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RETIREMENT CONCEPTS PREDICT RETIREMENT ANXIETY AND EXPECTED RETIREMENT ADJUSTMENT IN SLOVAK PRE-RETIREES

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ABSTRACT

This study investigates four retirement concepts—imposed disruption, new start, continuation in activities, and life without change—that shape pre-retirees' expectations about retirement. Expectations regarding retirement play a critical role in the pre-retirement phase, influencing retirement decisions, adjustment, and overall satisfaction. The study examined how these concepts predict retirement concerns and anticipated adjustment, alongside sociodemographic factors (age, gender, education, marital status, socioeconomic status) and psychological variables (retirement attitudes, self-efficacy). Data were collected from a sample of 450 Slovak pre-retirees (aged 50–64) using a comprehensive questionnaire. Results indicated that retirement concepts significantly predicted retirement concerns and anticipated adjustment, with imposed disruption—characterized by the loss of valued activities—emerging as the strongest predictor. This concept was associated with heightened concerns and greater challenges in adapting to retirement, underscoring its importance in understanding retirement outcomes.

key words:
retirement concepts,
adjustment to retirement,
retirement concerns

INTRODUCTION

Society and individuals shape the image of retirement through the ways they understand and describe what retirement is, what it means to people of different ages, which processes and phenomena it is associated with, what is expected of retirees, and how they are expected to spend their lives in retirement. These future expectations are referred to as *life scenarios* in Whitbourne's (1985) model of adult adjustment, and they contribute to preparing for anticipated life events—in this case, retirement. These expectations form in the pre-retirement phase and, according to Atchley (1976), play a key role in shaping retirement adjustment. In general, individuals do not base their expectations on all available information. Nonetheless, expectations are considered reliable indicators of actual retirement outcomes (Bernheim, 1990) and influence how the retirement experience is likely to unfold (van Solinge & Henkens, 2008). Individuals approaching retirement tend to report more accurate expectations (Dwyer & Hu, 1998).

Despite the recognized importance of expectations and retirement concepts in the pre-retirement phase, previous research has focused more on various aspects of retirement adjustment and post-retirement satisfaction, such as retirement planning (Topa et al., 2009; Wang & Shultz, 2010), attitudes toward retirement (Chan et al., 2021;

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Valero & Topa, 2017), and retirement self-efficacy (Valero & Topa, 2015). Therefore, the present study focuses on retirement concepts and their role in anticipated retirement adjustment and retirement-related concerns among pre-retirees.

Defining Retirement Expectations

Individuals approaching retirement age are increasingly aware of the reality of this life stage. They begin to reflect on what retirement will mean to them personally. Their ideas and expectations about retirement are shaped by various sources, including the media, family members, and friends, and they use this input to form their own understanding of retirement.

The conceptualization of retirement implies an expectation of a particular lifestyle. As such, retirement concepts are also referred to as lifestyles, expectations, constructs, or metaphors (Anderson & Gettings, 2020; Grødem & Kitterød, 2021). These concepts encompass a range of retiree identities and anticipated activities, situated within the norms and standards of retirement living (Bačová & Havan, 2023). Retirement concepts influence how individuals experience retirement. They guide decisions and actions, shape lifestyle choices, and thereby play a role in retirement adaptation, well-being, and overall quality of life (Bačová, 2021).

Walker et al. (1981), along with Hornstein and Wapner (1985), were among the first to identify four distinct concepts of understanding and experiencing retirement. Our study builds on Hornstein and Wapner's conceptualization, with moderate modifications based on more recent studies (Bačová & Halama, 2020; Nuttman-Shwartz, 2004). This framework emphasizes that retirement is not a unidimensional process but can be experienced in multiple ways—as a transition to old age, a new beginning, a form of continuity, or an imposed disruption. We present this original classification to illustrate how the concept of retirement has evolved over time.

Before and during retirement, some individuals perceive retirement as a *transition to old age*—a phase of life characterized by reduced activity, rest, the pursuit of balance, and efforts to put one's life "in order". In contrast, the second concept views retirement as a *new beginning*, a period during which individuals can live according to their own needs, desires, and goals, free from the obligations and expectations of others. The *continuity* concept describes retirement as a seamless progression of life, where familiar patterns persist, and previous activities continue—albeit in a more satisfying and less demanding way. Finally, the concept of *imposed disruption* frames retirement as the loss of the work world, representing the disappearance of a valued activity for which no substitute exists. Individuals with this perspective experience retirement as a frustrating and forced interruption in their lives (Hornstein & Wapner, 1985).

