



## Forgiving Others towards Self-Happiness: A Meta-Analysis Review

Arifah Handayani

Universitas Muhammadiyah Surakarta  
arifahafif69@gmail.com

Taufik Kasturi

Universitas Muhammadiyah Surakarta  
taufik@ums.ac.id

Eny Purwandari

Universitas Muhammadiyah Surakarta  
ep271@ums.ac.id

### Abstract

This article presents a meta-analytic study examining the relationship between forgiving others and personal happiness. Data were collected from fifteen sources across thirteen articles, involving a total of 6,651 participants (57% female; 43% male). The results, using a random effects model, indicate a significant positive relationship between forgiveness and happiness ( $z = 5.793$ ;  $p < 0.001$ ; 95% CI (0.179; 0.360)). The correlation is moderate, with the confidence interval ranging from 0.179 to 0.361. This meta-analysis supports previous studies that suggest a positive correlation between forgiving others and increased happiness. Specifically, individuals who are willing to forgive tend to experience higher levels of happiness compared to those who do not forgive. Age and country of origin showed no significant differences. The implications of this study suggest that age and country of origin are not relevant factors for justifying a lack of forgiveness.

**Keywords:** *forgiveness, happiness, meta-analysis*

Received 11 January 2024/Accepted 8 June 2024 ©Author all rights reserved

### Introduction

The concepts of forgiveness and happiness have existed for centuries, originating from theological and philosophical principles. These concepts are also linked to positive psychology (Hojjat & Ayotte, 2013) and prosocial behavior (Han et al., 2019). Over the past twenty years, the study of forgiveness has become a compelling area of research. As social beings, humans are naturally prone to differences in thoughts, interests, life principles, culture, and ways of interpreting problems in

every interaction. These differences often have the potential to trigger conflicts, leading to social discord.

Typically, the dominant responses to feeling offended by a transgression are anger, hostility, or revenge rather than forgiveness (Gilam et al., [2019](#)). Worthington et al., ([2016](#)) also stated that the loss of peace among those in conflict is rooted in lingering motives of revenge and avoidance. If not promptly addressed, the problem can become protracted, creating tension among the conflicting parties. Forgiveness is then considered a preferable approach to conflict resolution, enhancing social harmony (Burnette et al., [2014](#)). This view aligns with Adam Karduz and Saricam ([2018](#)), who found a negative correlation between forgiveness and revenge, the more forgiving and happy a person is, the less likely they are to seek revenge.

Forgiveness positively impacts psychological and physical health (Toussaint et al., [2015](#); Yao et al., [2017](#)), and offers hope for relationship improvement (Zheng & van Dijke, [2020](#)). However, some researchers argue that forgiveness does not automatically lead to reconciliation or relationship restoration with those who have wronged us (Enright & Fitzgibbons, [2015](#)). Forgiveness does not necessitate renewed physical contact between the offender and the victim. Reconciliation after forgiveness is limited to the absence of revenge, not necessarily the restoration of the relationship to its prior state.

There are numerous definitions of forgiveness from various psychological perspectives, all of which carry positive connotations, primarily from the victim's standpoint. Worthington ([2020](#)) defines forgiveness as a prosocial behavior that transforms the victim's response to the offender's transgression by fostering a better attitude, free from revenge and avoidance. Bartholomaeus and Strelan ([2016](#)) describe forgiveness as an episodic interpersonal state and a response by the victim to the offense. Another definition by Amanze and Carson ([2019](#)) sees forgiveness as a process that enhances the victim's capacity to overcome hesitation when forgiving, allowing them to gradually release hurt and negative influences, thereby fostering more positive feelings towards the offender.

These positive feelings may include happiness, which is defined as a positive emotion often accompanied by high life satisfaction (Boehm et al., [2017](#)). Similarly, Batik et al., ([2017](#)) assert that life satisfaction, an aspect of happiness, can be predicted by forgiveness. Although often avoided, forgiveness plays a crucial role in achieving happiness. Conversely, other research suggests that those who experience happiness are more likely to forgive (Jiang et al., [2015](#)), implying that happiness facilitates forgiveness.

Sucheta and Prasad ([2023](#)) found a positive correlation between forgiveness and happiness among adults ( $r = 0.58$ ;  $p < 0.01$ ). Similar results were found by Adam Karduz & Saricam ([2018](#)), showing a correlation between forgiveness and happiness ( $r = 0.58$ ;  $p < 0.01$ ). Shekhar et al., ([2016](#)) also identified a positive correlation between forgiveness and happiness among university students ( $r = 0.56$ ;  $p < 0.01$ ). Through forgiveness, individuals can find new meaning in their sadness, transforming despair into optimistic hope (Enright & Fitzgibbons, [2015](#)). Kavakli et al. ([2019](#)) demonstrated a relationship between happiness and forgiveness ( $r = 0.27$ ;  $p < 0.001$ ). However, Safaria ([2014](#)) found no correlation between forgiveness and happiness ( $r = 0.16$ ;  $p > 0.05$ ). Devassy and Raj ([2014](#)) also reported no relationship between forgiveness and happiness among adolescents ( $r = -0.02$ ;  $p < 0.01$ ).

Several meta-analyses have examined the theme of forgiveness and happiness. Feng et al., ([2022](#)) conducted a meta-analysis titled "Forgiveness and Subjective Well-Being: A Meta-analysis Review," concluding that forgiving individuals experience higher subjective happiness, greater life satisfaction, and more positive emotions. This research links forgiveness with subjective well-being rather than happiness. Another study, "A Meta-analysis of Forgiveness Education Interventions' Effects on Forgiveness and Anger in Children and Adolescents" (Rapp et al., [2022](#)), found that forgiveness education interventions positively impact forgiveness attitudes. This meta-analysis only addressed forgiveness, not happiness, and examined effects rather than variable relationships.

Hirst et al., ([2019](#)), in "Attachment Dimensions and Forgiveness of Others: A Meta-analysis," found that anxiety ( $r = -0.25$ ) and avoidance ( $r = -0.18$ ) negatively affect forgiveness. This study focused solely on forgiveness, exploring influence rather than relationships. Another study, "Forgiveness

Interventions for Older Adults: A Review" (Lopez et al., 2021), reported that participants receiving forgiveness interventions exhibited higher levels of forgiveness compared to those who did not. Forgiveness led to reduced depression, stress, and anger while enhancing life satisfaction, subjective happiness, and psychological well-being. This study discussed forgiveness interventions without specifically addressing the relationship between forgiveness and happiness.

Tanzer and Weyandt (2020) conducted a meta-analysis on happiness, concluding that understanding happiness involves behavioral activities rather than affective states. Their study, "Imaging Happiness: Meta-analysis and Review," did not discuss forgiveness.

The diverse findings from these studies indicate a lack of consensus on the relationship between forgiveness and happiness. Based on this overview, the research questions are: Do those who forgive achieve happiness? To what extent is forgiveness related to happiness among individuals of different ages and nationalities?

The objectives of this research are to synthesize previous studies on the relationship between forgiveness and happiness and identify factors influencing this relationship. Additional aims include: (a) calculating the overall impact of forgiveness on happiness and (b) examining the relationship between forgiveness and happiness among individuals of varying ages and nationalities.

## **Methods**

Numerous studies from various disciplines with different research approaches have been collected. The diverse findings on the same research theme can complicate the effort to construct theoretical conclusions. Therefore, a meta-analysis was chosen as a method to synthesize these varied results systematically. This research employs a meta-analytic approach to examine the relationship between forgiveness and happiness.



