# Cross-cultural validation of a psychological model of "Quality of life" concept

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Quality of life scale developed on the basis of the proposed model of life quality, was applied to 126 Austrian, 85 Swedish, 110 American and two groups of Croat students (one, N = 234, tested before the war (1990), and the other one, N = 185, after the first cease-fire (1991). The applied quality of life (QOL) scale comprised 15 predictive variables (pertaining to factors influencing life quality) and 6 criterion variables (appraising overall quality of life and 5 different aspects of it). Although there were some significant differences in the evaluations of 15 predictive variables given by the 5 examined groups, all obtained differences were very small. The lack of significant differences in 6 aspects of life quality appraised by 5 groups of students strongly supports the proposed model of life quality. Predictive variables used in the applied QOL scale explain almost 40% of life quality variance, thus supporting the proposed way of evaluating individual life quality.

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The concept of "quality of life" denotes different things in the usage of experts from various fields. Various professionals attribute to quality of life diverse meanings, almost always encompassing just a single feature of this primarily psychological phenomenon. In economics, for instance, quality of life is considered synonymous to "standard of living", while in medicine it most frequently represents the remaining functional level of a patient. Such a diversified and broad use of the "quality of life" concept leads to an increasing lack of distinction between the factors causing some changes in quality of life (for better or worse), and the basic complex meaning and content of the term itself. It thus becomes necessary to draw a conceptual distinction between the substance of the concept called "quality of life" and the factors affecting it.

In the model proposed by Krizmanić and Kolesarić (1989) quality of life is defined as a complex, synthetic experience of satisfaction/dissatisfaction with life, which occurs through the individual's permanent evaluation and reevaluation of his/her success in satisfying various needs and life roles.

The influence of objective circumstances making-up an individual's environment considerably depends on this person's value system formed through the interaction of inherited psychophysiological characteristics and environment this

1987), disclosing a significant relation between the child-rearing practices and life quality of older persons, corroborates such an assumption. The emotional atmosphere in the family, as well as the child-rearing practices, are important for the development of cognitive and personality characteristics, which in turn are crucial for the individual evaluation of the quality of life in later years. In the course of development people acquire certain basic or core assumptions about the world, other people and themselves (Janoff-Bulman, 1988), as well as certain personality repertoirs defined by Staats (cited in Fisher and Reason, 1990) as "constellations of com-

plex skills which are evoked by many situations, but also

have the quality of providing the basis for additional learn-

ing". These "basic behavioral repertoirs" are not personality

traits, but patterns of behaviors, cognitions and affects that are in constant interaction with the social and physical envi-

person was raised in. Thus the foundations which will

throughout lifetime determine an individual's quality of life

are formed in the course of this indivdual's development, up-

bringing and education in a certain cultural and social envi-

The research on the quality of life in the aged (Szatmari,

It seems reasonable to suppose that such behavioral repertoirs are manifestations of underlying cognitive schemata which are generally resistant to changes. People ordinarily alter their perceptions, memories and inferences so as to render them schema consistent (Nisbett and Rosss, 1980; Fiske and Taylor, 1984). Janoff-Bulman (1988) states that our interactions in the world are primarily defined by top-down processing, that is, we start with schemata and understand phenomena through these cognitive structures without necessarily being aware of their content.

In the light of conceptualization of life quality by Krizmanić and Kolesarić each person's appraisal of her/his

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quality of life is the product of some cognitive schemata (Weltanschauung, self-identity, personality repertoirs, etc.), which enable people to make sense of events, and their life experiences and aspirations. As long as oncoming information could be processed, if necessary even "bent" to fit the existing cognitive schemata, no significant change in the overall quality of life will result, albeit there could be some changes in certain aspects of it. Fitting the oncoming information into existing schemata could include not only lowering or rising of aspirations, but also some important changes in the individual's value system and goals, or sources of satisfaction.

This means that the individual's quality of life in a given moment does not depend so much on the real life-events or the actual situation as such, but rather on individual elaboration and evaluation of these events and situations.

Because environmental factors always act refracted through the specific psychological structure of an individual, quality of life of each particular person cannot be accurately assessed only on the basis of known objective conditions under which she or he lives. In accordance with the proposed model individual quality of life could be assessed only on the basis of a person's *subjective* appraisal of his/her satisfaction with life.