These four concepts were later confirmed by Hanson and Wapner (1994) in a group of retirees, and by Gee and Baillie (1999) in a group of pre-retirees, who began referring to them as expectations held by individuals prior to retirement. The concepts were further validated by Bačová and Halama (2020) in a sample of retirees. In their work, Bačová and Halama refined and expanded the existing methodology for measuring retirement concepts, revealing that the four concepts proposed by Hornstein and Wapner are not entirely independent of one another. They also suggested that these concepts, developed nearly four decades ago, may no longer fully reflect contemporary understandings of retirement. Evolving societal views and experiences of retirement have shaped new narratives among individuals approaching the legal retirement age today. Notably, the meanings attributed to retirement can overlap within the same individual and may shift over time. Recent research by Bačová and Havan (2023) confirms that the conceptualizations of retirement among pre-retirees differ from those originally proposed. In their study of Slovak pre-retirees, the concept of retirement as a transition to old age was no longer present. This may reflect a shift in perceptions, as the current retirement age in Slovakia (64 years) is no longer widely associated with the need to rest but rather with the potential for active aging. These findings align with the four primary conceptualizations identified among Israeli pre-retirees (Nuttman-Shwartz, 2004), which describe retirement as a time of uncertainty and crisis, hope for change, continuity of the previous life course, and a developmental transition.

Retirement Concepts in the Transition to Retirement

Retirement concepts are present throughout all phases of the transition to retirement. In the pre-retirement stage, they take the form of ideas and expectations about what life in retirement might look like. Will retirement mark a new phase of life, or will little change? Are we looking forward to it, or do we have concerns? The answers to such questions can influence the timing of retirement and the subsequent adjustment process (Taylor et al., 2008). These concepts are closely related to retirement attitudes and pre-retirement planning (Hanson & Wapner, 1994), as well as to retirement anxiety (Nam & Han, 2020), which may emerge during this stage or later.

In the retirement decision stage, retirement concepts remain as expectations but can also act as push or pull factors that influence how individuals adjust to life beyond work. Like in the pre-retirement phase, the retirement decision itself is one of the strongest predictors of retirement outcomes such as adjustment and satisfaction (Calvo et al., 2009). In the adjustment phase, retirees begin to directly confront their expectations with the reality of retirement. According to Bačová and Halama (2020), retirement concepts influence retirees' satisfaction, happiness, and sense of meaning in life during this phase. Therefore, we assume these concepts also affect retirement adjustment.

In this study, we focus on pre-retirees, with the main objective of examining whether retirement concepts predict retirement concerns and expected adjustment more effectively than other psychological variables (such as attitudes toward retirement and retirement self-efficacy), while controlling for sociodemographic factors.

Current Study

People of pre-retirement age in Slovakia experience the transition to retirement in many ways similar to those in other countries. They look forward to rest, travel, new activities, and spending more time with family and hobbies. The Slovak pension system allows retirees to combine retirement with paid work. Although a "culture of the right to early retirement from the labor market" still dominates public perception in Slovakia (Bútorová et al., 2022, p. 80), it is gradually being complemented by a growing recognition of the "right to work for people of all ages". As a result, the number of retirees who continue working is steadily increasing.

At the same time, Slovak pre-retirees face concerns about financial insecurity, as many consider the pension insufficient. Older workers may feel marginalized in the labor market, and for some, retirement signifies the loss of an active life role. Furthermore, Slovakia's pension legislation has undergone frequent and politically driven changes in recent years, creating instability that undermines individuals' ability to plan their retirement confidently. This legislative volatility contributes to heightened concerns about financial and social security during retirement.

Internationally, a substantial body of research has addressed retirement preparation and planning. Growing evidence, including findings from meta-analyses (e.g., Topa et al., 2009; Wang et al., 2011), confirms that retirement planning influences adjustment and other retirement-related outcomes. Because retirement preparation spans several years, this phase offers a critical window for intervention. Well-designed interventions can help prevent negative retirement outcomes (Zaniboni et al., 2020) by either alleviating concerns or improving expected adjustment. To support such efforts, it is essential to identify the factors that influence both.

Retirement concerns refer to fears or worries about the upcoming transition to retirement. These concerns manifest as anxiety, discomfort, and uncertainty, which can influence pre-retirees' attitudes toward retirement and hinder their preparation (Oluseyi & Olufemi, 2015). They stem from individuals' expectations about the consequences of retirement (van Solinge & Henkens, 2008) and can span multiple domains. Economic concerns involve fears of reduced income or financial insecurity; physical concerns include worries about declining health or reduced physical activity; social concerns relate to the potential loss of social contacts; and psychological concerns encompass feelings of loneliness, depression, or diminished self-esteem (Hayslip et al., 1997; Nam & Han, 2020). Retirement concerns have been linked to a variety of factors, including sociodemographic characteristics (e.g., gender, age, socioeconomic status), work-related variables (e.g., employment status, job satisfaction), physical condition (e.g., activity level, presence of illness or pain), and psychological variables (e.g., self-efficacy, psychological well-being, retirement attitudes, and retirement concepts) (see e.g., Fretz et al., 1989; Nam & Han, 2020; Taylor et al., 1997). Anxiety about retirement may result in avoidant behaviors, such as neglecting retirement-related information, or in proactive behaviors aimed at reducing uncertainty, such as seeking out more information (Eberhardt et al., 2022). Gaining a clearer understanding of the psychological predictors of retirement anxiety can support the development of targeted interventions. In this study, we focused primarily on retirement concepts, alongside retirement self-efficacy and attitudes toward retirement.

