

## Emocionalna inteligencija u školi

### Emotional intelligence in school

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#### Rezime

EI predstavlja sklop više sposobosti važnih za razvoj učenika: poznavanje vlastitih emocija i vlastitih postupaka, upravljanje osećanjima, prevladanje stresa, empatiju, komunikaciju, razumevanje potrebe za otvorenosću i poverenjem, prepoznavanje obrazaca ponašanja drugih ljudi, prihvatanje svojih mana i procena svojih vrhina, preuzimanje odgovornosti i prepoznavanje posledica svojih odluka, samopouzdanje kroz izlaganje svojih briga i osećanja bez ljutnje i pasivnosti, osećaj za liderstvo, rešavanje sukoba.

Osnovni cilj istraživanja je utvrditi da li se na osnovnu školskog uspeha, ocene iz vladanja, stepena prihvatanja/neprihvatanja od strane drugih učenika u razredu (pozitivne i negativne sociometrije) i od pola učenika može predvideti nivo emocionalne inteligencije. Interesovalo nas je

#### Summary

EI is the set of more capabilities important for development of student's skills: understanding of their own personal emotions and actions, control of feelings, overcoming of stress, empathy, communication skills, understanding of need for openness and trust, recognition of patterns of behaviour of other people, acceptance of their own flaws and virtues, taking responsibility and recognizing of consequences of their own decisions, self-confidence through exposure of personal concerns and feelings without anger and passivity, sense for leadership and conflicts solving.

The main objective of this research is to determine whether success in the school, grades in behaviour, level of acceptance/non-acceptance by other class students (positive and negative sociometry) and gender of students can be used for prediction of the result on a test for Emotional Intelligence. In

da li su emocionalno inteligentniji ujedno i omiljeni, i učenici sa najboljim školskim postignućima.

Za potrebe istraživanja korišćeni su Upitnik emocionalne inteligencije (kompetentnosti), UEK-15U (Taskić, 2002), i Sociometrijski upitnik za vršnjašku prihvaćenost po Koiu i Dodžu (Coie & Dodge, 1988). Iz školske administracije smo preuzeli podatke o vladanju i uspehu učenika. U istraživanju su učestvovali svi učenici završnih razreda treće (odeljenje autoelektričara) i četvrte godine (tri odeljenja: gimnazija, turistički tehničar i tehničar za računare) srednje škole „Đura Jakšić“ u Srbiji. Nalazi istraživanja govore da se na osnovu uspeha, vladanja, sociometrije i pola ne može predvideti nivo emocionalne inteligencije.

**Ključne reči:** emocionalna inteligencija, škola, uspeh, ponašanje, sociometrija, organizaciona kultura

## Uvod

Istraživači koji se bave obrazovanjem pokušavaju da pronađu odgovor zbog čega su neki učenici uspešniji od drugih. Sve do pre dvadeset godina vladalo je uverenje da je za uspeh učenika presudna njihova akademska inteligencija (IQ). Nalazi mnogobrojnih istraživanja pokazuju da visok nivo IQ učenika ne mora da znači automatski i da je on uspešan. U potrazi za razlozima uspešnosti ili neuspešnosti učenika došli smo, između brojnih faktora, i do pojma emocionalne inteligencije (EI), koja je definisana kao nivo sposobnosti koje pojedinac ima u regulisanju i razumevanju svojih

other words, we wanted to know whether more emotionally intelligent students are also favourite students and students with best academic achievements.

The Questionnaire for Emotional Intelligence (competency) QEI-15U (Taskić, 2002) and Sociometric Questionnaire for peer acceptance were used for purposes of this research. Data of behaviour and success of students were taken from the School administration. The research included all students of final third (Department of car electricians) and fourth year (three classes: high school, tourist technician, and computer technician) of the secondary school "Djura Jaksic" in Serbia.

Obtained results confirm that results of Emotional Intelligence cannot be predicted according school success, behaviour, Sociometry and gender.

**Key words:** emotional intelligence, school, success, behaviour, Sociometry, organizational culture

## Introduction

Many researchers who deal with education are trying to find the answer why some students are more successful than others. Until last 20 years, there was opinion that the academic intelligence (IQ) is the main cause of the success. Results of numerous researches indicated that the high IQ level of the student does not necessary causes his/her overall success. Searching reasons for success of students leded to numerous factors including the term of Emotional Intelligence (EI) which is defined as a level of capabilities which individual uses for regulation and definition of his/her own

sopstvenih emocija i raspoloženja, a koji pritom uzima u obzir osećanja drugih. Na osnovu ovog određenja, EI postaje jedan od važnijih faktora koji utiču na ponašanje učenika i može dati pretpostavku za njihov razvoj. Sa druge strane, sve je veći problem socijalizacije učenika. U današnjoj školi učenici provode više vremena za kompjuterom nego u otvorenom razgovoru licem u lice. Od učenika se očekuje da povežu prekinute razgovore i šifrovane poruke poslate preko internet mreža kako bi shvatili kako treba ispravno postupati. U ovakvo složenim i komplikovanim odnosima EI je važnija nego ikada ranije.

U ovom radu istraživali smo uticaj više faktora: a) postignuća učenika završnog razreda srednje škole (uspeh i vladanje), b) sociometrije, c) usmerenja i d) pola na njihovu emocionalnu inteligenciju. U završnoj godini školovanja učenici su već punoletni, smatra se da su već emocionalno zreli i da mogu imati sposobnost da opišu i kontrolišu svoje emocije. U istraživanju je postavljen problem: U kojoj meri uspeh učenika, vladanje, sociometrija i pol mogu biti faktori za predviđanje nivoa EI? Cilj ovog istraživanja je da se utvrdi da li se na osnovu uspeha i ponašanja učenika koje je izraženo kroz vladanje, može pretpostaviti nivo emocionalne inteligencije. Takođe, bilo je interesantno utvrditi da li pol i usmerenje učenika imaju veze sa emocionalnom inteligencijom. Na kraju, zanimalo nas je da li su učenici koji su bolje prihvaćeni od drugih emocionalno inteligentniji.

Na osnovu saznanja dobijenih iz ranijih istraživanja, za osnovnu pretpostavku u istraživanju uzeto je da se uz pomoć uspeha, ponašanja i sociometrijskog statusa

emotions and dispositions while also concerning for others feelings. According to this specification, EI has become one of important factors which influence the behaviour of students. Also, it can offer the assumption about their development. On the other hand, there is an increasing problem of students' socialization. Nowadays, students spend more time on computer instead on open conversation face-to-face. Students are expected to connect broken conversations and coded messages sent over Internet networks in order to realise how to behave properly. For such complex and complicated relationships, EI is important more than ever before.

This work explored the influence of following factors: a) achievements of students from final year of secondary school (success and behaviour), b) sociometry, c) orientation and d) gender on their Emotional Intelligence. During the final year, student become adult and it considers them emotionally mature and capable to describe and control their emotions. The research placed a question: To which extent student's success, behaviour, sociometry and gender can be factors for prediction of EI level? The aim of this research was to determine whether student's success and behaviour expressed through his/her overall behaviour can be used for assumption of level of EI. Also, it would be interested to determine whether gender and orientation of the student can influence on EI. Finally, there is a question whether students who have higher EI level are better accepted by other students.

