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Empirical Articles

Investigating Relationship Between Psychological Trait Resilience and Forgiveness Among Internally Displaced Persons

Relação Entre Traços Psiológicos de Resiliência e Perdão em Pessoas Deslocadas Internamente

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Abstract

Aim: In general, conflict has many adverse effects on individuals' lives. The purpose of this study was to examine the relationship between psychological trait resilience and forgiveness among internally displaced persons (IDPs).

Method: The sample consisted of 244 IDPs (111 males and 133 females) who have been exposed to various stressful situations. Age of participants ranged between 18 and 60 years (M = 32.63 years, SD = 8.18). Psychological Trait Resilience Scale and Enright Forgiveness Inventory were used through a cross-sectional study to collect data.

Results: The results showed that IDPs reported low levels of resilience and forgiveness. The results also indicated that ecological resilience was positively related with emotional, behavioral, and cognitive forgiveness, while engineering resilience was positively related with emotional and cognitive forgiveness. Adaptive resilience was found to be positively related with emotional forgiveness. Regression analysis indicated that ecological resilience uniquely predicted emotional, behavioral, and cognitive forgiveness after controlling for demographic characteristics.

Conclusion: These results suggest that higher levels of resilience are important for forgiveness among IDPs. Interventions aiming to enhance IDPs' forgiveness should account for psychological trait resilience.

Keywords: resilience, forgiveness, internally displaced persons

Resumo

Objetivo: O conflito tem efeitos adversos na vida dos indivíduos. O propósito deste estudo foi examinar a relação entre tracos psicológicos de resiliência e perdão entre pessoas deslocadas internamente (IDPs).

Método: A amostra foi composta por 244 IDPs (111 homens e 133 mulheres) estiveram expostos a diferentes situações stressantes. A idade dos participantes variou entre 18 e 60 anos (M = 32.63, SD = 8.18). A escala de Tracos Psicológicos de Resiliência e o Inventário de Perdão de Enright foram usados para recolha de dados num estudo transversal.

Resultados: Os resultados mostraram que os IDPs tendem ser menos resilientes e capazes de perdoar do que a população em geral. Os resultados mostraram também que a resiliência ecológica estava positivamente correlacionada com o perdão emocional e comportamental, ao passo que resiliência de engenharia estava positivamente correlacionada com perdão emocional e cognitivo. A resiliência adaptativa mostrou-se positivamente correlacionada com o perdão emocional. Análises de regressão indicaram a resiliência ecológica como preditor único do perdão emocional, comportamental, e cognitivo, após controlar as características sociodemográficas.

Conclusão: Estes resultados sugerem que níveis mais altos de resiliência são importantes para o perdão entre os IDPs. Intervenções que visem melhorar o perdão dos IDPs devem ter em consideração a resiliência de traço psicológico.

Palavras-Chave: resiliência, perdão, pessoas deslocadas internamente

Psychology, Community & Health, 2019, Vol. 8(1), 263–274, https://doi.org/10.5964/pch.v8i1.313

Received: 2018-12-05. Accepted: 2020-04-27. Published (VoR): 2020-05-19.

Handling Editor: Fátima Bernardo, Departamento de Psicologia, Universidade de Évora, Évora, Portugal; CERIS-CESUR - IST - Universidade de Lisboa, Portugal

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In general, conflicts adversely affect many displaced people's lives. Despite increased numbers of displaced people worldwide, little is known on how positive psychological traits relate to their well-being. Exploring the factors that may help internally displaced persons (IDPs) to effectively engage with society and offenders that cause them unpleasant conditions is an important research agenda (Baron, Jensen, & de Jong, 2004). Previous studies have demonstrated the usefulness of resilience and forgiveness in alleviating the impact of unpleasant conditions and helping individuals to adapt to stressful life conditions (Aziz, 2017; Yildirim & Alanazi, 2018).