### *Literature Search*

The first step involved collecting articles related to the themes of forgiveness and happiness. Data were sourced from Scopus in November 2023 using the keywords "forgiveness" and "happiness." An initial pool of 109 articles was gathered, which was then filtered to meet specific criteria (Figure 1). The criteria for the meta-analysis included: research articles examining the relationship between forgiveness and happiness, reporting the correlation coefficient between forgiveness and happiness, providing sample size and research location, written in English, being quantitative research articles published between 2004 and 2023, and excluding book chapters. Ultimately, thirteen articles with fifteen correlation coefficients met these criteria.

### *Data Coding*

The fifteen datasets were coded according to specific features: author names, article titles, publication years, measurement scales used, subject ages, sample sizes, and countries of the research. The correlation coefficients (r-values) indicating the relationship between forgiveness and happiness were coded first. If an article reported multiple r-values from different regions, all were included. The data coding details are presented in [Table 1](#).

### *Data Processing and Analysis*

The collected data were analyzed using JASP-0.18.0.0 software. The first step was to conduct a heterogeneity test to determine whether the effect sizes from the studies in the meta-analysis had similar or different correlations. This test also guided the selection of the appropriate model, either the fixed effect model or the random effect model. If the heterogeneity test indicated homogeneous effect sizes, the fixed effect model was used. Conversely, if the effect sizes were heterogeneous, the random effect model was employed. This implies that the chosen studies had random samples or varying subject characteristics. The analysis results also suggest potential for investigating moderator variables that influence the relationship between forgiveness and happiness (Card, [2011](#)).

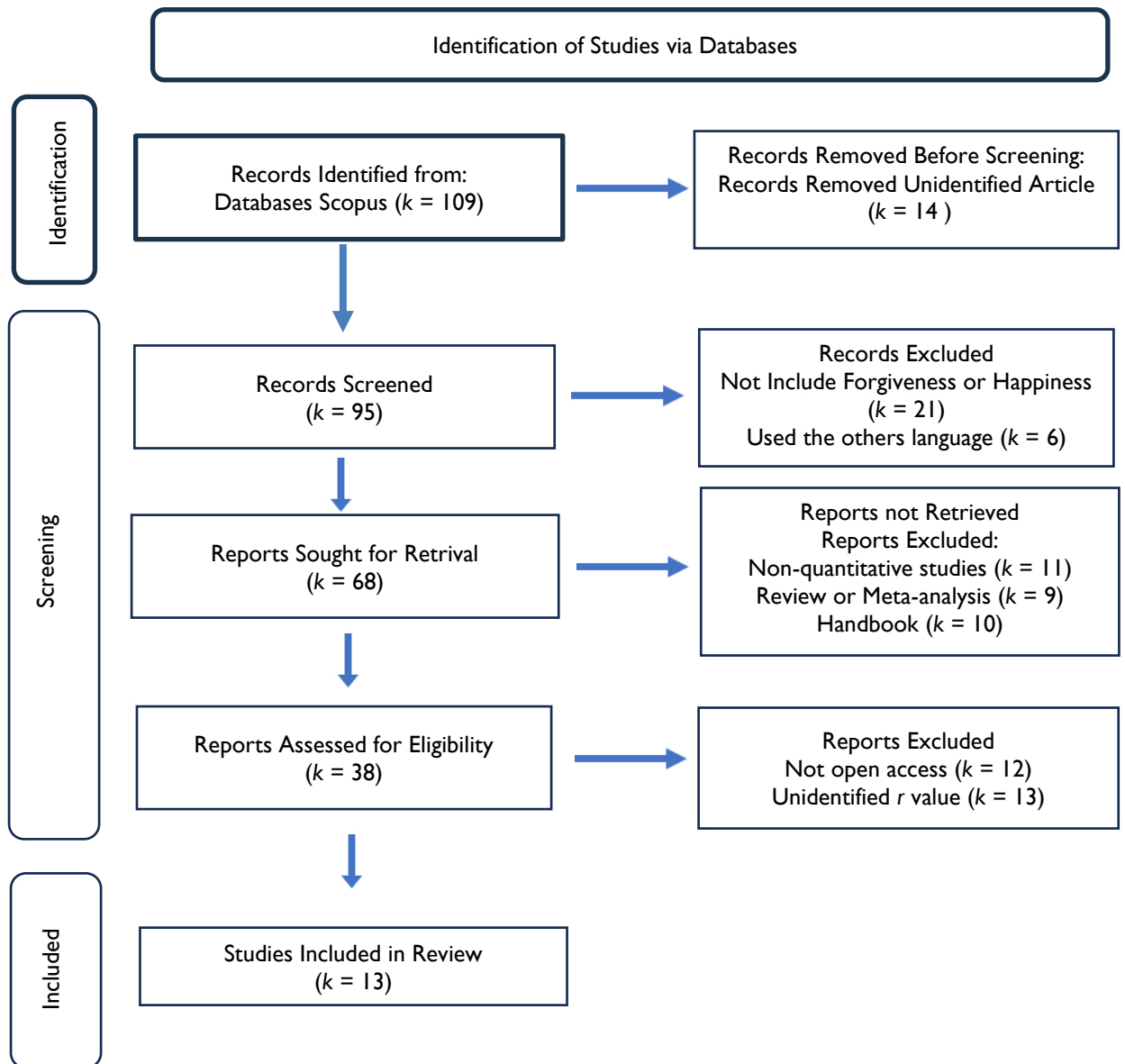


Figure 1. PRISMA-style flow diagram of studies included in the meta-analysis

**Table 1**  
*Primary Data Study*

| No | Research Title<br>&<br>Year                                                                                                                         | Researcher            | Measurement Scale                                                                                                                                                                          | Number &<br>Characteristics<br>of Subjects                    | Country           |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------|
| 1  | A Hypothetic Model for Examining the Relationship between Happiness, Forgiveness, Emotional Reactivity and Emotional Security (2022)                | Mustafa<br>Ercengiz   | Heartland<br>Forgiveness Scale<br>The Emotional<br>Security<br>The Emotional<br>Reactivity Scale<br>The Oxford<br>Happiness                                                                | 916<br>Age 18-25 years<br>(617 women,<br>299 men)             | Turkey            |
| 2  | A Proposed Model to Explain Happiness in College Students: The Roles of Perceived Parenting Styles, Emotional Self-Efficacy, and Forgiveness (2021) | Esra Asici            | Perceived Parenting<br>Styles Scale (PPSS)<br>Emotional Self-<br>Efficacy Scale (ESES)<br>The Heartland<br>Forgiveness Scale<br>(HFS)<br>The Oxford<br>Happiness<br>Questionnaire<br>(OHQ) | 386<br>Average age<br>21.08 tahun<br>(284 wanita, 102<br>men) | Turkey            |
| 3  | Exploring the Relationship between Coping Humor and Subjective Happiness: Belongingness and Forgiveness as Serial Mediators (2020)                  | Begum Satıcı          | Subjective Happiness<br>Scale<br>Coping Humor Scale<br>General<br>Belongingness Scale<br>Trait Forgiveness<br>Scale                                                                        | 306<br>Age 18-26 years<br>(158 women,<br>148 men)             | Turkey            |
| 4  | Predictive Effects of Subjective Happiness, Forgiveness, and Rumination on Life Satisfaction (2015)                                                 | Jale<br>Eldeleklioglu | Satisfaction with Life<br>Scale<br>The Subjective<br>Happiness<br>Scale<br>The Trait<br>Forgiveness Scale<br>The Ruminative<br>Thought Style Scale                                         | 380<br>Age 18-25 years<br>(295 women, 85<br>men)              | Turkey            |
| 5  | A Feasibility Study of Psychological Strengths and Well-being Assessment in Individuals Living with Recurrent Depression                            | Ann Macaskill         | The Gratitude<br>Question<br>The Trait Hope<br>Scale<br>The Life Orientation                                                                                                               | 112<br>Average age<br>41.34 years<br>(27 women, 85<br>men)    | United<br>Kingdom |

