96 | 0.50| 1615| 3.81 | 0.49| 1615| 3.71 | 0.50| 1189|
| Age                  | 54.19| 2.86| 1615| 59.18| 2.86| 1615| 64.04| 2.81| 214 |
| Retirement decision  |      |     |     |      |     |     |      |     |     |
| Working in career job| 1.00 | 0   | 1615| 0.40 | 0   | 647 | 0.18 | 0.38| 214 |
| Voluntarily retired   | 0.00 | 0   | 0   | 0.43 | 0.50| 694 | 0.58 | 0.49| 690 |
| Involuntarily retired | 0.00 | 0   | 0   | 0.17 | 0.38| 274 | 0.24 | 0.43| 285 |
| Bridge employment     |      |     |     |      |     |     |      |     |     |
| Working in career job| 1.00 | 0   | 1615| 0.40 | 0   | 647 | 0.18 | 0.38| 214 |
| Bridge job            | 0.00 | 0   | 0   | 0.12 | 0.32| 190 | 0.14 | 0.34| 164 |
| Fully retired          | 0.00 | 0   | 0   | 0.48 | 0.50| 778 | 0.68 | 0.46| 811 |
| Living with a partner  | 0.87 | 0.34| 1393| 0.84 | 0.37| 1353| 0.84 | 0.37| 999 |
| Health problems        | 0.30 | 0.46| 486 | 0.28 | 0.45| 430 | 0.30 | 0.46| 352 |
| Personal monthly income (euros) * | 3098 | 1421| 2026| 1045 | 2038| 1002| 2038| 1002|

* In the fixed-effects models, income is divided by 1000.

Table 2. Estimates from the fixed effects models on standardized measure of self-efficacy *. Source: NIDI Work and Retirement Panel (2001–2011), N=4419, person-period file. [SE=standard error.]

|                      | Model 1 | Model 2 | Model 3 |
|----------------------|---------|---------|---------|
|                      | β       | P-value | SE      | β       | P-value | SE      | β       | P-value | SE      |
| Age                  | -0.23   | ≤ 0.01  | 0.00    | -0.23   | ≤ 0.01  | 0.00    | -0.23   | ≤ 0.01  | 0.00    |
| Retirement decision  |         |         |         |         |         |         |         |         |         |
| Working in career job (reference) |         |         |         |         |         |         |         |         |         |
| Voluntarily retired   | -0.04   | 0.04    |         |         |         |         |         |         |         |
| Involuntarily retired | -0.11   | ≤ 0.05  | 0.05    |         |         |         |         |         |         |
| Bridge employment     |         |         |         |         |         |         |         |         |         |
| Working in career job (reference) |         |         |         |         |         |         |         |         |         |
| Bridge job            | -0.03   | 0.06    |         |         |         |         |         |         |         |
| Fully retired          | -0.07   | 0.04    |         |         |         |         |         |         |         |
| Combined effects      |         |         |         |         |         |         |         |         |         |
| Working in career job (reference) |         |         |         |         |         |         |         |         |         |
| Voluntarily retired – fully retired | -0.05   | 0.04    |         |         |         |         |         |         |         |
| Voluntarily retired – bridge job | 0.01    | 0.06    |         |         |         |         |         |         |         |
| Involuntarily retired – fully retired | -0.12   | ≤ 0.05  | 0.06    |         |         |         |         |         |         |
| Involuntarily retired – bridge job | -0.11   | 0.09    |         |         |         |         |         |         |         |
| Living with a partner  | 0.07    | 0.07    |         | 0.07    | 0.07    |         | 0.07    | 0.07    |         |
| Health problems        | -0.05   | 0.04    |         | -0.06   | 0.04    |         | -0.05   | 0.04    |         |
| Personal monthly income | -0.05   | ≤ 0.05  | 0.02    | -0.05   | ≤ 0.05  | 0.05    | -0.05   | ≤ 0.05  | 0.02    |
| R² within              | 0.130   | 0.130   | 0.131   | 0.130   | 0.130   | 0.131   |

* We used an accelerated cohort design in which information on age and the study wave of observation are combined (Singer & Willett, 2003). Self-efficacy, as well as age and personal monthly income are standardized. The coefficients of the dummy variables can be interpreted as Cohen’s d effect sizes.
From a theoretical perspective, this latter finding aligns with suggestions in previous literature that involuntary retirees who decide to take bridge jobs might be able to regain control over their retirement processes and prevent negative changes in their level of life satisfaction (22). However, since changes in self-efficacy were accounted for in this study, it is likely that other mechanisms are also at play. For example, bridge employees might be able to regain work-related benefits such as social contact, structured use of time, connection with current developments, and additional financial rewards (33). Since bridge jobs are often part-time and less demanding (34), it may also be argued that bridge employees still benefit from these work-related rewards, while at the same time being able to invest more time in leisure pursuits and activities in the family domain. Hence, this simultaneous advantage may explain the finding that voluntary retirees in bridge jobs show enhanced levels of post-retirement life satisfaction compared with their pre-retirement situation. Bridge employment, thus, seems to be beneficial for the life satisfaction of both voluntary and involuntary retirees, while the association with self-efficacy is less pronounced. What the results regarding self-efficacy mainly revealed was an age-effect relating negative changes in self-efficacy to increasing age.

