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Relationships between personality traits, general self-efficacy, self-esteem, subjective well-being, and entrepreneurial activity

Abstract: The present study focused on relationships between personality traits, self-efficacy, self-esteem and basic trust, and well-being in context of entrepreneurial activity. Participants were 301 unemployed people, 157 of whom had received a grant from an employment agency to start their own business. Participants completed measures of personality traits, self-efficacy, self-esteem, basic trust, satisfaction with life, positive and negative affect. To verify if beliefs about the self and about the world mediated relationships between personality traits and well-being we conducted a multiple-sample SEM. The study results confirm that the beliefs mediate relationships between personality traits and well-being. They also show that different types of beliefs serve a different function, depending on an individual's circumstances. Among grant acceptors, self-efficacy did not impact well-being, while self-esteem and basic trust had similar functions in both groups.

Keywords: well-being, Five Factor Model of personality, beliefs, characteristic adaptations

Many research assumes that individual differences in personality are related to well-being (Diener & Lucas, 1999; Lucas & Diener, 2008). Also beliefs, e.g. Self-Efficacy, Self-Esteem and Basic Trust can predict subjective well-being (Diener & Suh, 1996; Luszczynska, Scholz, & Schwarzer, 2005; Trzebiński & Zięba, 2004). The present study focused on relationships between personality, beliefs about the self-and the world, and well-being in context of entrepreneurial activity.

In the 1990s integrated models of human personality began to emerge. Scientists aimed to integrate numerous elements including biological dispositions, individual identities, and life narratives. Among the models proposed since then, two seem to be the most influential, a model proposed by McCrae and Costa (1996, 2008), and a model proposed by McAdams and Pals (McAdams, 1995, 2006; McAdams & Pals, 2006).

The model introduced by McCrae and Costa includes the following components: a) biological bases, which directly influence basic tendencies, including temperament

and personality traits; b) characteristic adaptations and self-concept (a subcomponent of characteristic adaptations), c) objective biography, and d) external influences. Personality Traits play the most significant role in this model because they influence Characteristic Adaptations. Characteristic Adaptations are habits, attitudes, skills, roles and relationships: "They are *characteristic* because they reflect the enduring psychological core of the individual, and they are *adaptations* because they help the individual fit into the ever-changing social environment" (McCrae & Costa, 2008, pp. 163–164).

Elements of personality constitute a system of related elements, and these relationships may be similar, or even universal, across people. For example, Neuroticism is related to Characteristic Adaptations such as self-esteem, irrational perfectionist beliefs, and pessimistic attitudes. Extraversion is related to Characteristic Adaptations, such as social skills, the number of friendships people have, and enterprising vocational interest. Conscientiousness is related to leadership skills, long-term planning, and the

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organization of support networks (McCrae & Costa, 2008). This model depicts personality as a dynamic system that regulates interactions between people, their characteristics, and their environments. The things that people want to do, what they feel, what they think about themselves, and what they actually do depend on their social environments and on Personality Traits as manifested through Characteristic Adaptations.

McAdams and Pals (2006) introduced an integrative model of personality that is based on the model proposed by McCrae and Costa. They modified the model of McCrae and Costa and stressed the importance of self-defining life narratives. They also conceptualized the sources and relationships of Characteristic Adaptations with dispositional traits in different ways than McCrae and Costa did. Through life narratives people self-reflect and are able to understand their life stories and make sense of the relations among the past, present, and future. In McAdams's and Pals' model, Characteristic Adaptations are influenced not only by basic tendencies and social environments, but also by a person's narrative identity. "If dispositional traits sketch the outline and characteristic adaptations fill in the details of human individuality, then narrative identities give individual lives their unique and culturally anchored meanings" (McAdams & Pals, 2006, p. 210).

In both the McCrae and Costa and McAdams and Pals models, Personality Traits influence people's reactions to situations, their behaviors, and also their general affective balance and satisfaction with life through Characteristic Adaptations. According to Diener (2000) subjective well-being consists of an affective component, determined by the frequency and intensity of positive and negative emotions, and of the cognitive component expressed in satisfaction with life. As stated by Lucas and Diener (2008, p. 795), "the strong influence of personality is seen as one of the most replicable and most surprising findings to emerge from the last four decades of research on SWB [Subjective Well-being]". Research suggest that the strongest relationships between Personality Traits and Subjective Well-being involve Extraversion and Neuroticism (Diener & Lucas, 1999). Extraversion correlates positively with the positive affect, and Neuroticism with the negative affect (Costa & McCrae, 1980). It has been also found that beliefs about oneself or about the world, expressed in optimism and self-esteem, are positively related to Extraversion and are negatively related to Neuroticism. Such beliefs are in turn, correlated with satisfaction with life (Lucas, Diener, & Suh, 1996).

