

MARITAL PARTNERS' INCOME AS A DETERMINANT OF MARRIAGE QUALITY*

Josip OBRADOVIĆ
Zagreb

Mira ČUDINA-OBRADOVIĆ
Faculty of Teacher Education, Zagreb

UDK: 316.356.2:331.2](497.5-37 Zagreb)
331.2-058.833(497.5-37 Zagreb)

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A theoretical mediation model of the influence of marital partners' income on marriage quality was constructed. The model consists of 3 independent and 5 dependent variables. Seven variables are measurement variables and one variable represents latent structure. The model was verified for husbands and for wives separately, among 340 dual full-time employed couples. The sample is representative of Zagreb and Zagreb metropolitan area on the variable husband's education. Structural Equation Modelling (SEM) was used to verify the model. After several modifications of the model, the χ^2 and fitting indices revealed a very good match between the data and the model. According to the obtained results, marital partners' income influences marriage quality as experienced by the husband and wife.

Key words: marital partners' income, economic stress, depression, marital strain, marriage quality



Josip Obradović, Zagreb, Croatia.
E-mail: josip.obradovic@zg.htnet.hr

INTRODUCTION

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The relationship between the economic power of an individual and his/her marriage and family processes has been of longstanding interest to social scientists. This was particularly so for the family scientists who tried to establish how the economic power of an individual or family affects the mental health and satisfaction of family members or marriage and family processes. One of the first important studies in this area was performed by Mira Komarovsky (1940) analyzing how

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social stratification and class structure, more specifically, the position of a working class family and its economic power, affects marriage processes and marital stability. After that, many similar studies were performed especially in English speaking countries (Broman & Forman, 1997; Conger et al., 1990; Fox & Chancey, 1998; Kinnunen & Pulkkinen, 1998; Rogers & Amato, 1997).

All these studies can be grouped into two categories. In the first group, the economic power of an individual or family was conceptualized as an objective measurable variable. More recently, representing the second group, economic power was conceptualized as the subjective experience of an individual or family member.

Objectively conceptualized, economic power is a multi-dimensional variable. It can be defined as salary, income, debts, loans, assets, poverty and income/needs ratio. In most studies, only some of these dimensions were used as a measure of economic power, mostly either salary or income. Some studies of social stratification and class structure used salary or income as one among various dimensions of socio-economic status. In this article we shall also use objectively measured marital partners' income as an indicator of their economic power and present results showing its influence on marriage quality.

Subjectively, economic power is usually conceived as economic strain or stress and economic hardship experienced by an individual or family member. The assumption underlying this approach is that an individual or family member having more objective economic constraints will experience more intensive economic strain and stress as well as economic hardship. To measure subjective economic concepts several scales were constructed and used very successfully in many studies (Ferguson et al., 1981; Pearlin et al., 1981).

Income, individual and family well-being

According to many research conclusions, a positive and curvilinear relationship between objective income and psychological well-being has been established (Lane, 2000; Van Praag et al., 2003; White & Rogers, 2000). Also, many studies posit an inverse or negative relationship between socio-economic or economic status and psychological distress. Some have clearly shown that permanent low-level income creates a sense of economic hardship which eventually leads to depression (Hraba et al., 2000). Especially important here is the fact that the same mechanism was observed in very different social contexts and different cultures (Hraba et al., 2000; Kinnunen & Pulkkinen, 1998; Kwon et al., 2003).

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Only a few studies that have defined income objectively have tried to check its influence on marital processes. The earlier studies clearly demonstrated a positive relationship between family income conceptualized objectively and marital happiness, quality and stability (Komarovsky, 1940). However, in more recent studies contradictory results were obtained. For instance, study performed by Brody et al. (1994) proved that per capita family income was associated with higher marital happiness and lower marital conflict. Similarly, the study by Amato & Rogers (1997) demonstrated that a low husband's income is a significant factor in explaining marital problems and low marital quality. Contrary to these results, Broman & Forman (1997) were not able to prove the existence of such a relationship. So, although it seems logical and intuitively reasonable to assume positive relationship between objectively defined income and some marital processes, this relationship is still not satisfactorily explained.

During the last decade many studies have approached this problem using the so-called subjective approach, by focusing on individual's experience of economic stress or hardship. These studies proved that the subjective experience of economic difficulties has a negative influence on various marital processes such as conflict and abuse of the partners preceded by irritability and ending in anxiety and depression (Hraba et al., 2000) or lower marital quality of both partners and lower marital stability (Conger et al., 1990). These mechanisms were especially pronounced in cases of sudden economic changes for the worse, requiring adjustment to a lower living standard or poverty (Kwon et al., 2003).

White and Rogers (2000) maintain that the subjective approach is more successful in establishing the existence of the relationship between economic standing and marital processes because the subjective measures are better proxy of economic power(lessness) than income conceptualized objectively. This was confirmed by some rare studies that simultaneously used both the objective and subjective approach (Fox & Chancey, 1998). As a consequence, recent studies use a subjective approach more and more in defining the economic power of the family as a determinant of family processes.

