



The Relationship Between Marital Satisfaction and Life Satisfaction: A Meta-Analysis Study

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Abstract

The main purpose of the current study was to examine the relationship between marital satisfaction and life satisfaction through meta-analysis method. A total of 6163 studies were identified as a result of the literature scanning and accordingly examined on the basis of their titles and abstracts. Ultimately, results of 19 studies were included to analysis. The findings obtained from analyses were examined and it was determined that there is a significant difference in all subgroups regarding the relationship between marital satisfaction and life satisfaction. Output of REM analysis showed that the pooled effect size of the relationship between marital satisfaction and life satisfaction is moderate (0.46). Considering the screening process within the scope of this study, it can be concluded that there are too many poor reporting practices regarding the studies.

Keywords: marital satisfaction, satisfaction of life, meta-analysis, family studies

Article History Received: 21. 06. 2023 Accepted:23.10.2023 Published:29.12.2023

Article Type Research article

Recommended Citation: Aksu, G., Eser, M.T., & Emekli, H. (2023). The Relationship Between Marital Satisfaction and Life Satisfaction: A Meta-Analysis Study, *International Journal on New Trends in Education and Their Implications (IJONTE)*, 14 (2), 7-22.

Introduction

Marriage is one of the important points in the lives of individuals. In many cultures, marriage is considered as the first stage of the family institution. Although many definitions of marriage are made, it is striking that a common framework has been created in the definitions. Pangiban (2007) defines marriage as an emotional, social and economic agreement between two people at the legal level. Özgüven (2000) defines marriage as a structure in which spouses meet many biological, psychological and social needs. When the scope of marriage is examined, a wide dynamism is seen such as sexual satisfaction, social needs, the need to love and be loved (Güler, 2021). As it's seen from different definitions, when we are studying marriage, we should take multiple variables into consideration with the effect of changing time.

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Changes have been reported in the structuring of marriage and its dynamics over time. The structure of marriage should be fully understood and well evaluated at the point of adapting to the changing marriage structure with industrialization (Çelik & Tümkaya, 2012). Significant changes have occurred in the structure of marriage, with the increasing number of spouses establishing dual-employment families. As the interest in the institution of marriage, which changes with the change in the conditions of time, increases, studies on marriage are also increasing (Çelik, 2018). And thus, the phenomenon of marriage, which constitutes the foundation stage of the family, has become more and more the subject of research.

With marriage, the lifestyles of individuals differ, and individuals now aim to provide satisfaction with this new lifestyle they have (Hünler & Gençöz, 2003). Marital satisfaction can be defined as the concept that expresses satisfaction with the dynamics of marriage. Marital satisfaction comes from the combination of many different variables. In studies, marital satisfaction is examined within the framework of these different variables. Variables such as satisfaction of life, conflict resolution styles and process, communication between spouses/partners, and sexual satisfaction significantly affect marital satisfaction and, more generally, family function (Greeff, 2000). Relationship with satisfaction is an important point for happy marriages. For couples who are happier in their marriage, they are more likely to resist the negative behavior of the other. Their attitudes toward their partner's behavior are observed as less accusatory and more optimistic (Kearns & Fincham, 2005). Even though family dynamics are unique, every person's and couple's satisfaction of life might be related to their marital satisfaction.

Although being married makes the individual happy in general, the quality of marriage is stated as an important factor on the happiness of the individual (Soylu & Kabasakal, 2016). Marriage-related expectations such as togetherness, responsibilities of being a parent, sexual union and pleasure, professional success, and economic freedom are expressed as predictors of marital satisfaction (Garcia & Tassara, 2003; Perlin & Diniz, 2005). The satisfaction of couples from their marriage includes most of their expectations about how the marriage can be better (Cox, 2006). Variables such as perceived spousal support, satisfaction with sexual life, and the use of effective and collaborative conflict resolution methods affect marital satisfaction (Greeff & De Bruyne, 2000; Schneewind & Gerhard, 2002; Çağ & Yıldırım, 2013). If all the given variables have a mutual approach of couples, we may talk about a healthy and satisfying relationship.

Couples in healthy families have a harmonious and satisfying marriage. Factors such as spending time together, fulfilling their mutual responsibilities, showing mutual respect, love and value, communicating effectively, having a profession, and trying to meet and solve the problems encountered together affect the psychological satisfaction of individuals in marriage (Terry & Kottman, 1995). However, maladaptive attributions (destructive communication, physiological and cognitive biases they've been through during conflicts etc.) of spouses during marital conflicts seem closely related to marital dissatisfaction (Fincham & Bradbury, 1987a). The increasing number of double-employed families brings with it a negative effect such as the fact that couples feel more marital stress. However, the satisfaction of having a dual-employee family has a significant and positive effect on the marital satisfaction of these couples (Perrone-McGovern et al., 2012). Many factors such as work, income, age, educational status, tendency to conform to gender roles, education level, life satisfaction, sexual satisfaction, duration of marriage, having children, and number of children are included in the studies as the determinants of marital satisfaction (Yıldız & Büyüksahin-Çevik, 2016; Hawkins & Booth, 2005; Çelik, 2018). Understanding of the relationship between changing time conditions and being in a marriage with a working partner can have an important role on new marital dynamics.

