

## Interdisciplinary View into Optimism and Pessimism in Emic Perspective

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### Abstract

The tradition of research of optimism and pessimism is very popular nowadays, but the past decades had offered a string of very interesting access into this phenomenon as within separate cultures so on the plan of cross-cultural comparisons. The aim of this research was to establish to which extent the different variables describing the style and lifestyle of students in Bosnia and Herzegovina are connected with the level of optimism / pessimism. In that regard, beside the general information on examinees, the differences regarding sex, evaluation of parental control dimensions and emotionality (family status), the level of empathy, intercultural sensibility, and the resistance and or the inclination to depressive, anxious conditions and stress, had been affirmed. An interdisciplinary approach dominated in this research (connecting the knowledge from pedagogy, psychology, sociology) relevant for the question of optimism/pessimism, as well as emic perspective, a perspective of view from within in research of one culture a combination of both qualitative and quantitative methods. The empiric part of research has covered the sample comprising of 457 examinees, students of the Universities of Zenica and University of Sarajevo with total of 9 faculties covering technical, scientific, social and humanistic sciences. The results had confirmed some of previously obtained both theoretical and empiric thesis on connection of optimism / pessimism with family background, level of empathy, intercultural sensitivity and preference of examinees' lifestyles.

**Keywords:** level of optimism / pessimism, parental control and emotionality, intercultural sensitivity, lifestyles.

### Introduction and theory background

Contemporary researches are rich with the endeavour to establish a connection between pessimism/optimism and personal characteristics of members of a single culture. Comparative examinations of happiness started in 60s of previous century and they are able to be found in World Database of Happiness<sup>1</sup>. According to last comparative data, among the happiest nations are Danish, Columbians. Swiss, Austrians, Icelanders etc. The level of happiness within majority of commentaries is often connected with the level of national profit / wealth (Westen, 1999). From this, it could be concluded that the people from wealthier countries are happier, and that subjective and objective feeling of satisfaction are on high correlation level under the impact of factors such as: social justice, low level of corruption, social and economic prosperity etc. However, these correlations should be taken into consideration with reserve for the wealth is an indirect factor only that should be correlated with sequence of other factors. Therefore, numerous differences are conditioned culturally knowing that persons from individualistic cultures connect happiness with the achievement of independence, while in collectivistic cultures the bond with the other members of a group they belong to is much important, as well as a compatibility of life with expectations of important persons (Le Vine, 2003; Kaçitçibaşı, 2007). The research conducted by Veenhoven (2007; after Rijavec et al.,

<sup>1</sup>Veenhoven, R. (2017). Happiness in Nations. World Database of Happiness, Erasmus University Rotterdam, The Netherlands. (Assessed on: 9.12.2017.) at: [http://worlddatabaseofhappiness.eur.nl/hap\\_nat/hat\\_fp.php?mode=1](http://worlddatabaseofhappiness.eur.nl/hap_nat/hat_fp.php?mode=1)

2008, p.83) has shown that happiness is not merely individual private matter but it depends on numerous social factors, since the happiness of westerners is connected with a sequence of factors depicting the level of social justice achieved, such as: political and economic freedom, obeying the law, human rights, women' rights, low level of corruption and personal freedom. In our researches in the area of Bosnia and Herzegovina (Alić, Cerić and Habibović, 2013, 2015, 2017a, 2017b,2017c) it was shown as in regard to evaluation of personal life satisfaction a level of empathy, the way of building up of social relations, sensitivity and social distance toward the others (in inter-group and outer-group relations), a family functionality, parental style / dominant behaviour examinees are exposed to, and preference of life styles have significant impact.

Dispositional optimism represents a general expectance as much more good than bad things should occur during the life. The key difference between optimists and pessimists is that the optimists even being faced with challenges and problems do not give up their goals, but they thrive to carry them out effectively facing with unpleasant emotional states. Martin Seligman has conceptualized optimism as explanatory style but not as personal characteristic knowing that explanation relates to that how people explain the causes of things happening in their lives. Preferred life styles significantly impact the level of optimism, but when they face with bad things, according Seligman, the optimists see its causes in external, interim and specific factors, but pessimists see them within internal, permanent and global causes (Rijavec et al., 2008, p.118).

