



Article

Global Perspective on Marital Satisfaction

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Abstract: Across the world, millions of couples get married each year. One of the strongest predictors of whether partners will remain in their relationship is their reported satisfaction. Marital satisfaction is commonly found to be a key predictor of both individual and relational well-being. Despite its importance in predicting relationship longevity, there are relatively few empirical research studies examining predictors of marital satisfaction outside of a Western context. To address this gap in the literature and complete the existing knowledge about global predictors of marital satisfaction, we used an open-access database of self-reported assessments of self-reported marital satisfaction with data from 7178 participants representing 33 different countries. The results showed that sex, age, religiosity, economic status, education, and cultural values were related, to various extents, to marital satisfaction across cultures. However, marriage duration, number of children, and gross domestic product (GDP) were not found to be predictors of marital satisfaction for countries represented in this sample. While 96% of the variance of marital satisfaction was attributed to individual factors, only 4% was associated with countries. Together, the results show that individual differences have a larger influence on marital satisfaction compared to the country of origin. Findings are discussed in terms of the advantages of conducting studies on large cross-cultural samples.

Keywords: global perspective; marital satisfaction; religion; children; economic status; collectivistic values; gross domestic product (GDP)

1. Introduction

Creating and sustaining a meaningful and positive relationship with a romantic partner is one of the central components of the human experience [1]. Irrespective of cultural differences, in almost every part of the world, people enter into forms of committed relationships [2]. In many cultures, the action of entering into formal marriage is of traditional meaning, and opens a new chapter in newlyweds' life [3].

Cross-culturally, marital status is considered one of the predictors of individual and relational well-being [4]. The quality of a married couple's cohabitation and union can be described as marital satisfaction—a construct covering thoughts, feelings, and behaviors related to one's relationship with their partner [5]. Partners that report greater marital satisfaction (and less relationship discord) have also reported experiencing fewer negative life events [6], better communication [7], higher mutual support or dyadic coping [8], fewer symptoms of psychological distress [9], and, overall, better health [10].

2. Review of Relevant Research

Given the significance of perceived marital satisfaction on other domains of life, it is important to determine correlates associated with having a satisfactory relationship. A vast number of variables (e.g., gender, age, and education) have previously been examined; however, similarly to other relational

studies, research has largely neglected non-Western countries (for an exception, see, e.g., [11] and [12], or, e.g., [13]). Therefore, little is known about the universality of previous findings, which suggests that our knowledge of these relations is selective. To this end, we utilized data from 33 countries [14] to examine factors that have previously been found to be positively associated with marital satisfaction in Western contexts [15]. Specifically, we were interested in examining whether sex, age, marriage duration, number of children, economic status, education, religiosity, level of collectivism, and countries' economies predict marital satisfaction in a large-scale global sample.

2.1. Sex

Early work [16] has suggested that men might be more satisfied with their marriage compared to women [16]. More recent research has also supported these sex difference in both Western [17,18] and non-Western cultures, including in the United Arab Emirates [19], Iran [20] and Malaysia [12]. The sex differences, however, can also be associated with the characteristics of a given culture, especially sex roles, patriarchy, or egalitarianism [21,22].

2.2. Age and Duration of Marriage

Age has previously been found to be negatively associated with marital satisfaction [23,24], although this is based on a scant number of studies. Understandably so, age is positively correlated with marriage duration; however, these two variables should be considered independently in their predictions of marital satisfaction, as they offer slightly different conceptualizations. Marriage duration is an operationalization of the time partners spend together in a committed relationship following the institutionalization of marriage. Meanwhile, studies involving the ages of partners are rather focused on various developmental challenges the couples face in their lives. For example, the couple may be confronted with mid-life crises or "empty nest" situations [25] and a new style of life during retirement [26]. As such, couples have to cooperate together to maintain their affection and marital relationship despite numerous life changes and challenges [27,28]. Taken together, marital satisfaction might fluctuate as a function of age and across different relationship stages.

The association between marriage duration and marital satisfaction seems to vary depending on the methodology used in the study, which is typically U-shaped or negative [29–31]. On one hand, partners seem to become more similar to each other with relationship duration, which fosters relationship stability and cohesion [32]. On the other hand, partners' decreased sexual satisfaction and, thus, passion may generally effect their reported levels of satisfaction [33]. Other factors, such as the ages at which partners got married or when they had their first child, may also affect their reported marital satisfaction due to the shift in their roles and the dynamics of family processes [34,35].

2.3. Number of Children

The negative associations between the number of children and marital satisfaction is well-documented in the literature [36,37]. Models that aim to explain the impact of number of children on marital satisfaction include role conflict, restriction of freedom, sexual dissatisfaction, and financial costs associated with having children [37]. Furthermore, Dillon and Beechler [38] conducted a meta-analysis that aggregated the findings on the association between number of children and marital satisfaction in 15 collectivistic cultures, and they also found a negative correlation between these variables. In contrast, based on a sample of close to 7000 American respondents, Nelson and colleagues [39] found that couples with children reported higher levels of happiness, meaning of life, and positive emotions compared to those who did not have children. Many parents described the influence their children as positive, which suggests that having children is personally rewarding, but does not necessarily reinforce their relationship [40]. Interestingly, in another research study, the number of children was negatively associated with marital satisfaction in Western countries, but positively in a non-Western one [41]. One possible explanation for this is that in countries with poorer social welfare, children are the substitutes of social care for the elderly to a higher extent than in

countries with higher social security, which may modify the relationship of number of children with marital satisfaction [41].

2.4. Economic Status

The fact that a majority of research on marital satisfaction was conducted in Western and industrialized countries begs the question as to whether economic status is also associated with marital satisfaction. Low economic status (i.e., low income followed by material hardship) is associated with a serious threat to the stability of marriage, and when the fundamental needs of a couple are not met, partners might pay less attention to intimacy and emotional fulfilment [42]. Therefore, lower economic status might potentially be negatively associated with self-reports of marital satisfaction [43]. Alternatively, Aube and Linden (1991) found socioeconomic status and marital adjustment and communication to be independent from one another.