According to information from earlier researches, the main assumption for this work

učenika može predvideti nivo emocionalne inteligencije, a takođe i da će EI zavisi ti i od pola i od usmerenja učenika. Da bi dobili što relevantnije podatke, pokrenuli smo istraživanje u jednoj prosečnoj mešovitoj školi gde su kao uzorak uzeti svi maturanti, učenici završnih razreda treće i četvrte godine.

Nalazi i saznanja dobijeni ovim istraživanjem treba da pomognu i u teorijskom, a pogotovu u praktičnom smislu, pre svega u sagledavanju i rešavanju nagomilanih socijalnih problema učenika u školi. Ako se dobiju nalazi koji potvrđuju da se nivo emocionalne inteligencije može predvideti u zavisnosti od uspeha, ponašanja i sociometrije onda bi to mogao da bude poziv na povećanu aktivnost u ovim oblastima. Napredak bi se mogao očekivati kod komunikacije, rešavanja konflikta, motivisanosti učenika da uče, u stvaranju poverenja među vršnjacima, kod preuzimanja odgovornosti za vlastite postupke i društin, za učenike, važnim oblastima.

## Pregled literature

Postoji brojna literatura o EI, ali problem definisanja ovog konstrukta nije konačno rešen. Tri modela EI se najčešće pominju: 1) Model sposobnosti po Saloveju i Majeru (Salovey & Mayer, 1990) gdje se EI posmatra kao sposobnost da se sagledavaju emocije, izvrši njihova integracija, da se razumeju i regulišu emocije u željenom pravcu kako bi se ostvarivao lični rast. 2) Drugi model je uveo Goleman (Goleman, 1995). On se zasniva na pet glavnih konstrukcija emocionalne inteligencije (samosvest, samoregulacija, socijalne ve-

is that success, behaviour and Sociometry of the student can be used for the prediction of his/her EI level. Also, it is assumed that this level depends on gender and orientation of the student. In order to obtain as much as more relevant data, researches made effort to conduct the research in an average school with students of both genders. Therefore, the sample included all graduates, students of final third and fourth year.

Results and acknowledgment obtained by this research should be helpful in theoretic and mostly practical sense and above all in analyzing and solving numerous social problems of students in the school. If results confirm that the EI level can be predicted depending on success, behaviour and Sociometry, it can be used as an invitation for higher activity in these areas of study. The progress can be expected in communication, conflicts solving, motivation of students for study, creation of trust among peers, taking the responsibility for actions and other areas important for students.

## Review of resources

There is numerous resources about EI while the problem of definition of this construct is not definitely solved. Three mostly mentioned models of EI are following: 1) Capability Model by Salovey and Mayer (1990) which observes EI as an ability to perceive emotions, integrate them, understand them and point into desired direction in order to achieve personal growth. 2) Second model is introduced by Goleman (1995). It is based on five main constructions of Emotional Intelligence (self-awareness, self-regulation, social skills, empathy and moti-

štine, empatija i motivisanost) od čijeg nivoa će zavisiti performace ličnosti. 3) U trećem modelu Petrides sa saradnicima (Petrides et al., 2007) definiše EI kao sposobnost samopercepcije ličnosti da sagleda svoje emotivne sposobnosti.

Najviše je pominjan i kritikovan Goulmenov model. Eysenck (2000) tvrdi da Goulmen nije dokazao korelaciju pet elemenata EI i da ne postoji mogućnost njihovog merenja. Lok (Locke, 2005) govori da EI pogrešno tumači podatke dobijene istraživanjima i da je zbog toga ne treba posmatrati kao sposobnost nego kao veštinu i jedan od oblika inteligencije ličnosti (IQ). Lendi (Landy, 2005) takođe tvrdi da EI ne uspeva da dokaže i predvidi uspeh i da su dobijeni parametri, koji pokazuju da se može pomoću EI dobiti prednost, ustvari metodološka zabluda. Po njemu ne može se upoređivati EI i akademska inteligencija.

Očigledno je da, što se EI tiče, postoje dva krila: komercijalno i akademsko. Komercijalno krilo pokušava da putem EI objašnjava i predviđa razvoj ličnosti u skoro svim oblastima njenog života, od porodice do zaposlenja i uspeha na poslu, dok akademsko krilo pokušava da se zadrži na strogim naučnim činjenicama. Tako Goulmen, predstavnik prve grupe naučnika, tvrdi da će viši nivo EI garantovati uspeh lideru na poslu, dok Majer, predstavnik druge grupe naučnika, govori o tome kako emocionalno osetljive osobe mogu imati mnogo više problema u prilagodavanju i komunikaciji od ljudi sa nižom EI. Zbog ovakvih, često potpuno različitih gledišta, i nalazi istraživanja se bitno razlikuju. Dok jedni istraživači tvrde da postoji presudan

vation) and their levels are key determinants for personal performances. 3) In third model, Petrides defines EI as an ability of personal self-perception. In other words, it is someone's ability to perceive his/her emotional capacities.

Goleman's model was mostly mentioned and criticized. Eysenck (2000) argues that Goleman did not indicate correlation between five elements of EI and that there is no possibility for their measurement. Locke (2005) claims that EI misinterprets data obtained by researches and therefore it should be observed as skill and form of personal intelligence (IQ) rather than a personal ability. Landy (2005) argues that EI cannot manage to prove and predict the success. Also, he claims that obtained results which indicate that EI can be used for making an advantage are actually a methodological fallacy. According to him, EI and academic intelligence cannot be compared.

There are two groups, regarding EI: commercial and academic. Commercial group explains that EI explains and predicts personal development in almost all life areas, from family to employment and business success. On the other hand, academic group tries to keep up with strong scientific facts. Therefore Goleman, representative of the first group of scholars argues that the higher EI level will guarantee the business success to a leader while Meyer, representative of the other group explains how sensitive persons can be confronted with more problems regarding adaptation and communication rather than people with lower EI level. Hence, research results are often various. While some researches claim that there is an important influence of EI, others argue that EI is not always correlated with someone's success

uticaj EI, drugi upozoravaju da EI nije uvek u korelaciji sa uspehom i rezultatima koje neko postiže. To se najbolje vidi u istraživanjima vezanim za uticaj EI na ličnost u zavisnosti od pola. Istraživanja Univerziteta u Kemridžu (University of Cambridge 2009) pokazuju da dečaci imaju višu EI od devojčica, dok Kafetsios (2010) polazeći od nalaza istraživanja tvrdi da su devojčice emocionalno inteligentnije od dečaka. Mavroveli i sar. (2007) je došla do rezultata da između emocionalne inteligencije dečaka i devojčica ne postoji razlika. Slične odnose imamo i za korelaciju EI i uspeha. Petrides (Petrides et al. 2004) tvrdi da nema značajne korelacije između kognitivnih sposobnosti i performansi. Nasuprot njima, Barčard (Barchard, 2003) i Parker (Parker et al., 2004) tvrde da postoji snažan uticaj EI na uspeh učenika. Što se odnosi na EI i ponašanja tiče, istraživači se slažu da EI utiče na ponašanje ljudi, ali ne uvek u pozitivnom smislu. To znači da visok nivo EI neće unapred obezbediti osobi savršeno uklapanje u radnu sredinu, a učeniku neće garantovati učionicu bez konflikta. Viši nivo EI učeniku može pomoći da bolje shvati i razume okruženje, što nije automatski garancija za prihvatanje (Mavroveli, 2008). Na pitanje da li učenici koji imaju bolji sociometrijski status imaju višu EI, takođe nema slaganja. Moreno (1951) je definisao sociometriju kao nauku o organizaciji grupa i položaju pojedinaca u njima gde se problemi trebaju rešavati unutar grupe a ne pritiskom spolja. Tako je dao sociometriji veoma važno mesto u oblikovanju ličnosti unutar grupe. Jedni tvrde da učenici koji imaju viši sociometrijski status imaju i višu EI (Bar-On, 2006) dok smo kod Mejera (Meyer, 2003) videli

