Economic Strain and Subjective Well-Being in Married Couples With Children: A Dyadic Analysis

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Abstract

The aim of this dyadic study was to investigate whether the economic strain (i.e., perceived deterioration of the financial situation and difficulty to respond to family obligations) experienced by married couples with children relates to their satisfaction with life, and whether marital satisfaction and parental self-efficacy mediate this relationship. To this end, we took both actor (i.e., partners’ economic strain was expected to relate to their own life satisfaction via their own marital satisfaction and parental self-agency), as well as partner (i.e., partners’ economic strain was expected to relate to their spouses’ life satisfaction via their spouse’s marital satisfaction and parental self-agency) effects into account. A total of 134 married couples with children participated in the study. Dyadic analyses revealed that wives’ perceived difficulty to respond to family obligations related to their husbands’ life satisfaction, via their husbands’ parental self-agency. Moreover, annual family income related negatively to wives’ life satisfaction, via wives’ difficulty to respond to their family obligations. In addition, husbands’ deterioration of their financial situation related negatively to their life satisfaction, via their marital satisfaction. Last but not least, husbands’ deterioration of their financial situation related negatively to their wives’ marital satisfaction and parental self-agency. These findings have important implications for counseling because they suggest that married couples’ subjective well-being suffers in times of financial turmoil, while gender differences determine the psychological processes through which economic strain relates to husbands’ and wives’ life satisfaction.

Keywords: economic strain, dyadic analysis, life satisfaction, marital satisfaction, parental self-agency

Introduction

The global financial crisis that began in 2008 is considered to be the most significant, in terms of societal impact after the ‘Great Depression’ (Rollero & Tartaglia, 2009). The aftermath of the financial crisis has been particularly unfavorable in Greece, given that the annual income of Greek citizens has decreased by more than 25% since 2008 (Anagnostopoulos & Soumaki, 2013). The economic strain that has been experienced ever since the crisis has started, was found to associate with sharp declines in individuals’ life evaluation, sharp increases in worry and stress, and declines in positive affect (Deaton, 2012). Considering that a family’s financial situation relates closely to the perceived economic strain of its members, it has been suggested that the economic strain of spouses is a key determinant of family members’ relationship quality and well-being (Mills, Grasmick, Stout Morgan, & Wenk, 1992). Nevertheless, previous studies have largely neglected the interdependency of spouses within married couples, thus, failing to capture the psychological processes through which economic strain relates to spouses’ well-being in an accurate way (Cook & Kenny, 2005).
To cover this gap in the literature, in the present study, among married couples with children, we examine the psychological mechanisms that explain the link between economic strain and life satisfaction. We take the issue of interdependency within couples into account by focusing, not only on how a spouse’s perceived economic strain relates to his/her own life satisfaction (i.e., actor effects), but also by investigating whether a spouse’s economic strain relates to his/her partner’s life satisfaction, as well (i.e., partner effects; Kenny, Kashy, & Cook, 2006). In line with the Conservation of Resources (COR; Hobfoll, 1989) theory, we propose that perceived economic strain due to loss of financial resources will enact feelings of inability to control family demands successfully, thus, resulting in spouses’ dissatisfaction with life. To this end, we focus on two mediators that may explain the relationship between economic strain and life satisfaction, marital satisfaction (Azrin, Naster, & Jones, 1973) and parental self-agency (Dumka, Stoerzinger, Jackson, & Roosa, 1996), that may be considered indicative of spouses’ (un)successful adaptation to family demands.

Economic Strain and Life Satisfaction

Perceived economic strain may be seen as a general construct that refers to an individual’s perception of financial inadequacy, as well as, his or her financial concerns and worries. Following Lucas and Donnellan (2007), we operationalize economic strain on the basis of two indicators of financial hardship: (a) deterioration of one’s financial situation due to income reduction, and (b) one’s inability to pay his/her bills and to meet his/her obligations in general. The latter is termed difficulty to respond to family financial obligations. The main aim of this study is to explain how and why perceived economic strain relates to one’s own, as well as his/her spouse’s subjective well-being. Diener (2000) defined subjective well-being as the cognitive and affective evaluations that people make about their lives. Despite the fact that subjective well-being is a multi-dimensional construct that encompasses different well-being indicators, in the present study we focus on overall life satisfaction, since it captures both affective and cognitive evaluations of one’s life. Furthermore, overall life satisfaction was found to determine important life decisions (Wirtz, Kruger, Scollon, & Diener, 2003), while it often has been the outcome of interest in studies focusing on the link between income and/or economic strain and well-being (e.g., Deaton, 2008; Diener & Biswas-Diener, 2002; Stevenson & Wolfers, 2013).

