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Perceived Intellectual Aging: More Wellbeing and Personality than Age and Intellect

Janek Musek
University of Ljubljana, Slovenia

Intellectual aging refers to the decline of cognitive abilities due to the processes of aging. This study addresses the question, how perceived intellectual aging (PIA) depends on age, cognitive abilities level, personality and wellbeing. The results of the analyses being performed confirmed the hypothesis that PIA can be predicted by age and cognitive abilities level, yet, somewhat surprisingly, clearly show that dimensions of wellbeing and personality are far stronger predictors. Wellbeing dimensions accounted for about 23 percent of the variance in PIA, personality dimensions for 17 percent, cognitive abilities level for 7 percent and chronological age only about 1 percent. Thus, the results of the study clearly suggest that, in the perception of intellectual aging signs, the effects of chronological age and the level of cognitive abilities are strongly overshadowed by the personality and wellbeing characteristics.

Key words: age, cognitive aging, cognitive abilities, personality, wellbeing, intellectual aging

The decline of intellectual or cognitive functions has always been a sign of aging. Older people often complain about different aspects of cognitive or intellectual aging including forgetting, deficient concentration and general decline of mental acuity. In past decades, a great amount of research evidence has been accumulated concerning different factors influencing the processes of cognitive aging (see, for example, Alftberg, Johansson, & Ahlström, 2021; Amanzio et al., 2023; Chang et al., 2019; Dong, 2023; Murman, 2015; Ren et al., 2023; Salthouse, 1985; Salthouse, Atkinson, & Berish, 2003) and several attempts have been made to elaborate the relevant explanatory theoretical models were made (Lachman, 1983; McCabe et al., 2010; Salthouse, 2016, 2019, 2020; Sedek, Hess, & Touron, 2021). A relatively minor part of the research has been dedicated to the subjectively perceived effects of cognitive aging, denoted as a *perceived intellectual aging* (Lachman, 1983, 2020; Lachman & Jette, 2019). Thus, factors influencing the subjective per-

Correspondence concerning the article should be addressed to Janek Musek, Department of Psychology, University of Ljubljana, Aškerčeva 2, Slovenia. E-mail: janek.musek@guest.arnes.si

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ception and appraisal of personal intellectual aging have attracted more and more attention (Lachman, 2020; Lachman et al., 2009, 2010; Musek, 2012; Raldiris et al., 2021; Salthouse, 2019, 2020).

According to the research literature, a variety of medical and psychosocial variables may contribute to the perceived effects of cognitive aging (Salthouse, 2003, 2019, 2020). These variables include the speed of mental processing, memory, and executive functions on one side (Balota, Law, & Zevin, 2000; Caso & Cooper, 2022; Engle & Kane, 2004; Jacoby, Bishara, Hessels, & Toth, 2005; Logan, 2003), and subjectively attributed changes in intellectual functioning on the other side (Bologna, Ferrante, & Galli, 2021; Musek, 2012; Lachman, 2020). The question might be raised therefore, whether perceived cognitive aging could be explained more by the real decline of mental functions and objective (chronological) age or more by the subjective personal impressions based on non-cognitive personality characteristics (Mroczek & Spiro, 2020; Musek, 2012; Roberts & Mroczek, 2018, 2021; Roberts et al., 2020; Smith, 2021).

Thus, perceived characteristics of cognitive decline in older people may be attributed to different factors. In the first place, these characteristics can be the result of a genuine decline in intellectual or cognitive performance during the aging process. This decline encompasses a decrease in sensory abilities, slowing of cognitive processing speed, and other changes in cognitive functioning due to the molecular biological alterations in brain functioning that occur with age (Salthouse, 1985, 2003, 2012; Ebaid et al., 2017; Brown et al., 2019; Ebaid & Crewther, 2020). Yet, other psychological factors may contribute to the development of signs of intellectual decline (Musek, 2012; Smith, 2021). Personality dimensions such as neuroticism can be such a factor (Chatterjee, Lee, & Bano, 2021; Terraciano & Costa, 2022). Emotionally unstable (neuroticistic) people may experience false memories, lack of attention and other cognitive dysfunctions that can be mistakenly attributed to cognitive decline. On the other hand, some psychological factors can mask the signs of intellectual decline, making them harder to detect. People with high levels of well-being and life activity are likely to manifest symptoms of cognitive decline later than people with lower levels of well-being and life activity.