However, some results suggest the importance of not only objective measures of well-being, but also the subjective evaluation of people's status. Therefore, it seems essential to include some subjective, comparative indicators of satisfaction in crucial areas of life [44,45] e.g., marital satisfaction. In this tone, Dolan and Metcalfe [46] claimed that subjective well-being is a significant indicator of well-being in general. Sadly, there is no previous research in this area regarding the personal evaluation of the economic status and its importance for particular dimensions of satisfaction. However, having in mind research conducted in the field of well-being, it seems crucial to examine whether the individual assessment of economic status may be a significant predictor of marital satisfaction.

2.5. Education

Previous research has also examined whether partners' level of education may be associated with reports of marital satisfaction; however, the results are inconclusive regarding the associations. Research based on a large American sample of 10,000 individuals found that dissolution rates decrease when the level of education grows [47]. Conversely, a study conducted on a smaller group of Belgian respondents ($N = 787$) did not find any significant associations between education and relationship satisfaction. Based on the mixed findings, there remains an unanswered question about the associations between education and marital satisfaction, especially from a cross-cultural perspective.

2.6. Cultural Considerations

Collectivistic and individualistic cultures differ in norms, customs, values, and familial issues [48]. Broadly defined, these cultural considerations are expressed in various domains of social functioning, including expressions of love and emotional intimacy [48,49]. Cultural considerations may influence marital satisfaction and its perceptions, as in collectivistic cultures, multi-generational families often live together and are characterized by mutual help, loyalty, and cooperation [41,48]. In Western, predominantly individualistic, cultures, marriage is perceived as satisfying when it fulfills individual goals of husbands and wives rather than obligations and duties, which is not the case in the non-Western cultures [50].

2.7. Religiosity

Values and norms surrounding romantic relationships, especially the institution of marriage, may be influenced by religious beliefs, making religiosity likely to be related to marital satisfaction [51,52]. A high level of religiousness has been shown to be associated with higher levels of marital satisfaction [53]. Research has revealed contradictory evidence regarding whether only religiousness or also religious affiliation are indicators of marital satisfaction [54].

2.8. Gross Domestic Product

The Gross Domestic Product (GDP) is one of the widely-used indicators of economic development used in international calculations. It is understood as the value of final goods and services produced by national production factors in a given country per unit of time [55]. The increase or decrease of real GDP and the dynamics of these movements constitute a measure of economic growth. It is worth noting that GDP is mainly an indicator of the economic status of the country and ignores other aspects of development. In contrast, other measures, e.g., the Human Development Index (HDI), are comprised of other indicators of human development, such as life expectancy, education quality (e.g., literacy rate), per capita income indicators, etc.

The relationship between economic growth and its implications for quality of life is a recurring issue in sustainability debates [56]. From a psychological point of view, GDP understood as the income of a country may be associated with higher life satisfaction. Generally, life satisfaction appears to increase with income [57–59]. Other studies, however, contrary to the cross-sectional designs, showed that the positive relation in happiness vanishes beyond some value of income [60]. In addition, a positive relationship between GDP and life satisfaction may be stronger in developed countries [57,59] but this relation does not exist in richer countries [61,62].

Although the mechanism of this effect is not yet established, there is growing evidence that financial variables may also influence the quality of marriage and marital satisfaction. Studies showed that spouses experiencing economic hardship suffer from negative consequences at the couple level [63] which may be manifested by increasing the number of negative interactions in marriage, causing disagreements and decreased time spent together. In the worst-case scenario, these troubles may lead to divorce [64]. In countries with higher GDP, couples experience potentially less financial difficulties. It can, therefore, be assumed that with GDP growth, marital satisfaction will improve.

3. Methodology of the Study

Despite the universal importance of positive relationships for our health and well-being [65] cross-cultural data on associations within what is associated with a satisfactory relationship is lacking. To date, a majority of research on the predictors of marital satisfaction has been largely examined within the Western, educated, industrialized, rich, and democratic (WEIRD) world [12,31,38,66] which leaves a gap in the literature related to the generalizability of previous findings on predictors of marital satisfaction.

Studies that utilize data from many nations across the world are useful, as some researchers want not only to compare samples from different parts of the world, but also to search for “universal” phenomena. Additionally, utilizing data collected from multiple nations allows for researchers to examine individual- or country-level factors (the latter depending, for example, on culture or climate). Taken together, this study utilized self-reported data collected from 33 countries [67] to determine variables associated with marital satisfaction.

3.1. Participants

Data from this study came from a data report published by Sorokowski and colleagues [67]. The raw data are available in an open-access repository at <https://figshare.com/s/d2bd33a9605a3a204881> [67]. Although the data were described in other papers [67] we did not perform any analyses related to the prediction of marital satisfaction within the samples. In addition, it is worth noting that the paper mentioned above may be seen rather as a description of the dataset (including information about recruitment strategy, descriptive statistics, and reliability coefficients), rather than an empirical investigation of particular hypotheses.

For this study, self-reported data from 7178 (3827 women) individuals aged between 18 and 88 years ($M = 40.7$, $SD = 11.4$) who reported being married between 0.8 and 70 years ($M = 14.8$, $SD = 11.6$) were utilized. The sample comprised people from 33 countries (14 European: Bulgaria,

Croatia, Estonia, Germany, Greece, Hungary, Italy, Poland, Portugal, Romania, Slovakia, Spain, Switzerland, and United Kingdom; 12 Asian: China, Hong Kong, India, Indonesia, Iran, Kazakhstan, Malaysia, Pakistan, Russia, Saudi Arabia, South Korea, and Turkey; four African: Ghana, Kenya, Nigeria, and Uganda; and three from North, South, and Central America: Brazil, Canada, and Mexico).

