

**Theoretical and Review Articles // Artículos teóricos y de revisión**

- Jesús Gil Roales-Nieto 99-141 Tensión individualismo-gregarismo en la configuración psicológica del ser humano II: arquetipos de yo gregario. [*Individualism-Gregariousness Tension in the Psychological Configuration of the Human Being, II: Archetypes of Gregarious Self.*]
- Lidia Budziszewska 143-162 Hierarchical Classification from Relational Frame Theory: A Review  
Jorge Villarroel Carrasco  
Enrique Gil

**Research Articles // Artículos de investigación**

- M. Graça Pereira 165-175 Communication, Forgiveness and Morbidity in Young Adults Involved in a Romantic Relationship.  
Liliana Fontes  
Margarida Vilaça  
Frank Fincham  
Eleonora Costa  
José C. Machado
- Alma Gabriela Martínez Moreno 177-1846 COVID 19 and Psychological Problems in Mexican Mothers.  
Jessica Elizabeth Pineda Lozano  
Carmen Alejandrina Virgen Carrillo  
María del Rocío Padilla Galindo  
Ana Cristina Espinoza Gallardo
- Mariana Coelho 185-196 The Impact of Stigmatizing Experiences and Self-Stigma on Mental Health and Suicidal Behavior: Results from the Community of Portuguese Language Countries.  
Henrique Pereira
- Hussein Bharmal 197-210 Evaluation of a Transdiagnostic Group Intervention in a Primary Care Mental Health Service: A Pilot Study.  
Roger Moore  
Jamie Kelly
- Maria Manuela Peixoto 211-221 Repetitive Negative Thinking, Rumination, Depressive Symptoms and Life Satisfaction: A cross-sectional mediation analysis.  
Olga Cunha
- Carlos Eduardo González Cifuentes 223-234 Psychometric properties of the Inventory of Interpersonal Problems-64 in Colombia.  
Francisco J. Ruiz

**Notes and Editorial Information // Avisos e información editorial**

- Editorial Office 237-238 Normas de publicación-*Instructions to Authors*.  
Editorial Office 239 Cobertura e indexación de IJP&PT. [*IJP&PT Abstracting and Indexing.*]

ISSN 1577-7057

© 2022 Asociación de Análisis del Comportamiento-MICPSY, Madrid, España

# IJP&PT

## INTERNATIONAL JOURNAL OF PSYCHOLOGY & PSYCHOLOGICAL THERAPY

EDITOR

Francisco Javier Molina Cobos  
Universidad de Almería, España

REVIEWING EDITORS

Mónica Hernández López  
Universidad de Jaén  
España

Francisco Ruiz Jiménez  
Fundación Universitaria Konrad Lorenz  
Colombia

ASSOCIATE EDITORS

Dermot Barnes-Holmes  
Ulster University  
UK

J. Francisco Morales  
UNED-Madrid  
España

Mauricio Papini  
Christian Texas University  
USA

Miguel Ángel Vallejo Pareja  
UNED-Madrid  
España

Kelly Wilson  
University of Mississippi  
USA

ASSISTANT EDITORS

Francisco Cabello Luque  
Adolfo J. Cangas Díaz  
Emilio Moreno San Pedro

Universidad de Murcia, España  
Universidad de Almería, España  
Universidad de Huelva, España

# IJP&PT

## INTERNATIONAL JOURNAL OF PSYCHOLOGY & PSYCHOLOGICAL THERAPY

### Comité Editorial / Editorial Committee

**Editor: Francisco Javier Molina Cobos, Universidad de Almería, España**

#### Associate Editors

Dermot Barnes-Holmes, *Ulster University, UK*  
Francisco Morales, *UNED, Madrid, España*  
Mauricio Papini, *Christian Texas University, USA*  
Miguel Ángel Vallejo Pareja, *UNED, Madrid, España*  
Kelly Wilson, *University of Mississippi, USA*

#### Reviewing Editors

Mónica Hernández López, *Universidad de Jaén, España*  
Francisco Ruiz Jiménez, *Fund. Univ. Konrad Lorenz, Colombia*  
Francisco Cabello Luque, *Universidad de Murcia, España*  
Adolfo J. Cangas Díaz, *Universidad de Almería, España*  
Emilio Moreno San Pedro, *Universidad de Huelva, España*

#### Assistant Editors

**Former Editors** Jesús Gil Roales-Nieto, *Universidad de Almería, España, (2001-2011)*  
Santiago Benjumea, *Universidad de Sevilla, España, (2012-2016)*  
Miguel Rodríguez Valverde, *Universidad de Jaén, España, (2017)*

### Consejo Editorial / Editorial Advisory Board

Yolanda Alonso *Universidad de Almería, España*  
Erik Arntzen *University of Oslo, Norway*  
M<sup>a</sup> José Báguena Puigcerver *Universidad de Valencia, España*  
Yvonne Barnes-Holmes *National University-Maynooth, Ireland*  
Adrián Barbero Rubio *UNED & MICPSY, Madrid, España*  
William M. Baum *University of New Hampshire, USA*  
Charles Catania *University of Maryland Baltimore County, USA*  
Juan Antonio Cruzado *Universidad Complutense, España*  
Victoria Díez Chamizo *Universidad de Barcelona, España*  
M<sup>a</sup> Paula Fernández García *Universidad de Oviedo, España*  
Perry N Fuchs *University of Texas at Arlington, USA*  
Andrés García García *Universidad de Sevilla, España*  
José Jesús Gázquez Linares *Universidad de Almería, España*  
Luis Gómez Jacinto *Universidad de Malaga, España*  
Celso Goyos *Universidade de Sao Paulo, Brasil*  
David E. Greenway *University of Southwestern Louisiana, USA*  
Patricia Sue Grigson *Pennsylvania State College of Medicine, USA*  
Steven C. Hayes *University of Nevada-Reno, USA*  
Linda Hayes *University of Nevada-Reno, USA*  
Phillip Hine *Temple University, USA*  
Per Holth *University of Oslo, Norway*  
Robert J. Kohlenberg *University of Washington, Seattle, USA*  
María Helena Leite Hunzinger *Universidade de Sao Paulo, Brasil*  
Julian C. Leslie *University of Ulster at Jordanstown, UK*  
Juan Carlos López García *Universidad de Sevilla, España*  
Juan Carlos López López *Universidad de Almería, España*  
Fergus Lowe *University of Wales, Bangor, UK*  
Carmen Luciano *Universidad de Almería, España*  
Armando Machado *Universidade do Miño, Portugal*  
Jose Marques *Universidade do Porto, Portugal*  
G. Alan Marlatt *University of Washington, Seattle, USA*