The present study attempts to address this question by testing different groups of variables for their contribution to perceived cognitive aging. Considering the research results, four possible major variables may impact perceived intellectual ageing: age, level of cognitive abilities, and non-cognitive variables including dimensions of personality and well-being. According to our hypotheses, it can be expected that perceived cognitive aging is influenced by chronological age, level of cognitive abilities, basic personality dimensions and dimensions of wellbeing. The cognitive variables include working memory, speed of cognitive processing, and executive functions (Baddeley, 1986; Fuster, 2002; Jacoby, Bishara, Hessels, & Toth, 2005; McCabe et al., 2010). The personality variables encompass five personality dimensions recognized as the Big Five, the personality dimensions in the frame of the Five Factor Model (Costa & McCrae, 1992; Digman, 1990, 1997; Goldberg, 1990; John, 1990; McCrae & Costa, 1987). They include extraversion, agreeableness, conscientiousness, neuroticism, and openness as well as their superordinate factors, the Big Two (DeYoung, Peterson, & Higgins, 2001; Digman, 1997) and the Big One or General Factor of Personality (GFP) (Just, 2011; Musek, 2007, 2017; Rushton, Bons, & Hur, 2008, Rushton & Irwing, 2008, 2009; Schermer & Vernon, 2010; van der Linden, Ni-

jenhuis, & Bakker, 2010; Vecchione, Alessandri, Barbaranelli, & Caprara, 2011; Veselka et al., 2009a,b). Finally, the dimensions of well-being subsume psychological wellbeing (Ryff, 1989; Ryff & Keyes, 1995) including autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance.

Method

Data, Participants, and Procedure

The data being analyzed in this study were collected from the MIDUS II (Midlife in the United States II) survey, conducted in 2004-2006 (Ryff & Davidson, 2011) and from the MIDUS II Cognitive Project (Ryff & Lachman, 2010, 2017). The original MIDUS II survey was performed on a large US national representative sample and the analyzed data were obtained from 4963 participants from both sexes (2316 males and 2647 females) in the age range from 28 to 84 years (M = 55.43 years, SD = 12.45). The MIDUS II data are available for free for research purposes and can be publicly accessed via WEB site of ICPSR (Inter-university Consortium for Political and Social Research) (ICPSR Web Site, 2011).

The MIDUS II Cognitive Project started as an extension of MIDUS II in 2008 (Ryff & Lachman, 2010, 2017). It includes a battery of cognitive abilities measured by the Brief Test of Adult Cognition by Telephone (BTACT). More information about the BTACT can be found in Lachman, Tun, Murphy, and Agrigoroaei (2009) or also at www.brandeis.edu/projects/lifespan. The BTACT comprises measures of speed and reaction time, which were administered by telephone to the MIDUS II participants (see also Table 1).

The detailed description of the methods being applied in the MIDUS II project is available in the relevant MIDUS II documents including the description of the sample, measuring instruments (MIDUS II scales with corresponding items), variables, and procedures (ICPSR Web Site, 2011; Ryff & Davidson, 2011). In this section, only the additional information necessary to understand the data analyses will be considered and presented.

Variables, Measures, and Research Design

The MIDUS II data were selected for the analyses in the present study for several reasons. First, the data were drawn from a large and highly representative sample contributing thus to the high degree of external validity and generalizability of the results. Yet the most important advantage of the MIDUS II data are the large-scale data for the variables, crucial for the purposes of this study: age, personality, cognitive abilities, and intellectual aging.

