The Impact of Psychological Preparation Information on Retirement Planning Intention and Retirement Conceptualization

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The research aim was to find out whether providing information on psychological preparation would produce changes in pre-retirees retirement planning intentions and advance retirement concepts. In the experiment, we divided the pre-retirees (N = 567, mean age of 54.91, SD = 3.55 years, working full-time) into four groups (with and without pre-test, with and without the information provided). There were no differences between the pre-test and post-test conditions. However, the results showed that participants acknowledged the need to prepare for retirement even before the intervention. The participants also rated themselves as psychologically prepared for retirement. The results also indicated which pre-retirees could benefit from psychological preparation: those who believe they would have a disadvantageous and unfavorable retirement transition. The next group is the ones who tend to conceptualize their retirement as an imposed disruption as they also perceive their psychological resources for a successful transition as insufficient.

Key words: retirement planning, retirement conceptualization, retirement psychological preparation, pre-retirees

Introduction

The transition from work to retirement involves behavioral and psychological distancing from employment, often accompanied by normative lifestyle changes and other social changes that may affect the well-being and health of newly retired persons (Osborne, 2012; Rodriguez-Monforte et al., 2020). Some research studies in the retirement literature bring to the fore arguments about adverse changes and losses of recent retirees (Pinquart & Schindler, 2007; Wang, 2007; Wang,
Henkens, & van Solinge, 2011; Seiferling & Michel, 2017). Lately, a growing number of research studies produced findings indicating positive retirement transition and outcomes (Hansson et al., 2018; Hansson et al., 2020; Henning, Lindwall, & Johansson, 2016; Lindwall et al., 2017; Sohier, van Ootegem, & Verhofstadt, 2021). Retirement research studies estimate that approximately one-third of the retired population has adjustment problems (La Rue, Haslam, & Steffens, 2022). The consent prevails that planning and preparation for retirement contribute to smoother retirement adjustment and more retirement satisfaction (Barbosa, Monteiro, & Murta, 2016; Hurtado & Topa, 2019; La Rue, Haslam, & Steffens, 2022; Topa et al., 2009). Our goal in this research study was to examine whether planning for retirement in pre-retirees can be encouraged by simple psychological intervention. Specifically, we were interested in promoting retirement consideration and planning for all pre-retirees in general by providing alerting information about the changes that retirement will bring to their lives and suggesting ways to deal with them.

Retirement Preparation through Psychological Interventions

Psychological preparation for retirement seeks to inform, instruct, coach, consult, and variously equip pre-retirees for adjusting to identity change and new relationships after leaving employment (Noone, Stephens, & Alpass, 2010; Schlossberg, 1981, 2011; Seidl et al., 2021). Since it is aimed at activating and strengthening individual resources, it engages several mental processes and activities, and as a result, can take various forms.

The preparatory psychological interventions for retirement aspire to increase well-being in the general population and thus can be qualified as positive psychological interventions (Bolier et al., 2013), as opposed to interventions aimed at reducing symptoms, problems, or disorders (Sin & Lyubomirsky, 2009). They belong to low-intensity methods focusing on prevention (Durgante et al., 2020), also allowing individuals to engage in self-help methods (van Agteren et al., 2021). Psychological retirement preparation belongs to wise psychological interventions, which Walton refers to as “psychological remedies for social and personal problems” (Walton, 2014; Walton & Wilson, 2018; Walton & Crum, Eds., 2020). Wise psychological interventions target a healthy general population, and they are ordinary, short, and frugal. Their main characteristic is that they are psychologically precise because they target those psychological processes that are most involved in the problem (this is what the adjective “wise” is supposed to express, see Walton, 2014). A common feature of all the above approaches is that they target all people, not just those requesting an intervention.

In their reviews, Leandro-França et al. (2016) and Rodríguez-Monforte et al. (2020) noted the lack of interventions for improving well-being across the retirement transition. The authors analyzed eleven and fifteen articles, respectively, most of which reported positive outcomes. However, a comparison of their impact and effectiveness was hindered by their high variation – in content, duration, target group, method of delivery, and professionals involved. The authors concluded, among other things, that the small number of studies, their heterogeneity, and their medium-low quality did not allow them to formulate valid conclusions and establish whether these interventions prevented frailty. Note that both reviews compared long-running and complex retirement preparation programs.

An example of a psychological intervention based on information provision is the theory of transition by Schlossberg and its applica-
tions in psychological counseling (Anderson, Goodman, & Schlossberg, 2012; Schlossberg, 1981; Schlossberg, 2011). Its primary goal is to help manage life transitions (including retirement). A transition is a phase of relational and personal changes, including attempts to cope with concerns, anxiety, and efforts to find new sources of support. Four factors influence a person's ability to cope with the changes: Situation, Self, Support, and Strategies. An individual can view a situation positively, negatively, or as being benign, depending on such issues as how the transition relates to one's social background, which aspects one can control, and how significant are the stresses associated with the necessary changes. Self includes personal and demographic characteristics and psychological resources as coping tools – ego development, outlook, commitment, and values. Social support includes intimate relationships, family, friends, co-workers, and communities. The fourth 'S' is Strategies used to control the meaning of the problem and manage stress to help the adjustment without being overwhelmed (Anderson, Goodman, & Schlossberg, 2012; Goodman & Pappas, 2000). Schlossberg's transition theory and models have found wide practical application in counseling adults in their life transitions, including retirement (Schlossberg, 2007, 2009, 2011; Schlossberg & Kay, 2010). The main principle is that the more aspects of coping factors a person identifies in advance, the better he or she is prepared to handle them in anticipatory socialization.

