# The Relationship of Trait Emotional Intelligence with the Big Five in Croatian and Slovene University Student Samples

Andreja Avsec!\*, Vladimir Takšić² and Tamara Mohorić²

<sup>1</sup>Department of Psychology, Faculty of Arts, University of Ljubljana, Slovenia

<sup>2</sup>Department of Psychology, Faculty of Science and Arts, University of Rijeka, Croatia

Abstract: The aim of the study was to examine the relationship between trait emotional intelligence (EI) and the Big Five factors of personality in two samples of Croatian and Slovenian university students. If EI is to be of significant value, it must measure something unique and distinct from standard personality traits. The Croatian sample consisted of 257 undergraduate students from University of Rijeka and Osijek and in Slovene sample there were 171 undergraduate students from University of Ljubljana. Participants filled out the Emotional Skills and Competences Questionnaire (ESCQ, Takšić, 1998) and the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991). After controlling for nationality and gender, the Big Five explained up to 33% of the variance of EI. For the Perceive and Understand Emotions Scale only openness and extraversion explain important part of the variance; for the Express and Label Emotions Scale extraversion and conscientiousness are important predictors. The Big Five traits are able to explain the highest proportion of the variance in the Manage and Regulate Emotion Scale; neuroticism is the strongest predictor, but extraversion and conscientiousness also predict important part of the variance. Although high, this percentage of explained variance does not put in question the discriminant validity of EI questionnaire.

**Key words:** trait emotional intelligence, emotional competence, ESCQ, five factor personality model, BFI

# Povezanost emocionalne inteligentnosti s petimi velikimi faktorji osebnosti na hrvaškem in slovenskem vzorcu študentov

Andreja Avsec¹, Vladimir Takšić² and Tamara Mohorić²
¹Department of Psychology, Faculty of Arts, University of Ljubljana, Slovenia
²Department of Psychology, Faculty of Science and Arts, University of Rijeka, Croatia

**Povzetek:** Namen raziskave je preveriti povezanost emocionalne inteligentnosti (merjenje s samoocenjevalnim vprašalnikom) s petimi velikimi faktorji osebnosti na vzorcu hrvaških in slovenskih študentov. Tako smo želeli preverili veljavnost vprašalnika emocionalne inteligentnosti ESCQ, katere del je tudi diferencialna veljavnost, da torej vprašalnik meri nekaj drugega kot osebnostne lastnosti. Hrvaški vzorec je vključeval 257 študentov Univerze na Reki in Univerze v Osijeku, slovenski pa 171 študentov Univerze v Ljubljani. Udeleženci so rešili vprašalnik emocionalne inteligentnosti ESCQ

<sup>\*</sup>Naslov / Address: doc. dr. Andreja Avsec, University of Ljubljana, Faculty of Arts, Department of Psychology, p. p. 580, SI-1001 Ljubljana, Slovenia, e-mail: andreja.avsec@psiha.net

(Takšić, 1998) in vprašalnik velikih pet faktorjev osebnosti BFI (John, Donahue, Kentle, 1991). Regresijska analiza je pokazala, da po kontroliranju nacionalnosti in spola velikih pet faktorjev osebnosti pojasnjuje do 33 % variance emocionalne inteligentnosti. Lestvico zaznavanja in razumevanja emocij pomembno napovedujeta odprtost in ekstravertnost. Pomembna prediktorja lestvice izražanja in poimenovanja emocije sta ekstravertnost in vestnost. Največ pojasnjene variance prispeva pet velikih k lestvici upravljanja in uravnavanja emocij. Najpomembnejši prediktor je nevroticizem, pomembna prediktorja sta tudi ekstravertnost in vestnost. Kljub relativno visokemu deležu pojasnjene variance pa diskriminativna veljavnost vprašalnika ESCQ ni problematična.