Resilience can be defined as the ability to bounce back from stressful situations or hardship (Smith et al., 2008). Typically, there are three broad approaches as to the conceptualization of resilience: trait, state, and outcome. Trait approach assumes resilience as stable personal characteristics used to cope with stressors for better adjustment and development (Connor & Davidson, 2003; Tusaie & Dyer, 2004). The state approach hypothesizes resilience as a dynamic process in which people effectively tackle with the adversities and quickly return to baseline following negative events (Johnson, Wood, Gooding, Taylor, & Tarrier, 2011). The outcome approach views resilience as a psychological outcome that assists people to bounce back in the face of hardship (Harvey & Delfabbro, 2004). These three approaches suggest that resilience is adaptive and important for successful long-term emotional functioning. People with higher levels of resilience are more inclined to report higher levels of social functioning and health (Wingo et al., 2017), stress management (Davydov, Stewart, Ritchie, & Chaudieu, 2010), positive emotions (Tugade & Fredrickson, 2004), optimism and psychological well-being (Souri & Hasanirad, 2011), subjective well-being, affect balance, and flourishing (Yildirim, 2019; Yildirim & Belen, 2019), lower levels of depression and anxiety (Maltby et al., 2019), and post-traumatic stress disorder symptoms (Catabay, Stockman, Campbell, & Tsuyuki, 2019).

Forgiveness is a multidimensional concept referring to an adaptive ability to build positive feeling, empathy, compassion and generosity toward the offenders (Enright, 1991). It includes three processes: emotional, behavioral and cognitive. Emotional process includes positive emotions toward forgiving offenders (Toussaint & Friedman, 2009). Behavioral process refers to producing ways and actions towards future reactions (Johnson, Wernli, & LaVoie, 2013; Toussaint & Friedman, 2009). Cognitive process refers to a person's belief and cognition regarding the goodness and worthiness of the victim (Johnson et al., 2013). Forgiveness can be separated into two types: interpersonal and intrapersonal forgiveness. Interpersonal forgiveness refers to one's responses towards an offense to resolve unpleasant conditions (Bono, McCullough, & Root, 2008), while intrapersonal forgiveness, which this study focused on, - is related with emotional process that involve changes



within individual states about forgiveness (Maltby, Day, & Hall, 2015). Studies have suggested that forgiveness allows individuals to realize their potential to rebuild the relationship with the offender after the conflict, and help them to protect their mental health and well-being (Church et al., 2013; Cox, Bennett, Tripp, & Aquino, 2012; Toussaint & Friedman, 2009). Individuals with higher levels of forgiveness reported greater satisfaction with life and positive affect, and lower negative affect (Bono et al., 2008). Forgiveness is associated with saving oneself from resentment and anger (Maltby et al., 2008), reducing the injured person's requirement for revenge and punishment (Fife, Weeks, & Stellberg-Filbert, 2013), and coping strategies (Worthington & Scherer, 2004). Higher levels of forgiveness were related to higher levels of resilience (Çerkez & Öztörel, 2019). In the displacement conditions, being resilient can assist individuals letting go of resentment, forgive, survive, and move forward (Aziz, 2017).

Iraq has experienced a long conflict history and the conflict has had many adverse effects on individuals. The conflict has forced numerous people to leave the areas where they lived. Iraq is comprised of various ethnic, religious, and cultural groups that may increase the likelihood of conflict. Experiencing high levels of conflict may have adverse effects on individuals' mental health, well-being, and quality of life (Porter & Haslam, 2005). It is important to identify the factors that may help individuals to protect their mental health. Resilience and forgiveness may play an important role in promoting the well-being of individuals who suffer from conflict (e.g., McLernon, Cairns, Hewstone, & Smith, 2004).

Studies have indicated that forgiveness is considered as a prosocial orientation that helps to restore the relationship between victims and the offenders (Cehajic, Brown, & Castano, 2008), and that resilience may be a factor that helps to restore the relationships through forgiving offenders (Worthington et al., 2016). Identifying factors boosting forgiveness among displaced individuals would be useful in terms of understanding their psychological health. For displaced individuals, investigating the factors that help them to move forward, reengage, and forgive are necessary especially after the series of conflicts that have occurred. It is important to determine psychological factors that diminish the effect of conflict on individuals' well-being. The present study aimed to investigate how resilience can be related with willingness to forgive others, and how resilience contributes to the promotion of forgiveness. In the present study, we hypothesized that IDPs would score low in the mean scores of overall and domains of resilience and forgiveness. We also hypothesized that dimensions of psychological trait resilience (engineering, ecological, adaptive) would positively relate with dimensions of forgiveness (emotion, behavior, cognitive). Furthermore, we expected that dimensions of resilience would significantly predict dimensions of forgiveness.

