

# NUMBER OF CHILDREN IN THE FAMILY AS A PREDICTOR OF PARENTS' LIFE SATISFACTION<sup>1</sup>

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It is to be expected that the marital partners' life satisfaction in a given society is closely related to fertility issues and willingness to have children, so any insight into determinants of marital partners' life satisfaction is of utmost theoretical and practical importance. A research was performed with the aim to test the influence of number of children in the family on marital partners' life satisfaction. Five hundred and five marriage couples, i.e. 1010 participants were included in the study. The couples were a representative sample for the City of Zagreb and Zagreb metropolitan area on the variable husbands' education. Two main effects (number of children and gender of the partner) and five covariates (marital partners' age and salary, size of dwelling unit, economic stress/need for economizing) were defined. ANOVA and ANCOVAs including five covariates were performed, the independent variable defining three groups: no child, one child and two and more children in the family. The statistically significant difference between these groups was obtained only after variables economic stress/need for economizing as perceived by marital partners were included into analysis together with other covariates. In that case the highest level of life satisfaction was expressed by parents having two and more children. The obtained results clearly demonstrated the importance of economic factors for marital partners' life satisfaction, more precisely the subjective experience of the family's economic situation. No influence of gender of the marital partner nor the interaction between two main effects was found after the complete control for covariates was performed.

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## THE LIFE SATISFACTION CONCEPT

During the last twenty to twenty-five years a whole new research area entitled Positive Psychology emerged. According to Diener et al. (1999) it appeared as a reaction to a predominance of studies of negative aspects of behavior such as various problems and forms of individual and social deviance or pathology, and as an avenue of giving a new significance to the study of well-being, life satisfaction and happiness.

The central variable of this field is life satisfaction and it is treated either as an independent variable influencing an individual's behavior and subjective feelings (Oishi et al., 2000), or as a consequence of various individual or societal factors. It is being studied both as a separate construct and as a part of subjective well-being, and proved to be its important component. Usually life satisfaction is conceptualized as an individual's global cognitive evaluation of his/her life quality. Another notion, similar and often interchangeable, is the concept of subjective well-being which includes the individual's life satisfaction together with emotional responses and domain satisfaction (satisfaction with work, marriage, leisure or friendships). In most of the studies relatively high and positive correlation was obtained between all these components of an individual's well-being, and some authors believe that a higher order factor analysis might prove the existence of a common underlying factor (Stones & Cosma, 1985).

## APPROACHES TO STUDYING SUBJECTIVE WELL-BEING AND LIFE SATISFACTION

Since life satisfaction is regarded as an important component of subjective well-being, most explanations of the life satisfaction concept come from the theories and research results describing subjective well-being. Those theories and research results can be grouped into two major approaches: 1. Multiple discrepancy approach; 2. Bottom-up and top-down approach.

## Multiple discrepancy approach

The multiple discrepancy approach starts from the assumption that life satisfaction is derived from social comparisons. According to the early explanations, one should consider himself/herself happy if his/her peers are worse off, and unhappy otherwise. Later, new components and new ideas were added to the explanation. For instance, Wood (1996) proposed a more complex social comparisons concept to define one's life satisfaction. He suggested that social comparisons might be used as a coping strategy that would probably be itself influenced by the individual's own personality and performance. So, individuals performing poorly could be reducing the scope of

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... social comparisons in which to actually engage, maintaining in that manner their comfortable level of satisfaction. Diener (1984) on the other hand indicated that person's goals, what a particular individual wants to achieve in life, are crucial for understanding not only his/her motivation but also his/her life satisfaction and subjective well-being. The most important element is the individual's level of aspirations, high aspirations being a major threat to one's happiness or life satisfaction (Markus & Nurius, 1986). The discrepancy between one's level of aspiration and his actual standing in some task is being stressed as the important basis for subjective wellbeing and life satisfaction. Not only how well a particular individual succeeds in achieving his/her goals is important, but also one's goals and aspirations levels themselves are predictive of the individual's life satisfaction (Austin & Vancouver, 1996). In other words, individuals setting complex and difficult goals could be satisfied if they experience themselves approaching these goals, while individuals of simple and modest goals could be dissatisfied by the feeling of merely achieving them. So a more comprehensive definition of the concept of life satisfaction in terms of social comparison is taking into account that "individuals compare themselves to multiple standards including other people, past conditions, aspirations and ideal levels of satisfaction, and needs or goals" (Diener et al., 1999). Life satisfaction is the final result of these multiple comparisons.

## Bottom-up and top-down approach

Diener (1984) made a distinction between top-down and bottom-up processes that influence subjective well-being and life satisfaction. The bottom-up approach explains an individual's life satisfaction by the influences of external events, his/her life situations and demographic characteristics. In support of this approach are data demonstrating some relationships between externally induced pleasure and reports of well-being and life satisfaction (Stallings et al., 1997). Yet, no positive and high correlation was obtained between individual's external objective life circumstances and life satisfaction. On the contrary, some demographic factors such as age, gender, income, education and marital status accounted for less than 20% of the variance of subjective well-being (Campbell et al., 1976; Seybold & Wagner, 1997). Similar results were obtained concerning the influence of different positive life events (Stallings et al., 1997). As a consequence, research interests shifted from life situations and demographic variables to personality determinants of subjective well-being and life satisfaction, the approach known as top-down. Many personality traits were studied as possible determinants of subjective well-being and

