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SUBJECTIVE WELL-BEING AMONG RUSSIAN STUDENTS

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ABSTRACT. The subjective well-being of 116 Soviet students at two locations in the Soviet Union was assessed with traditional self-report measures and with an event memory task. Both measures showed the Soviet students to be low in well-being compared to students in most of 38 other countries. Soviet well-being was especially low when considered in relation to per capita GNP. The single domain which best predicted global well-being in the Soviet Union was leisure satisfaction. Soviet students were most satisfied with their religion, living partner, friendship, and family relations, and least satisfied with transportation, education, and finances. The structure of well-being was very similar in the C.I.S. (U.S.S.R.) as in the U.S. For example, the Satisfaction with Life Scale formed a unitary factor, as it does in the U.S., and the PANAS formed two clear affect factors, as has been uncovered by Watson, Clark, and Tellegen (1984) in the U.S. and Japan. Overall, the measures divided into life satisfaction, peasant affect, and negative affect components, replicating data in the U.S. (Andrews and Withey, 1976). These results suggest the structural invariance of wellbeing across cultures. The paper discusses several potential reasons that Russian students report low levels of well being.

... one reason that Westerners ... assume that Russians are 'like us' is that Russian life offers no obvious tourist exotica - women in saris or kimonos, figures of Buddha in temples, camels on the desert - to remind the outsider that here is alien culture, one which did not pass through the Renaissance, Reformation, and the era of constitutional liberalism which shaped the West. But here is a culture that absorbed Eastern Orthodox Christianity from Byzantium, endured Mongol conquest and rule, and then developed through centuries of czarist absolutism with intermittent periods of opening towards the West followed by withdrawal into continental isolation.

H. Smith 'The Russians' (1985, 551)

There has been little information about subjective well-being previously available from the U.S.S.R., which has been a Communist country with an iron curtain of secrecy for many years. Guesses about subjective well-being (SWB) in the U.S.S.R. were based largely on ideology and on accounts in the popular press. By contrast, there has been a voluminous amount of research on other countries and world areas, for example, the global report on student well-being by Michalos (1987, 1991). A major purpose of the present study was to gain first-hand knowledge of SWB in Russia — both global life satisfaction and affective well-being, as well as satisfaction with various domains.

In addition to specific knowledge about well-being in the Soviet Union, we were interested in the structural invariance of well-being across cultures. To be interpretable, comparisons across countries must be based on measures with the same structure. Furthermore, a universal structure of well-being is important in interpreting measures within cultures. Thus, the question of structural invariance is an important one in terms of the validity of SWB measures. The few past attempts to assess structural invariance have been encouraging (e.g., MacKinnon and Keating, 1989). For example, Watson et al. (1988) have shown that positive and negative affect emerge as somewhat independent factors in both the U.S. and Japan. Diener and his colleagues (Pavot et al., 1991; Pavot and Diener, 1991) have found that life satisfaction forms a single factor in a variety of U.S. samples and they review evidence which shows that the Satisfaction with Life Scale is unidimensional in other Western countries. A second major purpose of the present study was to assess the structural invariance of several SWB measures in a culture quite different from that in the U.S. Work by Watson (1988) and others (Diener and Emmons, 1984) has suggested that PA and NA are somewhat independent. Further, Andrews and Withey (1976) have found that life satisfaction is somewhat independent of these two affective dimensions. Thus, we will explore data from Russia in order to determine whether these same factors emerge.

Another of our concerns was to explore the connection between subjects' memory for positive and negative events and SWB. Seidlitz and Diener (1991) have suggested a number of reasons that memories for positive and negative events reflect SWB, and a number of studies have shown that these measures converge with more traditional measures (Sandvik *et al.*, 1992; Seidlitz and Diener, 1991). Therefore, we wanted to explore the utility of this memory measure in another culture. Further, we wanted to assess PA and NA with both self-report and memory approaches to see if we obtained a pattern of convergence between different measures of these constructs. Most previous work on the independence of pleasant and unpleasant affect has been based only on self-report. Thus, we wanted to explore whether the same SWB factors could be obtained in Russia using both self-report and nonself-report measures.