3.2. Procedure

The co-authors and their respective research teams in their home countries collected data for this study. All samples constituted samples of convenience. Prior to participation, participants provided their written informed consent. On average, participants took approximately 30 min to complete the self-report measures. Additional details for the study procedure and sample can be found in Sorokowski and colleagues' [67] report.

3.3. Measures

The language of the original questionnaire was English. In all non-English speaking countries, it was translated into participants' native languages using the back-translation procedure.

3.4. General Demographics

Participants were asked about their sex, age and marriage duration (in years), number of children ("How many children do you have?"), and education (coded so that 1 means no formal education, 2—primary school, 3—secondary school, 4—high school or technical college, and 5—bachelor or master degree). As the developmental stages of life (and a marriage) might differ across cultures (Rogoff, 2003), we examined age as a continuous variable.

3.5. Collectivism

Participants' self-reported levels of collectivism were measured using a scale from the GLOBE survey (global study on different variables across 62 countries), specifically the Family Collectivistic Practices items. Participants rated, using a seven-point scale from 1 (strongly agree) to 7 (strongly disagree), whether they agree or disagree with the items (for example, "In this society, children generally live at home with their parents until they get married."). Additionally, in order to obtain data about collectivism on an individual level, we rephrased the items to make them refer directly to the subject (i.e., "I think children should generally live at home with their parents until they get married."). The answers regarding cultural considerations were recoded so that a higher number indicated higher collectivism.

3.6. Religiosity

Religiosity was measured using a single item ("Are you religious?"). Responses ranged from 1 (not at all) to 7 (extremely religious).

3.7. Economic Situation

Participants rated their economic situation by comparison with the average on a scale from 1 (much better than in my country) to 5 (much worse than in my country). These answers were recoded so that a higher number indicates a better economic situation.

3.8. Gross Domestic Product

As stated by the Organization for Economic Cooperation and Development (OECD), GDP may be understood as the total value of all goods, products, and services assembled in a specific time period (most commonly, a year). Information about country GDP was obtained from <https://pl.tradingeconomics.com/country-list/gdp?continent=america> and was given in billions of USD.

3.9. Relationship Satisfaction

Participants' relationship satisfaction was measured using the Kansas Marital Satisfaction Scale [36]. The KMSS scale is comprised of three questions: "How satisfied are you with your marriage?"; "How satisfied are you with your wife/husband as a spouse?"; "How satisfied are you with your relationship with your wife/husband?". Answers were given on a seven-point scale, which ranged from 1 (very dissatisfied) to 7 (very satisfied). The scale was revealed to be culturally equivalent (Tucker's phi for each country ranging from 0.92 to 1.0) and reliable (Cronbach's alpha for each country ranging from 0.76 to 0.99). For details, see [68].

In addition, we used the nine-item Marriage and Relationships Questionnaire [69]. It has been found to have satisfactory psychometric proprieties in cross-cultural research [70]. Participants answered these questions on a five-point scale, which ranged from 1 (yes) to 5 (no; sample question: "Do you enjoy your husband's/wife's company?"). A higher number indicated higher marital satisfaction.

Scores in the KMSS and MRQ were highly correlated ($r = 0.68, p < 0.001$).

3.10. Data Analysis

In order to investigate correlates of marital satisfaction across the 33 nations, we used a multilevel regression model that accounted for the nesting of the data (i.e., individuals within countries). All individual-level predictor variables were group mean centered and standardized, while the group-level predictor was grand mean centered and standardized.

To estimate the model parameters, the Maximum Likelihood (ML) method was used.

First, we ran a baseline model to estimate the variability of marital satisfaction across countries. In the second model, we included individual-level predictors, such as: (1) sex (dummy coded), (2) age, (3) marriage duration (4) number of children, (5) religiosity, (6) education (7) material situation, (8) individual level of collectivistic values, and (9) cultural values of collectivism as predictors, and mean relationship satisfaction as the dependent variable. Finally, we added GDP as the group-level predictor of marital satisfaction. In all models, we estimated the fixed effects of the predictors using maximum likelihood estimators. We compared the models using $-2\log$ likelihood ($-2LL$) statistics.

4. Results of the Studies

4.1. Within- and Between-Country Variability

The results from the baseline model suggested that there was significant variability in marital satisfaction on both the individual and country level. According to the intra-class correlation coefficient (ICC), 4% of the variance was assigned to countries, while 96% was associated with individual differences.

4.2. Individual-Level Predictors of Marital Satisfaction

The second model included individual predictors, provided significantly better fit to the data than the initial model ($\Delta-2LL = 306.96, p < 0.01$), and explained 4% of the individual-level variance of marital satisfaction.

We found that age was negatively related to marital satisfaction ($b = -0.10, p = 0.003$). Religiosity ($b = 0.11, p < 0.001$), education ($b = 0.04, p = 0.14$), material situation ($b = 0.17, p < 0.001$), individual level of collectivistic values ($b = 0.05, p = 0.01$), and cultural values of collectivism ($b = 0.06, p = 0.002$) were positively associated with marital satisfaction.

The length of marriage ($b = -0.02, p = 0.48$) and number of children ($b = 0.01, p = 0.48$) were not significant predictors of marital satisfaction.

Sex was a significant predictor of marital satisfaction ($b = -0.11, p < 0.001$), where men reported greater marital satisfaction compared to women. See Table 1 for a complete list of results.

To confirm the validity of our findings, we ran identical models with the second scale of marital satisfaction reported by Sorokowski and colleagues (2016; MRQ) as the dependent variable and found

very similar results. Marriage duration and number of children were also not significantly related to marital satisfaction, but the relation between individual level of collectivism and dependent measure was not significant ($b = 0.01$, $p = 0.10$), and the value of most estimates was smaller. Similarly to the analyses on the KMSS, the model including individual-level predictors as fixed factors revealed significantly better fit than the baseline (empty) model ($p < 0.01$).