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... life satisfaction. In a recent paper DeNeve and his colleagues (1998) reviewed the influence of 137 personality traits on subjective well-being and life satisfaction. According to the results of meta-analysis they performed, personality variables explained 11% of the variance of the life satisfaction. The most predictive variables turned out to be neuroticism and extraversion. It seemed that more variance of subjective well-being was explained by non-personality traits or those not yet included in analysis. Still, DeNeve (1998) and Diener et al. (1999) suggest that one's personality is an important predictor of both life satisfaction and subjective well-being. It directly determines behavior and the perception of the environment which in turn influence subjective well-being and life satisfaction. Also, while being an important predictor of subjective well--being and life satisfaction, personality is their inner source and it is probably connected to genetic factors (Diener et al., 1999). Some authors were able to prove and reinforce this position by research data on monozygotic twins raised in different social contexts (Braungart et al., 1992).

All the studies described so far conceptualized life satisfaction as one component of subjective well-being. Independently, other studies were performed using life satisfaction as the only dependent variable. Most of them applied the so--called bottom-up approach testing how different external factors i.e. demographic variables and life situations influence life satisfaction. The results of these studies are very relevant and important for the aim of our paper.

## LIFE SATISFACTION STUDIED INDEPENDENTLY FROM SUBJECTIVE WELL-BEING

Although in many studies life satisfaction was conceived as a central construct of subjective well-being, numerous studies exist with the aim to identify possible predictors of life satisfaction in which life satisfaction was conceived as the only dependent variable. All studied predictors of life satisfaction could be classified into work and non work predictors. Work predictors of life satisfaction were extensively studied within organizational psychology and many research results pointed out that job satisfaction alone accounted for between 3% and 13% of the variance of life satisfaction (Adams et al., 1996; Heady et al., 1985; Hart, 1999; Near et al., 1983). Much higher correlation between work variables and life satisfaction was obtained when measures of work-family conflict were used. In a comprehensive summary of different research reports (Kossek & Ozeki, 1998) negative correlations between work-tofamily conflict and life satisfaction ranged from -.18 to -.53, between family-to-work conflict and life satisfaction correlation ranged between -.12 and -.44, while for combined kind of

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... both family-work conflicts they ranged from -.11 to -.41. So, the highest common variance obtained between family-work conflict and life satisfaction was in the vicinity of 28%, expounding the interference of family with one's work as the highest threat to life satisfaction coming from the work domain. But many problems concerning the influence of work related variables on life satisfaction have not been resolved yet, because many of the mediating variables such as job involvement and achievement orientation as well as job characteristics were not accounted for.

Among non-work related variables most predictive for life satisfaction proved to be self-esteem, family satisfaction, satisfaction with finances and satisfaction with friends (Diener & Diener, 1995) but also some personality traits such as neuroticism and extraversion (Hart, 1999). Some research data pointed out that non-work sources could be more important for all-over life satisfaction than work sources (Hart, 1999). An interesting result of life satisfaction research is the lack of significant differences between males and females (Diener & Diener, 1995), the result not expected in view of previous data on wives' lower marriage satisfaction and more frequent depression in women (Haring et al., 1984). Our assumption is that gender might actually be an important predictor of life satisfaction because of different gender socialization, different roles and work load assigned to males and females in most cultural contexts. The lack of significant gender differences in life satisfaction could be the consequence of a sampling problem. It would be important to resolve these conflicting results using different samples of various educational levels and marital status.

## **CROSS-CULTURAL COMPARISONS OF LIFE SATISFACTION**

Although it is logical to assume that societal variables such as culture could significantly influence one's life satisfaction, relatively few studies were performed testing the relationship between culture and life satisfaction. Two of them, most frequently cited in this field (Suh et al., 1998) are World Values Survey (World Values Study Group, 1994) and ICSD (International Consortium, 1985). The first study (World Values Study Group, 1994) included 43 nations and the global life satisfaction was assessed by asking the respondents "All things considered, how satisfied are you with your life as a whole these days"? The response options for this single item measure varied from 1 (dissatisfied) to 10 (satisfied). The second study (International Consortium, 1985) included 41 nations, and the life satisfaction was assessed by the Satisfaction With Life Scale, the 5-item 5 point scale asking respondents to rate their global life satisfaction from their subjective perspective (Diener

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... et al., 1985). Many interesting results were obtained in these two studies. First, it was established that life satisfaction varied across countries and positive correlation between economic wealth of the nation (GNP) and the respondents' life satisfaction was obtained. Of the many aspects of different value systems (Hoffstede, 1980), two dimensions representing culture of a particular society were included: individualism and collectivism. Authors considered these variables as crucial, so different societies had been classified into individualistic and collectivistic ones. It is a general notion that the self in individualistic societies is viewed as a relatively autonomous, self--sufficient entity, independent from its surrounding or interpersonal context (Geertz, 1984). On the contrary, in collectivistic societies the major normative task of individual is to maintain harmony with others by coming to terms with others' needs and expectations (Triandis, 1995), while the distinction between self and others is blurred. Determinants of life satisfaction in such different societal contexts were proved to be different (Suh et al., 1998). In individualistic societies individual's emotions, goals and interests were most important determinants of life satisfaction i.e. emotions and feelings were more closely associated with life satisfaction ( $\beta$ =.556; p<.001) than were the norms and rules of behavior ( $\beta$  = .161; p < .01). In collectivistic societies where the achieved harmony between individual's interests and interests of the community (for instance family) made individuals satisfied, the contribution of emotions  $(\beta = .342; p < .001)$  and contribution of norms  $(\beta = .345; p < .001)$ were equally predictive for life satisfaction. There is no doubt, according to the obtained results, that different determinants of life satisfaction are to be expected in different cultures. Many other features of societies could most likely also be associated with life satisfaction of their citizens such as political system, family structure, economic prosperity or crisis and depression, but their influence on life satisfaction has not been studied yet. This will be the task of social scientists in the decades to come.