and results. The best way to prove it can be seen in researches about the influence of the EI to an individual, regarding the genre. Researches of University of Cambridge (2009) resulted in claims that boys have a higher EI level than girls while Kafetsios (2010) used results for conclusion that girls are emotionally more intelligent than boys. Mavroveli et al. (2007) argued that there is no difference between EI of boys and girls. Similar results are given in correlation between EI and success. Petrides et al. (2004) argued that there is no significant correlation between cognitive abilities and performances. Opposite to these argues, Barchard (2003) and Parker et al. (2004) argued that there is a strong influence of EI to the success of students. Regarding relationship between EI and personal behaviour, researches argued that EI influences on behaviour but not always in a positive way. In other words, the high EI level will not provide perfect personal adaptation in environment in advance. Therefore, it cannot guarantee environment with no conflict to the student. Higher EI level for students can help in better understanding about the environment, which is not an automatic guarantee for acceptance (Mavroveli, 2008). For a question about students' Sociometric results, there is no final claim that students with higher EI level can give better Sociometric results. Moreno (1951) defined Sociometry as a science about organization of groups and individual position in them. Problems within these groups should be solved in the group rather than using the external pressure. Therefore, he placed a Sociometry as an important element for personal forming within the group. Some researches claim that students with higher Sociometry have the higher EI level (Bar-On, 2006) while Meyer (2003) gives different observa-

da on tvrdi drugačije, tj. da viša EI može stvoriti brojne probleme takvim osobama. Goulmen (Goleman, 1998) je primetio da u zavisnosti od nivoa EI ljudi biraju posao. Oni koji imaju višu EI biraju poslove koji traže veću energiju i više akcije. Kao primer navodi menadžere. Ljudi sa nižom EI će, po Goulmenu birati poslove koji nisu povezani sa liderstvom i koji zahtevaju nizak stepen motivacije. Nasuprot Goulmenu, Majer tvrdi kako osobe sa visokom EI mogu biti neprihvaćene od sredine u kojoj žive i nerazumevanja okruženja u kome rade (Meyer i sar., 2003).

## Metodologija

Osnovni cilj istraživanja je utvrditi da li se na osnovnu školskog uspeha, ocene iz vladanja, različitog stepena prihvatanja/neprihvatanja od strane drugih učenika u razredu (pozitivne i negativne sociometrije) i od pola učenika može predvideti postignuće na testu emocionalne inteligencije.

Specifični ciljevi su utvrditi da li se na osnovu:

a) uspeha učenika (iz matematike, maternjeg jezika, istorije i opšteg uspeha) može predvideti njihovo postignuće na testu emocionalne inteligencije;

b) ocene iz vladanja učenika može predvideti njihovo postignuće na testu emocionalne inteligencije;

c) pozitivnog i negativnog sociometrijskog statusa može predvideti njihovo postignuće na testu emocionalne inteligencije;

d) pola učenika može predvideti njihovo postignuće na testu emocionalne inteligencije i

tions. According to him, higher EI level can create numerous problems for persons with higher Sociometry. Goleman (1998) noticed that people choose their job regarding their EI level. Those with higher EI level choose jobs for which higher energy and actions are needed. As an example, there are managers. People with lower EI level will choose jobs not connected to a leadership and with low level of motivation, according to Goleman. Opposite to that, Meyer claims that persons with high EI level can be unaccepted and misunderstood by living and working environment (Meyer et al. 2003).

## Methodology

The main objective of the research is to determine whether success in the school, behaviour, different level of acceptance-non-acceptance by other students (positive and negative Sociometry) and gender can be used for prediction of results for EI test.

Specific goals are to determine whether:

a) success of student (mathematics, mother language, history and general success) can be used for prediction of his/her result for EI test;

b) behaviour of student can be used for prediction of his/her result for EI test;

c) positive and negative Sociometry of student can be used for prediction of his/her result for EI test;

d) gender of student can be used for prediction of his/her result for EI test and

e) na osnovu usmerenja učenika u školi može predvideti njihovo postignuće na testu emocionalne inteligencije.

Iz problema istraživanja postavljene su hipoteze.

H1: Pretpostavka je da će učenici koji imaju bolji školski uspeh imati višu emocionalnu inteligenciju.

H2: Pretpostavka je da će učenici koji imaju odlične ocene iz vladanja imati višu emocionalnu inteligenciju.

H3: Pretpostavka je da će učenici koji imaju najviše indekse sociometrijskog privlačenja imati višu emocionalnu inteligenciju.

H4: Pretpostavka je da će učenice imati višu emocionalnu inteligenciju od dečaka.

H5: Pretpostavka je da će učenici u gimnaziji imati višu emocionalnu inteligenciju od učenika ostalih srednjih škola.

## Opis instrumenata

Kako bismo utvrdili vezu između emocionalne inteligencije i (ne)prihvaćenosti u grupi vršnjaka, pristupili smo testiranju emocionalne inteligencije a zatim proveli sociometrijsko istraživanje unutar grupe vršnjaka. U tu svrhu korištena su dva instrumenta.

1. Instrument za merenje Emocionalne inteligencije: *Upitnik emocionalne inteligencije (kompetentnosti)*, UEK-15 u kome se koristi skala Likertovog tipa po modelu Mejera i Saloveja (Meyer & Salovey, 1990) a koju je pripremio Taskić (2002), koji predstavlja skalu od 15 tvrdnji koja daje opštu procenu individualnih razlika u emocionalnoj inteligenciji (kompetentnosti). Pouzdanost skale je zadovoljavajuća, Kronbahov alfa je 0,90 a korelacija sa ukupnim skorom skale je 0,90–0,92.

e) orientation of the student in the school can be used for prediction of his/her result for EI test.

Research problem placed following hypotheses:

H1: It is assumed that students with better school success will have a higher EI level.

H2: It is assumed that students with excellent grades in behaviour will have a higher EI level.

H3: It is assumed that students with highest attraction indexes will have a higher EI level.

H4: It is assumed that female students will have a higher EI level than male students.

H5: It is assumed that students from a high-school will have a higher EI level.

## Description of instruments

In order to determine the connection between EI and (un)acceptance in peer group, I've conducted testing of EI. After that, the Sociometric research within the peer group was performed. Instruments used for these actions are following:

1. Instrument for measurement of EI: Questionnaire for EI (competency), UEK-15 Likert type, made by a model of Meyer and Salovey (Taksic, 2002), which includes 15-claims scale about overall estimation of individual differences in EI (competency). Its reliability is satisfying, while the correlation with total score of the scale is 0.90-0.92.