**Ključne besede:** čustvena inteligentnost kot osebnostna lastnost, emocionalna kompetentnost, ESCQ, pet-faktorski model osebnosti, BFI

CC = 3120

The study of emotional intelligence (EI) is currently a personality domain of considerable interest. In our research we focused on trait EI, which is frequently criticized because of its use of self-report questionnaires and consequently its problematically high relations to personality traits (Matthews, Zeidner, & Roberts, 2002). Many trait EI questionnaires were designed (Perez, Petrides, & Furnham, 2005), most of them in English speaking cultures. With these questionnaires discriminant validity of trait EI was well established (De Raad, 2005; Van Rooy, Viswesvaran, & Pluta, 2005), although we found rare studies that tested the relations between personality traits and trait EI in non-English speaking cultures (e. g., Law, Wong, & Song, 2004; Mikolajczak, Luminet, Leroy, & Roy, 2007). Our main goal was to examine these relations in two non-English speaking cultures with the questionnaire designed in Croatian language. Results from this study could add an important contribution to the research of trait EI confirming its importance and unique share in individual's personality.

Studies on EI expanded in the last few years, starting with the first article about this topic in the early 1990s (Mayer, DiPaolo, & Salovey, 1990). In recent years, a debate has emerged in the EI literature regarding whether or not self-report measures provide an accurate assessment of one's standing on this construct. Accordingly, some authors (Petrides & Furnham, 2000, 2001) have proposed a new conceptualization of EI that is directly relevant to this discussion. They make a distinction between trait EI and ability EI. In other words, according to these authors trait EI and ability EI are two separate constructs rather than two different ways of measuring the same construct. The ability EI concerns actual abilities and ought to be measured with maximum-performance tests. Trait EI encompasses behavioral dispositions and self-perceived abilities and is measured through self-report (Petrides & Furnham, 2001).

The main critic of trait EI is it's presumably too high relation with personality traits. Matthews et al. (2002) have provided arguments that several of the components of EI relate to combinations of the Big Five factors (see also Petrides & Furnham,

2001; Saklofske, Austin, & Minski, 2003; Van der Zee, Thijs, & Schakel, 2002). Trait EI seems to combine the evaluative positive poles of each of the big five personality factors. Meta-analysis of 25–28 studies found the following average corrected correlations between EI and the Big Five: .32 with openness, .33 with conscientiousness, .27 with agreeableness, .40 with emotional stability, and .36 with extraversion (Van Rooy et al., 2005).

One can expect a positive relationship between EI and extraversion. Extraverts are open to others and tend to be unreserved and informal in their contacts with other people. They are more sociable and consequently have more opportunities and motivation for practicing social skills, which are part of EI, at least in some mix models (e. g., Bar-On, 1997; Petrides & Furnham, 2000). Beside this the core dimension of extraversion is positive affectivity (Lucas, Diener, Grob, Suh, & Shao, 2000) thus it could be supposed that extraverted individual would report about higher optimism and positive emotions, that is about characteristics which are also present in some EI questionnaires scale. Results confirmed that extraversion is related to trait EI (Davies, Stankov, & Roberts, 1998; Dawda & Hart, 2000; Van der Zee et al., 2002), particularly to some aspects of EI such as social skills and optimism/mood regulation (Saklofske et al., 2003), and emotional management (Gannon & Ranzijn, 2005).

Agreeableness relates to motivation to maintain positive interpersonal relationships thus empathy should be a part of agreeableness construct. Individuals high in agreeableness tend to be friendly and warm, tend to have respect for others, and tend to be sensitive to other people's wishes. These characteristics could probably be related to the cognitive and behavioral processes directed to the emotions of others. De Raad (2005) used 437 items from several EI questionnaires and classified them into the categories comprised by the Abridged Big Five Circumplex (AB5C) model. The majority of the EI items were classified in categories of agreeableness and emotional stability of the Big Five. It should also be noted that empathy is sometimes used as a measure of EI or at least as one aspect of it (e. g. Bar-On, 1997; Davies et al., 1998) so high correlations between EI and agreeableness are not unexpected. Not all measures of trait EI are focused to others (some measures are focused to one's own emotions) and thus it is not surprising that the average correlation from different studies is not so high (Van Rooy et al., 2005).

