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FORGIVENESS, UNFORGIVENESS AND HEALTH

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Abstract

Forgiveness consists of giving up one's right to retribution and releasing or letting go of negative affect directed toward the offender (Hebl & Enright, 1993) and the increase of positive emotions and perspectives, such as empathy, hope, or compassion (Worthington & Wade, 1999). Unforgiveness is a combination of delayed negative emotions (i.e., resentment, bitterness, hostility, hatred, anger, and fear) and a hyperaroused stress response through rumination toward a transgressor (Worthington, Sandage, & Berry, 2000).

Evidence has been produced linking both forgiveness and unforgiveness to short-term physiological variables, such as cortisol reactivity (Berry & Worthington, 2001), blood pressure, and skin conductance (Lawler et al., 2005; Witvliet, Ludwig, & Vander Laan, 2001).

The mechanisms through which unforgiveness might endanger health primarily involve (a) the intense and chronic experience of its component emotions, resulting in autonomic nervous system hyperarousal and the general wear and tear associated with increased allostatic load, (b) problematic coping styles, such as avoidance coping (social isolation) or substance use and (c) possible violent revenge behavior.

Keywords: forgiveness, unforgiveness, health, chronical disease

The concept of forgiveness

From an ethical perspective, forgiveness is both an important value and a paradoxical weakness (Murphy, 2005). Research indicates forgiveness can promote resilience (Worthington, 2005) as well as physical and mental health (Thoresen, Harris, & Luskin, 2000) and, thus, forgiveness can be seen as a beneficial public health intervention. In some cases, self-forgiveness may be an inappropriate process, because self-blame could lead to improved health (Hart, Hanks, Bogner, Millis, & Esselman, 2007). Regaining control through self-blame could motivate a patient to engage in healthy behaviors and sense of control over the disease is associated with better adjustment (Gulyn & Youssef, 2010). In the same time, one kind of over-forgiveness (a form a fals forgiveness) could mentain the person in the process of victimisation.

An offense is a relational and moral injustice that violates people's physical, psychological, relational, or spiritual boundaries. These transgressions can create a sense of unforgiveness, characterized by negative emotions toward the offender (anger, resentment), relevant to the perceived severity of the violation and the degree of injustice suffered (Worthington, 2005).

Forgiveness is the process whereby an individual honestly considers the wrongdoer and the wrongdoing, and then replaces destructive, negative responses toward an offender, with positive, other-oriented cognitive, behavioral, and emotional responses (Strelan & Covic, 2006). Although many stressors are not related to transgressions, transgressions and associated rumination prompt stress responses that are relevant to many medical conditions. This coping process is termed emotional forgiveness, and results in the elimination of the attributed power and control. Emotional forgiveness is documented to be more powerful

physiologically compared to decisional forgiveness (Worthington et al., 2007) and has been described as an emotional and spiritual transformation (Lawler et al., 2005).

Forgiveness and health

Worthington and Scherer (2004) suggest that forgiveness may directly improve health by reducing hostility and cardiovascular strain, buffering the immune system (on cellular level, on a neuro-endocrine level, and through the release of antibodies), and improving central nervous system functioning (via the amygdala, hypothalamus, and the vagal nerve). Furthermore, while forgiveness does not always occur along with reconciliation, forgiveness may indirectly promote health by improving social support, reducing stress in marriages, and promoting relational skills and bonds.

In case of chronic disease, the illness itself becomes the transgression. Any medical condition could be considered a breach or violation of the boundaries of one's skin, one's personhood, and one's life. Identification of the offender, on the other hand, is vague. Research on attribution theory in patient populations has shown that different attribution targets for cause of disease (self-blame, other-blame, God-blame) can affect health variables because the process of forgiveness is different (Voth & Sirois, 2009).

Work with hospitalized patients with coronary-artery disease (CAD) suggested that individuals with higher levels of forgiveness had lower levels of anxiety, depression, and stress (Friedberg, Suchday, & Srinivas, 2009), especially when they shifted towards believing that they would pass away sooner or had more uncertainty about their life-expectency.