| No | Research Title<br>&<br>Year                                                                                                                              | Researcher                          | Measurement Scale                                                                                                                                                                                            | Number &<br>Characteristics<br>of Subjects         | Country           |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------|
|    | (2012)                                                                                                                                                   |                                     | Test<br>Forgiveness of Self<br>and Others<br>The Spirituality Index<br>The Satisfaction with<br>Life Scale<br>The Short<br>Depression-<br>Happiness Scale<br>The Positive and<br>Negative Affect<br>Schedule |                                                    |                   |
| 6  | Forgiveness and Happiness.<br>The Differing Contexts of<br>Forgiveness Using the<br>Distinction between<br>Hedonic and Eudaimonic<br>Happiness<br>(2005) | John Maltby                         | Enright Forgiveness<br>Inventory<br>The Depression-<br>Happiness<br>Scale<br>Oxford Happiness<br>Questionnaire                                                                                               | 244<br>Age 18-56 years<br>(128 women,<br>116 men)  | United<br>Kingdom |
| 7  | Forgiveness, Gratitude,<br>Happiness, and Prosocial<br>Bystander Behavior in<br>Bullying<br>(2020)                                                       | Fernanda Inez<br>Garcia-<br>Vazquez | The Gratitude<br>Questionnaire<br>The Forgiveness<br>Heartland Scale<br>The Scale of<br>Orientation to<br>Happiness                                                                                          | 1010<br>Age 12-18 years<br>(477 women,<br>533 men) | Mexico            |
| 8  | Gender Differences in the<br>Realationship between<br>Forgiveness and<br>Depression/Happiness<br>(2010)                                                  | Majda Rijavec                       | Transgression-<br>Related<br>Interpersonal<br>Motivations (TRIM)<br>Inventory<br>Well-being with<br>Short Depression-<br>Happiness Scale                                                                     | 600<br>Age 19-28 years<br>(300 women,<br>300 men)  | Croatia           |
| 9  | Forgiveness as a Predictor<br>of Mental Health in<br>Citizens Living in the<br>Military Conflict Zone<br>(2019-2020)<br>(2022)                           | Svetlana<br>Kravchuk                | Mental Health<br>Inventory-5 (MHI-5)<br>Mental Health<br>Outcome (BSI-12)<br>Trait Forgivingness<br>(dispositional) Scale<br>A Short-<br>-Version of<br>Forbearance Scale<br>(FS-8)                          | 145<br>Age 18-50 years<br>(74 women, 71<br>men)    | Ukraine           |





| No | Research Title & Year                                                             | Researcher       | Measurement Scale                                                                                                                                                                                        | Number & Characteristics of Subjects                     | Country  |
|----|-----------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|----------|
|    |                                                                                   |                  | Forgiveness Measures Decision to Forgive Scale (DTFS)<br>Emotional Forgiveness Scale (EFS)<br>The Adult Hope Scale<br>Flourish and Secure Flourish Scales.                                               |                                                          |          |
| 10 | Slovak Validation of the Enright Forgiveness Inventory-30 (2022)                  | Lucia Zahorcova  | Enright Forgiveness Inventory-30 (EFI-30)                                                                                                                                                                | 1209<br>Age 18-65 years<br>(609 women, 600 men)          | Slovakia |
| 11 | Does Spirituality Influences Happiness and Academic Performance? (2022)           | Rajasekhar David | Heartland Forgiveness Scale (HFS)<br>The Gratitude Questionnaire (GQ-6)<br>Daily Spiritual Experience Scale (DSES)<br>Subjective Happiness Scale or General Happiness Scale<br>Grade Point Average (GPA) | 174<br>Average age usia 22.3 years<br>(85 women, 89 men) | India    |
| 12 | The Role of Character Strengths in Depression: A Structural Equation Model (2018) | Ata Tehranchi    | Basic Emotions Scale (BES)<br>Beck Depression Inventory-II (BDI-II)<br>Dysfunctional Attitudes Scale-40 Form a (DAS-40)<br>Values in Action-Inventory of Strengths (VIA-IS-240)                          | 200<br>Average age 29.71 years<br>(139 women, 61 men)    | Iran     |

| No  | Research Title<br>&<br>Year                                                                         | Researcher      | Measurement Scale                                                                                                                                                 | Number &<br>Characteristics<br>of Subjects             | Country   |
|-----|-----------------------------------------------------------------------------------------------------|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------|
| 13a | Dataset on Positive Mental Health of Indonesian, Malaysian, and Thailand University Students (2020) | Tutut Chusniyah | Positive Mental Health Scale<br>Subjective Happiness Scale<br>Forgiveness Questionnaire<br>Brief State Humility Scale<br>Information Literacy Self-Efficacy Scale | 331<br>Average age 20.47 years<br>(189 women, 142 men) | Indonesia |
| 13b | Dataset on Positive Mental Health of Indonesian, Malaysian, and Thailand University Students (2020) | Tutut Chusniyah | Positive Mental Health Scale<br>Subjective Happiness Scale<br>Forgiveness Questionnaire<br>Brief State Humility Scale<br>Information Literacy Self-Efficacy Scale | 320<br>Average age 20.47 years<br>(172 women, 148 men) | Malaysia  |
| 13c | Dataset on Positive Mental Health of Indonesian, Malaysian, and Thailand University Students (2020) | Tutut Chusniyah | Positive Mental Health Scale<br>Subjective Happiness Scale<br>Forgiveness Questionnaire<br>Brief State Humility Scale<br>Information Literacy Self-Efficacy Scale | 318<br>Average age 20.47 years<br>(253 women, 65 men)  | Thailand  |

## Result

### Effect Sizes

#### Calculation of Effect Sizes Based on Correlation Data

The effect size ( $z$ ) for each correlation study was calculated using the formula  $z = 0.5 \cdot \ln\{(1+r) + (1-r)\}$ . The standard deviation of  $z$  ( $Vz$ ) was obtained using the formula  $Vz = 1/(n-3)$ , and the standard error (SE $z$ ) of the effect size ( $z$ ) was calculated using the formula SE $z$  = root of Vz.

From the fifteen datasets analyzed, there were a total of 6,651 participants, with the average number of participants per study ranging from 112 to 1,209. The analysis using the Random Effect model at a 95% significance level indicated a significant positive correlation (estimate value = 0.270, no negative sign) between forgiveness and happiness ( $z = 5.793$ ;  $p < 0.001$ ; 95% CI: 0.179 to 0.361). The correlation between forgiveness and happiness falls within the moderate category ( $r = 0.3$ ), with a confidence interval ranging from 0.179 to 0.361. Interpretation of correlation coefficients (Cohen, 1997):  $r = 0.1$  (low),  $r = 0.3$  (moderate),  $r = 0.5$  (high).

#### Correction for Sampling Error

In this meta-analysis study, the focus of correction is on sampling errors. The primary data collected consisted of fifteen primary datasets.