McCrae (2000) suggests there is little reason to expect a relationship between EI and conscientiousness. The carefulness, reliability, persistence, and goal-directedness of individuals high in this trait has no conceptual resemblance to the monitoring, interpreting of, and coping with emotions. For example, Van der Zee et al. (2002) haven't found an important relationship between this traits, however most of the studies report about important relations of Conscientiousness and EI (Dawda & Hart, 2000; Gannon & Ranzijn, 2005; Petrides & Furnham, 2001; Saklofske et al., 2003) and meta-analysis also reports about average correlation of .33 (Van Rooy et al., 2005).

Emotionally unstable individuals are worried, easily provoked, depressive, and vulnerable so one could argue that EI is no more than a combination of emotional stability and intelligence. The ability to cope with emotions is very similar to the emotional stability construct so a positive relationship between EI and emotional stability can be expected. Most of the studies report important relations of emotional stability with EI (Dawda & Hart, 2000; Davies et al., 1998; Gannon & Ranzijn, 2005; Saklofske et al., 2003). Although frequent intense negative affective experiences are central to neuroticism, a lack of understanding about those experiences is not a central characteristic of the trait, as some authors (Shulman & Hemenover, 2006) point out. The construct of EI comprises different abilities, and one of them (but not the only) being understanding of emotions. Managing and regulating emotions is also a key component of EI and thus is not surprising to have the highest average correlation of EI precisely with emotional stability (Van Rooy et al., 2005).

Finally, a positive relationship between EI and openness can be expected. McCrae (2000) even suggested that EI should have the strongest relations to the openness to experience dimension. This quasi-ability factor of personality is somewhat similar to intelligence, at least with the words people usually use to describe intelligent people (e. g., imaginative, sensitive, flexible, curious and independent). But the evidences for a relationship between EI and openness are not uniform. Schutte et al. (1998) reported that 33-item EI scale had a significant correlation with openness and non-significant relationships with other Big Five personality traits. On the other hand, some researchers found much lower correlations (De Raad, 2005). Interestingly, these results are opposite of findings for the ability EI where higher correlations with openness are found (Van Rooy et al., 2005).

The aim of our study was to examine relationship between trait EI and the Big Five in samples of Croatian and Slovenian students. If EI is to be of any significant value, it must measure something unique and distinct from standard personality traits. Previous studies reported that trait EI is relatively independent from traditionally defined personality traits, supporting the discriminant validity of the EI construct (Petrides & Furnham, 2001; but see De Raad, 2005). In our study important but not high correlations of trait EI with all five personality factors are expected.

Researchers found non-consistent correlations between trait EI and personality traits which could be the consequence of the fact that EI self-reported questionnaires originated from somewhat different theoretical background than personality questionnaires. Thus it is important to analyze these relations on the level of subscales. It could be predicted that the Perceive and understand emotions scale should have the smallest correlations with personality because it presumably comprise emotional ability which is not a part of any personality trait. On the other side, the Manage and regulate emotions scale should have the highest relations to personality, at least with emotional stability since an individual who has a tendency to experience strong negative emotions probably has more difficulties with their regulation. And finally the Express and label emotions scale should be related to extraversion, since extraverts are open to others and tend to be unreserved and informal in their contacts with

other people, thus expressing openly their inner feelings.

The present study is also important for determining the construct validity for the used trait EI measure. In the current literature one can find a large number of self-report measures of EI. For example, Perez and co-workers (2005) cited 15 different EI scales. Emotional Skills and Competence Questionnaire ESCQ (Takšić, 1998) is one of these self-report questionnaires, which was translated into several languages (Faria et al., 2006) but it's construct validity was not fully determined yet. Similar relations between trait EI and personality traits in Slovene and Croatian language would be the indicator of the questionnaire's construct validity.

#### Method

## **Participants**

The Croatian sample consisted of 257 undergraduate students (200 women and 57 men) from the University of Rijeka and Osijek. The Slovene sample consisted of 171 undergraduate students (141 women and 30 men) from University of Ljubljana. Students were from the first to the forth years of the study.