2. Kako bismo ispitali vršnjačku prihvaćenost, koristili smo sociometrijski upitnik, tehniku nominacije po Koju i Dodžu (Coie and Dodge, 1988). Od učenika je traženo da navedu drugove i drugarice iz odeljenja (najviše pet) sa kojima najviše vole i sa kojima ne vole da se druže, a) u školi i b) izvan nje. U obračun su uzeta po dva pozitivna i dva negativna kriterijuma sa po najviše pet izbora. Indeks vršnjačke prihvaćenosti, standardizovan u okviru odeljenja, izračunavan je kao zbir odgovora sa pozitivnim i negativnim predznakom, tako da viši skor odražava viši nivo prihvaćenosti, odnosno omiljenosti među vršnjacima. Na osnovu odgovora učenika izračunali smo: indeks privlačenja (svi pozitivni glasovi/ $2 \cdot [N-1]$ ), indeks odbijanja (svi negativni glasovi/ $2 \cdot [N-1]$ ), kao i sociometrijski status pojedinca u grupi (suma pozitivnih biranja minus suma negativnih biranja/ $2 \cdot [N-1]$ ).

Školsko postignuće učenika iz matematike, maternjeg jezika, istorije i opšteg uspeha kao i ocena iz vladanja je utvrđeno pregledom podataka iz školske administracije.

## Opis statističkih postupaka

Obrada podataka uradjena je uz pomoć SPSS, a korišćeni sledeći statistički postupci:

a) Deskriptivna statistika (AS; SD) za utvrđivanje izraženosti osnovnih varijabli istraživanja.

b) Za uticaj stepena predviđanja zadatog modela na stepen izraženosti emocionalne inteligencije korišćena je multivarijantna regresiona analiza.

c) Za merenje izraženosti razlika korišćena je *Analiza varijanse – ANOVA*.

2. In order to investigate peer acceptance, we used Sociometric questionnaire, nomination technique by Coie and Dodge (1988). Students needed to specify male and female friends from class (five the most) with which they prefer and which do not like to socialize, a) in school and b) out of the school. Two positive and two negative criteria with five choices each were used. Index of peer acceptance, standardized within the class was calculated as a sum of answers with positive and negative sign. The higher score indicates higher peer acceptance. According to students' answers, the following was calculated: attraction index (sum of all positive answers / $2 \cdot (N-1)$ ), rejection index (sum of all negative answers / $2 \cdot (N-1)$ ), and Sociometric status of individual in the group (sum of positive choices minus sum of negative choices / $2 \cdot (N-1)$ ).

Student success in mathematics, mother language, history and overall success and grade for behaviour were obtained by review of data from School administration.

## Description of statistic operations

Data processing was made using SPSS software while following statistic operations were used:

a) Descriptive statistics (AS;SD) for determination of the severity of primary research variables.

b) Multivariate regressive analysis was used to measure the degree of a given model prediction according to the degree of severity of emotional intelligence

c) Variance analysis – ANOVA was used for measuring of level of differences.

## Učesnici istraživanja

U istraživanju su učestvovali učenici završnih razreda treće (jedno odeljenje autoelektričara) i četvrte godine (tri odeljenja: gimnazija – opšti smer, turistički tehničar i tehničar za računare) srednje škole „Đura Jakšić“ u Rači kragujevačkoj. U istraživanju je učestvovalo ukupno 85 učenika, od čega 49 (57,6%) dečaka i 36 (42,4%) devojaka. Učenika iz smera autoelektričar je bilo 17 (20%), gimnazijalaca je bilo 17 (20%), tehničara računara 29 (34,1%) i turističkih tehničara 22 (25,9%).

## Analiza nalaza istraživanja

### Deskriptivna statistika

Deskriptivna statistika pokazuje da ispitivani učenici imaju najslabije ocene iz matematike ( $AS = 2,66$ ), a najbolje iz istorije ( $AS = 3,85$ ). Opšti uspeh je  $AS = 3,67$ . Ocene iz vladanja su vrlo visoke ( $AS = 4,80$ ). Emocionalna inteligencija je  $M = 58,82$  (od mogućih 100, što predstavlja dobar rezultat za ovaj uzrast, Tabela 1)

## Study participants

The research/study used students of final third (on class of auto-electricians) and fourth year (three classes: high-school-general orientation, tourist technician and computer technician) of the secondary school “Djura Jaksic” in Raca, Kragujevac. The total of 85 students participated in this research. There was 49 (57.6%) male and 36 (42.4%) female students. Also, the number of students from class of Auto-electricians was 17 (20%), from high-school 17 (20%) students, Computer Technicians 29 (34.1%) and 22 (25.9%) of Tourist Technicians.

## Results analysis

### Descriptive statistics

Descriptive statistics showed that questioned students have had lowest grades in mathematics ( $M = 2.66$ ), and highest grades in history ( $M = 3.85$ ). The overall success was  $M = 3.67$ . Grades for behaviour were very high ( $M = 4.80$ ). The level of EI was  $M = 58.82$  (Table 1).

Tabela 1

*Aritmetičke sredine i standardne devijacije učenika po smerovima i uspeha iz matematike, maternjeg jezika, istorije, opšteg uspeha, vladanja, pozitivne i negativne sociometrije i emocionalne inteligencije*

Table 1

*Mean values and standard deviations of students by their orientations - Mathematics, Serbian language, History, Overall success, Behaviour, Positive and negative Sociometry and Emotional Intelligence*

	Mathematics	Native language	History	Overall success	Behaviour	Positive Sociometry	Negative Sociometry	EI
High school (N=15)	3.93 (.96)	4.59 (.80)	4.76 (.75)	4.59 (.80)	5.00 (.00)	.26 (.15)	.17 (.13)	59.76 (7.40)
Tour.Tech. (N=22)	2.91 (1.23)	3.55 (1.10)	4.00 (1.02)	3.91 (.92)	5.00 (.00)	.16 (.09)	.08 (.10)	58.14 (7.39)
Comp.Tech. (N=29)	2.28 (.96)	3.52 (1.09)	3.45 (.95)	3.38 (.78)	4.79 (.41)	.12 (.07)	.09 (.11)	57.52 (6.10)
Auto-el. (N=17)	1.88 (.99)	2.94 (1.03)	3.18 (.98)	2.88 (.81)	4.35 (.49)	.17 (.20)	.08 (.09)	61.00 (6.43)
Total (N=85)	2.66 (1.24)	3.62 (1.14)	3.85 (1.08)	3.67 (1.00)	4.80 (.40)	.17 (.14)	.10 (.11)	58.82 (6.80)

Легенда: Matematika, Materiji jezik, Istorija, Opšti uspeh, Vladanje, Poz Socio, Neg Socio, EI, Gimnazija, Tur. teh., Teh.rač., Aut.El., Total

Legenda: Tur.teh. = Turistički tehničar, Teh.rač. = Tehničar računara, Aut.El. = Autoelektričar, Poz.Soc = Pozitivna sociometrija, Neg.Soc = Negativna sociometrija, EI = Emocionalna inteligencija

Legenda: Tour.Tech. = Tourist Technician; Comp. Tech. = Computer Technician; Auto-El. = Auto-electrician; Pos.Soc = Positive Sociometry; Neg.Soc. = Negative Sociometry; EI = Emotional Intelligence.