Ralph R. Miller *State University of New York-Binghamton, USA*  
Rafael Moreno *Universidad de Sevilla, España*  
Edward K. Morris *University of Kansas-Lawrence, USA*  
Lourdes Munduate *Universidad de Sevilla, España*  
Alba Elisabeth Mustaca *Universidad de Buenos Aires, Argentina*  
José I. Navarro Guzmán *Universidad de Cádiz, España*  
Jordi Obiols *Universidad Autónoma de Barcelona, España*  
Sergio M. Pellis *University of Lethbridge, Canada*  
Ricardo Pellón *UNED, Madrid, España*  
Wenceslao Peñate Castro *Universidad de La Laguna, España*  
Víctor Peralta Martín *Hospital V. del Camino, Pamplona, España*  
M. Carmen Pérez Fuentes *Universidad de Almería, España*  
Marino Pérez Álvarez *Universidad de Oviedo, España*  
Juan Preciado *City University of New York, USA*  
Emilio Ribes Iniesta *Universidad Veracruzana, México*  
Josep Roca i Balasch *INEF de Barcelona, España*  
Jesús Rosales Ruiz *University of North Texas, USA*  
Juan Manuel Rosas Santos *Universidad de Jaén, España*  
Jorge Ruiz Sánchez *Universidad de Burgos, España*  
Kurt Saltzinger *Hofstra University, USA*  
Mark R. Serper *Hofstra University, USA*  
Carmen Torres *Universidad de Jaén, España*  
Peter J. Urcuoli *Purdue University, USA*  
Guillermo Vallejo Seco *Universidad de Oviedo, España*  
Julio Varela Barraza *Universidad de Guadalajara, México*  
Juan Pedro Vargas Romero *Universidad de Sevilla, España*  
Carmelo Visdómine Lozano *SGIP, Ministerio del Interior, España*  
Graham F. Wagstaff *University of Liverpool*  
Stephen Worchel *University of Hawaii, USA*  
Edelgard Wulfert *New York State University, Albany, USA*  
Thomas R. Zentall *University of Kentucky, USA*

*International Journal of Psychology & Psychological Therapy* is a four-monthly interdisciplinary publication open to publish original articles, reviews of one or more area(s), theoretical reviews, or methodological issues, and series of interest to some of the Psychology areas. The journal is published for the *Asociación de Análisis del Comportamiento* (AAC) and MICPSY, and indexed and/or abstracted in:

- Academic Search Complete (EBSCO Publishing Inc.)
- Cabell's Directory (Cabell Scholarly Analytics)
- CLARIVATE-WEB OF SCIENCE (Emerging Sources Citation Index)
- ClinPSYC (American Psychological Association)
- DIALNET (Fundación Dialnet, Universidad de La Rioja)
- DICE-CSIC (Difusión y Calidad de las Revistas Españolas)
- Directory of Open Access Journals (DOAJ)
- EBSCO Information Service
- GOOGLE Scholar Metrics
- IBECs (Índice Bibliográfico Español en Ciencias de la Salud)
- IN-RECS (Index of Impact of the Social Sciences Spanish Journals)
- ISOC (CINDOC, CSIC)

*International Journal of Psychology & Psychological Therapy* es una publicación interdisciplinaria cuatrimestral, publicada por la Asociación de Análisis del Comportamiento (AAC), abierta a colaboraciones de carácter empírico y teórico, revisiones, artículos metodológicos y series temáticas de interés en cualquiera de los campos de la Psicología. Es publicada por la *Asociación de Análisis del Comportamiento* (AAC) y MICPSY y está incluida en las bases y plataformas bibliográficas:

- Journal Scholar Metrics
- LATINDEX (Sistema Regional de Información en Línea para Revistas Científicas de América Latina, el Caribe, España y Portugal)
- MIAR (Matriz de Información para el Análisis de Revistas)
- ProQuest Prisma Database
- Psychological Abstracts (American Psychological Association)
- PsycINFO (American Psychological Association)
- REBIUN (Red de Bibliotecas Universitarias Españolas)
- RESH (Revistas Españolas de Ciencias Sociales y Humanidades)
- SCIMAGO (SCImago Journal & Country Rank -SCOPUS)
- SCOPUS (Scopus Database Elsevier)

**Theoretical and Review Articles // Artículos teóricos y de revisión**

Tensión individualismo-gregarismo en la configuración psicológica del ser humano II: arquetipos de yo gregario. [*Individualism-Gregariousness Tension in the Psychological Configuration of the Human Being, II: Archetypes of Gregarious Self.*]..... 99  
*Jesús Gil Roales-Nieto*

Hierarchical Classification from Relational Frame Theory: A Review ..... 143  
*Lidia Budziszewska, Jorge Villarroel Carrasco, Enrique Gil.*

**Research Articles // Artículos de investigación**

Communication, Forgiveness and Morbidity in Young Adults Involved in a Romantic Relationship ..... 165  
*M. Graça Pereira, Liliana Fontes, Margarida Vilaça, Frank Fincham, Eleonora Costa, José C. Machado.*

COVID 19 and Psychological Problems in Mexican Mothers ..... 177  
*Alma G. Martínez Moreno, Jessica E. Pineda Lozano, Carmen A. Virgen Carrillo, María R. Padilla Galindo, Ana C. Espinoza Gallardo.*

The Impact of Stigmatizing Experiences and Self-Stigma on Mental Health and Suicidal Behavior: Results from the Community of Portuguese Language Countries ..... 185  
*Mariana Coelho, Henrique Pereira.*

Evaluation of a Transdiagnostic Group Intervention in a Primary Care Mental Health Service: A Pilot Study ..... 197  
*Hussein Bharmal, Roger Moore, Jamie Kelly*

Repetitive Negative Thinking, Rumination, Depressive Symptoms and Life Satisfaction: A cross-sectional mediation analysis ..... 211  
*Maria Manuela Peixoto, Olga Cunha.*

Psychometric properties of the Inventory of Interpersonal Problems-64 in Colombia ..... 223  
*Carlos Eduardo González Cifuentes, Francisco J. Ruiz*

**Notes and Editorial Information // Avisos e Información Editorial**

Normas de publicación [*Instructions to Authors*] ..... 237

Cobertura e indexación de *IJP&PT* [*IJP&PT Abstracting and Indexing*] ..... 239

STATEMENTS, OPINIONS, AND RESULTS OF STUDIES PUBLISHED IN *IJP&PT* ARE THOSE OF THE AUTHORS AND DO NOT REFLECT THE POLICY OR POSITION OF THE EDITOR, EDITORIAL COUNCIL OF *IJP&PT*, AND AAC; REGARDING ACCURACY OR RELIABILITY, NO GUARANTEE CAN BE OFFERED OTHER THAN THAT THE PROVIDED BY THE AUTHORS THEMSELVES.