Schematic presentation of the proposed quality of life model (Krizmanić and Kolesarić, 1989) is presented in Figure 1.

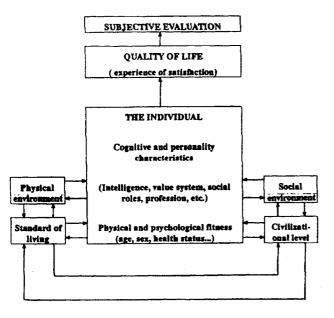


Figure 1. Objective and subjective factors, which by their interactive action influence and determine the individual quality of life.

It is, of course, also of interest to know why an individual is to a certain extent satisfied or dissatisfied with his/her life. Thus it becomes necessary to obtain an insight into the pattern of a person's satisfaction and into the structure of factors which determine it, together with their modes of interaction.

For the purpose of measuring subjective assessments of life quality, as well as factors influencing it, the proposed model was operationalized in 3 quality of life scales, aiming at measuring life quality of young, adult and older persons of both sexes (Krizmanić & Kolesarić, 1992).

The empirical validation of the proposed model and the scales developed on the basis of it, could be done in at least two different ways. One is to collect objective data about each person (like e.g. health, financial status, social role, number of friends and relations, etc.), and compare it with the subjective evaluation of this person's life quality. The other one, used in this study, is to apply the quality of life scale cross-culturally, i.e., to subjects of different sex and nationality having the same level of education (students).

The main supposition behind such an attempt to validate the model is that quality of life is a *universal* psychological construct, albeit factors influencing it could be (and probably are) to some extent culturally bound. In other words, it could be supposed that in the life of men and women living in different countries or societies diverse factors may influence or determine their life quality, without causing any significant differences in their overall quality of life. Any attempt at conceptualization of a supposedly universal psychological construct should be, therefore, cross-culturally validated.

Taking as subject only students allows for a supposition that the objective circumstance they live in would be similar within a given country.

#### **METHOD**

Subjects

The quality of life scale was applied to 126 Austrian, 85 Swedish, 110 American and two groups of Croat students. One group of Croats (234) was tested before the war (1990), and the other one (185) after the first cease-fire (1991).

## Procedure

The quality of life (QOL) scale was applied to groups of students (15-20) during regular university lectures or courses. The subjects were informed that they could, if they want to, take part in a cross-cultural research on quality of life. They were not asked to fill in their name or some other identification data, but only their age, sex and main subject of study. This was done in order to ensure straightforward answers to some questions about e.g. their emotional or sex life.

#### Instrument

The quality of life was assessed by one of the QOL scales devised on the basis of the proposed quality of life model.

Quality of life scales consist of a different number of predictive variables (13 for young, 15 for adult and 21 for older

subjects) and 6 criterion variables, identical for all subjects irrespective of their age.

The predictive variables pertain to different fields of activity and human relations, that is, they are intended to assess factors influencing individual quality of life.

The assessment of the overall quality of life and five more different aspects of it is done by means of 6 criterion variables.

Each variable is expressed as an open-ended statement, which the subject has to complete by assessing his/her degree of satisfaction/dissatisfaction with this particular variable on a 5-point scale, example of which is shown in Figure 2. Subject's appraisals are converted into scores from 5 (very satisfied) to 1 (very dissatisfied).

II-	I	I	—— I
very moderately satisfied	neither satisfied nor dissatisfied	moderately dissatisfie	very d

Figure 2. Example of a 5-point scale presented with each item.

All subjects in this study appraised their life quality on the QOL scale for adults, consisting of 15 predictive and 6 criterion variables.

Predictive variables ask for an assessment of satisfaction/dissatisfaction with: (1) family one was born and raised in, (2) existing emotional commitment, (3) sex life, (4) relations with friends, colleagues, neighbours, (5) education, (6) present occupation (study, school, job), (7) social position, (8) civil rights and freedoms, (9) faith (religion), (10) health, (11) leisure time, (12) economic status, (13) housing, (14) marriage, and (15) children.

Subject's answers to criterion variables assess: (1) the overall satisfaction with life up to the point of testing, (2) the quality of life in the past year, (3) general satisfaction with the realization of goals, wishes and hopes, (4) future expectations for the realization of yet unattained goals, (5) appraisal of person's satisfaction if his/her life were to continue the same way as it has been up to the point of testing, and (6) evaluation of life quality compared with one's friends, colleagues, neighbours.