Method

Sample

Participants were 244 internally displaced persons (111 males and 133 females) with ages between 18 to 60 years (M = 32.63, SD = 8.18). The fact that the mean age of participants is above the midpoint signifies that older participants had a higher response rate in comparison with younger participants. Other participants' characteristics are summarized with frequencies and percentages in Table 1.



Table 1

Participants' Sociodemographic Characteristics

Variable	n	%
Gender		
Male	111	45.49
Female	133	54.51
Education Level		
Illiterate	30	12.30
Primary level	84	34.43
Secondary level	60	24.59
Tertiary level	70	28.68
Marital Status		
Single	65	26.64
Married	156	63.93
Divorced	18	7.38
Separated	3	1.23
Widowed	2	0.82

Measures

Resilience

Resilience was measured using Psychological Trait Resilience scale (Maltby et al., 2015). The scale comprises of three domains with four items for each: engineering, ecological, and adaptive. All items were measured on a five-point Likert-type scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). Items include "I tend to take a long time to get over set-backs in my life" (engineering), "I give my best effort no matter what the outcome may be" (ecological), and "I enjoy dealing with new and unusual situations" (adaptive). Higher scores on each subscale reflect a higher score of resilience in each domain. Arabic translation of the scale was distributed to the participants. In the present study, internal consistency reliability was .78 for engineering, .77 for ecological, and .76 for adaptive.

Forgiveness

Forgiveness was measured using a short version of the Enright Forgiveness Inventory (McLernon et al., 2004). This scale includes three subdimensions: emotional forgiveness (8 items), behavioral forgiveness (6 items), and cognitive forgiveness (8 items). All items were assessed on a six-point Likert-type scale that ranged from 1 (strongly disagree) to 6 (strongly agree). Sample items include "kindness" (emotional), "help" (behavioral), and "worthless" (cognitive). Higher scores on each subscale refer to a higher score of forgiveness in each domain. Arabic translation of the inventory was given to the participants. In the present study, internal consistency reliability was .75 for emotional, .76 for behavioral, and .81 for cognitive.

Procedure

A three-step translation and back-translation procedure was applied to translate the questionnaires. Firstly, a bilingual expert translated the questionnaires from English to Arabic. Secondly, another independent bilingual expert translated back the Arabic version of the questionnaires into English. Thirdly, a different bilingual expert evaluated the integrity between the two forms. The final version of the translated Arabic questionnaires was used after considering any necessary changes about meaning and grammar. As a pen-and-paper version of



the questionnaires was administered, the researcher read aloud the items on the scales for those who were illiterate. The research sample was selected from the IDPs who live in Erbil Governorate. The majority of the participants have been living in shelters that were built by United Nations High Commissioner for Refugees (UNHCR) in cooperation with the local authorities. However, some of the participants have been living out of camp, in places such as within housing complexes or private houses. Participants were derived from both the inside and the outside of camps across five different subdistricts, with approximately 48 to 49 individuals from each subdistrict. The first author conducted the administration of the study instrument. All volunteer participants signed a written informed consent form before taking part in the study. Participants were informed about their rights such as completing the questionnaires without any pressure, anonymity, and confidentiality of the given information. The questionnaires were administered in the same order for all participants. The ethical approval for the study was obtained from a university ethics committee.

Statistical Analysis

Descriptive statistics, including frequencies, means, and standard deviations, were utilized to describe the demographic characteristics of the sample. Internal consistency reliability was estimated using Cronbach alpha. For the both scales, an overall reliability was calculated using all items on the scales while reliability for the subscales was calculated using items referring to the respective subscale only. Pearson correlation was used to explore the relationships between the domains of resilience and forgiveness. Multiple regression analysis was used to determine if the domains of resilience were significant predictors of the domains of forgiveness after controlling for demographic characteristics. All statistical analyses were performed using Statistical Package for the Social Science (SPSS) version 24.0 for Windows.