Providing Psychological Information as Retirement Preparation

Ensuring adequate information is the first step in all change management strategies (White, 1976). The provision of relevant information is often sufficient for the general population to apply the appropriate procedure and solve personal or and social problems (Walton, 2014; Walton & Wilson, 2018). As for preparing for retirement, most research studies concentrate on the effect of providing financial information on financial preparation for retirement (Dolls et al., 2018; Hoffmann & Plotkina, 2020; see Birkenmaier, Kim, & Maynard, 2021 for a review).

In contrast to financial information, providing psychologically saturated information explores more goals, not just cognitive ones (Walton, 2014). In the case of retirement preparation, the goal is to evoke new meanings ascribed to retirement and retirement transition. The information would draw attention to lifestyle changes fresh retirees will face and set appropriate attitudes and planning orientations for coping with the challenges. Therefore, the information provided should be minimally directive, allow self-reflection, and draw new conclusions about the importance of retirement preparation. Walton & Wilson (2018) refer to this strategy as prompting new meanings. This can be achieved by evoking questions (e.g., how might thinking about retirement be useful to you, your friends, or relatives?), altering situations (e.g., suggesting starting a business instead of a job), or providing new information (e.g., about how many of a person's friends or neighbors are already preparing for retirement).

To the best of our knowledge, the effects of providing psychological retirement information have not been examined yet. One recent exception is the study by Gettings and Anderson (2021), which examined the sources of information about retirement, the meanings ascribed to retirement, and associations between sources of retirement information and meaning. However, the participants in this study were young adults for whom preparing for retirement is not urgent.

We found a positive psychological intervention tool titled The Transition Guide by
Schlossberg and Kay (https://transitionguide.com). It is a self-scoring assessment that helps individuals manage the transition. The Transition Guide prompts individuals to engage in a self-help method to prepare themselves for retirement. It allows pre-retirees to focus their attention on the changes they will face and sets the intention to plan and cope with changes by stating their position in retirement preparedness. Compared to other tools, this tool is accessible, available online, and easy to understand. It provides immediate feedback, and the participant does not need any assistance. We chose and adjusted the Transition Guide in our research as tailored psychological information that can prompt pre-retirees to think about and plan for retirement (see more in the Method section). Providing information about retirement is an essential first step for pre-retirees. For this goal, we considered the Transition Guide a simple and quick tool for the general population of pre-retirees.

To learn more about the effect of psychological retirement preparation using a sample of the Slovak pre-retirees, we investigated the impact of the information on retirement planning intention and retirement concepts such as lifestyle expectations in retirement. We chose the four retirement lifestyle concepts by Hornstein and Wapner (1985). Retirement can be seen as a) an opportunity to make a new start, b) prolongation of a pre-retirement lifestyle, c) an unwelcome disruption, and d) a transition to old age. Several studies on retirement succeeded in using these concepts (Bačová & Halama, 2020; Gee & Baillie, 1999; Hanson & Wapner, 1994; Hopkins, Roster, & Wood, 2006). Recently, in newly retirees, research found a positive correlation between retirement satisfaction and the retirement concepts of New Beginning and Continuation, and a negative correlation between retirement satisfaction and the retirement concepts of Imposed Disruption and Transition to Old Age (Bačová, Halama, & Kordačová, 2022).

The Current Study

This research study is theoretically based on confirmed extended engagement for a predictable and expected retirement transition in pre-retirees (Ekerdt et al., 2001; Ekerdt, Kosloski, & Deviney, 2000). We also refer to the potential precariousness of the retirement transition in the lives of newly retired persons (Pinquart & Schindler, 2007; Wang, 2007; Wang, Henkens, & van Solinge, 2011; Seiferling & Michel, 2017). The study builds on the assumption that providing information is one of the effective forms of psychological intervention (Bolier et al., 2013; Sin & Lyubomirsky, 2009; van Agteren et al., 2021; Walton, 2014; Walton & Wilson, 2018).

Based on these theories and empirical findings, our research aims to verify whether information on psychological retirement preparation will increase pre-retirees’ intention to plan for retirement and advance their retirement concepts.

Our study contributes to the literature in several ways. In particular, we add to the debate on means to increase psychological preparation and interest in retirement planning (e.g., Chan, Chung, & Yeung, 2020). Doing so is essential, as prior work finds a positive association between retirees’ satisfaction and pre-retirement engagement (Hurtado & Topa, 2019). The need for psychological retirement preparation is largely confirmed and rightly emphasized (Adams & Rau, 2011). However, given the variability of the psychological resource to manage retirement in pre-retirees, little is known about what forms and durations of such training are sufficient, necessary, and justified (Rodríguez-Monforte et al., 2020). Notably, the role of information in stimulating retirement planning in the gen-
eral pre-retirees’ population is not yet sufficiently investigated (Leandro-França et al., 2016). We, therefore, strive to contribute to the answers to a broader question: Do all pre-retirees need psychological preparation for retirement if only some of them are experiencing difficulties in retirement transition? And specifically: Is providing information on psychological issues of retirement efficient enough to increase interest in one’s own retirement transition?