Perceived intellectual aging (PIA) is a central variable in our research design. In MIDUS II survey, it is measured by the following items (R signed items are reversely coded):

a. “If I forget my friend’s zip code, I’d be able to learn it again.” (R)

b. “It’s evitable that my intellectual functioning will decline as I get older.”

c. “I would have to ask a salesperson to figure out how much I’d save with a 20% discount.”

d. “The older I get the harder it is to think clearly.”

e. “As long as I exercise my mind I will always be on top of things.” (R)

f. “My mental acuity (sharpness) is bound to decline. “

g. “I can understand instructions only after someone explains them to me.”

h. “I don’t remember things as well as I used to.”

i. “There’s not much I can do to keep my memory from going downhill.”

Note that perceived intellectual aging (b1sintag) is measured in reverse order, meaning that higher scores represent lower level of intellectual aging. Therefore, in the analyses of the results, the coding of the perceived intellectual aging was rearranged so that higher scores represent also higher level of intellectual aging.

A more detailed insight into the variables included in the research model and the scales measuring these variables is provided in Table 1. Table 1 displays the names of the variables, their codes used in MIDUS II documentation and in this study, the names of the respective scales, the respective pages in the main MIDUS II documentation reference (Ryff & Lachman, 2010, 2017), and additional referential sources. All listed variables were put into the research model, which was designed as a correlational and multivariate study.

Thus, the research presented here was designed as a multivariate study of 19 variables entered into the starting research model. Besides intellectual aging (PIA) and the chronological age, 5 variables represent personality domain (Big Five: extraversion, agreeableness, conscientiousness, neuroticism, openness), 6 variables represent wellbeing dimensions (autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, self-acceptance), and 6 variables represent the spectrum of cognitive abilities (episodic verbal memory, working memory, verbal ability and speed, fluid intelligence, speed of information processing, memory retention versus forgetting).

Table 1 *Variables, variable codes, the scales, the pages in the documentation reference (Ryff et al., 2007; Ryff & Lachman, 2010) and respective source references*

Variable	**Code**	**Cronbach Alpha**	**Pages in Ryff et al., 2007***	**Source references (Rossi, 2001; Lachman, 1983)**
Age				
Age	b1page-m2		1 (Codebook)	
Personality				
Neuroticism	b1sneuro	.74	41-45 (Documentation Scales)	Rossi, 2001
Extraversion	b1sextra	.76	41-45 (Documentation Scales)	
Agreeableness	b1sagree	.80	41-45 (Documentation Scales)	
Openness to Experience	b1sopen	.77	41-45 (Documentation Scales)	
Conscientiousness	b1scons2	.68	41-45 (Documentation Scales)	

Table 1 continues

Table 1 continued

Variable	Code	Cronbach Alpha	Pages in Ryff et al., 2007*	Source references (Rossi, 2001; Lachman, 1983)
Intellectual Aging				
Perceived Intellectual Aging	b1sintag	.73	21-22	Lachman et al., 2009, 2010
Wellbeing dimensions				
Autonomy	b1spwba2	.71	28-32 (Documentation Scales)	Ryff, 1989; Ryff & Keyes, 1995
Environmental Mastery	b1spwbe2	.78	28-32 (Documentation Scales)	
Personal Growth	b1spwbg2	.75	28-32 (Documentation Scales)	
Positive Relations with Others	b1spwbr2	.78	28-32 (Documentation Scales)	
Purpose in Life	b1spwbu2	.70	28-32 (Documentation Scales)	
Self-Acceptance	b1spwbs2	.84	28-32 (Documentation Scales)	
Cognitive abilities				
Variable	**Code**		**Pages in Ryff& Lachman, 2010****	**Source references (Ryff & Lachman, 2010, 2017)**
Episodic Verbal Memory	B3TWLITU		4 (Documentation Scales)	
Working Memory	B3TDBS		4 (Documentation Scales)	
Verbal Ability & Speed	B3TCTFLU		4 (Documentation Scales)	
Fluid Intelligence	B3TNSTOT		5 (Documentation Scales)	