All subjects appraised their satisfaction/dissatisfaction on all 6 criterion variables, but there are some difference in the number of subjects assessing various predictive variables. According to the instructions the subjects did not evaluate their satisfaction/dissatisfaction with life areas or life roles they did not have any experience with at the time of the QOL scale application. As most of the subjects were not married or did not have children, the overall number of subjects for this two predictive variables is much smaller. It is also somewhat smaller for the assessment of satisfaction with emotional commitment and sex life, as some subjects did not have it at the time of the QOL scale application.

#### **RESULTS**

Altogether there were 190 male and 550 female subjects whose results were not analyzed separately, because it was already established (Krizmanić and Kolesarić, 1992) that in the results obtained by our QOL scale, there were no significant differences between men and women.

Average evaluations for each predictive variable given by Austrian, American, Swedish and Croat subjects tested before the war are presented in Table 1. In the last raw of the Table 1 are overall means for each group of subjects.

Table 1.

Mean values and overall means of 15 predictors - life areas and activities, enumerated and described under the heading "Instrument".

Predictors	Austria	USA	Sweden	Cro.(90)
1	4.11	4.29	3.89	4.24
2	3.34	4.26	4.50	4.35
3	3.81	3.86	3.96	4.07
4	3.62	4.19	4.18	4.53
5	3.72	3.41	3.69	-
6	3.98	3.00	3.49	3.85
7	3.41	3.70	3.68	3.89
8	3.62	3.32	3.75	3.16
9	3.65	3.66	3.37	3.95
10	3.72	3.78	3.76	-
11	3.94	3.51	4.07	3.91
12	3.48	3.34	3.32	3.21
13	3.73	3.79	3.48	3.73
14	3.82	4.25	4.52	4.26
15	3.81	4.64	4.31	4.92
M	3.72	3.80	3.86	4.01

The QOL scale applied to Croat students before the war (Cro. 90) had only 13 predictive variables, so the data for predictors 5 and 10 are missing for the first Croat group.

Although the overall means in this case are not statistically completely sound, they are presented as an illustration of on the average almost negligible differences between the examined groups.

The inspection of Table 1 shows that there are some statistically significant differences between various groups' evaluations of different predictors. The analysis of variance showed that for two predictors there were some significant differences (4: relations with friends, F(3,551) = 25.38, p < .000, and 9: faith, F(3,499) = 6.80, p < 0.000). By means of Scheffe's procedure it was established that the Croat group showed significantly greater satisfaction, whereas there were no significant differences between Croats and other groups of students on all other predictive variables. This in itself is a surprising result, considering the existing differences in stan-

dard of living and other objective circumstances in these countries and Croatia.

There were some significant differences between Austrians, Americans and Sweds, as e.g., in assessments of predictor 6 (present field of study) for which the Americans gave by far the lowest assessment.

Table 2 shows the average evaluations for predictive variables given by two Croat groups, i.e., one tested before the war (90) and the other one (91) appraising their life quality after the war was brought to a halt.

Table 2.

Mean appraisals of 15 predictors given by two Croat groups: Cro.9o and Cro.91 (\* significant differences p.<01)

Predictor	Cro.90	Cro.91	
1	4.24	4.35	
2	4.35	3.97	
3	4.07	3.74*	
4	4.53	4.51	
5	-	3.70	
6	3.85	3.91	
7	3.89	3.47*	
8	3.16	2.68*	
9	3.95	4.14	
10	-	3.73	
11	3.91	3.58*	
12	3.21	2.92*	
13	3.73	3.65	
14	4.26	3.87	
15	4.92	4.63	

As could have been expected, there were some significantly lower assessments (marked with \*in the Table 2) in the Croat group tested after the war. They were less satisfied with their sex life (3), F(1,339) = 7.13, p < .008; social position (7), F(1,408) = 20.51, p < .000; social environment (8), F(1,417) = 17.89, p < .000; leisure time (11), F(1,417) = 10.83, p < .001, and economic status (12), F(1,417) = 5.95, p < .01, due to the changes caused by war (lowered standard of living, air-raids, fear, etc.)