Therefore, in our study, we used a brief online intervention that provided information on the retirement transition, confronted the participants with the changes that retirement would bring to them, and diagnosed their psychological resources for managing these changes.

Hypotheses

We hypothesized that the information provided would significantly increase participants’ belief that they need to consider and plan retirement and raise their interest in these activities compared to the control groups (H1). Further, we hypothesized that the information provided would increase participants’ retirement conceptualizations positively associated with retirement satisfaction (New Beginning and Continuation) (H2). The information on retirement issues would decrease those retirement conceptualizations negatively associated with retirement satisfaction (Transition to Old Age and Imposed Disruption) compared to the control groups (H3).

Method

Sample

A Slovak research agency recruited the participants following three criteria: participants had to be over 50 years old, working full-time, and not retired. The participants responded through an online platform. All participants gave an informed consent before continuing with the survey. In the sample, we included only participants who passed the attention-check items and finished both rounds of the data collection. They received compensation from the research agency for participating in the research. The final sample consisted of 567 Slovak participants with a mean age of 54.91 (SD = 3.55) years, 249 were men (M = 54.83, SD = 3.70) and 318 were women (M = 54.98, SD = 3.43). Mean years until retirement age was 8.20 (SD = 4.08, Mdn = 8). The modal level of education was a high school degree (46.6%), followed by a university degree (33.0%), a vocational school (12.7%), a doctorate or higher degree (3.7%), Bachelor’s degree (3.4%), and elementary school (0.7%).

Procedure

We used Solomon’s four-group experimental design to assess the plausibility of pretest sensitization effects, that is, to control whether the mere act of taking a pre-test influenced scores on subsequent administrations of the post-test (Braver & Braver, 1988; see Figure 1).

The participants were randomly assigned to one of four groups: the intervention group with a pre-test (N = 152), the intervention group without a pre-test (N = 159), the control group with a pre-test (N = 125), and the control group without pre-test (N = 131). Following, all participants answered items about their gender, age, education, retirement proximity, satisfaction with their current job, anticipation of retirement adjustment, and subjective social status. Both pre-test groups completed the retirement consideration questionnaire, retirement planning checklist, and a questionnaire measuring four core retirement concepts. The same measures we used in the post-test. The intervention groups immediately continued
with the Intervention Questionnaire (see description below). The participants in the control groups answered 30 items of the short Big Five Inventory 2. We administrated the post-test five days after the pre-test. Our final sample featured only the participants who successfully filled out the post-test within 14 days after the pre-test.

**Measures**

The Retirement Consideration Questionnaire was inspired by Ekerdt and his colleagues, who analyzed in detail “workers’ extended engagement with the retirement before the event” (Ekerdt, Kosloski, & Devinney, 2000). Ekerdt et al. strived to measure the consideration given to retirement by questions that capture the awareness of the topic aiming to determine whether workers think about retirement and whether it comes up in conversation. “They are not items that ask about planning or preparation behavior in a specific sense, and they are attitudinally neutral. The objective here is to examine whether retirement is topical.” (Ekerdt, Kosloski, & Devinney, 2000, p. 6). The three retirement consideration questions from a nationally representative survey of persons aged 51 to 61 were as follows: How much have you thought about retirement? How much have you discussed retirement with your husband/wife/partner? How much have you discussed retirement with your friends or co-workers? We expanded these three questions, and our questionnaire consisted of eight items focused on thinking about retirement: “I’m thinking about what I’m going to do in retirement”, “Pensions are not a topic that needs to be addressed in advance”, “I try to avoid the idea of a retirement”, “Preparing for retirement in advance is unnecessary”, “One must work on oneself to prepare for a happy and peaceful retirement”, “People should prepare thoroughly for their retirement”, “Even before retirement, one should be familiar with every-
thing that one has to consider in retirement”,
“I am interested in how to retire in the best
possible way.” Participants endorsed their
agreement with these items using a 5-point
Likert scale ranging from Disagree to Agree.
The internal consistency of the questionnaire
was adequate: McDonald’s $\omega = 0.75$ for the
pre-test and 0.80 for the post-test.

Retirement planning was accessed via the
modified checklist for plans used by Wang,
Worsley, Cunningham, and Hunter (2014).
The authors constructed The Checklist for
Retirement Plans in two steps. They devel-
oped the individual items from people’s ac-
counts of their planning behaviors and then
produced categories of planning through la-
tent class analysis of their responses to those
items. Age, income, problem-solving skills, at-
titudes toward the future, and the presence
of long-term illness significantly predicted re-
tirement planning measured by this checklist
in their study. Several studies implemented
The Checklist (recently Seidl et al., 2021). We
adopted this checklist with all seven items on
future retirement planning. However, instead
of a dichotomous answer to the items (1 =
no, I do not plan, and 2 = yes, I plan) used
by Wang et al., we used the 5-point Likert
scale items ranging from Disagree to Agree.
All items shared the same stem: “I think that
before retiring person needs to plan...” and
continued with a short phrase: “where s/he
will live”, “how s/he will keep physically ac-
tive”, and “how s/he will keep mentally stim-
ulated”, “how much money s/he will need”,
“how to ensure his/her income is sufficient”,
“how s/he will meet people outside the fam-
ily”, “where s/he will go away from home,
or travel to.” The internal consistency of the
questionnaire was strong: McDonald’s $\omega =
0.80$ for the pre-test and 0.90 for the post-
test.