COR theory (Hobfoll, 1989) suggests that individuals strive to preserve and protect their resources and to acquire additional resources in order to adapt successfully in the environment. The model identifies four different kinds of resources: objects (e.g., shelter, food, transportation), conditions (e.g. marriage, employment), personal characteristics (e.g. self-esteem, optimism, sense of mastery), and energies (e.g. time, money, knowledge). All of these resources are important, not only for their instrumental value, but also for their value in aiding stress resistance. According to COR theory, individuals experience stress and impairments in well-being, when their resources are lost or threatened, and when they invest resources but fail to enrich their resource reservoir. In line with COR theory, perceived economic strain may be seen as a threatening condition because it concerns the loss of financial resources. Adequate income provides people with the means to cover basic needs such as the need for food or shelter. Perceived economic strain that relates to income reduction may prevent spouses’ from satisfying these basic family needs that may, in turn, harm their satisfaction with life. Importantly, in times of financial turmoil, the chance to invest other resources (e.g., family support) in order to recover from the loss of financial resources is highly unlikely, thus, making the impact of this resource loss more prominent. In line with this theoretical analysis, previous studies have supported the negative relationship between perceived economic strain and life satisfaction (Deaton, 2008; Diener & Biswas-Diener, 2002; Sacks, Stevenson, & Wolfers, 2012; Stevenson & Wolfers, 2013).
The Mediating Role of Marital Satisfaction

To better understand how economic strain is associated with couples' life satisfaction, we investigate the role of potential mediators in this relationship. We propose that marital satisfaction could be such a mediator, since it has been found to relate positively to both partners' happiness and life satisfaction (Bradbury, Fincham, & Beach, 2000; Dyrdal, Roysamb, Nes, & Vitterso, 2011). In contrast, partners, who face problems with their marriage, are likely to evaluate their life as less satisfying, since the quality of close personal relationships is central in adulthood (Myers, 2003).

Economic strain has been argued to associate with spouses' satisfaction with their marriage (Dakin & Wampler, 2008). People who experience high levels of financial pressure, as a result of either unemployment or prolonged economic downturn, are more likely to feel less satisfied with their marriage compared to those who experience lower financial pressure. A reason for this could be that financial pressure increases emotional distress between spouses and disrupts levels of communication among them (Cutrona et al., 2003; Falconier & Epstein, 2011; Kwon, Rueter, Lee, Koh, & Ok, 2003; Lucas & Donnellan, 2007). Indeed, economic strain has been found to increase fights between spouses (Conger, Rueter, & Elder, 1999; Kwon et al., 2003), hostility (Gudmunson, Beutler, Israelsen, McCoy, & Hill, 2007), levels of aggression (Falconier & Epstein, 2010) and the undermining of one another (Vinokur, Price, & Caplan, 1996).

The Mediating Role of Parental Self-Agency

Another factor that may explain the relationship between economic strain and life satisfaction is parental self-agency (i.e., a concept similar to parental self-efficacy). Parental self-agency refers to the parents' overall confidence in their ability to act successfully in the parental role, including perceptions of their ability to control their child's behaviors and to resolve problems that they have with their children (Dumka et al., 1996). Although there is empirical evidence supporting the positive relationship between generalized self-efficacy and life satisfaction (Bandura & Locke, 2003; Çakar, 2012; Caprara, Steca, Gerbino, Paciello, & Vecchio, 2006; Capri, Ozkendir, Ozkurt, & Karakus, 2012; Coffman & Gilligan, 2002; Magaletta & Oliver, 1999), the relationship between parental self-efficacy and life satisfaction has not been investigated in depth. The few available studies showed that parental self-efficacy relates positively with life satisfaction, indicating that as the level of parental self-efficacy increases, parents' are more satisfied with their life (Jones & Prinz, 2005; Nelson, Kushlev, & Lyubomirsky, 2014; Ohan, Leung, & Johnston, 2000).

Furthermore, a number of studies have shown that economic strain is associated with the expression of hostile and harsh parenting behaviors (Conger, Ge, Elder, Lorenz, & Simons, 1994; Lempers, Clark-Lempers, & Simons, 1989; Mistry, Vandewater, Huston, & Mcloyd, 2002; Simons, Lorenz, Conger, & Wu, 1992), while Elder (1995) found that economic strain relates negatively with parental self-efficacy. In particular, she showed that parents who experience economic strain, feel that their ability to contribute to the proper development of their children is undermined, as they are not able to afford their children's needs and desires. Moreover, Elder, Eccles, Ardelt, and Lord (1995) found that single parents, who experienced high levels of economic strain, were less confident about their parental role. Last but not least, Mistry, Vandewater, Huston, and Mcloyd (2002) examined American minority families with serious financial difficulties. They found that African-American and Hispanic participants experiencing high levels of economic strain, felt less effective as parents and less able to implement good practices and consistent discipline to their children. The same researchers also found that parents, who were depressed...
with their financial situation and encountered difficulties in responding to their financial obligations, expressed
less warm feelings towards their children.

All in all, these findings suggest that spouses, who experience loss of financial resources, feel less efficacious in
dealing with their parenting role, that in turn, may result to lower life satisfaction. This is in line with the main as-
sumptions of COR theory (Hobfoll, 1989), according to which, resource loss initiates a negative loss spiral that is
detrimental for well-being.