## SPECIFIC CHARACTERISTICS OF THE PRESENT STUDY

(1) Although an impressive number of studies on life satisfaction were performed, the study we are going to present is the first research effort in this area in Croatia. Because of many cultural and socio-economic specific characteristics of Croatia, it is unrealistic to expect that research results obtained in other societies will give an adequate explanation of life satisfaction in Croatian social and cultural context. After all, it has been clearly demonstrated that societies do differ by the level of life satisfaction and also that different factors determine life satisfaction in different societies (Suh et al., 1998). It would be

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... thus worthwhile to find out at least some of those factors or determinants of life satisfaction in Croatia.

(2) The influence of the presence of children on life satisfaction of their parents was rarely studied, especially outside of the USA. This problem is currently particularly relevant for the Croatian society, where an intense and emotionally loaded discussion about fertility issues is taking place. It is to be expected that the parental life satisfaction in a given society is closely related to fertility issues. Namely, it is logical to assume that marriage partners who passed through traditional socialization will be more satisfied with their life if there are children in the family. Conversely, if such marriage partners have no children, it is logical to assume that their life satisfaction will be lower. This could be especially valid for childless married women, who feeling unfulfilled, could start the cycle of marriage conflict and deterioration. Also it would be logical to assume that in urban areas, especially among young, relatively well-educated couples, life satisfaction could be higher if there are no children in their marriage. This should be especially true for the dual earner and dual career couples. The interference or enhancement of parental life satisfaction by the presence of children in the family is an important issue pertaining to family reproduction and willingness to have children, but nevertheless so far it has not been properly studied and in this sense our research represents the first effort to approach these socially relevant issues.

(3) Most of the studies performed in different countries were not representative either for the country or the region, as they were performed on convenient samples. Consequently, it was difficult to draw general conclusions. Our study was performed on a representative sample of the city of Zagreb and the Zagreb metropolitan area. The sample was made representative by husbands' level of education.

(4) All studies on life satisfaction so far performed have included only single individuals or married ones, but not from the same couple. In our study we have included 505 married couples. By having included both partners it is possible not only to check for the impact of person's characteristics on his or her life satisfaction, but it is also possible to check for the crossover effect, i.e. the influence of person's partner's characteristics on his or her life satisfaction. We believe that this is a more adequate approach in studying life satisfaction, because it could be easily supposed that some internal person's resources and some of his/her proximal circumstances and interactions both determine person's level of life satisfaction.

(5) Some studies obtained no significant statistical gender difference on the variable life satisfaction (Diener et al., 1999). It should be noted that in most of these studies college stu-

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... dents of different gender were included. Most of them were probably not married. It could easily be the case that unmarried young adults of either gender would be equally satisfied with their life. But there is a question if this holds true when people marry. Are different gender roles and prevalently non- -egalitarian power distribution in most marriages influencing life satisfaction of married partners differently? Our assumption is that because of gender differences in marital roles and unequal distribution of power and marital stress in marriages, life satisfaction could be very different for different partners in the same marriage. If this assumption is correct, we could assume even further that wives will declare less life satisfaction than husbands. It should be stressed that this expectation is in opposition to most findings about gender influence on life satisfaction. We hope that by including both marital partners we could obtain better insight into gender differences of marital partners.

## HYPOTHESES

Several hypotheses follow from the above review of research results and our assumptions.

#### Hypothesis 1

Although the City of Zagreb is a highly urbanized area, we have also included in our sample the wider metropolitan area of Zagreb. Since more than one third of the Zagreb population spent the first 18 years of life in villages or small towns, we can expect a prevalence of traditional values system in our sample with a high salience and centrality of children in the family. So we hypothesize ( $H_1$ ) *that there is a positive association between number of children in the family and parents' life satisfaction, before and after controlling for the influence of covariates.* 

#### Hypothesis 2

Previous studies did not show a clear influence of gender on life satisfaction. Some studies (performed in USA) found higher life satisfaction among wives than among their husbands (Harsha, 1997), in other studies husbands' life satisfaction was slightly higher, but there was no statistical significance of this difference (Harring et al., 1984). It should be emphasized that participants in those studies did not represent couples. Taking into consideration the still prevalent traditional unequal distribution of work load and power in Croatian marriages, we hypothesize (H<sub>2</sub>) that wives' life satisfaction will be lower than husbands' life satisfaction, before and after controlling for the influence of a set of covariates.