It should be noted here that stress in general and economic stress specifically do not have general or universal impact. Their influence on individuals and marital partners depends on numerous moderating variables, the two most prominent ones being gender and age. Generally, women report more variations in stress symptoms than men do in North America and they more frequently ask for professional help and use health care services to get rid of these symptoms (Conger et al., 1990). Stressors are also different for women. While

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women are most distressed by negative events in their social environment, like intimacy and marriage relationships, men are more distressed by economic stressors such as unemployment, job loss and low income. Several explanations were offered for these differences, the most popular two being gender inequality and gender vulnerability. However, this clear-cut gender difference in stressors valid for North America was not found in some other societies. For instance, the population in the Czech Republic experienced intensive and massive stress as a consequence of major economic and social changes that took place during the 90-ies. Interestingly, in contrast to the North American data, both men and women in the Czech Republic experienced similarly intensive economic stress and there was no gender difference in that respect (Hraba et al., 2000). The explanation offered by the authors took into account that both men and women had been breadwinners before political change in the Czech Republic took place, so the changes reflected in lost jobs, lowered income and higher consumer prices affected men and women equally. Gender is a moderating variable for experiencing economic stress, but its influence depends on cultural and gender roles in specific societies.

Age is also an important moderating variable in experiencing and coping with stress. According to many community surveys, older people experience more intensive economic stress than younger persons. While aging objectively brings reduced income and many health problems, caused by increased medical expenses, the intensity of subjective economic stress also tends to rise as a consequence of fewer personal and social resources available to old people.

Economic stress can be found in any society, but certainly there are a lot of variations between societies and between various time periods in the same society. For instance, we believe that the problem of economic stress in general and especially among the elderly would be conspicuously present in ex-socialist countries of Central and Eastern Europe during transition to a new type of economy. Some thorough studies of this problem were performed in the Czech Republic clearly showing that old people had more difficulties coping with stress than the younger ones (Hraba et al., 1995). Several explanations were offered, such as smaller differences between the best and worst paid employees in the past, a market economy favoring higher education, a new need for predominantly white collar jobs and entrepreneurship and generally the older generation being at disadvantage in comparison to earlier times.

Some studies were able to prove that not only marital partners', but also children's outcome variables such as exter-

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nalization and internalization were determined by family income (Hanson et al., 1997; Tytti et al., 2004). The income measured subjectively as parents' economic stress was found to be even more related to different behavior problems of children (Dawson, 1991). Also, in some studies researchers were able to prove that around 50% of the variance of children's scholastic performance was determined by family income (Mc Lanahan and Lichter, 1997).

International experience of the relationship between income and family processes

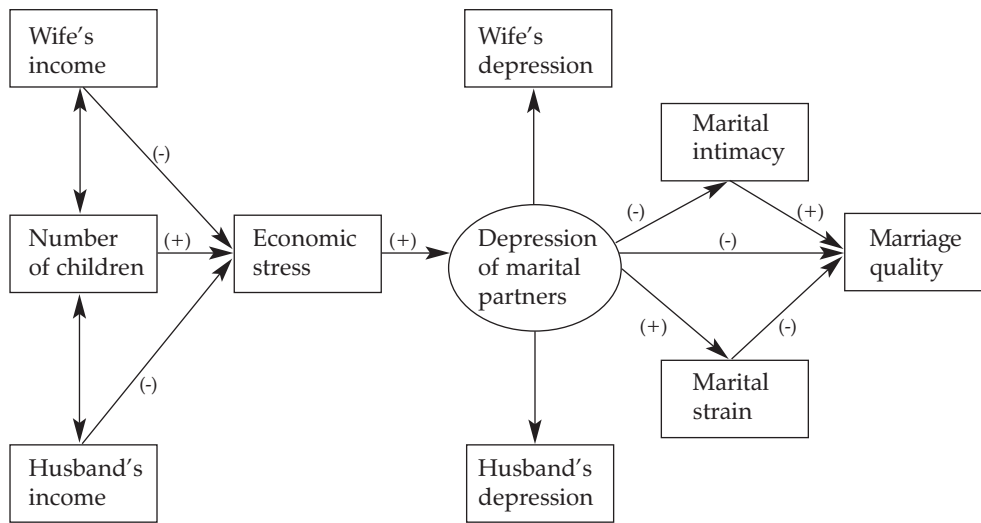
Although the relationship between income and family processes is interesting from a theoretical and even more from a social policy point of view, here we shall take a more narrow approach focusing attention on marital processes only. We were not able to find a single study using an international or cross-cultural approach to this topic. There are several one-country studies giving a certain insight into this relationship, but even one-country studies are very rare. In all of them, income was defined subjectively in terms of economic stress or economic hardship and some of them clearly demonstrate that economic hardship affects marital processes regardless of the country studied. The general mechanism of the negative impact of economic hardship on marital processes creates irritability and anxiety in marital partners, producing marital conflicts, abuse and depression in both partners, which in turn precipitates marital instability. The studies performed in the Czech Republic (Hraba et al., 2000), Finland (Kinnunen & Pulkkinen, 1998) and the Republic of Korea (Kwon et al., 2003) also showed the negative impact of economic hardship on marital satisfaction and marital quality. It is important to emphasize that similar results were obtained in countries differing widely in many social and cultural variables. For instance, Finland is a typical example of a country with an individualistic system of values, while collectivism and traditional family values are still expected from women in Korea. So the negative influence of economic hardship on the family could be presumed to be a general phenomenon. However, we must also emphasize that economic hardship in terms of marital partners' subjective experience is a narrower concept than family income. Economic hardship may coincide with the objective measures of income in only one segment of the population, while the wider range of population may not perceive economic hardship being relevant. This wider range of population was omitted from most of the studies performed before. In our analysis we tried to approach this problem by studying the subjective experience of economic stress

irrespective of objective family economic standing, hoping to pinpoint the influence of proximal variables that contribute to the cascade of marital relations deterioration.

