Mutual Connections in Between Empathy and Personality Traits of Helping Professions

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Abstract: The aim of the research was an examination and determination of relations between the empathy and personality. We focused on which personal features could predict the empathy. The study investigated 240 respondents from 30 to 35 years, 128 women and 112 men in helping professions. For determination of the empathy level we used non-standardized questionnaire Empathy Quotient EQ, for determination of personal features we used the first part of standardized Clinical analysis questionnaire CAQ– the range of normal personality. The difference between women and men was only in personal characteristics: dominance and hypersensitivity. The obtained results proved the relation between empathy and personality. Regarding to personal features and empathy, based on linear regression analyze were found the relations between empathy and emotional stability.

Keywords: *Empathy; Helping professions; Satisfaction with life; Personality; Personality traits.*

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Introduction

The research is focused on identifying individual personality characteristics, which are predictors for the level of empathy. The issue of empathy and personality in helping professions is highly topical, mainly because of the pressure of postmodern society, which considers empathy as one of the components that is absent in this profession. Knight (1989) defined empathy as understanding and sharing ideas and emotions of the others. He explained that an empathetic person does not feel sadness of others, however they feel objective compassion for the others. Cotton (2001) stated that empathy is an introspective of a person into the motives, feelings and actions of other people and the ability to be able to comprehend and understand those correctly. According to Baron-Cohen (2014), it is necessary to differentiate between cognitive and affective empathy. Empathy is the ability of all human beings, though not everybody is able to use it to the same extent. Its development depends on previous experience and, of course, willingness to try to understand someone else (Buda, 1994). The notion personality may be defined as a relatively stable way of thinking, acting and emotional reactions that are characteristic for adaptation of an individual to given circumstances. This clarifies why people who found themselves in the same situation act differently and it also clarifies diversity of their reactions to these situations (Wortman, Loftus, & Weaver, 1999). According to Cattell (1943), the personality is characterized by the way people behave in certain situation. From this point of view, it is possible then to deduce character traits based on people's acting and, at the same time, based on character traits, it is possible to deduce how would a person act in certain situation (Walter, 1995).

There are a few researches that deal with individuality and other variables. One of them is the research of Watson and Morris (1991) who studied the relation in between the factors of Narcissistic Personality Inventory (NPI) and empathy. They found out that the factor of exploitativeness/ entitlement predicts lower level of emotional and cognitive empathy (Watson & Morris, 1991). Munro, Bore, and Powis (2005) noticed positive relation in between empathy and extraversion and open mindedness and the ability to cooperate. Negative relation was proven in between empathy and distancing (Munro, Bore, & Powis, 2005). Del Barrio, Aluja, and Garcia (2004) confirmed that empathy is in a strong relation with kindness. A positive correlation was recognized in between conscientiousness, energy and openness. On the other hand, empathy did

not prove to be in any significant relation with those three emotions. The relation between empathy and emotional stability was not proven neither (Del Barrio, Aluja, & Garcia, 2004). These findings are not identical with the findings of Vymětal (1998) who states that a person who is empathetic has to be internally stable, too. Such a person has to be mature so that they are able to empathize in someone else. They should not overtake the identity of anybody else but to keep their own identity.

The correlation between empathy (as a part of emotional intelligence) and personality was in interest of Sala (2002), too. There were found strong correlations in between emotional intelligence and neuroticism, extraversion, kindness and conscientiousness, and moderate in regards to openness to experience. A relation was proven in between emotional intelligence and extraversion, openness to experience and conscientiousness (Goleman, 2011; Sala, 2002). Fogle, Huebner, and Laughlin (2002), Francis (1993), Scholte and De Bruyn (2001) found out that men tend to score higher on the scale of psychoticism and women scored higher on the scale of neuroticism. There was found no difference when it comes to extraversion. Graziano, Jensen-Campbell, and Finch (1997) dealt with the differences in between sexes. He found out that women score higher in kindness but have lower score in emotional stability (compared to men). Del Giudice, Booth, and Irwing (2012) found out that women scored higher than men in personality dimensions, specifically in emotional stability, conscientiousness, social boldness, alertness, directness, openness to changes and perfectionism. The main aim of our research is to study and verify the relation in between empathy and personality traits on sample of men and women who are 30 to 35 years old. Another aim is to find out exactly which personality traits predict the level of empathy. Our research directs attention to comparison of male and female personalities.