McCrae and Costa (1991) explained these relationships in two ways. Instrumental theories state that personality traits determine which situations people will typically engage in and which experiences they will have. For example, extroverts will engage in more social interactions than introverts, and extroverts will share positive emotions with others than introverts. Temperament theories point to a direct link between personality traits and emotional reactions. Extroverts do not necessarily seek specific situations, they simply react to what happens to

them in a different, more positive way. People who are higher in Neuroticism are more sensitive to cues about possible threats, including threats to their self-esteem, than people who are lower in Neuroticism. Although most studies on relationships between personality and Subjective Well-being have examined the roles of Extraversion and Neuroticism, there is also research that has found positive correlations between Subjective Well-being and Conscientiousness and Agreeableness (Shultz, Schmidt, & Steel, 2008).

The integrative models of McCrae and Costa and of McAdams and Pals state that beliefs are Characteristic Adaptations, and people differ in terms of their beliefs about the world and about themselves. According to Bandura (1977, 1997), self-referent beliefs pertain to a specific domain of activity and they predict the effects of actions taken within that domain. Global beliefs should be treated as relatively stable personal characteristics (Bandura, 1997; Jerusalem & Schwarzer, 1992). People expect that certain behaviors will have specific consequences. These expectations are based on global beliefs, self-efficacy beliefs, and on other beliefs about oneself, and on beliefs about the typical course of events in a specific context.

According to Bandura (1997), self-efficacy is an important aspect of these self-referent beliefs. As with other beliefs, self-efficacy can also be divided into general and domain-specific. General self-efficacy reflects a person's beliefs about her or his ability to deal with a broad variety of challenging demands (Luszczynska, Scholz, & Schwarzer, 2005). General Self-efficacy must also be distinguished from positive expectations, such as hope or optimism. General Self-efficacy may lead people to believe that they will achieve successful outcomes and all will be well, but this will take place because of personal efforts. A person with high self-efficacy expects her or his efforts and abilities are enough to deal with challenges and to achieve goals. Compared to people who are low in General Self-efficacy, People with higher General Self-efficacy tend to undertake more activities, they devote more effort to achieving what they set for themselves, and they are more successful in coping with difficult situations and stress. They are more persistent and when facing failure they tend to increase their efforts rather than disengage (Bandura, 1997). Consistent with such tendencies, General Self-efficacy is positively related to Satisfaction with Life (Luszczynska, Scholz, & Schwarzer, 2005).

General Self-efficacy is a set of beliefs that people have about their abilities to cope and to achieve goals, whereas self-esteem encompasses a wider array of beliefs about oneself. Self-esteem is a positive or negative attitude towards the Self (e.g., Rosenberg, 1965). People with high self-esteem are generally happy about themselves and self-esteem is positively related to how people perceive their achievements, abilities, intelligence, and popularity. It may not reflect objective levels of these dimensions (Baumeister, Campbell, Krueger, & Vohs, 2003). Self-esteem is positively linked to optimism (Lucas, Diener, & Suh, 1996) and to a tendency to experience positive emotions more frequently and more intensely.

General beliefs about the world encompass beliefs about the stability of rules governing reality and the beliefs about the world being a predictable, fair, and friendly place. These beliefs vary in scope, and they refer to the relationships between a person and her or his surroundings. The concept of Basic Trust introduced by Trzebiński and Zięba (2004) draws from Erikson's understanding of trust as a basic virtue developed in early childhood. Basic Trust expresses the convictions that the world makes sense and that it is generally a people-friendly place. Therefore, these beliefs constitute a 'private theory of the world' or an individual worldview. They are usually not very clearly verbalized, and when they are, these verbalizations are expressed through socially accepted metaphors and institutions aimed at sustaining them. Basic Trust correlates with Openness, Extraversion and Conscientiousness (Trzebiński & Zięba, 2004). Basic Trust is positively related to the employment of adaptive strategies in the face of life challenges. It is even more important when the situation is outside of individual control, for example when a person faces irreversible loss (Trzebiński & Zięba, 2004, 2012). In these situations positive outcomes cannot be traced back to beliefs about one's abilities; rather, they depend on the belief that the world makes sense and is a friendly place.