Participants’ ideas and beliefs about retire-
ment were captured by measuring the four
core concepts of retirement lifestyle proposed
by Hornstein and Wapner (1985) in their qual-
itative investigation. Inspired by the authors
who translated the qualitatively identified
concepts into a questionnaire (Gee & Baill-
lie, 1999; Hanson & Wapner, 1994; Hopkins,
Roster, & Wood, 2006), we accessed these
concepts using 12 items created solely for
the present study. Participants endorsed their
agreement with these items using a 5-point
Likert scale ranging from Disagree to Agree.
Transition to Old Age was measured by three
items: “I consider retirement to be the end
of all work and the enjoyment of a well-de-
served rest after a lifetime of effort”, “Retire-
ment provides an opportunity to end your
life peacefully”, and “Retired people should
no longer engage in new activities.” The last
item showed a very low correlation with oth-
er items, and the internal consistency was
poor ($\omega = 0.46/0.38$); therefore, it was omit-
ted. Without this item, internal consistency
became more satisfactory ($\omega = 0.59/0.46$).
New Beginning was accessed by three items:
“Retirement will finally be the time for me to
actively pursue my interests”, “I welcome re-
tirement as a whole new beginning in my life”,
and “The retirement transition will give me
every new opportunities to take an interest in things
I haven’t done before.” The internal consisten-
ty of the questionnaire was adequate ($\omega =
0.71/0.77$). The Continuation concept was ac-
cessed by three items: “My retirement life will
be very similar to my life now”, “Retirement
won’t make a big difference in my life” and
“I plan to live in retirement in the same way
as before retirement”. The internal consisten-
cy of the questionnaire was adequate ($\omega =
0.77/0.74$). The last concept, Imposed Disrup-
tion, was accessed by three items: “I perceive
retirement as an unwanted disruption to my
previous work”, “The thought of retiring wor-
ries and scares me”, and “It is difficult for me
to cope with the fact that I will have to retire
soon.” Internal consistency was strong (ω = 0.82/0.83).

**Intervention Description**

We used the *Transition Guide: A New Way to Think About and Manage Change*, a tool for self-scoring assessment developed by Schlossberg and Kay (2010), as an intervention that provides information on psychological preparation. The tool is available online (https://transitionguide.com).

The Transition Guide tool contains fifty-six items divided into four sections (Situation, Self, Supports, and Strategies; Anderson, Goodman, & Schlossberg, 2012). As a non-directive way of subtly suggesting the need for retirement preparation, we adapted, reformulated, and shortened the items in the Transition Guide so that the intervention focuses on retirement transition and consists of thirty items. We structured The Intervention Questionnaire into the following five scales: *Anticipated intensity of changes induced by retirement*, aimed at making participants aware of the intense changes retirement brings, whether good or bad for the participant (five items); *Perceived retirement transition* consisting of seven items indicating how participants see their retirement transition situation (favorable or unfavorable conditions); *Perceived personal strengths* (five items) reports on how participants view their strengths (positive qualities); *Social support from others* (six items) asks what help and support a participant expects from others; and *Problem-solving strategies* (seven items) shows the strategies the participants have used so far for changing things, negotiating terms, and handling difficulties.

The participants responded on 5-point Likert scales according to the content of the items. After each scale, the participants obtained immediate feedback – their scores for the anticipated intensity of retirement changes and the types of psychological resources they could use to cope with them. In the end, participants received an overall score on their psychological coping resources. The entire content of the Intervention Questionnaire is provided in the Appendix.

**Analyses**

The data were processed and analyzed using SPSS 22 and jamovi 2.2.5 software (The Jamovi Project, 2021). First, we used a two-way ANOVA to ascertain whether the post-test scores differ for the intervention and control groups, accounting for pre-test sensitization. After that, we focused on the change in the pre-test and post-test using a paired samples t-test, independently for the intervention and the control group. In addition, we analyzed the data from the Intervention Questionnaire. We also examined the connections between the post-test scores of dependent variables and the responses of the participants in the Intervention Questionnaire. Although the Shapiro-Wilk test of normality was significant for the dependent variables used, parametric tests were used considering the number of participants, continuous nature of variables, acceptable skewness and kurtosis (between -1 and 1), and visual inspection of Q-Q plots. Data are available at https://osf.io/qgfmp/?view_only=eca13f0b-9c2a4fe69c424d61ff279194

**Results**

**Hypothesis Testing**

Table 1 presents the mean and standard deviation for each dependent variable in the compared groups. The participants rated themselves highly in all dependent variables outside the concept of Imposed disruption (in
the upper half of the scale; the scales ranged from 1 to 5).

We conducted two-way ANOVA for each dependent variable to test our hypotheses (Table 2). The significance was compared to Holm-Bonferroni's corrected alpha for each test (Holm, 1979). The results showed that 1) the pre-test did not have a significant effect on post-test scores, 2) intervention did not have a significant effect on post-test scores, and 3) the interaction of pre-test and intervention was not significant for any of the dependent variables. Thus, regarding our hypotheses, we found that intervention did not have a significant effect on Retirement consideration, Retirement planning, New beginning, Continuation, Transition to old age, or Imposed disruption. Our results did not confirm any of the three hypotheses.