Table 1 continues

Table 1 continued

Variable	Code	Pages in Ryff& Lachman, 2010**	Source references (Ryff & Lachman, 2010, 2017)
Speed of Information Processing	B3TBKTOT	5 (Documentation Scales)	
Retention versus Forgetting	B3TWLDTU	6 (Documentation Scales)	

*Note. * Main documentation source for all scales included in MIDUS II. It represents a basic reference for the MIDUS-II data sets and provides essential information concerning scale construction and treatment of the scales.
Each scale is described in terms of scale construction, coding, missing data treatment, psychometric characteristics (especially reliability) and source articles.
** Main documentation source for all scales included in MIDUS II Cognitive Project. It represents a basic reference for the MIDUS-II Cognitive Project data sets and provides essential information concerning scale construction and treatment of the scales.
Each scale is described in terms of scale construction, coding, missing data treatment, psychometric characteristics (especially reliability) and source articles.

Data Analysis

In this study, data from MIDUS II were analyzed using the following methods, described in R programming language: correlational analyses, regression analyses, and SEM analyses. Finally, analyses were performed by R programming releases in 2021 (R Core Team (2021). In essence, the more recent R programs for the concerned analyses are the same.

For all analyses, the standard significance levels of .05 and .01 were considered when appropriate. Our SEM analyses (see Figure 1 with the appropriate text) yielded acceptable fit indices: RMSEA = 0.075, SRMR = 0.056, CFI = 0.902; TLI = 0.878.

Results and Discussion

The obtained data were analyzed by correlational, regression, and SEM analyses. Table 2 displays the means, standard deviations, skewness, kurtosis and correlations for all 19 variables in the research model. We should focus primarily on the correlations between PIA (b1sintag) and other variables, which represent hypothetical predictors in the research. As we can see, all these variables are significantly associated with the PIA. The correlations range from -.42 (personal growth b1spwbg2/) to .26 (neuroticism /b1sneuro/). It is noteworthy that the wellbeing and personality dimensions (from variables 9 to 19 in the table) exhibit larger correlations than age and variables of cognitive functioning (variables 2 to 8 in the table).

The relative contributions of wellbeing, personality, cognitive abilities, and age in predicting PIA have been tested by hierarchical regression analysis procedure conducted in four consecutive steps. In the first step, age was entered as a predictor (Model 1), then cognitive abilities were added in the next step (Model 2), and then the personality dimensions (Model 3), and finally, the wellbeing