Theoretical model

Studies of the impact of subjective economic stress on marital partners have been performed in countries of different culture (Barnes et al., 1999; Cairney, 2000; Chi & Chou, 1999; Cheung, 1998; Dixon & Stovalli, 1994; Miranda & Green, 1999; Sallinen & Kinnunen, 2001; Vannoy & Cubbins, 2001). In most of them, income was defined at dyad or family level, and the ultimate goal was to investigate how income mediated by subjective economic stress affected physical and mental health, life satisfaction or marital processes. Based on the results of these studies and the present socioeconomic situation in Croatia we have constructed a theoretical mediation model of the influence of income on marital quality. The model consists of three independent and a group of dependent variables, as presented in Figure 1.

FIGURE 1
Marital partners' income and marriage quality



From income to economic stress

As presented in Figure 1, we assume a positive relationship between the husband's and wife's income. We also assume a negative relationship between income and economic stress, income being objectively measured separately for each marital partner. Atypically, compared to most studies, we tried to study the influence of each partner's income on the economic stress as perceived by both marital partners separately.

From number of children to economic stress

Furthermore, we assume a positive relationship between the number of children in the family and the intensity of economic stress as experienced by both marital partners. Although this relationship has not received enough attention in previous studies, we assume that it is not irrelevant. The number of children in the family undoubtedly influences the intensity of economic stress as experienced by the husband and wife. It should be noted that we have also assumed a negative relationship between the father's income and the number of children in the family as well as the mother's income and the number of children in the family. It is well known that lower income families tend to have more children.

From economic stress to marital partners' depression

The relationship between economic stress and depression has been demonstrated and established in many studies (Botcheva & Feldman, 2004; Chi & Choe, 1999; Hraba et al., 1995; Hraba et al., 2000; Mendes de Leon et al., 1994). Typically, there was an effort to establish a relationship between economic stress and depression as experienced by individuals, or more generally, the relationship between depression and the individual level variables. According to our theoretical model, we have defined depression at the dyad level, or at the level of marriage unit, assuming that economic stress as experienced by the wife and husband separately, will be positively related to the intensity of depression as felt or experienced by both marital partners.

From marital partners' depression to marital intimacy, strain and marital quality

The relationship between depression of an individual and his/her experience of marital intimacy has been studied extensively (Burns et al., 1994; Schweitzer et al., 1992; Tennant, 1985; Turner, 1994). It was found that this relationship is reciprocal; depression impairs the experience of marital intimacy and the experience of low marital intimacy increases the intensity of depression. In our study we want to verify how depression in marriage or the dyad level is related to the perception of a husband's and wife's marital intimacy. The assumption is that more depression at the dyad level damages marital intimacy as experienced by both marital partners.

Likewise the relationship between depression and marital strain was also studied extensively. The reciprocal relationship holds here also, the depression of the marital partner being either the cause or the consequence of marital strain as

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experienced by marital partners (Keith & Hong, 1994; Elliot, 2001; Mirowsky, 1996; Roberts et al., 1997; Vega et al., 1988). In our theoretical model, we assume that depression at the dyad level will be positively related to marital strain as experienced by both partners, and that every increment in depression in the marital unit will increase marital strain as experienced by marital partners separately.

The relationship between depression and variables representing marital processes has also been extensively studied (Birchnell, 1991; Davila et al., 2003; Dehle et al., 2001; Dudek et al., 2001; Leinonen et al., 2002; McLeod, 1994; McLeod & Eckberg, 1993). In our model, we conceptualized depression at the dyad level and we tried to verify its influence on the marriage quality as experienced by the husband and wife. The assumption is that any increment in depression at the dyad level will decrease marriage quality as experienced by the husband and wife separately.

In our theoretical model, two mediating variables and their relationship to marital quality still need to be discussed: marital intimacy and marital strain. The relationship between marital intimacy and marital quality was studied in only a few studies (Bodenmann, 1997; Harper et al., 2000; McCabe, 1997; Vannoy, 2000). We assume that an increase in the marital intimacy as experienced by marital partners will also increase marriage quality as perceived by both partners.

Similarly, the relationship between marital strain and marital quality has not been studied intensively (Frisco & Williams, 2003; Houston et al., 1992; Umberson, 1995). We assume that this relationship is negative; if partners experience more intensive marital strain, the less satisfied each of them will be with marriage quality.

Summary of hypotheses

Hypothesis 1.

There will be a positive relationship between the wife's and husband's income.