Results

Descriptive Statistics

Table 2 shows Cronbach alpha, mean, standard deviation and midpoint values for overall and each component of resilience and forgiveness. As seen in Table 2, the mean scores for overall and each component of resilience were below the midpoint score with the adaptive resilience being the highest mean score indicating that the participants had low levels of resilience in the domains of engineering, ecological, and adaptive. As for forgiveness, the mean scores for overall and each component of forgiveness were also below the midpoint score with the highest mean score of emotional forgiveness followed by cognitive forgiveness showing that the participants had low levels of forgiveness in the domains of emotion, behavior, and cognition.

Table 2

Descriptive Statistics and Cronbach's Alpha Values for the Study Variables

Variable	α	М	SD	Midpoint value
Resilience				
Overall resilience	.80	28.27	4.29	36
Engineering	.78	9.21	2.64	12
Ecological	.77	8.54	2.73	12
Adaptive	.76	11.07	2.75	12



Variable	α	М	SD	Midpoint value
Forgiveness				
Overall forgiveness	.85	44.28	13.94	77
Emotional	.75	15.86	5.95	28
Behavioral	.76	12.69	4.61	21
Cognitive	.81	14.39	5.67	28

Table 2 also presents Cronbach alpha reliabilities for each of the subdomains of resilience and forgiveness. Cronbach alpha for each subscale showed good coefficients levels of $\alpha > .70$ (Kline, 2013).

Bivariate Correlation

Pearson correlation was used to explore the relationships between the three domains of resilience and forgiveness. Interpreting the effect size of the correlations among the variables is important. Effect size among the variables were assessed based on guidelines proposed by Cohen. According to Cohen (1992), an effect size of $.1 \le r < .3$ signifies a small effect, while an effect size of $.3 \le r < .5$ and $r \ge .5$ respectively signify medium and large effects. Pearson correlation test results are presented in Table 3. Based on these results, there is significant positive correlation between emotional forgiveness and all domains of resilience with small to medium effect sizes. Behavioral forgiveness shows a significant positive correlation with ecological resilience with small effect size. Cognitive forgiveness shows a significant positive correlation with engineering and ecological resilience with small effect sizes.

Table 3

Bivariate Correlation Between Components of Resilience and Forgiveness

Variable	Pearson correlation	Effect size	p
Emotional forgiveness			
Engineering	.22**	Small	< .01
Ecological	.35**	Medium	< .01
Adaptive	.19*	Small	< .05
Behaviour forgiveness			
Engineering	.12	None	.06
Ecological	.22**	Small	< .01
Adaptive	.00	None	.92
Cognitive forgiveness			
Engineering	.13*	Small	< .05
Ecological	.24**	Small	< .01
Adaptive	.09	None	.14

^{*}p < .05. **p < .01.

Multiple Linear Regression

A series of multiple regression analyses were performed to examine which aspects of psychological trait resilience could uniquely predict domains of forgiveness after controlling for demographic characteristics. In the regression analysis, domains of resilience (engineering, ecological, and adaptive) and demographic characteristics (sex, age, education level, and marital status) were considered as independent variables, while domains of forgiveness (emotion, behavior, and cognition) were considered as dependent variables. Three



separate hierarchical multiple regression analyses were conducted. Model 1 included demographic information whereas domains of resilience were added in Model 2. Table 4 presents a summary of the multiple regression analyses. As to emotional forgiveness, the results showed that participants' demographic characteristics in Model 1 did not predict a significant amount of variance in participants' emotional forgiveness, F(4, 243) = 1.10, adj $r^2 = .00$, p = .36. Inclusion of domains of resilience in Model 2 produced significant change in r^2 to predict emotional forgiveness, $\Delta r^2 = .14$, p < .001. Ecological resilience positively predicted emotional forgiveness ($\beta = .45$, p < .01). As for behavioral forgiveness, the participants' demographic characteristics in Model 1 did not reveal a significant amount of variance in participants' behavioral forgiveness, F(4, 243) = .93, adj $F^2 = .00$, p = .45. Adding domains of resilience in Model 2 revealed a significant change in F(4, 243) = .93, adj F(4, 243) =

Table 4

Regression Analysis With Dimensions of Forgiveness as Outcomes, and Demographic Variables and Dimensions of Resilience as Predictors