Retirement self-efficacy refers to an individual's belief or confidence in their ability to cope with specific challenges that retirement may bring (Taylor & Cook, 1995). It is negatively associated with retirement anxiety—individuals with higher self-efficacy tend to experience less anxiety about retirement (Fretz et al., 1989; Taylor et al., 1997). The same holds true for *attitudes toward retirement*, which reflect a person's positive or negative evaluations of retirement or its various aspects (Adams & Feinauer, 2015). Positive attitudes are linked to lower levels of retirement anxiety (Fretz et al., 1989). *Retirement concepts* encompass a broader framework and, according to Nam and Han (2020), are also associated with retirement anxiety—particularly the concept of *imposed disruption*. Based on this, we hypothesize that *retirement concepts will predict retirement concerns and account for additional variance beyond that explained by retirement self-efficacy, attitudes toward retirement, and sociodemographic variables (age, gender, education, socioeconomic status, and marital status) in a sample of pre-retirees (H1).*

Retirement adjustment has long been a subject of interest to researchers (and not only to them), primarily because it offers insights into how to enhance the quality of life after retirement (Wang et al., 2011). It is a complex process that reflects a specific pattern of changes in a retiree's well-being over time (Gall et al., 1997). Van Solinge and Henkens (2008) defined it as "the process of getting used to the changed conditions of life in retirement" (p. 423). Numerous factors influence adjustment to retirement, as demonstrated in several meta-analyses (e.g., Barbosa et al., 2016; La Rue et al., 2022; Wang et al., 2011). Van Solinge (2013) emphasized the role of personal variables, such as retirement self-efficacy, self-esteem, and personality traits, and this perspective is supported by Taylor and Cook (1995), who argue that much of the variation in retirement adjustment can be attributed to psychological determinants.

Psychological determinants are among the most frequently studied variables positively influencing retirement adjustment (Barbosa et al., 2016). In our study, we focus on three such variables: attitudes toward retirement, retirement self-efficacy, and retirement concepts. *Attitudes toward retirement* have been linked to post-retirement satisfaction (Valero & Topa, 2017) and play a role in the adjustment process (Chan et al., 2020). *Retirement self-efficacy* also significantly contributes to successful adjustment (Zaniboni et al., 2020). As previously mentioned, Bačová and Halama (2020) found associations between *retirement concepts* and life satisfaction, happiness, and meaning in life—terms often used interchangeably with retirement adjustment. Based on this evidence, *Hypothesis 2* posits that *retirement concepts will predict expected adjustment and explain additional variance beyond retirement self-efficacy, attitudes toward retirement, and sociodemographic variables (age, gender, education, socioeconomic status, and marital status) in a sample of pre-retirees).*

METHOD

Sample

Data were collected in July 2022 through a research agency, which recruited participants based on three criteria: they had to be between 50 and 64 years old (the retirement age in Slovakia), employed full-time, and not retired. Based on an a priori power analysis using G*Power software—with a significance level of 0.05, statistical power of 0.90, and assuming correlations of 0.20 or higher as meaningfully interpretable—we determined that a minimum of 207 participants was required.

Participants completed the survey via an online platform and provided informed consent before participation. The agency compensated respondents for completing the questionnaires. To reduce careless responding, two attention-check items were included, and all participants in the final sample passed these checks. All procedures involving human participants were conducted in accordance with the ethical standards of the institutional and national research committees and with the 1964 Helsinki Declaration and its later amendments. The research project was approved by the ethics committee of the Centre of Social and Psychological Sciences, Slovak Academy of Sciences. All participants provided informed consent to participate in the study during the online session.

The final sample consisted of 450 Slovak pre-retirees, with a mean age of 54.9 years ($SD = 3.51$). Half of the sample ($N = 225$; 50%) were men. Most participants had completed either high school ($N = 214$; 47.6%) or college ($N = 181$; 40.2%). A total of 122 pre-retirees (27.1%) reported not having a spouse or partner.

Measures

Predictors

To measure *retirement concepts*, we used the shortened version of the Retirement Lifestyles Questionnaire (RLQ, Bačová & Havan, 2023) which consists of 15 items assessing four retirement concepts: New start (e.g., *"By retiring, I will free myself from the work constraints and start a new life."*), Continuation in activities (e.g., *"In retirement, I will do the same activities that I did before."*), Life without change (e.g., *"Retirement won't change much in my life."*), and Imposed disruption (e.g., *"It will be difficult for me to find meaningful things to do in retirement."*). In this version, the original concept of *Transition to old age* was removed, and the previously defined *Continuation* factor (as described in Bačová & Halama, 2020) was split into two separate dimensions. Participants rated the items on a 7-point Likert scale

(1 = strongly agree, 7 = strongly disagree). The internal consistency (Cronbach's α) for the four subscales ranged from .70 to .82. The four-factor model showed acceptable fit in confirmatory factor analysis (Bačová & Havan, 2023): CFI = .935, TLI = = .319, RMSEA = .068 [CI: .075, .093], and SRMR = .077.