The correlation between empathy and personality traits were proven by several researches and theories: Del Barrio et al. (2004); Kaufman (2014); Munro et al. (2005); Sala (2002); Watson and Morris (1991); Vymětal (1998). These researches prove significant correlation between empathy and personality. However, we did not find out what is the correlation between empathy and personality traits from the Survey of clinical analysis. This is the reason why we chose the following research question (RQ) and two hypotheses (H):

RQ1: Does empathy correlate with personality?

H1: We suppose that personality traits describing emotional life will have positive impact on empathy.

H2: Personality traits describing emotional life predict the level of empathy.

Researchers such as Del Giudice et al. (2012); Graziano et al. (1997); Fogle et al. (2002); Francis (1993); Scholte and De Bruyn (2001), all of them have been dealing with the differences between men and women. Their researches found out that men reached different scores in personal traits than women. This resulted in different personality traits for both examined groups. Based on these findings, we decided to ask the last research question:

RQ2: Are there any differences between individual personality traits of men and women exciting helping professions?

Methods

Research sample

We set our sample based on intentional selection. We investigated correlations between researched variables on the sample of 240 people (100%), 112 men (46,7%) and 128 women (53,3%), who have been working in the sphere of psychology or social work for 5 years. We intentionally picked up these professions because both of these professions (psychologists as well as social workers) suppose that people have prosocial and empathetic behavior. The participants were in 30 to 35 years old (the age of young adulthood). We tried to equalize the participants of our research sample in several aspects such as age, obtained education, sex, permanent stay, marital status, socio-economic status, comparison of schools where the participants studied.

Table 1 Research sample

Sex	Count	%	Average age	Max	Min
Female	128	53,3%	32,34	35	30
Male	112	46,7%	34,77	35	30
Sum	240	100%	34,9	35	30

Source: the author of paper

Materials and equipments

We used Empathy Quotient EQ questionnaire, the Questionnaire of clinical analysis - scale of normal personality CAQ and the Questionnaire of satisfaction with life SWLS for verification of our hypotheses, research questions and realization of research.

Empathy Quotient – EQ - is a non-standard questionnaire. Its existence dates back to 2004 when it was invented by Simon Baron-Cohen and Sally Wheelwright (Baron-Cohen, 2014). The questionnaire consists of

60 questions; 20 questions are constructed to lead the individual from empathy orientation of the resting 40 questions that examine one's empathy level. The individual have choice to evaluate themselves on 4 grades Likert scale. The EQ questionnaire measures cognitive and affective aspects of empathy (Preti et al., 2011). Based on scaling we are able to determine 4 levels of empathy from low (below average) level, medium (average) level, high (above average) level and highly above average. After having calculated the inner consistency, our results were in conformity with given values in original testing where the EQ stated the value of reliability $\alpha = 0,835$ (Lawrence, Shaw, Baker, Baron-Cohen, & David, 2004).

Clinical analysis questionnaire (CAQ) is a standardized questionnaire translated into Slovak language by A. Nociar and I. Poledňová (1998). The questionnaire belongs to individuality and clinical tests because it consists of 16 normal personality traits that are overtaken from Cattell's sixteen factors personality questionnaire 16PF and 12 pathological ones that were came from Minnesota multiphase personality questionnaire MMPI. CAQ is a combination of these two questionnaires. The first part CAQ-I studies 16 scales of normal personality: kindness, intelligence, emotional stability, dominance, impulsiveness, conformity, boldness, being over-sensitive, being suspicious, imagination, foxiness, uncertainty, radicalism, self-sufficiency, self-discipline and tension. The second part CAQ-II studies clinical scales (hypochondria, suicidal depression, agitation, anxiety depression, low-energy depression, guilt and resentment, boredom, paranoia, psychopathy, schizophrenia, psychastemia, psychological inadequacy) (Nociar & Poledňová, 1998). For the purpose of our research, we decided to execute only the first part of the questionnaire that studies personality traits and structure of normal personality (Nociar & Poledňová, 1998).

The course of research

The initial phase of the research comprised of data gathering that was executed in person during April and may 2019. Before having accepted participation in our research, each and every responded was acknowledged of results anonymity and that these serve only for the purpose of this research. They were also updated on the fact that the research takes place in two steps, two individual questionnaires. 398 batteries of questionnaires were handed out, though, 158 must have been excluded from our research as these were non-complete and did not comply with the research conditions.

