

BRIDGING THE GENERATION GAP: THE INTERRELATIONS OF PERSONALITY TRAITS AND PSYCHOLOGICAL WELL-BEING AMONG PEOPLE BETWEEN 50 AND 75 AND IN GENERATION Y. A PILOT STUDY

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Abstract

The psychological well-being of young as well as older Hungarian adults is becoming an increasingly important issue that they often relate to socioeconomic and sociopolitical instability. Therefore, the purpose of the present small-scale study is to investigate the possible similarities between the 20-25-year-old and the 50-75-year-old people in terms of how Big Five traits predict personal growth, psychological immunity, and meaning in life that are strong predictors of psychological well-being. Participants (N=104) filled in an anonymous online questionnaire. T-tests and regression analyses were conducted. The results show that there is no significant difference between the two cohorts regarding the mean values of the Big Five scores. Neuroticism has a very strong predictive value in both cohorts on all the three scales that overall measured psychological well-being but the direction and the significance of the predictive value differ between the cohorts.

Keywords: existential positive psychology ▪ BFQ, psychological well-being ▪ Generation Y, young-old

Absztrakt

Mind a fiatal, mind az idősebb felnőttek pszichológiai jólléte egyre fontosabb kérdés Magyarországon, amit gyakran kötnek össze a szocioökonómiai és a szociopolitikai instabilitással. Így a jelen kismintás kutatás célja az, hogy feltárja a lehetséges hasonlóságokat a 20-25 és az 50-75 éves korosztály között tekintettel arra, hogy hogyan jelzik előre a Big Five személyiségvonások az egyéni fejlődést, a pszichológiai immunitást, az értelmes életet, amelyek mind erős prediktorai a pszichológiai jóllétnek. A résztvevők (N=104) egy anonim online kérdőívet töltöttek ki. Az eredményeken T tesztet és regresszió analízist folytattunk. Az eredmények azt mutatják, hogy nincs szignifikáns különbség a két kohorsz között a Big Five személyiségvonásokat tekintve. A Neuroticizmus skála nagyon erős predikációs értékkel rendelkezik mindhárom vizsgált skála esetén, amelyek összességében a pszichológiai jóllétet mérték, azonban a predikció iránya és erőssége különböző a két kohorszban.

Kulcsszavak: egzisztenciális pozitív pszichológia ▪ BFQ, pszichológiai jóllét ▪ Y generáció, fiatal idősök

1 INTRODUCTION

Hungary, as a rapidly aging society, faces a number of psychosocial challenges on the individual level. The first such challenge is employment related instability. For Generation Y, people who were born between 1980 and 1995, this is exemplified as the pressure to find employment in a labor market that is incapable of accommodating them. Owing to this fact, the majority of this age group experiences inability and/or anxiety to become independent of their parents and move from home (Eurostat, 2015). For the old adults (between 61 and 75 years old) and young-old people (between 50 and 60 years old) this is manifested as the struggle to keep their established position in order to be able to support themselves and the younger members of the family. Although the latter two age groups are in favor of relatively early retirement (European Commission, 2012), they are unable to do so due to the fact that pensions are inadequate to provide for their standard needs. Although frailty (see e.g. Gobbens et al. 2010) is a term usually applied in psychological research to describe physical and mental health deterioration in old age, here it can be used for both generations meaning their exposure to similar instability in terms of their socioeconomic status.

The second common set of characteristics is related to the stage of personality development the cohorts are in. According to Erikson (1968, 1998), Generation Y represents the onset of generativity and forming intimate relationships, while the old adult and young-old groups are in the stage of re-evaluation and consolidation. However, this study approaches the two age groups from existential psychological point of view in which not only an individual's chronological age but also the experience of liminal situations (goal setting, finding meaning in life, and finding means to preserve their psychological health) can provide a comparable background for different age groups (Wong, 2010). One of the main ideas of existentialism is that a human being has total freedom of choice and free will hand in hand with responsibility with which they can achieve authenticity, that is, being true to oneself. An authentic self lives by the rules of their true self rather than being pushed around by social, environmental, or psychological forces. A true self can give meaning to meaninglessness as it can find an emotional and/or cognitive approach to conceptualize overwhelming hardships in a way that it adds to an individual's personal growth (Anderson, 2015). Although finding our true self is a life-long process as numerous outer factors shape and have an impact on our personality, this is not a phenomenon of existential crisis. Existential crisis is a confrontation with a liminal situation (Yang et al., 2010) that puts the individual in a pressure situation to change his or her life completely, or, for instance, the perceived loss of future because of intrapersonal and/or environmental factors (Längle, 2001). As Dix (2008) states, for a healthy individual these situations are not very common in the middle of life when people become professionally and financially anchored, and socially

thriving. According to Dix (2008), the critical need for authenticity and (re)defining one's personality are more common during university years and from the years of retirement and onwards, which is around 52 years in Hungary. It is argued in the present paper that in Hungary the crisis that young adults experience during university years, i.e. to be totally involved in the activity they would like to pursue, to try themselves in situations which broaden the consciousness of the self, is prolonged because of the socioeconomic characteristics outlined above.