Numerous cross-cultural researches and comparisons of religious groups, optimism and pessimism, locus of control, have confirmed the differences regarding the social cultural context. Since the culture covers numerous factors, people sharing the same systems of values show a tendency of similar behaviour within the same context. The research of religious groups in the United States of America conducted by Sethi and Seligman (1993, after Westen, 1999) showed that the members of religious groups achieve higher scores on optimism scale than examinees who do not declare themselves as religious. In this research, it was found that religious people interpreting a destiny as being God's designation, much easier get along with difficulties and find a solace in everyday situations. The research conducted by Oettingen and Seligman (1990, after Westen, 1999) and which we aimed to compare citizens of Eastern and Western Berlin before the Berlin Wall fall, had offered a series of results useful for understanding of political, social and cultural impacts onto people sharing the same context regarding locus of control and optimism. The researchers had established that citizens of Berlin sharing the same experience till 1945 in a course of time of 45 years being divided into two ideologically confronted blocks, have expressed totally opposed results regarding variables considered. While with the citizens of Berlin it was established an inclination toward external locus of control and pessimistic attitude, the citizens of Western Berlin gained far higher scores on optimism scale and an inclination toward internal locus of control. This way, a significant importance of living within a society of limited freedoms, low economic situation, non-efficient bureaucracy on pessimism and external control was established, contrary to the life in an open society where an individual achievement was awarded and within a society that enabled its citizens a freedom of movement and non-obstructive exchange of ideas. In, presently classic study being conducted in the United States of America by Kluckhorn and Strodtbeck (1961, after Westen, 1999) examinees of five northern American groups have been compared: white men from Texas, Mormons, Hispanic, members of Zuni Indians and Navajo Indians. Numerous differences have been noticed within groups observed, but beside individual characteristics they expressed a belief as a human should not disturb natural harmony pointing out the value of peaceful coexistence between a human and a nature as one of the most important cultural value. Contrary to them, a majority of white Texans like majority of inhabitants of the West had emphasized the necessity of human management of nature. For them, a control is one of the most important value, and the lack of control a possible source of frustration and feeling of helplessness. The life in developed industrial West, market orientation, domination, possession and awarding of individual achievements (in the USA also multi-decade programmes „space conquering“, Moon flights, etc.) usually create a person tending to values system of individualism. In a study by Lee and Seligman (1997, after Westen, 1999) there was a comparison of white students from the USA, students born in The USA but originating from China, and students residing in the USA during their studies only but being born in China. The researchers had established that Chinese students gained somehow higher scores on the scale of pessimism than students from the USA, while white students from the USA attributed their success to personal endeavour, but for eventual failure they contributed it to the others.

These research findings are just a confirmation that the evaluation of optimism/pessimism should be understood on culturally sensitive manner. In individualistic cultures, where the principle of minimizing the pain and sadness rules, but maximizing of pleasures (utilitarianism philosophy), the life goal is to achieve a success leading to happiness by development of personal potentials, self-efficiency, self-enhancement process and self-confidence (Dejvis, 2017). In collectivistic cultures that process is mostly directed to achievement of collective harmony. In this regard, the manners of

teaching individuals to express emotions by cultural patterns: in individualistic cultures negative in intimate, but positive in outer groups while in collectivistic it is vice versa, positive in intimate but negative in outer-group relations (Hofstede, 2001, 2005). The very same conclusions are relevant for the comprehension of the difference between parental control and carefulness: control in individualistic cultures is almost always linked with parental hostility and potential gap being opened in inter-generation perspective, so consequently, it reflects to the level of perception of emotionality of parental behaviour; in collective cultures, the control is regard to be a constituent of parental emotionality and the manner of exposing carefulness in a course of children' upbringing. The comparisons of control perception and carefulness in the USA and Germany on one, and in Japan, Korea and Turkey on the other side, have confirmed that in individualistic cultures from the position of youngsters a control is regarded as lack of love and confidence, while in collectivistic cultures as a constituent of parental expression of carefulness repertory within the process of upbringing (Kağıtçıbaşı, 2007). Why such differences are so implied in regard to a perception and understanding of identical behavioural patterns? The answer could be probably found exclusively in different cultural contexts as a basis for interpretation of behaviour as well as the notion on that what is „normal“, „good“ and „bad“. If within a culture, the ideal of autonomy is promoted, early separations and lower emotional fusions, then parental behaviour will be determined by such strategies and models supporting the achievement of such values. Behavioural models, within the fullness of cultural context, should be understood taking into consideration the beliefs, especially religious ones, that serve as a spring from which all values are created the norms helping to govern and model the young generations. Therefore, the previous findings are the confirmation that evaluation of both optimism/pessimism should be observed in accordance to eco-cultural context and dominant parental ethno-theory<sup>1</sup>.

