



Physical Anthropology Section - 2013

I20 Unusual Innovative Perspectives of Research on Human Violent Behavior

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After attending this presentation, attendees will be informed about the rising need to change research approach in order to deepen insight on the possible genetic bases of human violent behavior.

This presentation will impact the forensic science community by reviewing the results of most important genetic studies on violent behavior, and emphasizing the importance of the interdisciplinary scientific cooperation.

The link between genes and aggressiveness and its inheritability has been one of most debated issues in the criminologic arena, and perhaps is still a controversial topic. Among several theories on violent behavior, Darwin's Natural Selection theory, Lombroso's Intuitions, the Terrie Moffitt's developmental theory of crime, and the General Aggression Model are considered of major interest.¹⁻⁵

Common sense questions need a proper answer: Do we all feel the same instinct to quarrel, punch, or kill? Do we observe the same aggressiveness in primary school children that punch over a trifling argument or in two males brawling, or punching, or even killing, while competing for the same female? And what about conflicts between husband and wife, or mother and son? Do we note the same kind and intensity of aggressiveness in a man resolute to rob a bank, but rapidly prone to murder the bank clerk, even before the policeman rushes to the crime scene after the alarm signal? Or in an adult subject who rapes a child; in a woman killing herself, or in twins both committing similar violent crimes?

Even if it is generally established that environmental, familiarial, educational, and cultural inputs influence the behavioral development, it's not enough of an explanation from a scientific point of view. More probable, it is: *individual genetic background* determining a sort of predisposition in aggressor habitus either in victimial status; *the circumstances* under which the violent act took place; and, *the momentary chance*, interacting together. How? This is the main question. The hypothesized existence of "warrior genes" has not ever been supported by scientific evidence. Notwithstanding, there are many investigations suggesting that genetic factors, such as hormones, neurotransmitters, enzymes, and endophenotypes have a leading role in human violent behavior.⁶⁻¹⁰ The increasing importance of genetic factors in aggressiveness can't be undervalued any longer, and should be considered in a more complex perspective together with "the circumstances" and "the chance."

Consequently, an innovative study approach on this topic should be developed, providing a multitask research unit composed of more traditional specialties (psychiatrists, psychologists, sociologists, criminologists, and medical examiners) and also by innovative, maybe unforeseen, figures such as the anthropologist, the ethologist, the expert in non-verbal communication, and the genetic biologist. The purposed multitask teamwork should be proposed and applied with the same research program in many different countries, to share and compare the obtained findings, in order to understand any further aspect of the human violent behavior.

A brief review of the research program will be addressed with attendees.

References:

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Human Aggressiveness, Violent Behavior, Research Unit