METHOD

Participants

Subjects were Russian students from the Moscow State University and the Glazov State Institute of Education. Moscow students, 14 males and 48 females (one student did not answer the question about sex) were from the Department of Psychology. Glazov students were from the Department of Philosophy and included 5 males and 48 females. The average age for Moscow and Glazov students was 18.5 and 19.4 years, respectively, and the overall mean age was 18.9. Moscow students were from different parts of the Soviet Union, whereas the majority of Glazov students were from one of the Ural communities. Furthermore, Moscow University is considered to be one of the finest schools in the U.S.S.R., whereas Glazov Institute is virtually unknown outside the local area.

Measures

In the present survey we employed several questionnaires and emotional memory measures. All instructions and questions were translated and administered in Russian. To achieve adequate translations, all questions were translated two times: from English into Russian, and then (by a different translator) back to English. Next, English versions were compared by a native reader of English and minor corrections were made in the Russian form of the questionnaires. Two bilingual native Russians and one native English speaker participated in this task.

Students were asked to answer the Delighted-Terrible scale about life as a whole (Andrews and Withey, 1976). A measure of life satisfaction was gained with the SWLS (Diener *et al.*, 1985). The PANAS (Watson *et al.*, 1988) was administered to obtain data about positive and negative affect. Comparative norms are available for each of these scales. Also, to obtain data about satisfaction with specific life domains, we used a single item (Michalos, 1991) for each of the following domains: health, finances, family relations, paid employment, friendship, housing, living partner, recreation activity, religion, self-esteem, transportation, education, and cultural life. We also used Michalos's item on rating one's life-as-a-whole at this moment to allow global comparisons with students in other countries. Self-esteem was measured with the Rosenberg Scale (Rosenberg, 1965).

Emotional memory measures were collected by allowing separate three-minute tests for subjects to write as many positive and then as many negative events from their lives as they could. Fifty one students, including 32 from the Moscow sample and 19 from the Glazov sample, were asked to write the positive events before the negative events, and 65 students, 31 and 34 respectively, recalled negative events first and positive events next. Subjects were also asked to report in an openended format on the positive and negative aspects of their lives and life in the U.S.S.R., and 65 respondents did so.

Procedure

All measures were anonymous and completed in a group setting during a one-hour period. We did not have individual questionnaires for each subject. Instead, all scales were written on the blackboard and instructions and questions were given by the same female experimenter. Subjects numbered their answers and responded on plain paper. The sequence of questions was the same for all groups (except for the counterbalanced positive and negative memory instructions): sex, age, the D-T scale, the SWLS, the PANAS, two 3-minute memory tests, the domain satisfactions, the Rosenberg scale, and questions about the positive and negative aspects of life in the U.S.S.R..

All results were collected during November and December, 1990. This was a period in which there were some shortages of goods and some political unrest. This was, however, prior to the failed coup, prior to the breakup of the U.S.S.R. into partly independent republics, and prior to the increasing prices of food and basic goods. The current paper refers to the "Soviet Union" and the "U.S.S.R." rather than the Commonwealth of Independent States (C.I.S.) because these terms were accurate at the time of data collection.

RESULTS

The data analyses began with the calculation of item means which are presented in Table I. As can be seen from the Table, Moscow students were not satisfied with their lives and Glazov students were even more dissatisfied. According to Andrews and Withey (1976) the mean for the D-T scale of a 15-19 year old representative sample of Americans was 5.4, whereas the Russian mean on the D-T scale was 4.7. Whereas only 1.9% of American adults had feelings about life-as-a-whole that ranged from Terrible to Mostly dissatisfied, for the Russian sample the corresponding number was 8.8%. Comparison means for the SWLS of Russian students with normative data for the SWLS (Pavot and Diener, 1991) shows that the means for Russian subjects are lower than American college students (with means such as 23.50, 24.49, and 25.18). The Soviet means are lower than means for disabled young adults in the U.S. (20.81 and 24.3) and only higher than means for male prison inmates (12.28) and for subjects under inpatient treatment for alcohol abuse (11.83).