Hypothesis 2.

The wife's income will be negatively related to the economic stress experienced by the wife and by the husband separately.

Hypothesis 3.

The husband's income will be negatively related to economic stress as experienced by wife and husband separately.

Hypothesis 4.

The number of children in the family will be positively relat-

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ed to economic stress as experienced by the wife and husband separately.

Hypothesis 5.

There will be a negative relationship between a wife's income and number of children and a husband's income and number of children in the family.

Hypothesis 6.

Economic stress as experienced by the husband and wife separately will be positively related to depression at the marital dyad level.

Hypothesis 7.

Depression at the marital dyad level will be negatively related to marital intimacy as experienced by the wife and husband separately.

Hypothesis 8.

Depression at the marital dyad level will be positively related to marital strain as experienced by the wife and husband separately.

Hypothesis 9.

Depression at the marital dyad level will be negatively related to marriage quality as experienced by the wife and husband separately.

Hypothesis 10.

Marital intimacy as experienced by the husband and wife will be positively related to marriage quality as experienced by the husband and wife separately.

Hypothesis 11.

Marital strain as experienced by the husband and wife will be negatively related to marriage quality as experienced separately by the husband and wife.

METHOD

To test the model described in Figure 1 for wives and husbands separately, we have operationalized the model, decided on the measures and made a decision about the participants of the study.

Participants

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The participants in our study included 340 dual-earner couples, a part of the larger sample of 505 marital couples being

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a representative sample of the City of Zagreb, the capital of Croatia, and the Zagreb metropolitan area on the variable husband's education. The subsample consisted of dual earner couples, both wives and husbands being full-time employees. The average age of the wives was $M=35.00$ years ($SD=8.16$) and the average age of the husbands was $M=38.28$ ($SD=7.82$). Of the total number of wives, 17.64% had elementary school education, 47.62% high school education and 34.70% were college or university graduates. Of the total number of husbands, 27.64% had elementary school education, 42.05% high school education and 30.31% were college or university graduates. The average duration of their marriages was $M=12.31$ years ($SD=7.68$). The average net salary for wives was: $M=2,982$ kunas ($SD=1,850$) or 500 USA \$ and for husbands it was $M=3,551$ kunas ($SD=2,490$) or 600 USA \$.

Variables and measures

Two variables representing family income and variable number of children in the family were included in the study as independent or exogenous variables, while five variables representing marriage processes were included as dependent or endogenous ones.

Exogenous variables

1. *Wife's income*. This variable is an interval scale representing net income a month (after deductions).
2. *Husband's income*. This variable is an interval scale representing net income a month (after deductions).
3. *Number of children in the family*. This variable is an interval scale with the lowest value of 0 and the highest of 4.

Endogenous variables

1. *Economic stress*. This variable was measured by a scale developed by Pearlin et al. (1981). The scale measures experience of economic stress and consists of 8 items. The sample of items: "Do you have difficulties in paying utility bills? Do you have enough money for the kind of food your family should have?" The sum of all checked "Yes" responses represented intensity of economic stress. Obtained internal consistency Cronbach α for wives was $\alpha = .94$, and for husbands $\alpha = .95$. According to the results of principal component analysis the scale is one-dimensional. Data on the variables were obtained separately for each marital partner.

2. *Depression of marital partners*. The variable is a latent structure representing depression at a dyad level. Both the wife's and husband's depression were significantly loaded on the latent variable. For obtaining depression at the dyad level,

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the CES-D scale (Radloff, 1977) was used consisting of 20 items with a 4 point format ranging from: 1) never or rarely to 4) always or most of the time. A sample of items: "I was bothered by things that usually do not bother me; I had trouble keeping my mind on what I was doing". Obtained internal consistency Cronbach $\alpha = .87$ for wives and $\alpha = .90$ for husbands. The scale measured three factors: 1. sadness, 2. inability to enjoy life, 3. feeling of being socially rejected.

3. *Marital intimacy as experienced by marital partners.* This variable was measured by the Marital Intimacy Scale developed by Schafer and Olson (1981). It comprises five subscales measuring emotional, social, sexual, intellectual and recreational intimacy between marital partners. Each subscale is of six-item five-point interval format. A sample of items: "My partner can really understand my hurts and joys; Sexual expression is an essential part of our relationship". Total score representing marital intimacy was obtained by summing up scores on all subscales. Internal consistency Cronbach $\alpha = .95$ for wives, $\alpha = .94$ for husbands. Principal component analysis showed that each of the subscales is one-dimensional.

4. *Marital strain.* This variable is measured by a marital strain subscale, a part of Family Inventory of Life Events and Changes (McCubbin et al., 1996) consisting of 5 items with Yes = 1 and No = 0 format. Sample of items: "Recently I had some difficulties in sexual relationships with my marital partner; I had increased difficulty with former or separated spouse". Obtained internal consistency Cronbach representing the trachoric correlation was $\alpha = .95$ for wives and $\alpha = .97$ for husbands. The scale was one-dimensional.