The quality of marriage is effective on individuals' happiness and subjective well-being (Johnson & Booth, 1995). Studies also report statistically significant relationships between marital adjustment, which is a concept close to marital satisfaction, and satisfaction of life (Be et al., 2013; Botha & Booysen, 2013; Çelik & Tümkaya, 2012). In general, people with high life satisfaction; It is expressed as a person who makes positive evaluations about his own life and generally feels good and happy (Diener & Myers, 1997). Life satisfaction is one of the concepts of positive psychology and its relations with subjective well-being are studied (Seligman & Csikszentmihalyi, 2000). Studies have shown that

life satisfaction is the cognitive perception of a person's subjective well-being (Yıldız & Büyüksahin-Çevik, 2016) and has effects on person's relationships.

Life satisfaction is affected by many different variables and situations. Studies report that individuals' psychological well-being affects their life satisfaction (Çelik & Tümkaya, 2012). Factors such as health level, income level, education level, which change with today's conditions, can affect people's satisfaction with life positively or negatively (Çelik, 2018). From this perspective, life satisfaction can also be defined as the satisfaction people feel from life and the level of satisfaction they want to achieve (Güler, 2021). Areas such as health, ego, immediate surroundings and social relations, ways of spending free time, work life, family life appear as areas related to life satisfaction and they all affect each other at a certain level (Yıldız & Çevik, 2016). Persons' relationship with themselves and with their social circle also effects their relationship with their partner and the quality level of their communication.

The quality of marriage is closely related to life satisfaction (Hünler & Gençöz, 2003). One of the important predictors of life satisfaction is marital experience (Yıldız & Baytemir, 2016). A happy marriage brings a high level of satisfaction from life; the feeling of happiness that arises with increasing harmony in marriage affects the psychological health of couples positively (Aker et al., 2005). It is stated that couples with high marital satisfaction provide more financial and moral support to each other in times of intense stress in their lives, and thus their mental health is positively affected (Paykel et al., 1996). Mutual satisfaction of expectations from marriage, which is one of the definitions of marital satisfaction, and especially women's wishes and hopes from marital relations are determinants of their life satisfaction (Munaf & Siddiqui, 2013). Mutual support brings satisfaction to couples both individually and together.

Marital satisfaction can affect life satisfaction directly, as well as through some situations such as managing the conflict process and providing emotional and moral support (Greef & Bruyne, 2000; Hawkins & Booth, 2005). At the same time, marital satisfaction can have a significant effect on life satisfaction and subjective well-being (Hawkins & Booth, 2005). In another study, it's pointed out that relationship discord is an important predictor for the incidence of mood, anxiety, and substance use disorders (Overbeek et al., 2006). These factors can be effected on personal communication issues and eventually they lead negative marital interaction between partners/spouses. Studies have reported that people who are not happy in their marriage have higher marital stress and lower life satisfaction (Perrone-McGovern et al., 2012). Studies examining the marital satisfaction of working individuals state that the poor working conditions of working couples, low level of earnings and similar factors negatively affect marital and life satisfaction (Çelik & Tümkaya, 2012). Be, Whisman, and Uebelacker, in their 2013 paper, states that the relationship between marital satisfaction and life satisfaction is stronger than the relationship between life satisfaction and job and health satisfaction.

Attempts by research to better understand marriage structures and concepts are increasing. As a result of this situation, studies on family and marriage have recently started to take place more frequently both in studies within the scope of Turkish literature and in studies within the scope of foreign literature. Changing understanding of marriage concept in new millennial age and observed divorces all around the world have become the resources of attention to marital conflict and satisfaction areas (Fincham & Beach, 2010). In this study, it was aimed to examine the relationship between marital satisfaction and life satisfaction with meta-analysis method. In this direction, studies using the correlational research method examining the relationships between marital satisfaction and life satisfaction since 2010 were examined. Considering the studies that include these variables and conducted in Turkey, it is thought that examining the effect size of the relationship between marital satisfaction and life satisfaction in a wider range with the meta-analysis method will be an important contribution to the field and provide an up-to-date perspective.

In line with the purpose of the study, answers to the following questions were sought:

- What is the pooled effect size of the relationship between marital satisfaction and life satisfaction variables?
- In the studies conducted between 2010-2022, does the relationship between marital satisfaction and life satisfaction differ in a statistically significant way in terms of the language



of the publication, the area of the publication, the index in which the publication was scanned, and the subgroups related to the publication year?

