

Preventing Vicarious Trauma: A Private Psychological Tool for Health Care Workers

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ABSTRACT: *Among the multiple problems associated with vicarious trauma in health care workers are hopelessness, absenteeism, poor sleep, anxiety, cynicism, Post-Traumatic Stress Disorder (PTSD) and other mental health issues. The problem is partly driven by rapid change, increased work complexity, staffing issues and consumer demand. Stigma, stoicism and other workplace barriers inhibit disclosure of the problem and the implementation of evidence-based techniques which have been shown to be effective. This article presents a psychological tool to help individuals protect themselves against the deleterious effects of vicarious trauma. Grounded in evidenced-based rationale, the tool brings together the preferential use of compassion over empathy, exposure therapy techniques, the use of mature defence mechanisms and employing a Bilateral Stimulation Technique. It is time-efficient and relatively easy to learn by an individual for themselves. It has the potential to alleviate the work distress and accumulated toxic emotions which lead to vicarious trauma, and overcome the barriers to implementing group and management-initiated interventions in this urgent area of need.*

KEYWORDS: *Compassion fatigue, Workplace, Emergency responders, Mental health, Vicarious trauma.*

BACKGROUND

Working with trauma and traumatized people is by nature emotionally charged as human emotions are highly contagious (Hatfield, et al. 2009). Treating traumatic injury invokes emotions such as shock, grief, anger and despair, as does listening to horrific details of childhood sexual abuses, or dealing with the charred remains and dismembered limbs of accident victims. Accumulated strong emotions and resultant vicarious trauma take their toll on health care workers; burnout rates are high, estimated at 38% (Bell, et al. 2003), and there is limited research on workable interventions in this area (McCray, et al. 2008).

Vicarious trauma here includes “secondary traumatic stress” (Bride, 2007), “vicarious traumatization” (Pearlman, et al. 1995), “compassion fatigue” (Newell, et al. 2010), “professional burnout” (Kahill, 1988) and “traumatoid states” (Thomas, et al. 2004). Problems resulting from vicarious trauma are well-described (Baird, et al. 2006; Beck, 2011; Sinclair, et al. 2007) and include poor sleep, mental illness, cynicism, absenteeism, loss of motivation and hopelessness (Ashooh, et al. 2019), increased alcohol use (Duffy, et al. 2015), and a desire to leave the workforce (Trautmann, et al. 2015). It can adversely impact family members of those effected (Motta, 2008) and emergency care practitioners are particularly vulnerable (Warren, et al. 2003).

Aside from the work itself and the strong emotions involved, contributors to vicarious trauma are multi-faceted. They include the pressure to adapt to rapidly changing practices, diverse cultural and patient needs (Valdez, 2009); increased work complexity (Reap, 2019); a shortage of professional staff (Keough, et al. 2016); increasing demand for services, rapidly evolving technology (Robinson, et al. 2005); longer shifts (McMahon, et al. 2017); and increased workplace violence (Gates et al., 2011). Vicarious trauma adds to the “tragic transformation of hope to cynicism” (Canfield, 2005).

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) (American Psychiatric Association, 2013) specifically acknowledges the plight of health care workers dealing with trauma in criterion A for post-traumatic stress disorder (PTSD). The DSM-5 criteria for PTSD almost outlines what has become an accepted norm for workers in this area: being upset at memories of trauma (Criterion B); avoiding reminders of trauma (Criterion C); becoming negative and cynical (Criterion D); being irritable and experiencing poor sleep (Criterion E); and having chronic symptoms (Criterion F). Criterion G, loss of function, is likely to be grossly under-reported in health care workers (Dyrbye et al., 2015) due to work environments permeated by stigma, stoicism and risk-intolerance, all hindering the disclosure and management of vicarious trauma (Wallace, 2012).

Helpful interventions alleviate the effects of vicarious trauma: engaging in debriefings (Everly, et al. 2000); seeking out formal

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psychotherapy or supervision, and reducing caseload (Bober, et al. 2006); structuring self-care (Rothschild, 2006); and connecting with peers (Pearlman, et al. 1995). All of these, however, are grossly underutilized (Bober, et al. 2006). Barriers hindering implementation of evidence-based practices include time constraints, help-seeking being seen as character weakness, occupational health and safety accountability leading to health care workers not declaring their needs for fear of losing their position or needing rehabilitation, a culture of stoicism and stigma encouraging harmful repression of strong emotions, as well as busyness and over-commitment (Valdez, 2009).