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#### Hypothesis 3

A set of covariates was included in our study because we assume that they could affect marital partners' life satisfaction independently from the main effects. The first covariate in our study was the age of marital partners. It was demonstrated previously that age was predictive for life satisfaction. Taking in consideration the present economic and social situation in Croatia we hypothesize (H<sub>3</sub>) that age of marital partners will affect their life satisfaction independently from main effects (number of children and partner's gender). We suppose that younger marital partners will show more life satisfaction than older ones.

#### Hypothesis 4

According to the research results in many only-one-country studies there was very little or no correlation between income and individual's life satisfaction. In cross-cultural studies it turned out that income of the country (GNP) was predictive for the variable life satisfaction of the inhabitants, pointing to the possibility that life satisfaction is not influenced by the salary only after some minimum level is met. Because our study is a one-country-study it would be logical to expect no association between one's income (salary) and life satisfaction. But taking into consideration the specific situation in Croatia which is going through economic transition with many people being unemployed or of low salary, we hypothesize (H<sub>4</sub>) *that salary will affect individual life satisfaction independently from main effects. We assume that marital partners getting higher salary will be more satisfied*.

#### Hypothesis 5

Along with the significance of economic living standard, other material aspects of life could be also important determinants of life satisfaction. Among other things, primarily it would be the quality of living accommodations, which is especially significant in Croatia, given the persistent housing problems. So we hypothesize ( $H_5$ ) a positive relationship between the size of dwelling unit and marital partners' life satisfaction. We expect marital partners living in larger dwelling units to be of higher life satisfaction.

#### Hypothesis 6

While salary represents a so-called objective variable, we know that the individual's perception of the situation is often more important than objective reality. We believe that this is especially true in the realm of possessing material goods or economic power, because the same objective economic power is differently perceived by different individuals. Therefore, we included two variables representing subjective economic sta-

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... tus of the family, or economic power as perceived by marital partners. The first variable represents economic stress and the second one represents economizing with family budget. For both variables we hypothesize (H<sub>6</sub>) that economic stress and economizing with family budget will negatively affect the variable life satisfaction independently from main effects. Marital partners who experience economize their financial budget will be less satisfied than marital partners who experience less economic stress and do not consider that they are forced to economize with family budget.

## METHOD

#### **Participants**

Five hundred and five married couples, i.e. 1010 participants were included in the study. These couples are a representative sample of the City of Zagreb and Zagreb metropolitan area on the variable husbands' education. In the sample there were 32.0% of husbands of incomplete or complete elementary education, 43.0% with completed high school and 25.0% college or university graduates There were 28.6% of wives of incomplete or completed elementary education, 43.3% of completed high school and 28.1% of wives who were college or university graduates. The fieldwork was performed by psychologists and sociologists who were experienced in field study. They performed interviews separately with husbands and wives either in the companies they were employed or at their homes.

## Variables and measures

Three groups of variables were included in the study: independent, control and dependent ones.

#### Independent variables (main effects)

Two variables were conceived as independent or main effects: 1. number of children in the family and 2. gender of the marital partner.

*Number of children in the family (Main effect 1)* represents a nominal scale consisting of three categories: (1) no children in the family coded as 1, (2) one child in the family coded as 2 and (3) two and more children in the family coded as 3. We treated one child in the family as a separate category because in the Croatian cultural context, a single child in the family usually has a different, specific treatment by parents. Category 3 represent two and more children, or in other words we have collapsed into one category number of children two and more, because more than 2 children in our sample was exceptional.

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... Gender of the marital partner (Main effect 2). Wives represent the first category coded as 1 and husbands represent the second category coded as 2. Data on the variable were obtained from the participants.

#### Control variables

In this group we have included 5 variables: (1) age of marital partner, (2) salary of marital partner, (3) size of the dwelling unit (apartment or house), (4) economic stress felt by marital partner, (5) need for economizing felt by marital partner.

Age of marital partner. Although in most of the studies it turned out that there was no correlation between age and life satisfaction, there are some studies in which age was predictive for life satisfaction, so we might say that situation is not quite clear. Besides, because we have performed research in the Croatian cultural and economic context in which connections between the generations are still stronger than in Western society, we expect less loneliness, but the socioeconomic status of the seniors being typically lower, we expect more economic stress, and have included age of marital partners as a covariate or control variable. Age of marital partner represents an interval scale with minimum 18 years and maximum 65 years. Data on the variable were obtained from the participants.

Salary of the marital partner. The variable represents average net salary per month for three months before the field work was performed. The minimum net salary in the sample was 900 kunas (120 US\$) and maximum salary was 20.000 kunas (2500 \$). Data on the variable were obtained separately from each of the partners. Because the distribution of the variable was skewed, the data were normalized by transforming them into log net monthly salary. Although in most of the one-country-studies there was either very small correlation or none at all obtained between salary (income) and life satisfaction, we have included variable net log salary per month in our study as a control one because of ongoing economic difficulties during the transition process which could magnify the salience of economic factors.

*Size of the dwelling unit* was conceived as an interval scale expressed in terms of total square meters. The size of the smallest dwelling unit in the sample was 25 square meters, and the size of the largest one was 500 square meters. Data on the variable were obtained from the participants. Because of the skewness of the distribution of the variable, data were normalized by transforming them into log of the size of dwelling unit.

