

Compassion and the Prevention of Violence

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Abstract: Worldwide, there is an epidemic of human violence. According to GlobalSecurity.org there are currently 37 violent conflicts going on in the world today. One way of combating violence is the installation of compassionate attitudes and behaviors in human beings. Research into the understanding and creation of compassion is developing in this country but the prevention of violence may well depend, in part, upon a further understanding of this important construct and of ways to foster its development across society.

The Challenge: One of the leading causes of death in people aged 15-44 years is violence, accounting for 1.6 million deaths worldwide, 14% of deaths among males and 7% of deaths among females. Additionally, there are uncounted costs in terms of injuries and physical, sexual, reproductive and mental health problems directly attributed to interpersonal violence. Countries around the world spend billions of dollars each year on law enforcement, health care, and lost productivity due to violence. The costs to countries and to individuals alike have made violence an epidemic worldwide and have led to a major World Report on Violence and Health by the World Health Organization (2002). WHO defines violence as “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation” and includes self-directed, interpersonal, and collective violence.

The WHO report offers nine recommendations for the understanding and prevention of violence. One theme that echoes throughout this report is the necessity of changing attitudes, behaviors, and social norms. An antithesis to violent behavior is the practice of compassion, or a sensitivity to the suffering of others and a desire to alleviate that suffering. Few ideas have won the attention of both academic researchers and the broad international community like current research into the construct of compassion. Perhaps of most remarkable focus has been the recent neuroimaging studies of Dr. Richard Davidson and colleagues at the University of Wisconsin who have placed 256-electrode arrays on the heads of Tibetan monk students of the Dali Lama meditating on compassion and have found striking elevations and synchrony of gamma EEG activity in neural circuitries related to empathy (Lutz et al., 2004; Brefczynski-Lewis et al., 2007), earning cover-story attention in the March 2005 *National Geographic*. And since these studies compared accomplished meditators with novices, there are reported implications for the ability to actually alter brain functioning with meditative compassion training, to actually train skills that promote happiness and compassion. In Developmental Psychology, Meltzoff's and others' formulations on the development of social cognition and empathy have illuminated how compassionate behaviors can be acquired in young children (Meltzoff, 2002; Meltzoff & Brooks, 2008). Similarly, Shaver and colleagues (Mikulincer & Shaver, 2005) have studied how attachment styles in children and adults relate to the development of compassion and altruism across the lifespan. Many of these ideas have been crystallized in a contemporary seminal text on this area by Gilbert (2005) entitled, *Compassion: Conceptualisations, Research, and Use in Psychotherapy*. And, just last year, the Center for Compassion and Altruism Research and Education (CCARE) was established at the Stanford University School of Medicine for the purposes of fostering multidisciplinary studies of compassion.

These studies are but a sampling of research growing across the country endeavoring to understand the development and creation of compassionate behaviors in human beings. But research to date is only in its infancy and certainly merits support, encouragement, and advancement. The implications of such a national research program are profound indeed, for the suppression of violence and the promotion of peace are perhaps the most worthy of goals for a civilized society.

Compassion research transcends disciplines and involves intellectual contributions and research hypotheses from diverse specialties. A list, by no means exhaustive, of possible research questions across a few of these disciplines follows:

Physiology

- What are the physiological (e.g., oxytocin, cortisol, heart rate, skin conductance, etc.) and behavioral (e.g., altruism, volunteerism, etc.) markers of compassion and of related and contradictory states?
- What are the challenges to expression of compassion by activation and inhibition of the threat-defense system and by active and passive expression of the safeness system and what are the physiological components of these reactions for specific cultural groups?
- What is the role of oxytocin, vasopressin, endogenous opiates in culturally-specific care-giving behaviors?
- What is the nature of the relationships among cortisol, avoidance and disengagement, anxiety and negativity and the expression of compassion?

Social Psychology

- What are the relationships between different types of and functions for positive affects (e.g., linked to seeking versus safety) and the expression of compassion across cultures?
- What are the culturally-specific distinctions between feelings of pleasure (external, unstable) and true happiness/contentment (internal, stable) as they relate to compassion?
- What is the role of cultural cruelty (as the opposite of compassion) within the context of activation/ inhibition of threat-defense systems?
- What kinds of defensive strategies prevent individuals from identifying with others?
- What personal and societal costs and benefits may come from an empathic stance toward others?
- What are the unique cultural practices that shape the development of compassion?
- How does one develop the components of compassionate caring within specific cultural groups?

Child Development

- What are the cultural characteristics of secure, anxious, and avoidant attachment styles within the context of compassion?
- Can one change attachment styles once they are formed, toward more secure styles and greater compassion?
- Which attachment styles best predict sustainability behaviors, altruism, and compassion?
- What is the role of self-compassion in the psychosocial well-being of young adults in different ethnic groups?
- What are the roles of family relationships and personality variables (e.g., extroversion) in predicting compassion?
- What are the individual skills and social ecologies requisite to the development of a compassionate identity?
- Can compassionate meditation, or a more culturally specific meditation or ritual, enhance a person's attachment security and compassionate behaviors?

Learning

- What is the role of cultural social reward systems in mother-child and self-other caring?
- How can an applied behavior analysis of the components of compassion (caring, empathic resonance, personal distress, forgiveness, and gratitude) shape compassionate behaviors?

- How can one increase compassion in adults, and what are the roles of conditioning and reinforcement, observational learning and modeling, and pro-social self-reinforcement?

Neuroscience

- What are the electrocortical correlates of culturally-specific compassionate imagery?
- To what extent does participation in compassionate, empathic, and altruistic behaviors activate the thalamocingulate (TC) division of the limbic system, and particularly the anterior cingulate, brain regions reputed to be implicated in species-preservative behaviors?
- Would activation of the TC limbic system, as well as the prefrontal cortex (PFC), lead to increased compassionate behaviors?
- Are there specific EEG localization and frequency characteristics associated with meditation on a universal mind, as opposed to meditation on the self, or on compassion?
- What are the electrocortical manifestations of compassion and cruelty?
- What role do mirror neurons play in the expression of compassion?
- What is the role of mirror neurons in empathic resonance as a component of compassion?

Health

- What is the role of compassion in cardiovascular health?
- Can compassion be increased by activation of the ventral vagal complex through heart rate variability training?
- What are the effects of mindfulness and compassionate mind training on anxiety and depression?
- Can the practice of compassion reduce intimate partner violence?

A glance at NSF research programs over the recent past finds relatively few funded projects directed at human violence, and most of those have been doctoral dissertation research endeavors. Furthermore, a search of funding opportunities in the general area of violence finds only one rfp, in Law and Social Science, dedicated only to the understanding of law and legal processes related, in part, to violence. And regarding NSF efforts to create a new generation of SBES scientists through REU programs, a cursory review of recently funded programs finds only one REU dedicated to the prevention of violence. Given the historical mission of the NSF “to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense . . . ,” and given the epidemic of violence in the country and explicit threats to the health, prosperity, welfare and defense of our country, it would seem that a more aggressive focus on the topic of understanding and prevention of human violence would be warranted.

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