		Emotional				Behavioral				Cognitive					
Variable	В	SE	β	t	р	В	SE	β	t	р	В	SE	β	t	р
Model 1															
Gender	-0.97	0.79	08	-1.24	.22	-0.48	0.61	05	-0.78	.43	-0.64	0.74	06	-0.87	.39
Age	-0.59	0.31	13	-1.92	.06	-0.31	0.24	09	-1.30	.20	-0.84	0.29	20	-2.92	.00
Education levels	0.02	0.40	.00	0.05	.96	0.46	0.31	.10	1.49	.14	-0.68	0.37	12	-1.81	.07
Marital status	0.25	0.53	.03	0.47	.64	0.29	0.41	.05	0.72	.47	0.31	0.49	.04	0.63	.53
Model 2															
Gender	-1.17	0.74	10	-1.58	.12	-0.66	0.60	07	-1.09	.28	-0.76	0.73	07	-1.04	.30
Age	-0.21	0.30	05	-0.72	.47	-0.15	0.24	04	-0.63	.53	-0.66	0.29	15	-2.25	.03
Education levels	0.38	0.38	.06	0.99	.33	0.58	0.31	.13	1.87	.06	-0.48	0.37	09	-1.29	.20
Marital status	0.72	0.51	.10	1.41	.16	0.45	0.41	.08	1.10	.27	0.51	0.50	.07	1.02	.31
Ecological	0.98	0.22	.45	4.56	.00	0.59	0.18	.35	3.34	.00	0.68	0.21	.33	3.22	.00
Engineering	-0.25	0.23	11	-1.12	.27	-0.25	0.19	14	-1.33	.19	-0.32	0.22	15	-1.44	.15
Adaptive	0.22	0.13	.10	1.61	.11	-0.03	0.11	02	-0.27	.79	0.09	0.13	.04	0.68	.50

Discussion

This study aimed to investigate the association between resilience and forgiveness among IDPs. This study provided a better understanding of the relationship between resilience and forgiveness among IDPs. The results of descriptive statistics indicated that IDPs were more likely to report low levels of resilience and forgiveness in all domains. These results were in the expected direction in which IDPs may be less resilient and forgiving.

As to the correlations among the variables of this research, the results showed that all domains of resilience were significantly correlated with emotional forgiveness with small to medium effect sizes. While ecological and



engineering resilience were correlated with cognitive forgiveness with small effect size, ecological resilience was only correlated with behavioral forgiveness. These results suggest that although IDPs are less resilient and forgiving compared to the general population, those who have high levels of resilience are more likely to forgive. These findings are in line with previous research in which positive correlation was found between resilience and forgiveness (Faison, 2007; Kumar & Dixit, 2014).

Although we recognize that regression analysis does not allow a conclusion concerning causation, the present results provided some indications on how resilience could be associated to forgiveness. Resilience was associated with forgiveness, which has the potential to influence internally displaced persons' mental health. Though effect sizes of the correlation between resilience and forgiveness ranged from small to medium, they were large enough in magnitude to predict significant direct effect between resilience and forgiveness. Ecological resilience directly affected emotional, behavioral, and cognitive forgiveness of IDPs. The analysis did not provide direct evidence for other domains of resilience in predicting domains of forgiveness. These results show similarities with previous research on resilience and forgiveness (Çerkez & Öztörel, 2019; Thompson & Korsgaard, 2019). These findings suggest that having robust and persistent capacity to recover quickly from disturbance may help IDPs to forgive offenders emotionally, behaviorally and cognitively. When it comes to levels of ecological resilience, which refers to confidence in one's strengths, skills, durability and determination toward dealing with adversities (Skomorovsky & Stevens, 2013), the levels of forgiveness increase within IDPs population. Resilience can be considered as a factor in helping IDPs to function positively, resist pressure stemming from displacement conditions, moving forward, and grow positively.