There was no significant difference in forgivingness in patients with traumatic brain injury (TBI), cerebrovascular accident (CVA), and spinal cord injury (SCI) (Johnstone & Yoon, 2009). Forgiveness was associated with general health perceptions, but not general mintal health, physical functioning, or bodily pain. In outpatients receiving physical therapy, forgivingness of self was associated with more healthy behavior, which was itself correlated with better overall health, physical health and current pain levels (thus forgiveness of self was only indirectly associated with these variables) (Svalina & Webb, 2012). Self-forgiveness had a positive association with mental health status and a negative one with chronic pain, while feeling forgiven by God was associated with better health-related social functioning.

On the other hand, forgivingness was not associated with bodily pain in a heterogeneous sample of rehabilitation patients (Johnstone & Yoon, 2009) even if forgiveness is currently receiving growing interest as a valuable coping mechanism in chronic pain, while self-forgiveness was directly associated with chronic pain and indirectly associated with current pain levels through health behaviors in patients receiving outpatient physical therapy (Svalina & Webb, 2012). This suggests that chronic pain patients who have difficulty forgiving may have more anger, mental health problems and disability due to pain than those who are higher in forgiveness. Thus, a forgiveness intervention may improve quality of life and functioning in patients with pain, such as fibromyalgia syndrom (FMS).

FMS is associated with debilitating widespread chronic pain, fatigue, sleep problems and other symptoms (distress is transformed into pain through sympathetic system rigidity). Depression and anxiety are two common comorbidities in patients with FMS, with additive adverse effects on pain severity, pain interference, functional limitations and quality of life (Uguz et al., 2010). Stressors activate the hypothalamic-pituitary-adrenal (HPA) axis and/or the sympathetic nervous system (SNS) to help the organism adapt physiologically with the threat (Black, 2003). The HPA axis and the SNS regulate via their central effectors (hypothalamic-hormones and norepinephrine) and peripheral effectors (glucocorticoids, norepinephrine and epinephrine) the physiological stress response thereby influencing wake-sleep cycles, growth, thyroid axis response, and reproductive, gastrointestinal, cardiorespiratory, metabolic, and immune systems (Chrousos, 2009).

Van Laarhoven and colleagues (2012) found that self-forgivingness may be particularly salient when individuals face a potentially life-threatening illness such as cancer, while other-forgivingness may be less relevant for such patients. Self-forgivingness was negatively associated with mood disturbance and positively associated with quality of life in patients at a breast cancer clinic (Romero et al., 2006). Similarly, women with stage 0-III breast cancer with higher levels of self-forgivingness had less mood disturbance and higher levels of quality of life than those with less self-forgivingness; forgivingness of self was also negatively associated with self-blame for cancer.

Patients with Parkinson's disease (PD) reported lower forgivingness levels than healthy age-matched controls (Butler, McNamara, Ghofrani, & Durso, 2011). Self-forgivingness was positively correlated with quality of life in HIV patients (Martin, Vosvick, & Riggs, 2012). Interestingly, there was an interaction between forgiveness and attachment style such that, among individuals with greater attachment anxiety, forgiveness of others was associated with higher pain levels, while forgiveness of self was associated with greater perception of health.

Several studies have examined the links between forgiveness and physical health, and most authors agree that there are multiple mediators that jointly explain the forgiveness-health relationship. Lavelock et al. (2015) emphasized that personality (low neuroticism and narcissism, high perceived agreeableness of a transgressor), religiousness (prayer, perceived social support of church comunity, positive religious coping, a positive image of God), and advanced age are the most important forgiving facilitators. The consequences of forgiveness are a clear decreasing of guilt, anger, stress, rumination, avoidance, risky health behaviors and unhealthy coping mechanisms (addictions) and an increasing positive factors (empathy, compasion, social support, high quality relationships, social skills, and conflict management, spiritual well-being). This combination of mechanisms eventuates into decreased physiological risk factors and better mental health and general well-being (decreasing hypertension, fatigue, cortisol secretion, cardiovascular symptoms, and overall physical symptomology, better immune functioning and successful aging).