Attitudes toward retirement were measured using the *Attitudes toward Gains and Losses in Retirement* scale (Anson et al., 1989). The scale consists of 20 items divided into three subscales: Gains in leaving work (e.g., *"It is good to retire because one is freed from everything bad about one's job."*), Gains in entering retirement (e.g., *"Retirement gives people a chance to reestablish relations with old friends and meet new people."*), and Losses in retirement (e.g., *"Retirement is part of a broader pattern of withdrawing from lots of other activities."*). Items were rated on a 7-point Likert scale ranging from 1 (strongly agree) to 7 (strongly disagree). Despite being developed several decades ago, the scale remains widely used and is noted for its clear structure and ease of translation (Rafalski et al., 2017). In our sample, the internal consistency (Cronbach's α) for the subscales ranged from .70 to .88.

We measured *retirement self-efficacy* using the *Brief Retirement Self-Efficacy Scale* (Valero & Topa, 2015), which consists of 11 items across three subscales: Finances (e.g., *"Have enough money for leisure activities."*), Activities (e.g., *"Preserve any current skills or knowledge that you want to maintain."*) and Health (e.g., *"Avoid excessive stress."*). Participants responded using a 5-point Likert scale ranging from 1 (*not very sure*) to 5 (*quite sure*). During the translation process, we excluded two items from the Finances subscale—"*Decide on the most appropriate pension benefit plan or insurance package for you.*" and "*Decide on a time for retirement that is best for you*"—as they were not applicable within the Slovak retirement system. For the purposes of our analysis, we treated the scale as unidimensional, with an internal consistency of α = .89 in our sample.

Control variables included age (measured in years), gender (male, female), education level (primary, secondary, tertiary – bachelor's degree, master's degree), and marital status. Marital status was derived from a question regarding the employment status of a spouse/partner, with *"I do not have a spouse/wife/husband"* as the final response option. Socioeconomic status was assessed using the *MacArthur Scale of Subjective Social Status* (adult version; Adler et al., 2000), which consists of a single item asking participants to indicate their perceived social rank relative to others in their society.

Dependent variables

Retirement concerns were measured using the *Retirement Anxiety Scale* (Hayslip et al., 1997), which assesses pre-retirees' concerns about potential challenges in retirement that may affect satisfaction during this life phase. The original scale contains 14 items rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The items address concerns such as lack of financial resources, health problems, emotional and mental well-being, loss of productivity, and loss of marital support. Due to the conceptual overlap between item 8 ("*I am concerned about my mental well-being after retiring.*") and item 9 ("*I am concerned about my emotional well-being after retiring.*"), we merged these into a single item: *"I am afraid I will be less comfortable after retirement."* As a result, the modified version of the scale included 13 items. The internal consistency of the modified scale was acceptable, with Cronbach's α = .86.

Anticipation of difficulties in retirement adjustment was assessed with a single item: *"I suppose I'll be adjusting to life in retirement…"* Responses were provided on a 4-point scale: *very hard*, *hard*, *easy*, *very easy*. This item was adapted from a three-item adjustment scale developed by van Solinge and Henkens (2008) and reflects expectations regarding the ease or difficulty of adapting to life in retirement during the transition period.

Statistical Analysis

We conducted two hierarchical linear regression analyses to test our hypotheses regarding whether retirement concepts predict (a) concerns about retirement and (b) expected adjustment to retirement. In both analyses, variables were entered in the same sequential blocks. In the first step, we included sociodemographic control variables: gender, age, education, socioeconomic status, and marital status. In the second step, psychological variables—attitudes toward retirement and retirement self-efficacy—were added. Finally, in the third step, we entered the retirement concepts.

The analyses and hypotheses were not preregistered. All analyses were conducted using *jamovi* software (2022). De-identified data are available on the Open Science Framework (OSF) at https://osf.io/4ntkv/?view_only=84e456cd43394a5a9b0c4b8caec6a2bd.

RESULTS

Descriptive statistics for all study variables are presented in Table 1. Table 2 displays the Pearson correlation coefficients among all variables included in the analyses.

Table 1 Descriptive statistics for all variables

	Mean (*SD*)	*Median* (*IQR*)	Minimum – Maximum	Meaning of a higher score
RC New start	5.09 (1.21)	5.20 (1.60)	1.00 – 7.00	higher preferring concept
RC Continuing activities	5.63 (1.11)	5.67 (1.67)	2.33 – 7.00	higher preferring concept
RC Life without Change	4.22 (1.56)	4.00 (2.50)	1.00 – 7.00	higher preferring concept
RC Imposed disruption	3.12 (1.33)	3.00 (1.80)	1.00 – 7.00	higher preferring concept
Gains in Entering Retirement	5.49 (0.99)	5.60 (1.35)	2.80 – 7.00	more gains
Losses in Retirement	3.12 (1.20)	3.00 (1.73)	1.00 – 6.91	more losses
Gains in Leaving Work	5.32 (1.24)	5.50 (1.75)	1.25 – 7.00	more gains
Retirement concerns	2.43 (0.74)	2.33 (1.01)	1.00 – 5.00	higher concerns
Retirement self-efficacy	3.26 (0.77)	3.22 (1.00)	1.00 – 5.00	higher self-efficacy
Adjustment to Retirement	2.58 (0.81)	3.00 (1.00)	1.00 – 4.00	better adjustment