McAdams and Pals' model provides a general framework for investigating relationships between personality and entrepreneurial activity. Recent meta-analyses have shown that individual differences on four of these five dimensions of the FFM are related to the likelihood that people will become entrepreneurs. Entrepreneurs scored higher on Conscientiousness and Openness to Experience and lower on Neuroticism and Agreeableness (Zhao & Seibert, 2006; Rauch & Frese, 2007). Although these two studies found no differences in Extraversion between entrepreneurs and other people, a study that used data from the National Longitudinal Survey of Youth in the United States found that level of Extraversion during childhood predicts owning a business in adulthood (Zhao & Seibert, 2006).

Relationships between personality and entrepreneurial activity reflect various processes. Openness to experience is important for entrepreneurs as they need to explore new ideas and take innovative approaches to the development of products and the organization of business (Zhao & Seibert, 2006). Agreeable people are less likely to start a business than less agreeable people because they are less likely to pursue their own self-interest, drive difficult bargains, or use others to achieve their objectives (Zhao & Seibert, 2006). Less agreeable people are more skeptical of others than more agreeable people (Costa & McCrae, 1992), which makes them more critical towards business information (Shane, 2003). Entrepreneurs need to be highly conscientious to achieve their goals. People who are emotionally stable are more likely to start their own businesses than people who are neurotic, because owning a business may be highly stressful, it is associated with significant risks, social isolation, pressure, insecurity, and personal financial difficulties (Rauch & Frese, 2007).

The findings of prior research have shown that many decisions, including choosing an occupation and deciding to start a business, depend to some degree on self-referent beliefs (Krueger, Reilly, & Carsrud, 2000). Among these beliefs, self-efficacy (Bandura, 1997), hope (Snyder, Simpson, Michael, & Cheavens, 2000), and self-esteem (Rosenberg, 1965) refer to perceptions about one's own effectiveness. Also beliefs about the world, e.g. belief in a just world (Lerner, 1980) and Basic Trust (Trzebiński & Zięba, 2004), can play important roles in the formulation and implementation plans to establish one's own business.

We examine the roles played by Self-Efficacy, Self-Esteem and Basic Trust as mediators relationships between personality traits and well-being. It was hypothesized that Self-Esteem would mediate between Extraversion, Neuroticism, Openness, Agreeableness and well-being; Self-Efficacy would mediate between Extraversion, Neuroticism, Openness, Conscientiousness and well-being; and Basic Trust would mediate relationships between Extraversion, Conscientiousness, Agreeableness and well-being. It was also expected that received (or not) a grant from an employment agency to start their own business would moderate the relationships between personality traits, beliefs and well-being.

Method

Sample and procedure

Participants were 301 unemployed people (138 women), aged 19–65 years ($M=33.74$, $SD=10.74$), 157 of whom had received a grant from an employment agency to start their own business. All participants were officially registered as unemployed during the six or more months before the study, and the length of their unemployment was less than 12 months. They all participated in a support program conducted by an employment agency, and 157 (52.16%) received a grant for launching their own business (approximately 5,000 Euro). They had to run their businesses for at least 12 months. If they did not, they would have to return the money. They were asked to participate in the study a few weeks after getting the grant while they were registering their business. The second subsample consisted of people who were registered as unemployed and did not choose to apply for a grant, although they could receive other support such as training or assistance in job seeking. Participants lived in small or medium sized towns (less than 100,000 inhabitants), and they were registered in employment agencies in Łomża, Kolno, Leszno, Szamotuły, Kościan, and in Poznan (for people living in the vicinity of Poznan).

The study was conducted in employment offices, during unemployment registration or during a meeting with the employment assistant. Participation was voluntary, and participants were not compensated. Participants were told about the study aims and procedure both verbally and in writing. At this meeting they were given paper questionnaires that were completed immediately.

Measures

Personality traits

Personality was measured with the Polish adaptation (Zawadzki et al., 1995) of the NEO-FFI (Costa & McCrae, 1992). The NEO-FFI is a 60-item inventory, that consists of five 12-items subscales measuring Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Participants responded on 5-point scales labeled 1 = definitely don't agree and 5 = definitely agree.

Self-Efficacy

General Self-Efficacy was measured using the Polish version (Juczyński, 2001) of Schwarzer's General Self-Efficacy Scale (Schwarzer, & Jerusalem, 1995). The questionnaire has 10 items (e.g. "Thanks to my resourcefulness, I can handle unforeseen situations", "I can always manage to solve difficult problems if I try hard enough"). Possible responses were 1 "not at all true," 2 "hardly true," 3 "moderately true," and 4 "exactly true."

Self-Esteem

Self-esteem was measured with the Polish version (Łaguna, Lachowicz-Tabaczek, & Dzwonkowska, 2007) of Rosenberg's (1965) Self-Esteem Scale. The 4-point scale consists of 10 items (e.g. "I take a positive attitude toward myself" labeled 1 = strongly disagree, 4 = strongly agree).