LAS DECLARACIONES, OPINIONES Y RESULTADOS DE LOS ESTUDIOS PUBLICADOS EN *IJP&PT* PERTENECEN EN EXCLUSIVA A LOS AUTORES, Y NO REFLEJAN LA POLÍTICA O POSICIÓN DEL EDITOR, DEL EQUIPO EDITORIAL, NI DEL CONSEJO EDITORIAL DE *IJP&PT*, NI DE LA AAC; EN CUANTO A SU EXACTITUD O FIABILIDAD, NO PUEDE OFRECERSE NINGUNA OTRA GARANTÍA QUE NO SEA LA APORTADA POR LOS PROPIOS AUTORES.

*IJP&PT* IS INCLUDED IN THE FOLLOWING INDEXING AND DOCUMENTATION CENTERS



## Communication, Forgiveness and Morbidity in Young Adults Involved in a Romantic Relationship

M. Graça Pereira, Liliana Fontes, Margarida Vilaça

Universidade do Minho, Portugal

Frank Fincham

Florida State University, USA

Eleonora Costa

Universidade Católica Portuguesa

José C. Machado

Universidade do Minho, Portugal

Ebru Taysi

Suleyman Demirel University, Turkey

### ABSTRACT

This study examined the direct and indirect effects of communication patterns and forgiveness on physical and psychological morbidity, among young adults involved in a romantic relationship. Participants were 298 students, currently involved in a heterosexual romantic relationship, from a large university in the United States, who completed the *Tendency to Forgive Scale*, the *Communication Patterns Questionnaire*, and the *Rotterdam Symptom Checklist*. Physical morbidity was directly predicted by mutuality communication. Destructive communication had an indirect effect on physical and psychological morbidity, via forgiveness. However, the indirect connection between destructive communication and psychological morbidity was only significant for female partners. Teaching constructive communication skills may be a key factor for interventions addressed to young adults in romantic relationships, in order to promote forgiveness, due to its potential positive influence in physical and psychological well-being.

*Key words:* communication patterns, forgiveness, morbidity, romantic relationships.

**How to cite this paper:** Pereira MG, Fontes L, Vilaça M, Fincham F, Costa E, & Taysi E (2022). Communication, Forgiveness and Morbidity in Young Adults Involved in a Romantic Relationship. *International Journal of Psychology & Psychological Therapy*, 22, 2, 165-175.

### Novelty and Significance

*What is already known about the topic?*

- Constructive communication and forgiveness of others has many benefits on physical and mental health.
- In the promotion of couple's positive communication, forgiveness represents an important coping strategy with an essential impact on relationship quality.
- Previous literature has focused on the mediator role of forgiveness among several psychological variables, emphasizing the benefits of forgiveness.

*What this paper adds?*

- In partners with low tendency to forgive, destructive communication predicted worse physical and psychological morbidity.
- Mutuality communication predicted lower physical morbidity, but not forgiveness.
- Female partners seem to be more susceptible to the adverse influence of destructive communication on psychological morbidity.

Evidence from the past decades research indicated that effective communication and forgiveness of others, especially in close relationships, has many benefits, including physical, mental, and relational health (Rasmussen, Stackhouse, Boon, Comstock, &

\* *Correspondence:* M Graça Pereira, School of Psychology, Universidade do Minho, Campus de Gualtar, 4710-057 Braga, Portugal. E-mail: gracep@psi.uminho.pt. *Acknowledgements:* This study was conducted at the Psychology Research Centre (CIPsi/UM), School of Psychology, University of Minho, supported by the Foundation for Science and Technology (FCT) through the Portuguese State Budget (UIDB/01662/2020), by a FCT grant (PTDC/PSI-GER/28163/2017); and by a grant awarded to Frank Fincham (90FE0022) from the United States Department of Health and Human Services.

Ross, 2019; Toussaint, Worthington, & Williams, 2015; Zarnaghash, Zarnaghash, & Zarnaghash, 2013).

While destructive communication involves threatening, insulting, or displaying anger, constructive communication includes the expression of feelings and making an effort to solve conflicts in the relationship (Roloff & Reznik, 2008). Both destructive and constructive communication may be associated with health, although destructive communication tends to be more stressful and harmful for psychological (Newsom, Nishishiba, Morgan, & Rook, 2003; Zarnaghash *et alia*, 2013) and physical health (Kiecolt-Glaser, Loving, Stowell, Malarkey, Lemeshow, Dickinson, & Glaser, 2005; Newton & Sanford, 2003; Toussaint *et alia*, 2015). Negative social interactions were more predictive of depressed mood than supportive ones (Teo, Choi, & Valenstein, 2013). Also, partners who engage in mutual constructive communication patterns reported less mental health problems than partners who use mutual destructive communication patterns (Sharafi, 2003).

Although the conceptualization of forgiveness is quite complex, there is a certain agreement on what forgiveness is not. Forgiveness is not excusing, condoning or forgetting, and it is different from reconciliation (Enright & Fitzgibbons, 2015). Overall, forgiveness is based on the intrapersonal conversion process of the victims' thoughts, feelings and behavior toward the transgressor from negative to a more positive state (Streelan, 2018). In other words, forgiveness refers to the process of progressively replacing the desire for the transgressor's punishment (vengeful, avoidant and hostile thoughts, feelings, and motivations) by more positive emotions, thoughts and motivations (Enright, 2012). Although women are generally seen as more forgiving than men, empirical evidence of gender differences regarding forgiveness is not consensual. Some studies, including meta-analytic reviews, conclude that women are more willing to forgive than men (e.g., Kaleta & Mróz, 2020; Miller, Worthington, & McDaniel, 2008), while other studies suggest that men tend to forgive more (e.g., Brown, 2003), or even that there is no gender difference in forgiving (e.g., Fehr, Gelfand, & Nag, 2010). According to Kaleta and Mróz (2020), the relationships between forgiveness and personality traits depend on the participants' gender.

Interpersonal transgressions are identified as social stressors that may negatively affect health (Cheadle & Toussaint, 2015). Forgiveness is theorized as a way of weakening the negative effects of stressors on mental, physical, and societal health (Rasmussen *et alia*, 2019; Webb, Toussaint, & Conway-Williams, 2012). Although different types of forgiveness (e.g. emotional) have been found to be related to multiple health outcomes, the tendency to forgive has been highly related to health (Worthington, Witvliet, Pietrini, & Miller, 2007).