Method

In this part of the research, information is given about the type of study, data collection and analysis of the data.

Research Design

Meta-analysis method was used in this study in which the relationship between marital satisfaction and life satisfaction was examined. Beyond listing individual study results, meta-analysis is a powerful way to extract valuable information from multiple studies (Card, 2012). Meta-analysis is the grouping of two or more studies on similar subjects on a subject, theme or field of study according to certain criteria and interpreting the quantitative findings of these studies by combining them (Cumming, 2012).

Data Collection

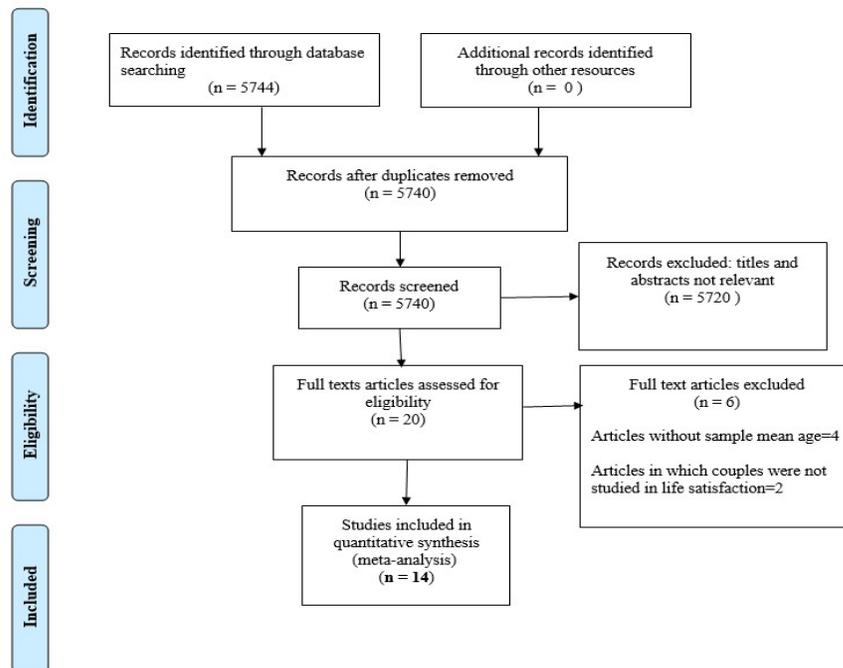
It is recommended to use the flow diagram within the scope of PRISMA statement and to follow the PRISMA guidelines in systematic review and meta-analysis studies in the international literature, in order to carry out and develop presentations and reports on systematic review and meta-analysis researches correctly (The PRISMA Group, 2009). In this context, two researchers independently searched the databases using keywords. Key words were used in the scanning process ("marital satisfaction", "life satisfaction", "evlilik doyumu", "yaşam doyumu"). During the scanning process, studies examining the relationship between life satisfaction and marital satisfaction were searched in ULAKBİM, Web of Science, Wiley, Springer, Science Direct and Google Scholar databases. The screening process was carried out between 15.04.2022 and 15.06.2022. A total of 6163 studies identified as a result of the scanning were examined according to their titles and abstracts. Then, the same studies were removed and the full texts of the remaining studies were examined. Then the inclusion criteria were determined. The inclusion criteria are as follows:

- Addressing the relationship between marital satisfaction and life satisfaction in the study.
- The study contains statistical information required for meta-analysis such as correlation coefficient and sample size.
- The study contains the Pearson correlation coefficient or the statistics used to calculate the Pearson correlation coefficient
- The study contains information about the publication language, research area, index and year variable.

14 studies were identified that met the stated inclusion criteria, and the research was conducted using information from these 14 studies. In those studies, it has been seen that 19 results are convenient for analysis. In order to make the scanning part of the study transparent, the flow diagram proposed by PRISMA is included in Figure 1 (PRISMA, 2009).

Figure 1.

Flow Diagram



Data Analysis

First of all, a coding form was created for the analysis of the studies covered in the research. During the coding phase of the studies selected according to the meta-analysis inclusion criteria, the specified study characteristics were discussed: (i) study name, (ii) author(s) name, (iii) year of publication of the study, (iv) publication language of the study, (v) correlation coefficient (vi) sample size, (vii), area where the study was conducted (viii), publication index from which the study was scanned (ix). Studies were coded by two researchers according to the specified characteristics, and the percentage of agreement between coders was 87%, and the Krippendorff Alpha coefficient was .85, and these results were evaluated as an indicator of high inter-coder reliability.