Basic Trust

Basic trust was measured using an 8-item scale (Trzebiński & Zięba, 2004). Participants indicated how well each statement expressed or represented their feelings and beliefs (e.g. "The world is good even if we are not doing well," "The world is just and everyone will get what they

deserve, sooner or later." Participants provided their ratings using a 5-point scale (1 = strongly disagree, 5 = strongly agree).

Subjective well-being

Subjective well-being was measured using a Polish adaptation (Juczyński, 2001), of the Satisfaction with Life Scale (SWLS; Diener et al., 1985). The measure asks the subject to agree or disagree, using a seven-point Likert-type scale (1 = strongly disagree, 7 = strongly agree), with five statements regarding the overall satisfaction with his or her life (e.g. "In most ways my life is close to my ideal", "I am satisfied with the current state of affairs in my life"). Higher scores indicate greater life satisfaction.

Positive and negative mood

Mood Questionnaire by Zalewska (2011) consisted of 12 items that referred to positive affective states (e.g., happy, enthusiastic) and 12 that referred to negative affective states (e.g. sad, nervous). Subjects indicated how often they experienced each mood using the following scale: 0 "not at all," 1 "less than once a month," 2 "once a month," 3 "several times a month," 4 "once a week," 5 "several times a week," 6 "everyday."

Results

Differences between grant recipients and non-recipients on our measures of personality, characteristic adaptations, and beliefs were examined with series of t-tests, and the results of these analyses are summarized in Table 1. These analyses found that compared to non-recipients, grant recipients had significantly higher scores on Extraversion, Conscientiousness, General Self-Efficacy, and Satisfaction With Life, and had

Table 1. Descriptive statistics and the results of comparisons of means for grant recipients ($N=157$) and non-recipients ($N=144$)

	Grant recipients		Non-recipients		<i>t</i>	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Neuroticism	18.33	7.37	20.63	7.20	-2.74	.006	.32
Extraversion	31.42	6.00	29.78	6.15	2.34	.020	.27
Openness	25.80	5.34	25.41	5.02	.65	.515	–
Agreeableness	30.06	5.73	30.42	4.56	-.60	.546	–
Conscientiousness	36.51	5.74	35.04	6.08	2.16	.032	.25
Self-Esteem	31.20	4.11	29.70	3.84	3.38	.001	.38
General Self-Efficacy	32.80	3.58	31.02	4.01	4.05	.001	.47
Basic Trust	30.49	5.00	29.50	4.63	1.78	.076	–
Satisfaction with life	23.82	4.66	21.70	5.44	3.62	.001	.42
Positive affect	57.12	9.23	55.37	9.92	1.58	.115	–
Negative affect	30.42	13.05	32.10	12.82	-1.13	.260	–

Table 2. Correlation coefficients for the grant acceptors (N=157; lower triangular matrix) and in the non-grant group (N=144; upper triangular matrix)

	1	2	3	4	5	6	7	8	9	10	11
1. Neuroticism		-.42***	-.05	-.27**	-.39***	-.48***	-.33***	-.24**	-.42***	-.49***	.50***
2. Extraversion	-.37***		.17*	.28**	.47***	.35***	.35***	.14	.35***	.55***	-.28**
3. Openness	-.27**	.23**		.18*	.12	-.02	.21*	.18*	-.01	.17*	-.03
4. Agreeableness	-.38***	.21**	.12		.42***	.15	.17	.12	.17*	.29**	-.19*
5. Conscientiousness	-.46***	.36***	.19*	.40***		.27**	.36***	.28**	.31***	.47***	-.24**
6. Self-Esteem	-.58***	.37***	.32***	.21**	.34***		.41***	.13	.47***	.47***	-.27**
7. General Self-Efficacy	-.30***	.32***	.22**	.13	.35***	.35***		.35**	.47***	.48***	-.41***
8. Basic Trust	-.23**	.34***	.26**	.26**	.31***	.32***	.25**		.37***	.38***	-.16
9. Satisfaction with life	-.34***	.37***	.26**	.31***	.34***	.44***	.38***	.32**		.46***	-.36***
10. Positive affect	-.43***	.40***	.30***	.35***	.36***	.37***	.33***	.35**	.37***		-.41***
11. Negative affect	.43***	-.32***	-.16	-.24**	-.25**	-.33***	-.28**	-.11	-.30***	-.29**	