Forgiveness is associated with improved physical health (Clabby, 2020; Lee & Enright, 2019), particularly lower cardiovascular diastolic blood pressure, arterial pressure, and less myocardial oxygen consumption. Forgiveness has also been associated with a decrease in the risk of cardiovascular disease (Toussaint & Cheadle, 2009), having an impact on the endocrine and immune systems by decreasing cortisol levels (Owen, Hayward, & Toussaint, 2011; Worthington & Scherer, 2004) and being protective of risk of all-cause mortality (Toussaint, Owen, & Cheadle, 2012). Lack of forgiveness has been associated with mental health variables such as depression (Toussaint, Williams, Musick, & Everson-Rose, 2008; Webb *et alia*, 2012), suicidal behavior (Hirsch, Webb, & Jeglic, 2011; Quintana-Orts & Rey, 2018), and emotion regulation, such as anger and hostility (Lawler-Row, Karremans, Scott, Edlis-Matityahou, & Edwards, 2008).

In addition to one's physical and mental health, forgiving a partner, in close relationships, also impacts relationship health. Offender's amends improve partner's forgiveness, which contributes to betrayal resolution (Hannon, Rusbult, Finkel, & Kamashiro, 2010). Partner-specific forgiveness is also related to relationship maintenance since it promotes closeness and commitment between partners, avoiding breakdown (Hannon *et alia*, 2010; Kato, 2016).

Evidence supports that communication patterns can be robust predictors of relationship quality and satisfaction (Gottman, 1994). Previous research on couples' communication has highlighted different communication patterns related to distressed and non-distressed couples (Markman, Rhoades, Stanley, Ragan, & Whitton, 2010; Karney & Bradbury, 1995). Overall, three main communication patterns emerge in couples' interactions or discussions: demand-withdraw (one partner is the demander, looking for change through discussion, while the other is the withdrawer, showing defensiveness, avoiding conflict and changing the topic); avoidance-withholding (both partners avoid discussing and resolving the conflict); and mutual constructive communication (positive behaviors such as mutual discussion expressing concerns and feelings, and negotiating solutions) (Christensen, 1988). Demand-withdraw and mutual avoidance-withholding patterns represent destructive communication patterns and inadequate responses to conflict, common in distressed and unsatisfied couples (Papp, Kouros, & Cummings, 2009; Schrodt, Witt, & Shimkowski, 2014). Mutual constructive communication was associated with higher levels of relationship satisfaction (Fincham & Beach, 2002; Karney & Bradbury, 1995).

Forgiveness decreases the use of ineffective conflict tactics, promoting less negative and more positive communication (Fincham, Beach, & Davila, 2004), which leads to increased relationship satisfaction (Braithwaite *et alia*, 2011; Fincham & Beach, 2002). In fact, after a conflict, forgiveness is an important indicator on whether couples will remain in their relationships and preserve their closeness (Braithwaite *et alia*, 2011), even in the long term (Kato, 2016). Therefore, forgiveness seems to act as an important coping strategy impacting the quality of the relationship (Fincham *et alia*, 2004; Kato, 2016).

Although both communication patterns and forgiveness represent important dimensions for the couples' physical and emotional health, to our knowledge, the effect of communication on forgiveness has not been studied.

Given that communication and forgiveness have predicted physical and psychological health, the present study tested a theoretical model in which forgiveness mediates the relationship between communication and morbidity. Previous literature has focused on the mediating role of forgiveness among several psychological variables, showing the potential beneficial contributions of forgiveness. In a study including 355 bullies and victims of bullying, van Rensburg and Raubenheimer (2015) found that forgiveness played a mediator role between bullying/ victimization and mental health. Overall, the results suggested that bullying adolescents who were unable to forgive others were more likely to report higher levels of psychopathology, while bullied teenagers who were able to forgive themselves were more likely to express lower levels of psychopathology. In another study with 475 college students, Yao, Chen, Yu, and Sang (2016) found that interpersonal forgiveness and self-forgiveness partly mediated the effect of self-esteem on subjective well-being. According to results, individuals with high self-esteem seemed to forgive more easily, thus enhancing their well-being. A longitudinal study with 331 married couples (Rose, Anderson, Miller, Marks, Hatch, & Card, 2019) indicated that forgiveness did not mediate the relationship between husband's religiosity and wives'

marital satisfaction. However, lower level of wives' perceptions of spousal forgiveness was a significant mediator between high levels of wives' religiosity and lower levels of husband and wife's marital satisfaction. More recently, a study that comprised 77 psychotherapy outpatients (Kaleta & Mróz, 2020) concluded that general levels of forgiveness mediated the relation between hope and depression, indicating forgiveness as a potential mechanism that, through basic hope, can reduce depression symptoms.

Although existent research provides evidence regarding the beneficial influence of communication and forgiveness on physical and psychological health, studies including communication, forgiveness and health are still very limited, especially within the couple relational framework. In order to extend previous research, the present study examined: i) the relationship between romantic partners' communication patterns, forgiveness, and physical and psychological morbidity; ii) the direct effects of communication patterns and forgiveness on morbidity; iii) the indirect effects of communication patterns on morbidity via forgiveness; and iv) the gender differences in the previous relationship. Based on the existent literature, it is expected that (H1) destructive communication patterns will be associated with lower levels of forgiveness and more physical and psychological symptoms, (H2) constructive communication patterns will be associated with high levels of forgiveness and less physical and psychological morbidity, (H3) communications patterns will have an indirect effect on physical and psychological morbidity via forgiveness, and (H4) the partners' gender will moderate the previous relationship.

## METHOD

### *Participants*

Participants were first year students at a large university in the Southeastern United States who enrolled in an introductory course on family development. Students that accepted to participate in this study received extra course credit. The study was approved by the Institutional Review Board, and the sample included 298 students who were in a monogamous heterosexual romantic relationship. Participation was voluntary and all students provided an informed written consent.

### *Measures*

*Tendency to Forgive Scale* (TTF; Brown, 2003). This questionnaire is a 4-item scale that measures past forgiveness experiences with the romantic partner. TTF includes items like "I tend to get over it quickly when my partner hurts my feelings" and "When my partner wrongs me, my approach is just to forgive and forget". Partners rate their level of agreement with each statement on a 7-point Likert scale, ranging from 0 "strongly disagree" to 6 "strongly agree". Higher scores indicate greater tendency to forgive. In this study, TTF showed an acceptable internal consistency (Cronbach's alpha of .72).