The Present Study

The central aim of this study, among married couples with children, is to unfold the process through which perceived
economic strain relates to life satisfaction. To this end, we propose that marital satisfaction and parental self-
agency function as mediators in this relationship. Cook and Kenny (2005) supported that romantic relationships
are characterized by interdependence, as partners may influence each other’s thoughts, emotions, and behaviors.
In order to capture and understand this interdependency within- and between-spouses, we disentangle actor from
partner effects. Accordingly, actor effects examine whether one’s life satisfaction is determined by his or her own
economic strain and consequently, his/her own marital satisfaction and parental self-agency. Partner effects assess
whether one’s life satisfaction is a function of his or her spouse’s economic strain, and consequently the spouse’s
marital satisfaction and parental self-agency. Based on the theory of crossover (Westman, 2001), we expect
partner effects to occur because one partner’s psychological experiences may impact the other partner directly
(through mimicking or empathetic concern). Namely, a wife, whose husband experiences high levels of economic
strain, may empathize with him and feel low levels of parental self-agency because she may believe that she
cannot compensate for the lost resources of her husband. In a similar vein, Demerouti, Bakker, and Schaufeli
(2005) supported the crossover of life satisfaction from husbands to their wives. Nevertheless, because of the
limited empirical evidence on partner effects of the proposed nature, the hypotheses that concern partner effects
are of exploratory nature. On the basis of the above theoretical analysis and empirical evidence, we hypothesize:

**Hypothesis 1a**: Perceived difficulty to meet the family’s financial obligations will relate negatively to one’s
own life satisfaction through one’s own marital satisfaction and parental self-agency.

**Hypothesis 1b**: One’s own perceived difficulty to meet the family’s financial obligations will relate to
his/her partner’s life satisfaction through his/her partner’s marital satisfaction and parental self-efficacy.

**Hypothesis 2a**: Perceived deterioration of the economic situation will relate negatively to one’s own life
satisfaction through one’s own marital satisfaction and parental self-agency.

**Hypothesis 2b**: One’s own perceived deterioration of the economic situation will relate negatively to
his/her partner’s life satisfaction through his/her partner’s marital satisfaction and parental self-efficacy.

Considering that income strongly relates to perceived economic strain (Mills et al., 1992), we have included annual
family income as a control variable in our analyses, by accounting for its relationship with difficulty to respond to
family obligations of husbands and wives (i.e., one of the two indicators of perceived economic strain). The hy-
pothesized model and study design are depicted in Figure 1.
Figure 1. The hypothesized model and study design.

Note. H = Husband; W = Wife; e = error. Straight lines concern actor effects; Dotted lines concern partner effects. Correlations between residual errors of mediators, correlations between Family Income and Deterioration of Financial Situation of Husbands and Wives, as well as correlations between Deterioration of Financial Situation and Difficulty to Respond to Family Obligations within partners and across partners, were eliminated from the figure to avoid complexity.

Method

Procedure and Participants

After obtaining permission from the directors of six public primary schools from the greater area of Thessaloniki, Greece, we informed the parents of the students about the topic of the study and invited them to participate. Study participation was voluntary and optional. The parents who agreed to participate in the study, received sealed envelopes that contained two questionnaires: one for the husband and one for the wife. Husbands and wives were asked to fill in their questionnaire independently. Respondents returned their questionnaires in sealed envelopes that were placed in return boxes located in the schools. The completion of the questionnaires required not more than 15 minutes.

Participants were 134 married couples ($N = 268$), with a mean age of 43.3 years ($SD = 5.46$) for men and 40.7 years ($SD = 5.44$) for women. The couples were married for 13.31 years ($SD = 6.25$) on average, and were parents of one to eight children ($M = 2.07$, $SD = 0.88$). The majority of both men (92.5%) and women participants were
employed (56.7%) at the time that the study took place. Regarding participants’ level of education, 46.6% were secondary school graduates, and 40.3% were university graduates.

**Measures**

*Annual Family Income.* To evaluate participants’ annual family income, we have used the following question: “Where would you place your current annual family income (including all possible economic sources, such as salaries, pensions, rents etc.)?” Participants provided their answers on a five-point scale ranging from (1) = Less than 10,000€ to (5) = More than 40,000€. The husbands and wives’ responses to this question correlated perfectly ($r = .99$, $p < .01$), suggesting absolute agreement across raters. Thus, we have only used husbands’ responses as indicators of family income in our main analyses.

*Economic Strain* was operationalized by means of *Deterioration of Personal Financial Situation* and by means of the *Difficulty to Respond to Family Obligations*. *Deterioration of Personal Financial Situation* was assessed with the following question that has been developed for the purposes of the present study: “In case your financial situation has been altered over the past three years, how did it alter?”. Participants provided their answers on a four-point scale ranging from (1) = My financial situation became much better to (4) = My financial situation became much worse. *Difficulty to Respond to Family Obligations* was assessed with the following question that has been developed for the purposes of the present study: “How do you meet the financial obligations of your family?”. Participants provided their answers on a five-point scale ranging from (1) = Very Easily to (4) = Very Hard.