### The aim of research

In interpreting the results it was especially interesting to compare data gained by previous researches (Alić, Cerić and Habibović, 2013, 2015, 2017a, 2017b, 2017c) in which, applying similar instruments, we observed different categories of social behaviour of students of elementary and secondary schools, students and young people originating from Bosnia and Herzegovina but living in some European countries and in USA (that is, the all age structures of children of elementary, secondary and higher school level). The aim of this research was to establish to which extent a different variable describing the way and style of living of students from Bosnia and Herzegovina, relate to the level of optimism/pessimism. In this regard, beside the general information about examinees, the differences have been established in respect to sex, evaluation of dimension of parental control and emotionality (family status), level of empathy, intercultural sensitivity, and resistance and/or an inclination to depressive, anxious conditions and stress. In the researches, an interdisciplinary approach predominates (connecting the knowledge from pedagogy, psychology, and sociology) relevant for the questions on optimism/pessimism and emic perspective, a perspective of researching the culture from within of a single culture combined with qualitative and quantitative methods.

### Methodological frame of research

The research has elements of both qualitative and quantitative analyses. Non-experimental empiric transversal layout was used based on the interview with individuals, questionnaire using standardized scales of evaluation, analyses of theoretical materials and statistical data processing. The field part of a research had been carried out in the period between February - June 2017.; data entry and its processing from June-September 2017, but the first analyses of processed data in the period of October and November of the current year. The empiric part of the research covered the sample comprising of 457 examinees, students of University of Zenica and University of Sarajevo including total of 9 faculties from technical, scientific, social and humanistic studies. At the University of Zenica, the research was conducted at the following faculties: Mechanical Faculty, Polytechnic Faculty, Faculty of Metallurgy, Faculty of Law, Philosophy Faculty and Medical Faculty, and at the University of Sarajevo: Faculty of Political Sciences and Faculty of Natural Sciences and Mathematics. The access to sex structure shows that the research included 328 female students and 129 male students (Table 1).

**Table 1.** Structure of sample

University	Faculty	Examinees	%
University of Zenica	Faculty of Philosophy	69	15.1
	Faculty of Mechanical Engineering	38	8.3

<sup>1</sup> For detailed insight into ethnopedagogy in Bosnia and Herzegovina see: Tufekčić, A. (2012). *Osnove etnopedagogije*. Sarajevo: Dobra knjiga i CNS.

University of Sarajevo	Faculty of Law	44	9.6
	Faculty of Polytechnic	57	12.5
	Faculty of Metallurgy and Materials Science	34	7.4
	Faculty of Economics	22	4.8
	Faculty of Medicine– General Medicine	48	10.5
	Faculty of Medicine – Health care	29	6.3
	Faculty of Political Sciences	74	16.2
	Faculty of Natural Sciences and Mathematics	42	9.2
	9 faculties / 10 departments	457	100

The following questionnaires has been used in this research: a questionnaire on general information of examinees, scale of parental perception of family relations (Vulić-Prtorić, 2000) including 25 items by which the examinees evaluate the dimensions of emotionality and control of both mother and father – Alpha Cronbach for emotionality of mother is 0.809, for emotionality of father 0.857, for mother's control 0.766, while for dimension of father's control, Alpha –Cronbach coefficient is 0.76; scale of empathy (Baron-Cohen, 2012) Alpha-Cronbach coefficient in this research is 0,867; Intercultural Sensitivity Scale / containing sub-scales: Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness (Chen, G.M., & Starosta, W.J., 2000, after to Fritz, Mollenberg & Chen, 2002) - Alpha Cronbach coefficient is 0,833; Scale of optimism / pessimism (Penezić, 2002) – Alpha Cronbach for subscale of optimism is 0,789, for subscale of pessimism 0.806; Questionnaire of life style preference – modified Olport-Vernon-Lindzey scale of values) scale constructed as the fifth-grade scale of Likert type measuring the intensity of ten lifestyles preferences (Luković and Čizmić, 2012); and DASS21 –Alpha Cronbach coefficient in this research for anxiety scale is 0.847, for stress scale 0.839, and for scale od depressiveness 0.863. The Alpha Cronbach values has shown for most questionnaires applied equally high scores as well as in our previous researches (Alić, Cerić and Habibović, 2013, 2015, 2017a, 2017b, 2017c).