Table 2 *Means, standard deviations, skewness, kurtosis, and correlations*

Variable	*M*	*SD*	sk	ku	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. b1sintag	3.05	0.96	-.14	2.78																		
2. B1PAGE_M2	55.48	12.11	2.44	2.21	.11**																	
3. B3TWLITU	6.84	2.24	.37	3.31	-.16**	-.30**																
4. B3TDBS	5.06	1.47	.25	2.72	-.16**	-.16**	.33**															
5. B3TCTFLU	19.14	6.08	.37	3.19	-.18**	-.29**	.27**	.20**														
6. B3TNSTOT	2.36	1.50	.13	1.96	-.23**	-.24**	.26**	.34**	.37**													
7. B3TBKTOT	38.00	11.14	.48	3.62	-.17**	-.42**	.26**	.29**	.40**	.45**												
8. B3TWLDTU	4.53	2.57	.61	3.48	-.14**	-.31**	.78**	.32**	.24**	.24**	.22**											
9. b1sextra	3.10	0.57	-.37	2.68	-.19**	.05**	.05**	.02	-.02	-.08**	-.04*	.03										
10. b1sagree	3.44	0.50	-.81	3.17	-.08**	.10**	.07**	.03	-.07**	-.12**	-.10**	.03	.50**									
11. b1scons2	3.40	0.45	-.71	3.26	-.27**	-.03	.10**	.06**	.02	.05**	.05**	.08**	.26**	.27**								
12. b1sneuro	2.07	0.62	.49	3.03	.26**	-.19**	.01	-.04*	.01	-.06**	.05**	.01	-.20**	-.12**	-.19**							
13. b1sopen	2.91	0.54	-.16	2.80	-.32**	-.01	.09**	.08**	.14**	.07**	.04*	.08**	.51**	.32**	.32**	-.22**						
14. b1spwba2	37.26	6.90	-.30	2.67	-.34**	.10**	-.00	.03	.01	.01	.00	-.03	.33**	.10**	.29**	-.34**	.41**					
15. b1spwbe2	38.39	7.31	-.56	2.88	-.36**	.17**	.01	.06**	-.01	.05**	.00	-.00	.40**	.20**	.40**	-.52**	.33**	.51**				
16. b1spwbg2	38.74	6.81	-.54	2.79	-.42**	-.06**	.14**	.10**	.12**	.11**	.08**	.12**	.45**	.29**	.38**	-.33**	.51**	.43**	.57**			
17. b1spwbr2	40.76	6.88	-.77	2.93	-.25**	.11**	.07**	.03*	-.02	-.00	-.05**	.05**	.50**	.48**	.31**	-.35**	.30**	.37**	.62**	.58**		
18. b1spwbu2	38.69	6.89	-.52	2.63	-.38**	-.05**	.12**	.07**	.10**	.10**	.08**	.10**	.37**	.23**	.41**	-.33**	.35**	.38**	.63**	.68**	.59**	
19. b1spwbs2	38.32	8.10	-.80	3.26	-.33**	.11**	.03	.04*	.02	.08**	.00	.01	.43**	.23**	.35**	-.46**	.37**	.51**	.76**	.64**	.65**	.69**

Note. *M* and *SD* are used to represent mean and standard deviation, respectively, sk = skewness, ku = kurtosis.

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

Acceptable skewness is between -2 and 2, acceptable kurtosis is between -7 and 7 (see George & Mallery, 2010 and Hair, Black, Babin & Anderson, 2010).

dimensions were entered as predictors (Model 4). Table 3 displays the results of 4-step hierarchical regression analysis. Surprisingly, age (Model 1) explains very small amount of the variance in PIA (about 1%), yet this small percentage is already significant. Cognitive abilities (Model 2) account for further 7.3% of the PIA variance, which means very significant increment in comparison to Model 1. Model 3 with personality dimensions explains

Table 3 *Regression results using b1sintag as the criterion*

Predictor	*b*	*beta*	sr^2	*r*	Fit	Difference
(Intercept)	5.41**					
B1PAGE_M2	0.01**	0.10	.01	.10**		
					R^2 = .010**	
(Intercept)	3.98**					
B3TWLITU	-0.03*	-0.06	.00	-.16**		
B3TDBS	-0.04**	-0.07	.00	-.16**		
B3TCTFLU	-0.01**	-0.07	.00	-.17**		
B3TNSTOT	-0.09**	-0.14	.01	-.23**		
B3TBKTOT	0.00	-0.04	.00	-.17**		
B3TWLDTU	0.00	-0.00	.00	-.14**		
					R^2 = .073**	ΔR^2 = .062**
(Intercept)	3.32**					
b1sextra	-0.05	-0.03	.00	-.19**		
b1sagree	0.15**	0.08	.00	-.08**		
b1scons2	-0.39**	-0.18	.03	-.27**		
b1sneuro	0.27**	0.17	.03	.26**		
b1sopen	-0.42**	-0.24	.04	-.32**		
					R^2 = .170**	ΔR^2 = .097
(Intercept)	1.98**					
b1spwba2	-0.02**	-0.17	.02	-.34**		
b1spwbe2	-0.02**	-0.13	.01	-.36**		
b1spwbg2	-0.04**	-0.26	.03	-.42**		
b1spwbr2	0.01**	0.09	.00	-.25**		
b1spwbu2	-0.02**	-0.16	.01	-.38**		
b1spwbs2	0.01**	0.07	.00	-.33**		
					R^2 = .226**	ΔR^2 = .056**

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant; *b* represents unstandardized regression weights; *beta* indicates the standardized regression weights; sr^2 represents the semi-partial correlation squared; *r* represents the zero-order correlation.
*$p < .05$; **$p < .01$.