In the face of this, private, individualized preventative measures would be helpful, but there is a paucity of such. This article presents an evidence-based, time-efficient, preventative psychological tool to help individuals protect themselves against the ravages of vicarious trauma. Devised by a psychiatrist sub-specializing in severe personal trauma, the tool was first presented at the Emergency Medical Services Authority (EMSA) Tenth Annual Trauma Summit of California, San Francisco, in April 2019.

RATIONALE

The psychological tool is grounded in four evidence-based psychotherapeutic principles:

- Using compassion is qualitatively different to using empathy and helps prevent vicarious trauma.
- Controlled re-exposure to memories of trauma decreases anxiety.
- Using mature defence mechanisms relieves distress where immature or neurotic defence mechanisms do not.
- Synchronizing the left and right brain hemispheres helps process trauma-based emotions.

Each principle is empirically supported as discussed below.

Brain imaging shows that empathy activates the para-cingulate, anterior and posterior cingulate, and the amygdala (Völlm, et al. 2006). Using empathy, feeling with someone, can lead to self-referential negative emotions, social withdrawal and burnout (Singer, et al. 2014). These are likely related to the amygdala's role in pain generation. Compassion, on the other hand, is feeling for someone. It is mediated in the medial orbitofrontal cortex and ventral striatum (Klimecki, et al. 2014). Activating compassion networks leads to helping behaviors, other-referential emotions, and the experience of love, social approach, and better health for the helper. Compassion is preferentially activated in the psychological tool.

Exposure Therapy for trauma is supported by a substantial body of evidence spanning decades (Foa, et al. 2000). Its core principle is controlled re-exposure to reminders of trauma to decrease anxiety. This is diametrically opposed to avoidance, which is often used by working professionals to deal with stress: drinking alcohol, venting anger, isolating from peers, leaving the workforce, denying distress and assuming an air of invincibility. The psychological tool involves controlled re-exposure to work-related stress to safely process strong emotions.

Defence mechanisms help us deal with anxiety and distress. Mature defence mechanisms are effective and preferred (Vaillant, 1985), but the use of neurotic defence mechanisms is widespread,

particularly repression; pushing distressing emotions away rather than expressing them, (of course I can handle this, it's my job), rationalization (everyone else seems to cope; emotions just get in the way), and denial (I'm fine; what's the fuss?). The psychological tool makes use of mature defence mechanisms: anticipation (I'll be ready and prepared), and suppression (I feel this emotion now but I'll deal with it later). The use of humor, another mature defence mechanism, is encouraged.

The left and right brains are known to have specialized functions (MacNeilage, et al. 2009). Eye Movement Desensitization and Reprocessing (EMDR), a psychotherapeutic modality approved in the USA and Australia to treat PTSD, aims to synchronize the two with Bilateral Stimulation Techniques to help process emotions. Effectiveness for these in actual and vicarious trauma has been shown (Keenan, et al. 2007; Artigas, et al. 2014) and mechanisms of action are beginning to be elucidated (Amano, et al. 2016; Propper et al. 2007). The psychological tool employs a Bilateral Stimulation Technique to help process strong emotions.

THE PSYCHOLOGICAL TOOL: This private psychological tool to help prevent vicarious trauma has been designed for prevention. Those who are on the brink of depression or PTSD should seek professional diagnosis and treatment as should those with a strong history of childhood abuse or neglect. The tool is remembered by the acronym WASH your WEB. Its central purpose is to "wash your web" of strong emotions which can accumulate if left unchecked. It is in two parts: WASH for use before and on shift, and WEB for after a shift. It is optimally used for every shift. An overview of the tool is followed by a detailed explication.

The first part, WASH, is undertaken pre-shift and between cases. It involves a minute or two of thinking time to:

- WALL off empathy.
- ANTICIPATE exposure to trauma.
- SHELVE strong emotions to deal with them later.
- HOLD HOPE after helping compassionately.