*Life Satisfaction* was assessed with the Greek version *(Lyrakos et al., 2013)* of the Satisfaction with Life Scale that has been developed by *Diener, Emmons, Larsen, and Griffin (1985)*. This is a five-item scale that measures global satisfaction with life (e.g., “In most ways my life is close to my ideal”). Participants provided their answers on a 7-point scale, with higher values corresponding to a higher degree of life satisfaction. Total scores could range from 5 to 35. The scale reliability for this study was satisfactory (Cronbach’s $\alpha = .89$).

*Marital Satisfaction* was assessed with the 9-item Marital Happiness Scale *(Azrin et al., 1973)* that has been translated and validated in Greek by *Heinz (1995)*.This scale measures satisfaction with different aspects of one’s marriage and particularly: household responsibilities, rearing of children, social activities, money, communication, sex, occupational progress, personal independence and overall marital happiness. An example item is: “If my partner continues to act in the future as he/she is acting today in household responsibilities, how happy will I be?”. Participants provided their answers on a 10-point scale ranging from (1) = “Completely Dissatisfied” to (10) = “Completely Satisfied”. The total score is calculated and divided by 2 to represent a level of overall marital satisfaction, ranging from 1 to 5, with higher values corresponding to a higher degree of marital satisfaction. The Cronbach’s $\alpha$ of the scale for this study was excellent ($\alpha = .94$).

*Parental Self-Agency* was measured with the 5-item Parenting Self-Agency Measure *(Dumka et al., 1996)*. This instrument measures the overall parenting self-agency/self-efficacy (e.g., “I feel sure about myself as a parent”). Participants provided their answers on a 5-point scale ranging from (1) = “Almost Never” to (5) = “Almost Always”. The total score is calculated to represent a level of parental self-efficacy, with higher values corresponding to a higher degree of parental self-efficacy. The scale has been translated into Greek, by the authors, by using back-translation techniques. The Cronbach’s $\alpha$ of the scale for this study was very good ($\alpha = .80$).
Analytical Strategy

The central proposition of this study is that husbands and wives’ perceptions of their economic strain determine their own, as well as their partners’ subjective well-being. Our study design follows a hierarchical structure, where husbands and wives are nested within couples (i.e., dyads). Such dyadic data are non-independent, meaning that the experiences of partners, within a certain couple, are more alike than the experiences of partners belonging to different couples (Kenny, 1996). In order to account for this non-independence, we performed dyadic analyses for dyads with distinguishable members (i.e., husbands vs. wives) (Kenny et al., 2006). Dyadic analyses allow estimating whether husbands’ perceived economic strain relates to their own (i.e., actor effects), as well as their wives’ (i.e., partner effects) outcome variables, and whether wives’ economic strain relates to their own (i.e., actor effects) and to her husband’s (i.e., partner effects) outcome variables. Since we were interested in testing both actor and partner effects in this study, dyadic analyses are considered appropriate.

Our dyadic model was estimated by means of path analyses (Kenny et al., 2006), with the AMOS 20 software (Arbuckle, 2011). Our data have been organized with the dyad structure, where there was a single unit for each dyad. In order to achieve model parsimony while testing all hypothesized effects simultaneously in a single model, we have used manifest variables for all examined constructs. In line with the recommendations of Kenny and colleagues, and in order to capture the non-independence within each couple, all predictor variables were allowed to correlate within partners and across partners. Namely, we correlated the residual errors of difficulty to respond to family obligations as rated by husbands and by wives, and we correlated the deterioration of financial situation as rated by husbands and by wives. We have also allowed deterioration of financial situation, as reported by husbands, to correlate with difficulty to respond to family obligations, as reported by both husbands and wives. Further, we correlated deterioration of financial situation, as reported by wives, with difficulty to respond to family obligations, as reported by both husbands and wives. Moreover, annual family income was allowed to correlate with difficulty to respond to family obligations, of both husbands and wives. Finally, the residual errors of all mediating and outcome variables were allowed to correlate within and across partners. All predictor variables (except income that referred to the couple level) were centered on the grand-mean across both men and women. The examined path model is depicted in Figure 1.

To test our hypotheses, a series of nested models were fitted to the data. Model fit was assessed with the chi-square ($\chi^2$) statistic and the related degrees of freedom (df), the goodness of fit index (GFI), the comparative fit index (CFI), the root mean square error of approximation (RMSEA) and the standardized root mean square residual (SRMR). A $\chi^2/df$ value < 3.00, and GFI and CFI values > .90 are indicative of a good fit (Brown, 2006), while RMSEA and SRMR values ≤ .08 indicate a reasonable fit to the data (Hu & Bentler, 1999). Mediating effects were tested by using bootstrap maximum-likelihood estimation with 2000 re-samples and 95% confidence intervals (CIs) around the indirect effects. Indirect effects are supported when CIs do not contain zero (Shrout & Bolger, 2002).

Results

Descriptive Statistics

Table 1 presents the means, standard deviations and correlations between the study variables. Table 1 shows that number of children per couple related significantly to the life satisfaction of both husbands and wives. Considering that our sample was imbalanced, in terms of number of children per couple, we have controlled for this
variable in our main analyses by including a manifest variable for number of children with paths to husbands’ and wives’ life satisfaction.