### Razlike u školskom uspehu (i vladanju) učenika različitih smerova

Analiza varijanse pokazuje da postoji značajna razlika u *opštem uspehu* između četiri školska smera  $F_{(3,80)} = 13,887$ ,  $p < 0,001$  (Tabela 1). Naknadni testovi pokazuju da postoji značajna razlika u opštem školskom uspehu između gimnazijalaca (koji imaju najbolji uspeh) i svih drugih smerova (razlike aritmetičkih sredina sa autoelektričarima iznosi 1,776,  $p < 0,01$ ; turističkim tehničarima 0,679,  $p$

### Differences in school success (and behaviour) of students with different orientations

Variance analysis showed that there is a significant difference in overall success between 4 school orientations  $F_{(3,80)} = 13.887$ ,  $p < .001$  (Table 1). Subsequent tests showed that there is significant difference in overall school success between high-school students (with best results) and students of all other orientations (mean differences with: auto-electricians were 1.776,  $p < .01$ ; tourist technicians .679,  $p < .05$ ; and computer

$< .05$ ; i tehničarima računara 1,209,  $p < 0,01$ ). Utvrđene su značajne razlike u uspjehu iz matematike  $F_{(3,79)} = 12,279$ ,  $p < 0,001$ . Gimnazijalci imaju značajno bolji uspeh iz matematike nego učenici svih drugih smerova (sve razlike su značajne na nivou 0,01). Turistički tehničari imaju bolji uspeh iz matematike od autoelektričara ( $p < 0,01$ ) i tehničara računara ( $p < 0,05$ ). I na uspehu iz srpskog jezika i istorije gimnazijalci imaju bolji uspeh no svi drugi smerovi (sve značajno na nivou 0,01).

technicians 1.209,  $p < .01$ ). Significant differences in results in mathematics were also determined  $F_{(3,79)} = 12.279$ ,  $p < .001$ . High-school students have much better success in mathematics than students of other orientations (all differences are important on level 0.01). Tourist technicians have better results in mathematics than auto-electricians ( $p < .01$ ) and computer technicians ( $p < .05$ ). Also, students from high-school have better results in Native language (Serbian language) and history than students of other orientations (all significant on level 0.01).

### Razlika u sociometrijskom statusu

### Differences in Sociometry

ANOVA pokazuje da postoji značajna razlika u testu prihvatanja drugih učenika (pozitivna sociometrija) između đaka četiri smera  $F_{(3,81)} = 4,623$ ,  $p < 0,01$ . Naknadni testovi pokazuju da postoji značajna razlika između gimnazijalaca (koji imaju najvišu pozitivnu sociometriju) i svih drugih smerova (razlike AS: autoelektričari 0,09,  $p < 0,05$ ; turistički tehničari 0,10,  $p < 0,05$ ; i tehničari računara 0,14,  $p < 0,01$ ). Ista analiza pokazuje da ne postoji značajna razlika u negativnoj sociometriji (neprihvatanju) između đaka četiri smera  $F_{(3,81)} = 2,303$ ,  $p = 0,08$ .

ANOVA showed that there is a significant difference in acceptance test (positive Sociometry) between students of four orientations  $F_{(3,81)} = 4.623$ ,  $p < .01$ . Subsequent tests showed that there is significant difference between students from high-school (who have the highest positive Sociometry) and students of all other orientations ( $M$  differences: auto-electricians .09,  $p < .05$ ; tourist technicians .10,  $p < .05$ ; and computer technicians .14,  $p < .01$ ). The same analysis showed that there is no significant difference in negative Sociometry (non-acceptance) between students of four orientations  $F_{(3,81)} = 2.303$ ,  $p = .08$ .

Učenici različitog opšteg školskog uspeha imaju različit pozitivni sociometrijski status  $F_{(3,83)} = 4,43$ ,  $p < 0,01$ . Naknadni testovi pokazuju da postoji značajna razlika u pozitivnoj sociometriji između učenika sa dobrim i odličnim uspehom ( $AS_{\text{dobar}} = 0,12$ ,  $AS_{\text{odličan}} = 0,23$ ,  $p < 0,01$ ). Ne postoji značajna razlika na negativnom sociometrijskom statusu između učenika različitog opšteg uspeha.

Students with different overall success in school have different positive Sociometry  $F_{(3,83)} = 4.43$ ,  $p < .01$ . Subsequent tests showed that there is a significant difference in positive Sociometry between students with good and excellent overall success ( $M_{\text{good}} = .12$ ,  $M_{\text{excellent}} = 0.23$ ,  $p < .01$ ). For negative Sociometry, there is no significant difference between students with different overall success.

**Razlika po polu**

**Differences according to gender**

Devojke imaju značajno bolji opšti uspeh u odnosu na dečake (razlika AS = 0,69,  $t_{(82)} = 3,81, p < 0,01$ ), bolji uspeh iz matematike (razlika AS = 0,71,  $t_{(81)} = 2,96, p < 0,01$ ), bolji uspeh iz srpskog jezika (razlika AS = 0,52,  $t_{(83)} = 2,48, p < 0,05$ ), bolji uspeh iz istorije (razlika AS = 0,63,  $t_{(77)} = 2,97, p < 0,01$ ) i bolje vladanje (razlika AS = 0,25,  $t_{(83)} = 2,97, p < 0,01$ ) (Tabela 2).

Female students have significantly better overall results than male students ( $M$  difference  $M = .69, t_{(82)} = 3.81, p < .01$ ), better results in mathematics ( $M$  difference  $M = .71, t_{(81)} = 2.96, p < .01$ ), better results in Serbian language (difference  $M = .52, t_{(83)} = 2.48, p < .05$ ), better results in History (difference  $M = .63, t_{(77)} = 2.97, p < .01$ ) and better results in Behaviour (difference  $M = .25, t_{(83)} = 2.97, p < .01$ ) (Table 2).

Tabela 2

*Aritmetičke sredine i standardne devijacije učenika različitog pola iz uspeha iz matematike, maternjeg jezika, istorije, opšteg uspeha, vladanja, pozitivne i negativne sociometrije i emocionalne inteligencije*

Table 2

*Mean values and standard deviations of different students related to Mathematics and standard deviations of different students -- Mathematics, Serbian language, History, Overall success, Behaviour, negative and positive Sociometry and Emotional Intelligence*

	Mathematics	Native language	History	Overall success	Behaviour	Positive Sociometry	Negative Sociometry	EI
Male (N=49)	2.33 (1.16)	3.37 (1.07)	3.53 (1.08)	3.33 (.86)	4.69 (.47)	0.14 (.10)	0.10 (.12)	58.31 (6.52)
Female (N=36)	3.11 (1.23)	3.97 (1.16)	4.22 (.96)	4.11 (1.01)	4.94 (.23)	.21 (.17)	.11 (.10)	59.53 (7.19)

Legenda: Matematika, Maternji jezik, Istorija, Opšti uspeh, Vladanje, Poz Socio, Neg Socio, EI, muški, ženski

Legenda: Pos socio = Pozitivna sociometrija; Neg socio = Negativna sociometrija; EI = Emocionalna inteligencija.

Note: Pos socio = Pos. Sociometry; Neg socio = Negative sociometry; EI = Emotional Intelligence.