At the end of a shift, WEB processes the shelved strong emotions. It involves five to ten minutes to:

- WALK through the day's events.
- EXPRESS the shelved strong emotions.
- Use a BILATERAL Stimulation Technique.

Now the detailed explication.

WASH: At the beginning of each shift, during hand-over, a coffee or toilet break, or during a short walk down the corridor, the health care worker consciously prepares themselves for incoming trauma with W-A of WASH; the S-H of WASH is employed between cases while on shift. WASH-Wall off empathy, Anticipate strong emotions, Shelve strong emotions and Hold Hope-is done as follows.

WALL OFF EMPATHY: It is not important to know the neural networks in order to walk, but it is helpful to know the difference between "walk" and "run" to activate the desired networks for the desired result. Likewise, it is not necessary to know the neural

networks involved to activate compassion or empathy but knowing the difference between “empathy” and “compassion” will help activate the desired networks for the desired result. Empathy, feeling with people, involves “feeling another’s pain” (Loggia, et al. 2008). Compassion, feeling for the suffering of others, leads to being useful (Klimecki, et al. 2014). Compassion (Oh my goodness this poor person needs help, what do I need to do, say, and achieve right now?) rather than empathy (Oh my goodness this poor person needs help, this is shocking, why do these things happen, how would I cope, how does anyone cope?) is needed at work. This involves remembering to use compassion preferentially over empathy while understanding that the two are not mutually exclusive. Visualizing a wall inside the brain to shield empathy networks and protect oneself is a helpful reminder.

ANTICIPATE STRONG EMOTIONS: Anticipating entails consciously visualizing a “space” in the mind, a “shelf” that is metaphorically set aside for incoming strong emotions. Anticipation, a mature defence mechanism (Vaillant, 2000) is encapsulated by the adage forewarned is forearmed. Having done the W-A of WASH, the professional is now prepared for incoming strong emotions. The S-H of WASH is employed as strong emotions are encountered, as follows.

SHELVE STRONG EMOTIONS: This makes use of another mature defence mechanism, suppression. As strong emotions are encountered, the health care worker consciously “lays the emotion on the shelf” and leaves it to be dealt with later. This is suppression, a conscious mature defence mechanism preferable to repression which unconsciously pushes difficult emotions aside, denies them and by and largely leaves them unprocessed (Boag, 2010). Suppression allows a professional to get on with the day and process emotions later.

HOLD HOPE: This is done by the professional by affirming that another person has, through their efforts, been helped. Hope and compassion are closely linked (Spandler, et al. 2011). To hold hope, it is helpful for the professional to think something akin to I am a competent professional doing my best under these circumstances; I did okay and will learn for next time; or I did what I could and I hope it goes well for the person. Things may go well for the person, they may not. The professional reminds themselves that their actions are part of a combined effort to achieve a good outcome. If a good outcome is not achieved, then something may be learned for the next case. Hope, like compassion, likely activates neural networks associated with helping, approach and being prosocial, resulting in positive emotions and better health for the professional (Singer, et al. 2014).

Post-shift, the **WEB** of shelved emotions will be dealt with. This involves up to ten minutes preferably before a movie, meal, or interaction with loved ones; perhaps while walking in a park, working out at a gym, jogging, or sitting on a couch without an alcoholic drink. W-E-B is: Walk through the day’s events, express each shelved emotion, and use a Bilateral Stimulation Technique.

WALK THROUGH THE DAY: This is an imagined re-exposure technique used as part of therapy to help treat anxiety (Reddan, et al. 2018). It entails briefly going from the start to the end of the shift without getting caught up in any situation. This helps prevent repression which may lead to depression or burnout, and prepares the brain for exposure to and expressing the shelved emotions.