* $p < .05$, ** $p < .01$, *** $p < .001$

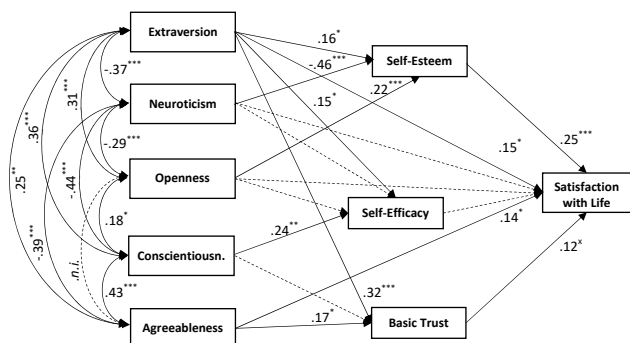
lower score on Neuroticism. In contrast, the analyses found that the two groups not differ significantly in terms of Openness, Agreeableness, Basic Trust, and either measure of affect. Effect sizes (Cohen's d) for the significant differences were small to medium (Sawilowsky, 2009).

Correlations between the study variables for both groups are presented in Table 2. According to Cohen's (1988) standard, in which correlation coefficients in the order of .30 are "medium," and those of .50 are "large", most of the study correlations are medium.

To verify if beliefs about the self and about the world mediated relationships between Personality Traits and Subjective Well-being (SWB), and examined differences between grant acceptors and the non-grant groups, we conducted a multiple-sample SEM (Byrne, 2010; Kline 2005) using AMOS 23.

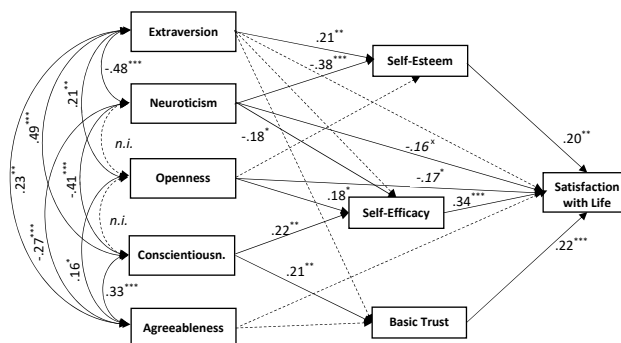
In the both models, of Satisfaction with Life and of Positive Affect, all five Personality Traits, Self-Esteem, Self-Efficacy, and Basic Trust were included. Based on the literature review presented earlier, we assumed that Extraversion, Neuroticism, Openness, Agreeableness and beliefs about the self and about the world predict Satisfaction with Life and Positive Affect; Extraversion, Neuroticism and Openness relate to Self-Esteem; Extraversion, Neuroticism, Openness and Conscientiousness predict Self-Efficacy; Extraversion, Conscientiousness and Agreeableness relate to Basic Trust. We assumed that relationships between Personality Traits and both aspects of subjective well-being were decomposed into direct effects and indirect effects through the beliefs. The models of Satisfaction with Life are presented in Figure 1 and Figure 2. The models of Positive Affect are presented in Figure 3 and Figure 4.

Figure 1. The model of relationships between Personality Traits, Beliefs and Satisfaction with Life in the group of grant acceptors (N = 159)



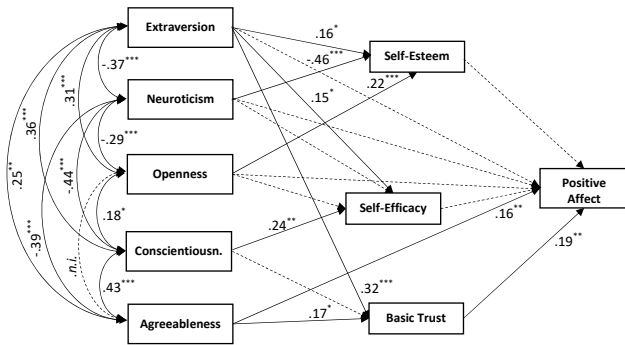
Note. *** $p < .001$; ** $p < .01$; * $p < .05$; $X p = .051$

Figure 2. The model of relationships between Personality Traits, Beliefs and Satisfaction with Life in the non-grant group (N = 144)



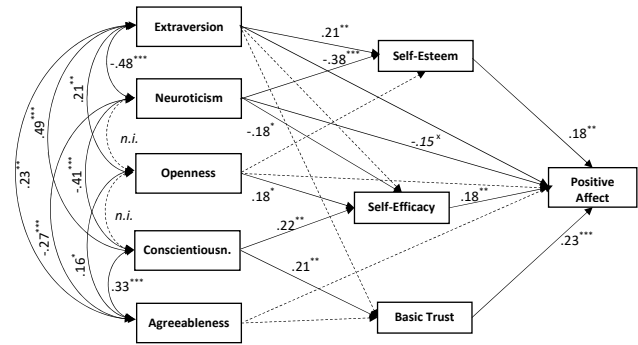
Note. *** $p < .001$; ** $p < .01$; * $p < .05$; $X p = .055$