5. *Marital quality as experienced by marital partners.* This variable was measured by MQI (Marital Quality Index) developed by Norton (1983). The scale has been previously used and validated (Heyman et al., 1994). It consists of six items of five-point format. Sample of items: "We have a good marriage; My relationship with my partner makes me happy". Internal consistency Cronbach α was $\alpha = .96$ for both wives and husbands and the scale was one-dimensional.

Overview of the analysis

The initial structural model (see Figure 1) was evaluated in stepwise fashion using the EQS program (Bentler & Wu, 1995, version 7b released 1998), separately for wives and husbands. The final structural models were fitted by adding standardized paths that were statistically and theoretically sound on the basis of the Lagrangian Multiplier test. The covariance matrix was used as an input. Missing data were substituted by

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means of the corresponding variable (less than two percent of the data were missing) and ML ROBUST for non-normal data was applied as a method of parameter estimation. Fit of the models was assessed by multiple indices. Chi-square and degrees of freedom are reported for each model.

Four measures of fit were used to supplement chi-square: the comparative fit index (CFI), Bentler-Bonett non-normed fit index (NNFI), Bentler-Bonett normed fit index (NFI) and Root mean-square error of approximation (RMSEA).

RESULTS

Descriptive statistics

Seven out of eight variables included in our model are measurement variables and one variable is latent structure, which was derived from two measurement variables, i.e. wife's and husband's depression. The independent variable, number of children in the family was broken down into 5 categories: according to the obtained results 17.94% of the couples were childless, 37.96% had one child, 36.76% had two children, 6.76% had three, and fewer than 1% had 4 children. For the rest of the variables included in this study, descriptive statistics are presented in Table 1.

TABLE 1
Descriptive statistics
for study variables

Variable	Wives				Husbands			
	M	SD	Skew	Kurtosis	M	SD	Skew	Kurtosis
Income	2.982	1.850	2.42	10.61	3.551	2.490	3.40	16.84
Economic stress	5.23	2.40	-.64	-.65	4.99	2.57	.55	-.93
Depression	39.77	10.11	.70	.21	37.34	9.29	.25	1.60
Marital intimacy	104.01	17.10	-1.16	3.96	104.77	17.39	-1.52	6.79
Marital strain	1.78	3.78	2.68	8.64	1.15	2.30	2.52	7.85
Marital quality	23.06	5.80	-1.25	2.30	23.51	5.48	-1.60	4.31

Note: N=340

Results obtained for husbands and wives on most of the variables are very similar, except for the income variable. Husbands' salaries were higher than their wives' salaries, a result that has been consistently obtained in previous studies. The skewness and kurtosis indicators on some variables, in particular on the variable income, are quite high, indicating that income and some other variables are not normally distributed. This was taken into consideration when deciding what method of analysis should be used for verifying the theoretical model.

As we can see in table 2 and 3, intercorrelations among independent variables for both models are small and nonsi-

gnificant, but there are many significant correlations among family processes variables. In particular, a high, positive and significant correlation was obtained for both husbands' and wives' model between the variables marital intimacy and marital quality. Also, a positive and significant correlation was obtained between husbands' and wives' depression, the wives' depression and husbands' marital strain. It is important to note that there was a negative and significant correlation between wives' economic stress, wives' and husbands' income and wives' depression. Likewise, there was negative and significant correlation between husbands' income and economic stress.

TABLE 2
Intercorrelations
among variables
included in wives'
model

TABLE 3
Intercorrelations
among variables
included in husbands'
model

Variable	1	2	3	4	5	6	7	8	9
1 Number of children in the family	-								
2 Wives' income	.100	-							
3 Husbands' income	.030	.143	-						
4 Wives' depression	.030	-.085	-.023	-					
5 Husbands' depression	-.069	-.011	-.050	.367**	-				
6 Wives' marital intimacy	-.080	-.070	-.031	.318**	-.204*	-			
7 Husbands' marital strain	-.060	-.024	-.062	-.063	.305**	-.254**	-		
8 Wives' economic stress	.041	-.318**	-.207*	-.207*	.224*	.164	.164	-	
9 Wives' marital quality	-.061	.016	.050	.047	-.210*	.755**	-.286*	-.118	-

Note: * p<.05, ** p<.001

Variable	1	2	3	4	5	6	7	8	9
1 Number of children in the family	-								
2 Wives' income	.100	-							
3 Husbands' income	.061	.143	-						
4 Wives' depression	.001	-.080	-.020	-					
5 Husbands' depression	-.060	-.010	-.050	.370**	-				
6 Husbands' marital intimacy	-.060	-.090	-.040	-.190	-.225**	-			
7 Wives' marital strain	.020	-.020	-.090	.320**	.160	-.234**	-		
8 Husbands' economic stress	.102	-.141	-.280**	.122	.235**	-.123**	.061**	-	
9 Husbands' marital quality	.040	.042	-.001	-.190	-.254**	.621**	-.345**	-.090	-

Note: * p<.05, ** p<.001

Evaluation of the model

Wives

First we shall try to evaluate how the model presented in Figure 1 fits the data for wives. The EQS Structural Equation Modeling Program, using ML ROBUST path estimation for

asymmetrically distributed data was used. After several model modifications the following results were obtained: $\chi^2 (21, N=340)=28.10, p>.05$. Sattora-Bentler $\chi^2 (21, N=340)=25.52, p>.05$. NFI=.948, NNFI=.976, CFI=.986 and RMSEA=.000, which shows perfect match between the model and the data. Relationships among variables entered into the model are presented in Figure 2.