**Table 2.**  
*Mean Population Correlation Corrected for Sample Size*

| No             | Researcher                   | N     | Rxy   | N x Rxy |
|----------------|------------------------------|-------|-------|---------|
| 1              | Mustafa Ercengiz             | 916   | 0.45  | 412.2   |
| 2              | Esra Asici                   | 386   | 0.25  | 96.5    |
| 3              | Begum Satici                 | 306   | 0.51  | 156     |
| 4              | Jale Eldeleklioglu           | 380   | 0.26  | 98.8    |
| 5              | Ann Macaskill                | 112   | 0.25  | 28      |
| 6              | John Malby                   | 244   | 0.39  | 95.16   |
| 7              | Fernanda Inez Garcia-Vasquez | 1010  | 0.49  | 494.9   |
| 8              | Majda Rijavec                | 600   | -0.04 | -24     |
| 9              | Svetiana Kravchuk            | 145   | 0.29  | 42      |
| 10             | Lucia Zahorcova              | 1209  | 0.31  | 374.7   |
| 11             | Rajasekhar David             | 174   | 0.13  | 22.6    |
| 12             | Ata Tehranchi                | 200   | 0.18  | 36      |
| 13             | Tutut Chusniyah              | 331   | 0.15  | 49.6    |
| 14             | Tutut Chusniyah              | 320   | 0.05  | 16      |
| 15             | Tutut Chusniyah              | 318   | 0.15  | 47.7    |
| <b>Total</b>   |                              | 6651  |       | 1946.16 |
| <b>Average</b> |                              | 443.4 |       | 0.29    |

Table 2 shows that the correlation coefficients ( $r$ ) vary widely, with the lowest value at  $-0.04$  and the highest at  $0.51$ . The true correlation coefficient across these fifteen studies can be calculated by finding the mean of the correlation coefficients. The average number of subjects per study is approximately 443 (Total sample: 6651/Number of studies: 15). The average correlation coefficient is  $0.29$ . The variance of ( $r_{xy}$ ) at  $0.29$  represents a combination of the variance in the population correlation and the variance due to sampling error. When tested with an average sample size of 443, the correlation coefficient is significant.

#### Average Reliability of Variables

After correcting the average population correlation for sample size in Table 3, the next step is to calculate the variance of ( $R_{xy}$ ).

**Table 3.**  
Calculation of Variance ( $r_{xy}$ )

| No       | Year | Researcher                       | N    | $r_{xy}$ | $(r_{xy}-r)$ | $(r_{xy}-r)^2$ | $N(r_{xy}-r)^2$ |
|----------|------|----------------------------------|------|----------|--------------|----------------|-----------------|
| 1        | 2022 | Mustafa Ercengiz                 | 916  | 0.45     | 0.16         | 0.0256         | 23.44           |
| 2        | 2021 | Esra Asici                       | 386  | 0.25     | -0.04        | 0.0016         | 0.62            |
| 3        | 2020 | Begum Satici                     | 306  | 0.51     | 0.22         | 0.0484         | 14.81           |
| 4        | 2015 | Jale Eldeleklioglu               | 380  | 0.26     | -0.03        | 0.0009         | 0.34            |
| 5        | 2012 | Ann Macaskill                    | 112  | 0.25     | -0.04        | 0.0016         | 0.18            |
| 6        | 2005 | John Malby                       | 244  | 0.39     | 0.1          | 0.01           | 2.44            |
| 7        | 2020 | Fernanda Inez Garcia-<br>Vasquez | 1010 | 0.49     | 0.2          | 0.04           | 40.4            |
| 8        | 2010 | Majda Rijavec                    | 600  | -0.04    | -0.33        | 0.1089         | 65.34           |
| 9        | 2022 | Svetiana Kravchuk                | 145  | 0.29     | 0            | 0              | 0               |
| 10       | 2022 | Lucia Zahorcova                  | 1209 | 0.31     | 0.02         | 0.0004         | 0.48            |
| 11       | 2022 | Rajasekhar David                 | 174  | 0.13     | -0.16        | 0.0256         | 4.45            |
| 12       | 2018 | Ata Tehranchi                    | 200  | 0.18     | -0.11        | 0.0121         | 2.42            |
| 13       | 2020 | Tutut Chusniyah                  | 331  | 0.15     | -0.14        | 0.0196         | 6.48            |
| 14       | 2020 | Tutut Chusniyah                  | 320  | 0.05     | -0.24        | 0.0576         | 18.43           |
| 15       | 2020 | Tutut Chusniyah                  | 318  | 0.15     | -0.14        | 0.0196         | 6.23            |
| Total    |      |                                  | 6651 |          |              |                | 162             |
| Variance |      |                                  |      |          |              |                | 0.024           |

According to Hunter & Schmidt (1990), the estimation of the variance in population correlation can be obtained by correcting the observed variance  $\sigma^2r$  for sampling error. The formula to calculate sampling error variance is:  $\sigma^2e = (1 - r^2)^2 / (N - 1)$

$$\begin{aligned}\sigma^2e &= (1 - 0.29^2)^2 / (443.4 - 1) \\ &= 0.83 / 442.4 \\ &= 0.0018\end{aligned}$$

Thus, the sampling error variance  $\sigma^2e$  in this meta-analysis study is 0.0018.

#### *Estimation of Population Correlation Variance*

The true population correlation variance is the corrected variance. It is obtained by subtracting the sampling error variance from the observed variance ( $r_{xy}$ ). The formula used is:  $\sigma^2Q = \sigma^2r - \sigma^2e$ .

$$\begin{aligned}\sigma^2Q &= 0.024 - 0.0018 \\ &= 0.0222\end{aligned}$$

#### *Impact of Sampling Error*

The impact of sampling error can be determined using the following equation:  $\sigma^2e / \sigma^2r \times 100\%$ .

$$\begin{aligned}S^2 &= 0.0018 / 0.024 \times 100\% \\ &= 7,5\%\end{aligned}$$

The sampling error variance is found to be 0.0018, and the population variance is 0.022. Comparing the sampling error variance to the population variance and multiplying by 100% shows that the percentage of variation caused by sampling error is small, at 7.5%. This small percentage likely indicates a low publication bias due to sampling errors. This is supported by the evaluation of publication bias conducted using funnel plot, Egger's test, and fail-safe N approaches, confirming that the meta-analysis study of the correlation between forgiveness and happiness does not have publication bias issues. Therefore, the results are scientifically reliable.

### *Moderator Analysis*

#### *Age*

Using the JASP application, the p-value obtained (0.86) was greater than 0.05, indicating no significant difference in the average effect size between young and old age groups. This suggests that age does not differentiate forgiveness attitudes that correlate with happiness.

#### *Country of Origin*

Using the JASP application, the p-value obtained (0.70) was greater than 0.05, indicating no significant difference in the average effect size between European and Asian countries. This suggests that the country of origin does not differentiate forgiveness attitudes that correlate with happiness.

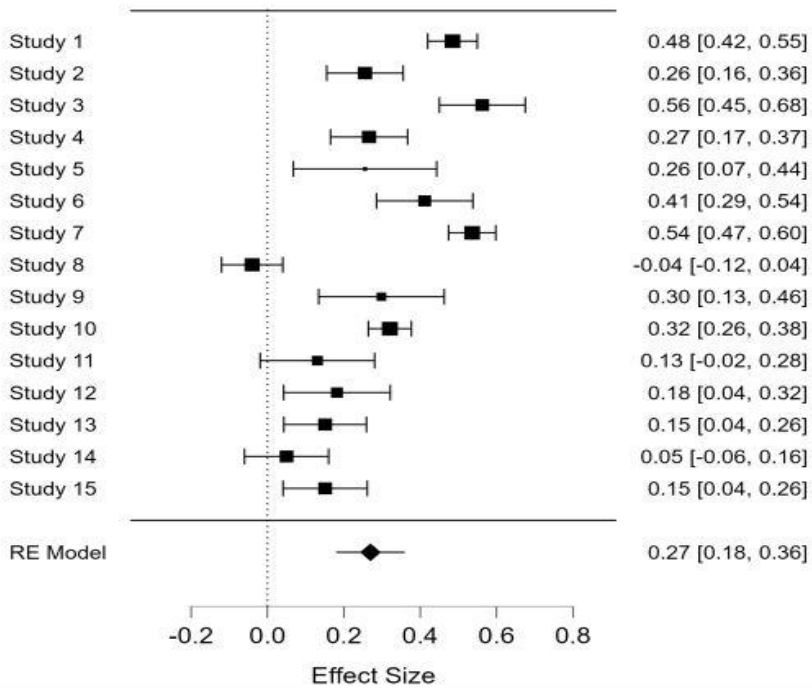
#### *Publication Bias*

To assess publication bias, we used a funnel plot and Egger's test. The fifteen studies in the meta-analysis showed a symmetrical distribution of large and small sample sizes, indicating no publication bias. Egger's Test confirmed the symmetry with p-values from both the rank correlation (0.697) and regression (0.397) methods being greater than 0.05. Thus, the funnel plot is symmetrical, suggesting no publication bias.