Table 1
Means, Standard Deviations, and Correlations Among the Study Variables, (N = 134 couples, N = 268 individuals)

| Variable                          | M    | SD   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Number of children per couple     | 2.07 | .89  | .     | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    |
| Employment Status                 | 1.51 | .57  | -.07 | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    |
| Annual Family Income              | 2.78 | 1.15 | .09  | -.41*| .    | .    | .    | .    | .    | .    | .    | .    | .    | .    | .    |
| Deterioration of Financial Situation (H) | 3.40 | .58  | -.06 | -.01 | -.21*| .    | .    | .    | .    | .    | .    | .    | .    | .    | .    |
| Deterioration of Financial Situation (W) | 3.34 | .55  | .01  | -.11 | -.25**| .70**| .    | .    | .    | .    | .    | .    | .    | .    | .    |
| Difficulty to Respond to Family Obligations (H) | 3.63 | .87  | .04  | .15  | -.57**| .43**| -.37**| .    | .    | .    | .    | .    | .    | .    | .    |
| Difficulty to Respond to Family Obligations (W) | 3.53 | .85  | .07  | .16  | -.47**| .35**| .48**| .66**| .    | .    | .    | .    | .    | .    | .    |
| Parental Self-Agency (H)          | 18.35| 3.22 | .07  | -.09 | -.23**| -.05 | -.12 | -.17* | -.27**| .    | .    | .    | .    | .    | .    |
| Parental Self-Agency (W)          | 19.72| 2.74 | .07  | -.07 | -.04  | -.23**| -.15 | -.13 | -.18**| .25**| .    | .    | .    | .    | .    |
| Marital Satisfaction (H)          | 3.46 | .99  | .04  | .08  | .14  | -.37**| -.23**| -.26**| -.28**| -.36**| -.13 | .    | .    | .    | .    |
| Marital Satisfaction (W)          | 3.40 | .97  | .01  | .04  | .11  | -.31**| -.27**| -.22**| -.28**| -.30**| .20*| .85**| .    | .    | .    |
| Life Satisfaction (H)             | 21.34| 6.44 | .18* | .08  | .27**| -.36**| -.31**| -.40**| -.38**| -.35**| .24**| .47**| .35**| .    | .    |
| Life Satisfaction (W)             | 22.37| 6.30 | .21* | -.13 | .29**| -.38**| -.43**| -.31**| -.46**| .31**| .38**| .38**| .45**| .49**| .    |

Note. H = Husband; W = Wife.
*p < .05. **p < .01.

Hypotheses Testing

To test our hypotheses, we compared the full mediation model (M1; see Figure 1) to a partial mediation model (M2), that was similar to the full mediation model with additional paths from all predictor variables (annual family income, difficulty to respond to family obligations of husbands and wives, and deterioration of family income of husbands and wives) to the outcome variables (i.e. life satisfaction of husbands and wives). Table 2 shows that the partial mediation model (M2) fitted significantly better than the full mediation model (M1), implying that there are certain direct effects that need to be taken into account, while testing the study hypotheses. However, investigation of the parameter estimates of M2 suggested that only one of the additional paths was significant, namely the path from wives’ difficulty to respond to family obligations to wives’ life satisfaction (β = -.25, p < .01). Thus, we tested a third, alternative model (M3; see Figure 2) that was similar to the full mediation model but also included this direct path. Table 2 shows that M3 fitted better to the data than M1. Although, M3 showed a worse fit to the data than M2, we considered M3 as the best fitting model because it is more parsimonious (i.e., does not include non-hypothesized paths that are not significant). M3 showed an acceptable fit to the data with all fit indices meeting the required criteria.
Figure 2. The final model.

Note. H = Husband; W = Wife. Straight lines concern actor effects. Dotted lines concern partner effects. Only significant paths are presented. Residual errors are not depicted to avoid complexity. The examined model also includes a control, manifest ‘Number of Children’.

*p < .05. **p < .01. ***p < .001.

Table 2
Results of Path Analyses (Maximum Likelihood Estimates; N = 134 couples, N = 268 individuals)

<table>
<thead>
<tr>
<th>Model/Model Comparison</th>
<th>χ²</th>
<th>df</th>
<th>χ²/df</th>
<th>GFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>SRMR</th>
<th>Δχ²</th>
<th>df</th>
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</thead>
<tbody>
<tr>
<td>Model</td>
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<tr>
<td>M1. Full Mediation</td>
<td>53.08</td>
<td>23</td>
<td>2.31</td>
<td>.94</td>
<td>.95</td>
<td>.10</td>
<td>.08</td>
<td>-</td>
<td></td>
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<tr>
<td>M2. Partial Mediation</td>
<td>12.11</td>
<td>13</td>
<td>0.93</td>
<td>.99</td>
<td>1.00</td>
<td>.00</td>
<td>.03</td>
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<td></td>
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<td>M3. Alternative Final*</td>
<td>38.94</td>
<td>22</td>
<td>1.77</td>
<td>.96</td>
<td>.97</td>
<td>.08</td>
<td>.06</td>
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<td></td>
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<tr>
<td>Model Comparison</td>
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<td></td>
<td></td>
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<tr>
<td>M1-M2</td>
<td>40.97***</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1-M3</td>
<td>14.14***</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>M2-M3</td>
<td>26.83**</td>
<td>9</td>
<td></td>
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</tbody>
</table>

Note. W = Wife; df = degrees of freedom; GFI = goodness-of-fit index; CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

*Full Mediation & Difficulty to Respond to Obligations W → Life Satisfaction W.