Table 1. Multilevel linear models regressing marital satisfaction on sex, age, marriage duration, number of children, religiosity, education, material situation, individual and national level of collectivism, and country gross domestic product (GDP).

Predictors	KMSS (Questionnaire 1)			MRQ (Questionnaire 2)		
	Model 1 (Baseline) b (SE)	Model 2 (Individual-Level Predictors) b (SE)	Model 3 (Group-Level Predictors) b (SE)	Model 1 (Baseline) b (SE)	Model 2 (Individual-Level Predictors) b (SE)	Model 3 (Group-Level Predictors) b (SE)
Fixed Effects						
Individual-Level Predictors						
Intercept	5.72 (0.05) ***	5.72 (0.07) ***	5.72 (0.11) ***	4.50 (0.04) ***	4.50 (0.04) ***	4.43 (0.08) ***
Sex (0 = M, 1 = F)		−0.11 (0.03) ***	−0.11 (0.02) ***		−0.03 (0.01) ***	−0.03 (0.01) ***
Age		−0.10 (0.03) **	−0.10 (0.03) **		−0.07 (0.01) ***	−0.07 (0.01) ***
Marriage Duration		−0.02 (0.03)	−0.02 (0.03)		−0.03 (0.01)	−0.03 (0.01)
Number of Children		0.01 (0.02)	−0.01 (0.02)		<0.01 (0.01)	<0.01 (0.01)
Religiosity		0.11 (0.02) ***	0.11 (0.02) ***		0.05 (0.01) ***	0.05 (0.01) ***
Education		0.04 (0.02) *	0.04 (0.02) *		0.03 (0.01) ***	0.03 (0.01) ***
Material situation		0.17 (0.02) ***	0.17 (0.02) ***		0.07 (0.01) ***	0.07 (0.01) ***
Collectivism individual		0.05 (0.02) **	0.05 (0.02) **		0.01 (0.01)	<0.01 (0.01)
Collectivism national		0.06 (0.02) **	0.05 (0.02) ***		0.04 (0.01) ***	0.04 (0.01) ***
Group-level Predictors						
GDP			<0.01 (0.01)			<0.01 (0.01)
Random Effects						
Individual Level Variance	1.91 (0.03) ***	1.83 (0.03) ***	1.83 (0.03) ***			
Country Level Variance	0.08 (0.02) ***	0.08 (0.02) ***	0.08 (0.02) ***			
Model Properties						
−2LL	25,071.56	24,764.60	24,763.84	13,035.82	12,565.67	12,564.75
AIC	25,077.56	24,788.60	24,789.84	13,041.82	12,589.67	12,590.75

Note: The predictors were group mean centered. The regression coefficients are unstandardized. Standard errors are presented in parentheses. Data are clustered within countries. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

4.3. Group-Level Predictors of Marital Satisfaction

The third model included individual predictors, as well as GDP, as predictors of marital satisfaction. The proposed model did not provide significantly better fit to the data than the initial model ($\Delta-2LL = 0.76$, $p > 0.05$), still explaining 4% of the individual-level variance of marital satisfaction.

The findings regarding relations between individual-level predictors and marital satisfaction were consistent with the previous model. In the model, GDP was not a significant predictor of marital satisfaction ($b < 0.01$, $p = 0.39$).

5. Discussions and Conclusions

The goal of the present study was to determine the global predictors associated with marital satisfaction based on self-reported data collected from 33 countries. We found that only a small share of variance is associated with countries, while over 90% of marital satisfaction variability was located at the level of individuals. Our results showed that several variables (i.e., age, religiosity, economic status, education, collectivism, and sex) were associated with marital satisfaction in the global sample. This large-scale analyses support much of the previously published evidence, suggesting their global

universality. Specifically, the role of economic status, religiosity, education, age, and sex was reflected in our data, and these appeared to be global predictors of marital satisfaction.

Interestingly, our results showed that the number of children was not a significant predictor of marital satisfaction, and the direction of this relation was positive, which does not support prior findings in Western societies (see meta-analysis by [37]. Using a meta-analytic perspective including 148 datapoints, Twenge and colleagues [37] found a negative correlation between these two factors. Therefore, the number of children should not be considered a global determinant of marital satisfaction, as including more non-Western subjects in the study may counteract this tendency, given different familial norms. Alternatively, the relation between number of children and marital satisfaction may be more complex, i.e., moderated by other variables. However, this possibility goes beyond the current study and can be addressed in future investigations.

A few existing studies tried to explain the observed cross-cultural differences in marriage-related variables, such as marital adjustment, with the level of collectivism/individualism in given cultures (e.g., [38,41,71,72]. However, to our knowledge, none of the previous studies included measures of collectivism/individualism in their analyses. Instead, their authors assumed that given samples differ on this continuum. Our study is the first to show that the individual level of collectivism (regardless of the culture of origin) was positively associated with self-reports of marital satisfaction, providing evidence for collectivistic values as favorable for a satisfactory marriage. The results suggest that both situations—when someone perceives their culture as a collectivistic one or perceives themselves as a collectivistic person—can be related to marital satisfaction.

In our sample, sex turned out to be a significant predictor of marital satisfaction. To this end, our results are not surprising, as previous research rarely indicated contradictory tendencies [12,17,20]. One of the possible explanations points at inequity in distribution of household duties and responsibilities (including child care). Despite the cultural differences, women are still responsible for a vast majority of household tasks, which may be a burden and have impact on the quality of life and the relationship [73]. In fact, women's satisfaction with the division of household tasks, together with their contribution to status-enhancement tasks, was shown to a predictor of their marital satisfaction [74]. However, a recent meta-analysis by Jackson and colleagues [75] suggests that the differences found may have been a result of including clinical samples in analyses, comprising 226 independent samples of predominantly White, middle-class Americans. They found no differences among nonclinical samples. This shows how complex the relation between marital satisfaction and gender might be.