Compared with their peers from other countries, Croats appraising their life quality after the war (Cro.91) were significantly less satisfied only with their social environment F(3,500) = 24.34, p < .000 and the way they were spending their leisure time, F(3,490) = 6.86, p < .000, but they were significantly *more* satisfied with their faith, F(3,470) = 11.72, p < .000. This increased satisfaction with religion could be explained by war experiences, but also by general changes in the social system allowing for open manifestations of one's faith.

The average evaluations of general quality of life and 5 other aspects of it (criterion variables) for all groups are presented in Table 3.

Table 3.

Average evaluations of criterion variables (aspects of life quality enumerated and described under the heading "Instrument")

Criteria	Austria	USA	Sweden	Cro.90	Cro.91
1	4.17	3.56	3.93	3.96	3.80
2	3.73	3.47	3.88	3.74	3.34
3	3.82	3.39	3.43	3.80	3.59
4	3.84	4.14	4.05	4.19	4.16
5	3.28	2.99	3.41	3.34	2.92
6	3.36	3.64	3.45	3.50	3.30

As the analysis of variance of the two Croat groups predictor evaluations already showed that there were some significant differences between those groups, the appraisals of 6 criterion variables were analyzed separately for Cro.90 and all other groups, and Cro.91 and other groups.

Although there were some significant differences in the life quality of the examined groups, the life quality appraisals of the first Croat group (Cro.90) did not differ from appraisals of other examined groups in any of the criterion variables. Or, more accurately said, Croat appraisals showed greater satisfaction with some aspects of life quality, instead of lesser as might have been expected. The comparison of the results obtained by the Cro.91 group with the appraisals of other groups showed some significant differences. In the first criterion variable (How are you in general satisfied with your life up to this point), F(3,499) = 8.47, p < .000, Scheffe's procedure showed that the most satisfied were Austrian students (slightly more than moderately satisfied). Their assessment of the overall life quality is statistically higher than the assessments of American, Swedish and Croat (91) students. The lowest overall life quality report American students, whose average assessment significantly differs from all other

The analysis of variance of the second criterion variable (How much are you satisfied with your life in the course of the past year) also showed that there were some significant differences, F(3,503) = 5.00, p < .002. Scheffe's procedure revealed two significant differences, both applying to the Croat (91) group, which gave the lowest estimate. Their quality of life in the past year, which was the year of the war, was significantly lower than the life quality of Swedish and Croatian students before the war, but it should be stressed that it did not differ from the life quality of Austrians and Americans.

For the third criterion variable (How much are you in general satisfied with the realization of your goals, wishes and hopes), F(3,503) = 4.01, p < .007, Scheffe's test established that the results of American students were significantly lower than the assessments given by Croat (90) and Austrian students. This finding is in accordance with the proposed conceptualization of life quality, because each individual's quality of life partially depends on her/his level of aspiration. American students probably have not only higher aspirations

then other examined groups, but also wish to fulfil them as soon as possible.

The fourth criterion variable (Do you expect to be able to realize in the future all that you have not been able to realize up to now) showed some interesting differences in the expectations of the examined groups, F(3,503) = 3.91, p < .008. The results of Croat and American students are significantly higher then the results of Austrian subjects. This is not surprising for the American students, living in "the land of opportunities", but seems less understandable for students living in the land ravaged by war. The fact that Croats showed the highest expectations of all groups, could be explained by the changes happening in the social system, i. e., the establishment of an independent state, the end of socialist government, etc.

Although for the fifth criterion variable (If your life is to continue in the same way as it has been up to now, would you be satisfied with it) all examined groups gave somewhat lower values, all of them around "neither satisfied nor dissatisfied", there were some significant differences, F(3,503) = 3.93, p < .009. As most subjects expressed high expectations of the future (all groups, with the exception of Austrians, have averages over 4.0) it is quite understandable that they are not too happy with their present life. The only significant difference exists between the after-war Croat group (Cro.91) and Swedish students, comparatively the most satisfied group.

The last criterion variable (Compared to the life of your friends, colleagues, neighbours or acquaintances, your own life is in general...), F(3,503) = 3.80, p < .01, showed only one significant difference (Scheffe's test), and that is between after-war Croat group and American students, whose assessment of their life quality compared to their friends, neighbours etc., is significantly higher.