#### Instruments

Emotional Skills and Competences Questionnaire (ESCQ, Takšić, 1998). A measure of trait EI that consists of 45 items divided into three subscales: the Perceive and understand emotions scale (PU) has 15 items, the Express and label emotions scale (EL) has 14 items and the Manage and regulate emotions scale (MR) has 16 items. Items are rated on a 5-point Likert scale ranging from 1 – "Never applied to me" to 5 – "Always applied to me". There are moderate positive correlations between the subscales (r = .35 - .51) that allowed the researcher to form a linear combination measure of overall emotional competence (Takšić, 1998). The questionnaire was translated and used in several different languages and cultures and had shown satisfactory psychometric properties (Avsec & Takšić, 2007; Faria et al., 2006; Toyota, Morita, & Takšić, 2007). In our samples the first two scales have internal reliability above .85. The third scale, Manage and regulate emotions, has somewhat lower reliability ( $\alpha = .76$  for Croatian sample and  $\alpha = .67$  in Slovene sample).

The Big Five Inventory (BFI; John, Donahue, & Kentle, 1991). The BFI consist of 44 short and easy-to-understand phrases aimed to assess the prototypical traits defining each of the Big Five dimensions. Extraversion has eight items, of which three are reverse-scored. Agreeableness and conscientiousness are each represented by nine items, including four reversals, for each scale. Neuroticism has 8 items, with 3 reversals; openness has 10 items, 2 reversed. BFI items are rated on a 5-point scale ranging from 1 – "Disagree strongly" to 5 – "Agree strongly". The BFI scales have shown substantial internal consistency, retest reliability, and clear factor structure,

as well as considerable convergent and discriminant validity compared to longer Big Five measures (John & Srivastava, 1999). Coefficients of internal reliability in both samples are satisfying (for agreeableness  $\alpha = .70$  in both samples; for other scales  $\alpha > .79$ ).

#### **Procedure**

Participants were tested in several groups of 20–50 students at their faculties during the lectures. Participation in the study was voluntarily and anonymous.

Results

First, we examined the differences between Croatian and Slovene sample and between genders, in EI and the Big Five using two-way ANOVAs. As far as EI concerns, important differences between nationalities emerged only in the Perceive and understand emotions scale ( $M_{Cro} = 57.3$ ,  $SD_{Cro} = 6.9$ ,  $M_{Slo} = 60.7$ ,  $SD_{Slo} = 7.3$ , F(1, 1)427) = 11.52, p = .001;  $\eta^2$  = .026) where Slovene participants reported higher scores. Differences between nationalities emerged also in the third and fifth factor of personality, in agreeableness ( $M_{\text{Cro}} = 32.2$ ,  $SD_{\text{Cro}} = 4.7$ ,  $M_{\text{Slo}} = 33.3$ ,  $SD_{\text{Slo}} = 4.7$ , F(1, 427) = 5.0, p = .026,  $\eta^2 = .012$ ) and openness ( $M_{\text{Cro}} = 37.1$ ,  $SD_{\text{Cro}} = 5.7$ ,  $M_{\text{Slo}} = 38.3$ ,  $SD_{\text{Slo}} = 38.3$ 5.9, F(1, 427) = 7.8, p = .005,  $\eta^2 = .018$ ) where Slovene participants reported higher scores. As far as gender differences in EI concerns, important gender differences emerged in two out of the three scales: in the Perceive and understand emotions scale  $(M_{\rm M} = 56.0, SD_{\rm M} = 7.3, M_{\rm F} = 59.3, SD_{\rm F} = 7.1, F[1, 427] = 13.0, p = .000, \eta^2 = 10.00$ .030) and in the Express and label emotions scale ( $M_{\rm M} = 45.1$ ,  $SD_{\rm M} = 7.7$ ,  $M_{\rm F} = 47.7$ ,  $SD_{F} = 7.4$ , F[1, 427] = 11.9, p = .001,  $\eta^{2} = .027$ ). Males and females differed also in conscientiousness ( $M_{\rm M} = 30.0$ ,  $SD_{\rm M} = 5.0$ ,  $M_{\rm F} = 31.7$ ,  $SD_{\rm F} = 5.5$ , F[1, 427] = 7.8, p =.006,  $\eta^2 = .018$ ) and neuroticism ( $M_{\rm M} = 20.1$ ,  $SD_{\rm M} = 4.7$ ,  $M_{\rm F} = 23.2$ ,  $SD_{\rm F} = 5.7$ , F[1, 427]= 17.4, p = .000,  $\eta^2 = .039$ ). Interaction between nationality and gender is important for the Express and label emotions scale (F[1, 427] = 8.2, p = .004,  $\eta^2 = .019$ ) and for openness; Slovene males are more opened, whereas in Croatian sample females report higher openness than males ( $F[1, 427] = 4.4, p = .037, \eta^2 = .010$ ).