From the angle of existential positive psychology, both cohorts can be viewed as facing an existential crisis regarding goal setting, finding meaning in life, and finding means to preserve their psychological health. Generation Y faces this crisis owing to the inner and often social pressure to plan a career path, engage in along-term relationship, have children, or establish an existence. The older cohort needs to overcome an existential crisis because of the possible onset of chronic diseases, the death of the spouse, or decreasing social life. Although the actual situations differ, the emotional and cognitive experience can be considered similar according to the paradigm of existential psychology. The way both cohorts meet this challenge is possibly dependent on their personality traits (Malkoç, 2011). Based on the aforementioned research, this paper argues that there is a legitimate ground for comparing adults between 20-35 and 50-75 years old.

In Hungary, scientific research on psychological well-being of the older adults is still scarce (Bardus et al., 2013) as well as research in this field on Generation Y (Tari, 2010). The present small-scale pilot study intends to contribute to this knowledge. Furthermore, this research represents a novel angle by conducting a comparative study on the two cohorts (participants who are 20-35 years old, and participants who are 50 and 75 years old) that links personality traits and psychological immunity, personal growth, and meaning in life.

2 BACKGROUND

2.1 How are existential and positive psychology interwoven?

Existential psychology has its roots in existentialism (Flynn, 1986; Kaufmann, 1956) and sprang to life mainly after the Second World War. Existentialism focuses on human existence as well as individual freedom, responsibility, and authenticity. Early existential psychologists emphasized two main poles that cause a major inner conflict: (i) the so called negative existential givens (Stolorow, 2011), that are namely anxiety, dread, guilt, and despair, and (ii) the positive existential givens which are freedom, responsibility, and transcendence (Wong, 2005). However, as existential psychology has extremely diverse philosophical

roots, it is often criticized for not having some universally accepted tenets. Yalom (1980) intended to systematize the various ways of influences that shaped existential psychology. Based on these, he identified four existential anxieties: (i) death, (ii) freedom (iii) isolation, (iv) meaninglessness (Wong, 2010). Yalom (2008) also states that the fact that humans are conscious of their unavoidable death holds not only the capacity and possibility to immobilize them, but also to help them to “reenter life in a richer, more compassionate manner” (p. 9). This latter possibility can be reached by living a meaningful life, that is, a life in which the individual feels that he or she (i) lives the life he or she is meant to live, (ii) has the ability to set goals, and (iii) feels his/her individual freedom together with his/her responsibility in society (Adams, 2014).

The concept originates from Viktor Frankl (2006) who claimed that the loss of individual goals causes the lack of meaning in life. As Wong (2009) points out, existential psychology is about finding meaning and goals in life in spite of, or rather, due to the fact that life inevitably ends. Meaning in life in the field of existential psychology is defined by two major factors: the capability and willingness of goal setting, and people’s comprehension of themselves and the world (Steger et al., 2008). Steger’s definition states that meaning in life is how much people can understand, make sense of, or see significance in their lives, which is parallel with the extent of how they perceive themselves to have a purpose, mission, or aim their lives (Steger, 2009b). Steger (2009a) also highlights that there are scientific efforts to place meaning in life under the broader term of well-being that can involve psychological and physical factors such as self-esteem, positive affect, and lack of physical illness.

This step is where existential psychology and positive psychology can become interwoven. Although both schools of thought place meaning in the center of gravity, existential psychology focuses almost solely on death anxiety, meaninglessness, and alienation (Wong, 2010) whereas positive psychology revolves almost exclusively around the joys of living, human strengths, coping, and resilience (Seligman & Csíkszentmihályi, 2000). However, it must be noted that positive psychology is not positive thinking. As Peterson and Park (2014) put it, positive psychology is concerned with the fact that “what is good about life is as genuine and relevant as what is bad, thus deserving equal attention from psychologists. [...] life entails more than avoiding or undoing problems” (p. 2).

On the one hand, however, regarding existential psychology, it is essential to question what individuals can do when they have faced their death anxiety and alienation if they lack the necessary coping skills and cannot show resilience in the face of these critical challenges of life. On the other hand, it is questionable how happiness, hope, or optimism can be conceptualized if they are never contrasted with situations that appeared to be hopeless, sad or pessimistic. Hardship and coping, anxiety and hope can be the two sides of the same

coin. Therefore, it is fruitful to combine the two schools together to create a fuller picture of how crisis is innate in human life and how it can also be overcome. Positive and existential psychology do not only complement each other because both approaches the possibilities, characteristics, and factors of meaning seeking in life, but also because positive psychology attempts to scientifically approach issues that many existential psychologists claim to be impossible to research (Batthyany & Russo-Netzer, 2014). Therefore, the main framework of the present paper is in the realm of existential positive psychology (Wong, 2010) as the two theories efficiently combine research methods and theory about concepts such as personal growth or meaning in life.

2.2 Personality, Big Five Inventory, and (existential) positive psychology

Personality as a concept is very difficult to define as each school of thought has its own idea about what personality consists of and how it functions. An overall encyclopedic definition (The Gale encyclopedia of psychology, 2001) is “The unique pattern of psychological and behavioral characteristics by which each person can be distinguished from other people” (p. 490). However, as the present paper works in the realm of the Big Five traits, which originates from trait psychology, this definition can be supplemented by the idea that there are certain re-evolving similarities among people too, and personality can be based on a number of fundamental factors that are measurable (Schacter et al. 2009). Positive psychology works in a synergy of the two poles, emphasizing both the uniqueness of individuals and the similarities among people. A definition from the perspective of positive psychology (Holder & Klassen, 2009) is as follows:

...personality refers to the internal traits that contribute to people behaving in consistent ways over time and across situations. Our personalities are our unique set of individual differences that govern how we behave and how we react to the environment. Our personalities are relatively enduring components that describe who we are; they are not momentary and fluctuating states (p. 689).