It is of interest to analyze the amount of quality of life variance explained by the predictors used in the quality of life scale. For this purpose multiple regression coefficients and coefficients of determination were calculated for each group of subjects separately. For all subjects predictors 14 and 15 were left out, because of the relatively small number of married subjects in each group. The obtained coefficients of determination, and the average coefficient of determination for each criterion variable are shown in Table 4.

Table 4.

Coefficients of determination (R<sup>2</sup>) for each group of students, and average coefficients of determination for each criterion variable.

	Groups o subjects	f	Criterio	Criterion variables										
	1	2	3	4	5	6								
Austria	.279	.282	.196	.183	.283	.134								
USA	.457	.209	.289	.092	.271	.195								
Sweden	.456	.229	.413	.335	.331	.367								
Cro. 90	.256	.142	.164	.149	.378	.135								
Cro. 91	.352	.193	.259	.161	.336	.233								
Average	R <sup>2</sup> .359	.211	.264	.184	.320	.213								

Coefficients of determination presented in Table 4 show that the average amount of explained quality of life variance is greatest for the criterion variables 1 and 5, because all predictors taken together explain on the average 36% and 32%, respectively, quality of life variance.

As could have been expected, the amount of explained quality of life variance is not the same for all criterion variables nor for all examined groups. So, e.g., it varies for the first criterion variable between 26% (Cro.90) and 46% (USA and Sweden), for the second between 14% and 28%, etc. These differences are even more pronounced for various groups of subjects. All predictor variables explain between 23% and 46% of life quality variance for Swedish subjects, but only 13% to 28% for Croats tested after the cease-fire.

In order to establish the structure of the most predictive variables for each criterion and each group of subjects the multiple regression coefficients were also determined by the use of backward regression procedure, keeping in the equation only the most predictive variables for each criterion, i. e. the ones with significant beta weights.

Table 5, presented in the Appendix, shows the pattern of the most predictive variables for each of the 6 criterion variables. The numbers in Table 5 show the rank order of predictors kept in the equation.

#### DISCUSSION

The aim of this study was to validate the proposed life quality model and the QOL scale developed on the basis of it. The obtained results seem to corroborate the main hypothesis that, despite some differences in the importance of various predictor variables, the appraised life quality of subjects living in very different societies and conditions would be very similar, or at least not as different as could have been expected on the basis of existing differences between standard of living and other societal conditions in Austria, Sweden, USA and Croatia. In a research aiming at establishing cross-cultural differences in quality of life, it would be of interest to analyze all the differences obtained between the 5 groups of subjects on all predictor variables. For the purpose of this study it is important to stress that the satisfaction/dissatisfaction with various life areas and activities (predictor variables) of the Croat group tested before the war does not differ from the satisfaction/dissatisfaction shown by their peers in other countries. Although we did expect much lower satisfaction with some aspects of life, e.g. standard of living, housing etc., the obtained results disclosed only two significant differences, both of them showing that Croats were significantly more satisfied with some aspects of their life.

Comparison of the two Croat groups showed some significantly lower evaluations of satisfaction with various life areas given by the Croats tested after the war, but again not as many as could have been expected due to the circumstances they were living in. Interestingly enough, there are 5 statistically significant differences between the two Croat groups (Table 2), but only two between Croats 91 and their peers from other countries.

The lack of any significant differences in all 6 aspects of life quality between the Croats 90 and all other groups of subjects strongly supports our conceptualization of life quality, showing that numerous and complex differences existing between Austria, Sweden, USA and Croatia do not reflect themselves in the appraised life quality of students living in such very different circumstances.

Comparison of the life quality of Croats tested after the war (Cro.91) and students from other countries gave even more surprising results. Although there were again some significant differences between students coming from Austria, Sweden and USA, the overall life quality of the Croat group, with the recent experience of war behind them, did not differ from the overall life quality of Sweds, and was even significantly higher than the life quality of American students.

The fourth criterion variable (expectations of the future) showed that both Croat groups have the highest expectations of all groups, while in their assessments of the fifth and sixth criterion variables the second Croat group (91) significantly differed only from one of the other groups. These results point to a good discriminative power of the applied QOL scale.

The very similar assessments of six different aspects of life quality obtained from 5 groups of subjects living in very different circumstances seem to corroborate the validity of the proposed quality of life model.

In accordance with the proposed conceptualization of quality of life construct, the pattern of the most predictive variables (Appendix, Table 5) varies for each group of subjects, although there are only a few significant differences in various aspects of their life quality.