The same difference is apparent between Soviet students' PANAS data and American PANAS scores: the positive and negative affect scale means were 29.5 and 24.7, respectively, for Russian students, whereas these means for American students are 32.0 and 19.5 (Watson *et al.*, 1988). When an affect balance score was calculated, the Russian sample showed a difference between positive and negative affect of only 4.8, whereas this difference was 12.5 for Americans. Thus, Soviet students scored at the less desirable end on all three major components of SWB.

Table II provides an overview of the global life satisfaction for 39 countries (Michalos, 1991) plus the current Russian data. As can be seen, only three countries have life satisfaction scores lower than the U.S.S.R.: Portugal (3.26), Japan (4.09) and Cameroon (4.12). Many countries with much lower wealth than the U.S.S.R. have much higher levels of reported well-being. Indeed, the U.S.S.R. had a per capita GNP which is located in the upper end of the distribution, whereas it has reported well-being toward the bottom of that distribution. Perhaps political ferment in the U.S.S.R. caused the lower SWB. During the period of data collection the Soviet Union was undergoing a rethinking

Characteristics	Mean	S.D.
Whole sample ($N = 116$)		·
D-T (Andrews and Withey)	4.651	1.022
SWLS	17.675	4.836
Positive Affect (PANAS)	29.496	5.304
Negative Affect (PANAS)	24.713	7.553
Life-as-a-whole	4.149	1.483
13 Domains	55.948	8.866
Number of Positive events	4.526	2.518
Number of Negative events	3.439	1.982
Self-Esteem (Rosenberg)	38.158	7.410
Moscow Sample ($N = 63$)		
D-T (Andrews and Withey)	4.850	1.102
SWLS	18.869	4.529
Positive Affect (PANAS)	30.667	5.140
Negative Affect (PANAS)	25.317	6.914
Life-as-a-whole	4.475	1.260
13 Domains	56.111	9.567
Number of Positive events	4.937	2.596
Number of Negative events	3.778	2,136
Self-Esteem (Rosenberg)	40.810	7.442
Glazov sample (N = 53)		
D-T (Andrews and Withey)	4,408	0.864
SWLS	16.302	4.854
Positive Affect (PANAS)	28.077	5.197
Negative Affect (PANAS)	23.981	8.271
Life-as-a-whole	3.774	1.637
13 Domains	55.755	8.041
Number of Positive events	4.020	2.345
Number of Negative events	3.020	1.703
Self-Esteem (Rosenberg)	34.882	5.969

TABLE I Descriptive data

of political and economic concepts and also there were many disruptions in the patterns of daily life. Our data suggest that these types of factors might influence SWB. The question about positive aspects of life in U.S.S.R. was answered negatively by 16 students ("There is nothing good" or "I cannot see any good thing"), skipped by the majority of subjects, and was only answered in relation to the future or to desirable alternatives ("Things will improve" or "I would like . . .") by another nine students. Thus, of those subjects responding about aspects of

TABLE II Gross national product per capita and global life satisfaction for various countries

Country	GNP per capita in U.S. dollars	Global domain satisfaction
Austria	9218	4.92
Bahrain	10401	4.96
Bangladesh	129	4.31
Belgium	9120	5.21
Brazil	2032	4.94
Cameroon	845	4.12
Canada	12284	5.11
Chile	1920	4.97
Colombia	1378	5.12
Egypt	672	4.55
Finland	10725	5.44
Germany	11403	4.84
Greece	3932	4.83
Hungary	5526	4.77
India	262	4.72
Israel	5420	4.98
Japan	10154	4.09
Jordan	1690	4.49
Kenya	347	4.46
Korea	1978	4.21
Mexico	2154	5.12
Netherlands	9869	5.17
New Zealand	7709	5.06
Norway	4007	5.14
Philippines	724	5.02
Portugal	270	3.26
Puerto Rico		5.18
Singapore	6653	4.76
S. Africa	2424	4.53
Spain	4780	4.55
Sweden	12444	4.96
Switzerland	16246	5.08
Taiwan	2861	4.35
Tanzania	240	4.97
Thailand	810	4.61
Turkey	1210	4.21
U. Kingdom	9171	5.20
U.S.A.	14172	5.28
U.S.S.R.	9227	4.15
Yugoslavia	2500	4.70

Soviet life, 46 of 65 students failed to mention any positive aspects whatsoever. In answering the question about the positive and negative aspects of one's own life, most students (89 percent) focused on the family, parents, friends, and themselves.