EXPRESS EACH SHELVED EMOTION: Here, each emotion is noticed, labelled and expressed. Firstly, the professional notices the emotion on the imagined shelf and the events which led to strong emotion from the shift. Secondly, each emotion is labelled with a word, the more precise the words chosen to label the emotion, the better. Labelling an emotion combines thinking with feeling to help process the emotion (Kircanski, et al. 2012). It is helpful for the professional to have a lexicon of forty or fifty words for emotions. Thirdly, each emotion is expressed through vocalizations – using the word for the emotion and saying “I feel (anger)” – and through controlled expressions such as hand gestures and facial expressions. This way, the brain is taught, as it is in exposure therapy, not to fear strong emotions, but to proficiently handle them to regain a realistic view of oneself and the world (Rauch, et al. 2006). The professional may cry, express anger with clenched fists, express disgust or fear in words, thereby expressing them consciously and in controlled expression rather than by catharsis (Straton, 1990). This combination of thinking and feeling, labelling and expressing, and the controlled expression of emotions is therapeutic in structured circumstances (Littrell, 1998). Growing proficiency over emotions promotes health, well-being and prevents empathic distress. Laughing privately or with a trusted colleague at things which were odd, black, frivolous or strange also promotes health (Bennett, 2003).

USE A BILATERAL STIMULATION TECHNIQUE (BST): It is used during the whole of the post-shift WEB: while Walking through the day and while expressing each strong emotion. BSTs are part of larger protocols used for the survivors of natural disasters (Trentini, et al. 2018). One particular BST involves crossing hands in front of the body while looking at palms, then resting fingers on or near the opposite shoulder or clavicle. The fingers then gently tap alternating Left-Right-L-R-L-R at a relaxed pace, approximately one L-R per heartbeat, while consciously noticing, labelling and expressing emotions (Artigas, et al. 2014). The BST can be stopped and started at will, but is best continued until each shelved strong emotion has been expressed.

To finish the post-shift WEB part of the tool, the BST is continued while the professional focusses on being calm, soothed and peaceful for up to a minute, after which the professional can continue with their own interests.

DISCUSSION

In the face of time constraints and reticence to engage in management-led interventions many health care workers suffer in stoic silence, and too many burn out. The WASH your WEB tool provides a private structured approach to process strong emotions rather than allow them to accumulate. The tool is a reminder for professionals to utilize compassion over empathy and suppression over repression. These are difficult concepts to grasp at first, but once understood and practiced they become worthwhile skills for emotional health and prevention of vicarious trauma. The most significant contribution of the tool, perhaps, is the integration of utilizing compassion, suppression and anticipation with principles of evidence-based interventions such as exposure therapy and use of a BST. It is, however, no substitute for therapy for those needing it.

The tool was developed over years of clinical experience in trauma; limited n=1 trials have been positive. The major current limitation

is a lack of empirical evidence beyond informal n=1 trials for the tool itself. If empirical evidence supports its use it would be face-saving and cost-effective.

It is hypothesized that learning the difference between compassion and empathy, suppression and repression, the principles of exposure therapy and a BST would be of benefit to health care workers. As in the case of employing mindfulness techniques (Duarte, et al. 2016), however, practicing the skills of each is required. The tool provides a format in which to explore these techniques succinctly and privately apply them.

CONCLUSION

The adverse effects of vicarious trauma are multifarious and come at great social and personal cost. This needs to be addressed urgently to preserve the health care workforce. Key workplace barriers hinder implementation of effective measures in this area. The WASH your WEB psychological tool has the potential to help prevent the effects of vicarious trauma and stimulate further research in this area. The need is to overcome some of the barriers inadvertently created in the workplace of health care workers: stigma, stoicism, and occupational health and safety binds.