While calculating the effect sizes in the study, the raw Pearson correlation coefficient (r), which expresses the relationship between two variables was used (Borenstein, Hedges, Higgins, & Rothstein, 2009). In this study, effect sizes are interpreted as very low between 0.00 and 0.10, low between 0.11 and 0.30, medium between 0.30 and 0.50, high between 0.51 and 0.80, and very high between 0.81 and above, as stated by Cohen, Manion, and Morrison (2007). All analyzes of the research were carried out using JAMOVİ and *R* software.

Jamovi, which is used in the analyzes carried out within the scope of the research, is a free software built on the R programming language and helps statistical analyzes based on popular R packages (Eser, Yurtçu, & Aksu, 2020). Metaphor (Viechtbauer, 2010) package was used in both softwares. The effect sizes of the studies included in the meta-analysis should provide the assumption of normal distribution (Rosenberg, Adams, & Gurevitch, 2000). Within the scope of the research, first of all, an examination was carried out on whether the effect sizes of the studies included in the meta-analysis provided the assumption of normal distribution or not. The normal distribution graph obtained by considering the effect sizes of the studies was examined and it was concluded that the assumption of normal distribution was met.

Q statistics, I² statistics, which are a function of Q statistics, and Tau² statistics were used to determine whether the studies evaluated within the scope of meta-analysis showed a heterogeneous distribution. Considering that both the variation within the study (variance) and the variation between studies (Thompson & Sharp, 1999) are considered, the random effects model is a more realistic

representation of the real world (Field, 2003b), and the random effects model (REM) was preferred within the scope of the research. . In the estimation of the variance between studies under REM, the Sidik-Jonkman estimator, which has better properties and produces better results than other estimators, was preferred (Harrer et al., 2021).

Funnel diagram, Egger's regression test, Kendall's tau, p -curve and p -uniform were used to examine publication bias. In addition, the method of Fail-safe N was also used to obtain information about how many studies with a zero effect size value should be done in order to eliminate the significance of the meta-analysis result, in other words, to obtain information about the power and reliability level of the research. Within the scope of the research, publication language (Turkish/English), research area (not psychology/psychology), publication year (before 2016:0/2016 and after:1), the index in which the publication was scanned (Web of Science/Google Scholar/Other) were used as moderator variables. Analog ANOVA was used to determine the effect of these moderator variables on the variability of the effect size estimation.

Validity and Reliability

Studies included in the current reliability generalization meta-analysis are marked with an asterisk (*).

The Role of the Researcher

Corresponding author; Conceptualization, writing review&editing, and writing-original draft, resources, visualization. *Second author;* Conceptualization, methodology, software, validation, formal analysis, investigation, resources, data curation, writing-original draft, and visualization, and project administration. *Third author;* Conceptualization, methodology, software, validation, formal analysis, investigation, resources, data curation, writing-original draft, visualization, and supervision.

Ethical Information

Ethics commission report was not required because secondary data was used in the study.

Results

Within the scope of this part of the study, this meta-analysis research was conducted to determine the pooled effect size of the relationship between marital satisfaction and life satisfaction variables. Again, within the scope of this section, moderator analyses were used to determine the sources of the change in the pooled effect size. In this section, firstly the findings of publication bias, then the findings of heterogeneity, effect size and moderator analysis are included.

Findings On Publication Bias

When studies on publication bias in recent years are examined, it is stated that publication bias is mostly caused by significance levels and p-hacking, and therefore, it is recommended to interpret the outputs obtained as a result of p-curve and p-uniform analyses in the evidence collection process regarding publication bias (Simonsohn, Nelson, & Simmons 2014a; Harrer et al., 2019) Within the scope of the research, before calculating the pooled effect size for the meta-analysis, evidence was sought for the detection of publication bias in the studies examined within the scope of the analysis. For this purpose, the results obtained from the p-uniform analysis and then the p-curve analysis were interpreted.

Table 1 presents the statistics on publication bias for the p-uniform method. When the p-value for the p -uniform publication bias test is examined, it is striking that this value is greater than 0.05. This does not mean that the null hypothesis is true, it indicates that there is not enough evidence to reject the null hypothesis. As a result, the result obtained for the p value of the test statistic obtained from the p-uniform analysis ($p=0.993>.0.05$) means that there is not enough evidence for the existence of publication bias.



Table 1.

P-uniform publication bias test statistics

Test statistic	<i>p</i> -value
-2.461	0.993

Within the scope of the p-uniform analysis, the effect size of the result of the *p*-uniform analysis and the confidence intervals for the effect size were obtained. Table 2 shows the effect size statistics for the *p*-uniform analysis.

Table 2.