Note. RC = retirement concepts; *SD* = standard deviation; *IQR* = interquartile range

Next, we tested our hypotheses using hierarchical multiple regression analyses. Prior to conducting the analyses, we assessed whether key assumptions of multiple regression were met, including multicollinearity, normality of residuals, and homoscedasticity. No violations were identified, and therefore standard ordinary least squares (OLS) regression was used.

Each regression model was built in three steps. In Step 1, sociodemographic control variables were entered: gender, age, education, socioeconomic status, and marital status. Step 2 included the psychological predictors: retirement self-efficacy and attitudes toward retirement. In Step 3, retirement concepts were added to evaluate their incremental predictive value. The detailed results for the model predicting retirement concerns are presented in Table 3.

Table 2 Correlations between variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. New start	-								
2. Continuing activities	**.23**	-							
3. Life without change	-.04	**.38**	-						
4. Imposed disruption	**-.33**	**-.24**	.02	-					
5. Gains in Entering Retirement	**.48**	**.33**	.00	**-.32**	-				
6. Losses in Retirement	**-.27**	**-.34**	**-.13**	**.61**	**-.33**	-			
7. Gains in Leaving work	**.37**	**.17**	*-.11*	**-.26**	**.59**	-.08	-		
8. Retirement concern	**-.33**	**-.29**	**-.18**	**.52**	**-.36**	**.62**	**-.22**	-	
9. Retirement self-efficacy	**.36**	**.32**	**.13**	**-.39**	**.38**	**-.48**	**.23**	**-.62**	-
10. Adjustment to retirement	**.27**	**.20**	**.13**	**-.43**	**.19**	**-.32**	**.18**	**-.33**	**.34**

Note. bold = $p < .01$, italic = $p < .05$

Table 3 Hierarchical linear regression analysis for dependent variable – retirement concerns

Predictors	Step 1		Step 2		Step 3	
Block 1	*ß*	95% CI	*ß*	95% CI	*ß*	95% CI
Gender	-0.12	[-0.30, 0.07]	-0.08	[-0.22, 0.05]	-0.08	[-0.22, 0.05]
Age	-0.06	[-0.15, 0.03]	-0.04	[-0.10, 0.02]	-0.04	[-0.10, 0.02]
Education	0.13*	[0.04, 0.23]	0.09***	[0.02, 0.16]	0.09*	[0.02, 0.15]
Socio-economic status	-0.19***	[-0.29, -0.10]	-0.00	[-0.07, 0.07]	0.00	[-0.07, 0.07]
Marital status	-0.15	[-0.36, 0.06]	-0.14	[-0.28, 0.01]	-0.10	[-0.25, 0.04]
Block 2						
Retirement self-efficacy			-0.41***	[-0.49, -0.33]	-0.39***	[-0.47, 0.31]
Gains in Entering Retirement			-0.01	[-0.09, 0.08]	-0.01	[-0.10, 0.08]
Losses in Retirement			0.41***	[0.34, 0.49]	0.33***	[0.23, 0.41]
Gains in Leaving work			-0.08	[-0.16, 0.00]	-0.06	[-0.13, 0.02]
Block 3						
New Start					-0.03	[-0.10, 0.05]
Continuing activities					0.05	[-0.03, 0.12]
Life without change					-0.11***	[-0.18, -0.04]
Imposed disruption					0.15***	[0.07, 0.23]
Adjusted R^2	0.042***		0.536***		0.553***	
Δ Adjusted R^2			0.494***		0.017***	

Note. * $p < .05$, *** $p < .01$

In the model predicting retirement concerns, the first block, consisting of sociodemographic variables, accounted for 4.2% of the variance in expected retirement concerns, $F(5, 444) = 4.93$, $p < .001$. Two variables emerged as significant predictors: education ($\beta = .13$, $t = 2.76$, $p = .006$) and socioeconomic status ($\beta = -.19$, $t = -3.95$, $p < .001$). Specifically, pre-retirees with higher levels of education and lower perceived socioeconomic status reported greater concerns about retirement. However, when psychological variables (Block 2) and retirement concepts (Block 3) were added to the model, only education remained a significant sociodemographic predictor.

The inclusion of psychological variables in the second block significantly improved the model's explanatory power, with the adjusted $R^2 = .536$, representing a substantial and significant increase over the first step ($\Delta R^2 = .494$). In this step, education remained significant ($\beta = .09$, $t = 2.63$, $p = .009$), along with two psychological variables: retirement self-efficacy ($\beta = -.41$, $t = -10.07$, $p < .001$) and perceived losses in retirement ($\beta = .41$, $t = 10.77$, $p < .001$). These results suggest that higher levels of education, greater anticipated losses in retirement, and lower retirement self-efficacy are associated with higher retirement concerns.