Another important predictor revealed in our analyses is religiosity, which, similarly to the case of sex, is in line with the majority of previous work (e.g., [53]). There are many factors possibly contributing to this effect. Religiousness is associated with viewpoints, values, and attitudes that, when shared, can strengthen marital union and satisfaction [76]. Further studies provide evidence that praying for one's partner and religious communication predicts higher levels of marital satisfaction [77,78] or reduced infidelity [79]. However, it can be associated with sexual adjustment problems [80].

The weakest, but still significant, predictor of marital satisfaction was education. Other studies suggested that not only general level of education, but also heterogeneity between partners may influence marital quality and that satisfaction in couples where the husband is more educated than his wife can differ from those with the wife's advantage over the husband [81,82]. These detailed relations can be explored in future studies.

Even though we found many significant predictors of marital satisfaction, our model explained only to some degree the variability of marital satisfaction at the level of individuals. This leaves area for future research aiming at finding the remaining factors related to marital satisfaction. Additionally, although one may conclude that country-level factors are relatively irrelevant in relation to marital satisfaction compared to individual-level factors, they still have a significant effect on our dependent measure. This suggests that future research may also focus on finding country-level predictors of marital satisfaction, which may be, for example, related to climate, since this was also found to be related to interpersonal relations [14]. Additionally, the described predictors of marital satisfaction

can interact with other variables. A closer attempt to explore the mechanism behind the relationship between marital satisfaction and its predictors is beyond this study, but it seems to be a promising future research path.

The context of GDP has proved irrelevant to marital satisfaction. The analysis revealed no indication of the trend suggested in the hypothesis, i.e., that marital satisfaction shall increase with the growth of GDP. In general, our result suggests that economic development is likely not to be related to marital satisfaction. A significant conclusion can be drawn here that for the perceived marital satisfaction, the “wealth” of the country in which one lives, its progress, and economic development do not directly translate into the standard of everyday living.

In addition, it is worth noting that the scale used as a measurement tool of marital satisfaction was not assessed in terms of its measurement invariance. This fact may be seen as a significant limitation of our study—even though there is some evidence for the cultural equivalence of this scale [67]. Hence, considering the cross-cultural nature of this study, we firmly believe that future research endeavors should be focused on those specific psychometric properties of the KMSS.

Another limitation is related with both the manner of statistical analysis used in our study and the nature of the sample. Although one of the values of the present study is having participants from non-WEIRD countries, we included some WEIRD countries in the sample. Therefore, we recommend investing some future efforts to investigate the similarities and differences in predicting marital satisfaction between WEIRD and non-WEIRD countries. It would be necessary to define some salient criteria of distinction between WEIRD and non-WEIRD countries. Sadly, this discussion seems complex and nuanced, and would slightly exceed both the volume and scope of our paper. However, such criteria were proposed in the works of Klein et al. [83] and Muthukrishna et al. [84]. They might be considered as a recommendation for future research.

For reasons of methodological value, the studies carried out by both Weisfeld (cf. e.g., [85] and Hill (cf. e.g., [13,86] who have published several papers presenting the satisfaction with marital relations in different cultures using many other variables, showing its context much more widely than in this article, are the key to inclusion in future research. However, due to the significant number of differences and the multitude of data that require detailed description, they are not included in this paper. In sum, this study is a reliable verification of some common factors associated with marital satisfaction, and we hope that it will inspire researchers to get involved in more cross-cultural projects engaging big samples in order to examine whether other psychological phenomena exist globally, also outside of the Western world. We acknowledge that the examined factors, i.e., sex, age, marriage duration, education, religiosity, and cultural considerations, do not exhaust the list of potential correlates of relationship satisfaction.

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References

1. Karney, B.R.; Bradbury, T.N. The longitudinal course of marital quality and stability: A review of theory, methods, and research. *Psychol. Bull.* **1995**, *118*, 3–34. [[CrossRef](#)] [[PubMed](#)]
2. Bell, D. Defining marriage and legitimacy. *Curr. Anthr.* **1997**, *38*, 237–253. [[CrossRef](#)]