Based on this definition, personality can be seen as a relatively stable set of traits that can be shared with other people. However, every particular trait set is unique and responsive to environmental factors. This definition, therefore, fits well into the idea of researching the Big Five traits in relation to factors of psychological wellbeing that are affected by the environment.

The relationship of the Big Five personality traits and positive psychology has been researched on various types of datasets (e.g. children, different nationalities, workplace environments; see e.g., Ha & Kim, 2013). However, there are numerous studies in the realm of positive psychology that underscore the

lack of knowledge regarding other Big Five personality traits and concepts of positive psychology (Sharpe et al., 2011) as well as the small amount of research on younger adults (Vaidya et al., 2002). According to Holder and Klassen (2009), numerous concepts of positive psychology have been researched and linked to the Big Five Inventory such as emotional stability, loneliness, or self-esteem. However, they also state that further research is needed in older age groups and extended research in the field of positive psychology and the possible interrelations with other personality traits and concepts of positive psychology. In addition to the connections between positive psychology and the Big Five Inventory needing further research, existential positive psychology is also lacking scientific research in the field of personality traits. One possible direction is examining the relations of certain concepts of existential positive psychology and personality traits in the light of the two cohorts introduced in Section 1. Therefore, in Section 2.3 a summary will be provided of the existing research on goal setting, meaning in life, psychological immunity, and the Big Five Inventory regarding Generation Y as well as adults who are between 50 and 75 years old.

2.3 Well-being and personality traits in Generation Y and people who are between 50 and 75 years old

Well-being, which includes goal setting, meaning in life, and psychological immunity, is a well-researched concept among old-age adults. However, it is rarely touched upon regarding Generation Y. Brassen et al. (2012) state that with age the frequency of positive emotions increase while negative emotions (e.g. anger) decline. They state (Brassen et al., 2012) that at young age there is an active and constantly ongoing process of overcoming regretful situations, whereas in old age, due to the more limited time of life, disengagement from regretful events becomes a key factor in well-being. Emotionally healthy aging, which involves psychological immunity, means the avoidance of negative or regretful events. Brassen et al. (2012) also point out that in younger age experiencing much more negative feelings is more typical than from old-adulthood onward. Besides disengagement from regretful events, acceptance of anger, anxiety and sadness increase from younger to old age (among 21 and 73 years old participants; Shallcross et al., 2013). Palgi (2012) emphasizes the well-being paradox, which states that contrary to physical and cognitive decline, subjective well-being remains relatively stable across the lifespan and declines slightly only among the oldest-old. However, psychological well-being that encompasses purpose in life or personal growth varies with age. Concepts like meaning in life, personal growth, and purpose in life show a steep decremental tendency as people grow older. Palgi (2013) also assumes that psychological well-being means the need to cope with the existential challenges of life, which becomes a core value in older age.

This result is shown by Hatami et al. (2015) who conclude that there is a significant negative relationship between existential anxiety and well-being in old age.

It has been questioned many times how stable personality traits are and what roles environmental factors play in certain trait changes (see e.g., Gomez et al. 2009). As regards to the Big Five trait model, Kandler et al. (2014) highlight that there are significant differences between Generation Y and people between 50 and 75. However, it is vital to note that when studies (see e.g., Nye et al., 2015) highlight the differences in personality traits based on age, they usually assume a very different lifestyle between the young adult and the old adult age groups. However, in the present paper it is argued that for reasons enumerated in Section 1, the two participant cohorts of the present study are not so different. Vaidya et al. (2002) emphasize that similar life experiences cause similar trait changes throughout the lifespan. Therefore, it can be assumed that the two participant cohorts might actually be very similar regarding their personality traits.

Weber et al. (2015) point out that the level of Agreeableness and Openness are good predictors of well-being and the quality of life in both young adulthood and older age. Kandler et al. (2014), however, emphasize the changes of personality traits between young and old adults. They state that while in the case of young adults Neuroticism tends to decrease and Conscientiousness and Agreeableness increase, the trend shows the opposite direction among the old-age group. Besides this, in their study the old age cohort showed a significant decrease in Extraversion and Openness as well. However, these findings should be interpreted with caution because of the variance on the Big Five traits that can be found among individuals from the beginning of their lives. Perrig-Chiello et al. (2009) state that despite the variation among individuals, Extraversion, Neuroticism, and Conscientiousness are the most important factors of a well-lived life where, naturally, Neuroticism is expected to be low. Similar results are reiterated by Weber et al. (2015), indicating that higher rates of Agreeableness and Openness result in better quality of life. Agreeableness, Openness and Conscientiousness are also associated with the presence of meaning and purpose in life (Lavigne et al., 2013).