**p < .01. ***p < .001.

Table 3 presents path estimates of the final model (M3). It is important to note that all covariances in M3 were significant and in the expected direction, except for the covariances between the errors of wives’ parental self-agency and wives’ marital satisfaction, as well as husbands’ marital satisfaction and wives’ parental self-agency,
that were not significant. Annual family income related negatively and significantly to both husbands’ and wives’ perceived difficulty to respond to their family obligations (see Table 3).

Table 3

<table>
<thead>
<tr>
<th>Paths</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Couple Effects</strong></td>
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</tr>
<tr>
<td>Annual Family Income → Difficulty to Respond to Obligations H</td>
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</tr>
<tr>
<td>Annual Family Income → Difficulty to Respond to Obligations W</td>
<td>-.47***</td>
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<tr>
<td><strong>Actor Effects</strong></td>
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<tr>
<td>Difficulty to Respond to Obligations H → Marital Satisfaction H</td>
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<tr>
<td>Difficulty to Respond to Obligations H → Parental Self-Agency H</td>
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<tr>
<td>Deterioration of Financial Situation H → Marital Satisfaction H</td>
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<td>Deterioration of Financial Situation H → Parental Self-Agency H</td>
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<td>Number of Children → Life Satisfaction H</td>
<td>.14*</td>
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<td>Number of Children → Life Satisfaction W</td>
<td>.21**</td>
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Note. H = Husband; W = Wife.

* p < .05. ** p < .01. *** p < .001.

Also, number of children related positively and significantly with husbands’ and wives’ life satisfaction. According to Hypothesis 1a, partners’ difficulty to respond to family obligations was expected to relate to their own marital satisfaction and parental self-agency, and in turn to their own life satisfaction (i.e., actor effects). These indirect effects were not supported by our data, since both husbands’ and wives’ difficulty to respond to family obligations did not relate either to their own marital satisfaction or to their parental self-agency (see Table 3). However, results
did show that husbands’ marital satisfaction (β = .54, p < .05) and parental self-agency (β = .16, p < .05) related to husbands’ life satisfaction, while wives’ marital satisfaction (β = .36, p < .05) and parental self-agency (β = .24, p < .05) related to wives’ life satisfaction. Analyses supported a main, negative effect of wives’ difficulty to respond to family obligations to their overall life satisfaction (β = -.28, p < .05). Interestingly, bootstrap analyses supported the indirect effect of annual family income to wives’ life satisfaction via wives’ difficulty to respond to their family obligations (standardized estimate = .17; 95% CI [.082, .293]; p = .001). This result suggests that the annual family income relates positively to wives’ life satisfaction because wives find it less difficult to respond to family obligations.

According to Hypothesis 1b, it was expected that husbands’ and wives’ difficulty to respond to their family obligations will relate to their partners’ life satisfaction via their partners’ marital satisfaction and parental self-efficacy (i.e., partner effects). This hypothesis was only partially supported. As shown on Table 3, only wives’ difficulty to respond to family obligations related negatively to their husbands’ parental self-agency (β = -.27, p < .05). The finding, that husbands’ parental self-agency related positively to husbands’ life satisfaction, suggests an indirect effect from wives’ difficulty to respond to family obligations to their husbands’ life satisfaction, via husbands’ parental self-agency. Indeed, bootstrap analyses did support this indirect effect (standardized estimate = -.15; 95% CI [-.289, -.024]; p = .02) and showed that when wives find it hard to respond to their family obligations, their husbands experience less parental self-agency and as a result, they are less satisfied with their life. Taking all results concerning Hypothesis 1 into account, bootstrap analyses supported a significant indirect effect from annual family income to husbands’ life satisfaction first, via wives’ difficulty to respond to family obligations and then, via husbands’ parental self-agency (standardized estimate = .07; 95% CI [.003, .151]; p = .03).

Hypothesis 2a suggested that husbands’ and wives’ deterioration of financial situation will relate negatively to their own life satisfaction via lower marital satisfaction and parental self-agency. This hypothesis has been partly supported because, as shown on Table 3, only husbands’ deterioration of financial situation related negatively to their own marital satisfaction (γ = -.40, p < .001). Bootstrap analyses further supported the indirect effect of husbands’ deterioration to husbands’ life satisfaction via their marital satisfaction (standardized estimate = -.20; 95% CI [-.340, -.070]; p = .005). As concerns the partner effects of Hypothesis 2b, wives’ deterioration of financial situation did not relate to their husbands’ marital satisfaction and parental self-agency (see Table 3). However, husbands’ deterioration of financial situation related negatively to their wives’ marital satisfaction (β = -.25, p < .05) and parental self-agency (β = -.27, p < .05). Nevertheless, bootstrap analyses did not support the indirect effect from husbands’ deterioration of financial situation to wives’ life satisfaction via wives’ marital satisfaction and parental self-agency (standardized estimate = -.12; 95% CI [-.262, .014], p = .08). However, these results suggest that the indirect effect of husbands’ deterioration to husbands’ life satisfaction (standardized estimate = -.20; 95% CI [-.340, -.070]; p = .005) is not only mediated by husbands’ marital satisfaction but also by wives’ parental self-agency that was found to relate positive to husbands’ life satisfaction (β = .15, p < .05; see Table 3).