Table	1. Correlatio	is between the	e ESCQ S	Subscales an	id the Big Fiv	ve Factors
-------	---------------	----------------	----------	--------------	----------------	------------

	Perceive, Understand emotions		Express, Label emotions		Manage, Regulate emotions	
	Croatian Sl	ovene	Croatian S	lovene	Croatian	Slovene
Extraversion	.27**	.16*	.42**	.41**	.45**	.40**
Agreeableness	.05	.07	.11	.16*	.24**	.24**
Conscientiousness	.19**	.09	.23**	.23**	.41**	.20**
Neuroticism	09	.04	20**	11	49**	32**
Openness	.27**	.29**	.21**	.28**	.31**	.22**

<sup>\*</sup>p < 0.05 (2-tailed), \*\*p < 0.01 (2-tailed).

Correlations between EI and the Big Five are presented for Croatian and Slovene sample separately in Table 1. Results confirmed our expectations about lower relation of the Perceive and understand emotions subscale with personality factors. This scale was related only to extraversion and openness and in Croatian sample also to conscientiousness. The second subscale – Express and label emotions – was related to all five factors except to neuroticism in Slovene sample and to agreeableness is Croatian sample. As predicted, it had the highest correlations with extraversion. We also predicted that the Manage and regulate emotions scale will have the highest correlation with neuroticism but this was confirmed only in Croatian sample. The Manage and regulate emotions scale was related to all five factors of personality, with the highest correlations for neuroticism and extraversion. We tested the differences in correlations between Croatian and Slovene sample with Fisher z transformation. Important differences (at the .05 level) emerged only in correlations for the Manage and regulate emotions scale with conscientiousness (z = 2.34), and with neuroticism (z = -2.06). Both correlations were higher in Croatian sample.

Table 2. Results of the Hierarchical Regression Analyses of the ESCQ Subscales on the Big Five, Controlling for Gender and Nationality

	Predictor	β	R	$R^2$
Perceive, Understand Emotions				
Step 1 (method enter)	Nationality	0.23**	.23	.05
Step 2 (method enter)	Gender	$0.17^{**}$	.28	.08
Step 3 (method stepwise)	Openness	0.26**	.39	.15
Step 4 (method stepwise)	Extraversion	$0.14^{**}$	.41	.17
Express, Label Emotions				
Step 1 (method enter)	Nationality	0.15**	.15	.01
Step 2 (method enter)	Gender	0.13**	.20	.05
Step 3 (method stepwise)	Extraversion	$0.40^{**}$	.44	.20
Step 4 (method stepwise)	Conscientiousness	$0.14^{**}$	.46	.21
Step 5 (method stepwise)	Openness	0.12**	.48	.23
Manage, Regulate Emotions				
Step 1 (method enter)	Nationality	0.06	.06	.00
Step 2 (method enter)	Gender	-0.02	.06	.01
Step 3 (method stepwise)	Neuroticism	-0.44**	.44	.19
Step 4 (method stepwise)	Extraversion	$0.30^{**}$	.52	.27
Step 5 (method stepwise)	Conscientiousness	$0.20^{**}$	.55	.30
Step 6 (method stepwise)	Openness	0.17**	.57	.33

<sup>\*\*</sup>p < 0.01 (2-tailed)

We conducted hierarchical regression analyses of the ESCQ scales on the Big Five. We were especially interested in that part of explained variance of trait EI

which could be explained by the Big Five factors. We entered gender and nationality into regression first to eliminate possible influence of these variables. Gender was an important predictor only for the Perceive and understand emotions subscale, explaining 3% of the variance (Table 2). Nationality turned out to be a little bit stronger predictor, predicting 8% of the variance of the Perceive and label emotions scale and 4% of the variance of the Express and label emotions scale.