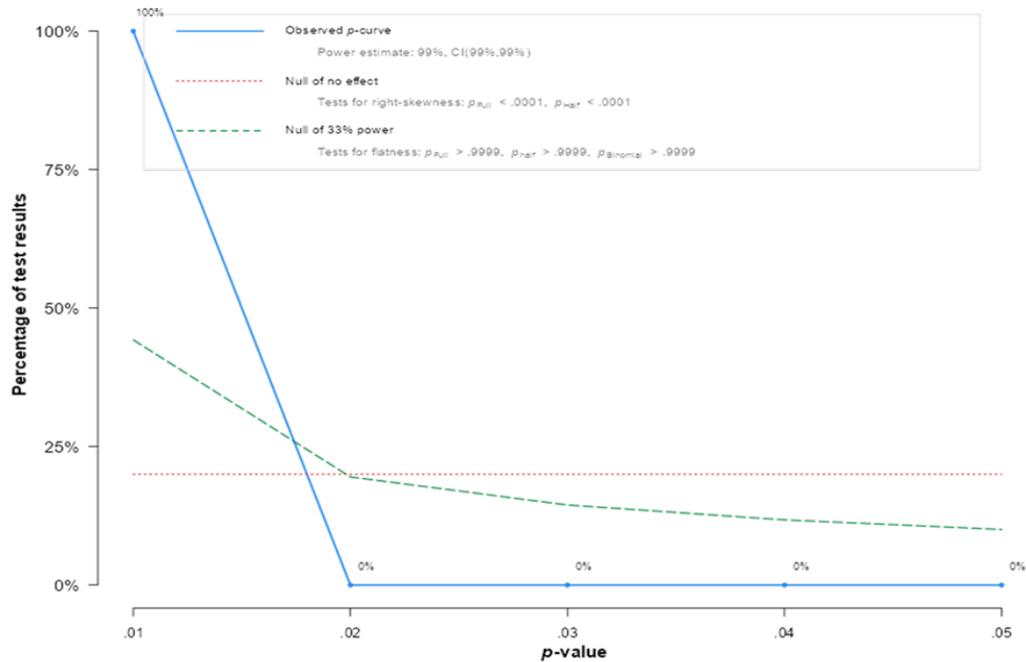
Effect size statistics for P-uniform analysis

Effect Size	ES _{lower}	ES _{upper}	z	<i>p</i> -value	Number of Statistically Significant Studies
0.50	0.46	0.55	-7.53	0.00	19

When the effect size and confidence intervals regarding the effect size of the p-uniform analysis in Table 2 are examined, it is seen that the effect size value (0.50) is very close to the 0.51-1.00 interval, which indicates a moderate effect. As a result, it was determined that the effect size for the *p*-uniform analysis was moderate.

Within the scope of the research, after the outputs obtained from the p-uniform analysis were interpreted, the outputs obtained from the *p*-curve analysis were interpreted. Figure 2 includes the visual of the *p*-curve publication bias analysis result.

Figure 2.
P-curve plot



Note: The observed p -curve includes 19 statistically significant ($p < .05$) results, of which 19 are $p < .025$. There were no non-significant results entered.

When Figure 2 was examined, it was determined that the observed p -curve included 19 studies at the $p < 0.05$ significance level and all of the studies were at the $p < 0.025$ significance level. The blue line represents the observed p -curve and the power estimate of the observed p -curve is 99%.

Mullen, Muellerleile, and Bryant (2001) pointed out that the results of meta-analysis studies can be resistant to future studies only if the value calculated using the $N/(5k+10)$ formula is greater than 1. Using the related formula, it was determined that the value obtained for the total population consisting of 9427 individuals, 89.7, was greater than 1. The fact that the calculation results for these values are greater than 1 can be interpreted as the publication bias of this meta-analysis study is very low. When the relevant values and the results obtained from the p -uniform and p -curve analyses were evaluated holistically, it was concluded that there was no evidence of publication bias.

Examining the funnel plot is one of the most classical methods used to gather evidence for publication bias. Figure 3 shows the funnel plot.

Figure 3.

Funnel plot



As can be seen in Figure 3, the majority of the 19 studies included in the study are located towards the top of the figure, where the standard error is small, and close to the combined effect size. This positioning of the studies within the scope of the funnel plot can be interpreted as "No evidence of publication bias is observed" (Borenstein et al., 2013). In addition, the fact that the Egger Linear Regression test (Egger Value= 0.925; $p=0.355>0.05$) result is not statistically significant is another indication that there is no evidence of publication bias. Begg and Mazumdar rank correlation statistics is one of the most widely used methods to gather evidence for publication bias. When there is no evidence of publication bias, this coefficient is expected to be close to 1 and the two-tailed p value is expected to make no significant difference, that is, the p value is expected to be greater than 0.05. According to the Begg and Mazumdar rank correlation statistics ($Tau_b =0.018$; $p=0.945 > 0.05$), no evidence of publication bias was found in the studies included in the meta-analysis.