### Analyses and interpretation of research results

T-test is a statistical test of difference helping with the review whether there is real difference between the occurrences tested. In this research we have used T-test as a kind of appropriate statistical method to establish the differences regarding sex of examinees, but in regard of a sequence of criteria-variables observed: scale of optimism/pessimism, intercultural sensitivity, dimension of both mother and father control, empathy, stress inclination, depression and anxiety. We have established as regarding the sex, there are statistically significant differences in respect to most variables observed: optimism/pessimism, evaluation of parental dimensions, empathy and intercultural sensitivity, and an inclination to anxiety conditions and stress (Table 2.).

**Table 2.** T-test: Differences between criteria variables regarding the sex of examinees

Scales	Sex	N	M	$\delta$	SE M
Scale of optimism	female	323	23.00	4.798	.267
	male	127	21.98	5.483	.487
Scale of pessimism	female	322	21.60	7.156	.399
	male	127	20.82	6.639	.589
Respect for cultural differences	female	327	25.46	3.522	.195
	male	127	23.43	4.514	.401
Dimension of mother's emotionality	female	320	40.94	4.025	.225
	male	125	39.35	4.489	.401
Dimension of mother's control	female	320	14.14	3.179	.178
	male	125	15.22	3.357	.300
Dimension of father's emotionality	female	296	38.84	5.078	.295
	male	116	37.80	5.717	.531
Dimension of father's control	female	294	13.57	3.052	.178
	male	116	15.05	3.650	.339
Empathy	female	324	45.63	9.567	.531
	male	127	39.31	10.517	.933
Anxiety	female	323	6.28	5.103	.284
	male	124	5.02	4.098	.368
Stress	female	324	8.16	5.055	.281

	male	125	7.02	4.299	.385
t-test sex		t	df		p
Scale of optimism		1.940	448		.050
Scale of pessimism		1.062	447		.289
Respect for Cultural Differences		4.541	188.545		.000
Dimension of mother's emotionality		3.614	443		.000
Dimension of mother's control		-3.166	443		.002
Dimension of father's emotionality		1.796	410		.073
Dimension of father's control		-3.867	181.808		.000
Empathy		5.880	212.272		.000
Anxiety		2.709	275.673		.007
Stress		2.410	262.854		.017

A slightly emphasized difference has been noticed regarding female examinees. Having in mind that it has been statistically found significantly higher score at female students at level  $p < 0,05$ , ( $r = 0,50$ ,  $df = 448$ ) meaning that female students achieve somehow higher scores at the scale of optimism. The difference is visible when we compare both female and male examinees with average score achieved, so it is at female examinees 23.0 with SD 4.798, while at male examinees 21.98, and SD 5.483. Within a sub-scale Respect of cultural differences, a difference at level  $p < 0,01$  ( $r = 0,000$ ,  $df = 188.545$ ) has been found, meaning that female students statistically achieve significantly higher scores at this sub-scale.

Differences in evaluation of dimensions of parental behaviour has shown that female students evaluate statistically higher the emotionality of mother at level  $p < 0,01$  ( $r = 0,000$ ,  $df = 443$ ), while male examinees higher evaluate mother's control.  $p < 0,01$ ,  $r = 0,002$ ,  $df = 443$ ) and father's control  $p < 0,01$  ( $r = 0,000$ ,  $df = 181.808$ ). Obviously, female examinees are more directed to relationship and relational dimension, but males to normative behaviour dimension of both parents. These data can partially depict normative and relational dimension of observed culture. As it was expected, female examinees in statistically significant higher measure achieve scores at empathy scale at level  $p < 0,01$  ( $r = 0,000$ ,  $df = 212.272$ ) meaning that female students are significantly empathic that their male colleagues.