### Independent and Dependent Samples T-Tests for Groups with Pre-Test

Firstly, we accessed the pre-test difference between the control and intervention groups. The results showed no significant differences between these two groups, suggesting equal pre-test scores in both groups (Cohen's $d$ ranged from 0.00 to 0.14).

### Table 1 Means and standard deviations for the dependent variables in the post-tests

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Control group</th>
<th>Intervention group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without pre-test (N = 131)</td>
<td>With pre-test (N = 125)</td>
</tr>
<tr>
<td>Retirement consider</td>
<td>3.74 (0.68)</td>
<td>3.62 (0.68)</td>
</tr>
<tr>
<td>Retirement planning</td>
<td>4.22 (0.70)</td>
<td>4.08 (0.77)</td>
</tr>
<tr>
<td>Retirement concepts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition to old age</td>
<td>3.56 (1.10)</td>
<td>3.40 (1.00)</td>
</tr>
<tr>
<td>New Beginning</td>
<td>3.84 (0.82)</td>
<td>3.85 (0.85)</td>
</tr>
<tr>
<td>Continuation</td>
<td>3.30 (0.87)</td>
<td>3.42 (0.95)</td>
</tr>
<tr>
<td>Imposed disruption</td>
<td>2.27 (1.02)</td>
<td>2.17 (1.05)</td>
</tr>
</tbody>
</table>

**Note.** A higher mean value indicates higher retirement consideration, retirement planning, and a higher inclination towards retirement concepts (range 1 to 5).

### Table 2 Results of two-way ANOVA

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Without pre-test / with pre-test</th>
<th>Without intervention / with intervention</th>
<th>Interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>p</td>
<td>$\eta^2$</td>
</tr>
<tr>
<td>Retirement consider</td>
<td>2.19</td>
<td>0.140</td>
<td>0.004</td>
</tr>
<tr>
<td>Retirement planning</td>
<td>1.34</td>
<td>0.247</td>
<td>0.002</td>
</tr>
<tr>
<td>Transition to old age</td>
<td>0.34</td>
<td>0.558</td>
<td>0.001</td>
</tr>
<tr>
<td>New Beginning</td>
<td>0.00</td>
<td>0.963</td>
<td>&lt; 0.001</td>
</tr>
<tr>
<td>Continuation</td>
<td>1.78</td>
<td>0.183</td>
<td>0.003</td>
</tr>
<tr>
<td>Imposed disruption</td>
<td>0.16</td>
<td>0.687</td>
<td>&lt; 0.001</td>
</tr>
</tbody>
</table>

**Note.** F: df1 = 1, df2 = 563. Pre-test grouping variable: without pre-test / with a pre-test. Intervention grouping variable: without intervention / with intervention.
from 0.04 to 0.18). Secondly, we focused on the difference between pre-test and post-test scores separately in both groups. We found significantly higher post-test scores for the New Beginning and Continuation concepts in the Intervention group, but the difference was very small for the former and small for the latter. Although we expected an increase in these concepts, it should be noted that there was a slightly lower but still significant unexpected increase in the Continuation concept in the control group as well. After applying the Holm-Bonferroni method, only the difference in Continuation in the intervention group remains significant. Interestingly, we found a small significant decrease in Retirement Planning in the control group. Table 3 presents the results.

### Table 3: Pre-test and post-test differences in control and intervention groups

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Control group</th>
<th>Intervention group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test M (SD)</td>
<td>Post-test M (SD)</td>
</tr>
<tr>
<td>Retirement consideration</td>
<td>3.58 (0.67)</td>
<td>3.62 (0.68)</td>
</tr>
<tr>
<td>Retirement planning</td>
<td>4.21 (0.68)</td>
<td>4.08 (0.77)</td>
</tr>
<tr>
<td>Retirement concepts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition to old age</td>
<td>3.44 (1.01)</td>
<td>3.40 (1.00)</td>
</tr>
<tr>
<td>New Beginning</td>
<td>3.79 (0.82)</td>
<td>3.85 (0.85)</td>
</tr>
<tr>
<td>Continuation</td>
<td>3.24 (0.96)</td>
<td>3.42 (0.95)</td>
</tr>
<tr>
<td>Imposed disruption</td>
<td>2.23 (1.02)</td>
<td>2.17 (1.05)</td>
</tr>
</tbody>
</table>

*Note.* *p* < 0.05, **p** < 0.01, ***p*** < 0.001. Correlations significant at their respective Holm-Bonferroni corrected level of alpha are bolded. Negative values of Cohen’s *d* indicate a lower score in the posttest.