*The Communication Patterns Questionnaire* (CPQ; Noller & White, 1990). This is a self-report measure that assesses partner communication during conflict. Based on the Christensen's (1988) three main communication patterns, this instrument considers four complementary patterns: coercion (blame, threat, and physical and verbal aggression), mutuality (open discussion, negotiation, and lack of avoidance), post-conflict distress (guilt, hurt, and withdrawal), and destructive process (demand-withdraw, criticize-defend, and pressure-resist patterns). The instrument consists of 29 items, but the present study only used three subscales (coercion, mutuality, and destructive process), a total of 24 items that were answered with a 9-point Likert scale, ranging from 1 "very unlikely" to 9 "very likely" (e.g. "Both members threaten each other with negative consequences"



from coercion subscale, “Both members try to discuss the problem” from mutuality subscale, and “Both members blame, accuse, and criticize each other” from destructive process subscale). For all subscales, higher scores indicate more use of coercion, mutuality, and destructive process patterns. In the present study, Cronbach’s alphas were .88, .87, and .75 for coercion, mutuality, and destructive process, respectively.

*Rotterdam Symptom Checklist* (RSCL; de Haes, Olschewski, Fayers, Visser, Cull, Hopwood, & Sanderman, 1996). This checklist is used to measure psychological (15 items) and physical symptoms (14 items). Psychological morbidity items involve depressed mood, despairing about the future, worrying, and anxiety. Physical symptoms include fatigue, tiredness, headaches, dizziness, and sleeping difficulties. All items address symptoms experienced in the previous week. Higher scores indicate higher psychological or physical morbidity. In this study, Cronbach’s alpha for both psychological and physical morbidity scales was .86.

### *Data Analysis*

Analyses of the relationship between communication patterns (coercion, mutuality, and destructive process), forgiveness, and morbidity (physical and psychological) were performed using Pearson correlations. To examine the overall suitability of the hypothesized model and obtain direct and indirect effects between the variables, a path analysis was conducted with bootstrapping. The specified paths were based on the literature, i.e., communication patterns as exogenous latent factors, forgiveness as a mediator variable, and physical and psychological morbidity as endogenous latent factors. Model fit was assessed using the chi-square statistics ( $\chi^2$ ), goodness of fit index (GFI), comparative fit index (CFI), root mean square error of approximation (RMSEA), and standardized root mean residual (SRMR). Adequate fit was defined as  $\chi^2$ , p-value over .05, GFI and CFI over .95, RMSEA below .07, and SRMR below .08 (Hair, Black, Babin, & Anderson, 2010).

Subsequently, a multiple group path analysis was performed taking into consideration the participants’ gender (men vs. women) in successively nested models. The comparison between models was tested through the  $\chi^2$  value difference test ( $\Delta \chi^2$ ): first, unconstrained multiple-group model across gender, in which the same patterns of structural paths were tested without constraints across groups; second, fully constrained multiple-group model, where structural paths were constrained to be equal across groups; finally, partially constrained multiple-group model, where some structural paths are released across groups.

SPSS software (version 24.0) was used to perform the standard statistical analysis, while the structural equation model was performed with the AMOS software (version 24.0).

## **RESULTS**

Participants were 298 young adults, 229 women ( $M_{age}= 19.4$ ;  $SD= 1.2$ ) and 69 men ( $M_{age}= 19.8$ ,  $SD= 1.9$ ) being in a monogamous romantic relationship. All participants were students attending the first year of the College of Human Sciences in a major state university, in USA.

The results showed that all variables were significantly correlated with the dependent variables (physical and psychological morbidity), with the exception of coercion pattern that did not correlate with psychological morbidity (Table 1). Coercion and destructive process patterns were positively correlated with physical and psychological morbidity, whereas mutuality and forgiveness were negatively correlated with both physical and psychological morbidity variables. As expected, physical and psychological morbidity

Table 1. Relationship between communication patterns, forgiveness, and morbidity.

Variables	<i>M (SD)</i>	1	2	3	4	5
1. Coercion	5.92 (4.69)	-				
2. Mutuality	22.03 (4.88)	-.316***	-			
3. Destructive process	7.75 (4.86)	.750***	-.360***	-		
4. Forgiveness	9.72 (1.98)	-.049	.066	-.116*	-	
5. Physical morbidity	33.88 (7.60)	.118*	-.251***	.211***	-.140*	-
6. Psych. morbidity	13.44 (4.30)	.082	-.175**	.218***	-.210**	.730***

Notes: \* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$ .

showed a positive and strong correlation. Coercion and mutuality patterns did not correlate with forgiveness, while the correlation between the destructive process pattern with forgiveness was low.

The results of the path analysis for the initial hypothesized model showed a poor fit:  $\chi^2(7) = 250.538$ ,  $p < .001$ ,  $GFI = .818$ ,  $CFI = .556$ ,  $RMSEA = .342$  (90%  $CI = .307, .379$ ),  $SRMR = .178$ . The chi-square test was significant, the  $GFI$  and  $CFI$  values were lower than .950, and the  $RMSEA$  and  $SRMR$  values were considerably higher than the acceptable scores.

After adjusting the proposed model according to the modification indices and path coefficients significance, the final model indicated a good global fit (Figure 1):  $\chi^2(4) = 7.401$ ,  $p = .116$ ,  $GFI = .990$ ,  $CFI = .989$ ,  $RMSEA = .054$  (90%  $CI = <.001, .113$ ),  $SRMR = .039$ . Non-significant pathways ( $p < .05$ ) were removed (leading to the deletion of the coercion communication pattern), and two modification indexes were taken into consideration: the addition of a direct relationship between mutuality and physical morbidity, and between psychological and physical morbidity.

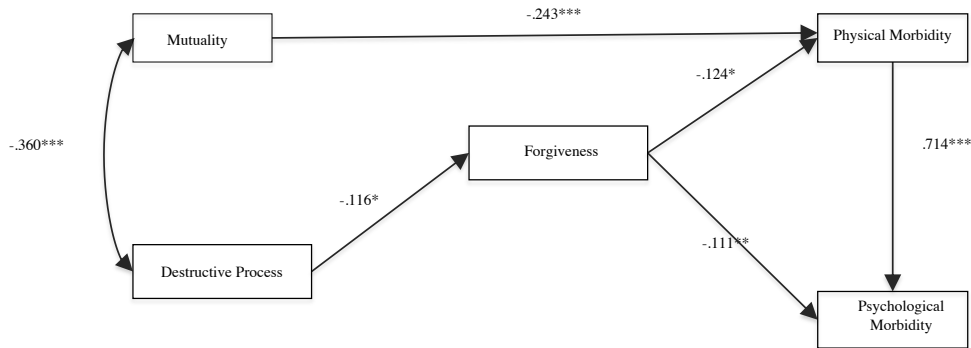


Figure 1. The hypothesized model of direct and indirect effects of communication and forgiveness on morbidity (\* =  $p < .05$ ; \*\* =  $p < .01$ ; \*\*\* =  $p < .001$ ).