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... *Economic stress.* The variable was measured by the scale developed by Pearlin (Pearlin et al., 1981). The scale measures chronic economic strain and stress and consists of 8 items. The sample of items: "Do you have difficulties in paying utility bills" etc. Participants were asked to check either Yes or No. The sum of all checked yes responses represented the intensity of stress. Reliability of the scale was  $\alpha = .95$ , and factor validity obtained by using principal component analysis yielded only one factor. Data on the variable were obtained separately for each marital partner. Because of the economic situation in the country and its possible influence on marital partners, we included the variable in the study as a control one.

Economizing with family budget. This variable was measured by the scale developed by Fergusson et al. (1981). The scale consisting of 15 items measures a need felt by the family members to economize with the family budget. The sample of items: "Have you been forced to reduce the heating of your home? Have you been forced to postpone a purchase of clothes?" etc. Participants were asked to check either Yes or No. The sum of all checked yes responses stands for the level of economizing. Reliability of the scale was  $\alpha = .97$ . Factor validity was obtained by using the exploratory (principal components) and confirmatory factor analysis. Three factors were obtained: 1. feeling the need for economizing with recreation and fashion money; 2. being forced to buy goods in second-hand shops; 3. being forced to borrow money or to sell property to meet the ends. Three subscales were developed for measuring each of the three factors. Reliability  $\alpha$  was between .88 to .96. Data were obtained separately for each marital partner.

#### **Dependent variable**

*Life satisfaction of marital partners.* The variable was measured by Satisfaction With Life Scale (Diener et al., 1985). The scale measures global life satisfaction and consists of a 5 item 5-point format. The sample of items: "The conditions of my life are excellent; If I could live my life over, I would change almost nothing". This is a well validated measuring instrument that has been used extensively in quality of life research to assess cognitive dimension of subjective well-being (Pavot & Diener, 1993). In our study the obtained reliability was  $\alpha$  =.83. Factor validity of the scale was checked by using principal component analysis. According to the obtained results the scale is one-dimensional. Data on the variable were obtained separately for each marital partner.

## RESULTS

Descriptive statistics for covariates or control variables and dependent variable are presented in Table 1, except for the variable size of dwelling unit which is common for both partners.

The average size of the unit in square meters was $M_{no}$ child = 65.16,
(SD = 29.64); Mone child = 75.06, $(SD = 48.54)$ ; Mtwo and more = 84.62,
SD = 41.84.

	Number of children in the family					Gender of the marital partner				
	No chi	ildren	One		Two and more		Wife		Husband	
	n	=186	n	=362	n	=462	n	=505	n	=505
Variables	М	SD	Μ	SD	Μ	SD	Μ	SD	Μ	SD
Age	32.78	9.36	36.00	8.74	39.39	7.53	35.49	8.60	38.42	8.54
Salary	2507	2087	2696	2102	2897	2649	2370	2010	3136	2625
Economic stress	5.10	2.56	5.20	2.45	5.46	2.46	5.41	2.44	5.20	2.52
Economizing	6.82	4.39	7.15	4.23	7.54	4.29	7.37	4.21	7.17	4.37
Life satisfaction	13.68	4.14	13.56	3.45	14.11	3.81	13.82	3.87	13.85	3.64

#### • TABLE 1

Means and standard deviations of covariates and dependent variable life satisfaction as a function of number of children in the family and the gender of the marital partner (N=1010)

#### ➡ TABLE 2

Analysis of variance results for Main Effects and Interaction Effects of number of children in the family and the gender of the marital partner on life satisfaction To check for our hypothesis 1. we have performed ANOVA and a series of ANCOVA statistical procedures. ANOVA results are presented in Table 2.

As presented in Table 2, variables number of children in the family and gender of the marital partner did not affect variable life satisfaction. Neither the interaction between main effects was significant. So, hypothesis 1 was not confirmed.

Source	df	MS	F
Number of children in the family Gender of the marital partner NCF x GMP Error	2 1 2 1104	34.08 .50 8.63	2.42 .01 .61

Note: N=1010. \*p <.05. \*\*p <.01.

Because we assumed that a set of covariates would affect variable life satisfaction independently of main effects, i.e. independent variables, we have performed a series of ANCO-VA procedures testing for the influence of main effects while controlling for the set of covariates. We were adding in succession one covariate after another to get net or decontaminated influence of independent variables on the variable life satisfaction. Influence of the independent variables on life satisfaction controlling for the influence of covariates age and log salary is presented in Table 3.

df

MS

F

1.59

1.53

1.43

➡ TABLE 3 Analysis of covariance of life satisfaction as a function of number of children in the family and the gender of the marital partner after controlling for two covariates

Number of children in the family219.84Gender of the marital partner119.04NCF x GMP217.81Error795

Note: N=1010. \*p <.05. \*\*p <.01.

Source

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In the first step variable age was included as covariate or control variable. The results show variable age not affecting life satisfaction. F-ratio was not being significant F(1,1003)=1.39; p>.05. The next covariate included in the analysis was the variable salary of the marital partner. Because the distribution of the variable was skewed, it was transformed into log salary, and as such was included in the analysis. The obtained F-ratio was statistically significant: F(2, 795)=18.35; p<.001, meaning that variable salary together with variable age affects life satisfaction independently from main effects, so it proved to be indispensable as a control variable.