17% of PIA variance representing even larger increment in predictive power. Finally, wellbeing dimensions in Model 4 explain about 23% of PIA variance, which is also a significant increase in the predictive or explanatory power compared to other models. Note that higher-order dimensions in the domain of cognitive abilities, personality, and wellbeing (g-factor, Big Two and GFP) are omitted in regression analysis because their variance is absorbed in the primary dimensions.

Note that all necessary conditions for regression analysis (including collinearity, homoscedasticity, and normality of residuals) were checked and all are acceptable.

Given all predictor variables together, they explain 28.7% of the variance in PIA. In the battery of 18 variables the largest predictors of PIA are autonomy, personal growth, fluid intelligence, openness, purpose in life, environmental mastery, conscientiousness, working memory and verbal ability & speed (see Table 3). The higher the values of these predictors, the lower the level of PIA. The strongest predictors of PIA in the opposite direction are neuroticism, self-acceptance, and age. Thus, the higher the values of these three predictors, the higher is the level of PIA.

The effects of age, cognitive level, personality and wellbeing on the PIA can be tested by structural equation model (SEM) analysis. The data in the research model were thus analyzed by algorithms *lavaan*, *sem,* and *semPaths*, provided in r packages *lavaan* (Rosseel, 2012) and *semPlot* (Epskamp, 2019). The analyses revealed the relationships between key latent dimensions denoted as PIA (Perceived Intellectual Aging: b1sintag), Age (Chronological Age: B1PAGE_M2), CgA (Cognitive Abilities: B3TWLITU, B3TDBS, B3TCTFLU, B3TNSTOT, B3TBKTOT, B3TWLDTU), Prs (Personality Dimensions: b1sneuro, b1sextra, b1sagree, b1sopen, b1scons2), and WB (Wellbeing Dimensions: b1spwba2, b1spwbe2, b1spwbg2, b1spwbr2, b1spwbs2, b1spwbu2). The reported relationships are indicated by standardized parameter estimates (standardized regression coefficients). Obviously, PIA is most strongly negatively associated with dimensions of wellbeing or WB (standardized path coefficient -0.31), then with personality dimensions (Prs; -0.15), cognitive abilities (CgA; -0.13), and age (Age; 0.09), which is in slight positive relation to PIA. Figure 1 depicts only structural relationships between key latent dimensions, omitting thus the unimportant details.

It is noteworthy, that the analyzed SEM model has acceptable fit indices. With some theoretically sound modifications, which concern the correlated manifest variables (for example B3TNSTOT and B3TBKTOT or b1sagree and b1spwbr2), the model yielded the following fit indices: RMSEA = 0.075, SRMR = 0.056, CFI = 0.902; TLI = 0.878.

As we can see, the chronological age is a significant predictor of PIA, yet to a much lesser extent than it would be expected. Obviously, the strict age effect on PIA is largely overshadowed by the influence of other factors affecting the answering of the PIA items.

The cognitive abilities are associated with PIA, although less than personality and wellbeing dimensions. PIA is especially related to the decline in fluid intelligence, yet also to the decrease of verbal ability and speed, and working memory.

However, the results of our analyses clearly show that wellbeing and personality dimensions are far better predictors of PIA than age and cognitive abilities. Perceived intellectual aging depends therefore more on our personality and wellbeing than on factual (chronological) age and decline of our cognitive abilities.