Direct and indirect (via forgiveness) associations of communication patterns with morbidity were identified. Mutuality communication only had a direct negative effect on physical morbidity ( $\beta = -.24$ ,  $p < .001$ ), showing that higher levels of mutuality predicted lower levels of physical morbidity. Conversely, destructive process showed a direct negative effect on forgiveness ( $\beta = -.12$ ,  $p < .05$ ), indicating that higher levels of forgiveness were predicted by lower levels of destructive process. Additionally, analyses revealed indirect effects of destructive process with both physical ( $\beta = .014$ ,  $p = .057$ ) and psychological morbidity ( $\beta = .023$ ,  $p = .035$ ), via forgiveness. Therefore, higher levels

of destructive process predicted a lower tendency to forgive, which in turn predicted higher levels of physical and psychological morbidity. Finally, physical morbidity had a direct positive effect on psychological morbidity ( $\beta = .71, p < .001$ ), indicating that higher levels of physical morbidity predicted higher levels of psychological morbidity.

The multigroup analysis indicated that gender had a significant effect on the adjusted hypothesized model. Specifically, the indirect effect of destructive process on psychological morbidity was significant only for women ( $\beta = .02; p < .05$ ), revealing a stronger relationship in women, compared to men (Table 2).

Table 2. Standardized indirect effects (via forgiveness) with multigroup analysis.

	Predictor	Outcome	$\beta$	95% CI	<i>p</i>
Men	Destruct. process	Physical morbidity	.046	-.011; .159	.140
	Destruct. process	Psych. morbidity	.020	-.037; .130	.503
Women	Destruct. process	Physical morbidity	.010	-.003; .035	.140
	Destruct. process	Psych. morbidity	.024	.001; .066	.038

Note: 95% CI [Bootstrap bias-corrected confidence interval at 95% (5000 samples)].

## DISCUSSION

This study focused on the relationships between communication patterns, forgiveness, and morbidity, specifically if communication predicts physical and psychological morbidity via forgiveness.

Results from the correlation analysis showed a positive link between mutuality communication pattern and physical and psychological morbidity, and a negative association between destructive communication and physical and psychological morbidity, as previously reported in the literature (Kiecolt-Glaser *et alia*, 2005; Newsom *et alia*, 2003; Newton & Sanford, 2003; Teo *et alia*, 2013; Toussaint *et alia*, 2015; Zarnaghash *et alia*, 2013). Coercion, however, only correlated with physical morbidity, suggesting that this type of communication may have a negative influence on physical health but not on mental health. Regarding forgiveness, the destructive process pattern was the only communication pattern significantly associated with this variable. Given that previous literature has stressed that, often, forgiveness depends on the assessment of damage or offense severity by the offended (Merolla & Zhang, 2011), this result suggests that forgiveness is more sensitive to the potential influence of destructive process communication than other patterns. Unsurprisingly, all types of communication patterns were related, with destructive communication patterns (coercion and destructive process) being positively associated with each other, and negatively associated with the constructive communication pattern (mutuality). Overall, results suggest that H1 and H2 were partially confirmed.

In terms of direct and indirect associations of communication with physical and psychological morbidity, the adjusted model only included constructive (mutuality) and destructive (destructive process) communication patterns. Results showed an indirect path between the destructive process pattern and physical and psychological health, through forgiveness, but not between mutuality pattern and physical and psychological morbidity. In fact, mutuality communication directly predicted physical symptoms, indicating that the more mutuality patterns individuals use, the less physical symptoms they experience, thus corroborating prior evidence on communication patterns and physical health (Kiecolt-Glaser *et alia*, 2005; Newton & Sanford, 2003; Toussaint *et alia*, 2015).

The indirect effect revealed that partners who used more destructive communication patterns exhibited less tendency to forgive, which contributed to more physical and psychological morbidity. According to the literature, destructive behaviors, coercion or avoidance may evoke physical arousal and negative emotions (Papp *et alia*, 2009; Schrodtt *et alia*, 2014), which was associated with unforgiveness (Worthington *et alia*, 2007). On the contrary, forgiveness in marriage is associated to more constructive communication (Fincham & Beach, 2002). Overall, this finding reinforces the idea that communication plays a central role influencing forgiveness (Fincham & Beach, 2002). Physical and psychological morbidity were directly predicted by forgiveness, as expected due to current findings from research on forgiveness and health (Lee & Enright, 2019; Quintana-Orts & Rey, 2018; Toussaint *et alia*, 2012; Webb *et alia*, 2012). Since indirect effects were only found between destructive process and morbidity, H3 was partially corroborated.

Physical morbidity directly predicted psychological symptoms. Although the literature highlights the adverse effects of mental illness on physical health, a number of studies have found the opposite, i.e., the negative effect of physical symptomatology on psychological health (Adams, Chien, & Wisk, 2019; Pinguart & Shen, 2011).

Results revealed gender differences in the adjusted hypothesized model. Thus, while the indirect effect of destructive communication with physical morbidity was statistically significant for both men and women, the indirect relationship between destructive communication and psychological morbidity was significant only for women. Although the literature is ambiguous, regarding gender differences in forgiveness, women tend to be more willing to forgive than men (Miller *et alia*, 2008). Furthermore, women are more likely than men to suffer from mental conditions such as depression (Van Loo, Aggen, Gardner, & Kendler, 2017). Therefore, it is possible that the link between communication, forgiveness and mental health is different for women and men. However, it is important to acknowledge that, given the different size of gender groups, this finding must be interpreted with caution and more studies to confirm this hypothesis are warranted. Overall, H4 was confirmed.

There are some limitations in this study that need to be acknowledged such as the cross-sectional design that does not allow causality, as well as the nature of the sample that included young partners, mainly women, pursuing a higher education degree. Future research should use longitudinal designs to understand whether communication patterns, forgiveness, and health change over time, as well as to test the moderator role of forgiveness. Also, future studies should replicate this study with distressed couples, couples that are in a long relationship (married or dating), and less educated. Given that this study focused on couples' communication, it would be interesting to consider, in future research, each partner's communication style independently, as well as the interaction between both styles on psychological and physical morbidity. Future studies should also include physiological measures (e.g., blood pressure, heart rate variability, cortisol levels) besides self-report measures.

