

Epigenetics as a Mechanism for the Transmission of Ancestral Trauma Associated with the Outdoor Environment Among People of African Descent

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Research Problem Statement

People of African descent do not participate in nature immersion, thus they do not enjoy the beneficence of the outdoors. This research suggests that epigenetic markers, not just collective memory, largely predispose this segment of the population to stressors related to transgenerational traumas associated with the outdoor environment.

Importance of Research

Research suggests that transgenerational trauma experienced by the second and third generations of Holocaust survivors is due to changes in epigenetic markers that present as symptoms of Post Traumatic Stress Disorder. Research in the field of epigenetic transmission of transgenerational trauma has been applied to, not only this population, but also war veterans, Cambodian refugees, World Trade Center survivors, rats, plants, and even bacteria (Kellerman, 2013; Yehuda, 2016). It has not been applied to people of African descent.

Transgenerational Trauma

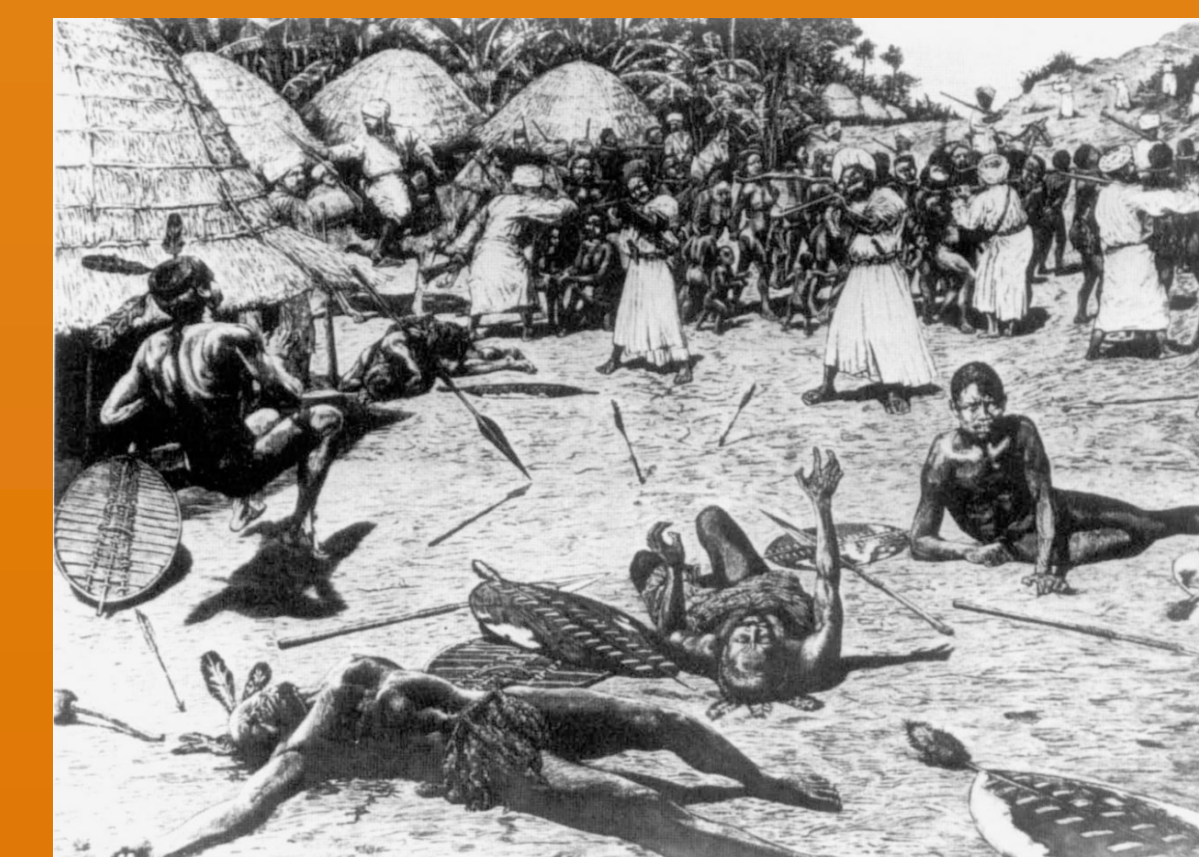
Transgenerational trauma is the collective unhealed traumas of the past which are passed on from one generation to the next. Ancestral trauma specifically distinguishes the horrors and brutalities imposed by whites on people of African descent, which is passed either by psychosocial, psychobiological, or neurobiological mechanisms from one generation to the next (DeGruy-Leary, 2006).

Post Traumatic Slavery Syndrome

Post Traumatic Slave Syndrome is a collection of "multigenerational maladaptive behaviors" that have subconsciously developed as coping mechanisms for people of African descent. DeGruy-Leary (2006) identifies the etiology of these behaviors as "systemic and structural racism and oppression".