Results in Table 5 show that various groups of subjects have: (a) a different number of predictors left in the equation and (b) a different pattern of predictors explaining a significant amount of each particular criterion variable variance. The analysis of the most predictive variables for each criterion also showed that various predictors differ in their importance for various aspects of life quality.

For Austrians 28% of their general life satisfaction/dissatisfaction variance (criterion 1) is explained by only two predictors: their way of spending their leisure time and their family of origin. Forty-six percent of general satisfaction with life variance of American students are explained by six predictors: (1) overall health, (2) civil rights and freedoms they have, (3) their satisfaction with their education, (4) leisure time, (5) economic status, and (6) emotional commitment they have.

The differences in the pattern of predictors explaining 35% and 26% of variance for the two Croat groups clearly show the changes caused by war. Before the war the most important predictors for the general satisfaction/dissatisfaction with life were: (1) housing, (2) sex life, (3) leisure time, and (4) present studies. After the cease-fire there is a different pattern: (1) health (not important before the war), (2) faith (not important before the war for the Croats, and not among the most predictive variables for any other group), (3) present studies, (4) leisure time, and (5) emotional commitment.

Patterns of predictors for all the other criterion variables show the same variety, with the exception of criterion 4 (expectations of the future).

The pattern of predictors for this criterion shows that the importance of some predictor variables could be culturally determined. Thus for Austrian students there are 5 important predictive variables: (I) housing, (2) sex life, (3) present field of study, (4) education, and (5) material status. For American, Swedish and Croat students (before the war) there is only one, but different predictor. For Americans this is predictor 4 (relations with friends, colleagues, neighbours), for Sweds their present studies, and for Croats their family of origin. It seems that this predictor patterns correspond with some cultural values established in different societies, so for the future realization of their goals Americans strongly rely on relations with friends and colleagues, Swedes on their profession, and Croats (before the war) upon their family background.

Croat students examined after the war (Cro91) show a different pattern of the most predictive variables: (1) health, (2) leisure time, (3) education, and (4) social position. It could be supposed that changes in the political and social system, as well as the experience of war, changed the pattern of the most predictive variables for this particular aspect of life quality.

Considering all 6 aspects of life quality assessed by the scale, it could be stated that for all of them health is most often the first predictive variable (11 times), the way of spending leisure time and housing are the next ones (5 times). In the second place appear most often: the way of spending leisure time (5 times), sex life (4 times), social position and civil rights and freedoms (3 times). In the third place are most often: emotional commitment and social position (4 times) and present field of study (3 times). Taking into account the fact that there are 5 groups of subjects and six criterion variables, the obtained results show that there is much greater variety then similarity of predictor patterns across the groups and criterion variables.

The fact that various predictors differentially influence various aspects of life quality could, at least partially, explain the lack of significant differences in appraised life quality established in our study between subjects coming from different societies. The switch in the importance of various environmental and personal conditions for life quality certainly explains the fact that the life quality of Croats examined after the war is not significantly lower than the life quality of their peers in other countries.

The relatively small amount of explained quality of life variance obtained in many studies of life quality could also be attributed to this differential impact of various predictors on diverse quality of life aspects. Campbell, Converse and Rodgers (1976) found that 17% of general life satisfaction could be predicted on the basis of demographic variables, and Andrews and Whithey (1976) reported that only 8% of life quality variance could be explained by age, family background, education, race and sex as predictors.

Our model of life quality proposes that changes in the environment (social, political, economic, personal) could

change the degree of satisfaction/dissatisfaction with some aspects of environment, other people or oneself, but as long as these changes or events are not drastic, they do not significantly affect the individual's quality of life. As long as the basic human needs are to some degree satisfied, each and every person can find some other sources of satisfaction, change his/her level of aspiration, and make some adjustments to the changed situation. In a somewhat simplified manner one could claim that a person loosing all economic security would e.g., turn towards nursing the existent interpersonal relationships (family, relatives, friends), concentrate on her/his health, or strengthen his/her faith.

Our results show that all predictors used in QOL scale taken together explain almost 40% of life quality variance, which is much more then the amount of explained variance reported by other authors.

With the unexplained part of quality of life variance various authors try to cope in different ways. Some, as Costa and McCrae (1980) ascribe it to personality characteristics, others (Abbey and Andrews, 1985) to emotional states. Although our model of life quality offers to some extent the same explanation, by claiming that personality, in the widest possible sense of the term, is responsible for people's quality of life, there are some important differences.