The respondents were asked to fill in three paper form questionnaires from the evidence forms. We started with the first part, the

Cinical Analysis Questionnaire (CAQ), then we continued with the questionnaire Empathy Quotient (EQ).

Statistic evaluation of data

The results of Empathy Quotient EQ, Clinical Analysis Questionnaire CAQ and Satisfaction with life scale SWLS from respondents were processed via the program SPSS Statitics 17.0. Then, based on results of the normality test, we chose parametric and non-parametric variants of comparison and correlation tests. We used Mann-Whitney's U test and Student's T test for two independent selections for differences of personality traits between men and women. Regression analysis was used for those research questions which examined if personality predicts empathy.

The results

We present our findings in this sub-chapter. In regards to research question Q1: Does empathy correlate with personality? we formulated two hypotheses. Hypothesis H1: We suppose that personality traits describing emotional life will have positive impact on empathy. After having run the normality tests, we run parametric Pearson's correlational analysis (Table 2). Based on its results we accepted hypothesis H1; a strong positive correlation was proven for the quality of Warm-heartedness, ($r = 0,90$; $p = 0,000$) and Emotional stability ($r = 0,93$; $p = 0,000$), too. Other tested personality traits were in no correlation with empathy.

Table 2 Pearson's correlation analysis- empathy, personality traits

	Empathy	Sig. (one-way)
Empathy	-	-
Kindliness	0,90**	0,000
Emotional stability	0,93*	0,000
		Sig. (2-smerná)
Intelligence	0,15	0,094
Dominance	0,09	0,153
Impulsiveness	-0,02	0,434
Conformity	0,10	0,144

Boldness	-0,07	0,241
Being over-sensitive	0,13	0,084
Being suspicious	-0,02	0,414
Imagination	0,12	0,097
Foxiness	0,10	0,144
Uncertainty	0,12	0,093
Radicalism	-0,02	0,397
Self-sufficiency	0,03	0,360
Selfdiscipline	0,09	0,156
Tension	0,02	0,422

Source: the author of paper

Subsequently we formulated hypothesis H2 as follows: *Personality traits describing emotional life predict the level of empathy*. We run regression analysis where empathy was dependent variable and personality traits stood for independent variable. We used stepwise method. We excluded certain non-significant personality traits: Warm-heartedness, Intelligence, Dominancy, Conformity, Impulsiveness, Boldness, the quality of Being over-sensitive, suspicious and unsure, Imagination, Foxiness, Radicalism, Self-sufficiency, Self-discipline and Tension. Based on results we may claim that emotional stability could be explained to 86,5% by variants of empathy (Table 3). As such, emotional stability is a significant and powerful predictor of empathy level (Table 5). Hypothesis H2 was accepted in connection to personality trait of emotional stability.

Table 3 Multiple regression analysis (stepwise) - characteristics of the model

Model	R	R ²	Adjusted R ²	The standard error of estimation	Alternation R ²
1	0,930 ^a	0,865	0,863	4,01	0,865

a. Predictors: (Constant), Emotional stability
Dependent variable: Empathy

Source: author of paper

Table 4 Multiple regression analysis (stepwise) - ANOVA

	Model	Df	Median ²	F	Sig.
1	Regression	1	12090,7	753,301	0,000^b
	Residual	118	16,1		

b. Predictors: (Constant), Emotional stability
Dependent variable: Empathy

Source: the author of paper

Table 5 Multiple regression analysis (stepwise) - coefficients

	Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	SE	Beta		
1	(Constant)	14,971	1,055		14,186	0,000
	A	3,117	0,114	0,930	27,446	0,000

a. Predictors: (Constant), Emotional stability
Dependent variable: Empathy

Source: the author of paper

The last research question Q2 was formulated as follows: *Are there any differences between individual personality traits of men and women exciting helping professions?* In the first step we tested normality of used variables in relation to sex. Normality proved in certain traits and did not prove for the others; resulting from the finding we decided to use various types of testing differences for individual personality traits (Table 6 and Table 7). We were able to identify the differences only in regards to the trait Dominance and Over-sensitivity. Men scored higher in Dominance and women scored higher in Over-sensitivity.