The current study provides initial evidence concerning the association between resilience and forgiveness among IDPs. This study contributes to a better understanding of IDPs' mental health which highlights the importance of resilience in predicting forgiveness and further extends the model of resilience and forgiveness by showing that internally displaced persons' levels of resilience is associated with emotional, behavioral and cognitive levels of forgiveness. Studies suggest that Arab internally displaced persons report higher levels of mental health problems, such as serious psychological distress (Dallo, Kindratt, & Snell, 2013), as well as anxiety, depression, and post-traumatic stress disorder (Jamil et al., 2007). Considering the importance of psychological resources in reducing disturbance experienced in post displacement settings, the results of this study highlight the potential association between resilience and forgiveness that can be applied in practice to minimize the negative impacts of psychological disturbance emerging as a result of displacement. Addressing internally displaced persons' resilience and forgiveness has potential to improve the psychological health of IDPs. For example, intervention programs can be designed to help IDPs to identify and meet the psychological resources of engineering, ecological, and adaptive resilience in order for them to forgive not only emotionally but also behaviorally and cognitively.

It is important to note that the assessments of resilience and forgiveness as indices of well-being in diverse cultural and socioeconomical backgrounds are challenging. Though resilience and forgiveness scales used in this study are reliable and valid in Western countries (e.g., Maltby et al., 2015; McLernon et al., 2004), their applicability may be limited in the current sample (noting that good internal consistency reliabilities were obtained in this study) in terms of not accurately reflecting resilience and forgiveness cross-culturally. It would be useful to test the applicability of these measures by showing their reliabilities (e.g., test-retest) and validities (e.g., construct validity) within non-western cultures, particularly in the Arabic culture. Furthermore, although we have selected multidimensional models of resilience and forgiveness in an attempt to gain more information



as to the measured variables, using different models of resilience – e.g., Connor and Davidson's (2003) Model of Resilience – and forgiveness – e.g., Thompson et al. (2005) Heartland Forgiveness Model – may be useful to fully assess the variable of interests. Moreover, this study did not measure other potential variables such as anxiety, stress, and depression that could have significantly affected the emerging findings. Including such variables in future studies would be of importance to usefully assess IDPs' well-being. The final limitation was related to the study sample. As the sample only included participants who are internally displaced within Iraq, the findings may not be generalized to the rest of the population.

Overall, the present study indicated that internally displaced people were less resilient and forgiving compared to their counterparts. It also demonstrated that components of resilience and forgiveness were positively related to each other. Ecological resilience was uniquely important to influence emotional, behavioral, and cognitive forgiveness of internally displaced people after controlling for demographic characteristics. Interventions should be designed not only to enhance internally displaced people's resilience but also increase their forgiveness skills.

Funding

The authors have no funding to report.

Competing Interests

The authors have declared that no competing interests exist.

Acknowledgments

The authors have no support to report.

References

- Aziz, I. A. (2017). *Individual difference predictors of well-being among displaced persons who live under stressful conditions* (Doctoral dissertation, Department of Neuroscience, Psychology and Behaviour, University of Leicester, Leicester, United Kingdom). Retrieved from https://lra.le.ac.uk/handle/2381/40398
- Baron, N., Jensen, S. B., & de Jong, J. T. V. M. (2004). Refugees and internally displaced people. In B. Green, M. Friedman, J. de Jong, S. Solomon, T. Keane, J. Fairbank, B. Donelan, & E. Frey-Wouters (Eds.), *Trauma interventions in war and peace: Prevention, practice, and policy* (pp. 243–270). New York, NY, USA: Kluwer Academic/Plenum.
- Bono, G., McCullough, M. E., & Root, L. M. (2008). Forgiveness, feeling connected to others, and well-being: Two longitudinal studies. *Personality & Social Psychology Bulletin, 34*(2), 182-195. https://doi.org/10.1177/0146167207310025
- Catabay, C. J., Stockman, J. K., Campbell, J. C., & Tsuyuki, K. (2019). Perceived stress and mental health: The mediating roles of social support and resilience among black women exposed to sexual violence. *Journal of Affective Disorders*, 259, 143-149. https://doi.org/10.1016/j.jad.2019.08.037
- Cehajic, S., Brown, R., & Castano, E. (2008). Forgive and forget? Antecedents and consequences of intergroup forgiveness in Bosnia and Herzegovina. *Political Psychology*, 29(3), 351-367. https://doi.org/10.1111/j.1467-9221.2008.00634.x