Intensive emotional states proposed by Abbey and Andrews (1985) probably can influence one's life quality too, but only when their nature or intensity incapacitates the existing cognitive maps. Persisting anxiety, depression or happiness are not typical for normal, mentally healthy people, and the impact of such emotional states does not invalidate our conceptualization of life quality, which aims at explaining quality of life of normal, mentally healthy persons. Life quality of a depressed person whose cognitive schemata are already changed and who views the world, people and oneself very pessimistically, cannot be compared with life quality of a person whose cognition is intact, although his or her physical health might be seriously impaired.

Different patterns of important predictors for various aspects of life quality and for various groups of subjects found in our study seem to support such notion quite well. The comparison of the results obtained by both Croat groups with their American, Austrian and Swedish peers strongly supports the hypothesis that individual quality of life does not significantly change even after major upheavals (war), as long as people, through their cognitive schemata, can make sense of them. The application of our QOL scale to displaced persons in Croatia (Kolesarić, 1994) showed no significant difference in their quality of life compared to life quality of Croats living in undamaged cities and places. All of them were not very satisfied with their present life, but still appraised their overall life quality as quite good. They tried to understand what has happened to them, and kept their hopes that the future will be better.

It could be supposed that life events which shatter people's core assumptions about the world and themselves, or most of the existing cognitive schemata, as it happens to victims of torture or violence, could significantly change their quality of life, for as long as new schemata (e.g. self-identity, Weltanschauung) are established.

The proposed way of measuring quality of life by a self-reported appraisal of satisfaction/dissatisfaction with different life aspects and areas seems to be adequate, because only subjective, self-reported appraisal can catch all these processes of constant evaluation and reevaluation of each person's life conditions and circumstances. In the same vein is the attempt of Gerin et al., (1990), who depart from the usual medical practice and ask their patients to appraise their quality of life on a Subjective Quality of Life Profile.

Although their scale assesses subject's satisfaction/dissatisfaction with diverse life areas and activities, it does not assess various aspects of life quality, but global "subjective" and" objective" quality of life. In the proposed conceptualization of life quality there is no "objective quality of life", but only objective circumstances which to a lesser or greater extent influence each person's quality of life.

Measuring diverse aspects of individual life quality (6 criterion variables in our QOL scale) enabled us to show the differential impact of predictor variables on each aspect of life quality, which is not only of practical but also of theoretical importance for the explanation of life quality variance.

#### CONCLUSION

Our cross-culturally obtained findings support the hypothesis, derived from the proposed model of life quality, that individual experience of one's quality of life is a complex-psychological phenomenon formed on the basis of evaluation and reevaluation of objective circumstance, past and present individual experiences, and personality characteristic in the-broadest meaning of the term.

Subjective assessment of life quality by our QOL scale seems adequate for establishing each individual's pattern of factors influencing his/her life quality and its diverse aspects.

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#### **APPENDIX**

 $Table \ 5.$  Most predictive variables for each of the 6 criterion  ${\bf v}$  ariables

														Su	bjed	e t s														
Au. USA SW. C1 C2 Au. USA SW		SW.	C1	C2	2 Au. USA SW. C1 C2						Au. USA SW. C1 C2				Au.	Au. USA SW. C1 C2														
Pred.		(	Crit. 1				Cr	it. 2.				Cr	it. 3.				Cri	it. 4.				Cri	it. 5.			***************************************	Cr	it. 6.		
1	2		2												3				1						4					
2		6			5				2	3		3	3	4	4									6						3
3				2												2					1			2					2	
4																	1													
5		3										2				4				3										
6				4	3		2		1					3		3		1						5				2		
7						3	3						2	1						4	3		2				1			2
8		2									2			2																
9					2																			3		1		1		
10		1	3		1	1	1			1		1			1					1		1			1					1
11	1	4		3	4	2				2	1		1		2					2	2		1		3					
12		5						1								5					4			4	2				3	
13			1	1												1								1					1	
Sum*	2	6	3	4	5	3	3	1	2	3	2	3	3	4	4	5	1	1	1	4	4	1	2	6	4	1	1	2	3	3

Sum \* Total number of predictors obtained by backward multiple regression procedure.