3. Nelson, M.R.; Deshpande, S.; Otnes, C. *Love without Borders: An Examination of Cross-Cultural Wedding Rituals*; Lawrence Erlbaum: Mahwah, NJ, USA, 2004.
4. Diener, E.; Gohm, C.L.; Suh, E.; Oishi, S. Similarity of the relations between marital status and subjective well-being across cultures. *J. Cross Cult. Psychol.* **2000**, *31*, 419–436. [[CrossRef](#)]
5. Hendrick, S.S. A generic measure of relationship satisfaction. *J. Marriage Fam.* **1988**, *50*, 93. [[CrossRef](#)]
6. Cohan, C.L.; Bradbury, T.N. Negative life events, marital interaction, and the longitudinal course of newlywed marriage. *J. Personal. Soc. Psychol.* **1997**, *73*, 114–128. [[CrossRef](#)] [[PubMed](#)]
7. Christensen, A.; Eldridge, K.; Catta-Preta, A.B.; Lim, V.R.; Santagata, R. Cross-cultural consistency of the demand/withdraw interaction pattern in couples. *J. Marriage Fam.* **2006**, *68*, 1029–1044. [[CrossRef](#)]
8. Falconier, M.K.; Jackson, J.B.; Hilpert, P.; Bodenmann, G. Dyadic coping and relationship satisfaction: A meta-analysis. *Clin. Psychol. Rev.* **2015**, *42*, 28–46. [[CrossRef](#)]
9. Whisman, M.A.; Baucom, D.H. Intimate relationships and psychopathology. *Clin. Child Fam. Psychol. Rev.* **2011**, *15*, 4–13. [[CrossRef](#)]
10. Bookwala, J. The role of marital quality in physical health during the mature years. *J. Aging Health* **2005**, *17*, 85–104. [[CrossRef](#)]
11. Falconier, M.K.; Randall, A.K.; Bodenmann, G. *Couples Coping with Stress: A Cross-Cultural Perspective*; Routledge: Abingdon, UK, 2016.
12. Ng, K.-M.; Loy, J.T.-C.; MohdZain, Z.; Cheong, W. Gender, race, adult attachment, and marital satisfaction among Malaysians. *Fam. J.* **2013**, *21*, 198–207. [[CrossRef](#)]
13. Carroll, S.J.; Hill, E.J.; Yorgason, J.B.; Larson, J.H.; Sandberg, J.G. Couple communication as a mediator between work–family conflict and marital satisfaction. *Contemp. Fam. Ther.* **2013**, *35*, 530–545. [[CrossRef](#)]
14. Sorokowska, A.; Sorokowski, P.; Hilpert, P.; Cantarero, K.; Frackowiak, T.; Eahmadi, K.; AlGhraibeh, A.M.; Aryeetey, R.; Bertoni, A.; Bettache, K.; et al. Preferred interpersonal distances: A global comparison. *J. Cross Cult. Psychol.* **2017**, *48*, 577–592. [[CrossRef](#)]
15. Bradbury, T.N.; Fincham, F.D.; Beach, S. Research on the nature and determinants of marital satisfaction: A decade in review. *J. Marriage Fam.* **2000**, *62*, 964–980. [[CrossRef](#)]
16. Bernard, J. *The Future of Marriage*; Yale University Press: London, UK, 1982.
17. Fowers, B.J. His and her marriage: A multivariate study of gender and marital satisfaction. *Sex Roles* **1991**, *24*, 209–221. [[CrossRef](#)]
18. Whiteman, S.D.; McHale, S.M.; Crouter, A.C. Longitudinal changes in marital relationships: The role of offspring’s pubertal development. *J. Marriage Fam.* **2007**, *69*, 1005–1020. [[CrossRef](#)]
19. Al-Darmaki, F.R.; Hassane, S.H.; Ahammed, S.; Abdullah, A.S.; Yaaqeb, S.I.; Dodeen, H. Marital satisfaction in the United Arab Emirates: Development and validation of a culturally relevant scale. *J. Fam. Issues* **2016**, *37*, 1703–1729. [[CrossRef](#)]
20. Rostami, A.; Ghazinour, M.; Nygren, L.; Richter, J. Marital Satisfaction With a Special Focus on Gender Differences in Medical Staff in Tehran, Iran. *J. Fam. Issues* **2014**, *35*, 1940–1958. [[CrossRef](#)]
21. Kaufman, G. Do gender role attitudes matter? *J. Fam. Issues* **2000**, *21*, 128–144. [[CrossRef](#)]
22. Taniguchi, H.; Kaufman, G. Gender role attitudes, troubles talk, and marital satisfaction in Japan. *J. Soc. Pers. Relatsh.* **2013**, *31*, 975–994. [[CrossRef](#)]
23. Buunk, B.P.; Van Yperen, N.W. Referential comparisons, relational comparisons, and exchange orientation: Their relation to marital satisfaction. *Personal. Soc. Psychol. Bull.* **1991**, *17*, 709–717. [[CrossRef](#)]
24. Lee, G.R.; Shehan, C.L. Retirement and marital satisfaction. *J. Gerontol.* **1989**, *44*, S226–S230. [[CrossRef](#)] [[PubMed](#)]
25. Brim, O.G.; Ryff, C.D.; Kessler, R.C. *How Healthy Are We? A National Study of Well-Being at Midlife*; University of Chicago Press: Chicago, IL, USA, 2004.
26. Henry, R.G.; Miller, R.B.; Giarrusso, R. Difficulties, disagreements, and disappointments in late-life marriages. *Int. J. Aging Hum. Dev.* **2005**, *61*, 243–264. [[CrossRef](#)] [[PubMed](#)]
27. Booth, A.; Johnson, D.R. Declining health and marital quality. *J. Marriage Fam.* **1994**, *56*, 218. [[CrossRef](#)]
28. Randall, A.K.; Bodenmann, G. Stress and its associations with relationship satisfaction. *Curr. Opin. Psychol.* **2017**, *13*, 96–106. [[CrossRef](#)]
29. Kurdek, L.A. The nature and predictors of the trajectory of change in marital quality for husbands and wives over the first 10 years of marriage. *Dev. Psychol.* **1999**, *35*, 1283–1296. [[CrossRef](#)]