Within the scope of the research, the numerical output of the Fail-Safe N, which is another way of defining the p value and obtained as a result of the meta-analysis, was also examined. The fact that the p value of the Fail Safe-N is less than the alpha value ($p<0.001$) indicates that the study has a high level of reliability. Within the scope of the research, it was determined that the p value of the Fail Safe-N was less than 0.05 alpha ($FSN=16.914$, $p<.001$). According to this result, it can be said that the research is a study with a high level of reliability.

Findings Regarding The Pooled Effect Size Of The Relationship Between Marital Satisfaction and Life Satisfaction

After the process of searching for evidence regarding publication bias regarding the studies included in the sample of the research, the pooled effect size should be calculated within the scope of the preferred random effects model, taking into account the sampling frame of the research. The Table 3 includes the pooled effect size and the lower and upper values of the confidence interval for the pooled effect size.

Table 3.

Analysis output for overall effect size

Model	ES	SE	z	p	ES _{lower}	ES _{upper}
REM	0.46	0.02	16.61	< .0001	0.41	0.51

When Table 3 is examined, it is striking that the pooled effect size value is 0.46 with an error of 0.02. The lower limit for the pooled effect size value is 0.41 at the 95% confidence interval, and the upper limit is 0.51. When the point cut-off value of 0.46 and the lower and upper confidence interval values for the pooled effect size are interpreted considering the effect size classification of Cohen et al. (2011), it can be said that the pooled effect size of the association between marital satisfaction and life satisfaction is moderate.

Another output of the meta-analysis is the forest plot. The forest graph is included in Figure 3. Considering the data on the effect sizes of the studies included in the study, it is seen that the individual effect sizes of the studies vary between 0.29 (Be et al., 2013) and 0.65 (Matalon et al., 2021). When the statistical results of the effect sizes of the studies are evaluated holistically, it's striking that the effect sizes of the researches are all positive. The forest graph also includes study weights. The size of the square representing each study in the forest plot indicates the weight of the study. When the squares giving information about the working weights in Figure 2 are examined, Be et al.4 (2021), it can be said that the weight of the study is the highest.

Figure 3.

Forest plot

Study	Total	Corre
Yildiz & Baytemir(2016)	294	
Celik & Tumkaya(2012)	119	
Ince & Guducu-Tufekci(2015)	123	
Perrone-McGovern & et al.1(2012)	87	
Perrone-McGovern v& et al.2(2012)	87	
Be & et al. 1(2013)	1385	
Be & et al.2(2013)	1385	
Be & et al.3(2013)	1385	
Be & et al.4(2013)	1385	
Celik(2018)	332	

Within the scope of the research, after the interpretation of the forest graph, heterogeneity statistics were examined. When the results of heterogeneity statistics are examined, it is observed that the result of Cochran's Q Test is statistically significant ($Q \sim (df = 18) \sim = 122.15, p = <.0001$). That is, the change in effect size is larger than expected from the sampling error. According to this result, it

can be said that the actual effect size varies according to the studies. The I^2 statistic, which is another statistic to provide information on heterogeneity, shows the rate of change in the observed effect size attributable to sampling error. I^2 gives information about the degree of inconsistency of the findings of the studies within the scope of meta-analysis and reflects the extent to which the confidence intervals obtained from different studies overlap with each other. The I^2 value obtained within the scope of the meta-analysis is a relatively large I^2 (85%) value (Higgins et al., 2003) and this value means that the effect size differs significantly in studies. In addition to the Q and I^2 statistics, the lower limit value of the 95% confidence interval for the pooled effect size is 0.25 and the upper limit value is 0.51, which gives information about how widely the effect sizes vary between populations (based on standard deviation). Considering the statistically significant result of the Q statistic, the relatively high I^2 value and the relative width of the estimation interval, it can be said that there is a heterogeneity that needs to be examined. Within the scope of the research, moderator analyzes were used to explain the sources of heterogeneity. Finally, moderator analysis was used to gather information on the sources of heterogeneity.

Moderator Analysis

Finally, in this meta-analysis research, it was examined whether the studies included in the analysis showed heterogeneous distribution. The heterogeneity of the combined studies was determined by the Q test and the I^2 value. In this context, the final aim of the research is to determine the differentiation status of the relationship between marital satisfaction and life satisfaction in terms of publication language, research area, index of publication and publication year. The results of moderator analysis are given in Table 4.

Table 4.