A strength of this study and its findings lies in its capability to combine information on the voluntariness of retirement transitions and participation in bridge employment over a 10-year observation period. This permitted us to refine our current understanding of intra-individual changes in late-life outcomes that are related to the retirement process. Retirement unfolds over a relatively prolonged period rather than as an abrupt one-off event; it is a gradual process that can have a variety of long-term consequences for the well-being of retirees depending on the retirement context. Also changes in partner status during the retirement process were found to be important for late life well-being; loss of a partner decreases life satisfaction, while starting to live with a partner enhances life satisfaction. In addition, the dataset used herein allowed us to investigate changes in the mental well-being of retirees in comparison to those respondents who remained in career jobs. Another important advancement of this study is the investigation of the relationship between retirement transition characteristics and self-efficacy, which did hardly get attention in previous literature, despite the fact that it is known that major life transitions such as retirement can changes various facets of late life well-being (13).

However, the present study contains a number of limitations that offer some suggestions for further research. First, the sample was not entirely representative of the Dutch labor market even though diverse organizational settings were included. Consequently, the findings may not be entirely generalizable to the Dutch population. In addition, generalizability of the findings to other countries may be limited because the investigated cohorts benefited from the relatively generous pension system available in the Netherlands (35). Additional research

### Table 3. Estimates from the fixed effects models on standardized measure of life satisfaction. Source: NIDI Work and Retirement Panel (2001–2011), N=4419, person-period file. [SD=standard error.]

|                      | Model 1 |          | Model 2 |          | Model 3 |          | Model 4 |          |
|----------------------|---------|----------|---------|----------|---------|----------|---------|----------|
|                      |  β      | P-value  | SE      |  β       | P-value  | SE       |  β       | P-value  | SE     |
| Age                  | -0.06   | ≤0.01    | 0.00    | -0.06    | ≤0.01    | 0.00     | -0.06    | ≤0.01    | 0.00   |
| Retirement decision: |         |          |         |          |         |          |         |          |        |
| Working in career job (reference) | | | | | | | | |
| Voluntarily retired  | 0.08    | 0.04     |         |          |         |          |         |          |        |
| Involuntarily retired| -0.15   | ≤0.05    | 0.06    |          |         |          |         |          |        |
| Bridge employment:   |         |          |         |          |         |          |         |          |        |
| Working in career job (reference) | | | | | | | | |
| Bridge job           | 0.11    | 0.06     |         |          |         |          |         |          |        |
| Fully retired        | -0.01   | 0.04     |         |          |         |          |         |          |        |
| Combined effects:    |         |          |         |          |         |          |         |          |        |
| Working in career job (reference) | | | | | | | | |
| Voluntarily retired – fully retired | 0.06 | 0.04 | 0.07 | 0.04 | | | | |
| Involuntarily retired – bridge job | 0.15 | ≤0.05 | 0.07 | 0.15 | ≤0.05 | 0.07 | | |
| Involuntarily retired – fully retired | -0.19 | ≤0.01 | 0.06 | -0.16 | ≤0.01 | 0.06 | | |
| Involuntarily retired – bridge job | 0.02 | 0.10 | 0.05 | 0.10 | | | | |
| Living with a partner | 0.41 | ≤0.01 | 0.07 | 0.42 | ≤0.01 | 0.07 | 0.41 | ≤0.01 | 0.07 |
| Health problems      |        |          |         | -0.12   | ≤0.01    | 0.04     | -0.11   | ≤0.01    | 0.04   |
| Personal monthly income | 0.01 | 0.02 | 0.01 | 0.02 | 0.01 | 0.02 | 0.02 | 0.02 | 0.02 |
| Self-efficacy        | 0.25    | ≤0.01    | 0.04    |          |         |          |         |          |        |
| R² within             | 0.035   | 0.031    | 0.036   | 0.038    | 0.036   | 0.038    | 0.038   | 0.038    |

* We used an accelerated cohort design in which information on age and the study wave of observation are combined (Singer & Willett, 2003). Life satisfaction, as well as age, personal monthly income, and self-efficacy are standardized. The coefficients of the dummy variables can be interpreted as Cohen’s d effect sizes.
should thus aim to consider other organizational areas and countries in order to overcome these shortcomings.

Second, although the study results provide important insights into the consequences of retirement dynamics for late life well-being, it should be noted that we used dichotomous measures to reflect rather heterogeneous groups of retirees. For example, the group of involuntary retirees is probably highly diverse. For instance regarding age at retirement or reasons for the involuntary exit, it may include those who suffered from health problems or experienced pressures from the organization to retire (2, 3). At the same time, the involuntary transition may be abrupt and unexpected for some retirees, whereas it may be an anticipated event for others. Also bridge employment is likely to be more diverse than the dichotomous measure reflects. Previous research has shown that some bridge employees work in career-related jobs, while others start in completely different jobs (20). In addition, the number of work hours and the labor conditions may be very diverse within the group of bridge employees (34). Future research could extend the current research by including more of this heterogeneity into the explanatory model.

A further limitation relates to the measurement of the dependent variables. First of all, we measured well-being with rather general measures. In addition, we used shortened scales to measure self-efficacy and satisfaction with life. Both these aspects could reduce the power of our analyses and may contribute to the relative small effect sizes we found in the current study. Further research could focus on more specific measures of late-life well-being, such as positive and negative affect, depression, and self-image (13). This would help achieve a more sophisticated understanding of the impact of retirement on late-life well-being.

Nonetheless, our study contributes to the research field on late-life well-being by showing that despite the relative stability in well-being throughout life (28), major life transitions, such as retirement, are also important for how older adults feel. The presented results suggest that bridge employment is a beneficial strategy for retirees. In particular, involuntary retirees could consider participation in bridge employment in order to prevent a decline in mental well-being following forced career withdrawal. Human resource management professionals and occupational psychologists who work with older adults should be made aware of the negative impact of involuntary retirement on mental well-being in later life and help involuntary retirees realize their preferences and expectations of the work domain.

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