However, female examinees are at the same time more inclined to anxiety and stress knowing that there is statistically significant difference regarding stress noticeable at level  $p < 0,01$  ( $r = 0,017$ ,  $df = 262.854$ ), and regarding anxiety at level  $p < 0,01$  ( $r = 0,007$ ,  $df = 275.673$ ). It is interesting that regarding an inclination to depressive moods there are no differences between the students according to sex.

#### Abstract from correlative matrix for criteria variables observed

Calculation of correlation of criteria variables observed has been conducted applying Spearman's rho coefficient of correlation taking into consideration that it was needed to establish the range of correlation. Using Spearman's rho correlation coefficient, possible connection between variables are examined: general information about students / which served as basic for branching of the sample), evaluation of dimensions both father and mother, level of empathy, intercultural sensitivity, inclination to anxiety, depressive moods, stress, all in relation to the results achieved on optimism/pessimism scale. In respect to demographic characteristics of students (background, life in urban/rural areas) it is stated as there is no difference regarding optimism/pessimism. Differences are also not noted regarding variables related to family structure – two generation, three generation, complete, incomplete families.

It has shown as optimism is in high correlation with evaluations of parental dimensions, but in negative correlation with control, and vice versa. pessimism in correlation with control, but in negative correlation with emotionality of parents (Table 3.).

Differences are to be easily noticed in evaluations of controlling mother's behaviour where correlation at level  $P < 0,01$  was noticed with examinees gaining higher scores on optimism scale ( $r = 0.125$ ;  $p = .009$ ), but the same result was established regarding correlation between father's control and optimism at level  $P < 0.05$  ( $r = 0.122$ ;  $p = .014$ ).

On the other side, a positive correlation was established between optimism and examinees who higher evaluate emotionality of mother at level  $P < 0,01$  ( $r = 0.244$ ;  $p = .000$ ), and optimism and higher evaluations of father's emotionality at level  $P < 0.01$  ( $r = 0.189$ ;  $p = .000$ ).

**Table 3.** Abstract from the correlation matrix for dimensions of emotionality and parental control, and cultural dimensions

Scale		Scale of optimism	Scale of pessimism
Dimension of mother's emotionality	Spearman's rho	.244**1	-.290**
	Sig. (2-tailed)	.000	.000
	N	441	440
Dimension of mother's control	Spearman's rho	-.125**	.296**
	Sig. (2-tailed)	.009	.000
	N	441	440
Dimension of father's emotionality	Spearman's rho	.189**	-.236**
	Sig. (2-tailed)	.000	.000
	N	408	407
Dimension of father's control	Spearman's rho	-.122*	.259**
	Sig. (2-tailed)	.014	.000
	N	406	405

In Table 4, an abstract from correlation matrix for empathy, intercultural sensitivity, optimism/pessimism and observed everyday habits have been presented. It is interesting that a habit of reading books is not in correlation with optimism/pessimism, but it is with the level of empathy at level  $p < 0,01$  ( $r = 0.211$ ,  $p = .000$ ), and intercultural sensitivity at level  $p < 0,01$  ( $r = 0.204$ ;  $p = .000$ ) from which it is possible to conclude as students who read books on regular basis aside from obligatory study literature, achieve higher scores on the scale of empathy and intercultural sensitivity. Students consuming alcohol are lower empathetic from non-consumers at level  $p < 0.01$  ( $r = 0.125$ ;  $p = .008$ ). Simply: a developed habit of reading books influence empathy and intercultural sensitivity but not to optimism or pessimism, while consuming alcohol, within this sample of young people at least, lower the level of empathy.