Devojke imaju i značajno jače prihvatanje drugih učenika (razlika AS = 0,06,  $t_{(83)} = 2,21, p < 0,05$ ). Ne postoji značajna razlika u neprihvatanju drugih (negativna sociometrija) u odnosu na dečake  $t_{(83)} = 0,30$  (nije statistički značajno), kao i u emocionalnoj inteligenciji  $t_{(83)} = 0,82$ , nije statistički značajno.

Female students also better accepted other students (difference  $M = .06, t_{(83)} = 2.21, p < .05$ ). There is no significant difference in un-acceptance of other students (negative Sociometry) related to male students  $t_{(83)} = .30$ , ni(not statistically important), like for EI  $t_{(83)} = .82$ , ni(not statistically important).

## Regresiona analiza

Ispitana je mogućnost da se na osnovu ocene iz pojedinih predmeta, ocene iz vladanja, pozitivnog i negativnog sociometrijskog statusa, usmerenja učenika i pola, mogu predvideti ostavrenja na testu emocionalne inteligencije. Upotrebljena je standardna višestruka regresija pomoću koje je ispitano nekoliko modela (Grafikon 1).

U prvom modelu je ispitivano da li se na osnovu školskog uspeha i ocene iz vladanja može predvideti nivo emocionalne inteligencije. Prediktorske varijable su bile uspeh iz matematike, srpskog jezika, istorije, opšti uspeh i ocena iz vladanja, a zavisna emocionalna inteligencija. Model se pokazao kao nezadovoljavajući  $F_{(4,72)} = 1,024$ , (nije statistički značajno), i ne omogućava predviđanje nivoa emocionalne inteligencije.

Drugi model je ispitao mogućnost predviđanja rezultata na testu EI na osnovu pozitivnog i negativnog sociometrijskog statusa, i on se takođe pokazao kao nezadovoljavajući  $F_{(2,82)} < 1$ , (nije statistički značajno).

Ispitivano je da li se na osnovu postojećih četiri smera u školi može predvideti nivo emocionalne inteligencije. i ovaj model se pokazao nezadovoljavajućim  $F_{(3,81)} = 1,127$ , (nije statistički značajno), kao i model predviđanja emocionalne inteligencije na osnovu pola učenika  $F_{(2,82)} < 1$ .

## Regressive analysis

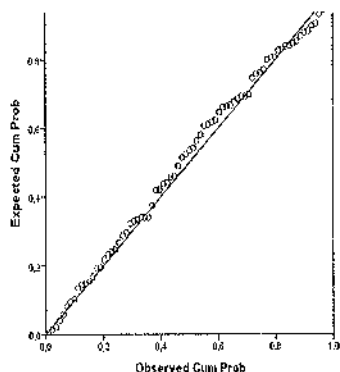
The standard multiple regression was used for possibility to use grades for individual subjects, behaviour, positive and negative sociometry, student orientation and gender in order to predict results for test of EI. Several models were explored using this method.

First model included observation whether school success and Behaviour grades can be used for prediction of EI level. Predictive variables: success in mathematics, Serbian language, history, overall success and behaviour, while dependent variable was EI. Model was unsatisfying  $F_{(4,72)} = 1.024$ , (not statistically important), and it does not provide the prediction of EI level.

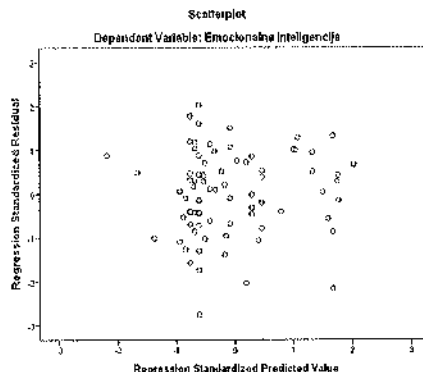
The second model investigated the possibility of prediction of results of EI test according to positive and negative Sociometry, and it was also unsatisfying  $F_{(2,82)} < 1$ , (not statistically important).

It was investigated whether according to existing 4 school orientations the EI level can be predicted. Also, this model was unsatisfying  $F_{(3,81)} = 1.127$ , (not statistically important), including the Model of EI prediction using gender of student  $F_{(2,82)} < 1$ .

Normal P-P Plot of Regression Standardised Residual  
Dependent Variable: Emotional Intelligence



Scatterplot  
Dependent Variable: Emotional Intelligence



Grafikon 1

*Dijagrami regresione analize (Normal Probability Plot i Scatterplot)*

Figure 1

*Regressive Analysis Diagrams (Normal Probability Plot and Scatterplot)*

## Diskusija

Ni jedna od postavljenih hipoteza nije potvrđena. Emocionalan inteligencija se ne može predvideti na osnovu školskog uspeha (predstavljenog kroz opšti uspeh, uspeh iz matematike, maternjeg jezika i istorije), ocene iz vladanja, pozitivnog i negativnog sociometrijskog statusa i pola.

**H1:** Pretpostavka da će učenici koji imaju bolji školski uspeh imati višu emocionalnu inteligenciju nije potvrđena. Nije mogla da se pronađe veza između dobrog uspeha i nivoa EI, čak su učenici trećeg stepena, koji imaju najslabiji uspeh, za nijansu imali i bolje rezultate na skali EI. Razlog može da leži u tome što odlični učenici veću pažnju posvećuju učenju i razmišljanju o karijeri. Pošto u takvim odeljenjima postoji takmičarski duh može doći do pro-

## Discussion

None of placed hypotheses was confirmed. Emotional intelligence cannot be predicted using school success (presented through overall success, grades in mathematics, mother language and history), behaviour, positive and negative Sociometry and gender.

**H1:** Assumption that students with better school results will have higher EI level is not confirmed. There was no possibility to find the connection between good success and EI level. Even students from three-year secondary school, with lowest school results obtained better results in EI scale. The reason for that may lie in a fact that excellent students pay more attention to studying and carrier. Since classes with such students have desire to compete,

blema u komunikaciji baš kako je to nglasio i Mejer (Meyer et. all., 2003). Učenici, u odeljenjima koja imaju slabiji uspeh, više pažnje obraćaju na druženje i davanje pomoći drugima uz očekivanje da će i drugi razumeti njihove potrebe. Istraživanje Univerziteta u Kembrudžu (University of Cambridge, 2009) pokazuje da EI nema uticaja na uspeh ali da pomaže u borbi sa stresom i anksioznošću, što može dovesti do boljih postignuća učenika. U svojim istraživanjima Barčard (Barchard, 2003) i Parker i sar. (Parker et.al.,2004) došli su do drugačijih pokazatelja i oni tvrde da EI snažno utiče na akademski uspeh. Na uspeh učenika utiču i drugi faktori: porodica, vrsta škole, okruženje. Razlog bi mogao biti i to što škola ne meri nijednu od komponenti EI niti kod učenika niti kod nastavnika. Školski uspeh je sveden na reprodukciju i konformisanje a ove varijable ne koreliraju sa EI. Međutim, tačan mehanizam kojim EI utiče na akademski uspeh učenika je još uvek nepoznat.