The present study provides evidence that communication is connected to physical and psychological morbidity through forgiveness. The findings emphasize the potential impact of more negative communication patterns and low tendency to forgive on young adults' health, in the context of romantic relationships. However, this study did not find constructive communication patterns predicting more forgiveness, since there was no relationship between mutuality and forgiveness. Also, women were more susceptible to the adverse influence of destructive communication and forgiveness opposition on psychological morbidity.

To the best of our knowledge, this the first study exploring indirect effects of communication patterns with physical and psychological morbidity, via forgiveness, in a sample of young adults engaged in a romantic relationship.

The present study highlights the importance of communication and forgiveness for young couples, thus contributing to clinical practice. Destructive communication patterns may create a crucial impairment in the partners' health and should therefore be assessed and subject of couple therapeutic interventions. Specifically, communication skills interventions should focus on reducing the use of destructive communication within couples' interactions. Furthermore, considering that forgiveness has been well established as a significant factor on relationship quality and satisfaction (Braithwaite, Selby, & Fincham, 2011), it is important to target partners' ability to forgive in intervention programs that aim to improve the quality of the relationship, as well as individual's physical and mental health.

Finally, intervention programs focused on communication skills would benefit from differentiated approaches according to the partners' gender, i.e., those aimed at women should focus on reducing the frequency and intensity of destructive communication patterns and improving their capacity to forgive.

## REFERENCES

- Adams JS, Chien AT, & Wisk LE. (2019). Mental illness among youth with chronic physical conditions. *Pediatrics*, *144*, 1-9. Doi: 10.1542/peds.2018-1819
- Braithwaite S, Selby E, & Fincham F (2011). Forgiveness and relationship satisfaction: Mediating mechanisms. *Journal of Family Psychology*, *25*, 551-559. Doi: 10.1037/a0024526
- Brown R (2003). Measuring individual differences in the tendency to forgive: Construct validity and links with depression. *Personality and Social Psychology Bulletin*, *29*, 759-771. Doi: 10.1177/0146167203029006008
- Cheadle A & Toussaint L (2015). Forgiveness and physical health in healthy populations. In L Toussaint, E Worthington Jr & D Williams (Eds), *Forgiveness and Health: Scientific evidence and theories relating forgiveness to better health* (pp. 91-106). Dordrecht: Springer.
- Christensen, A (1988). Dysfunctional interaction patterns in couples. In P Noller & M Fitzpatrick (Eds.), *Perspectives on Marital Interaction* (pp. 31-52). Philadelphia: Multilingual Matters.
- Clabby JF (2020). Forgiveness: Moving on can be healthy. *The International Journal of Psychiatry in Medicine*, *55*, 123-130. Doi: 10.1177/0091217419885468
- de Haes JCJM, Olschewski M, Fayers P, Visser MRM, Cull A, Hopwood P, & Sanderman R (1996). *Measuring the quality of life of cancer patients with the Rotterdam Symptom Checklist (RSCL): A Manual*. Groningen: Northern Centre for Healthcare Research (NCH).
- Enright RD (2012). *The Forgiving Life: A Pathway to Overcoming Resentment and Creating a Legacy of Love*. Washington DC: American Psychological Association.
- Enright RD & Fitzgibbons RP (2015). *Forgiveness therapy: An empirical guide for resolving anger and restoring hope*. Washington DC: American Psychological Association.
- Fehr R, Gelfand MJ, & Nag M (2010). The road to forgiveness: A meta-analytic synthesis of its situational and dispositional correlates. *Psychological Bulletin*, *136*, 894-914. Doi: 10.1037/a0019993
- Fincham F & Beach S (2002). Forgiveness in marriage: Implications for psychological aggression and constructive communication. *Personal Relationships*, *9*, 239-251. Doi: 10.1111/1475-6811.00016
- Fincham F, Beach S, & Davila J (2004). Forgiveness and conflict resolution in marriage. *Journal of Family Psychology*, *18*, 72-81. Doi: 10.1037/0893-3200.18.1.72
- Gottman J (1994). *What predicts divorce? The relationship between marital processes and marital outcomes*. New York: Psychology Press.
- Hair JF, Black W, Babin B, & Anderson R (2010). *Multivariate data analysis* (7th ed.). New York: Prentice Hall.
- Hannon P, Rusbult C, Finkel E, & Kamashiro M (2010). In the wake of betrayal: Amends, forgiveness, and the resolution of betrayal. *Personal Relationships*, *17*, 253-278. Doi: 10.1111/j.1475-6811.2010.01275.x