Table 6 Student's t-test for two independent selections - personality traits, sex

	Sex	N	Average	SD	T	df	Sig.
Dominance	male	112	10,1	2,20	2,064	118	0,040

	female	128	8,2	2,39			
Foxiness	male	112	8,1	2,77	-0,771	98,173	0,442
	female	128	8,5	1,98			
Radicalism	male	112	7,2	2,25	0,406	118	0,685
	female	128	7,0	2,64			
Selfsufficiency	male	112	8,8	2,57	0,888	118	0,376
	female	128	8,4	2,38			
Selfdiscipline	male	112	8,8	2,55	1,326	118	0,187
	female	128	8,2	2,53			
Tension	male	112	8,1	2,29	-1,702	118	0,091
	female	128	8,8	2,56			

Source: the author of paper

Table 7 Mann-Whitney U test - personality traits, sex

	Sex	N	Average ranking	U	Sig
Warm-heartedness	male	112	60,85	1772,500	0,918
	female	128	60,20		
Intelligence	male	112	64,64	1560,000	0,217
	female	128	56,88		
Emotional stability	male	112	61,84	1717,000	0,691
	female	128	59,33		
Impulsiveness	male	112	65,82	1494,000	0,115
	female	128	55,84		
Conformity	male	112	59,44	1732,000	0,753
	female	128	61,43		
Boldness	male	112	61,01	1763,500	0,880

		female	128	60,05		
Being suspicious		male	112	61,26	1749,500	0,822
		female	128	59,84		
Imagination		male	112	56,92	1591,500	0,287
		female	128	63,63		
Tension		male	112	56,13	1547,500	0,193
		female	128	64,32		
Being sensitive	over-	male	112	49,50	1176,000	0,001
		female	128	70,13		
Being unsure		male	112	53,88	1421,000	0,049
		female	128	66,30		

Source: the author of paper

Discussion

Interpretation of the results

Based on everyday confrontation with individual situations in which one has to use their emphatic behavior we can state that empathy influences people's lives and that it is necessary for one's functioning in society. Based on given data we decided to find out how does the level of empathy influence person's overall satisfaction with life. We were primarily interested in finding out if certain personality traits could possibly cause that a person is on lower or higher empathy level. We were also interested in finding out if some personality traits can predetermine if an individual is satisfied with their life. The main aim of our research was to find out mutual connection among empathy, personal traits and life satisfaction. The connection between and personality confirm the research of Del Barrio et al. (2004); Kaufman (2014); Munro et al. (2005); Sala (2002); Watson and Morris (1991); Vymětal (1998).

The first survey question was aimed to find out if empathy is anyhow correlated to personality. The question formulation was inspired by several researches (Del Barrio et al., 2004; Munro et al., 2005; Sala, 2002; Watson and Morris, 1991; Vymětal, 1998). Each of the researches has proven either positive or negative correlation between personal traits and

empathy. Watson and Morris (1991) found out that there is negative correlation between empathy and mercenariness. Vymětal (1998) proved positive correlation between empathy and emotional stability. Sala (2002) proved strong positive correlation between emotional intelligence (empathy is one of its components) and neuroticism, extraversy, kindness and conscientiousness. He also proved moderate positive correlation between emotional intelligence and openness to experience. The research of Del Barrio et al. (2004) found out strong positive correlation between empathy and kindness and trivia positive correlation between empathy and conscientiousness, energy and openness. Munro et al. (2004) proved positive correlation between empathy and personality, to be specific, between extraversy, open-mindedness and ability to cooperate. The authors also proved negative correlation between empathy and distance. Based on given findings we decided to formulate two hypotheses, H1 and H2.

In hypothesis H1 we were verifying if empathy is linked to those personality traits that describe emotional life. We verified our hypothesis by means of parametric Pearson's correlational analysis after having run the tests of normality. Based on the results we may claim that there are strong positive correlations in between empathy and emotional traits of warm-heartedness and emotional stability; the more a person is warm-hearted and emotionally stable, the more empathetic, understanding and relatable they are, too. Our findings are in accordance with the description of these personality characteristics by Nociar and Poledňová (1998) who stated that people with high score of warm-heartedness are more hearty, helpful and content while being surrounded by other people. In regards to proven correlation in between empathy and emotional stability, we account for it that people who are mellow and can control their emotions are more likely to understand better the others and be objective to them. As such, they are more empathetic. Vymětal (1998) states a fact very much linked to our findings; people who are emotionally stable tend to accept the others. They are more empathetic, too.