Unforgiveness and health

Unforgiveness has been defined by Worthington (2005) as a mixture of delayed negative emotions (resentment, anger) relevant to the perceived severity of the violation and the degree of injustice suffered, and negative thoughts, motivations, and behaviors toward a transgressor. Viewed through a stress-and-coping framework, unforgiveness activate more stress responses (Worthington & Scherer, 2004). Unforgiving people perceive themselves to have been victimized and continue to attribute power and control over their well being to an offender for the action. Unforgiveness can become a chronic state of being, continuing over time and engaging the body's stress response (Lavelock, Griffin & Worthington, 2013).

The endocrine system is engaged and activates the HPA (hypothalamic-pituitary-adrenal) while the autonomic nervous system engages the SAM (Sympathetic-Adrenal Medullary) system. Among the first and most powerful of these chemicals are the corticosteroids and catecholamines that impact heart and respiration rates, blood glucose levels, constriction of blood vessels, gastro-intestinal track functioning, heightened brain responses (perception, physical withdrawal, depression, memory, etc.), physical shaking, and (within the immune system) T- helper and T- suppression cells. If the heightened stress response becomes chronic because the perceived stress is ongoing, the body adjusts to this allostatic load, which also impacts the brain's neuroplasticity and structural integrity (Ganzel, Morris & Wethinton, 2010).

Findings about the body's hormone response to unforgiveness reveal that unforgiveness is reflected in specific cortisol levels, adrenaline production and cytokine

balance (Worthington, Witvliet, Lerner, & Scherer, 2005), with patterns that parallel those reported in people living with high stress. These hormone patterns are known to compromise the immune system (Berry & Worthington, 2001) with the long-term consequence of leading to several identified chronic illnesses (Danese, Pariante, Caspi, Taylor, & Poulton, 2007). The body's response to stress has also been investigated in people who have accomplished forgiveness, compared to those of others who have continuing unforgiveness. Forgiveness reportedly results in beneficial physiologic changes, including lower heart rate, increased rate of cardiovascular recovery, lower cholesterol ratios, reduced resting blood pressure, less EMG tension, and reduced skin conductance (Friedberg et al., 2009).

Unforgivingness was associated with higher prevalence of cardiovascular conditions, particularly hypertension, tachycardia, and angina, in a survey of healthy people even after controlling for socio demographic factors, depression, and anger. It was less consistently associated with myocardial infarction and arteriosclerosis (Toussaint & Cheadle, 2009). Diabetic symptoms were positively associated with unforgivingness of hypothetical and actual transgressions. DeWall, Pond, and Bushman (2010) speculated this is because diabetic symptoms are a dimension of self-control as prior research has linked poor blood glucose control to aggression and lack of cooperative behavior. Anger is one of the most salient properties of pain (Fernandez & Turk, 1995), and can exacerbate pain (Greenwood, Thurston, Rumble, Waters, & Keefe, 2003). A positive correlation between anger and pain intensity has been shown in patients with chronic back pain, spinal cord injury (Conant, 1998), and cancer (Glover, Dibble, Dodd, & Miaskowski, 1995). Anger-in (suppressing feelings of anger) and anger-out (displaying anger in an overtly aggressive manner) have both shown detrimental effects on cardiovascular health (Gallacher, Yarnell, Sweetnam, Elwood, & Stansfeld, 1999), hypertension (Gentry, Chesney, Gary, Hall, & Harburg, 1982) and somatic complaints (Martin et al., 1999).

Some studies emphasized that people with a history of maltreatment have been documented to live with an up-regulation of their immune system's inflammatory response, compared to those with no history of maltreatment (Danese et al., 2007). The stress management systems (e.g., stress hormones, heart rate, blood pressure, flight/fear readiness) that are controlled by the brains in those with history of chronic stress are dysregulated, compared to non-exposed adults (McEwen, 2000). Brain imaging has investigated how experiences change the brain at developmentally sensitive times, and which parts of the brain are impacted by particular circumstances. These neuroimaging studies have revealed changes in both brain anatomy and brain activity: cognitive activity in the ventromedial prefrontal cortex diminishes and limbic-system activity increases (Shonkoff, Boyce, & McEwen, 2009).