Pearson correlations were calculated between the major SWB scales and are summarized in Table III. Correlations between Michalos's (1991) life-as-a-whole, the D-T Scale, the SWLS, the positive affect and negative affect scales, and the sum of satisfaction with the 13 domains are shown. As can be seen, the scales converged at a modest level. In addition, the positive and negative subscales of the PANAS correlate at very low levels with each other just as they do in the U.S. and Japan (Watson *et al.*, 1984). Furthermore, the event difference score (number of positive minus negative events recalled) converges at modest but significant levels with the self-report scales.

The data about satisfaction with different domains are presented in Table IV. As can be seen, individuals' satisfaction with their living partner, family, and friendship was quite high, whereas satisfaction with material domains such as transportation, finances, and housing was quite low. It is interesting to note that satisfaction with one's self-esteem was also quite low, despite the fact that many students were enrolled in an elite university. Because many people in Russia do not actively practice religion, the meaning of the high satisfaction rating in the religious domain is unclear.

Correlations of the satisfaction with the various life domains and the major well-being scales are presented in Table V. Satisfaction with recreation activity was most highly correlated with the D-T scale, the SWLS, and the global satisfaction item (Life-as-a-whole). The strong correlation of recreation activity and global subjective well-being was also found by Heady, Veenhoven, and Wearing in an Australian sample (1991). Another set of strong correlations was between the domain "Paid employment" and global life satisfaction (Life-as-a-whole) and the SWLS. Satisfaction with Housing was correlated with both the D-T scale and the SWLS. Surprisingly, satisfaction with the domains of Friendship, Living partner, and Self-esteem did not have a large impact on any of the global items. And the Religion domain exhibited a negative correlation with the SWLS and global life satisfaction. It should be noted that variation in the standard deviations of the domain

		Pearso	on correlatio	ns for all maj	or scales				
Characteristics	1	2	3	4	5	9	7	8	6
 The D-T Scale SWLS Soutus PANAS Negative PANAS Negative PANAS Global life satisf Satif with 13 Domains Number of pos. events Number of neg. events Event difference score Self-Esteem 	0.51** 0.25* 0.25* 0.58** 0.33** 0.19 0.19 0.19 0.21*	0.21* -0.24* 0.42** 0.32** 0.16 -0.10 0.22* 0.43**	-0.01 0.36** 0.07 0.09 0.26** 0.20*	-0.31** -0.23* -0.06 0.36** -0.31**	0.41** 0.27** -0.03 0.27** 0.29**	0.15 0.25* 0.32***	0.27** 0.72** 0.09	0.47**	0.26**
Note: * $p < 0.05$, two-tailed ** $p < 0.01$, two-tailed	קים			reason of the second	d and - a third is a second a second and dates in some want book				and and the second s

TABLE III prrelations for all major s 233

Characteristics	Mean	S.D.
Health	4.61	1.26
Finances	3.33	1.70
Family relations	4.95	1.35
Paid employment	4.09	1.22
Friendship	5.04	1.36
Housing	4.21	1.67
Living partner	5.23	2.27
Recreation activity	4.09	1.66
Religion	5.81	2.06
Self-esteem	4.30	1.48
Transportation	2.91	1.72
Education	3.87	1.28
Cultural life	4.33	1.42
Moscow sample		
Financial domains	27.03	6.47
Social domains	29.08	5.11
Glazov sample		
Financial domains	26.45	6.17
Social domains	29.30	4.48

 TABLE IV

 Descriptive data for satisfaction with different domains

measures does not seem to account for those domains which do and do not correlate with global well-being.