Distribution of effect sizes by subgroups of moderator variables

Moderator Variable	Moderator Variable Level	k	ES _{pooled}	ES _{lower}	ES _{upper}	df	Q _B	p
Publication language	Turkish	7	0.4357	0.3630	0.5032	18	72.95	<0.0001
	English	12	0.4821	0.4193	0.5403			
Research area	Psychology	12	0.4692	0.4053	0.5284	18	58.12	<0.0001
	Others	7	0.4579	0.3812	0.5283			
Publication Indexing	Web of Science	6	0.4152	0.3424	0.4831	18	44.36	<0.0001
	Google Scholar	6	0.4539	0.3695	0.5310			
	Others	7	0.4364	0.5920	0.6280			
Publication year	Before 2016	10	0.4294	0.3712	0.4843	18	67.78	<0.0001
	2016 and later	9	0.4940	0.4187	0.5625			

The output of the moderator analysis performed for the first sub-problem related to the second problem statement within the scope of the study (Is there a statistically significant difference between the effect sizes of the studies according to the publication language?) is located in the first row of Table 4. The first value to be examined regarding the determination of heterogeneity sources is the Q value. When the results of the moderator analysis regarding the first line were examined, it was concluded that the publication language (Turkish/English) variable created a statistically significant difference between the effect sizes ($Q=72.95$; $p<.00001$). Accordingly, the fact that the studies were published in Turkish or English changes the effect size. When the averages of effect sizes are examined, it is seen that the English-language studies have a higher effect on the relationship between marital satisfaction and life satisfaction.

The output of the moderator analysis performed for the second sub-problem related to the second problem statement within the scope of the study (Is there a statistically significant difference between the effect sizes according to research area variable of the studies?) is located in the second row of Table 4. The first value to be examined regarding the determination of heterogeneity sources is the Q value. When the results of the moderator analysis for the second line were examined, it was concluded that the research area (Psychology/Others) variable created a statistically significant difference between the effect sizes ($Q=58.12$; $p<0.0001$). Accordingly, the fact that the studies were carried out in the area of psychology or in another area changes the effect size. When the averages of effect sizes are examined, it is seen that the studies published in the area of psychology have a higher effect on the relationship between marital satisfaction and life satisfaction.

The output of the moderator analysis performed for the third sub-problem related to the second problem statement within the scope of the study (Do the effect sizes of the relationships between marital satisfaction and life satisfaction differ statistically according to the index in which the publication was scanned?) is located in the third row of Table 4. The value to be examined regarding the determination of heterogeneity sources within the scope of the relevant moderator analysis is the Q value. When the results of the moderator analysis for the third row were examined, it was concluded that the index (WOS/Google Scholar/Other) variable in which the publication was scanned created a statistically significant difference between the effect sizes ($Q=44.36$; $p<0.0001$). Accordingly, the fact that the studies are published in WOS, Google Scholar or another directory changes the effect size. When the averages of the effect sizes are examined, it is seen that the studies published in a journal scanned in Google Scholar other than WOS and another index have a higher effect on the relationship between marital satisfaction and life satisfaction.

The output of the moderator analysis performed for the fourth sub-problem (Is there a statistically significant difference between the effect sizes of the studies according to the publication year?) related to the second problem statement within the scope of the study is in the last line of Table 4. The first value to be examined regarding the determination of heterogeneity sources within the scope of the relevant moderator analysis is the Q value. When the moderator analysis of the last line was examined, it was concluded that the variable of publication year (before 2016/2016 and after) created a statistically significant difference between the effect sizes ($Q=67.78$; $p<.0001$). Accordingly, the fact that the studies were published before or after 2016 changes the effect size. When the averages of effect sizes are examined, it is seen that the studies published 2016 and later have a higher effect on the relationship between marital satisfaction and life satisfaction.

Discussion and Conclusion

The main purpose of this meta-analysis is to evaluate individual studies that deal with the relationship between life satisfaction and marital satisfaction with the help of meta-analysis method. According to this determined purpose, analysis meta-analysis was carried out with 19 individual studies ($N= 9427$) meeting the inclusion criteria. In addition to the stated main purpose, moderator analyses were carried out to determine whether there is a possible statistical difference according to the language of publication, research area, publication indexing and publication year of individual studies on the relationship between marital satisfaction and satisfaction with life. The findings obtained from these analyses were examined and it was determined that there was an important difference in all subgroups in the relationship between marital satisfaction and life satisfaction. Accordingly, it was



determined that the effect size of the articles written in English in the publication language from the subgroups was higher than the Turkish articles. Similarly, it was determined that the effect size obtained in studies in the field of psychology was higher than the effect sizes obtained in other fields. When the effect sizes were compared according to the databases in which the journals were indexed, it was determined that the articles scanned in google scholar were at the highest level, followed by other databases and the lowest effect size in the journals in the web of science database. When compared by years, it was concluded that the effect sizes in the studies conducted after 2016 were higher than the studies conducted before 2016.