After controlling for nationality and gender, the Big Five explained up to 32% of the variance of EI. Although high, this percentage of explained variance does not put in question the discriminant validity of this EI questionnaire. As expected, the Perceive and understand emotions scale had the weakest relation with the Big Five, and the Manage and regulate emotions scale had the strongest. For the Perceive and understand emotions scale only openness and extraversion explained important part of the variance, accounting for 9% of the variance. For the Express and label emotions scale extraversion and conscientiousness were important predictors, accounting for 17% of the variance, after controlling for gender and nationality. The Big Five were able to explain the highest proportion of the variance in the Manage and regulate emotion scale (32%). Neuroticism was the strongest predictor of the Manage and regulate emotion scale, but extraversion and conscientiousness also predicted important part of the variance.

### **Discussion**

The results indicated important relations between trait EI and the Big Five, although the relations are not too high to set doubts about the differential validity of the trait EI construct

Our results confirmed previous findings concerning gender differences. Most studies report higher results for trait EI for women (e. g. Petrides & Furnham, 2001; Shutte et al., 1998) which are supposed to be at least partly a consequence of differential socialization of boys and girls. Interestingly, in our study gender differences did not occur for the Manage and regulate emotions scale while in Petrides and Furnham's study (2000) the only gender difference was for the Social skills factor, which include some sort of regulation of emotions.

We were also interested to see if there are any differences in the results for different nationalities. The results indicated important differences between Croatian and Slovene sample in the Perceive and understand emotions scale. Differences between nationalities on ESCQ were also found in other studies (Faria et al., 2006). Because there could be many reasons for differences in nationalities, among other also methodological, we could hardly interpret these results as they reflect actual differences in trait EI. For example, specifics of the sample could influence the average scores since the samples were not matched on all demographic variables.

The main concern of this study was the relation between trait EI and the Big

Five. We hypothesized the similar structure of this relation for Croatian and Slovene sample, since this could be used as an indicator of good construct validity of the ESCQ questionnaire. Only two correlations coefficients differed importantly in selected samples, both for the third scale of ESCQ, the Manage and regulate emotions scale. One possible reason is the difference in internal consistency of this scale for Croatian and Slovene sample. Due to one item in this scale (item 10) the internal consistency on Slovene sample is somewhat lower ( $\alpha$  = .67), as we already reported. The different alphas in both samples could be the cause of different correlations with the Big Five. In spite of lower reliability, this scale has the highest correlations with the Big Five in comparison to other two ESCQ scales.

Because of the critics of the trait measures of EI stating that trait EI is nothing more than a set of already known personality traits, this issue was a central problem of our study. The ESCQ, together with Emotional Intelligence Scale (Schutte et al., 1998) derives directly from Mayer and Salovey's theory of EI as a mental ability (Mayer & Salovey, 1997). So it would be reasonably to expect lower correlations with the Big Five dimensions compared to questionnaires of EI which derived from the mix models (e. g., Bar-On, 1997), in spite of relying on and using self-report measures. Results indeed indicate important but not too high relation to personality traits, except for the Manage and regulate emotions scale. Using regression analyses on the ESCQ scores we determined that up to 35% of variance could be explained with the Big Five. Although the scales ESCQ are interrelated (r = .35 - .51), the results of regression analyses indicated different importance of the Big Five factors for the each scale of the ESCQ.