In hypothesis H2 we supposed that personality traits linked to emotional life will predict the level of empathy. We were verifying this hypothesis by means of multiple regression analysis where the dependent variable was empathy and the independent variable was the scope of personality traits. Using stepwise regression method, we must have excluded certain non-significant personality traits: Warm-heartedness, Intelligence, Dominancy, Conformity, Impulsiveness, Boldness, the quality of Being over-sensitive, suspicious and unsure, Imagination, Foxiness, Radicalism, Self-sufficiency, Self-discipline and Tension. The only personality trait

considered to be important was emotional stability. We found out that emotional stability explains 86,5% of empathy variation; emotional stability is a strong and significant predictor of empathy level. We interpret it by the fact that the more a person is emotionally stable, the more empathetic they are and vice versa. The lower score of emotional stability a person has, the less likely they tend to be empathetic. The finding conveys with the findings of scientists (Baron-Cohen, 2014; Del Barria, 2004; Munro et al., 2005; Sala, 2002; Watson and Morris, 1991; Vymětal, 1998).

Our second research question investigated if men and women differ in their personalities. We found out that they do differ in two variables; dominance and over-sensitivity.

Nociar and Poledňová (1998) define a person with higher score of over-sensitivity to be gentle, protected, their sense prevails over their use of power. This scaling is in mutual correlation with some other scaling, such as femininity scale. This is in accordance with the results of our research that proved women have higher over-sensitivity score than men. The other finding showing that men have higher score of dominance can be attributed as a fact based on historic evidence; men tended to be the powerful, independent ones meanwhile women were considered to be fragile, delicate creatures who have love sense and can grow the other beings (Fogle et al., 2002; Graziano et al., 1997).

Limits of the research

After having executed the research, we found out several delimitations that should have been taken care of prior to research execution. The first delimitation was that we have picked up the sample by intentional sampling. As such, we cannot generalize the findings for the whole population as we had worked with chosen groups only. Other delimitation was that we had not known our respondents prior to our first meeting with them and we realized the examination on our first meeting with them. We used two non-standardized surveys in our research. We suppose that it was also a delimitation. There could have been distortions in our findings due to the fact that our surveys contained self-examination scaling where the individuals could have intentionally change responses to let themselves be seen in better light. They also could have been giving socially acceptable responses, too.

The distortion could have taken place unintentionally, too, as many times it happens that people cannot objectively judge themselves and it is more relevant to be judged by somebody else. As the surveys had many disadvantages, such as limited number of responses, limited selection of

responses, or there may occur that a question is misunderstood, for future reference, we would avoid a survey. In future, we would opt e.g. for an experiment. Another delimitation was people's current emotional state that we had not investigated prior to research execution and that could have possibly played a role in distortion of results.

Recommendations and future intentions

As we have mentioned commenting on limitations, we would recommend to investigate given circumstances that could possibly influence the findings. We would also add our own survey that would investigate recent occasions so-called external variabilities that might significantly influence individuals in their evaluation of satisfaction with their lives (such as divorce, trauma, tragedy, accident, health condition, etc.). The level of empathy could have been distorted, individuals could have marked individual items based on some negative experience concerning their understanding of others or they were misunderstood by the others. Our research did not take into account anxiety and assertiveness. We would make these emotions count in future research. Based on our findings, we would suggest the following model. That would explain correlations between empathy, personality, satisfaction with life, and also what and how influences them.

We find our paper to be a good motif for future, more extended and detailed examination of this topic, mutual relations between empathy and tity traits, as all of these points are important for person's life and their functioning in society. If such a research was executed on representative sample, we would get to know which traits should be supported and developed especially in child's personality to become emphatic and satisfied human beings. The findings of research on representative sample would be possibly applied and implanted into formulation of a program strengthening empathy, satisfaction with life based on certain personality traits. What would be really interesting is get to know mutual relations between variables from the second part of CAQ (the clinical scaling and empathy). We would know that for better development of child's empathy, traits such as warm-heartedness and emotional stability should be developed, or empathy should be developed to make the child more emotionally stable. Our research has proven that the strongest predictor of empathy is emotional stability and as such, the most important thing of all is to work especially on emotional stability.

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