As regards to Neuroticism, Eastern European countries (Slovakia, Serbia, Austria, Ukraine, Romania), score in the same mean level range as Lebanon, South Korea or South Africa (Schmitt et al. 2007), which considering the socio-economic situation in the latter countries raises concerns. Based on Lesse's (1990) findings, the socio-economic factors can shape individuals' personality. Moreover, Daraei (2013) pointed out that socio-economic factors have great influence on individuals' psychological well-being as well as that the effect of wealth on psychological well-being in poorer countries is not the same as in richer countries. While in poorer countries wealth has a great impact on well-being because it provides for more basic psychological and physical needs, in richer countries wealth has less impact on well-being. Daraei (2013) also con-

cludes that in well-being socio-economic situation and the relationship with the family are very important factors. Grob et al. (1996) in a comparative study on Western and Eastern European countries highlight that participants from Eastern Europe (including Hungary) scored significantly lower on measures of well-being than their Western European counterparts. They also stated that personality factors such as perceived control and self-esteem were significantly lower in the case of Eastern European participants.

To summarize, the Big Five personality traits are strongly connected to the concepts of well-being that comprises meaning in life, goal setting, and psychological immunity. Based on the reviewed research, we can say that the two cohorts of the sample might be quite similar regarding personality traits if we take situational factors into account, while Agreeableness, Openness and Conscientiousness are good predictors of well-being, especially meaning and purpose in life. However, the rate of Neuroticism in the comparison of 56 countries worldwide in Eastern Europe and the characteristics that affect well-being and personality factors of Eastern European countries compared to the Western European ones can be accounted for differences between the two large geographical regions regarding personality traits and psychological well-being. Based on the reviewed literature, the present study has four hypotheses. As it was argued that there might be trait differences between Western and Eastern European countries, the Big Five scores are compared to the standardized scores of Körner et al.'s (2015) study on a representative German sample. The hypotheses of the present study are as follows:

1. The Hungarian sample will show higher scores on Neuroticism than the standardized German sample.
2. Due to the Hungarian socioeconomic environment and the fact that both cohorts face major life challenges, Neuroticism will have the highest scores compared to the other Big Five scales in both age groups, which negatively impacts psychological immunity, personal growth and meaning in life.
2. In the attempt of Generation Y to start their own life as well as the old-age group's struggle to remain active and generative members of society, Agreeableness, Conscientiousness, and Openness will have positive predictive value in terms of meaning in life in both cohorts.

3 METHODS

3.1 Participants

The participants ($N=104$; $N_{\text{female}}=70$; $N_{\text{male}}=34$) of the present study consisted of two cohorts: Generation Y ($N=42$; $N_{\text{female}}=30$; $N_{\text{male}}=12$) and older participants ($N=62$; $N_{\text{female}}=40$; $N_{\text{male}}=22$). The group of old participants consists of late-adult

(from 50 to 60 years of age) and young-old participants (between 60 and 75 years of age) (Iverson, 2009), however, in the analysis they form one group because of the small number of participants in the two separate groups (see limitations in Section 5). This way the study deals with two separate cohorts: (i) Generation Y, (ii) and people between 50 and 75. The participants were all Hungarian whose first language was Hungarian. The socioeconomic and educational background as well as religiousness and general life situation (current emotional disposition or presence of stress) were measured and were not statistically different between the two groups.

The selection criteria of the study involved three requirements. Participants could not participate in the study (i) if they had diagnosed neurological disorder that affects their mental health (e.g. Alzheimer's disease, Parkinson's disease), (ii) if they were involved in psychiatric care, (iii) if they had a life-threatening disease. The reason of these excluding criteria was that all the three conditions could have majorly hindered the ability of comprehending the items, could have psychologically harmed the participants (e.g. in condition iii), and ethical approval would have been necessary to involve these groups as well. Due to the old age group, the definition of life-threatening disease needed careful consideration as in their case there can be chronic diseases that in the long run can evolve to be life threatening but at the time of the study do not fall into this category. Therefore, life-threatening disease in this study was defined as an illness that needs regular (weekly or two weekly) short-term inpatient care and which severely affects participants' physical, mental and psychological well-being as well as their capacity for active life and regular work and necessitates regular medication. As only non-clinical participants were included in the sample where anonymity was assured, the protection of participants from an ethical standpoint was ensured as much as it was possible within the resources of the present study. The participants who felt the need to consult a professional after filling in the questionnaire could reach both a toll-free hotline, and a clinical psychologist by calling the numbers that were indicated at the end of the questionnaire.

3.2 Instruments

The present study used four self-report measurements instruments and twelve background variables. All measurement instruments (see detailed in Table 1) are validated in Hungarian except for the Personal Growth Initiative Scale (PGIS) (Robitschek, 1998). In this case the standard translation procedure (Szokolszky, 2004) for research purposes was applied. The items were translated into Hungarian by a professional translator specialized in social sciences. In the next step, it was translated back into English by another translator with the same specialization. An English native researcher was asked to compare the original

English language scale and the new English translation in order that the quality and the content of the Hungarian version of the scale could be checked. Reliability analysis for all scales was conducted (see Section 4). As the survey was predicted to be quite lengthy and time consuming for the participants, the shorter, 60-item version of the Big Five Questionnaire (BFQ) (Caprara et al., 1993) was applied. The remaining two instruments, that is, the Psychological Immune System Inventory (PISI) (Oláh, 2005) and the Meaning in Life Questionnaire (MLQ) (Strack, 2007), were used unchanged. As Table 1 shows, the reliability of the scales is sufficient to be applied in multivariate statistical analyses.