30. VanLaningham, J.; Johnson, D.R.; Amato, P. Marital happiness, marital duration, and the U-shaped curve: Evidence from a five-wave panel study. *Soc. Forces* **2001**, *79*, 1313–1341. [[CrossRef](#)]
31. Wendorf, C.A.; Lucas, T.; Imamoğlu, E.O.; Weisfeld, C.C.; Weisfeld, G.E. Marital satisfaction across three cultures: Does the number of children have an impact after accounting for other marital demographics? *J. Cross Cult. Psychol.* **2010**, *42*, 340–354. [[CrossRef](#)]
32. Anderson, C.; Keltner, D.; John, O.P. Emotional convergence between people over time. *J. Personal. Soc. Psychol.* **2003**, *84*, 1054–1068. [[CrossRef](#)]
33. Schröder, J.; Schmiedeberg, C. Effects of relationship duration, cohabitation, and marriage on the frequency of intercourse in couples: Findings from German panel data. *Soc. Sci. Res.* **2015**, *52*, 72–82. [[CrossRef](#)]
34. Bahr, S.J.; Chappell, C.B.; Leigh, G.K. Age at marriage, role enactment, role consensus, and marital satisfaction. *J. Marriage Fam.* **1983**, *4*, 795. [[CrossRef](#)]
35. Shapiro, A.F.; Gottman, J.M.; Carrère, S. The baby and the marriage: Identifying factors that buffer against decline in marital satisfaction after the first baby arrives. *J. Fam. Psychol.* **2000**, *14*, 59–70. [[CrossRef](#)] [[PubMed](#)]
36. Glenn, N.D.; McLanahan, S. Children and marital happiness: A further specification of the relationship. *J. Marriage Fam.* **1982**, *44*, 63. [[CrossRef](#)]
37. Twenge, J.M.; Campbell, W.K.; Foster, C.A. Parenthood and marital satisfaction: A meta-analytic review. *J. Marriage Fam.* **2003**, *65*, 574–583. [[CrossRef](#)]
38. Dillon, L.M.; Beechler, M.P. Marital satisfaction and the impact of children in collectivist cultures: A meta-analysis. *J. Evol. Psychol.* **2010**, *8*, 7–22. [[CrossRef](#)]
39. Nelson-Coffey, S.K.; Kushlev, K.; Dunn, E.W.; English, T.; Lyubomirsky, S. In defense of parenthood. *Psychol. Sci.* **2012**, *24*, 3–10. [[CrossRef](#)]
40. White, L.K.; Booth, A.; Edwards, J.N. Children and marital happiness. *J. Fam. Issues* **1986**, *7*, 131–147. [[CrossRef](#)]
41. Onyishi, E.I.; Sorokowski, P.; Sorokowska, A.; Pipitone, R.N. Children and marital satisfaction in a non-Western sample: Having more children increases marital satisfaction among the Igbo people of Nigeria. *Evol. Hum. Behav.* **2012**, *33*, 771–774. [[CrossRef](#)]
42. Jackson, G.L.; Trail, T.E.; Kennedy, D.P.; Williamson, H.C.; Bradbury, T.N.; Karney, B.R. The salience and severity of relationship problems among low-income couples. *J. Fam. Psychol.* **2016**, *30*, 2–11. [[CrossRef](#)] [[PubMed](#)]
43. Conger, R.D.; Elder, G.H.; Lorenz, F.O.; Conger, K.J.; Simons, R.L.; Whitbeck, L.B.; Huck, S.; Melby, J.N. Linking economic hardship to marital quality and instability. *J. Marriage Fam.* **1990**, *52*, 643. [[CrossRef](#)]
44. Diener, E.; Kahneman, D.; Helliwell, J. *International Differences in Well-Being*; Oxford University Press (OUP): Oxford, UK, 2010.
45. Tay, L.; Diener, E. Needs and subjective well-being around the world. *J. Personal. Soc. Psychol.* **2011**, *101*, 354–365. [[CrossRef](#)]
46. Dolan, P.; Metcalfe, R. Measuring subjective wellbeing: Recommendations on measures for use by national governments. *J. Soc. Policy* **2012**, *41*, 409–427. [[CrossRef](#)]
47. Heaton, V.R.A.C.B. Religious influence on marital stability. *J. Sci. Study Relig.* **1997**, *36*, 382. [[CrossRef](#)]
48. Hofstede, G.H.; Hofstede, G. *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*; Sage: Thousand Oaks, CA, USA, 2001.
49. Dion, K.K.; Dion, K.L. Individualistic and collectivistic perspectives on gender and the cultural context of love and intimacy. *J. Soc. Issues* **1993**, *49*, 53. [[CrossRef](#)]
50. LaLonde, R.N.; Hynie, M.; Pannu, M.; Tatla, S. The role of culture in interpersonal relationships. *J. Cross Cult. Psychol.* **2004**, *35*, 503–524. [[CrossRef](#)]
51. Hünler, O.S.; Gençöz, T. The effect of religiousness on marital satisfaction: Testing the mediator role of marital problem solving between religiousness and marital satisfaction relationship. *Contemp. Fam. Ther.* **2005**, *27*, 123–136. [[CrossRef](#)]
52. Orathinkal, J.; Vansteenwegen, A. Religiosity and marital satisfaction. *Contemp. Fam. Ther.* **2006**, *28*, 497–504. [[CrossRef](#)]
53. Olson, J.R.; Marshall, J.P.; Goddard, H.W.; Schramm, D.G. Variations in predictors of marital satisfaction across more religious and less religious regions of the United States. *J. Fam. Issues* **2016**, *37*, 1658–1677. [[CrossRef](#)]