Figure 3. The model of relationships between Personality Traits, Beliefs and Positive Affect in the group of grant acceptors (N = 159)



Note. *** $p < .001$; ** $p < .01$; * $p < .05$

Figure 4. The model of relationships between Personality Traits, Beliefs and Positive Affect in the non-grant group (N = 144)



Note. *** $p < .001$; ** $p < .01$; * $p < .05$; X $p = .056$

To verify what is the role of the type of group (grant-acceptors vs non-grant), we compared two types of models. In model 1a and 1b, we assumed that loads on paths may vary depending on the group. For models 2a and 2b, we have added an additional limitation by constraining all parameters to be equal across the two groups.

All models fitted the data well (see Table 3 and Table 4). Next analysis indicated that Model 1a and 1b did not differ significantly (difference of $\chi^2 = 50.412$; $df = 36$; $p = .056$). We also did not find a significant difference between models 2a and 2b (difference of $\chi^2 = 45.430$; $df = 36$; $p = .135$).

Thus, as Model 1b and Model 2b were more parsimonious than Model 1a and Model 2a (i.e., had more degrees of freedom; Edwards, 2001) the results were preferable to Model 1a and Model 2a.

Table 5 and Table 6 summarize the standardized total, direct, and indirect effects of the Personality Traits and Beliefs on Satisfaction with Life and Positive Affect.

These results indicate that from among Personality Traits Extraversion, Agreeableness and Neuroticism are best at predicting Satisfaction With Life, but the entire effect of Neuroticism and part of the effect of Extraversion is mediated by Beliefs. Conscientiousness and Openness affect Satisfaction With Life to a small extent, primarily through Beliefs. In both groups, one of the most important predictors of Satisfaction with Life was Self-Esteem and Basic Trust. Comparison of the significance of the parameter differences indicates that the groups of grant-acceptors and non-grant differ in the effects of General Self-Efficacy (*Critical Ratios* = 2,33) and Openness (*Critical Ratios* = -2,25) on Satisfaction with Life. Both

Table 3. Fit indices in the tested models of Satisfaction with Life

Model	χ^2	df	p	χ^2/df	NFI	GFI	RMSEA (LO 90; HI 90)	CFI	ECVI
Model 1a no constraints	33.866	18	.013	1.88	.951	.976	.054 (.024; .082)	.974	.595
Model 2a with constraints	84.278	54	.002	1.56	.877	.943	.043 (.024; .061)	.951	.523

NFI – Normed Fix Index, GFI – Goodness of Fit Index; RMSEA – Root Mean Square Error of Approximation; CFI – Comparative Fit Index, ECVI – Expected Cross-Validation Index.

Table 4. Fit indices in the tested models of Positive Affect

Model	χ^2	df	p	χ^2/df	NFI	GFI	RMSEA (LO 90; HI 90)	CFI	ECVI
Model 1b no constraints	35.563	18	.002	1.98	.949	.975	.057 (.028; .085)	.972	.601
Model 2b with constraints	80.993	54	.010	1.50	.883	.945	.041 (.002; .058)	.956	.512

NFI – Normed Fix Index, GFI – Goodness of Fit Index; RMSEA – Root Mean Square Error of Approximation; CFI – Comparative Fit Index, ECVI – Expected Cross-Validation Index.

Table 5. The standardized total, direct, and indirect effects of the variables included in the model of Satisfaction with Life for grant acceptors ($N=157$) and non-grant ($N=144$)

	Grant acceptors			Non-grant		
	Total	Direct	Indirect effects	Total	Direct	Indirect effects
Neuroticism	-.123	.016	-.129 by Self-Esteem -.010 by Self-Efficacy	-.285	-.155	-.072 by Self-Esteem -.059 by Self-Efficacy
Extraversion	.261	.158	.043 by Self-Esteem .017 by Self-Efficacy .043 by Basic Trust	.213	.117	.042 by Self-Esteem .054 by Self-Efficacy
Openness	.127	.051	.063 by Self-Esteem .013 by Self-Efficacy	-.103	-.158	-.001 by Self-Esteem .056 by Self-Efficacy
Agreeableness	.196	.170	.026 by Basic Trust	.094	.084	.010 by Basic Trust
Conscientiousness	.040		.027 by Self-Efficacy .013 by Basic Trust	.122		.074 by Self-Efficacy .048 by Basic Trust
Self-Esteem	.286	.286		.184	.184	
General Self-Efficacy	.106	.106		.335	.335	
Basic Trust	.141	.141		.209	.209	