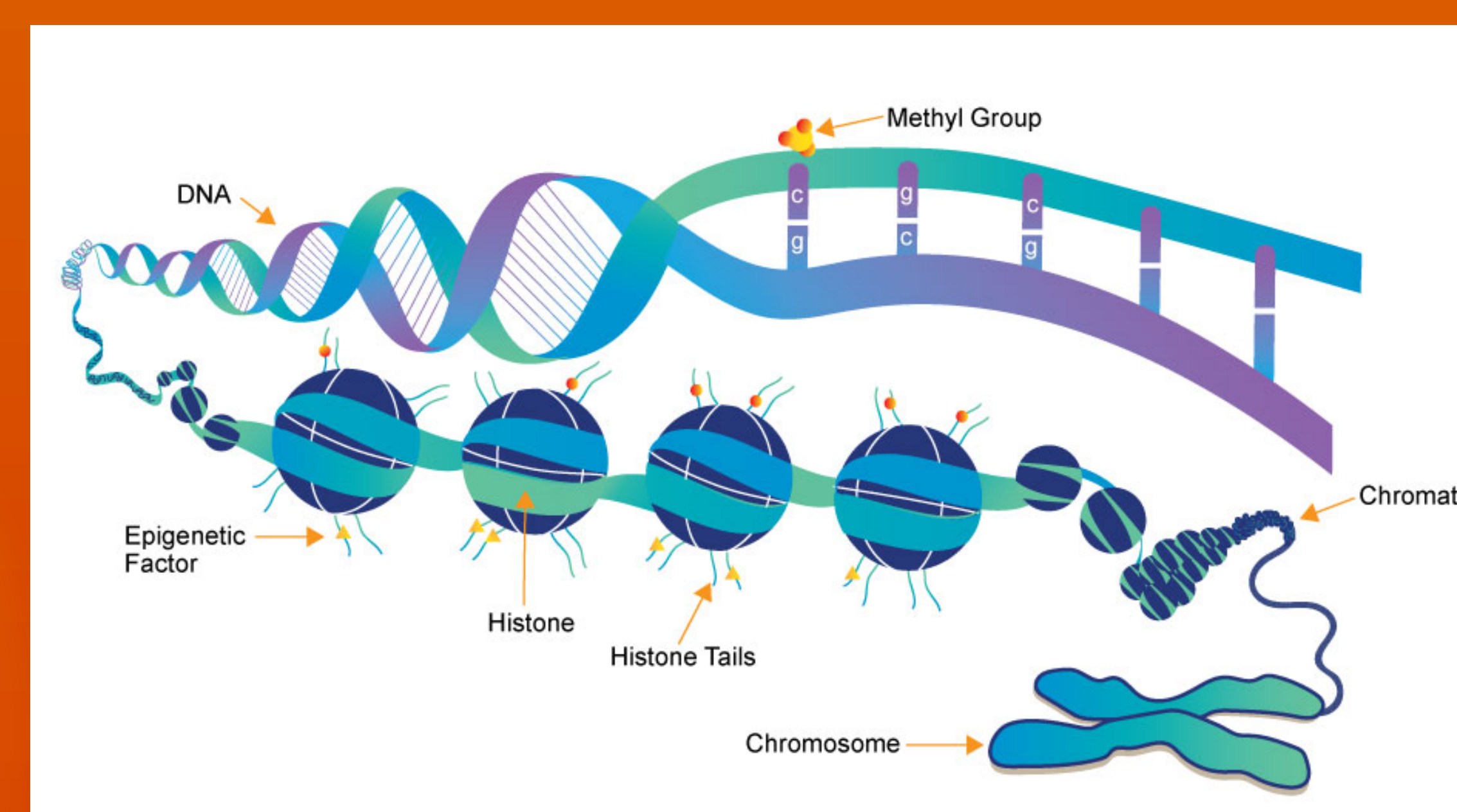
The Maafa

The Maafa is a term that is integral to the understanding of Black psychology. It is the Kiswahili term for "great disaster". In this context it is the period of time which refers to the enslavement of Africans beginning with the Arabs. It is a "wound to the soul" and an attempt of African genocide which covers the diabolical, multigenerational impact on physical, cultural, and spiritual well-being of all people of African descent and the universe (Ani, 1994; Asante, 1988; Baruti, 2015; Kambon, 1998; Richards, 1980).