Additional Analyses

Given that our sample included both dual-earner (n = 71) and single-earner (n = 58) couples, we have performed additional multi-group analyses to test the invariance of our final model across these two sub-groups. Specifically, we performed multi-group analyses and we compared two versions of M3: a model where paths (i.e., structural weights) were allowed to vary freely across groups, was compared to a model where paths were constrained to be equal across groups. Results of the chi-square difference test showed that these two models fit equally well
to the data \( \Delta \chi^2(29) = 35.45, p = .19 \). These results suggest that the final model is invariant across the two groups and the supported psychological processes are not affected by the working status of the couples.

**Discussion**

With this dyadic study among married couples with children, we attempted to shed light on the mechanisms through which perceived economic strain relates to husbands’ and wives’ life satisfaction. Using COR theory (Hobfoll, 1989) as our theoretical framework, we hypothesized that perceived economic strain will associate negatively to life satisfaction and that marital satisfaction and parental self-agency will mediate this relationship. In line with Kenny (1996), we took into account the interdependency that exists within the members of each couple, and in line with the crossover theory (Westman, 2001), we proposed that how one partner feels and behaves as a response to his/her perceived economic strain, is not only relevant for his/her own but also for his/her partner’s subjective well-being. In what follows, we discuss the theoretical and practical implication of the study findings in detail.

**Economic Strain and Life Satisfaction**

According to Hypothesis 1a, difficulty to respond to ones’ family obligations was expected to relate to partners’ own marital satisfaction and parental self-agency, and in turn, to their own life satisfaction. These indirect effects were rejected, since both husbands’ and wives’ difficulty to respond to family obligations did not relate to their own marital satisfaction or parental self-agency. A possible explanation could be that we did not take into account other variables, such as spouses’ negative emotions, that have been found to mediate the relationship between perceived economic strain and marital satisfaction (Conger, Rueter, & Elder, 1999; Falconier & Epstein, 2010; Gudmunson, Beutler, Israelsen, McCoy, & Hill, 2007; Kwon et al., 2003; Vinokur et al., 1996). Thus, it is possible that this link was not supported in our study because this crucial mediator was not taken into account. Another explanation could be that in Greece, the extended family network provides strong materialistic and emotional support to couples who have difficulties meeting their financial obligations, by helping to maintain an adequate standard of living (Mousourou, 2005). This implies that support from the extended family network is likely to function as a protective factor and moderate the adverse effects of the economic strain in a way that economic strain relates to marital satisfaction and parental self-agency, only in the absence of this external source of support.

Our results did show that husbands’ marital satisfaction related to their own life satisfaction, while wives’ marital satisfaction related to their own life satisfaction. This finding adds to previous studies that supported the relationship between marital satisfaction and subjective well-being (Allendorf, 2013; Proulx, Helms, & Buehler, 2007). Moreover, it was found that husbands’ parental self-agency related to their own life satisfaction, while wives’ parental self-agency related to their own life satisfaction, confirming previous empirical evidence showing that parental self-agency has a considerable impact on life satisfaction of both men and women (Jones & Prinz, 2005; Nelson, Kushlev, & Lyubomirsky, 2014; Ohan, Leung, & Johnston, 2000).

In addition, our results revealed that annual family income related to wives' overall life satisfaction through wives' perceived difficulty to meet the family’s financial obligations. This mediating effect adds to previous evidence suggesting that subjective well-being relates to income (Clark, Frijters, & Shields, 2007; Deaton, 2008; Diener & Biswas-Diener, 2002; Ervasti & Venetoklis, 2010; Sacks, Stevenson, & Wolfers, 2012; Stevenson & Wolfers, 2013). Our findings add to the explanation as to why family income relates to life satisfaction, since they show
that income associates with the degree to which individuals (particularly, women) believe that they are able to respond to their family obligations. Interestingly, difficulty to meet the family’s financial obligations did not relate to husbands’ life satisfaction, probably because other factors may be more important for men’s life satisfaction. It may be that for men, satisfaction with life is not at all related to family obligations and responsibilities. Instead, it seems that for married women with children, life satisfaction is synonymous with their ability to respond to their family’s basic needs. The above finding is in line with Gilligan’s theory of moral development (Gilligan, 1977, 1993), which supports that men usually adopt an individualistic perspective based on rights and autonomy, whereas women exhibit a relational perspective of taking responsibility for the well-being of others.