### Table 4: Descriptives of the scales of Intervention Questionnaire in the intervention groups and difference between intervention groups without and with pre-test

<table>
<thead>
<tr>
<th>Intervention scores</th>
<th>Intervention – without pre-test (N = 159)</th>
<th>Intervention – with pre-test (N = 152)</th>
<th>Cohen’s <em>d</em></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>The intensity of retirement changes</td>
<td>3.02</td>
<td>0.84</td>
<td>3.12</td>
</tr>
<tr>
<td>Perceived transition situation</td>
<td>3.50</td>
<td>0.63</td>
<td>3.53</td>
</tr>
<tr>
<td>Perceived personal strengths</td>
<td>4.04</td>
<td>0.60</td>
<td>3.98</td>
</tr>
<tr>
<td>Social support</td>
<td>3.82</td>
<td>0.71</td>
<td>3.78</td>
</tr>
<tr>
<td>Strategies used</td>
<td>3.47</td>
<td>0.51</td>
<td>3.37</td>
</tr>
</tbody>
</table>

*Note.* A higher mean value indicates a higher level of anticipated retirement changes and estimated psychological resources (ranging from 1 to 5).
personal strengths 0.66 (five items), Social support 0.79 (six items), Strategies used 0.65 (seven items; see all items in the Appendix).

Table 4 presents the descriptives of the scores in the Intervention Questionnaire for the groups without and with a pre-test. There were no differences between the intervention group without and with the pre-test (Cohen’s $d$ values were insignificant and ranged from 0.05 to 0.19). Both intervention groups self-assessed their psychological resources for retirement quite highly (in the upper level of the scale ranging from 1 to 5).

To gain insight into the relationship between assessing one’s psychological retirement resources and retirement concepts and retirement planning intention, we analyzed the relationships between the scales of the Intervention Questionnaire and the dependent variables.

Table 5 shows that the participants who were more inclined to the retirement concept Imposed disruption perceived the changes that retirement would bring them more intensely. They also perceived their retirement transition situation as unfavorable, their strengths as insufficient, their social support as weaker, and their troubleshooting strategies as less sufficient. On the other hand, pre-retirees inclined to look at retirement as a New beginning showed a more positive perception of their retirement transition situation. They positively perceived their strengths and valued their social support. The two retirement concepts – Transition to old age and Continuation showed similar patterns, except that the Continuation concept was associated with the perception of the lower level of changes brought about by retirement.

The other two dependent variables – Retirement consideration and Retirement planning – positively correlated with only one scale of the Intervention Questionnaire. The more participants perceived the intensity of changes brought about by retirement, the higher their scores in the variables Retirement consideration and Retirement planning (Table 5).

**Discussion**

The results did not confirm our hypotheses. Compared to the control groups, the intervention group did not increase their retirement consideration and planning beliefs ($H1$). Nor did the intervention group advance the
retirement concepts of New beginning and Continuation (H2) or decrease the retirement concepts of Transition to old age and Imposed disruption (H3). We found no difference between the pre-tests and post-tests that followed the application of the intervention used. The intervention content, form, and duration were not robust enough to “persuade” participants to think more about retirement planning, and the one-time intervention application was not sufficient to “nudge” participants into advancing their retirement concepts. The only partial result in the expected direction was that the group reported higher agreement with the concept of Continuation after the psychological retirement information.

Recent works have not observed significant effects of similar retirement interventions in financial preparation. Hoffmann and Plotkina (2020) investigated when financial information is more likely to improve retirement planning intentions and which consumers are more prone to act on their stated intentions. In a longitudinal study, they found that message format had a limited effect on message effectiveness, but the receipt of a message did improve consumers’ intention to plan for retirement. The willingness to learn more about retirement planning and retirement self-efficacy mediated this effect. The authors concluded that financial information was more likely to improve retirement planning intentions when consumers’ perceived financial security was low and when such message was congruent with consumers’ goal mindset. Their findings were in a similar vein as our results, when the effect of providing relevant information was not sufficient enough.

Although we have made every effort, including a sophisticated experimental design, there are some methodological limitations in the research arrangement in our research. The time between the pre-test, psychological information, and post-test was relatively long (up to 14 days), and this can limit the extent of capturing changes induced by the intervention.

We examined a sample of general pre-retirees with diverse backgrounds, and we randomly assigned them to experimental and control groups. It is a strength of the present research that it provides evidence of generalizability. However, the broad age range in the studied samples can be a limitation. As Ekerdt, Kosloski, and Devinney (2000) found the closer the retirement date, the more intense the thinking about retirement. The wide age range of our samples may also have contributed to the fact that the participants could have rejected thinking and planning for a distant retirement.

Another possible issue regarding the non-significant results is whether the performed tests had the satisfactory statistical power to detect meaningful changes. Sensitivity power analysis using G*Power software revealed that with a sample of 576 participants and alpha 0.05, we had 80% power to detect effects as small as \( f = 0.138 \) for ANOVA and, with groups of 311 (intervention) and 256 (control), \( d = 0.210 \) for the t-test. Both of these are small effects (Cohen, 1988), however, with some potential to be consequential for an explanation of events (Funder & Ozer, 2019). We believe that effect sizes lower that these are not meaningful in the context of the study as they would represent only minor changes in dependent variables with no practical relevance for the demonstration of variables. However, this conclusion means that low statistical power was not the problem in our study, and the identified effect sizes represent no intervention effect on retirement intentions and concepts.