In the final block, which included retirement concepts alongside all previously entered variables, the model explained 55.3% of the variance in retirement concerns, representing a significant improvement over the second step ($\Delta R^2 = .017$). The strongest predictor remained retirement self-efficacy ($\beta = -.39$, $t = -9.51$, $p < .001$), followed by perceived losses in retirement ($\beta = .33$, $t = 7.24$, $p < .001$). Two retirement concepts also significantly contributed to the prediction: imposed disruption ($\beta = .15$, $t = 3.54$, $p < .001$) and life without change ($\beta = -.11$, $t = -2.98$, $p = .003$). Education ($\beta = .09$, $t = 2.55$, $p = .011$) remained a significant sociodemographic predictor. These findings support *Hypothesis 1,* indicating that retirement concepts significantly predict retirement concerns and explain additional variance beyond sociodemographic and psychological variables.

Table 4 presents the results of the hierarchical regression analysis predicting expected adjustment to retirement. In the first step, we entered sociodemographic variables that were hypothesized to relate to adjustment expectations. The overall model was significant, $F(5, 444) = 2.56$, $p = .027$, accounting for 1.7% of the variance in expected adjustment. Among the control variables, only socioeconomic status was a significant predictor ($\beta = .13$, $t = 2.59$, $p = .01$), indicating that individuals with higher perceived socioeconomic status expected an easier adjustment to retirement. However, this effect was no longer significant after including psychological variables in the second block and retirement concepts in the final model.

The addition of psychological variables in the second block significantly improved the model, $F(9, 440) = 10.32$, $p < .001$, explaining 15.7% of the variance ($\Delta R^2 = .140$). In this step, retirement self-efficacy ($\beta = .19$, $t = 3.52$, $p < .001$), gains in leaving work ($\beta = .16$, $t = 2.86$, $p = .005$), and losses in retirement ($\beta = -.23$, $t = -4.40$, $p < .001$) emerged as significant predictors. Losses in retirement had the strongest negative association with expected adjustment.

When retirement concepts were added in the third step of the model, several additional predictors emerged. The strongest predictor of expected adjustment was *imposed disruption* ($\beta = -.32$, $t = -5.77$, $p < .001$), followed by *retirement self-efficacy* ($\beta = .14$, $t = 2.59$, $p = .010$), *life without change* ($\beta = .13$, $t = 2.83$, $p = .005$), and *new start* ($\beta = .10$, $t = 2.09$, $p = .038$). The full model explained 23.2% of the variance in expected adjustment to retirement, $F(13, 436) = 11.41$, $p < .001$, with the inclusion of retirement concepts contributing a significant 7.5% increase in explained variance ($\Delta R^2 = .075$). These results support *Hypothesis 2*: retirement concepts significantly

Table 4 Hierarchical linear regression for dependent variable – retirement adjustment

Predictors	Step 1		Step 2		Step 3	
Block 1	*ß*	95% CI	*ß*	95% CI	*ß*	95% CI
Gender	0.05	[-0.13, 0.24]	0.02	[-0.17, 0.20]	0.00	[-0.17, 0.17]
Age	0.02	[-0.07, 0.11]	0.01	[-0.08, 0.09]	0.01	[-0.07, 0.09]
Education	0.04	[-0.06, 0.14]	0.07	[-0.02, 0.16]	0.06	[-0.02, 0.15]
Socio-economic status	0.13*	[0.03, 0.23]	0.04	[-0.06, 0.13]	0.03	[-0.06, 0.12]
Marital status	0.14	[-0.07, 0.35]	0.13	[-0.06, 0.33]	0.04	[-0.15, 0.23]
Block 2						
Retirement self-efficacy			0.19***	[0.09, 0.30]	0.14*	[0.03, 0.24]
Gains in Entering Retirement			-0.05	[-0.16, 0.07]	-0.07	[-0.19, 0.04]
Losses in Retirement			-0.23***	[-0.33, -0.13]	-0.03	[-0.15, 0.09]
Gains in Leaving work			0.16***	[0.05, 0.27]	0.09	[-0.02, 0.20]
Block 3						
New Start					0.10*	[0.01, 0.20]
Continuing activities					-0.01	[-0.10, 0.09]
Life without change					0.13***	[0.04, 0.22]
Imposed disruption					-0.32***	[-0.43, -0.21]
Adjusted R^2	0.017*		0.157***		0.232***	
Δ Adjusted R^2			0.14***		0.075***	

Note. * $p < .05$, *** $p < .01$

predict expectations of adjustment, above and beyond sociodemographic and psychological factors. Pre-retirees who view retirement as a *new start* or a *life without change*, and who do not perceive it as an *imposed disruption*, anticipate an easier adjustment. Moreover, the belief in one's ability to manage retirement-related challenges—reflected in higher retirement self-efficacy—remains a key positive predictor of anticipated adjustment.