Although two covariates taken together were significantly correlated with dependent variable, after being included into the analysis they did not significantly change the influence of independent variables on life satisfaction. As presented in Table 3, even after including both covariates into analysis, the F ratios representing the influence of main effects and interaction between them on the variable life satisfaction was not statistically significant. The adjusted means of life satisfaction variable for the groups of marital partners with different number of children were: Mno child=13.71, (SD=4.14); Mone child=13.63, (SD=3.44); Mtwo and more=14.12, (SD=3.81). Adjusted means of life satisfaction for marital partners were: Mwife=13.99, (SD=3.87); Mhusband =13.65, (SD=3.64).

The third variable included in the analysis as a covariate or control variable was log of the size of dwelling unit. Influence of the independent variables on life satisfaction controlling for the influence of covariates age, salary and the size of dwelling unit is presented in Table 4.

Source	df	MS	F
Number of children in the family	2	15.46	1.24
Gender of the marital partner	1	14.93	1.20
NCF x GMP	2	23.23	1.87
Error	786		

Note: N=1010. \*p <.05. \*\*p <.01.

The results obtained show that 3 covariates taken together affect variable life satisfaction: F(3,786)=12.72, p<.001. Still, after all three covariates were included into analysis, the influence of main effects on life satisfaction was not significant (Table 4). It means that no statistically significant difference in the level of marital partners' life satisfaction was found between the group of partners without children, the group having one child and the group having two and more children even with the triple control performed. After controlling

➡ TABLE 4 Analysis of covariance of life satisfaction as a function of number of children in the family and the gender of the marital partner after controlling for three covariates

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⇒ TABLE 5 Analysis of covariance of life satisfaction as a function of number of children in the family, and gender of the marital partner after controlling for five covariates for the variables age, log salary and log size of dwelling unit adjusted means of life satisfaction variable were:  $M_{no child}$ =13.78, (SD=4.14); Mone child=13.62, (SD=3.44); Mtwo and more=14.08, (SD=3.81). Neither a significant difference in life satisfaction was obtained between wives and husbands after the triple control was performed, adjusted means being Mwife=13.98, (SD=3.86) and Mhusband=13.68, (SD=3.64). Some previous studies of the influence of gender on life satisfaction did yield similar results of no gender difference, but in all those studies the participants were either not married or not marital couples (Diener & Diener, 1995). Considering different gender roles, work loads and expectations in marriage, we expected that life satisfaction will be different for married women and especially that in the same couple it will be the wife reporting lower life satisfaction, but these expectations did not prove justified.

In the last step of analysis, together with the previously used covariates we have included another two: economic stress and economizing with family budget. The first three covariates used (age, salary, dwelling unit) are objective characteristics of marital partners or the family. By contrast, economic stress and economizing represent subjective experience of marital partners of their economic situation. After including into analysis all covariates the obtained results show that five covariates taken together affect the variable life satisfaction, F(5,784)=23.45, p<.0001 (Table 5).

Source	df	MS	F
Number of children in the family Gender of the marital partner NCF x GMP Error	2 1 2 784	57.17 9.05 22.70	5.02** 0.80 2.00

Note: N=1010. \*p <.05. \*\*p <.01.

The results showing the influence of main effects after controlling for 5 covariates are presented in Table 5. It is evident that adding covariates economic stress and economizing into analysis, F-ratio representing influence of the independent variable or main effect 1 on dependent variable has become significant, meaning that in accordance with our hypothesis ( $H_1$ ) the number of children in the family did influence parental life satisfaction.

Other F-ratios representing the influence of gender of the marital partner on life satisfaction and the interaction between the 2 main effects remained insignificant even after control was performed for 5 covariates. That means that gender of the marital partner doesn't affect variable life satisfac-

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... tion and also, that main effect 1, or number of children in the family, affects life satisfaction independently of the variable gender of the marital partner. The obtained adjusted means of variable life satisfaction for three groups were:  $M_{\text{no child}}=13.56$ , (SD=4.14); Mone child =13.55, (SD=3.44) and M<sub>two and more</sub>=14.36, (SD=3.81) respectively. For the influence of the variable gender of the marital partner on life satisfaction, the following adjusted means of variable life satisfaction for the two genders were M<sub>wife</sub>=13.94, (SD=3.86) and M<sub>husband</sub>=13.71, (SD=3.64) respectively.

We can conclude that it was indispensable to include into statistical analysis a set of five covariates or control variables if we were interested to check for the net effect of two main effects or independent variables on the dependent variable life satisfaction. Results obtained by using ANOVA were significantly different than after including the 5 covariates into analysis. Separately from the two independent variables or main effects 5 covariates explained 13% of the variance of the variable life satisfaction. Specifically, the following betas symbolizing relationship between each covariate and dependent variable were obtained: for the variable age:  $\beta = -.04$ , p>.05; for the variable log salary:  $\beta = .07$ , p<.05.; for the variable log size of dwelling unit:  $\beta = -.01$ , p>.05; for the variable economic stress:  $\beta = -.31$ , p<.001; for the variable economizing:  $\beta = -.02$ , p>,05. In other words, only two covariates, precisely log salary and economic stress were associated with the variable life satisfaction.