Forgiveness Interventions to Promote Physical Health for chronic patients

Despite an expanding base of literature on the efficacy of forgiveness interventions in a variety of populations, few intervention studies utilized a patient population. For instance, hypertension patients randomized to an eight-week forgiveness intervention did not display a significant reduction in blood pressure after receiving the intervention, but they did show a decrease in anger expression, which was associated with lower mean arterial pressure post-intervention (Tibbits, Ellis, Piramelli, Luskin, & Lukman, 2006). Thus, a forgiveness intervention may reduce blood pressure not directly but indirectly through psychosocial variables such as anger. Waltman's study demonstrated that participants experienced positive cardiac health outcomes following a forgiveness intervention training: they experienced significantly fewer cardiac perfusion defects, compared to their pre-test levels and compared to the control group (Waltman et al, 2009). CAD patients receiving forgiveness therapy based on Enright's model had significant increases in forgiveness between pre-test and post-test and between pre-test and follow-up compared to the control group receiving sessions to cope with

CAD (delayed impact on physiological parameters) (Waltman et al., 2009). There were no changes on anger-recall induced myocardial perfusion defects from pre-test to post-test in the intervention group, but there were differences from pre-test to 10-week follow-up. A four-week forgiveness therapy program for terminally ill cancer patients significantly improved forgiveness, hope, and quality of life and reduced anger compared to wait-list control (Hansen, Enright, Baskin, & Klatt, 2009). While the above studies specifically tested the effectiveness of forgiveness therapy, two additional studies examined the effectiveness of therapies that had several components including forgiveness. Breast cancer patients receiving a group body-mind-spirit treatment including forgiveness displayed greater reductions in anxiety than the control group receiving standard of care, but patients in both groups had similar decreases in depression and increases in body-mind-spirit well-being (Liu et al., 2008).

Effective forgiveness education and counseling can be spiritually based (Lavelock et al., 2013) or educationally designed (Toussaint, Owen, & Cheadle, 2012); in addition forgiveness training can be accomplished at the bedside by nursing personnel, others in community educational programs, and still others through one-on-one sessions with counselors who may be spiritually based (Lavelock et al., 2013). In any case, if the coping mechanism of forgiveness is to become recognized as an effective intervention for physical conditions, from what we know to date, each of these methods can be engaged successfully (Wade, Hoyt, Kidwell, & Worthington, 2014). With a general process approach to therapy supplemented by REACH model, the therapist is prepared to help deal with unforgiveness within therapy or as part of a group that can be an adjunct to therapy (Worthington, 2005).

Research that investigated the development of a forgiveness education intervention was tested with people living with fibromyalgia. The exploratory trial with this intervention noted that the forgiveness intervention was followed by an improvementin the report of pain among those living with this condition (Toussaint et al., 2013). Research has also documented that perceived health status is improved with forgiveness interventions in aging adults (Ingersoll-Dayton, Campbell, & Ha, 2009), and forgiveness interventions also strengthen participants' willingness to continue in physical rehabilitation exercises (Lavelock et al., 2013).

A meta-analysis by Wade, Worthington, and Meyer (2005) identified three elements that were common among all effective forgiveness interventions: (1) use of multiple methods to reduce unforgiveness, (2) committing to forgiveness, and (3) empathizing or experiencing positive other-oriented emotions as an antidote to unforgiveness. In order for forgiveness to be accomplished in clinical settings, two steps must be realized: the pacient must eliminate the unforgiveness they are experiencing (uncomfortable feelings, ruminations and behaviors associated with a particular offense) and then experience an increase in positive reactions and emotions (Wade, Worthington, & Meyer, 2005).

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