In order to evaluate the relationship between marital satisfaction and life satisfaction within the scope of the research, the results of 19 individual studies were combined with the meta-analysis method. In the study, it was observed individual effect sizes of the studies vary between 0.29 and 0.65; also all of the effect sizes of the studies are all positive and the pooled effect size value was determined as 0.46, and according to this value, it was concluded that there was a moderate relationship between the two variables (Be et al., 2013). According to this result, individual studies examining the bivariate relationship between marital satisfaction and life satisfaction show that there is a positive and moderate relationship between two variables as a whole. Accordingly, when the studies conducted in different languages, in different fields and in different years are evaluated as a whole, it has been concluded that marital satisfaction increases life satisfaction in a positive way. It can be said that the pooled effect size value calculated according to the random effect model represents a moderate effect according to the classification of Cohen et al. (2007). The effect size value obtained regarding the relationship between marital satisfaction and life satisfaction was found to be similar to the results of studies (Yıldız & Baytemir, 2016; Çelik & Tümkaya, 2012; Ünüvar & Tagay, 2015; Botha & Boysen, 2013; Boyce, Wood, & Ferguson, 2016). As a result of the literature review, no empirical research findings were found for the same purpose. The fact that there is no study with a similar subject does not allow comparison with the obtained pooled effect size value. Within the scope of the study, not only individual studies in which the data obtained from a single country constituted the sample, but also individual studies with different types of samples were included. It is thought that this situation increases the generalizability of the obtained pooled effect size. In measuring the effect of publication language on the relationship between marital satisfaction and life satisfaction, the effect size of the publication language of the publications published in Turkish (0.44) is smaller than the publication size of the publications published in English (0.48). However, the difference is statistically significant and in favour of publications published in English. This result is thought to be due to the relative knowledge that only English-language journals are more selective in terms of theory and methodology, and that article review processes are more sensitive. At the same time, scanning half of 12 studies published in English out of 19 studies that were meta-analysed within the scope of WOS and providing data to determine the scientific indicators of countries from the WOS database, the h-index value calculated here is lower (but more valuable) because Web of Science only selected journals with high impact factor for the index. Google Scholar's h-index has the highest value because it scans more journals. In terms of objective evaluation, it should also be stated which database is used while giving the h-index. The H-index is also used to evaluate the performance of scientific journals.

Another limitation of this meta-analysis study is that it deals with studies conducted in relational survey type that examines the relationship between variables. Also, in the study only articles were scanned within the scope of the study. Although all of the postgraduate studies of individual researchers were accessed, only the published and accessible to the readers could be accessed due to the differing dates of acceptance and publication of the articles in accordance with the publication policies of peer-reviewed scientific journals. Although a rich keyword pool has been created for individual studies obtained with the help of search engines and databases, it is seen as another important limitation that the studies that are not shown or cannot be reached as a result of the search cannot be included in the meta-analysis study. Another limitation is that analog ANOVA, which can be affected by various variables, was used in subgroup analyzes. In addition, the study is limited to the analysis of the coded moderator variables. The low number of primary numbers in some subgroups in the moderator analyzes may also have affected the results.

This meta-analysis study has limitations as in any other study. The first of these is the limitations of the meta-analysis method itself. Correlational studies were included in this study. Only articles were scanned within the scope of the study. Although all of the postgraduate studies of individual

researchers were accessed, only the readers could be accessed due to the differing dates of acceptance and publication of the articles in accordance with the publication policies of peer-reviewed scientific journals. Although a rich keyword pool has been created for individual studies obtained with the help of search engines and databases, it is seen as another important limitation that the studies that are not shown or cannot be reached as a result of the search cannot be included in the meta-analysis study. Considering the screening process within the scope of this study, it can be concluded that there are too many poor reporting practices regarding the studies. Thus, one of the most important limitations of the study is the fact that 5720 of the 5740 studies reached in the databases could not be included in the analysis due to the lack of information on their titles and abstracts. Another limitation is that analog ANOVA, which can be affected by various variables, was used in subgroup analyzes. In addition, the study is limited to the analysis of the coded moderator variables. The low number of primary numbers in some subgroups in the moderator analyzes may also have affected the results.

As a result of overestimating the actual population effect, the problem of "publication bias" is encountered. (Crocker & Algina, 1986; Pedhazur & Schmelkin, 1991; Thompson, 2003). As a result of the heterogeneity analyzes carried out within the scope of the research, it was concluded that the results obtained differ according to the language of publication, publication area, screening index and study year. For this reason, it is recommended that researchers consider the variables covered in the study when interpreting the relationship between life satisfaction and marital satisfaction, and interpret the results of the analysis by controlling these variables, if necessary.

Although the analysis of this study with JAMOVI and R program is seen as a limitation by some researchers, this situation has not been considered a limitation due to the increase in the use of free and open source programs instead of paid and closed code programs such as CMA in recent years and the results obtained are supported with richer materials. As a matter of fact, p-uniform analysis and p-curve publication bias analysis results performed within the scope of the study are seen as one of the superior aspects of the study.

Note: As it stated earlier in "Validity and Reliability" section, the references with asteriks (*) refer to studies included in meta-analysis.

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