The nature of the retirement transition also adds to this finding. Transition to retirement is ambivalent. Retirement entails both gains...
and losses synchronously. The pre-retiree attitudes to retirement transition may also be ambivalent. In previous studies, the participants reported retirement by apprehension and idealization (Genoe, Liechty, & Marston, 2018; Grødem & Kitterød, 2021). Also, the transition period can be relatively long and divided into sub-phases (Wanka, 2019). Different thoughts and emotions associated with retirement may be at the forefront of the future retirees’ minds in the sub-phases. Some participants (especially those just over the age of 50) may have been in a phase where retirement issues still felt very far away. Some pre-retirees see retirement as a welcome event. Not all of them feel the need for preparation, and not all are comfortable with the same type of preparation.

We can also find help explaining the results of our participants by analyzing their answers to the questionnaires on retirement consideration and retirement planning. All participants’ responses, both in the intervention and the control groups, in the pre-tests and post-tests, indicated that they acknowledged the need to plan and prepare for retirement (Table 1). It suggests that our participants may not have needed to be “persuaded” into doing some psychological preparation because they already seemed to be “convinced.”

The analysis of the data from the Intervention Questionnaire also provides us with a key to the results. The responses in the Intervention Questionnaire revealed that the participants thought they had been equipped for retirement psychologically (Table 4). The intervention might only reinforce the participants’ pre-existing beliefs about their psychological preparedness for retirement.

The fact that the studied population of pre-retirees in a post-communist country still partially lives in the retirement settings of the previous regime, where retirees were taken care of by the patronizing state, may also have contributed to the failure of the intervention. Retirement used to not mean too much change in life except that they received a pension instead of a salary. Although pension was much smaller, their needs also decreased in retirement. Perhaps the same or similar intervention would have different consequences in other socio-economic and cultural settings.

In addition to not finding a difference between pre-test and post-test, we found several noticeable links between retirement planning and concepts (dependent variables) and the self-assessment of psychological readiness in the Intervention Questionnaire (Table 5).

The participants who anticipated retirement would bring them more intense changes reported a greater need to think and plan for retirement. We also found relationships between retirement concepts and self-assessment of psychological resources for managing retirement. The participants with a higher retirement concept of New Beginning anticipated a favorable transition situation and self-estimated higher personal strengths. By contrast, the participants with a higher concept of Imposed Disruption increasingly anticipated an unfavorable transition, self-estimated lower psychological strengths, and a lower level of expected social support (Table 5).

Our non-significant findings regarding the impact of the intervention on psychological retirement preparation raise questions about whether all pre-retirees need a psychological guide well ahead of retirement age and under what conditions is psychological preparation for retirement justified. Retirement researchers have only recently become aware of the need for psychological retirement preparation. As far as we know, researchers have not yet explicitly asked questions about the necessary or selective need for psychological pre-retirement training.

At the same time, our results offer a key to which pre-retirees could benefit from psycho-
logical retirement preparation. They are the ones who believe they would have an adverse and unfavorable retirement transition. The next group are the ones who tend to conceptualize their retirement as an imposed disruption and who also perceived their psychological resources for a successful transition as insufficient.

In summary, the form of intervention we used did not increase participants’ retirement planning intention nor advance their retirement concepts. However, the Intervention Questionnaire revealed that pre- retiree participants reported thinking about and planning their retirement and perceived their psychological preparedness regardless of the provided intervention.

Several explanations of our non-significant results are possible, and several factors are highly likely to act here simultaneously. Therefore, it is difficult to determine the direction of future research. Some explanation for our insignificant results lies in the intervention used. Its content, form, and length of proceedings were not robust enough. Perhaps the participants knew the contents of the intervention, or it may not have been relevant enough for them for various reasons. A more detailed explanation outside the intervention itself of why the intervention was not effective includes several options as well. Future investigations should focus on determining more precisely which groups of pre-retirees could benefit from the information on the psychological aspects of retirement and why.

The main conclusion of our research study is that in utilizing psychological retirement preparation it is more effective to identify early the potential pre-retirement vulnerability, stimulate motivation in participants, and then create an intervention appropriate for the participant’s specific needs.

Acknowledgments

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References


Appendix

Intervention “Retirement Transition Guide”

Desirable or not, retirement induces changes in a person’s life. Adapting to these life changes takes time and energy.

What is key to a satisfactory retirement transition?

Although the transition to retirement differs for each person, the steps that have to be taken are quite similar.

Experts have developed three steps to facilitate this change. The procedure has been validated in many countries for many people of pre-retirement age.

Step 1: Familiarize yourself with the changes that await you

Think about how retirement will change your life. Regardless of whether the transition is positive or negative, it may stress you out. For example, you may experience feelings of loss when you leave work and your co-workers, or insecurity about your new status in the family.

Please indicate the extent to which you assume retirement will change your life, regardless of whether it is good or bad:

<table>
<thead>
<tr>
<th>Change</th>
<th>This change will affect my life:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Being referred to as a &quot;retiree&quot;, and not in terms of my job status will change my life ...</td>
<td>a great deal - - - - - very little</td>
</tr>
<tr>
<td>2 The fact that I will no longer go to work every day and perform my job will change my life ...</td>
<td>a great deal - - - - - very little</td>
</tr>
<tr>
<td>3 Not seeing my co-workers will change my life ...</td>
<td>a great deal - - - - - very little</td>
</tr>
<tr>
<td>4 Having a lot of free time will change my life ...</td>
<td>a great deal - - - - - very little</td>
</tr>
<tr>
<td>5 Being around in the family to perform family tasks that I have not done before will change my life ...</td>
<td>a great deal - - - - - very little</td>
</tr>
<tr>
<td>6 Having to change my daily habits will change my life ...</td>
<td>a great deal - - - - - very little</td>
</tr>
</tbody>
</table>

Your score: ...