Table 1

Descriptive information of the measurement instrument and the reliability of the scales

Instruments	Description of the instrument	Sample item	Subscales	Cronbach's Alpha	No. of items	Reversed items
Big Five Questionnaire (Caprara et al., 1993)	A trait based personality measurement test with 5 subscales.	I am an active and vigorous person.	Neuroticism	.78	12	7, 8, 9, 11, 13, 15, 16, 18, 20,
			Openness	.72	10	21, 23, 26, 29, 30, 32, 33, 34,
			Extraversion	.74	13	36, 37, 38, 39,
			Conscientiousness	.75	13	47, 50, 51, 53, 55, 57, 59, 60
			Agreeableness	.67	11	
Psychological Immune System Inventory (Oláh, 2005)	The questionnaire measures the level of development and efficiency of the psychological immune system and the modes of coping.	According to my experience, success is the result of rigorous planning.	Scales were aggregated	.96	80	5, 6, 9, 12, 14, 15, 16, 19, 28, 31, 32, 37, 44, 45, 46, 47, 51, 53, 60, 61, 62, 63, 64, 67, 69, 76, 77, 78, 79
Personal Growth Initiative Scale (Robitschek, 1998)	The instrument measures one's desire to be involved in changing and developing oneself as a human being.	I can choose the role that I want to have in a group.	n.a.	.89	9	n.a.
Meaning in Life Questionnaire (Strack, 2007)	A questionnaire designed to measure meaning in life.	I am searching for meaning in my life.	Scales were aggregated	.61	10	n.a.

The Five Questionnaire items were measured on a 5-point Likert scale, the Psychological Immune System Inventory applied a 4-point Likert scale, while the Personal Growth Initiative Scale used a 6-point, and the Meaning in Life Questionnaire worked with a 7-point Likert scale. The biographical variables that

were applied are age, gender, marital status, highest level of education, place of residence, occurrence of traumatic loss in past one year, presence of children (check box items), and physical health, financial status, the quality of family/friend support, time spent on free-time activities, as well as religiousness (5-point Likert scale items).

3.3 Data Collection

The items were typed into an online survey application (KwikSurvey). The survey was proofread by a professional proofreader in order that the text would not contain any typos or grammar mistakes. Then the survey was piloted on two possible participants from each cohort to check whether it can be filled in without any problems and how much time it needs to be completed. These answers then were deleted. The fill-in time of the questionnaire on average was 20-25 minutes.

In the second step, a link was generated that directly lead to the survey and it was attached to an invitation letter (see English version in Appendix A) that explained the purpose of the study, asked the possible participants to forward the link to their acquaintances, and thanked them for the participation. The data collection method followed the chain-referral protocol. Therefore, the invitation letter and the link were shared on social networking sites (e.g. Facebook) and were sent via email to 14 contact persons who could have been potential participants but did not participate. The usage of social media could result in a distorted sample with regards to the fact that older participants might not be as accessible this way as younger participants (see limitations in Section 5). The contact persons had previously agreed to forward the letter to their acquaintances. The data collection spanned 4 weeks and was terminated on the 10th of May, 2015.

3.4 Data Analysis

The collected data was analyzed in SPSS 20.0 (IBM Corp., 2013). The criteria for univariate and multivariate outliers were met. (Tabachnick & Fidell, 1996; Hoaglin & Inglicwicz, 1987). Equality of variance was tested with Levene's Test, which produced significant results on two scales (Personal Growth Scale: $p < .03$, Perseverance (PISI subscale): $p < .05$). However, based on Tabachnick and Fidell (1996) normality could be assumed as both cohorts exceeded the number of 30 participants. The total sum of the 16 scales of the Psychological Immune System Inventory was computed according to the guidelines of the developer of the test (Oláh, 2004). Therefore, one aggregated scale was produced. The same proce-

ture was applied with the two subscales of the Meaning in Life Questionnaire to obtain an aggregated Meaning in Life Scale.

As a next step, independent sample T-tests were conducted to check for the possible significant mean differences between the two cohorts on the Big Five scales. Following that, linear regression analyses were computed using the split group method to see the predictive value of the Big Five scales on personal growth, psychological immunity, and meaning seeking by cohorts. As the final step, a hierarchical linear regression analysis was conducted as there were multiple independent variables and the possible change in the explanatory value of the model by analyzing all independent variables at the same time provided valuable information.

4 RESULTS

4.1 Significance testing of the Big Five scales compared to the standardized values on the German sample

Körner et al.'s (2015) study standardized scale mean values were compared to the ones of the present sample to test for possible significant differences. Therefore, an independent sample t-test was conducted for all of the five scales where naturally the differences in sample sizes were taken into account. The German sample included a representative sample of participants (N=1908) (Körner et al., 2015), the present study has a non-representative sample (N=104). In Körner et al.'s (2015) study standardized scores based on age were not conducted, therefore, in the independent t-test analysis the total participant number of both samples were analyzed.

