

Jeter, B. R., Brewer, K. G., & Webb, J. R. (2012, August). Stress as a mediator of the relationship between forgiveness and health. Abstract submitted for presentation at the 120th Annual Convention of the APA, Division 36 – Society for the Psychology of Religion and Spirituality: Orlando, Florida.

Statement of the Problem

Empirical support for the association between forgiveness and both physical health and mental health is growing (Webb, Toussaint, & Conway-Williams, in press). Experts have suggested that there is a salutary relationship between forgiveness and health and that, likewise, stress may be a key factor from cognitive, emotional, and physiological perspectives (Worthington, Witvliet, Pietrini, & Miller, 2007). Although the psychological study of forgiveness is burgeoning, little work has been done to assess the nuances of stress in the context of the forgiveness-health relationship. The purpose of this study was to aid this area of investigation. Our general hypothesis was that stress would play a mediating role in this relationship, such that higher levels of forgiveness would be associated with lower levels of stress, which, in turn, would be associated with better health-related variables.

Method

College students from two regional institutions in eastern Tennessee were recruited for this study and received extra credit for their participation. Volunteers completed a series of self-report questionnaires, including measures of demographic information, religious background and behaviors, stress, and multiple dimensions of: forgiveness (of self, of others, and by God) and health (general physical health status and general mental health status).

In our cross-sectional analyses of the relationship between forgiveness and health, as mediated by stress ($n = 481$; $\bar{F} = 725.26\%$; $M_{\text{age}} = 22.17$), we employed Preacher and Hayes' (2008) method of mediation analysis. When conducting our analyses, we controlled for gender, age, education, ethnicity, marital status, and lifetime religiousness.

Results

We examined mediation models for two health related dependent variables (DV). For general physical health status, the full model was significant ($R^2 = .12$, $p < .0001$) and reflected a salutary association. Only forgiveness of self was associated with the DV and this relationship was partially mediated by stress. For general mental health status, the full model was also significant ($R^2 = .39$, $p < .0001$) and reflected a salutary association. Likewise, the association was partially mediated and in the context of forgiveness of self only.

Conclusions

Our general hypothesis regarding the association of forgiveness with health as mediated by stress received partial support. Concerning both DVs, following mediation analysis, only forgiveness of self was associated therewith. Forgiveness of others and feeling forgiven by God were not associated with health. Associations with both health-related variables were partially mediated by stress. That is, the association of forgiveness of self with physical and mental health was both direct and indirect, through stress.

Consistent with prior theory and research (Toussaint & Webb, 2005; Worthington, et al., 2007), our findings suggest that stress may play a role in the relationship between forgiveness and, both, physical and mental health. However, much of the prior work has been in the context of forgiveness of others, only. In consideration of our findings, it appears that when multiple dimensions of forgiveness are measured, forgiveness of others may not be associated with health.

The association between higher levels of forgiveness (of self) and lower levels of stress may contribute to fewer physical and mental health symptoms by facilitating a positive outlook, lowering anxiety and depression, supporting the ability to cope, and future orientation (Zaleski, Levey-Thors, & Schiaffino, 1998). Furthermore, this forgiveness-stress relationship may lessen the likelihood of health compromising behaviors, such as alcohol and drug use (Webb, Hirsch, & Toussaint, 2011; Zaleski, et al., 1998). Consistent with prior research regarding multiple dimensions of forgiveness in association with multiple dimensions of health (e.g., Webb, et al., 2011; Webb, Toussaint, Kalpakjian, & Tate, 2010), it appears that there may be relative importance among the dimensions of forgiveness herein measured and that forgiveness of self may be most important. In conclusion, the salutary association between forgiveness and health is becoming well-established. Likewise, such is becoming increasingly nuanced, depending on context and dimensions of all variables under consideration.

Words: 634

References

- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891. doi: 10.3758/brm.40.3.879
- Toussaint, L., & Webb, J. R. (2005). Theoretical and empirical connections between forgiveness, mental health, and well-being. In E. L. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 349-362). NY: Routledge.
- Webb, J. R., Hirsch, J. K., & Toussaint, L. (2011). Forgiveness and alcohol problems: A review of the literature and a call for intervention-based research. *Alcoholism Treatment Quarterly*, 29(3), 245-273. doi: 10.1080/07347324.2011.585922
- Webb, J. R., Toussaint, L., & Conway-Williams, E. (in press). Forgiveness and health: Psycho-spiritual integration and the promotion of better healthcare. *Journal of Health Care Chaplaincy*.

- Webb, J. R., Toussaint, L., Kalpakjian, C. Z., & Tate, D. G. (2010). Forgiveness and health-related outcomes among people with spinal cord injury. *Disability and Rehabilitation*, 32(5), 360-366. doi: 10.3109/09638280903166360
- Worthington, E. L., Jr., Witvliet, C. V. O., Pietrini, P., & Miller, A. J. (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(4), 291-302. doi: 10.1007/s10865-007-9105-8
- Zaleski, E. H., Levey-Thors, C., & Schiaffino, K. M. (1998). Coping mechanisms, stress, social support, and health problems in college students. *Applied Developmental Science*, 2(3), 127-137. doi: 10.1207/s1532480xads0203_2