- Church, A. T., Katigbak, M. S., Locke, K. D., Zhang, H., Shen, J., de Jesús Vargas-Flores, J., . . . Cabrera, H. F. (2013). Need satisfaction and well-being testing self-determination theory in eight cultures. *Journal of Cross-Cultural Psychology*, 44(4), 507-534. https://doi.org/10.1177/0022022112466590
- Cohen, J. (1992). A power primer. Psychological Bulletin, 112(1), 155-159. https://doi.org/10.1037/0033-2909.112.1.155
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and Anxiety*, *18*(2), 76-82. https://doi.org/10.1002/da.10113
- Cox, S. S., Bennett, R. J., Tripp, T. M., & Aquino, K. (2012). An empirical test of forgiveness motives' effects on employees' health and well-being. *Journal of Occupational Health Psychology*, *17*(3), 330-340. https://doi.org/10.1037/a0028314
- Çerkez, Y., & Öztörel, I. (2019). Resilience, life satisfaction and forgiveness of prospective psychological counselors. *Revista San Gregorio*, 1(32), 84-91. https://doi.org/10.36097/rsan.v1i32.1006
- Dallo, F. J., Kindratt, T. B., & Snell, T. (2013). Serious psychological distress among non-Hispanic whites in the United States: The importance of nativity status and region of birth. *Social Psychiatry and Psychiatric Epidemiology, 48*(12), 1923-1930. https://doi.org/10.1007/s00127-013-0703-1
- Davydov, D. M., Stewart, R., Ritchie, K., & Chaudieu, I. (2010). Resilience and mental health. *Clinical Psychology Review*, 30(5), 479-495. https://doi.org/10.1016/j.cpr.2010.03.003
- Enright, R. D. (1991). The moral development of forgiveness. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development*, (pp. 123–152). Mahwah, NJ, USA: Lawrence Erlbaum Associates.
- Faison, M. V. (2007). The relationship of forgiveness to psychological resilience and health among African American Women (Unpublished doctoral dissertation). Capella University, Minneapolis, MN, USA.
- Fife, S. T., Weeks, G. R., & Stellberg-Filbert, J. (2013). Facilitating forgiveness in the treatment of infidelity: An interpersonal model. *Journal of Family Therapy*, *35*(4), 343-367.
- Harvey, J., & Delfabbro, P. H. (2004). Psychological resilience in disadvantaged youth: A critical review. *Australian Psychologist*, *39*, 3-13. https://doi.org/10.1080/00050060410001660281
- Jamil, H., Farrag, M., Hakim-Larson, J., Kafaji, T., Abdulkhaleq, H., & Hammad, A. (2007). Mental health symptoms in Iraqi refugees: Posttraumatic stress disorder, anxiety, and depression. *Journal of Cultural Diversity, 14*(1), 19-25.
- Johnson, J., Wood, A. M., Gooding, P., Taylor, P. J., & Tarrier, N. (2011). Resilience to suicidality: The buffering hypothesis. *Clinical Psychology Review, 31*(4), 563-591. https://doi.org/10.1016/j.cpr.2010.12.007
- Johnson, H. D., Wernli, M. A., & LaVoie, J. C. (2013). Situational, interpersonal, and intrapersonal characteristic associations with adolescent conflict forgiveness. *The Journal of Genetic Psychology, 174*(3), 291-315. https://doi.org/10.1080/00221325.2012.670672
- Kline, P. (2013). Handbook of psychological testing. London, United Kingdom: Routledge.
- Kumar, A., & Dixit, V. (2014). Forgiveness, gratitude and resilience among Indian youth. *Indian Journal of Health & Wellbeing*, *5*(12), 1414-1419.