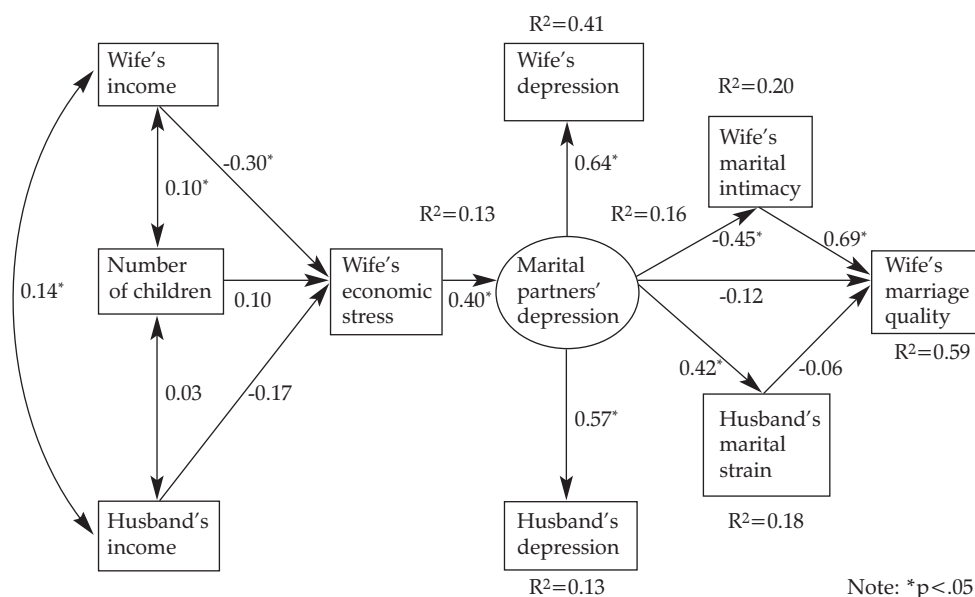


FIGURE 2
Marital partners'
income and wife's
marriage quality

As assumed there is positive relationship between the wife's and husband's income ($\beta = .14, p<.05$). There is a negative and significant path between wives' income and wives' economic stress ($\beta = -.30, p<.05$), negative and significant path between husbands' income and wives' economic stress ($\beta = -.17, p<.05$), but there is no significant direct path between variable number of children in the family and wives' economic stress. This relationship exists only indirectly through wives' income. Evidently, both wives' and husbands' income has impact on the wives' experience of economic stress. The lower the income of both marital partners, the higher the wives' experience of economic stress.

There is a positive and significant path between wives' economic stress and latent structure variable depression of marital partners ($\beta = .40, p<.05$). In other words, the more wives experience economic stress, the more both partners will experience depression.

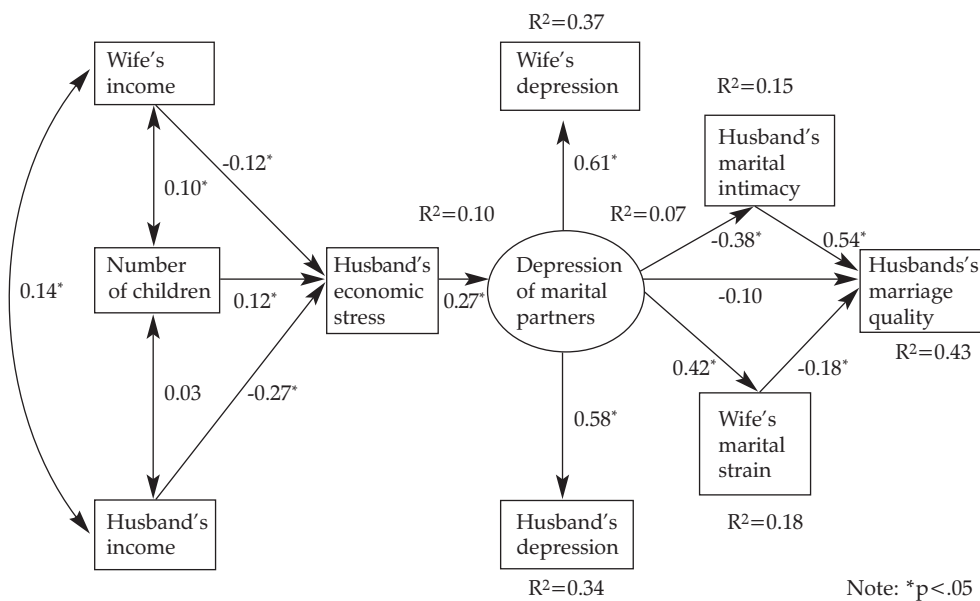
There is a significant and negative path between the latent structure variable depression of marital partners and variable wives' marital intimacy ($\beta = -.45, p <.05$), and positive and significant path between variable depression of marital partners and husbands' marital strain ($\beta = .42, p<.05$). In other words, the

more both partners are depressed, the less marital intimacy wives will experience and more marital strain husbands will experience. It is interesting to note that there is no direct significant path between the variable *depression of marital partners* and variable *wives' marital quality*. Finally, there is a significant and positive path between variable *wives' intimacy* and variable *wives' marital quality* ($\beta = .69, p < .05$).