The closer your score is to 5, the more the retirement transition will change your life. It is therefore more important that you undergo greater psychological preparation for retirement.

In all cases, the following questions will help you cope with the changes retirement brings.

Step 2: Evaluate the resources you have to cope with the changes in retirement

Each of us has four resources that we can use:
A. Situation (favorable or unfavorable conditions),
B. Your personality (your positive qualities),
C. Other people’s support,
D. Strategies for changing things, negotiating the terms, and handling the difficulties.

By answering the following questions, you will find out which resources you need to cope with your retirement.

You will find your result at the end of the questions.

(A) For the following items, indicate how you see your retirement transition situation:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Positive - - - - - - - - - Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>Retirement will be a … change for me</td>
<td>positive - - - - - - - - - negative</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>My retirement is an event that …</td>
<td>I am expecting - - - - I haven’t admitted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>My retirement will take place in … conditions</td>
<td>favorable to me - - unfavorable to me</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Besides retirement, I will have to tackle other personal problems (family, health, etc.) …</td>
<td>I do not agree - - - - - I agree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>I have dealt successfully with difficult life situations before …</td>
<td>I agree - - - - - I do not agree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I guess financially when I retire … things will be</td>
<td>pretty good - - - - - much worse</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I think my retirement will probably be …</td>
<td>my decision - - - forced on me</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Your score: …

The closer your score is to 35, the more favorable your retirement situation is likely to be. If you score less than 14, this is a weak area.

(B) For the following questions, indicate what you perceive your strengths to be:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Strength - - - - - - - - - Weak</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>My acquaintances say I’m …</td>
<td>an optimist - - - a pessimist</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>… to handle my retirement successfully</td>
<td>I have enough strength - - - I don’t have enough strength</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>The thought of retirement fills me with …</td>
<td>pleasure - - - - - horror</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>My good and bad personality aspects and my behavior …</td>
<td>I know myself well - - - I am often surprised by my reactions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>I make decisions more …</td>
<td>rationally - - - - - emotionally</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Your score: …

The closer your score is to 35, the more favorable your retirement situation is likely to be. If you score less than 14, this is a weak area.
Your score: ...
The closer your score is to 25, the higher your chances of adjusting well to the changes that retirement brings.
If your score is less than 10, this is a weak area.

(C) For the following questions, indicate what help and support you have from others:

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
<th>Score Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>My family supports me ...</td>
<td>completely - - - - - not as much as I would like</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>My close friends support me ...</td>
<td>completely - - - - - not as much as I would like</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>My co-workers support me ...</td>
<td>completely - - - - - not as much as I would like</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>I have at least one informal group with which I share common interests and activities ...</td>
<td>I agree - - - - - I do not agree</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>In general, I have everything I need for a happy retirement ...</td>
<td>I agree - - - - - I do not agree</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>Asking someone for help and support ...</td>
<td>I have no problem with that - - - is difficult for me</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>

Your score: ...
The closer your score is to 30, the more support you will be able to get when you retire.
If your score is less than 12, this area is weak.

(D) For the following questions, indicate the troubleshooting strategies you use:

<table>
<thead>
<tr>
<th>Question</th>
<th>Response Options</th>
<th>Score Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think I know when to act and when not to do something ...</td>
<td>almost always - - - - - not at all</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>I can change my mind ...</td>
<td>very easily - - - - - not always</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>When I’m going through serious life changes ...</td>
<td>I don’t find it hard - - - it’s very hard for me</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>I solve problems more ...</td>
<td>rationally, with a clear head - emotionally</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>In tackling various life difficulties ...</td>
<td>I try different approaches - - - I always do the same thing</td>
<td>5 4 3 2 1</td>
</tr>
<tr>
<td>I intentionally use relaxation techniques ...</td>
<td>regularly - - - - - - almost never</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>
Your score: ...

The closer your score is to 35, the more you will be able to use different strategies to achieve your goals, so you will have a better chance of adjusting to the changes that retirement brings.

If your score is less than 14, this area is weak.

Summary of your skill-set for successfully coparing with the life changes brought about by retirement

<table>
<thead>
<tr>
<th>Resource</th>
<th>Your score</th>
<th>Source level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Retirement situation (favorable or unfavorable circumstances)</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>2. Your personality (positive qualities)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Support from other people</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Strategies for tackling difficult life situations</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* High, medium, low

Step 3: Take responsibility for your retirement transition

We find it easier to get through each stage in life if we are aware of our assets and liabilities and develop an “action plan”. Even doing just a little bit of preparation for retirement can improve your sense of well-being and control over events.

Based on your resource summary, come up with some suggestions to improve some of the “weaker” areas in your retirement preparation.

Here are some inspiring ideas on how you can prepare for and handle your retirement.

• Strive to see the positive aspects and positive results.
• Find out what kind of experiences other people in your profession have had with retirement.
• Recognize that feelings of loss and grief are normal and last for a while.

Ideas for your action plan

Write down three steps you can take to improve a low or medium score in one of your resource areas:

1. ...
2. ...
3. ....