Epigenetics

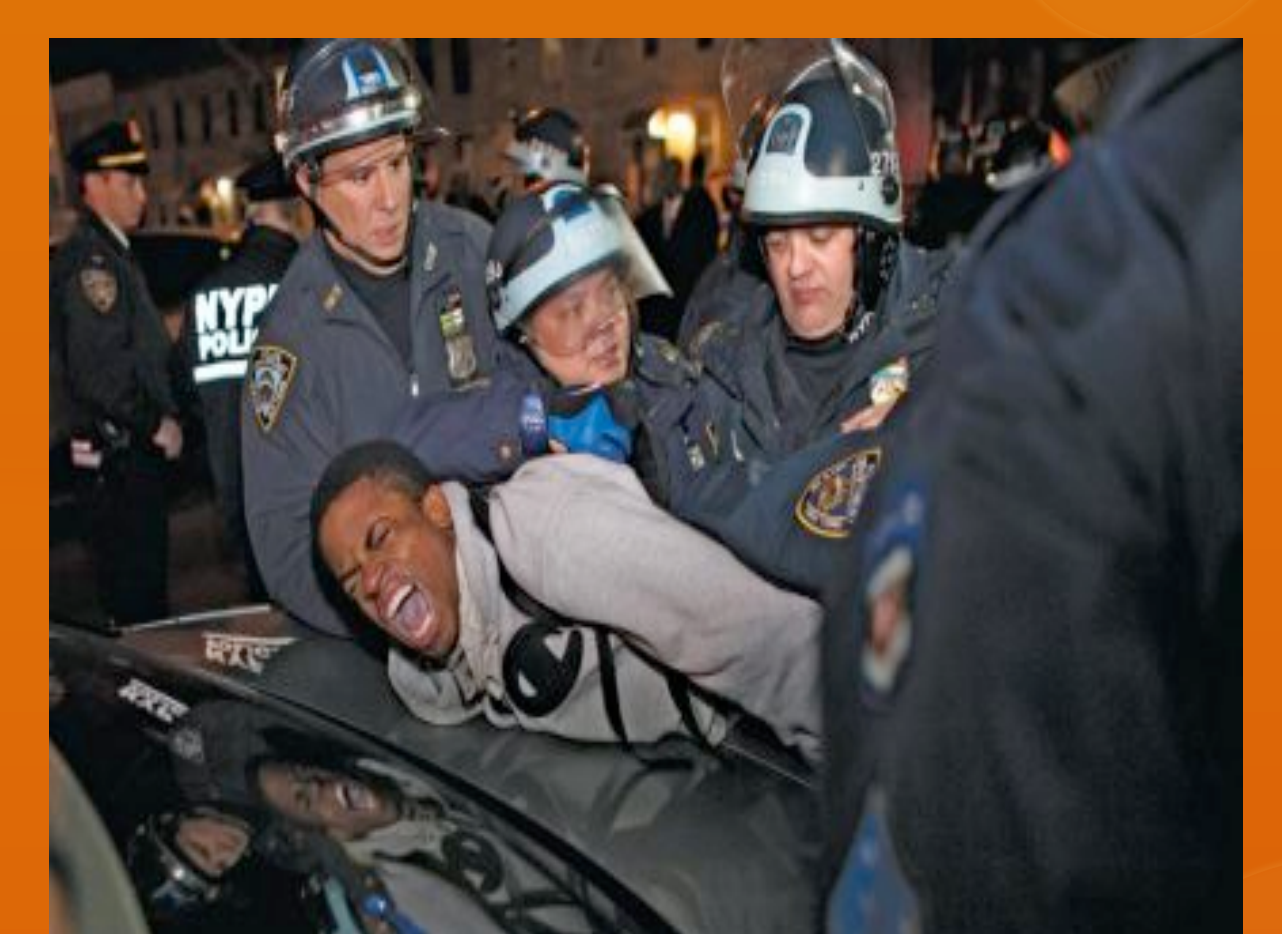
Epigenetics is the study of gene expression changes in the cells of human, animal, plant, or other organisms in the presence of DNA sequence stability. In this instance, epigenetics refers to a complex series of changes and/or mechanisms in levels of cortisol, corticoid receptors, methylation processes, transcription inhibition or acceleration and other functions (Weinhold, 2006) which can effect how one or a population respond to particular stimuli. Here, the response is avoidance and the stimuli is the outdoor environment.



Representation of the chromatin structure, including histones and DNA, which become available to epigenetic marks.

Trauma and Outdoor Environment

African people throughout the diaspora have experienced ongoing, violent, and multi-faceted disaster by the hands of whites during the Maafa, Jim Crow, and present day (Ani, 1994; Asante, 1988; Baruti, 2015; Kambon, 1998; Richards, 1980). Traumatic experiences that occurred in the outdoor environment are associated with a particularly negative stigma wherein people of African descent view the outdoors as "sick places" which conjure thoughts of torture, death, and cruelty (Bixler and Floyd, 1997; Johnson & Bowker, 2004). Some of the most memorable, outdoor experiences between Blacks and whites in the United States have been (and continue to be) horrendous. After enslavement, Blacks' understanding of what "yurugu" is capable of remained in the minds of people of African descent (Bush, 1993; Gray White, 2013; McBride, 2005), and continues to grow due to current publicly gruesome events that go unpunished by law.



Significance of Investigation

Avoidance of the outdoors in the African community is reduced and simplified to a "lack of interest". Little, if any research relating trauma associated with the outdoors as a function of psychobiological mechanisms not regulated by conscious thought, discusses the avoidance of outdoors in this vein. This research endeavors to breach the subject and generate conversation and study in this area.

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