- Hirsch J, Webb J, & Jeglic E (2011). Forgiveness, depression, and suicidal behavior among a diverse sample of college students. *Journal of Clinical Psychology, 67*, 896-906. Doi: 10.1002/jclp.20812
- Kaleta K & Mróz J (2020). The Relationship between Basic Hope and Depression: Forgiveness as a Mediator. *The Psychiatric Quarterly, 91*, 877-886. Doi: 10.1007/s11126-020-09759-w
- Karney BR & Bradbury TN (1995). Assessing longitudinal change in marriage: An introduction to the analysis of growth-curves. *Journal of Marriage and Family, 57*, 1091-1108. Doi: 10.2307/353425
- Kato T (2016). Effects of partner forgiveness on romantic break-ups in dating relationships: A longitudinal study. *Personality and Individual Differences, 95*, 185-189. Doi: 10.1016/j.paid.2016.02.050
- Kiecolt-Glaser J, Loving T, Stowell J, Malarkey W, Lemeshow S, Dickinson S, & Glaser R (2005). Hostile marital interactions, proinflammatory cytokine production, and wound healing. *Archives of General Psychiatry, 62*, 1377-1384. Doi: 10.1001/archpsyc.62.12.1377
- Lawler-Row K, Karremans J, Scott C, Edlis-Matityahou M, & Edwards L (2008). Forgiveness, physiological reactivity and health: The role of anger. *International Journal of Psychophysiology, 68*, 51-58. Doi: 10.1016/j.ijpsycho.2008.01.001
- Lee Y & Enright R (2019). A meta-analysis of the association between forgiveness of others and physical health. *Psychology & Health, 34*, 626-643. Doi: 10.1080/08870446.2018.1554185
- Markman HJ, Rhoades GK, Stanley SM, Ragan EP, & Whitton SW (2010). The premarital communication roots of marital distress and divorce: The first five years of marriage. *Journal of Family Psychology, 24*, 289-298. Doi: 10.1037/a0019481
- Merolla AJ & Zhang S (2011). In the wake of transgressions: Examining forgiveness communication in personal relationships. *Personal Relationships, 18*, 79-95. Doi: 10.1111/j.1475-6811.2010.01323.x
- Miller AJ, Worthington EL, & McDaniel MA (2008). Gender and forgiveness: A meta-analytic review and research agenda. *Journal of Social and Clinical Psychology, 27*, 843-876. Doi: 10.1521/jsep.2008.27.8.843
- Newsom J, Nishishiba M, Morgan D, & Rook K (2003). The relative importance of three domains of positive and negative social exchanges: A longitudinal model with comparable measures. *Psychology and Aging, 18*, 746-754. Doi: 10.1037/0882-7974.18.4.746
- Newton T & Sanford J (2003). Conflict structure moderates associations between cardiovascular reactivity and negative marital interaction. *Health Psychology, 22*, 270-278. Doi: 10.1037/0278-6133.22.3.270
- Noller P & White A (1990). The validity of the Communication Patterns Questionnaire. *Psychological Assessment: A Journal of Consulting and Clinical Psychology, 2*, 478-482. Doi: 10.1037/1040-3590.2.4.478
- Owen A, Hayward R, & Toussaint L (2011, April). *Forgiveness and immune functioning in people living with HIV-AIDS* [Paper presentation]. Society for Behavioral Medicine 32<sup>nd</sup> annual meeting, Washington, DC, USA.
- Papp LM, Kouros CD, & Cummings EM (2009). Demand-withdraw patterns in marital conflict in the home. *Personal Relationships, 16*, 285-300. Doi: 10.1111/j.1475-6811.2009.01223.x
- Pinquart M & Shen Y (2011). Depressive symptoms in children and adolescents with chronic physical illness: An updated meta-analysis. *Journal of Pediatric Psychology, 36*, 375-384. Doi: 10.1093/jpepsy/jsq104
- Quintana-Orts C & Rey L (2018). Forgiveness, Depression, and Suicidal Behavior in Adolescents: Gender Differences in this Relationship. *The Journal of Genetic Psychology, 179*, 85-89. Doi: 10.1080/00221325.2018.1434478
- Rasmussen KR, Stackhouse M, Boon SD, Comstock K, & Ross R (2019). Meta-analytic connections between forgiveness and health: The moderating effects of forgiveness-related distinctions. *Psychology & Health, 34*, 515-534. Doi: 10.1080/08870446.2018.1545906
- Roloff ME & Reznik RM (2008). Communication during serial arguments: Connections with individuals' mental and physical well-being. In MT Motley (Ed.), *Studies in Applied Interpersonal Communication* (pp. 97-119). Thousand Oaks, CA: SAGE Publications, Inc.
- Rose A, Anderson S, Miller R, Marks L, Hatch T, & Card N (2019). Longitudinal test of forgiveness and perceived forgiveness as mediators between religiosity and marital satisfaction in long-term marital relationships. *The American Journal of Family Therapy, 46*, 1-19. Doi: 10.1080/01926187.2018.1547667
- Schrodt P, Witt PL, & Shimkowski JR (2014). A meta-analytical review of the demand/withdraw pattern of interaction and its associations with individual, relational, and communicative outcomes. *Communication Monographs, 81*, 28-58. Doi: 10.1080/03637751.2013.813632
- Sharafi A (2003). *The relationship between marital communication pattern and mental health in female elementary school teachers and their husband in Tehran* [Unpublished master's thesis]. Tarbiat Moallem University of Tehran, Iran.

- Strelan P (2018). Justice and Forgiveness in Interpersonal Relationships. *Current Directions in Psychological Sciences*, 27, 20-24. Doi: 10.1177/0963721417734311
- Teo AR, Choi H, & Valenstein M (2013). Social relationships and depression: Ten-year follow-up from a nationally representative study. *PLoS one*, 8, e62396. Doi: 10.1371/journal.pone.0062396
- Toussaint L & Cheadle A (2009). Unforgiveness and the broken heart: Unforgiving tendencies, problems due to unforgiveness, and 12-month prevalence of cardiovascular health conditions. In M Evans & E Walker (Eds.), *Religion and Psychology* (pp. 135-170). New York: Nova Publishers.
- Toussaint L, Owen A, & Cheadle A (2012). Forgive to live: Forgiveness, health, and longevity. *Journal of Behavioral Medicine*, 35, 375-386. Doi: 10.1007/s10865-011-9362-4
- Toussaint L, Williams D, Musick M, & Everson-Rose S (2008). The association of forgiveness and 12-month prevalence of major depressive episode: Gender differences in a probability sample of U.S. adults. *Mental Health, Religion & Culture*, 11, 485-500. Doi: 10.1080/13674670701564989
- Toussaint LL, Worthington ELJ, & Williams DR (2015). *Forgiveness and Health. Scientific Evidence and Theories Relating Forgiveness to Better Health*. New York: Springer.
- Van Loo HM, Aggen SH, Gardner CO, & Kendler KS (2017). Sex similarities and differences in risk factors for recurrence of major depression. *Psychological Medicine*, 48, 1685-1693. Doi: 10.1017/s0033291717003178
- van Rensburg EJ & Raubenheimer J (2015). Does forgiveness mediate the impact of school bullying on adolescent mental health? *Journal of Child & Adolescent Mental Health*, 27, 25-39. Doi: 10.2989/17280583.2014.955502
- Webb J, Toussaint L, & Conway-Williams E (2012). Forgiveness and health: Psycho-spiritual integration and the promotion of better healthcare. *Journal of Health Care Chaplaincy*, 18, 57-73. Doi: 10.1080/08854726.2012.667317
- Worthington EL & Scherer M (2004). Forgiveness is an emotion-focused coping strategy that can reduce health risks and promote health resilience: Theory, review, and hypotheses. *Psychology & Health*, 19, 385-405. Doi: 10.1080/0887044042000196674
- Worthington E, Witvliet C, Pietrini P, & Miller A (2007). Forgiveness, health, and well-being: A review of evidence for emotional versus decisional forgiveness, dispositional forgivingness, and reduced unforgiveness. *Journal of Behavioral Medicine*, 30, 291-302. Doi: 10.1007/s10865-007-9105-8
- Yao S, Chen J, Yu X, & Sang J (2016). Mediator Roles of Interpersonal Forgiveness and Self-Forgiveness between Self-Esteem and Subjective Well-Being. *Current Psychology*, 36, 585-592. Doi: 10.1007/s12144-016-9447-x
- Zarnaghash M, Zarnaghash M, & Zarnaghash N (2013). The Relationship Between Family Communication Patterns and Mental Health. *Procedia-Social and Behavioral Sciences*, 84, 405-410. Doi: 10.1016/j.sbspro.2013.06.575

Received, January 11, 2022  
Final Acceptance, April 17, 2022