Table 6. The standardized total, direct, and indirect effects of the variables included in the model of Positive Affect for grant acceptors ($N=157$) and non-grant ($N=144$)

	Grant acceptors			Non-grant		
	Total	Direct	Indirect effects	Total	Direct	Indirect effects
Neuroticism	-.197	-.150	-.037 by Self-Esteem -.009 by Self-Efficacy	-.248	-.149	-.067 by Self-Esteem -.032 by Self-Efficacy
Extraversion	.221	.134	.013 by Self-Esteem .015 by Self-Efficacy .060 by Basic Trust	.373	.304	.039 by Self-Esteem .029 by Self-Efficacy
Openness	.090	.061	.018 by Self-Esteem .011 by Self-Efficacy	-.021	-.051	-.001 by Self-Esteem .030 by Self-Efficacy
Agreeableness	.214	.179	.036 by Basic Trust	.078	.067	.010 by Basic Trust
Conscientiousness	.041		.023 by Self-Efficacy .018 by Basic Trust	.090		.040 by Self-Efficacy .049 by Basic Trust
Self-Esteem	.083	.083		.172	.172	
General Self-Efficacy	.091	.091		.183	.183	
Basic Trust	.198	.198		.217	.217	

variables explain a significant part of the Satisfaction with Life variance only in the non-grant group.

Discussion

Our findings add to the existing knowledge about the relationships among Personality Traits, Characteristics Adaptations and well-being, and about the impact of situational factors on these relationships. In our sample, Personality Traits and Beliefs about the self and about the world explained 45% of the variance of Satisfaction With Life, 42% of the variance of Positive Affect. Similar to

the results of previous research (Costa & McCrae, 1980; Lucas & Diener, 2008) Extraversion and Neuroticism were related to both the cognitive (Satisfaction with Life) and to the affective (Positive Affect) component of well-being. Consistent with the conclusions of the meta-analysis of Steel, Schmidt, and Shultz (2008) we also found positive correlations between Agreeableness and Conscientiousness, and Satisfaction with Life and Positive Affect.

Hierarchical regression and SEM suggested that Satisfaction with Life is related to Personality Traits, Beliefs about the self (Self-Esteem, Self-Efficacy), and beliefs about the world (Basic Trust). These variables were related to

Satisfaction with Life over and above relationships between Satisfaction with Life and Personality.

Although relationships between Personality Traits and Satisfaction with Life were significant when personality was examined alone, when Beliefs were introduced into the model the coefficients for personality were not significant. This suggested that Self-Esteem, Self-Efficacy, and Basic Trust mediated the relationships between Personality Traits and Satisfaction with Life, and the SEM analyses confirmed this supposition. The model with all five Personality Traits fits the data best, but direct effects of those traits on Satisfaction with Life were modest and limited to Extraversion and Agreeableness. Relationships between Neuroticism, Openness, Conscientiousness, and Satisfaction with Life were fully mediated by Beliefs.

According to the Five-Factor Theory the effects of Personality Traits on behaviour should be mediated by Characteristic Adaptations, including beliefs about the self and the world (McCrae & Costa, 2008). McCrae and Sutin (2018) noted that when discussing Personality Traits and behaviours, simple statistical mediation should be distinguished from causal mediation. These authors stressed that studies may show that a particular Characteristic Adaptation mediates between a Personality Trait and an outcome variable, but this does not mean that this Characteristic Adaptation is the only significant predictor of an outcome. For example, social skills may mediate the effect of Extraversion on leadership and their effect may be stronger than the effect of Extraversion itself, but this does not mean that leadership depends solely on social skills. A full model explaining the impact of Extraversion on leadership effectiveness would have to entail numerous Characteristic Adaptations. A study may include a specific Characteristic Adaptation and it may mediate the relationship between a trait and an outcome variable fully, but this does not mean that other Characteristic Adaptations should be ignored as possible predictors – they may even be stronger than the one included in the study. The role played by specific Characteristic Adaptations may also depend on the specificity of a situation (McCrae & Costa, 2008).

McCrae and Sutin seem to question the search for specific mediators between Personality Traits and behaviors.

“If one knew which specific Characteristic Adaptations were relevant to the outcome, for practical purposes it might make sense to assess them and ignore the underlying traits. But a small number of (...) personality traits are associated with a myriad of Characteristic Adaptations, so systematic exploration of potential predictors of some outcome is probably easier at the trait level.” (McCrae & Sutin, 2018).