The best predictor for the Perceive and understand emotions scale was openness and this finding confirmed McCrae (2000) assertion on the importance of openness for EI due to it's close resemblance to crystallized intelligence. Openness is the factor which comprises characteristics relevant to intelligent people and is related to constructs such as self-reflection, self-consciousness, personal growth. It could be expected that all of these characteristics of the individual heighten their emotional competences although the evidence for a relationship between EI and openness is not uniform (e. g., Schutte et al., 1998; De Raad, 2005)

Extraversion emerged as the best predictor for the Express and label emotions scale. This aspect of EI refers to expression and visibility of emotions, similarly as extraversion in its broad sense refers to directing the energy to outer world. Extraverts are open to others and tend to be unreserved and informal in their contacts with other people thus expressing openly their inner feelings. Many studies have reported about important relations between trait EI and extraversion (Dawda & Hart, 2000; Davies et al., 1998; Saklofske et al., 2003; Van der Zee et al., 2002; Van Rooy et al., 2005).

And finally, the best predictor for the Manage and regulate emotions scale was neuroticism. The ability to cope with emotions is very similar to the emotional stability. Individual who is not depressed, anxious, angry, and who manage his/her emotions has high EI, at least that part which refers to managing their own and also

other's emotions. Many other studies, using different measures of trait EI report about important correlations between trait EI and neuroticism (Dawda & Hart, 2000; Gannon & Ranzijn, 2005; Saklofske et al., 2003).

Agreeableness did not add any significant contribution to the explained variance of EI in all three regression analyses. Because we used stepwise method of regression analyses the real importance of weak predictors could be underestimated. but the correlations (Table 1) also indicate that agreeableness is the factor which has the lowest correlations with the EI. The average correlation between trait EI and agreeableness in meta-analysis was also low (Van Rooy et al., 2005), which is not surprising since not all scales of trait EI focus to others. If we take closer looks to correlations it could be seen that there is no relation of agreeableness with the Perceive and understand emotions scale. Although understanding other's emotions is the first step in empathy or cognitive component of empathy, it does not necessary leads to sympathy and consequently to better interpersonal relationships which are frequently related to agreeableness. Agreeableness had also very low correlations with the ability to express and label emotions and a bit higher but still weak correlations with the Managing and regulating emotions scale. For better interpersonal relationships, which are an indicator of agreeable persons, it is more important to regulate and not so much to express their own emotions.

The obtained correlations between Big Five dimensions and ESCQ subscales are pretty the similar with those from previous studies. Toyota, Morita, and Takšić (2007) used Japanese version of the Big Five Personality inventory (BFS) and got the same pattern of correlations, except for openness to experience, where the correlations were a bit higher (.40 to .54). In her diploma work Tropin (2005) has compared ESCQ subscales and Big Five descriptors and found even higher correlations with openness to experience (.41 to .58). Also, Managing and regulating emotions scale showed the highest correlations with each Big Five dimensions (.39 to .52).

There are some limitations to our study. Like in many other studies the sample of university students is not representative for all young people. Although there may be a minor possibility that the structure of the sample could have influenced the structure of interrelations, it is quite possible that it has influenced the obtained gender differences. In the literature there exist quite a lot of studies examining relations between trait EI and personality traits since the validity of this relatively new construct of EI has yet to be scientifically verified and tested. Thus it seems reasonable to define exact relations of the Big Five and different EI measures. This process would also help in finding the best measure of trait EI. The different studies using the ESCQ showed that it is a questionnaire with good divergent validity in regard to the Big Five. Its subscales demonstrated different relations to the Big Five traits and thus confirmed the construct validity of the questionnaire.