To further investigate the pattern above, individual satisfaction scales were summed into global financial satisfaction and social satisfaction. As can be seen in Table VI, for both samples there tended to be significant correlations between financial domains and the global scales, and smaller or inconsistent correlations between social domains and the major scales.

Subsequent regression analyses shows that satisfaction with recreation activity was the most influential predictor of the D-T scale (Beta = 0.37), the SWLS (Beta = 0.20), and global life satisfaction (Beta = 0.36). Another predictor of global life satisfaction and the SWLS was satisfaction with paid employment (Beta = 0.25 and Beta = 0.21). Satisfaction with cultural life entered the regression equations for the D-T scale (Beta = 0.25) and global life satisfaction (Beta = 0.21). Other predictors were satisfaction with housing for the SWLS (Beta = 0.21).

Domains	D-T	SWLS	Global domain
Health	0.16	0.13	0.27**
Finances	0.16	0.25**	0.13
Family relations	0.20*	0.17	0.28**
Paid employment	0.22**	0.32**	0.40**
Friendship	0.17	0.15	0.12
Housing	0.32**	0.32**	0.31**
Living partner	0.06	-0.06	0.09
Recreation activity	0.39**	0.32**	0.47**
Religion	-0.14	-0.22*	-0.18^{*}
Self-esteem	0.21*	0.17^{*}	0.11
Transportation	0.22*	0.14	0.27**
Education	0.22*	0.26**	0.38**
Cultural life	0.30**	0.17	0.32**

TABLE V Correlations between different domain satisfactions and major well-being scales

Note: * p < 0.05, two-tailed ** p < 0.01, two-tailed

0.20) and satisfaction with family relations for global life satisfaction (Beta = 0.18). Additional regression analyses conducted separately for Moscow and Glazov students showed that only domains such as Health, Finances, Paid employment, Housing, Recreation activity, Transportation, and Education were significant predictors of global life satisfaction in both areas.

In order to explore the structure of the measures, individual factor analyses of the SWLS were performed. For the SWLS only one factor had an eigenvalue (1.95) above one, and this factor accounted for 39 percent of the total variance. The second factor was much weaker with an eigenvalue of only 0.93. However, the internal reliability for the SWLS (coefficient Alpha = 0.59) was lower than in American samples (Pavot and Diener, 1991).

A clear two-factor structure emerged in the factor analysis of the PANAS. The first principle factor accounted for 24 percent of the variance and the second factor contributed an additional 16 percent of the total variance. The eigenvalue of the first factor was 4.73 and of the second factor it was 3.24. Only two other factors had an eigenvalue above one (1.24 and 1.15), but the scree plot showed that they fell in a flat line below the slope of the first two eigenvalues. The correlation

	The D-T Scale	SWLS	Life-as-whole
Whole sample	ayara kana kana kana kana kana kana kana k		
Financial domains	0.34**	0.40**	0,52**
Social domains	0.17	0.06	0.15
Moscow sample			
Financial domains	0.34**	0.41**	0.43**
Social domains	0.05	0.07	0.18
Glazov sample			
Financial domains	0.36**	0.41**	0.52**
Social domains	0.42**	0.05	0.13

TABLE VI Pearson correlations for financial and social domains and global SWB scales

Note: * p < 0.05, two-tailed ** p < 0.01, two-tailed

between the NA and the PA factors was very low r = -0.043. The item loadings of the PANAS on the two factors are shown in Table VII. As can be seen, Russian mood terms formed two factors which are very similar to those found in America and Japan (Watson et al., 1988), except for the item "Excited," which loaded on the NA factor.

A factor analysis was also performed on all of the scales together global life satisfaction, the D-T scale, the SWLS, the satisfaction with different domains, Positive Affect, Negative Affect, and the number of recalled positive and negative events. A three factor solution was requested in order to examine the similarity of the structure of the scales to that found in American samples. The structure, presented in Table VIII, is similar to that found in the U.S. (Andrews and Withey, 1976). As can be seen, the three factors can be identified as satisfaction, positive affect, and negative affect. The correlations between the factors were: I and II, r = -0.24; I and III, r = -0.31; and II and III, r = -0.07. It is noteworthy that the memory measures loaded with the respective scales of the PANAS.