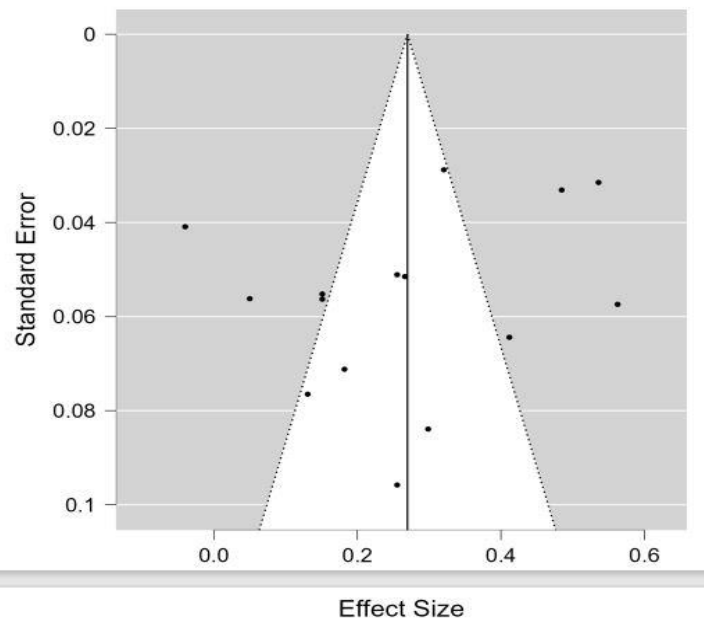
The negative rank correlation (-0.086) indicates that studies with large sample sizes were not included in the meta-analysis sample, with a dominance of small sample size studies. The negative regression coefficient (-0.848) suggests the possibility of 2654 biased or methodologically flawed unpublished studies. Using Fail-safe N, with  $k = 15$ , the formula  $5k + 10$  gives 85. The obtained Fail-safe N value of 2654, with a significance target of 0.05 and  $p < 0.001$ , is much greater than 85, confirming no publication bias in this meta-analysis study.

In conclusion, based on the evaluations using funnel plot, Egger's test, and Fail-safe N, there is no evidence of publication bias in the meta-analysis of the correlation between forgiveness and happiness. Thus, the results are scientifically reliable.

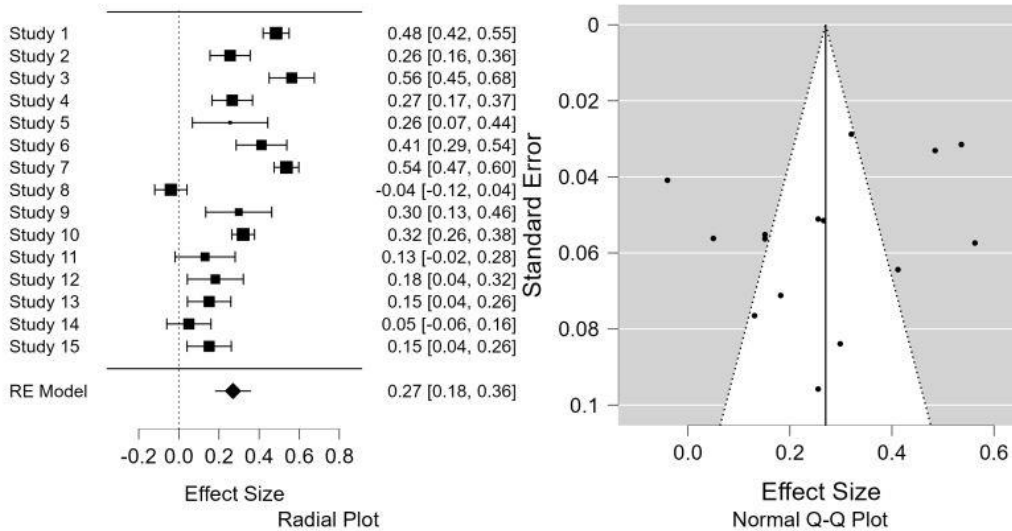
**Forest Plot**



**Funnel Plot**



Diagnostic Plots



Discussion

*The Relationship Between Forgiveness and Happiness*

The rapid development of research often results in studies that replicate earlier research. However, using the same variables can still yield varying results with different correlation values. Sometimes, findings even contradict each other despite examining the same variables. Meta-analysis research can be used to correct sampling errors, measurement errors, and other potential errors introduced by researchers.

This study conducted a meta-analysis of empirical studies on the relationship between forgiving others and personal happiness. Thirteen articles with fifteen effect sizes were collected, encompassing 6,651 subjects. The primary aim of this meta-analysis was to determine the relationship between forgiveness and happiness. The hypothesis posited a positive relationship between the two, although results indicated a moderate correlation. The findings showed that forgiveness and happiness are significantly positively correlated. This suggests that higher levels of forgiveness are associated with higher levels of happiness.



These results are reinforced by the absence of publication bias in the studies examining the relationship between forgiveness and happiness, ensuring the findings are scientifically robust. This conclusion is consistent with other research (Shekhar et al., [2016](#); Adam Karduz & Saricam, [2018](#); Sucheta & Prasad, [2023](#)), which also reported a relationship between forgiveness and happiness. Although the correlation values ( $r$ ) differed across these studies, the relationship between forgiveness and happiness remains scientifically reliable. Forgiveness can be considered a viable approach for individuals seeking to achieve personal happiness. Forgiveness is the most rational and productive choice in overcoming past offenses towards happiness (Hughes, [2016](#)).

Although this research shows a positive relationship between forgiveness and happiness, it is also important to consider studies with different findings. The goal is to approach a more critical understanding and not rely solely on one perspective. For instance, Castillo's ([2019](#)) research found that in certain cultures, forgiveness is not always associated with happiness. In cultures that prioritize personal honor, forgiveness can be seen as a sign of weakness. This is in line with research by Ceylan-Batur et al., ([2023](#)) that someone who highly values honor will find it more difficult to forgive. These findings help provide reasons why some people are unwilling to forgive others.

Furthermore, Strelan & van Prooijen ([2016](#)) also state that someone who feels unfairly treated because they repeatedly experience hurtful situations may find that forgiveness does not lead to happiness. On the contrary, those who choose not to forgive may grow into stronger individuals because they can protect themselves from greater harm. Forgiveness is not the best solution when it makes the perpetrator more likely to re-offend.

Another important point to understand is that forgiveness is a very complex and multidimensional process. Forgiveness out of compulsion will not bring happiness. Therefore, not all forgiveness will have the same positive impact on someone's happiness (Wade et al., [2014](#)). Research showing different or even opposite results ultimately emphasizes the importance of studying forgiveness with a more comprehensive approach from both sides (victim and perpetrator).