#### References

- Avsec, A., & Takšić, V. (2007). Vprašalnik emocionalne inteligentnosti ESCQ [Emotional Skills and Competence Questionnaire ESCQ]. In A. Avsec (Ed.), *Psihodiagnostika osebnosti [Psychodiagnostics of Personality]* (pp. 263-268). Ljubljana: Filozofska fakulteta.
- Bar-On, R. (1997). *Bar-On Emotional Quotient Inventory: A measure of emotional intelligence*. Toronto, ON: Multi-Health Systems Inc.
- Davies, M., Stankov, L., & Roberts, R. D. (1998). Emotional Intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology* 75, 989–1015.
- Dawda, D., & Hart, S. D. (2000). Assessing emotional intelligence: Reliability and validity of the Bar-On Emotional Quotient Inventory (EQ-i) in university students. *Personality and Individual Differences*, 28, 797-812.
- De Raad, B. (2005). The trait-coverage of emotional intelligence. *Personality and Individual Differences*, *38*, 673-687.
- Faria, L., Lima Santos, N., Takšić, V., Raty, H., Molander, B., Holmstrom, S., Jansson, J., Avsec, A., Extremera, N., Férnandez-Berrocal, P., & Toyota, H. (2006). Cross-cultural validation of the Emotional Skills and Competence Questionnaire (ESCQ). Psicologia, 20(2), 95-127.
- Gannon, N., & Ranzijn, R. (2005). Does emotional intelligence predict unique variance in life satisfaction beyond IQ and personality? *Personality and Individual Differences*, *38*, 1353–1364.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). The "Big Five" Inventory—Versions 4a and 54. Berkeley: University of California, Berkeley, Institute of Personality and Social Research.
- John, O. P., & Srivastava, S. (1999). The Big Five Trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin and O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102–139). New York: Guilford Press.
- Law, K. S., Wong, C., & Song, L. J. (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *Journal of Applied Psychology*. 89, 483-496.
- Lucas, R. E., Diener, E., Grob, A., Suh, E. M., & Shao, L. (2000). Cross-cultural evidence for the fundamental features of Extraversion. *Journal of Personality and Social Psychology*, 79, 452-468.
- Matthews, G., Zeidner M., & Roberts, R. D. (2002). *Emotional intelligence: Science myth.* Cambridge: The MIT Press.
- Mayer, J. D., DiPaolo, M., & Salovey, P. (1990). Perceiving the effective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment*, 50, 772-781.
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey and D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3-31). New York: Basic Books.
- McCrae, R. R. (2000). Emotional intelligence from the perspective of the five-factor model of personality. In R. Bar-On & D. A. Parker (Eds.). *The handbook of emotional intelligence* (pp. 263-276). San Francisco: Jossey-Bass.
- Mikolajczak, M., Luminet, O., Leroy, C., & Roy, E. (2007). Psychometric properties of the

- Trait Emotional Intelligence Questionnaire: Factor structure, reliability, construct, and incremental validity in a French-Speaking population. *Journal of Personality Assessment*, 88, 338-353.
- Perez, J. C., Petrides, K. V, & Furnham, A. (2005). Measuring trait emotional intelligence. In R. Schulze & R. D. Roberts (Eds), *Emotional intelligence: An international handbook* (pp. 181-201). Ashland, OH, US: Hogrefe and Huber Publishers.
- Petrides, K. V., & Furnham, A. (2000). Gender differences in measured and self-estimated trait emotional intelligence. *Sex Roles*, 42, 449-461.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European Journal of Personality*, *15*, 425-448.
- Saklofske, D. H., Austin, E. J., & Minski, P. S. (2003). Factor structure and validity of a trait emotional intelligence measure. *Personality and Individual Differences*, *34*, 707-721.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., et al. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, *25*, 167–177.
- Shulman, T. E., & Hemenover, S. H. (2006). Is dispositional emotional intelligence synonymous with personality? *Self and Identity*, *5*, 147-171.
- Takšić, V. (1998). Validacija konstrukta emocionalne inteligencije [Validation of the emotional inteligence construct]. Unpublished doctoral dissertation, University of Zagreb, Croatia.
- Toyota, H., Morita, T., & Takšić, V. (2007). Development of a Japanese version of the Emotional Skills and Competence Questionnaire. *Perceptual and Motor Skills*, 105, 469-476.
- Tropin, M. (2005). *Different measures of emotional intelligence*. Unpublished diploma thesis, University of Rijeka, Croatia.
- Van der Zee, K., Thijs, M., & Schakel, L. (2002), The relationship of emotional intelligence with academic intelligence and the Big Five European. *Journal of Personality*, 16, 103–125.
- Van Rooy, D. L, Viswesvaran, C., & Pluta, P. (2005). An evaluation of construct validity: What is this thing called emotional intelligence? *Human Performance*, 18, 445-462.

Prispelo/Received: 10.7.2009 Sprejeto/Accepted: 15.9.2009