DISCUSSION

Our results showed that the level of SWB in the U.S.S.R. is consider-

	Fact	tors
Items	Negative Affect	Positive Affect
Nervous	0.80	-0.06
Distressed	0.79	0.06
Afraid	0.78	-0.12
Jittery	0.78	-0.09
Irritable	0.74	-0.19
Upset	0.69	0.15
Scared	0.58	-0.12
Excited	0.55	0.38
Ashamed	0.47	-0.15
Guilty	0.41	0.10
Hostile	0.29	-0.74
Active	0.05	0.74
Determined	-0.13	0.65
Inspired	-0.21	0.63
Enthusiastic	-0.09	0.62
Alert	-0.06	0.57
Attentive	0.06	0.55
Proud	-0.07	0.49
Strong	-0.08	0.46
Interested	0.10	0.36

 TABLE VII

 Factor loadings of the Positive and Negative Affect items of PANAS

ably lower than in most other countries. One possibility is that college students are more politically aware and therefore were unhappier than the rest of the Russian population. But Michalos (1991) reviewed evidence suggesting that college students are often representative of the well-being level of their country. Moreover, results of a survey in the U.S.S.R. by Amosov (1990) found that students are not the unhappiest group in Russia; professionals, white collar workers, and blue-collar workers all showed higher levels of dissatisfaction. He found that 79% of white-collar workers and professionals, 55% of blue-collar workers, 46% of young people (which included students), and 25% of retired people were unhappy. The average percentage was 58 for the whole sample. These figures indicate that the percentage of unhappy people among Soviet students is lower than the average unhappiness for the country. Thus, the low levels of subjective well-being among Russian students is likely to overestimate the SWB level in the general population.

Characteristics	Factor 1	Factor 2	Factor 3
The D-T	0.86	0.11	-0.02
Satisf. with 13 Domains	0.73	-0.12	0.21
Global life satisf.	0.71	-0.07	-0.21
SWLS	0.69	-0.04	-0.07
Number of neg. events	0.03	0.87	-0.14
Negative PANAS	-0.18	0.69	0.23
Positive PANAS	-0.08	-0.15	-0.89
Number of pos. events	0.19	0.26	-0.65

 TABLE VIII

 Factor loadings for the three-factor model of the major scales

One possible explanation for the low levels of Russian well-being is that there is a cultural influence reflected in the self-reports of SWB. Russian people often try to hide their success. For example, a Soviet journalist described to Smith (1990) this cautiousness in the Russian daily greetings: "When two Americans meet, they ask each other, 'How are things?' and they tell each other 'Fine' ... By contrast, when two Soviets meet and ask each other how they are, they will say, 'Normal' or 'So-so'. Even if things are good — especially if things are good! You don't want to tempt the devil. You don't want people to think things are great. Because they might be envious. And if they're envious, there's no telling what they might do." (p. 204)

To merge psychologically with others, to share misfortune, and to level the fate of all are common Russian cultural characteristics. And again, it is not considered inappropriate in Russia to be or look unhappy, tired, or sad, whereas in America there is a desire to appear young, fresh, healthy, and strong. Thus, the low SWB reported by Russians could be due to cultural norms governing the expression of negative emotions. Two considerations, however, suggest that the low level of SWB was not entirely an artifact of self-report. First, it is possible that such norms affect mood, not just verbal responses. And second, it should be noted that Soviets scored much lower than Americans (Sandvik *et al.*, 1991; Seidlitz and Diener, 1991) on the memory for positive versus negative events. The average Soviet student recalled 1.1. more positive than negative life events, whereas this difference for American students is about 3.0. The memory measure is a production measure in which subjects try to write as many events as they can, and as such seems less susceptible to the influence of the cultural norms described above. Nevertheless, a thorough exploration of why Soviet students score so low on SWB awaits future research.