Table 2
Significant differences on Big Five scales between the Hungarian sample and the German standardized scores

	Hungarian sample		German standardized scores		t	Sig.
	M	SD	M	SD		
Neuroticism	2.74	.63	1.62	.62	17.67	***
Openness	3.76	.57	2.04	.47	30.22	***
Conscientiousness	3.65	.51	2.71	.55	18.23	***
Extraversion	3.26	.55	2.20	.50	19.23	***
Agreeableness	3.54	.55	2.54	.47	19.55	***

*** $p < .001$

The results show that the mean values of the Big Five scales of the Hungarian sample were significantly ($p < .001$) higher on every scale compared to the German standardized values. Statistical power analyses for Cohen's d and actual statistical power was calculated with GPower (Faul et al., 2007) for each scale based on the mean values and standard deviations of the German and the Hungarian sample (Extraversion: $d = 2.02$, $1 - \beta^1 = 1.00$; Agreeableness: $d = 2.04$, $1 - \beta = 1.00$; Conscientiousness: $d = 1.77$, $1 - \beta = 1.00$; Openness: $d = 3.29$, $1 - \beta = 1.00$; Neuroticism: $d = 1.79$, $1 - \beta = 1.00$). Table 2 also points out that Neuroticism had the lowest mean value in the overall Hungarian sample. The independent t -test did not yield significant differences between the two age groups on any of the scales. The effect size for every scale was very low ($d_{\text{Neuroticism}} = .42$, $d_{\text{Extraversion}} = .04$, $d_{\text{Agreeableness}} = .06$, $d_{\text{Conscientiousness}} = .17$, $d_{\text{Openness}} = .32$), therefore, in order to obtain statistical power at the recommended .80 level (Cohen, 1988), the overall sample size should have been considerably higher.

4.2 The relation of Neuroticism on psychological immunity, personal growth and meaning in life in the two cohorts

As Table 2 shows, as opposed to the predictions made based on the reviewed literature, Neuroticism had the lowest mean values among the five scales in the Hungarian sample even though it was significantly higher than the German standardized score. However, despite the relatively low mean score ($M = 2.74$ on a 5-point Likert scale), its predictive value in psychological immunity, personal growth, and meaning in life might be considerable. Therefore, linear regression analyses were conducted comparing the two participant cohorts.

As Table 3 points out, in both cohorts there is a moderate or high R^2 value.² Therefore, it can be concluded that the data fits the regression line considerably well. Based on the β_2 values, we can generally say that Neuroticism has high predictive value in psychological immunity in both participant cohorts, which shows a negative interrelation between the predictor and the dependent variable (the greater Neuroticism is, the lower psychological immunity can be). Although correlation analysis would have also been sufficient to measure the interrelation shown in Table 3, linear regression analysis was opted for in order that R^2 could be calculated directly. It must also be noted that both β values are very high, that is, both cases Neuroticism is an important negative predictor of psychological immunity.

¹ $1 - \beta$: statistical power

² β : in regression models stands for standardized coefficients

Table 3

Linear regression model of psychological immunity in both participant cohorts

		R	R²	B	SE	β	t
Generation Y	Neuroticism	.55	.30***	63.32	4.01	-.55***	15.80
50-75-year-olds		.76	.58***	72.62	2.71	-.76***	26.77

*** $p < .001$; tolerance=1.00; $f^2_{\text{Generation Y}} = 0.43$, $1-\beta_{\text{Generation Y}} = 0.80$; $f^2_{50-75\text{-year-olds}} = 1.36$, $1-\beta_{50-75\text{-year-olds}} = 0.80$

In the case of personal growth a negative interrelation can be observed regarding both cohorts, however, considering Generation Y it is not significant.

Table 4

Linear regression model of personal growth in both participant cohorts

		R	R²	B	SE	β	t
Generation Y	Neuroticism	.19	.04	5.21	.46	-.19	11.36
50-75-year-olds		.66	.44***	7.29	.39	-.66***	18.32

*** $p < .001$; tolerance=1.00; $f^2_{\text{Generation Y}} = 0.59$, $1-\beta_{\text{Generation Y}} = 0.80$; $f^2_{50-75\text{-year-olds}} = 0.79$, $1-\beta_{50-75\text{-year-olds}} = 0.80$

There was no significant difference between the two cohorts in terms of the mean value of Neuroticism ($M_{\text{Generation Y}} = 2.89$, $SD_{\text{Generation Y}} = .63$, $M_{50-75\text{-year-olds}} = 2.63$, $SD_{50-75\text{-year-olds}} = .62$, $\text{Sig} = .90$) that might shed light on a very important issue. Medium high Neuroticism in older age can strongly predict barriers in goal setting or initiating life changes. The results show that Neuroticism does not have a significant impact on the personal growth of Generation Y, while for the 50-75-year-old participants Neuroticism plays a significant role in their personal growth that consists of setting or reaching goals, initiating life changes, or reevaluating where one's life is heading.