## DISCUSSION

In the introductory part of the paper we have stated a hypothesis (H<sub>1</sub>) according to which we expected that independent variable, the number of children in the family as main effect 1 will affect variable life satisfaction irrespectively of the influence of covariates. The obtained results did not confirm hypothesis (1). There was no statistically significant difference in life satisfaction between the three groups of marital partners before control was performed and only after the last two covariates, i.e. economic stress and economizing were introduced into ANCOVA statistical procedure, the F-ratio became statistically significant, confirming the influence of the variable number of children in the family on marital partners' life satisfaction. Introducing covariates, especially variable economic stress, proved to be indispensable to get net effect of the independent variable on the dependent one. There are probably other variables which might affect variable life satisfaction separately from the main effect 1, but according to the model we have constructed, it is evident that experiencing the present economic situation in Croatia turned out to be an important predictor

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... of life satisfaction. In other words, the real effect of the variable number of children in the family on marital partners' life satisfaction was covered by the influence of covariates economic stress and economizing on life satisfaction. Although it is maybe premature to make more general conclusions concerning the effects of variable number of children in the family on the variable parental life satisfaction, it seems that at least tentatively we can conclude that marital partners having two and more children are more satisfied than marital partners without children or having one child, if the economic situation of the family is taken into account. This probably has some implications for the family planning policy in Croatia. If the country is interested in preserving the present level of birth rate or increasing it, according to the obtained results economic factors should be taken more seriously into consideration.

In hypothesis (H<sub>2</sub>) we expected differences in life satisfaction between marital partners of different gender, more precisely, we expected that wives will be less satisfied because of the double load they usually have in Croatian cultural context, working both in and out of home. The obtained results did not confirm hypothesis (2). There was no statistically significant difference in life satisfaction between marital partners of different gender neither before nor after control for 5 covariates. Probably several explanations exist. It seems to us most probable that the correct explanation of the obtained results is the level of aspirations or expectations. Although, as we have stated previously, wives bear double load, they probably have adjusted their expectations to the present situation and this is the reason why there was no statistically significant difference between their level of life satisfaction and satisfaction of their marital partners. This conclusion should be tested either cross--culturally or by controlling for the wife's role expectations.

The rest of the hypotheses were about the influence of a set of covariates on the variable life satisfaction. The first covariate was the age of the marital partners. We have assumed that the age of marital partners is negatively correlated with life satisfaction or that younger marital partners were more satisfied than the older ones. Such hypothesis was in accordance with some theoretical considerations (Wilson, 1967) and the present social and economic situation in the country. In our study we did not obtain results alowing us to state that younger marital partners are more satisfied than the older ones. The obtained F-ratio was not statistically significant, so this hypothesis was rejected.

The next hypothesis stated that salary is positively correlated with life satisfaction. ANCOVA results showed that there was a statistically significant relationship between 2 covariates: age and log salary of the marital partners taken together and

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... variable life satisfaction. The obtained  $\beta$  was positive and also statistically significant, but relatively small. So in the Croatian social context income or salary affects life satisfaction, a result which was not obtained in some other one-country-studies (Clark & Oswald, 1994). These results are in accordance with hypothesis (4) and give a clear evidence that net effect of number of children in the family on life satisfaction of marital partners can be obtained only if the salary together with the age of the marital partners is introduced into the analysis as a control variable. But even after it was done, the F-ratios representing the influence of the main effects on the dependent variable were still insignificant. The values of adjusted means were not much different from those obtained before controlling for two covariates.

In hypothesis (5), we assumed a positive relationship between variable size of dwelling unit and the variable marital partners' life satisfaction, because in Croatian social context housing is still a major problem of the family. Results did not confirm this hypothesis (5). When the size of dwelling unit was included into analysis together with other two covariates, Fratio did not change significantly and the obtained  $\beta$  symbolizing the relationship between the size of dwelling unit and life satisfaction was not significant. Hypothesis (5) was rejected, so it seems that the size of dwelling unit is not predictive of marital partners' life satisfaction.

In hypothesis (6) we expected a negative relationship between variables economic stress, economizing with family budget and marital partners' life satisfaction. The obtained  $\beta$ s for the last two covariates showed that there was a negative and significant relationship between economic stress and variable life satisfaction, but not so for economizing with family budget. So hypothesis (6) was only partly confirmed, i.e. for the variable economic stress. After including variables economic stress and economizing into analysis with the rest of the covariates, the difference in life satisfaction among marital partners representing groups without children, having one child and having two or more children became statistically significant. According to the adjusted means, most satisfied marital partners were those having two and more children. The obtained results clearly demonstrated the importance of economic factors, more precisely the subjective experience of their family's economic situation. No influence of gender of the marital partner nor the interaction between two main effects was found after the complete control for covariates was performed.

In our research we have included 5 variables as covariates for which we have assumed that they affect life satisfaction independently of main effects. Our assumption was based

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either on international experience or specific characteristics of the present situation in Croatia. In many studies the educational level of the marital partners was also treated as a covariate, but according to the international experience no correlation between individual's level of education and life satisfaction was found (Witter et al., 1984), so we did not include it in the research. Also, we did not include as a possible covariate duration or length of marriage. It would be logical to expect an influence of this variable on life satisfaction, but we did not include it, because it is positively and highly correlated with the variable age of the partners (r=.77, p<.001), which has been included in the study as a covariate. In the same manner we did not include as a covariate the variable number of rooms in the dwelling unit, because it was positively and highly correlated with the variable size of dwelling unit (r=.74, p<.001) which was included in the study.