Some studies use samples that are not demographically or geographically representative, so the results cannot be universally applied across different conditions or cultures. This underscores the importance of cross-cultural research to obtain more comprehensive results to better understand the dynamic variations in the relationship between forgiveness and happiness.

These findings highlight several significant limitations of the meta-analysis. The limited age range of participants restricts conclusions about how forgiveness impacts happiness across different age groups. The lack of geographical diversity among the studies limits the ability to analyze differences in forgiveness attitudes and their relationship with happiness across various cultures. Relying solely on the Scopus database may have excluded relevant studies from other high-quality databases, affecting the comprehensiveness of the analysis. Additionally, the wide range of years covered by the studies introduces variability due to changes in societal norms, measurement techniques, and research methodologies, impacting the consistency of the findings.

#### *Moderating Effects*

Previous research has identified several factors influencing forgiveness. Self-compassion and interpersonal mindfulness are predictors of a person's tendency to forgive (Topcu & Erus, [2023](#)). Additionally, resilience acts as a mediator in the relationship between forgiveness and happiness (Jaufalaily & Himam, [2017](#)). This suggests that forgiveness is not an isolated behavior but is influenced by various mediators. For example, forgiveness is also mediated by person's religiosity and spirituality (Peterson, [2015](#)).

#### *Additional Findings on the Role of Forgiveness in Happiness*

##### *Indirect Relationship between Forgiveness and Happiness*

There is an indirect relationship between forgiveness and happiness, mediated by emotional reactions (Ercengiz, [2022](#)). As forgiveness increases, emotional reactions decrease, which in turn leads to an increase in happiness. This pathway suggests that the emotional relief and reduction in negative feelings following forgiveness contribute significantly to enhancing happiness.

### *Forgiveness and Parenting Style*

Forgiveness does not mediate the impact of parenting style on happiness. However, it has a direct relationship with happiness (Asici & Sari, [2021](#)). This finding indicates that while the influence of parenting style on happiness might operate through other factors, forgiveness itself remains an independent contributor to happiness.

### *Forgiveness as a Mediator between Coping Humor and Happiness*

Forgiveness serves as a mediator in the relationship between coping humor and happiness (Satici, [2020](#)). This means that using humor as a coping mechanism can enhance happiness through the process of forgiveness. Additionally, forgiveness maintains a direct relationship with happiness, highlighting its dual role as both a mediator and a direct influencer of happiness.

### *Happiness as a Predictor of Life Satisfaction*

Happiness is the strongest predictor of life satisfaction, more so than forgiveness and rumination (Eldeleklioglu, [2015](#)). Despite this, forgiveness still has a direct correlation with happiness, suggesting that while happiness primarily drives life satisfaction, forgiveness independently contributes to enhancing happiness.

These findings emphasize the multifaceted role of forgiveness in enhancing personal well-being. Forgiveness not only directly increases happiness but also functions through various mediators such as emotional reactions and coping humor, reinforcing its significance in the pursuit of life satisfaction and overall well-being. These findings highlight the complexity of forgiveness, suggesting that several factors contribute to the decision to forgive. The interplay of self-compassion, interpersonal mindfulness, and resilience underscores the nuanced nature of forgiveness and its impact on personal happiness. The reduction in negative emotional reactions as a mediator further supports the positive relationship between forgiveness and happiness. Thus, understanding and fostering these predictors and mediators can enhance forgiveness practices, ultimately contributing to greater personal happiness.



### *Age and Country Differences in Forgiveness*

#### *Age Differences*

According to Vera Cruz et al. ([2024](#)), children up to the age of four do not have a concept of forgiveness, gradually learning it from their environment. Cognitive abilities in children influence their tendency to forgive (Van der Wal et al., [2014](#)). Forgiveness involves self-control over emotions, thoughts, and behaviors, including problem-solving skills and socialization abilities (Garthe & Guz, [2020](#)). Krause ([2015](#)) found that parents are more likely to forgive, whereas Tao et al. ([2021](#)) reported no differences in forgiveness among the elderly.

The meta-analysis did not reveal significant differences in forgiveness attitudes across age groups. This lack of difference may be attributed to the limited age range of participants in the included studies. The narrow age spectrum between younger and older participants does not provide a sufficient basis to observe notable age-related differences in forgiveness and its correlation with happiness.

#### *Country Differences*

The construct of happiness varies across cultures. Western cultures emphasize individual freedom, achievement goals, and positive feelings, while Eastern cultures and Latin American countries emphasize relationships with society, family, and interpersonal connections (Oishi & Gilbert, [2016](#)). Turkey, uniquely positioned between East and West, geographically belongs to Asia but culturally aligns more with Europe. However, Turkey has recently shifted closer to Asian countries in terms of political and economic policies (Altunisik, [2024](#)).

Similarly, the analysis did not find significant differences in forgiveness attitudes based on the participants' country of origin. The limited number of studies included in the meta-analysis is a primary reason for this lack of variation. The restricted geographical diversity of the studies constrains the ability to detect cultural or national differences in forgiveness that might impact happiness.



## **Conclusion**

The meta-analysis of thirteen articles encompassing fifteen study results supports previous research findings, indicating a significant positive correlation between forgiveness and personal happiness. This suggests that individuals who are willing to forgive experience higher levels of happiness compared to those who are unwilling to forgive. Additionally, the analysis found no significant differences in the relationship between forgiveness and happiness across different age groups or geographical locations.

Overall, these findings reinforce the notion that forgiveness is a key factor contributing to personal happiness, irrespective of age or cultural background. Future research should address the limitations identified in this study to further validate and expand upon these conclusions.

The findings suggest that age and nationality are not relevant factors when considering forgiveness. Regardless of one's age or cultural background, the ability and willingness to forgive remain essential for personal well-being. Therefore, individuals should not use age or nationality as reasons to withhold forgiveness. Instead, fostering a forgiving attitude can lead to increased happiness and overall life satisfaction, benefiting individuals regardless of their demographic characteristics.

These implications underscore the universality of forgiveness as a fundamental aspect of human relationships and emotional well-being. By recognizing the irrelevance of age and nationality in forgiveness, individuals can cultivate a more compassionate and understanding approach towards forgiveness, ultimately promoting healthier interpersonal relationships and individual happiness.

Future meta-analyses should include studies from multiple reputable databases like SpringerLink and ProQuest to enhance the robustness and generalizability of findings. Emphasizing research from the past ten years will reflect the latest trends and advancements in the field. Including participants from a wider age range and diverse cultural backgrounds will provide a more comprehensive understanding of the relationship between forgiveness and happiness. Ensuring methodological

consistency across studies will help mitigate variability and enhance the comparability of findings. By addressing these limitations and recommendations, future research can provide a more nuanced and accurate understanding of the relationships between forgiveness and happiness.