**Table 4.** Abstract from correlation matrix for empathy, intercultural sensitivity, optimism/pessimism and criteria of everyday habits observed

Scales		Empathy	Intercultural sensitivity	Scale of optimism	Scale of pessimism
I read books	Spearman's rho	-.211**2	-.204**	-.086	.067
	Sig. (2-tailed)	.000	.000	.069	.156
	N	451	453	450	449
Daily, periodicals on political topics	Spearman's rho	-.063	-.019	.020	.003

1 \*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

2 \*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

	Sig. (2-tailed)	.181	.691	.669	.945
	N	451	453	450	449
I consume alcohol	Spearman's rho	.125**	-.018	.066	-.025
	Sig. (2-tailed)	.008	.701	.165	.602
	N	452	454	451	450

Aside from a high correlation between the levels of empathy and intercultural sensitivity at level  $P < 0,01$  ( $r = 0,422$ ;  $p = .000$ ) a connection of these mutually conditioned variables has been noted, with optimism and pessimism (Table 5.). Namely, higher level of empathy is in high correlation with optimism at level  $P < 0,01$  ( $r = 0,314$ ,  $p = .000$ ) and it is at the same time a high correlation of intercultural sensitivity with optimism is present at level  $P < 0,01$  ( $r = 0,381$ ,  $p = .000$ ). That means, that empathic persons who express higher level of intercultural sensitivity also more optimistic ones.

**Table 5.** Abstract from correlation matrix for optimism / pessimism, empathy and intercultural sensitivity

Scale		Scale of optimism	Scale of pessimism
Empathy	Spearman's rho	.314**	-.231**
	Sig. (2-tailed)	.000	.000
	N	450	449
Intercultural sensitivity	Spearman's rho	.381**	-.305**
	Sig. (2-tailed)	.000	.000
	N	449	448

This conclusion supports theoretical thesis that more confident and open-minded persons view in more bright way to events and people, and they do believe as they are able within their (really and objectively evaluated limits) influence their surroundings. The next abstract from correlation matrix supports previous results. Namely, in Table 6. are shown the results for optimism/pessimism, depression, anxiety and stress where a high correlation between higher scores on pessimism and inclination to depression, anxiety moods and difficulties to cope with stress are visible.

**Table 6.** Abstract from correlation matrix for optimism/ pessimism, depression, anxiety and stress

Scale		Scale of optimism	Scale of pessimism
Depression	Spearman's rho	-.272**	.420**
	Sig. (2-tailed)	.000	.000
	N	447	446
Anxiety	Spearman's rho	-.222**	.348**
	Sig. (2-tailed)	.000	.000
	N	445	444
Stress	Spearman's rho	-.153**	.336**
	Sig. (2-tailed)	.001	.000
	N	447	446

Statistically significant correlation between the level of pessimism at level  $P < 0,01$  is noticed at examinees achieving higher scores on depression scale ( $r = 0,420$ ;  $p = .000$ ) anxiety ( $r = 0,348$ ;  $p = .000$ ) and stress ( $r = 0,336$ ;  $p = .000$ ). That means as more pessimistic examinees are at the same time those persons that hardly cope with depression, anxiety and stress. Reverse conclusion values for persons inclined to optimism, so these data are a kind of confirmation of some findings from theoretical elaboration and earlier researches (Seligman, 2002; Linley et al. 2004; Rijavec et al., 2008).



**Table 7.** Results for scale of pessimism per faculties

Faculties	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Faculty of Political Sciences	72	24.07	7.362	8	36
Faculty of Polytechnic	57	22.96	7.613	10	40
Faculty of Mechanical Engineering	38	22.47	6.044	8	35
Faculty of Metallurgy and Materials Science	33	21.30	4.440	9	29
Faculty of Law	42	21.07	7.971	8	37
Faculty of Economics	22	21.05	7.061	9	32
Faculty of Medicine – Health care	28	20.86	7.347	11	40
Faculty of Philosophy	68	20.62	6.986	8	38
Faculty of Natural Sciences and Mathematics	42	19.48	5.903	9	32
Faculty of Medicine– General Medicine	48	17.98	6.069	8	33
Total	450	21.36	7.014	8	40

The data analyses have shown that the highest average result on scale of pessimism is achieved by students of Faculty of Political Sciences, but the lowest one goes to students of Medical Faculty in Zenica. These results could be linked to the present work market chances-graduated students of political sciences get their job harder, while students of Medical sciences get it easier and along with degrees in medical field could be verified abroad (presently, a great number of young people are in process of leaving Bosnia and Herzegovina searching for jobs within EU countries).