**H2:** Pretpostavka da će učenici koji imaju odlične ocene iz vladanja imati višu emocionalnu inteligenciju nije potvrđena. Samo kod nekih učenika je potvrđena ova pretpostavka, pa nije mogla da se uzme kao pravilo. U ovom istraživanju zabeleženi su i slučajevi da učenici sa lošijom ocenom iz vladanja imaju viši nivo EI. Obrazovne institucije su mesto gde se potrebe učenika ne uvažavaju u potpunosti iako to ne treba da bude praksa. Zbog toga, emocionalno osetljiviji učenici mogu da oseću potrebu da se pobune protiv takvog načina rada škole. Oni češće dolaze u konfliktne situacije sa svojim nastavnicima, jer su oni za njih predstavnici škole pa tako mogu da dobijaju niže ocene iz vladanja. Ovi učenici mogu imati sasvim dobre odnose sa svojim vršnjacima i izuzet-

there can be problems in communications, according to Meyer et al. (2003). Students from classes with lower results pay more attention to socializing and helping others expecting that others will understand their needs. The research by University of Cambridge (2009) showed that EI level has no influence on school success but it helps in fight against stress and anxiety, which can provide better school results. Researches made by Barchard (2003) and Parker et al. (2004) showed that EI has a strong influence on academic success. There are other influence factors: family, kind of school, environment. However, there is no defined exact mechanism with which EI influences on academic success of students.

**H2:** Assumption that students with excellent grades in Behaviour will have higher EI level is not confirmed. Only some students confirmed this assumption and it could not be used as a rule. This research noted cases in which students with lower grade in Behaviour can have a higher EI level. Educational institutions are places where students' needs are not completely satisfied although it should not be a practice. Hence, more sensitive students can feel a need to rebel against such kind of school work. They get into conflict situations with teachers more often, because they see them as school representatives who give them lower grades in Behaviour. These students can have correct relationships with their peers and extremely high level EI level. Within this area of work, researches related to correlation between EI and behaviour were conducted (Mavroveli et al., 2008). Students with higher EI level express less negative emotions at the school. They are better in problems



no visok nivo EI. U ovoj oblasti su provedena istraživanja vezana za korelaciju između EI i ponašanja (Mavroveli i sar. 2008). Učenici sa višom EI izlažu manje negativnih emocija u školi, bolje rešavanje problema, višu energiju i aktivnost kao i bolju koncentraciju, generalno imaju bolje ponašanje i obazriviji su prema ponašanjima drugih. Pobjinama, učenici sa manjom EI, imaju mnogo briga, nervozni su, imaju strahove i teško se nose sa problemima.

**H3:** Pretpostavka da će učenici koji imaju najviše indekse sociometrijskog privlačenja imati višu emocionalnu inteligenciju nije potvrđena. Česta je pojava da u školi postoje učenici koji su veoma popularni među vršnjacima, a da oni nisu ni dobri đaci, nemaju dobro vladanje a nisu ni družljubivi. Oni imaju nizak nivo EI a veoma su visoko na skali sociometrije. Objašnjenje ovakvog fenomena leži u tome što učenici, koji su po prirodi radoznali, žele da saznaju razloge takvog „neobičajenog“ ponašanja „zvezda“ u školi. Primećena je veća zainteresovanost za ove učenike. Ostali učenici imaju želju da pokore „zvezde“ i privole ih svom načinu ponašanja. Sa druge strane, u ovom istraživanju je potvrđeno da učenici koji uopšte nisu prihvaćeni od strane svojih vršnjaka mogu imati visok nivo EI. Odgovor zbog čega je to tako može da leži u tome što učenici sa niskim sociometrijskim statusom svoju EI usmeravaju u drugom pravcu kao što je povećana motivacija za učenje, na primer. Istraživači su našli da su ljudi visoke EI sposobni da se bolje i brže socijalno prilagođavaju (Sjöberg, 2001). U istraživanjima Mavroveli i sar. (2007) tvrde da učenici sa višom EI imaju manje problema sa svojim vršnjacima, imaju više prijatelja, više vole drugu decu, ne biraju maltretiranje

solving, have higher energy, creativity and concentration. In other words, they generally better behave and they are more considerable for behaviour of others. According to researches, students with lower EI level are more concerned, anxious, feared and have difficulties in problem solving.

**H3:** Assumption that students with higher attraction indexes will have higher EI level is not confirmed. Schools often have students very popular among peers, while they don't have good results, they are problematic and asocial. They have a low EI level but very high grade in Sociometry. Explanation of such phenomenon lies in a fact that naturally curious students want to find reasons for such "unusual" behaviour of "stars" in the school. The greater interest for these students was observed. Other students want to conquer "stars" and submit them to their way of behaviour. On the other hand, students which are not accepted by their peers have a high EI level. The answer to this lies in a fact that students with low Sociometry level direct their EI to other direction, such as higher motivation for studying. Researchers noted that people with high EI level are capable to better and faster socially adapt (Sjöberg, 2001). Researches by Mavroveli et al. (2007) argued that students with higher EI level have less problems with their peers, have more friends. Also, they are more communicative with others and they do not choose harassment as a method for conflict solving. Results of their research show that students with higher EI will have a possibility to create better social relationships in the school.

**H4:** Assumption that female students will have higher EI than male students

drugih za rešavanje sukoba. Rezultati njihovog istraživanja pokazuju da će učenici sa višom EI imati mogućnost boljih socijalnih odnosa u školi.

**H4:** Pretpostavka da će učenice imati viši nivo EI od dečaka nije potvrđena. U ovom istraživanju ne postoje bitne razlike između EI dečaka i devojčica. Ovakvom ishodu doprinelo je vreme koje su učenici proveli zajedno tokom školovanja (12 godina) tokom kojeg su brisali mnoge razlike pa i one među polovima, sve veći uticaj društvenih regulatora i medija koji potiru razlike među polovima, a tu je i uticaj odnosa u porodici, gde žena zauzima sve ravnopravni položaj. Učenici sve više odbacuju koncept po kome žene predodređuje biologija a muškarce kultura. Slične rezultate, istražujući EI u srednjim školama dobili su Mavroveli (Mavroveli et al., 2007) kao i Petrides (Petrides et al. 2004). Nasuprot njima, istraživači Univerziteta u Kembridžu (University of Cambridge, 2009) su dobili nalaze koji pokazuju da su dečaci imali višu EI od devojčica. Kafetsios tvrdi, na osnovu svojih istraživanja, da su žene emocionalno inteligentnije ali im to ne omogućava prednost u životnim situacijama.

**H5:** Pretpostavka je da će učenici u gimnaziji imati višu emocionalnu inteligenciju nije potvrđena. Postavlja se pitanje da li EI utiče na usmerenje učenika ili usmerenje učenika utiče na nivo EI? Istraživanja pokazuju da je ovde presudna motivisanost učenika za učenje (Parker i sar., 2004). Učenici koji su motivisani da uče upisuju teže smerove bez obzira na svoju akademsku inteligenciju, jer to nadoknađuju verom u sebe, energijom i motivisanošću. Goulmen govori da motivisanost koja je važan deo

is not confirmed. This research shows no important differences between EI of male and female students. Such result is a consequence of time students spent together during education (12 years). During that period many differences were erased, including those among genders. The increasing influence of social factors and media minimize differences between genders. Also, there is a strong influence of family relationships in which women are increasingly equal to men. Students increasingly drop out the concept in which women are defined by biology while men are defined by culture. Similar results, given by EI levels in secondary schools were noted by Mavroveli et al. (2007), Petrides, Furnham and Martin (2004). On the other hand, researchers from University of Cambridge (2009) obtained results in which male students have higher EI level than female students. Kafetsios claims that women are emotionally more intelligent but it does not provide them advantage in life situations.