## References

- Adam Karduz, F., & Saricam, H. (2018). The relationships between positivity, forgiveness, happiness, and revenge. *Revista Romaneasca pentru Educatie Multidimensionala*, 10(4), 1-22. doi: [10.18662/rrem/68](https://doi.org/10.18662/rrem/68)
- Altunışık, M. B. (2024). Turkey's 'Return' to Central Asia in a Shifting Global and Regional Context: New Opportunities and Limitations. *Journal of Balkan and Near Eastern Studies*, 1–16. doi: [10.1080/19448953.2024.2308971](https://doi.org/10.1080/19448953.2024.2308971)
- Amanze, R. U., & Carson, J. (2019). Measuring forgiveness: Psychometric properties of a new culturally sensitive questionnaire. The Bolton Forgiveness Scale (BFS). *Mental Health Religion & Culture*. doi: [10.1080/13674676.2020.1716211](https://doi.org/10.1080/13674676.2020.1716211)
- Asici, E. & Sari, H.I. (2021). A proposed model to explain happiness in college students: The roles of perceived parenting styles, emotional self-efficacy, and forgiveness. *Journal of Adult Development*. 28. 1-14. doi: [10.1007/s10804-021-09378-0](https://doi.org/10.1007/s10804-021-09378-0)
- Bartholomaeus, J., & Strelan, P. (2016). Just world beliefs and forgiveness: The mediating role of implicit theories of relationships. *Personality and Individual Differences*. 96(106-110). doi: [10.1016/j.paid.2016.02.081](https://doi.org/10.1016/j.paid.2016.02.081)
- Batik, M. V., Bingol, T. Y., Kodaz, A. F., & Hosoglu, R. (2017). Forgiveness and subjective happiness of university students. *International Journal of Higher Education*, 6(6). doi: [10.5430/ijhe.v6n6p149](https://doi.org/10.5430/ijhe.v6n6p149)
- Boehm, J. K., Ruberton, P. M., & Lyubomirsky, S. (2017). The promise of fostering greater happiness. In: Snyder C.R., editor. *The Oxford Handbook of Positive Psychology*. 3rd ed. Oxford Academic, (944–958). doi: [10.1093/oxfordhb/9780199396511.013.55](https://doi.org/10.1093/oxfordhb/9780199396511.013.55)
- Burnette, J. L., Davisson, E. K., Finkel, E. J., Van Tongeren, D. R., Hui, C. M., & Hoyle, R. H. (2014). Self-control and forgiveness: a meta-analytic review. *Soc. Psycho. Person. Sci.* 5, 443–450. doi: [10.1177/1948550613502991](https://doi.org/10.1177/1948550613502991)
- Card, N. A. (2011). *Applied meta-analysis for social science research*. Guilford Press.
- Castillo, V.A. (2019). An investigation of forgiveness in an honor culture. Retrieved from
- Ceylan-Batur, S., Uskul, A., & Gul, P. (2023). Forgive and forget? Honor-oriented individuals are less forgiving of transgressing peers. *Personality and Individual Differences*. 206. doi: [10.1016/j.paid.2023.112147](https://doi.org/10.1016/j.paid.2023.112147)
- Chusniyah, T., Jaafar, J. L., Chaiwutikornwanich, A., Kuswandi, D., Firmanto, A., Mustopa, A., &

- Zahra, G. (2020). Dataset on positive mental health of Indonesian, Malaysian, and Thailand university students. *Data in brief*. 32. [doi: 10.1016/j.dib.2020.106314](https://doi.org/10.1016/j.dib.2020.106314)
- Cohen, J. (1997). *Statistical power analysis for the behavioral sciences*. Academic Press.
- David, R., Singh, S., Ribeiro, N., & Gomes, D. R. (2022). Does spirituality influence happiness and academic performance? *religions*, 13(7), 617. MDPI AG. Retrieved from [doi: 10.3390/rel13070617](https://doi.org/10.3390/rel13070617)
- Devassy, V. P., & Raj, S. J. (2014). The Relationship between Emotional Competence, Forgiveness, and Happiness among Adolescents. *TIJ's Research Journal of Social Science & Management - RJSSM*, 4.
- Eldeleklioglu, J. (2015). Predictive effects of subjective happiness, forgiveness, and rumination on life satisfaction. *Social Behavior and Personality: An International Journal*, 43 (9).
- Enright, R. D., & Fitzgibbons, R. P. (2015). *Forgiveness therapy: An empirical guide for resolving anger and restoring hope*. American Psychological Association. [doi: 10.1037/14526-000](https://doi.org/10.1037/14526-000)
- Ercengiz, M., Safali, S., Kaya, A., & Turan, M. E. (2022). A hypothetic model for examining the relationship between happiness, forgiveness, emotional reactivity and emotional security. *Current Psychology*. 42. [doi: 10.1007/s12144-022-02909-2](https://doi.org/10.1007/s12144-022-02909-2)
- Feng, G., Li, Y., & Bai, X. (2022). Forgiveness and subjective well-being: A meta-analysis review. *Personality and Individual Differences*. 186. 111350. [doi: 10.1016/j.paid.2021.111350](https://doi.org/10.1016/j.paid.2021.111350)
- Garcia-Vazquez, F. I., Valdes-Cuervo, A. A., Martínez-Ferrer, B. & Parra-Perez, L. G. (2020) Forgiveness, gratitude, happiness, and prosocial bystander behavior in bullying. *Front. Psychol.* 10, 2827. [doi: 10.3389/fpsyg.2019.02827](https://doi.org/10.3389/fpsyg.2019.02827)
- Garthe, R. C., & Guz, S. (2020). The development of forgiving in children, adolescents, and emerging adults. In E. L. Worthington, Jr. & N. G. Wade (Eds.), *Handbook of forgiveness* (87–96). [doi: 10.4324/9781351123341-9](https://doi.org/10.4324/9781351123341-9)
- Gilam, G., Abend, R., Shani, H., Ben-Zion, Z., & Hendler, T. (2019). The anger-infused ultimatum game: a reliable and valid paradigm to induce and assess anger. *Emotion*, 19, 84–96. [doi: 10.1037/emo0000435](https://doi.org/10.1037/emo0000435)
- Han, H., Liauw, I., & Kuntz, A. F. (2019). Moral identity predicts the development of presence of meaning during emerging adulthood. *Emerg. Adulthood* 7, 230–237. [doi: 10.1177/2167696818758735](https://doi.org/10.1177/2167696818758735)
- Hirst, S. L., Hepper, E. G., & Tenenbaum, H. R. (2019). Attachment dimensions and forgiveness of others: A meta-analysis. *Journal of Social and Personal Relationships*, 36(11-12), 3960-3985. [doi: 10.1177/0265407519841716](https://doi.org/10.1177/0265407519841716)
- Hojjat, M., & Ayotte, B.J. (2013). Forgiveness and Positive Psychology, in M. Hojjat, and Duncan Cramer (eds), *Positive Psychology of Love*, Series in Positive Psychology; online edn, Oxford Academic, 26 Sept. 2013), accessed 7 Nov. 2023. [doi: 10.1093/acprof:oso/9780199791064.003.0009](https://doi.org/10.1093/acprof:oso/9780199791064.003.0009)
- Hughes, P. (2016). Two Cheers for Forgiveness (and Even Fewer for Revenge). *Philosophia*. 44.

[doi: 10.1007/s11406-015-9671-x](https://doi.org/10.1007/s11406-015-9671-x)