According to Hypothesis 1b, it was expected that husbands’ and wives’ difficulty to respond to their family obligations will relate to their partners’ life satisfaction, via their partners’ marital satisfaction and parental self-efficacy. This hypothesis was only partially supported by the results of the study. It was found that only wives’ difficulty to respond to family obligations related to their husbands’ life satisfaction, via their husbands’ parental self-agency. In other words, it is supported that when women find it hard to meet their family obligations, their husbands feel less confident about their parental abilities and as a result, they are less satisfied with their life. We speculate, that wives’ perceived difficulty to meet their family’s financial obligations affects the construction of husbands’ masculinity role, which states that men are responsible for the financial security of their family. Deliyanni-Kouimtzis (2005) supports that men are entrusted with the role of the provider in the family and therefore, when their wives find it hard to meet their family obligations, they are likely to feel that they are failing in their role.

The second hypothesis of the study suggested that husbands and wives’ deterioration of financial situation will relate negatively to their own life satisfaction, via their own marital dissatisfaction and poor parental self-agency. Hypothesis 2a was only partially supported. It was found that only husbands’ deterioration of financial situation related negatively to their overall life satisfaction, via their marital satisfaction. In other words, when husbands’ economic situation is changing for the worse, their marital satisfaction declines and thereby, their satisfaction with life decreases. This is in line with the existing literature (Bradbury, Fincham, & Beach, 2000; Bryant, Taylor, Lincoln, Chatters, & Jackson, 2008; Conger, Rueter, & Elder, 1999; Dakin & Wampler, 2008; Dyrdal, Roysamb, Nes, & Vitterso, 2011; Falconier & Epstein, 2010). However, the mediating role of marital satisfaction between the wives’ deterioration of financial situation and life satisfaction was not confirmed.

As concerns the partner effects of Hypothesis 2b, wives’ deterioration of financial situation did not seem to affect their husbands’ marital satisfaction and parental self-agency. However, husbands’ deterioration of financial situation related negatively to their wives’ marital satisfaction and parental self-agency, suggesting that when men assess that their economic situation is changing for the worse, their wives’ marital satisfaction and parental self-agency reduces. It could be argued that when husbands experience loss of financial resources, they become less sensitive and supportive to their wives and therefore, their wives experience less marital satisfaction and lower levels of parental self-agency (Mills et al., 1992).

Last but not least, the results of the present study showed that husbands’ deterioration of their financial situation related to their life satisfaction, via their wives’ parental self-agency, suggesting that when husbands experience a deterioration in their financial situation, their wives believe that they are less effective in their parenting role which, consequently, makes their husbands less satisfied with their lives. This finding may be explained by the traditional and patriarchic roles of men within the Greek family (Sakka & Deliyanni-Kouimtzis, 2005). Traditionally,
in Greece, the upbringing and care of the children is primarily a woman’s duty. Therefore, when women fail to succeed in this role, it is likely that men will feel dissatisfied with their lives.

Overall and according to our results, it is safe to reach the following conclusions: (a) in times of financial turmoil, perceived economic strain relates negatively to family functioning and life satisfaction; (b) there are still significant gender differences, according to which, Greek men are expected to follow more rigid and traditional roles than women, both inside and outside the family sphere; and finally (c) there is significant interdependence between spouses that has to be taken into account when couples’ well-being is investigated.

Limitations of the Study and Suggestions for Future Research

This study is subject to a number of limitations. Although the number of couples who participated in this study can be considered sufficient for dyadic analyses [i.e., according to Maas & Hox’s (2005) rule of thumb, a minimum of 30 couples suffices for accurate estimations], results would have been more robust with a bigger sample. For instance, certain indirect effects that were marginally significant in the reported analyses, could have been supported with a bigger sample, particularly when considering that the path model that was fitted to our data was quite complex. Furthermore, lower income or no-income families have been under-represented in this study, which raises concerns with regard to the generalizability of our findings to the total population. In addition, participants were approached only through public schools. Although our sample is not representative of married couples with children living in Greece, we were mainly interested in the psychological processes that explain spouses’ well-being and not in comparing mean scores in the variables of interest (where representative samples would be imperative). Finally, the cross-sectional design of our study is another limitation. Future longitudinal studies should try to replicate these findings.

Implications of the Study

Despite these limitations, the present study covers a significant gap in the literature that concerns the role of spouses’ perceived economic strain on their subjective well-being, in times of economic recession. Moreover, the study provides important information about the mediating role of marital satisfaction and parental self-agency in the relationship between perceived economic strain and subjective well-being. Our findings have significant implications for public policy and counseling. First of all, these findings could contribute in designing and implementing preventive programs aiming at enhancing the quality of life of both men and women, who experience high levels of economic strain. Moreover, family therapists need to be aware of all the adverse effects of economic strain for both husbands and wives, as well as, of the important differences between genders, in order to provide better counseling services. Finally, therapists should take into account that marital satisfaction and parental self-agency are relevant for spouses’ life satisfaction and therefore, they should develop strategies that strengthen spousal relationships and reinforce parental self-agency, which will eventually increase their overall satisfaction with life.

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Competing Interests

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