In reference to these remarks, we are uncertain how the mediating role of Beliefs (Self-Esteem, Self-Efficacy, Basic Trust) explains the relationships between Personality Traits and Satisfaction with Life. First, our model may not have included other, possibly more important mediators between Personality Traits and Satisfaction with Life. Characteristic Adaptations include habits, attitudes, skills, roles, and relationships (McAdams & Pals, 2006; McCrae & Costa, 2008). All Characteristic Adaptations

are influenced by Personality Traits and by the interaction between Personality Traits and the environment. Research on Satisfaction with Life has shown, that it depends on positive beliefs, coping strategies, personal projects (Little & Joseph, 2007; Wiese, 2007), and numerous other factors, which, according to the Five-Factor Theory, would fall into the category of Characteristic Adaptations.

The inclusion of other Beliefs or Characteristic Adaptations other than Beliefs, might explain the relationships between Personality Traits, Characteristic Adaptations and Satisfaction with Life equally well or better. Consequently, our findings should not be used to say that the level of self-esteem, self-efficacy, or Basic Trust explain how Personality Traits impact Satisfaction with Life. Rather, we assume, that these Beliefs may be one of the many mediators of this relationship. Future research is needed to determine if other Beliefs (or Characteristic Adaptations other than Beliefs) mediate relationships between personality and satisfaction (see: Zalewska, 2018).

According to Bandura (1977, 1997) and Mischell and Shoda (1995, 2008) beliefs about the self and about the world are hierarchical. People hold global, very general beliefs about themselves and about the world, but they also hold beliefs referring to specific situations, objects, and aspects of reality. In the present study we analyzed the role of global beliefs. However, in our sample Satisfaction with Life could possibly be predicted more accurately by specific aspects of self-efficacy and self-esteem referring to our participants' specific circumstances (being unemployed, seeking employment through grants) or work-related self-efficacy. When a person is unemployed, her or his Satisfaction with Life may not necessarily depend on the general belief that the world is friendly, rather, it may depend on the beliefs about those aspect of reality that are relevant to job seeking (e.g. the mechanisms of free trade, efficacy of the institutions supporting the unemployed). Future research may therefore consider the global, as well as domain specific beliefs and their interaction with the participants' specific circumstances.

Our findings confirm that Beliefs mediate relationships between Personality Traits and Satisfaction with Life. They also show that different types of Beliefs serve a different function, depending on an individual's circumstances. Only in the non-grant group did the level of Self-efficacy impact Satisfaction with Life and mediate between other variables and Satisfaction with Life. Among grant acceptors, Self-efficacy did not impact Satisfaction with Life, while Self-esteem and basic trust had similar functions in both groups.

Naturally, the study has some limitations. The choice of the sample and the procedures require additional comment. Participants were all Polish so our results might not generalize to other cultural contexts in which the antecedents and conditions of unemployment or the institutional support (or lack thereof) may be different.

The cross-sectional design also limits conclusions about causality. A longitudinal study would be more valid if Personality Traits and Characteristic Adaptations were to be studied before applying for the start-up grant and some time

after (e.g. after a year). Obtaining data on Satisfaction with Life after a year is still possible, but a prospective design would require a new group of participants, who would have to be approached before they were awarded the start-up grants.

Additionally, the interpretation of the group comparisons is constricted because the groups differed not only in terms of Satisfaction with Life and Beliefs, but also in terms of personality. This last difference is perplexing. Compared to the non-grant group, the grant acceptors had higher levels of Extraversion and Conscientiousness, and lower levels of Neuroticism. This difference may be coincidental but it may also stem from systematic differences. Possibly, employment assistants in the job centres may have evaluated some of the grant applicants as better adjusted because of their personalities and therefore, these applicants were more likely to be awarded the grant. It is less likely that getting the grant impacted the participants' personality. According to the Five-Factor Theory, Personality Traits are stable (Costa & McCrae, 2008), and the changes in their levels can be observed for whole life-spans and not weeks; periods and not single events or transient circumstances (Helson, & Kwan, 2000; McCrae et al., 2000; Roberts, 1997). Also, we were unable to control for the differences in personality between people who participated in our study and those who refused. Grant acceptors and the non-grant group differed in terms of three Personality Traits and these differences must be taken into account when interpreting the differences between them in terms of the links of Personality Traits, Characteristic Adaptations and Satisfaction with Life. However, it should be noticed that despite the differences in terms of personality traits, self-beliefs and life satisfaction, the examined relationships between personality on both levels (traits and characteristic adaptations) and Subjective well-being were similar in both groups. This allow to infer that these findings can reflect some universal relationships.

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