Generally we found the same structure of factors in Russia as has been found in America. When the scales were divided into three factors, the factors were very similar to those found in the U.S. The two emotion factors were composed of Russian mood terms similar to those found in English, except for the item "Excited". Excited is an English marker of Positive Affect, whereas for Russians it is a marker of Negative Affect. Because "excited" is a term which denotes high arousal and falls near the arousal pole of the emotion circumplex (Larsen and Diener, 1991), it is not surprising that this term is not invariably associated with moods of either hedonic tone. Also encouraging is the fact that the two memory scores converged with the pleasant affect and unpleasant affect scale scores. This suggests that the memory measures are an alternative method of measuring subjective well-being, and also provide convergent validity evidence for the standard self-report scales. These affect factors reflect the convergence between self-reports of the experience of specific mood adjectives and the recall of life events.

An interesting pattern of relations can be noted for the domain satisfactions which do and do not predict global life satisfaction. For example, our findings replicate those by Heady *et al.* (1991) in suggesting that leisure satisfaction is a strong predictor of global satisfaction. Caution should be exercised, however, in drawing a causal inference from such data. It might be, for example, that global satisfaction has the largest top-down effect on leisure satisfaction. Furthermore, it may be that there is little variance in domains such as health for student samples, even though health has the potential to strongly influence global satisfaction. We found that financial domains were more influential than social life domain satisfactions in the prediction of global wellbeing. Russian students were most satisfied with their religion, living partner, friendship, and family relations and were dissatisfied with transportation, education and finances. It would appear that the domains predicting satisfaction in Russia are quite different from those found in the U.S. For example, selfesteem and the social domains were not the strongest correlates of global subjective well-being. The reason for this, however, is unclear. Is it because people value different domains, or is it because certain domains were currently more salient? It is also possible that the topdown effect of life satisfaction on satisfaction with specific domains varies between the West and Russia. The findings suggest that caution should be used in generalizing findings as to which domains are most important to general well-being.

It is interesting to note the high level of satisfaction with religion and, at the same time, the negative influence of one's satisfaction with religion on individual well-being. One possible explanation can be drawn from the role of church in the U.S.S.R. Since 1917 and until Gorbachev's "perestroika" the State policy had been atheism and systematic destruction of institutional religion: many churches and monasteries were closed, priests and believers were persecuted, and propaganda against religion was commonplace. Many people were frustrated by the antireligious activity of the government. Recently, people received a real (not formally declared as it had been before) liberty of conscience that was viewed as a victory and celebrated. As a reflection, our results perhaps show this rise of satisfaction with religion. But, it should be mentioned that during the years of repression most believers had been older women and people who turned to church after a life of frustration or a major personal tragedy. In addition to this, there is a difference between the Western church and Russian Orthodox church. According to Erikson (1963), there is a common Russian religious belief that everybody is guilty and sinful, and that suffering is good for salvation. He compared Russian religion with Western religion before the Reformation. Thus, it may be that Russians who regularly attend church and are most satisfied with their religion are most dissatisfied with their lives because of their religious beliefs, or seek religion because of dissatisfaction.

We found that students from Glazov (which is a small town) were less happy than Moscow students, whereas Andrews and Withey (1976) reported that Americans from rural areas and small cities are

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usually happier than inhabitants of big cities, and this pattern was replicated by Michalos (1991) for Canadians and Europeans. They explained this difference by the facts of higher level of crime, noise, pollution and long commuting in big cities in the U.S.A., Canada, and Europe. But for Russians, life in small towns and rural areas means a much lower standard of living. Moreover, Moscow is the cultural and intellectual center of the country, whereas there are only two theaters in Glazov. Thus, the quality of life is significantly lower in the provincial cities of Russia, and people, as a result, are possibly less happy than those in central cities like Moscow.

In Amosov's survey (1990) the main reason for unhappiness for 85% of the respondents was economics (low income - 50%, bad housing -25%, shortages -40%) and the author concluded that people are too poor to be happy. Thus, Russians seem to be unhappy with their financial status. Yet, it can be noted in Table II that the GNP per capita in the Soviet Union was much higher than many other countries where SWB was higher at the time of data collection. Thus, Soviets were more unhappy with their material conditions than their GNP/per person would have predicted. This could be because of shortages of specific consumer goods, despite a developed level of heavy industry. Parallel to this is the fact that the Soviet Union spent a relatively large percentage of its income on the military, with concomitantly less money available for consumer goods, especially food. It may also be that the political ferment in Russia has led to dissatisfaction with finances, although this explanation begs the question as to which is cause and which is effect.