DISCUSSION

The main goal of this article was to investigate the role of expectations regarding retirement concepts in relation to retirement concerns and expected retirement adjustment among Slovak pre-retirees, in the context of other sociodemographic and psychological predictors. We now discuss the results separately for concerns and adjustment.

Retirement Concepts as Predictors of retirement concerns

In Nam and Han's (2020) study, the concept of *imposed disruption* predicted psychological retirement anxiety, along with the concepts *new beginning* and *transition to old age*, but not *continuation*. The concept of *imposed disruption* also predicted physical, economic, and social retirement anxiety. In our study, the concepts *imposed disruption* (positively) and *life without change* (negatively) predicted concerns about retirement. These two concepts are associated with change, and their resources lie in activity. Whereas in *imposed disruption*, retirees lose their most highly valued activity (usually work), in the *life without change* concept, the role of activity remains stable in the overall pattern of life, although the style of engaging with activity may change (Hornstein & Wapner, 1985).

Alongside these concepts, *retirement self-efficacy* (the strongest predictor) also predicted concerns about retirement. This personal ability influences retirees' perceptions of retirement and mental health, and these perceptions are positively related to life satisfaction and negatively related to anxiety and depression (Fretz et al., 1989). Workers with higher levels of self-efficacy experience less anxiety about retirement (Taylor et al., 1997). The second strongest predictor was *losses in retirement*, representing a negative attitude toward retirement. According to Valero and Topa (2017), positive expectations are significant explanatory factors for the satisfaction that retirees feel, their anxiety about the retirement process, and their levels of depression after retirement. This is reflected in the impact of anticipated pre-retirement loss on future well-being. When pre-retirees expect to lose much in retirement (e.g., social contacts, a sense of usefulness, or daily activities) and hold negative expectations beforehand, these feelings may carry over into post-retirement concerns.

The finding that *education*—a sociodemographic variable—positively predicts retirement concerns was unexpected. A higher level of education is associated with greater retirement concern. This is surprising given that education is generally reported to be positively related to life satisfaction (Amaike, 2006), and is pragmatically linked to lower negative feelings associated with retirement. Retirees with higher education tend to have better access to social networks, leisure activities, social status, and financial resources. Accordingly, individuals with higher education are typically considered to have better opportunities for adjusting to changes in personal circumstances than those with lower levels of education (Wetzel et al., 2015). An explanation for this finding may be found in a study on a Czech sample of pre-retirees—relevant given the similarity of the Czech and Slovak social systems—conducted by Vidovičová (2013). In that study, college graduates had the highest proportion of respondents who evaluated retirement as an unpleasant experience. Although retrospective evaluations of retirement were similarly positive across all education groups, significantly more pre-retirees with primary or vocational education expected retirement to be joyful. One possible explanation is that individuals with lower levels of education, who are more likely to perform physically demanding work, may perceive retirement as a well-earned reward. In contrast, those with higher education may be more informed about financial matters and the pension system. Given the low level of pension income in Slovakia and long-standing economic uncertainty, they may feel more apprehensive about entering retirement. Their concerns may be related to expected income reductions or the loss of a work-related identity—issues that can, in part, be mitigated by combining employment with pension benefits, which is permitted in both Slovakia and the Czech Republic. Alternatively, retirement may simply be perceived as a signal of gradual social withdrawal, prompting more highly educated individuals to view this life stage with greater concern. These interpretations, however, warrant further empirical investigation.

Retirement Concepts as Predictors of Retirement Adjustment

The concept of *imposed disruption* emerged as the strongest (negative) predictor of expected adjustment to retirement. This retirement concept is associated with a perceived loss of meaningful activity and is typically characterized by feelings of frustration and depression. It is also closely related to perceptions of loss during retirement

(Bačová & Havan, 2023). Coping with the loss of resources is a central component of retirement adjustment, and individuals who are highly integrated in their work roles often find the transition to retirement more difficult (van Solinge & Henkens, 2008). Pre-retirees who score higher on the *imposed disruption* dimension tend to be more engaged in their work and exhibit more negative attitudes toward retirement (Gee & Baillie, 1999). If retirement is perceived as something externally imposed rather than chosen, and the individual is unprepared for this change, the adjustment process is likely to be more challenging. *Imposed disruption* can be understood as an involuntary exit from the workforce, and research shows that involuntary retirement negatively affects the adjustment process (van Solinge & Henkens, 2008).