By single factor analyses of variant, an impact of choosing the study onto pessimism measured by pessimism scale has been researched. Our sample comprised of ten study programmes from nine faculties from Zenica and Sarajevo. Statistically considerable difference was stated at level  $p < 0,00$ ;  $F(9,440)$ ,  $p = 0.00$ . With the help of Tuky's test we found differences between the following faculties:

Faculty of Medicine Zenica and Faculty of Political Sciences Sarajevo,  $p = 0.00$ . Mean result on scale of pessimism of the students of Faculty of Political Sciences Sarajevo is 24.07 with standard deviation 7,362

Polytechnic Faculty Zenica and Faculty of Medicine Zenica,  $p = 0,009$ . Arithmetic mean of the students of Polytechnic faculty is 22,96, with standard deviation of 7,613, while with students of Faculty of Medicine Zenica, the mean result on scale of pessimism is 17,98 and standard deviation of 6.069. This data supports thesis that the students of Polytechnic Faculty are more pessimistic than students of Medicine.

Faculty of Political Sciences Sarajevo and Faculty of Natural Sciences and Mathematics Sarajevo,  $P < 0,021$ . Students of Faculty of Natural sciences and Mathematics Sarajevo achieve mean score on pessimism scale from 19,48 with standard deviation of 5.903. Based on these data we conclude as the students of Faculty of Political Sciences more pessimistic than the students of Faculty of Natural Sciences and Mathematics.

Results of scale of optimism and differences between faculties presented in Table 8.

**Table 8.** Results for scale of optimism per faculties

Faculties	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Minimum</i>	<i>Maximum</i>
Faculty of Law	43	24.14	4.384	15	30
Faculty of Medicine – Health care	28	24.07	3.114	15	30
Faculty of Medicine– General Medicine	48	23.71	4.838	6	29
Faculty of Philosophy	68	23.31	4.804	8	30
Faculty of Natural Sciences and Mathematics	42	22.50	4.671	11	30



Faculty of Economics	22	22.27	5.275	10	30
Faculty of Mechanical Engineering	38	22.18	4.826	12	30
Faculty of Polytechnic	57	22.04	5.261	9	30
Faculty of Metallurgy and Materials Science	33	21.94	5.601	9	30
Faculty of Political Sciences	72	21.57	5.718	6	30
Total	451	22.72	5.011	6	30

Using single factor analyses of variation, it is stressed the impact of choosing the study onto optimism measured by optimism scale. The sample covered ten study programmes from nine faculties in Zenica and Sarajevo. Statistically significant difference has not been noticed:  $F(9,441) = 1.648$ ,  $p=0,099$ . From the table we can see that the highest scores are achieved by students of Faculty of Law Zenica, but the lowest one goes to the students of the Faculty of political sciences (but the difference is just slight one). From the previous results, it could be concluded as the highest scores on pessimism scale are achieved by students of Faculty of Political sciences Sarajevo, but the highest ones on scale of optimism is achieved by students of Medical Faculty Zenica.

Previous results have led us to necessity of establishing the eventual correlation between preferred life styles of students and optimism/pessimism displayed (Table 9.).

**Table 9.** An abstract from correlation matrix for dimensions of emotionality and parental control and cultural dimensions

Scales		Scale of optimism	Scale of pessimism
Egoistic orientation	Spearman's rho	.092	.015
	Sig. (2-tailed)	.052	.753
	N	443	442
Prometheus activism	Spearman's rho	.083	.052
	Sig. (2-tailed)	.082	.271
	N	443	442
Hedonistic orientation	Spearman's rho	.116* <sup>1</sup>	.003
	Sig. (2-tailed)	.014	.944
	N	443	442
Religious-traditional style	Spearman's rho	.130**	.073
	Sig. (2-tailed)	.006	.123
	N	443	442
Orientation to power	Spearman's rho	-.005	.087
	Sig. (2-tailed)	.910	.069
	N	443	442
Family-sentimental style	Spearman's rho	.178**	-.002
	Sig. (2-tailed)	.000	.974
	N	443	442
Altruistic orientation	Spearman's rho	.081	.000
	Sig. (2-tailed)	.090	.985
	N	443	442
Cognitive style	Spearman's rho	.139**	-.066
	Sig. (2-tailed)	.003	.166
	N	443	442
Utilitarian style	Spearman's rho	.097*	.008
	Sig. (2-tailed)	.041	.871
	N	443	442
Orientation to popularity	Spearman's rho	-.127**	.133**

<sup>1</sup> \*. Correlation is significant at the 0.05 level (2-tailed).