**H5:** Assumption that high-school students will have higher EI level is not confirmed. There is a question: Does EI level has influence on student orientation or the student orientation influences on EI level EI? Researchers showed that the motivation for study is the key factor (Parker et al. 2004). Students motivated for studying are decided for more difficult orientations no matter about their academic intelligence, because it can be compensated by self-confidence, energy and motivation. Goleman noted that motivation presented great power than IQ (Goleman, 1996).

EI, predstavlja veću snagu od IQ (Goleman, 1996).

Za diskusiju najinteresantniji nalazi ovog istraživanja su da uspeh, ponašanje i sociometrijski status ne utiču direktno na EI. Isto tako, nalazi su pokazali da ni pol učenika kao i usmerenje ne utiču na nivo EI. Ali, posredno EI utiče na svakog učenika u njegovom formiranju stavova prema učenju, ponašanju i odnosu prema drugim učenicima. Viša EI otvara mogućnost učenicima da imaju drugačiji način razmišljanja od učenika sa nižom EI. Da li će učenici uvek iskoristiti svoju višu EI kako bi stekli određenu prednost u rezultatima i odnosima sa drugim učenicima, zavisi od mnogo faktora koje ovde nisu pominjani. Ti faktori, od kojih su najvažniji, okruženje i vrsta škole, mogu da se ispituju u narednim istraživanjima i uporede sa ovim rezultatima. Neki istraživači upozoravaju da se mora uzeti u obzir činjenica da učenici na tom uzrastu, pre svega zbog manjka iskustva i životnih situacija, mogu veoma teško precizno da odrede i opišu svoje emocionalno stanje (Koifman, 2002). Značaj uticaja EI je još veći ako znamo da ona može da se uči i poboljšava tokom života. Program „Ti možeš to“ pokazuje da se mogu unaprediti mnogi aspekti EI kod učenika (Bernard, 2006).

Treba imati u vidu snažan uticaj organizacione kulture koja oblikuje EI. Tako se organizaciona kultura javlja kao presudan faktor u formiranju EI učenika. Istovremeno EI učenika izgrađuje organizacionu kulturu škole. Ako želimo da poboljšavamo ili menjamo EI učenika, moramo da menjamo organizacionu kulturu škole, što nije nimalo lako. O jakoj povezanosti organizacione kulture i EI govore i istraživanja Tolmatsa

The most interesting results of this research explained that Success, Behaviour and Sociometry do not have direct influence on EI level. Also, results showed that gender and orientation of student do not influence on EI level. EI indirectly influences on each student during his/her forming of attitudes toward studying, behaviour and relationship with other students. Higher EI level opens the possibility to have different way of thinking rather than lower EI level. Are students able to use their higher EI level always in order to obtain certain advantage in results and relationships with other students? It depends on numerous factors which are not mentioned in this work. Such factors, among which environment and kind of school are most important can be investigated in further researches and compared with these results. Some researchers warn that the fact that students of that age have difficulties to precisely define and describe their emotional condition (Koifman, 2002). The importance of the influence of EI is even greater if we know that it can be learned and improved during the life. Program by Bernard, named „You can do it“ showed that many aspects of EI in students can be improved (Bernard, 2006).

The strong influence of organizational culture which forms EI should be kept in mind. Therefore, organizational culture is a key factor in forming of EI for students. Also, EI of students defines the organizational culture of the school. If we want to improve or change EI level in students, we need to change the entire organizational culture of the school which is difficult task. Researches by Tolmats and Reino (2006) explained about strong connection

i Rinoa (Tolmats & Reino, 2006). Takođe, Draksejt i Volf (Druskat & Wolff, 2001) tvrde da školska kultura nije jednostavni zbir pojedinačnih kultura učenika. Oni predlažu da treba iskoristiti organizacionu kulturu ne samo za pojedinačna popravljnja EI učenika, nego i za njihovo timsko prilagođavanje.

## Zaključak

Emocionalna inteligencija je trenutno tema koja privlači veliko interesovanje kako akademskih krugova tako i šire javnosti. U poslednjih nekoliko godina sve je više prisutna svest da socijalni i emocionalni faktori igraju važnu ulogu u uspehu i ponašanju učenika. Da EI ima veliki uticaj na ljude, nije sporno, međutim, još uvek se traže i proučavaju mehanizmi pomoću kojih EI reguliše i usmerava njihov razvoj.

Na osnovu nalaza ovog istraživanja utvrđeno je da: uspeh učenika, njihovo vladanje, vršnjačka prihvaćenost merena sociometrijom, pol i usmerenje u školi ne utiču na skorove emocionalne inteligencije. Istraživanja pokazuju da se emocionalna inteligencija može unaprediti učenjem, što škole svojim programima i rade, ali sve je očiglednije da je presudan uticaj sredine i organizacione kulture na razvoj emocionalnih veština učenika. Organizaciona kultura škole, zbog svoje snage i vremena koje učenici provode u njoj, ima veći značaj za razvoj učenika od porodice, samostalnog učenja i drugih faktora koji su u dosadašnjim istraživanjima isticali kao najvažniji. To potvrđuju i nalazi u ovom istraživanju koji ukazuju na mnogo manji uticaj uspeha, vladanja, sociometrijskog statusa i pola učenika na nivo emocionalne inteligencije,

between organizational culture and EI. Also, Druskat and Wolff (2001) claim that school culture is not just a sum of cultures of individual students. They suggested that organizational culture should be used for individual improvement of students and their team adaptation.

## Conclusion

Emotional intelligence is a subject which attracts interest of large academic institutions and wider audience. During last several years, the awareness of social and emotional factors and their important role in success and behaviour of students are increasingly present. There is no doubt that EI has a great influence on people. However, there is still search for mechanisms with which EI can regulate and direct their development.

According to obtained results the following is determined: success of students, their behaviour, accepting by peers measured using Sociometry, gender and orientation has no influence on results of EI. Numerous researches showed that EI can be improved by studying, which schools actually do by their programs. However, it is obvious that influence of environment and organizational culture are important for development of emotional skills of students. Organizational Culture of the school has greater importance for development of student rather than his/her family, independent study and other factors which were mentioned as most important in previous studies. Also it is confirmed by research results which indicate that

od uticaja istog usmerenja i istog razreda. Može se zaključiti da je EI veoma složen konstrukt koji zavisi od mnogo elemenata, kao i to da će ishodi biti potpuno drugačiji u različitim okruženjima. Isto tako, postoje velike razlike u nivou EI u zavisnosti od uzrasta ispitanika. To može da potvrdi tezu da se EI u toku života pojedinaca učenjem i uticajima različitih organizacionih kultura menja i razvija u različitim pravcima, što upućuje na zaključak da ona može biti i pozitivna i negativna. Iz ovoga proizilazi da emocionalna inteligencija u školi treba da se istražuje zajedno sa organizacionom kulturom škole.

success, behaviour, Sociometry and gender have less influence than EI results.

It can be concluded that EI is a very complex construction which depends on many elements and results will vary in different environments. Also, there are great differences in level of EI depending of the age of respondent. It can confirm the thesis that EI changes and evolves in different directions during someone's life, which implies to the conclusion that it can be positive and negative. According to that, EI in the school should be explored along with Organizational Culture of the school.

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