DECLARATIONS

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REFERENCES

- Amano, T., & Toichi, M. (2016). The role of alternating bilateral stimulation in establishing positive cognition in emdr therapy: a multi-channel near-infrared spectroscopy study. *PLoS one*, *11*(10).
- American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders (DSM-5®). American Psychiatric Pub.
- Artigas, L., & Jarero, I. (2014). The butterfly hug. Implementing EMDR early mental health interventions for man-made and natural disasters, 127-130.
- Ashooh, M. P., Barnette, K., Moran, T. P., O'Shea, J., & Lall, M. D. (2019). Advanced Practice Provider Burnout in a Large Urban Medical Center. *Adv Emerg Nurs J*, *41*(3), 234-243.
- Baird, K., & Kracen, A. C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Couns Psychol Q*, *19*(2), 181-188.
- Beck, C. T. (2011). Secondary traumatic stress in nurses: A systematic review. *Arch Psychiatr Nurs*, *25*(1), 1-10.
- Bell, H., Kulkarni, S., & Dalton, L. (2003). Organizational prevention of vicarious trauma. *Fam Soc*, *84*(4), 463-470.
- Bennett, H. J. (2003). Humor in medicine. *South Med J*, *96*(12), 1257-1261.
- Bober, T., & Regehr, C. (2006). Strategies for reducing secondary or vicarious trauma: Do they work? *Brief Treat Crisis Interv*, *6*(1), 1.
- Boag, S. (2010). Repression, suppression, and conscious awareness. *Psychoanal. Psychol*, *27*(2), 164.
- Bride, B. E. (2007). Prevalence of secondary traumatic stress among social workers. *Social work*, *52*(1), 63-70.
- Canfield, J. (2005). Secondary traumatization, burnout, and vicarious traumatization: A review of the literature as it relates to therapists who treat trauma. *Smith Coll Stud Soc Work*, *75*(2), 81-101.
- Duarte, J., & Pinto-Gouveia, J. (2016). Effectiveness of a mindfulness-based intervention on oncology nurses' burnout and compassion fatigue symptoms: A non-randomized study. *Int J Nurs Stud*, *64*, 98-107.
- Duffy, E., Avalos, G., & Dowling, M. (2015). Secondary traumatic stress among emergency nurses: a cross-sectional study. *Int Emerg Nurs*, *23*(2), 53-58.
- Dyrbye, L. N., Eacker, A., Durning, S. J., Brazeau, C., Moutier, C., Massie, F. S., et al. (2015). The impact of stigma and personal experiences on the help-seeking behaviors of medical students with burnout. *Acad Med*, *90*(7), 961-969.
- Everly, G. S., & Mitchell, J. T. (2000). The "debriefing" controversy and crisis intervention: A review of lexical and substantive issues. *Int J Emerg Ment Health*, *2*(4), 211-226.
- Foa, E. B., Keane, T. M., & Friedman, M. J. (2000). Guidelines for treatment of PTSD. *J Trauma Stress*, *13*(4), 539-588.
- Gates, D., Gillespie, G., Kowalenko, T., Succop, P., Sanker, M., & Farra, S. (2011). Occupational and demographic factors associated with violence in the emergency department. *Adv Emerg Nurs J*, *33*(4), 303-313.
- Hatfield, E., Rapson, R., & Le, Y. C. (2009). "Emotional Contagion and Empathy", *Social Neuroscience of Empathy*, eds. Jean Decety and William Ickes, Cambridge: MIT Press.
- Kahill, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Can Psychol*, *29*(3), 284.
- Keenan, P., & Royle, L. (2007). Vicarious trauma and first responders: a case study utilizing eye movement desensitization and reprocessing (EMDR) as the primary treatment modality. *Int J Emerg Ment Health*, *9*(4), 291-298.
- Keough, V. A., Tell, D., Andreoni, C., & Tanabe, P. (2016). Unique educational needs of emergency nurse practitioners. *Adv Emerg Nurs J*, *38*(4), 300-307.
- Kircanski, K., Lieberman, M. D., & Craske, M. G. (2012). Feelings into words: contributions of language to exposure therapy. *Psychol Sci*, *23*(10), 1086-1091.
- Klimecki, O. M., Leiberg, S., Ricard, M., & Singer, T. (2014). Differential pattern of functional brain plasticity after compassion and empathy training. *Soc Cogn Affect Neurosci*, *9*(6), 873-879.
- Littrell, J. (1998). Is the reexperience of painful emotion therapeutic?. *Clin Psychol Rev*, *18*(1), 71-102.
- Loggia, M. L., Mogil, J. S., & Bushnell, M. C. (2008). Empathy hurts: compassion for another increases both sensory and affective components of pain perception. *Pain*, *136*(1-2), 168-176.
- McCray, L. W., Cronholm, P. F., Bogner, H. R., Gallo, J. J., & Neill, R. A. (2008). Resident physician burnout: is there hope? *Fam Med*, *40*(9), 626.