Table 5

Linear regression model of meaning in life in both participant cohorts

		R	R²	B	SE	β	t
Generation Y	Neuroticism	.36	.13*	6.18	1.27	.36*	4.86
50-75-year-olds		.18	.03	10.70	.83	-.18	12.93

Note. * $p < .05$; tolerance=1.00; $f^2_{\text{Generation Y}} = 0.15$, $1-\beta_{\text{Generation Y}} = 0.80$; $f^2_{50-75\text{-year-olds}} = 0.45$, $1-\beta_{50-75\text{-year-olds}} = 0.80$

Neuroticism as regards to meaning in life has a low negative and non-significant predictive value in the older cohort. Neuroticism was moderately high in the older cohort, therefore, a stronger predictive value could be expected. The non-significant result can be due to the low number participants that could influence the effect size and statistical power, although the statistical power analysis yielded acceptable results (see Table 5., Note). Furthermore, Table 6 shows the results of the hierarchical multiple regression analysis that was performed to investigate the ability of Neuroticism to predict meaning in life, after controlling for traits such as Openness, Agreeableness, and Conscientiousness, but Table 6 shows only the significant predictors. In the case of the older participant cohort, the 2-step analysis could not be performed owing to the fact that Neuroticism was deleted by SPSS 20.0 from among the predictive variables alongside with Agreeableness, and Conscientiousness due to the fact that they were not significant predictors. This analysis was performed based on the assumptions of Perrig-Chiello et al.'s (2009) and Lavigne et al.'s (2013) research, that states that Conscientiousness, Agreeableness and Openness are the key traits of meaningful life; however, Neuroticism can significantly hinder them. As Table 6 shows, only Openness plays a significant predictive role in older cohort regarding meaning in life and Neuroticism is not accounted for any added predictive value, as it is not even entered in the model owing to the fact that statistically it was not a significant predictor.

Table 6
Hierarchical multiple regression model of meaning in life in both participant cohorts

		R	R ²	R ² change	B	SE	β	t
Generation Y	Step 1	.50	.25***					
	Conscientiousness				1.58	.44	.50***	3.63
	Step 2	.58	.34*	.09*				
	Conscientiousness				1.45	.42	.46***	3.48
	Neuroticism				.85	.38	.29*	2.22
50-75-year-olds	Step 1	.26	.07*					
	Openness				.67	.33	.26*	2.04

* $p < .05$, *** $p < .001$; tolerance_{GenerationY/Step 1} = 1, tolerance_{GenerationY/Step 2} = .98, tolerance_{50-75-year-olds/Step 1} = 1

Regarding the sample of Generation Y, Table 5 shows a significant moderate positive relationship between Neuroticism and meaning in life, although the model fit is quite low ($R^2 = .13$). Even though Schnell and Becker (2006) found

significant positive relationship between Neuroticism and meaning in life regarding the subscale of spirituality, they could not find a theoretical explanation for this finding and stated the need of further research. The finding of the present study is especially intriguing, as in Table 6 it is highlighted that Neuroticism has defined 9% of the whole model of 34% in Step 2 of the analysis where Conscientiousness and Neuroticism were entered. Agreeableness and Openness were deleted in Step 1. The statistical power analysis regarding the results of Table 6 calls for the need of a bigger sample size to achieve higher statistical power ($f^2_{\text{Generation Y}}=0.147$, $1-\beta_{\text{Generation Y}}=0.71$; $f^2_{50-75\text{-year-olds}}=0.07$, $1-\beta_{50-75\text{-year-olds}}=0.67$).

5 DISCUSSION

The basic assumption of this paper was that Generation Y and people between 50 and 75 years old in Hungary do not differ as significantly as one would intuitively suppose in terms of their personality traits and psychological well-being owing to the country's socioeconomic and sociopolitical characteristics. More specifically, the age group that is entering the job market and the age group that is theoretically on the verge of leaving it experience very similar life situations. These similarities occur since both groups try to retain their employment or find any, support their families, or struggle to keep their financial existential level. Therefore, the hypotheses of the present research paper were that the 20-35-year-old and the 50-75-year-old participants will be relatively similar in terms of personality traits due to the very similar environmental effects. In addition, it was also hypothesized that due to the increasingly elevated level of negative emotions compared to Western European countries, Neuroticism will have a strong predictor value in psychological immunity, meaning in life, and initiating personal growth even above and beyond other personality traits such as Conscientiousness, Agreeableness, and Openness.

The results show that there are no significant mean differences regarding the two participant cohorts in terms of personality traits. The results of Table 2 also support Hypothesis 1, that is, that the Hungarian sample will score higher on Neuroticism than the standardized German sample. This result underlines the assumption that socioeconomic characteristics can shape one's personality traits (Lesse, 1990). Furthermore, research from other Eastern European countries (see e.g., Mikołajczk et al., 2008) reports similar or higher mean scores than the one in the present study. However, the present results should be interpreted with caution not only because of the small participant number but also because this paper focuses only on two cohorts instead of including as a wide range of age as possible such as the German study.

Linear regression analysis in Table 3 pointed out that Neuroticism has a very strong explanatory power in psychological immunity where the interrelations

are negative in both cohorts. These results are especially interesting because of two reasons. Firstly, based on previous research, Neuroticism was expected to be significantly higher among 20-35-year-old participants than in the older participant cohort. However, in this sample it could not be pointed out (see Section 4.1), which might be due to the fact that they experience similarly critical life events (Vaidya et al., 2002). In the linear regression model it can be observed that despite the relatively low mean value of Neuroticism in both cohorts compared to the other Big Five scales in the Hungarian sample, Neuroticism plays a very significant role in psychological immunity and it has even higher impact in the case of the older participants. This means that people who experience higher level of negative emotions have less functional psychological immune system. During the interpretation of the results a conceptual overlap between Neuroticism and the Psychological Immune System Inventory needs to be born in mind. However, the finding presented in Table 3 not only supports the existing literature, but also highlights that the relatively same level of Neuroticism in both cohorts can hinder the psychological immunity more in older age. Besides this, the finding points out that a moderately high level of Neuroticism has a very strong negative explanatory power of psychological immunity even in the younger cohort which is in the phase of finding a long-term relationship, establishing their own living environment, or starting a family. This finding, therefore, might indicate a further research alternative regarding the effect of low psychological immunity on starting a family, or establishing a career.