The concept of *new start* represents retirement as the beginning of a new phase of life—one in which individuals can pursue projects or goals that they previously lacked time for. In this phase, it becomes easier to detach from work and focus on personal needs (Hornstein & Wapner, 1985). This concept reflects a positive evaluation of retirement (Bačová & Halama, 2020), and along with *imposed disruption*, it is associated with more radical life changes—though in opposite directions, one positive and the other negative. The *new start* concept is linked to retirement planning (Kočišová et al., 2023) and is associated with perceived gains in retirement, gains from leaving work, and even with losses in retirement (Bačová & Havan, 2023). When pre-retirees view retirement as the beginning of a new phase, they are less likely to feel a sense of loss and, consequently, may not need to engage in coping processes typically required during the retirement transition (as described by van Solinge & Henkens, 2008). Retirement adjustment is therefore likely to be easier for individuals who adopt this outlook—similar to those who anticipate *life without change*. The concept of *life without change* reflects a sense of lifestyle continuity, suggesting that retirement has little impact on daily life. This expectation appears to be neutral and is not directly associated with either *new start* or *imposed disruption*, but it is negatively associated with perceived losses in retirement (Bačová & Havan, 2023). If pre-retirees desire a life without major changes, their sense of loss during the retirement transition is likely to be lower, thus facilitating a smoother adjustment.

Alongside these concepts, *retirement self-efficacy* also emerged as a significant predictor of retirement adjustment—the second strongest in the model. Self-efficacy has been identified as a central factor in adjustment during the aging process (van Solinge & Henkens, 2008) and has demonstrated a notable influence on the retirement transition (Topa et al., 2009). When individuals form expectations about life in retirement, their perception of their own ability to manage the specific challenges and demands of this life stage can meaningfully predict how well they will adjust. As Bandura (2001) emphasized, a successful transition is contingent on one's belief in their capacity to achieve desired outcomes and navigate change effectively.

Implications

Overall, the present findings shed light on the importance of retirement concepts, particularly in relation to retirement concerns and adjustment. Regarding retirement concerns, these can be understood in part through the concept most closely associated with them. The concept of *imposed disruption* is characterized by the perceived loss of a highly valued activity—typically work—accompanied by feelings of depression, frustration, anger, or powerlessness (Hornstein & Wapner, 1985). When individuals perceive such a loss, they may focus on the past and develop concerns about the future. One way to cope with the loss of work is to identify a meaningful replacement activity, which can be explored either individually or in retirement coaching sessions. In contrast, the concept of *life without change* is not typically associated with increased concerns, as it implies continuity—nothing new or unexpected, and life simply continues. Retirement coaching for pre-retirees can effectively incorporate insights from these retirement concepts, with one key goal being the reduction of retirement-related concerns or anxiety.

In the case of retirement adjustment, we can adopt a resource-based dynamic perspective (Wang et al., 2011), which can help us understand the role of retirement concepts. According to the authors of this approach, retirement adjustment is a dynamic, longitudinal process that fluctuates as a "function of individual resources and changes in these resources" (p. 4). If pre-retirees expect that nothing will change after retirement and that they will maintain their previous lifestyles and activities (the *life without change* concept), their resources are likely to remain stable, making adjustment easier. If they view retirement as a *new start*, they are likely to believe they will find satisfactory resources in retirement, also leading to an easier adjustment. However, if pre-retirees feel that the transition to retirement means losing important resources—not only work but also work-related aspects such as social contact, self-esteem, and purpose—they may expect a more difficult adjustment. The flexibility of the resource-based dynamic framework helps to account for individual differences in the retirement adjustment process, and our findings suggest that this also applies to retirement concepts. Knowing a person's dominant concept prior to retirement may help predict their behavior during the transition. In general, expectations are shaped by current factors such as health, family or work situation, and economic status. If one or more of these factors change, expectations may shift accordingly (Dwyer & Hu, 1998). We propose the same holds true for retirement concepts: they are not fixed, and they can change not only due to external circumstances but also as people prepare for retirement. This is supported by Bačová et al. (2023), who found that psychological preparation is particularly beneficial for those who conceptualize retirement as *imposed disruption*, as they perceive their psychological resources to be insufficient for a successful transition. We recommend that future research verify these conclusions in longitudinal studies that follow changes in retirement concepts in relation to various factors.

Limitations

This study also has several limitations. First, the sample was non-random and collected online, which may have excluded older individuals who do not use the internet or lack computer literacy. Although digital skills are increasingly widespread, there remains a portion of the (especially older) population that is less inclined to use digital technology.

Another limitation lies in the measurement of retirement adjustment, which was assessed using only a single item on a 4-point Likert scale. Additionally, the study employed a cross-sectional design, which limits our ability to examine changes or stability in retirement concepts, adjustment to retirement, or retirement concerns over time. The findings therefore reflect current attitudes, which may be shaped by participants' present life circumstances. However, this potential for change can also be seen in a positive light, for example, as an opportunity to revise negative retirement concepts, improve retirement adjustment, or reduce concerns about retirement through targeted interventions.

CONCLUSION

Our study highlights the significant role that retirement concepts can play in predicting individuals' concerns about retirement and their anticipated adjustment to this new phase of life. These concepts encompass a broader range of factors than other psychological variables and help clarify how individuals transition into and live in retirement. Importantly, these reflections and expectations occur in the present, before the actual transition to retirement. Therefore, we should leverage the insights from this research and pursue further studies on how people envision their retirement, as these expectations directly influence their future experiences.

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