It is clear that Soviet students, like their adult counterparts, have relatively low levels of SWB. What is not clear is why this is so. A number of plausible explanations for the low level of Soviets' SWB have been offered in this paper and await exploration in future research. Fortunately, the structure of subjective well-being among Russians seems similar to that found in western countries. Thus, it appears that Russian levels of well-being can be meaningfully compared to those in other countries. This finding is encouraging in suggesting that the facets of SWB are consistent across different cultures.

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REFERENCES

- Amosov, N.: 1990, 'Chelovek v zerkale', Nedelia 37, 3. (in Russian) and 'Anketa', Nedelia 10, 6. (in Russian).
- Andrews, F. M. and Withey, S. B.: 1976, Social Indicators of Well-Being: America's Perception of Life Quality (Plenum, New York).
- Diener, E.: 1984, 'Subjective well-being', Psychological Bulletin 85, pp. 542-575.
- Diener, E. and Emmons, R. A.: 1984, 'The independence of positive and negative affect', Journal of Personality and Social Psychology 47, pp. 1105-1117.
- Diener, E., Emmons, R. A., Larsen, R. J. and Griffin, S.: 1985, 'The satisfaction with life scale', Journal of Personality Assessment 49, pp. 71-75.
- Erikson, E. H.: 1963, Childhood and Society (W.W. Norton & Co., New York).
 Heady, B., Veenhoven, R. and Wearing, A.: 1991, 'Top-down versus bottom-up theories of subjective well-being', Social Indicators Research 24, pp. 81–100.
- Larsen, R. J. and Diener, E.: 1992, 'Circumplex models of emotion: Problems and promises', in Clark M. S. (ed.), Review of Personality and Social Psychology (Sage
- Publications, Newbury Park, CA), pp. 25–29. MacKinnon, M. J. and Keating L. J.: 1989, 'The structure of emotions: Canada-United States comparison', Social Psychology Quarterly 52, pp. 70-83.
- Michalos, A. C.: 1987, Final Progress Report on Global Report on Student Well-Being: Application of Multiple Discrepancies Theory (University of Guelph, Ontario, Canada).
- Michalos, A. C.: 1991, Global Report on Student Well-Being (Springer-Verlag, New York).
- Pavot, W. and Diener, E.: 1991, 'Review of the satisfaction with life scale' (Manuscript submitted for publication).
- Pavot, E., Diener, E., Colvín, C. R. and Sandvik, E.: 1991, 'Further validation of the satisfaction with life scale: evidence for the cross-method convergence of well-being measures', Journal of Personality Assessment 57, pp. 149-161.
- Rosenberg, M.: 1965, Society and the Adolescent Self-Image (Princeton University Press, Princeton, N.J.).
- Sandvik, E., Diener, E. and Seilditz, L.: 1992, 'The validity of measures of subjective well-being', Journal of Personality (in press).
- Seilditz, L. and Diener, E.: 1991, 'Memory for positive versus negative life events: Theories for the difference between happy and unhappy persons', Journal of Personality and Social Psychology (in press).
- Smith, H.: 1985, The Russians (Random House, New York).
- Smith, H.: 1990, The New Russians (Random House, New York).
- Watson, D.: 1988, 'Intraindividual and interindividual analyses of positive and negative affect: Their relation to health complaints, perceived stress, and daily activities', Journal of Personality and Social Psychology 54, pp. 1020-1030.
- Watson, D., Clark, L. A. and Tellegen, A.: 1984, 'Cross-cultural convergence in the structure of mood: A Japanese replication and a comparison with U.S. findings', Journal of Personality and Social Psychology 47, pp. 127-144.

Watson, D., Clark, L. A. and Tellegen, A.: 1988, 'Development and validation of brief measures of positive and negative affect: The PANAS scale', Journal of Personality and Social Psychology 54, pp. 1063–1070.

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