Secondly, Hypothesis 2 is confirmed regarding the considerable negative interrelation between Neuroticism and psychological immunity in both cohorts. Based on the current research findings it can be stated that both participant cohorts have approximately the same scores on Neuroticism, which is low compared to the other scales in the sample, however, it has a very significant negative impact on psychological immunity that is one of the cornerstones of psychological well-being. Although previous research points out that in older age Neuroticism decreases, Table 3 shows that it has larger negative effect on older adults' psychological well-being than in the case of younger ones.

A further finding (see Table 4) is that Neuroticism has strong significant negative predictive value of initiating personal growth (e.g., initiating life changes, setting new goals) only in the case of the older cohort, despite the fact that many of the reviewed studies (Gomez et al. 2009, Kandler et al., 2014, Nye et al., 2015) stated that Neuroticism as a trait decreases with age and its peak is around the mid-thirties. Based on the results of Table 4, it can be hypothesized that in the later stages of life experiencing negative interpersonal and intrapersonal emotions can hinder personal growth, which might lead to isolation, anxiety, and despair. It is also worth considering whether the fact that this phenomenon is not exhibited by Generation Y is due to the life stage in which they might not be so conscious of the inevitability of death (see Section 2.1).

Regarding Hypothesis 3, the direction of the interrelation (negative β value) between Neuroticism and meaning in life is theoretically plausible as it resonates with Frankl's (2006) thesis, that is, negative emotions undermine the individual's ability to find meaning in life. However, it can also be taken into account that although finding new goals or initiating major life changes can be highly clouded by negative emotions (see Table 4) in later adulthood, having meaning in life is not associated with negative emotionality as older adults might regard meaning as having a family and children, still pursuing their career, or finding joy in their retirement. Thus, meaning in life seems to be cut off from negative emotionality as opposed to personal growth and psychological immunity in older age. However, having meaning in one's life is related to Openness only in the older cohort, which has a modest but significant explanatory power. This is supported by previous research detailed in Section 2.3. However, regarding the younger cohort, a strong and significant positive predictive value of Neuroticism can be pointed out related to meaning in life, and this relationship holds true in the hierarchical multiple regression model. Although this finding is very intriguing, it is important to consider, that the hierarchical multiple regression model has quite low statistical power, and therefore, more participants would be needed to investigate this finding in a reliable and valid way. Despite the fact that the sample and effect size as well as statistical power can be an issue in this case, this result would need further research by increasing sample size and conducting a qualitative research step.

The present study is a small-scale pilot study that, in the light of the results, is intended to be changed, fine-tuned, and investigated on a much larger sample size. It also has a number of limitations regarding the generalizability of the findings or the sample size. The present study was conducted online, and therefore, it could only reach participants who are willing to use social networking sites or email clients. This might distort the results especially in the older cohort. Besides this, all of the instruments were self-report questionnaires that did not make methodological triangulation of the results possible but might, in turn, subject the results to social desirability bias. The chain-referral sampling technique also raises concerns as the response rate could not be calculated and the chain-referral might have touched upon only certain social classes, or professional circles. Despite the number of limitations of the study, its contribution to existing research is twofold: (i) as literature on the psychological well-being of Generation Y as well as adults between 50 and 75 is scarce, and this comparative angle has not been researched yet, the present paper adds a new insight into how personality traits play a role in psychological well-being and might initiate a discussion about the possible psychological similarities of the two cohorts, (ii) the present study might be able to assist healthcare professionals in designing counseling programs as regards to successful retirement as well as career start. The application of the results of the present study could aid in fo-

ocusing on the similarities between the two age groups in a working environment, for instance, that might make replacement changes, team work with the participation of the two age groups easier, or individual needs within a family more recognizable.

As regards to further research directions, a replication of a more fine-tuned study involving cross-cultural comparisons, more age groups, and a qualitative interview phase is planned. In addition to this, the moderator effects of certain biographical data will be examined. Furthermore, a cross-cultural study involving participants from the fields of medical science and theology might yield interesting results regarding the role of spirituality in psychological well-being.

6 CONCLUSION

The present study highlighted that Neuroticism has strong predictive value in psychological well-being both among people between 20 and 35 and 50 and 75. It is also pointed out that although Neuroticism had the lowest score among the other Big Five scales in the Hungarian sample, it is significantly higher than the standardized German score that might be due to sociopolitical and socioeconomic differences.

Based on the overall results, it is vital to note that older adults might not be so different from the adults who are in the so called generative phase of their lives in terms of personality traits and psychological well-being. Therefore, their marginalized situation in the Hungarian society should definitely be reconsidered and they should not necessarily be seen as the age group that must only be helped but they ought to be included in mainstream society as productive and generative members.

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