We were able to explain 59% of the variance of dependent variable *wives' marital quality* by this mediation model.

Husbands

The same procedure as above was repeated to test how the model in Figure 1 fits the data for husbands. After two model modifications the following indices were obtained: $\chi^2 (21, N=340)=35.05, p > .05$, Satorra-Bentler $\chi^2 (21, N=340)=30.21, p > .05$, NFI=.912, NNFI=.933, CFI=.961 and RMSEA=.04, demonstrating excellent match between the model and the data. The model is presented in Figure 3.



Note: * $p < .05$

FIGURE 3
 Marital partners' income and husband's marriage quality

According to the obtained results, similarly as in the wives' model, there is a significant negative path between *wives' income* and *husbands' economic stress* ($\beta = -.12, p < .05$), and *husbands' income* and *husbands' economic stress* ($\beta = -.27, p < .05$). In contrast to the wives' model, there is a direct and significant path between variable *number of children in the family* and *husbands' economic stress* ($\beta = .12, p < .05$) and there is also an indirect path between the variable *number of children in the family* and *husbands' economic stress*, because there is an interaction between variables *wives' income* and *number of children in the fa-*

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mily ($\beta = .10$, $p < .05$). As we can see in Figure 3, the more a husband experiences economic stress, the more both partners will be depressed ($\beta = .27$, $p < .05$). The variable *depression of marital partners* affects *husbands' intimacy* ($\beta = -.38$, $p < .05$) and *wives' marital strain* ($\beta = .42$, $p < .05$). Finally, these two variables are related to *husbands' marital quality*, because there is a direct positive and significant path between *husbands' intimacy* and *husbands' marital quality* ($\beta = .54$, $p < .05$) and a direct negative and significant path between the variable *wives' marital strain* and *husbands' marital quality* ($\beta = -.18$, $p < .05$).

According to this mediation model, 43% of the variance of dependent variable *husbands' marital quality* has been explained. We should also emphasize, that as well as in the wives' model, the variable *depression of marital partners* does not directly affect the dependent variable *husbands' marital quality*.

DISCUSSION

As expected, a positive relationship between a husband's and wife's income was obtained. Generally speaking, the economic situation in the country is evidently reflected in the economic stress both marital partners experience. More specifically, according to the obtained results, those marital partners who have lower incomes experience greater economic stress, so hypotheses 2 and 3 were confirmed. However, there are some gender differences in this respect. While lower income creates an intensive experience of economic stress for both marital partners, the number of children in the family directly affects husbands' economic stress. Such results were not obtained for wives, so hypothesis 4 was only partly confirmed. These gender differences might be explained by husbands' stronger identification as main providers, their greater subjective responsibility to provide for the family, especially in families with more children, and their experience of stress if they fail to do so.

In hypothesis 5, we assumed a negative relationship between the variables *husband's and wife's income* and the variable *number of children in the family*. It turned out that our hypothesis was wrong, so hypothesis 5 was rejected. The common belief according to which there are more children in the low income families evidently should be modified. Our results show that there is a positive relationship between *number of children in the family* and the variable *wife's income*.

Some previous studies have confirmed the relationship between intensity of *economic stress* and *depression* as experienced by marital partners at an individual level (Conger et al., 1990). Having in mind that psychologically marriage is primarily a relationship between marital partners, it is desirable, perhaps even indispensable, to take into consideration how

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economic stress as experienced by each marital partner is related, or contributes to the intensity of *depression* in the marital unit, i.e. the *depression* at the dyad level. According to the obtained results, *economic stress* as experienced by individual marital partners affects depression as experienced by both partners, so hypothesis 6 was confirmed. Depression at the dyad level turned out to be more indicative, reflecting both marital interaction and spillover effects. The hypotheses 7 and 8 posited that dyad level *depression* would be negatively reflected in marital intimacy, while increasing at the same time marital strain as experienced by both husband and wife. This assumption proved to be correct, confirming hypotheses 7 and 8. Previous research studies on the relationship between economic stress and depression have not included the variables marital intimacy or marital strain, focusing on variables such as irritability and anxiety. We consider marital intimacy and strain to be process variables that more directly predict marital quality as experienced by marital partners.

Hypothesis 9 was not confirmed, as there was no significant path between the variable *marital partner's depression* and variable *marriage quality* as experienced by husbands and wives. Depression at the dyad level affects *wife's marriage quality* only indirectly via marital intimacy and *husband's marriage quality* via marital intimacy and marital strain.

In this respect, hypothesis 10 was completely, and hypothesis 11 only partly confirmed. For both marital partners the variables *marital intimacy* and *marital strain* proved to be predictive for marital quality. *Marital intimacy* is positively related to *marital quality*; the more marital intimacy partners experience, the more they will be satisfied in marriage. As far as marital strain is concerned the situation is different. Marital strain as experienced by the husband does not affect the wife's marriage quality.