54. Lev-Wiesel, R.; Al-Krenawi, A. Attitude towards marriage and marital quality: A comparison among Israeli Arabs differentiated by religion. *Fam. Relat.* **1999**, *48*, 51. [CrossRef]
55. OECD. *National Accounts at a Glance: Gross Domestic Product (GDP)*; OECD Publishing: Paris, France, 2009. Available online: <http://www.oecd.org/berlin/44681640.pdf> (accessed on 15 October 2020).
56. Cibulka, S.; Giljum, S. Towards a comprehensive framework of the relationships between resource footprints, quality of life, and economic development. *Sustainability* **2020**, *12*, 4734. [CrossRef]
57. Deaton, A. Income, health, and well-being around the world: Evidence from the gallup world poll. *J. Econ. Perspect.* **2008**, *22*, 53–72. [CrossRef]
58. Inglehart, R. *Culture Shift in Advanced Industrial Society*; Walter de Gruyter GmbH: Berlin, Germany, 1990.
59. Stevenson, B.; Wolfers, J. *Economic Growth and Subjective Well-Being: Reassessing the Easterlin Paradox*; Brookings Papers on Economic Activity: Washington, DC, USA, 2008; Volume 1, pp. 1–87.
60. Di Tella, R.; MacCulloch, R. Happiness adaptation to income beyond basic needs. In *International Differences in Well-Being*; Diener, E., Helliwell, J., Kahneman, D., Eds.; Oxford University Press: Oxford, UK, 2010.
61. Proto, E.; Rustichini, A. A Reassessment of the Relationship between GDP and Life Satisfaction. *PLoS ONE* **2013**, *8*, e79358. [CrossRef] [PubMed]
62. Zhao, X.; Sun, Z. The effect of satisfaction with environmental performance on subjective well-being in China: GDP as a moderating factor. *Sustainability* **2020**, *12*, 1745. [CrossRef]
63. Conger, R.D.; Rueter, M.A.; Elder, G.H., Jr. Couple resilience to economic pressure. *J. Personal. Soc. Psychol.* **1999**, *76*, 54–71. [CrossRef]
64. Dew, J.; Britt, S.; Huston, S. Examining the relationship between financial issues and divorce. *Fam. Relat.* **2012**, *61*, 615–628. [CrossRef]
65. Proulx, C.M.; Helms, H.M.; Buehler, C. Marital quality and personal well-being: A meta-analysis. *J. Marriage Fam.* **2007**, *69*, 576–593. [CrossRef]
66. Henrich, J.; Heine, S.J.; Norenzayan, A. The weirdest people in the world? *Behav. Brain Sci.* **2010**, *33*, 61–83. [CrossRef] [PubMed]
67. Sorokowski, P.; Randall, A.K.; Groyecka, A.; Frackowiak, T.; Cantarero, K.; Hilpert, P.; Ahmadi, K.; AlGhraibeh, A.M.; Aryeetey, R.; Bertoni, A.; et al. Marital satisfaction, sex, age, marriage duration, religion, number of children, economic status, education, and collectivistic values: Data from 33 countries. *Front. Psychol.* **2017**, *8*, 1199. [CrossRef]
68. Nichols, C.W.; Schumm, W.R.; Schectman, K.L.; Grigsby, C.C. Characteristics of responses to the Kansas marital satisfaction scale by a sample of 84 married mothers. *Psychol. Rep.* **1983**, *53*, 567–572. [CrossRef]
69. Russell, R.J.H.; Wells, P.A. *Marriage and Relationship Questionnaire*; American Psychological Association (APA): Washington, DC, USA, 1993.
70. Lucas, T.; Parkhill, M.R.; Wendorf, C.A.; Imamoglu, E.O.; Weisfeld, C.C.; Weisfeld, G.E.; Shen, J. Cultural and evolutionary components of marital satisfaction: A multidimensional assessment of measurement invariance. *J. Cross Cult. Psychol.* **2008**, *39*, 109–123. [CrossRef]
71. Epstein, N.B.; Chen, F.; Beyder-Kamjoui, I. Relationship standards and marital satisfaction in Chinese and American couples. *J. Marital Fam. Ther.* **2005**, *31*, 59–74. [CrossRef]
72. Madathil, J.; Benschoff, J.M. Importance of marital characteristics and marital satisfaction: A Comparison of Asian Indians in arranged marriages and Americans in marriages of choice. *Fam. J.* **2008**, *16*, 222–230. [CrossRef]
73. Grote, N.K.; Clark, M.S. Perceiving unfairness in the family: Cause or consequence of marital distress? *J. Personal. Soc. Psychol.* **2001**, *80*, 281–293. [CrossRef] [PubMed]
74. Stevens, D.; Kiger, G.; Riley, P.J. Working hard and hardly working: Domestic labor and marital satisfaction among dual-earner couples. *J. Marriage Fam.* **2001**, *63*, 514–526. [CrossRef]
75. Jackson, J.B.; Miller, R.B.; Oka, M.; Henry, R.G. Gender differences in marital satisfaction: A meta-analysis. *J. Marriage Fam.* **2014**, *76*, 105–129. [CrossRef]
76. Pléchaty, M. Perceptual congruence of five attitudes among satisfied and unsatisfied couples. *Psychol. Rep.* **1987**, *61*, 527–537. [CrossRef]
77. David, P.; Stafford, L. A relational approach to religion and spirituality in marriage. *J. Fam. Issues* **2013**, *36*, 232–249. [CrossRef]
78. Fincham, F.D.; Beach, S.; Lambert, N.; Stillman, T.; Braithwaite, S. Spiritual behaviors and relationship satisfaction: A critical analysis of the role of prayer. *J. Soc. Clin. Psychol.* **2008**, *27*, 362–388. [CrossRef]

79. Fincham, F.D.; Beach, S. I say a little prayer for you: Praying for partner increases commitment in romantic relationships. *J. Fam. Psychol.* **2014**, *28*, 587–593. [[CrossRef](#)]
80. Orathinkal, J.; Alfons, V. Do demographics affect marital satisfaction? *J. Sex Marital Ther.* **2007**, *33*, 73–85. [[CrossRef](#)]
81. Heaton, T.B. Factors contributing to increasing marital stability in the United States. *J. Fam. Issues* **2002**, *23*, 392–409. [[CrossRef](#)]
82. Tynes, S.R. Educational heterogamy and marital satisfaction between spouses. *Soc. Sci. Res.* **1990**, *19*, 153–174. [[CrossRef](#)]
83. Klein, R.A.; Vianello, M.; Hasselman, F.; Adams, B.G.; Adams, J.R.B.; Alper, S.; Aveyard, M.; Axt, J.R.; Babalola, M.T.; Bahník, Š.; et al. Many labs 2: Investigating variation in replicability across samples and settings. *Adv. Methods Pract. Psychol. Sci.* **2018**, *1*, 443–490. [[CrossRef](#)]
84. Muthukrishna, M.; Bell, A.V.; Henrich, J.; Curtin, C.M.; Gedranovich, A.; McInerney, J.; Thue, B. Poza psychologią zachodnią, wykształconą, przemysłową, bogatą i demokratyczną (WEIRD): Pomiar i mapowanie skali kulturowego i psychologicznego dystansu. *Psychol. Sci.* **2020**, *31*, 678–701. [[CrossRef](#)] [[PubMed](#)]
85. Weisfeld, C.C.; Weisfeld, G.E.; Dillon, L.S. *The Psychology of Marriage: An Evolutionary and Cross-Cultural View*; Lexington Books: Lanham, MD, USA, 2018.
86. Hill, E.J.; Yang, C.; Hawkins, A.J.; Ferris, M. A cross-cultural test of the work-family interface in 48 countries. *J. Marriage Fam.* **2004**, *66*, 1300–1316. [[CrossRef](#)]

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