- Hunter, J. E., & Schmidt, F. L. (1990). Dichotomization of continuous variables: The implications for meta-analysis. *Journal of Applied Psychology*, 75(3), 334–349. <https://doi.org/10.1037/0021-9010.75.3.334>
- Jaufalaily, N. & Himam, F. (2017). Resilience as a mediator of the relationship between forgiveness and happiness among college students. *Anima Indonesian Psychological Journal*, 32(3), 121-127. [doi: 10.24123/aipj.v32i3.626](https://doi.org/10.24123/aipj.v32i3.626)
- Jiang, F., Yue, X., Lu, S., & Yu, G. (2015). Can you forgive? It depends on how happy you are. *Scandinavian Journal of Psychology*, 56(2), 182-188. [doi: 10.1111/sjop.12185](https://doi.org/10.1111/sjop.12185)
- Kavaklı, M., Özteke Kozan, H. İ., Kesici, Ş., & Ak, M. (2019). How can we feel happy? The examination of relationships among happiness, mindfulness and forgiveness. *Research on Education and Psychology (REP)*, 3(2), 198-208.
- Krause, N. (2015). Assessing the relationships among race, religion, humility, and self-forgiveness: a longitudinal investigation. *Advances in Life Course Research*. 24. [doi: 10.1016/j.alcr.2015.02.003](https://doi.org/10.1016/j.alcr.2015.02.003)
- Kravchuk, S. (2022). Willingness to self-forgive as a predictor of the well-being of young students. *Revista Romaneasca Pentru Educatie Multidimensionala*, 14(4), 264-272. [doi: 10.18662/rrem/14.4Sup1/671](https://doi.org/10.18662/rrem/14.4Sup1/671)
- López, J., Serrano, M. I., Giménez, I., & Noriega, C. (2021). Forgiveness Interventions for Older Adults: A Review. *Journal of clinical medicine*, 10(9), 1866. [doi: 10.3390/jcm10091866](https://doi.org/10.3390/jcm10091866)
- Macaskill, A. (2012). A feasibility study of psychological strengths and well-being assessment in individuals living with recurrent depression. *The Journal of Positive Psychology*, 7(5), 372–386. [doi: 10.1080/17439760.2012.702783](https://doi.org/10.1080/17439760.2012.702783)
- Maltby, J., Day, L. & Barber, L. (2005). Forgiveness and happiness. The differing contexts of forgiveness using the distinction between hedonic and eudaimonic happiness. *Journal of Happiness Studies*. 6. 1-13. [doi: 10.1007/s10902-004-0924-9](https://doi.org/10.1007/s10902-004-0924-9)
- Oishi, S., & Gilbert, E. A. (2016). Current and future directions in culture and happiness research. *Current Opinion in Psychology*. 8:54-58. [doi: 10.1016/j.copsyc.2015.10.005](https://doi.org/10.1016/j.copsyc.2015.10.005)
- Peterson, J. (2015). Examining the relationship between forgiveness and subjective well-being as moderated by implicit religiousness and spirituality. *Clinical Psychology Dissertations*. 3.
- Rapp, H., Wang Xu, J., & Enright, R. D. (2022). A meta-analysis of forgiveness education interventions' effects on forgiveness and anger in children and adolescents. *Child development*, 93(5), 1249–1269. [doi: 10.1111/cdev.13771](https://doi.org/10.1111/cdev.13771)
- Rijavec, M., Jurcec, L., & Mijocevic, I. (2010). Gender differences in the relationship between forgiveness and depression/happiness. *Psihologijske Teme*, 19(1), 189–202.
- Safaria, T. (2014). Forgiveness, Gratitude, and Happiness Among College Students. *International Journal of Public Health Science*, 3(4), 1 Dec. 2014. [doi: 10.11591/ijphs.v3i4.6947](https://doi.org/10.11591/ijphs.v3i4.6947)
- Satici, B. (2020). Exploring the relationship between coping humor and subjective happiness: belongingness and forgiveness as serial mediators. *Health Psychology Report*, 8,



228-237. [doi: 10.5114/hpr.2020.97329](https://doi.org/10.5114/hpr.2020.97329)

- Shekhar, C., Jamwal, A., & Sharma, S. (2016). Happiness and Forgiveness among College Students. *Indian Journal of Psychological Science*, 7(1), 088-093.
- Strelan, P., & Van Prooijen, J.-W. (2016). Tough love: The behavior control justice motive facilitates forgiveness in valued relationships. *Personal Relationships*, 23(3), 536–553. [doi: 10.1111/per.12142](https://doi.org/10.1111/per.12142)
- Sucheta & Prasad, S. S. (2023). Relationship between Forgiveness and Happiness in Context with Gender among Adults. *International Journal of Indian Psychology*, 11(3), 3898-3903.
- Tanzer, J. R., & Weyandt, L. (2020). Imaging happiness: Meta analysis and review. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 21(7), 2693–2734. [doi: 10.1007/s10902-019-00195-7](https://doi.org/10.1007/s10902-019-00195-7)
- Tao, L., Zhu, T., Min, Y., & Ji, M. (2021). The Older, the More Forgiving? Characteristics of Forgiveness of Chinese Older Adults. *Front. Psychol.* 12:732863. [doi: 10.3389/fpsyg.2021.732863](https://doi.org/10.3389/fpsyg.2021.732863)
- Tehranchi, A., Neshat Doost, H. T., Amiri, S. & Power, M. J. (2018). The Role of character strengths in depression: A structural equation model. *Front. Psychol.* [doi: 10.3389/fpsyg.2018.01609](https://doi.org/10.3389/fpsyg.2018.01609)
- Topcu, P., & Erus, S. M. (2023). Self compassion and interpersonal mindfulness as predictors of forgiveness in adulthood. *International Journal of Psychology and Educational Studies*, 2023, 10(1), 261-273. [doi: 10.52380/ijpes.2023.10.1.1014](https://doi.org/10.52380/ijpes.2023.10.1.1014)
- Toussaint, L., Worthington, E. V. Jr., & Williams, D. R. (Eds.). (2015). *Forgiveness and health*. Springer. [doi: 10.1007/978-94-017-9993-5](https://doi.org/10.1007/978-94-017-9993-5)
- Van der Wal, R. C., Karremans, J. C., & Cillessen, A. H. N. (2014). It takes two to forgive: The interactive role of relationship value and executive control. *Personality and Social Psychology Bulletin*, 40, 803–815. [doi: 10.1177/0146167214525807](https://doi.org/10.1177/0146167214525807)
- Vera Cruz, Germano & Kpanake, Lonozou & Morales-Martinez, Guadalupe & Mullet, Etienne. (2024). Development of the forgiveness schema among young children and adolescents: A multinational comparison. *International Journal of Behavioral Development*. [doi: 10.1177/01650254241233531](https://doi.org/10.1177/01650254241233531)
- Wade, N. G., Hoyt, W. T., Kidwell, J. E., & Worthington, E. L. (2014). Efficacy of psychotherapeutic interventions to promote forgiveness: a meta-analysis. *Journal of consulting and clinical psychology*, 82(1), 154–170. [doi: 10.1037/a0035268](https://doi.org/10.1037/a0035268)
- Worthington, E. L. Jr. (2020). “Understanding forgiveness of other people: definitions, theories, and processes,” in *Handbook of Forgiveness*. 2nd Edn. eds. E. L. Worthington Jr. and N. G. Wade. Routledge, 11–21. [doi: 10.4324/9781351123341-2](https://doi.org/10.4324/9781351123341-2)
- Worthington, E. L., Jr., Griffin, B. J., & Lavelock, C. R. (2016). Forgiveness, conflict, and societal change. In D. T. Kong & D. R. Forsyth (Eds.), *Leading through conflict: Into the fray* (pp. 179–199). Palgrave Macmillan/Springer Nature. [doi: 10.1007/978-1-137-56677-5\\_9](https://doi.org/10.1007/978-1-137-56677-5_9)



- Yao, S., Chen, J., Yu, X., & Sang, J. (2017). Mediator roles of interpersonal forgiveness and self-forgiveness between self-esteem and subjective well-being. *Curr Psychol* 36, 585–592. doi: [10.1007/s12144-016-9447-x](https://doi.org/10.1007/s12144-016-9447-x)
- Zahorcova, L., & Dockal, V. (2022). Slovak validation of the Enright Forgiveness Inventory-30. *Ceskoslovenska psychologie*. doi: [10.51561/cspsych.66.6.568](https://doi.org/10.51561/cspsych.66.6.568)
- Zheng, M. X., & Dijke, M. (2020). Expressing forgiveness after interpersonal mistreatment: Power and status of forgivers influence transgressors' relationship restoration efforts. *Journal of Organizational Behavior*, 41(8), 782–796. doi: [10.1002/job.2432](https://doi.org/10.1002/job.2432)