Maltby, J., Day, L., Flowe, H. D., Vostanis, P., & Chivers, S. (2019). Psychological trait resilience within ecological systems theory: The resilient systems scales. *Journal of Personality Assessment, 101*(1), 44-53. https://doi.org/10.1080/00223891.2017.1344985

- Maltby, J., Day, L., & Hall, S. (2015). Refining trait resilience: Identifying engineering, ecological, and adaptive facets from extant measures of resilience. *PLOS ONE*, *10*(7), Article e0131826. https://doi.org/10.1371/journal.pone.0131826
- Maltby, J., Wood, A. M., Day, L., Kon, T. W., Colley, A., & Linley, P. A. (2008). Personality predictors of levels of forgiveness two and a half years after the transgression. *Journal of Research in Personality, 42*(4), 1088-1094. https://doi.org/10.1016/j.jrp.2007.12.008
- McLernon, F., Cairns, E., Hewstone, M., & Smith, R. (2004). The development of intergroup forgiveness in northern Ireland. *The Journal of Social Issues*, *60*(3), 587-601. https://doi.org/10.1111/j.0022-4537.2004.00373.x
- Porter, M., & Haslam, N. (2005). Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: A meta-analysis. *Journal of the American Medical Association*, 294(5), 602-612. https://doi.org/10.1001/jama.294.5.602
- Skomorovsky, A., & Stevens, S. (2013). Testing a resilience model among Canadian forces recruits. *Military Medicine*, 178(8), 829-837. https://doi.org/10.7205/MILMED-D-12-00389
- Smith, B. W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioral Medicine*, *15*(3), 194-200. https://doi.org/10.1080/10705500802222972
- Souri, H., & Hasanirad, T. (2011). Relationship between resilience, optimism and psychological well-being in students of medicine. *Procedia: Social and Behavioral Sciences*, *30*, 1541-1544. https://doi.org/10.1016/j.sbspro.2011.10.299
- Thompson, L. Y., Snyder, C. R., Hoffman, L., Michael, S. T., Rasmussen, H. N., Billings, L. S., . . . Roberts, J. C. (2005). Dispositional forgiveness of self, others, and situations. *Journal of Personality*, *73*(2), 313-360. https://doi.org/10.1111/j.1467-6494.2005.00311.x
- Thompson, B. S., & Korsgaard, M. A. (2019). Relational identification and forgiveness: Facilitating relationship resilience. *Journal of Business and Psychology, 34*, 153-167. https://doi.org/10.1007/s10869-018-9533-1
- Toussaint, L., & Friedman, P. (2009). Forgiveness, gratitude, and well-being: The mediating role of affect and beliefs. *Journal of Happiness Studies*, *10*(6), 635-654. https://doi.org/10.1007/s10902-008-9111-8
- Tugade, M. M., & Fredrickson, B. L. (2004). Resilient individuals use positive emotions to bounce back from negative emotional experiences. *Journal of Personality and Social Psychology, 86*(2), 320-333. https://doi.org/10.1037/0022-3514.86.2.320
- Tusaie, K., & Dyer, J. (2004). Resilience: A historical review of the construct. *Holistic Nursing Practice, 18*(1), 3-10. https://doi.org/10.1097/00004650-200401000-00002
- Wingo, A. P., Briscione, M., Norrholm, S. D., Jovanovic, T., McCullough, S. A., Skelton, K., & Bradley, B. (2017). Psychological resilience is associated with more intact social functioning in veterans with post-traumatic stress disorder and depression. *Psychiatry Research*, *249*, 206-211. https://doi.org/10.1016/j.psychres.2017.01.022



- Worthington, E. L., Griffin, B. J., Toussant, L. L., Nonterah, C. W., Utsey, S. O., & Garthe, R. C. (2016). Forgiveness as a catalyst for psychological, physical, and spiritual resilience in disasters and crises. *Journal of Psychology and Theology*, 44(2), 152-165. https://doi.org/10.1177/009164711604400206
- Worthington, E. L., & 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*(3), 385-405. https://doi.org/10.1080/0887044042000196674
- Yildirim, M. (2019). Mediating role of resilience in the relationships between fear of happiness and affect balance, satisfaction with life, and flourishing. *Europe's Journal of Psychology, 15*(2), 183-198. https://doi.org/10.5964/ejop.v15i2.1640
- Yildirim, M., & Alanazi, Z. S. (2018). Gratitude and life satisfaction: Mediating role of perceived stress. *International Journal of Psychological Studies*, *10*(3), 21-28. https://doi.org/10.5539/ijps.v10n3p21
- Yildirim, M., & Belen, H. (2019). The role of resilience in the relationships between externality of happiness and subjective well-being and flourishing: A structural equation model approach. *Journal of Positive Psychology and Wellbeing, 3*(1), 62-76.