Among personality dimensions, major predictors of PIA are openness, conscientiousness, and neuroticism. People with higher

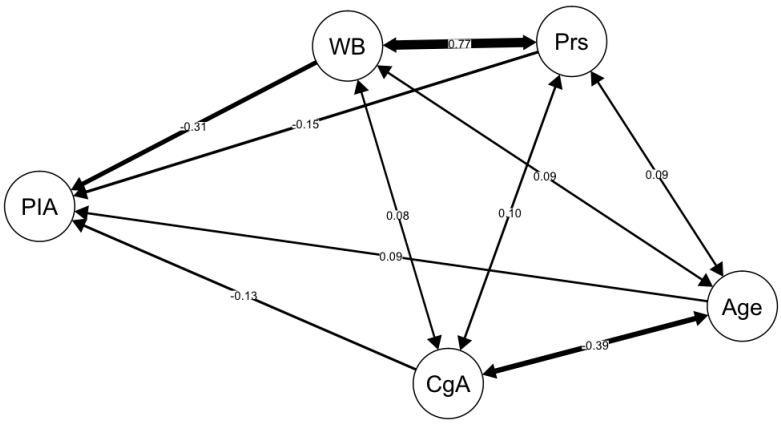

Figure 1 The relationships between key latent dimensions of the variables in the research model. The arrows display standardized parameter estimates (standardized regression coefficients). The latent dimensions include PIA (Perceived Intellectual Aging: b1sintag), Age (Chronological Age: B1PAGE_M2), CgA (Cognitive Abilities: B3TWLITU, B3TDBS, B3TCTFLU, B3TNSTOT, B3TBKTOT, B3TWLDTU), Prs (Personality Dimensions: b1sneuro, b1sextra, b1sagree, b1sopen, b1scons2) and WB (Wellbeing Dimensions: b1spwba2, b1spwbe2, b1spwbg2, b1spwbr2, b1spwbs2, b1spwbu2). The focus is on the relations of PIA with other key latent dimensions. Perceived intellectual aging (PIA) has strongest association with wellbeing dimensions (WB), then personality dimensions (Prs), cognitive level (CgA) and age (Age). WB, Prs and CgA are negatively related to PIA, while Age is slightly positively related. Otherwise, it is obvious that the WB and Prs are very strongly connected, while Age and CgA are also substantially correlated. Other relations are of minor interest.

level of mental openness are cognitively more active, and therefore, they may actually experience fewer signs of cognitive aging and may also take these signs as less disturbing. It also seems understandable that conscientious individuals with their lifestyles (self-control, regularity, orderliness, discipline, organization, etc.) factually experience less cognitive aging signs and better control them or adjust to them.

Neuroticism can influence the perception of signs of cognitive aging in many ways. Emotionally labile individuals may mistakenly see memory errors, lack of attention, and other signs, which are actually the result of emotional blocks, and confusion as signs of cognitive aging. Thus, these signs may represent some sort of false alarms. On the other hand, it is not impossible for emotionally labile people to actually have a lower threshold for detecting the true signs of cognitive aging, just as they are quicker and more likely to focus on negative things happening in their lives.

It is also understandable that the components of wellbeing are substantially negatively related to PIA. Individuals, higher in personal growth, autonomy, purpose in life, and environmental mastery experience fewer signs of intellectual aging, and, if they do not, their welfare will be more endangered. It is noteworthy, however, that relations with others and self-acceptance (if partialized in regard of other predictors) tend to be positively related to PIA.

Conclusions, Caveats and Limitations

It is certainly no surprise that perceived cognitive aging is inversely proportional to cognitive abilities. This is a link to a direct consequence of a decline in cognitive performance. Even less surprising is the significant correlation between perceived cognitive aging and age, which has nevertheless reaffirmed itself as an important predictor in the whole set of predictors. Yet, surprisingly, the far strongest predictors of perceived cognitive aging are personality dimensions and dimensions of wellbeing. Major personality predictors of PIA are openness, conscientiousness, and neuroticism and major wellbeing predictors are personal growth, autonomy, purpose in life and environmental mastery.

A certain limitation of the study is the fact that it was performed on the data, which were not collected with a special regard to the problem of this study. However, the selected data contain representative and adequate assembly of variables that are very relevant exactly to the subject of this study.

Author's ORCID
Janek Musek
https://orcid.org/0000-0003-4291-5789

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