All the variables included in the study belong to the so--called bottom-up approach in explaining life satisfaction. We have not included in the study as a covariate any variable belonging to the so called top-down approach, for instance the personality of the marital partners. To ensure a better insight into the effects of the number of children in the family on life satisfaction of fathers and mothers, future studies should include some important "top-down approach" variables, primarily personality traits such as extraversion and neuroticism. By performing a control for the five "bottom-up approach" variables in Croatian social and cultural context our results show that the number of children in the family affects marital partners' life satisfaction, partners having two and more children being the most satisfied. It is difficult to conclude about the causal direction of this relationship: it could be that generally optimistic and satisfied people are willing to have more children, but also it could easily be the case of a greater sense of life meaning and purposefulness in raising children being the cause of a greater life satisfaction in families with more children.

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## Broj djece u obitelji kao prediktor životnoga zadovoljstva roditelja

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Opravdano je očekivati da će životno zadovoljstvo roditelja u bilo kojem društvu biti najuže povezano s pitanjima fertiliteta i željom roditelja da imaju djecu, pa je svaka spoznaja o odrednicama roditeljskoga životnog zadovoljstva i teorijski i praktično vrlo važna. Na petsto i pet bračnih parova, tj. 1010 ispitanika provedeno je istraživanje s ciljem da se ispita utjecaj broja djece u obitelji na životno zadovoljstvo roditelja. Bračni parovi predstavljaju reprezentativni uzorak za grad Zagreb i Zagrebačku županiju prema varijabli muževljeva naobrazba. Definirana su dva glavna efekta (broj djece i spol roditelja) i pet kovarijata (dob roditelja, plaća roditelja, veličina stambene jedinice i ekonomski stres/

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... potreba za ekonomiziranjem). Postupkom ANOVA i ANCOVA, uz pet definiranih kovarijata, određene su razlike među tri skupine: obitelji bez djece, s jednim djetetom i s dvoje i više djece. Dobivena je statistički značajna razlika među skupinama tek onda kad se, uz ostale kovarijate, u analizu uvrstila varijabla ekonomski stres i potreba za ekonomiziranjem. U tim uvjetima najveće životno zadovoljstvo izražavala je skupina roditelja koji imaju dvoje i više djece. Dobiveni su rezultati jasno pokazali važnost ekonomskih odrednica životnoga zadovoljstva roditelja, zapravo važnost subjektivnoga doživljaja obiteljskoga ekonomskog stanja. U analizi se nije pokazala važnost spola roditelja za njihovo životno zadovoljstvo kao niti interakcija između dva glavna efekta nakon što je provedena kontrola za sve kovarijate.

## Die Kinderzahl einer Familie als Prädiktor für die Zufriedenheit der Eltern mit dem eigenen Leben

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Man darf zu Recht erwarten, dass die Zufriedenheit von Eltern mit dem eigenen Leben in jeder beliebigen Gesellschaft aufs engste mit dem Kinderwunsch und seiner Verwirklichung in Zusammenhang steht. Jegliche Erkenntnis über die Merkmale elterlicher Zufriedenheit ist insofern von allergrößter theoretischer und praktischer Bedeutung. Die dieser Arbeit zugrunde liegende Untersuchung hatte zum Ziel, die Auswirkung der Kinderzahl auf die Zufriedenheit von insgesamt 505 Ehepaaren bzw. 1010 Untersuchungspersonen zu ermitteln. Die befragten Ehepaare stellen bezüglich des Bildungsstandes des männlichen Ehepartners eine für die Stadt und Gespanschaft Zagreb repräsentative Bevölkerungsgruppe dar. Es wurden zwei Hauptausgangspunkte definiert (Kinderzahl und Geschlecht des befragten Elternteils) sowie fünf Kontrollvariablen (Alter der Eltern, Einkommen der Eltern, Größe der Wohnfläche und finanzieller Stress/notwendige Sparmaßnahmen). Anhand des ANOVA- und ANCOVA-Verfahrens und unter Einbezug der genannten fünf Kontrollvariablen ermittelte man Unterschiede zwischen folgenden drei Gruppen: Familien ohne Kinder, Familien mit einem Kind und Familien mit zwei und mehr Kindern. Ein statistisch wesentlicher Unterschied zwischen den befragten Gruppen war erst dann festzustellen, als zu den übrigen Kontrollvariablen die Variable 'finanzieller Stress/notwendige Sparmaßnahmen' hinzukam. In diesem Zusammenhang äußerten Paare mit zwei und mehr Kindern

OBRADOVIĆ, J., ČUDINA-OBRADOVIĆ, M.: NUMBER OF CHILDREN... die größte Zufriedenheit mit sich und dem Leben. Die Untersuchungsergebnisse zeigen deutlich, wie wichtig materielle Faktoren für die Zufriedenheit der Eltern sind (im Grunde geht es darum, wie die Ehepartner die materiellen Verhältnisse der Familie erleben). Nicht ausschlaggebend war hingegen das Geschlecht des befragten Elternteils, ebenso wenig die Interaktion zwischen den genannten zwei Hauptausgangspunkten nach Überprüfung der Kontrollvariablen.