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Sig. (2-tailed)	.007	.005
N	443	442

Statistically significant correlation between the level of optimism at level  $P < 0,01$  is noticed at examinees preferring religious-traditional style ( $r=0,130$ ;  $p=.006$ ), family-sentimental style ( $r=0,178$ ) and cognitive style ( $r=0,139$ ;  $p=.003$ ).

Statistically significant correlation between the level of optimism at level  $P < 0,05$  is noticed at examinees preferring hedonistic orientation ( $r=0,116$ ;  $p=.0,14$ ) and utilitarian style ( $r=0,097$ ;  $p=.041$ ).

Statistically significant but negative correlation between the level of optimism at level  $P < 0,01$  is noticed at examinees preferring orientation of popularity ( $r=0,127$ ;  $p=.007$ ).

These data also support a sequence of theoretical findings on correlation of optimism with living the religious-traditional, family-sentimental, cognitive, utilitarian styles and hedonistic orientation (Seligman, 2002, Rijavec, et al. 2008).

Statistically significant correlation between the level of pessimism at level  $P < 0,01$  is noticed at examinees preferring the orientation of popularity ( $r=0,133$ ,  $p=.005$ ) that could be contributed to present negative status of examinees, for the desire for higher level of presence and visibility on social networks and the world surrounding someone in general, can point to low level of self-esteem and self-confidence.

### Conclusive reflection

The tradition of measuring of optimism and pessimism is very popular nowadays, but previous decade offered a sequence of very interesting views into this phenomenon as within separate cultures through emic, so as on the field of cross-cultural researches through ethic perspective. In our research conducted on a sample comprising of 457 students of University Zenica and Sarajevo, it emerged as optimism correlates with higher level of empathy, intercultural sensitivity, along with preference to the following life styles: religious-traditional, family-sentimental, cognitive style, hedonistic orientation and utilitarian style. Statistically significant correlation between the level of pessimism is noticed with examinees preferring orientation to popularity that can be related to present and enormously big influence of social networks where popularity varies from minute to other and is connected to likes of other persons, a number of posts seen etc. Namely, it seems to be conditioned by situation. Consequently, such bonds to other people can lead to lower down the level of self-esteem and self-confidence and lower emotional stability. For the higher level of optimism variables of evaluation of father and mother have shown as important ones. Favourable emotional climate within family is very strong factor of shaping up mature and stable personality, and such persons possess a potential for building up the next emotionally literate generations. In B&H society the importance of family is nourished, and connection is confirmed by these findings. It is interesting that at the very brink of statistical importance female examinees display somehow higher results on the scale of optimism than male examinees. Higher level of pessimism is also noticed with examinees achieving higher scores on depression scale, anxiety and stress, meaning that more pessimistic examinees are at the same time those persons who hardly cope / or have difficulties regarding depression, anxiety and stress. Reverse conclusion values for persons who incline to optimism so, these data are also a kind of confirmation of some findings from theoretical elaboration and previous researches. It seems as these findings suggest a necessity of introduction of programmes in learning some social and emotional competence, but up-to-present researches and evaluation of numerous programmes show that these skills could be learned. Single factor variant analyses have served for research of influence of choosing study onto optimism/pessimism measured by optimism/pessimism scale. Based on this part of research it was confirmed that the highest scores on pessimism scale has been displayed by students of Faculty of Political Sciences Sarajevo, but the highest scores on optimism scale belong to students of Medical Faculty Zenica. The emphasized pessimism of the students of Faculty of Political Sciences and the lowest one with the students of Medical Faculty, could be connected to present work-market chances-graduated students of Political Sciences hardly get a job, while students of medical sciences get it easily having an opportunity it to be verified in some other countries/presently, a great number of young people are in process of leaving B&H seeking the job in any of UE country. Perception of a better future is strong predictor for development of optimism, happiness and easier way to cope with stress, depression and anxiety.

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