- McMahon, B., Hudson, J., Prewitt, J., Carman, M. J., & Engleson, M. (2017). Measuring Fatigue in Triage: A Pilot Study. *Adv Emerg. Nurs. J*, 39(2), 114-122.
- MacNeilage, P. F., Rogers, L. J., & Vallortigara, G. (2009). Origins of the left & right brain. *Sci Am*, 301(1), 60-67.
- Motta, R. W. (2008). Secondary trauma. *Int J Emerg Ment Health*.
- Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue. *Best Pract Ment Health*, 6(2), 57-68.
- Pearlman, L. A., & MacJan, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Prof Psychol Res Pr*, 26(6), 558.
- Pearlman, L. A., & Saakvitne, K. W. (1995). Treating therapists with vicarious traumatization and secondary traumatic stress disorders. Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized, 23, 150-177.
- Propper, R. E., Pierce, J., Geisler, M. W., Christman, S. D., & Bellorado, N. (2007). Effect of bilateral eye movements on frontal interhemispheric gamma EEG coherence: Implications for EMDR therapy. *J Nerv Ment Dis*, 195(9), 785-788.
- Reddan, M. C., Wager, T. D., & Schiller, D. (2018). Attenuating neural threat expression with imagination. *Neuron*, 100(4), 994-1005.
- Reap, V. (2019). Sex Trafficking: A Concept Analysis for Health Care Providers. *Adv Emerg. Nurs. J*, 41(2), 183-188.
- Rauch, S., & Foa, E. (2006). Emotional processing theory (EPT) and exposure therapy for PTSD. *J Contemp Psychother*, 36(2), 61.
- Robinson, K. S., Jagim, M. M., & Ray, C. E. (2005). Nursing workforce issues and trends affecting emergency departments. *Nurs Manag*, 36(9), 46-53.
- Rothschild, B. (2006). Help for the helper: The psychophysiology of compassion fatigue and vicarious trauma. WW Norton & Co. p 191.
- Sinclair, H. A., & Hamill, C. (2007). Does vicarious traumatization affect oncology nurses? A literature review. *Eur J Oncol Nurs*, 11(4), 348-356.
- Singer, T., & Klimecki, O. M. (2014). Empathy and compassion. *Curr Biol*, 24(18), R875-R878.
- Spandler, H., & Stickley, T. (2011). No hope without compassion: the importance of compassion in recovery-focused mental health services. *J Ment Health*, 20(6), 555-566.
- Straton, D. (1990). Catharsis reconsidered. Australian & New Zealand Journal of Psychiatry, 24(4), 543-551.
- Thomas, R. B., & Wilson, J. P. (2004). Issues and controversies in the understanding and diagnosis of compassion fatigue, vicarious traumatization, and secondary traumatic stress disorder. *Int J Emerg Ment Health*.
- Trautmann, J., Epstein, E., Rovnyak, V., & Snyder, A. (2015). Relationships among moral distress, level of practice independence, and intent to leave of nurse practitioners in emergency departments: results from a national survey. *Adv Emerg. Nurs. J*, 37(2), 134-145.
- Trentini, C., Lauriola, M., Giuliani, A., Maslovaric, G., Tambelli, R., Fernandez, I., et al. (2018). Dealing with the aftermath of mass disasters: a field study on the application of EMDR integrative group treatment protocol with child survivors of the 2016 Italy earthquakes. *Front Psychol*, 9, 862.
- Vaillant, G. E. (2000). Adaptive mental mechanisms: Their role in a positive psychology. *Am Psychol*, 55(1), 89.
- Vaillant, G. E. (1985). An empirically derived hierarchy of adaptive mechanisms and its usefulness as a potential diagnostic axis. *Acta Psychiatr Scand*, 71(S319), 171-180.
- Valdez, A. M. (2009). So much to learn, so little time: educational priorities for the future of emergency nursing. *Adv Emerg. Nurs. J*, 31(4), 337-353.
- Völlm, B. A., Taylor, A. N., Richardson, P., Corcoran, R., Stirling, J., McKie, S., et al. (2006). Neuronal correlates of theory of mind and empathy: a functional magnetic resonance imaging study in a nonverbal task. *Neuroimage*, 29(1), 90-98.
- Wallace, J. E. (2012). Mental health and stigma in the medical profession. *Health*, 16(1), 3-18.
- Warren, T., Lee, S., & Saunders, S. (2003). Factors influencing experienced distress and attitude toward trauma by emergency medicine practitioners. *J Clin Psychol Med Settings*, 10(4), 293-296.