Generally, many different theoretical models on the relationship between income, economic stress and marriage quality could be constructed: the model presented in Figure 1 is only one of many possibilities. The obtained results demonstrate that with some minor modifications this theoretical model is adequate explanation of the relationship between marital partners' income and marriage quality. Most of the hypotheses turned out to be correct while all the χ^2 -es and fitting indices proved to be satisfactory. Our research results clearly show that marital partners' income does affect the marriage quality through different marital processes. However, this is a well known fact that has been proved in previous research (Kinnunen & Pulkkinen, 1998; Kwon et al., 2003). The specific contribution of this study is that we have included both objective and subjective measures of economic

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power of the family, that we have assumed a spillover between individual and dyad level variables, and finally, that we have included marital process variables (marital intimacy and strain), so that we were able to explain a larger proportion of variance of the variable marriage quality in comparison to some earlier studies (Conger et al., 1990, Kinnunen & Pulkkinen, 1998; Kwon et al., 2003) in which personal variables such as anxiety and irritability were included in the mediation model. Also our study was conducted in a different socio-cultural setting from the studies carried out in USA, Finland, Korea and Czech Republic. Nevertheless, our results are similar to those obtained in other studies, pointing to the generalizability of conclusions in different social contexts. However, one should keep in mind that all the studies cited, including our own, were conducted in a situation of economic crisis that caused massive economic hardship to a great number of families. The cited research studied families during and after the Great Depression (Komarovsky, 1940), or during economic recession in the 80-ies (Conger et al., 1990) in USA, or in Finland during the recession in the 1990s, in the Czech Republic at the beginning of economic and political transition of the 90s, in Korea during deep recession at the end of the 90s, while our study was performed in spring 1999, during recession and economic recovery from the post-war period in Croatia. All these studies showed that family income was a very important predictor of marriage quality during social and economic crises in various societies. It is still an open question as to what would be the influence of marital partners' income on marriage quality in a so-called normal economic and social situation. There are only a few such studies (Broman & Forman, 1997; Rogers & Amato, 1997) so it is difficult to draw any general conclusions.

In spite of the specific contributions of our study, there are also some limitations, the most important of which is the lack of longitudinal data.

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Dohodak bračnih partnera kao odrednica bračne kvalitete

Josip OBRADOVIĆ
Zagreb

Mira ČUDINA-OBRADOVIĆ
Učiteljski fakultet, Zagreb

Konstruiran je teoretski model o djelovanju dohotka bračnih partnera na njihov doživljaj bračne kvalitete. Model se sastoji od 3 nezavisne i 5 zavisnih varijabli. Sedam varijabli su tzv. mjerljive ili opažene, dok jedna varijabla predstavlja latentnu dimenziju. Model je provjeren zasebno za muševce i za žene na 340 zaposlena bračna para u punom radom odnosu. Uzorak je reprezentativan za Grad Zagreb i Zagrebačku županiju s obzirom na muševce obrazovanje. Za provjeru modela upotrijebljen je SEM statistički postupak. Nakon nekoliko modifikacija modela dobiveni χ^2 i ostali indeksi primjerenosti pokazali su vrlo dobro slaganje između modela i podataka. Prema postignutim rezultatima dohodak bračnih partnera djeluje na doživljaj kvalitete braka muža i žene.

Ključne riječi: dohodak bračnih partnera, ekonomski stres, depresija, bračni stres, bračna kvaliteta

Das Einkommen der Ehepartner als Determinante für die Qualität der Ehe

Josip OBRADOVIĆ
Zagreb

Mira ČUDINA-OBRADOVIĆ
Lehrerakademie, Zagreb

Die Verfasser haben ein theoretisches Modell konstruiert, um zu zeigen, wie sich das Einkommen der Ehepartner auf deren Einschätzung zur Qualität des Ehelebens auswirkt. Das Modell besteht aus drei unabhängigen und fünf abhängigen Variablen. Sieben Variablen sind sog. messbare oder beobachtete Variablen, während eine der Variablen

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eine latente Dimension darstellt. Das Modell wurde in einer Umfrage unter 430 Ehepaaren geprüft, in denen beide Partner einer Vollzeitbeschäftigung nachgehen; Frauen und Männer wurden gesondert befragt. Die Umfrageteilnehmer sind im Hinblick auf den Bildungsgrad des männlichen Ehepartners repräsentativ für die Stadt Zagreb sowie die Gespanschaft Zagreb. Zur statistischen Auswertung der Ergebnisse wurde das SEM-Verfahren angewandt. Nach einigen Modifizierungen des untersuchten Modells zeigten der χ^2 -Index sowie übrige Indexe eine sehr gute Übereinstimmung zwischen dem Modell und den erhaltenen Angaben. Gemäß den Ergebnissen beeinflusst das Einkommen der Ehepartner die Art und Weise, wie die Qualität der Ehe von diesen erlebt wird.

Schlüsselwörter: Einkommen der Ehepartner, wirtschaftlich bedingter Stress, Depression, Ehestress, Qualität des Ehelebens