

Accepted Manuscript

Title: Significance of temporal changes on sexual dimorphism of cranial measurements of Indian population

Author: Vineeta Saini PhD

PII: S0379-0738(14)00253-9
DOI: <http://dx.doi.org/doi:10.1016/j.forsciint.2014.06.017>
Reference: FSI 7643

To appear in: *FSI*

Received date: 8-8-2013
Revised date: 27-4-2014
Accepted date: 17-6-2014



Please cite this article as: V. Saini, Significance of temporal changes on sexual dimorphism of cranial measurements of Indian population, *Forensic Science International* (2014), <http://dx.doi.org/10.1016/j.forsciint.2014.06.017>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Title: Significance of temporal changes on sexual dimorphism of cranial measurements of Indian population

Author's Name and Affiliations: Vineeta Saini, PhD, Department of Forensic Medicine, Institute of Medical Sciences, BHU, Varanasi, India, 221005

Corresponding Author: Dr Vineeta Saini

Email: vineetasaini2012@gmail.com , vin22saini@gmail.com

Phone no: +91 9971790222; 9971793868

Permanent address: Saini Sadan, Adjacent Garden of Spice

Sector 12A, Gurgaon

Haryana, India 122001

Revision of discriminant function formulae has always been advocated by anthropologist to take into account the changing pattern of sexual dimorphism due to temporal/secular changes. The present study aims to track temporal changes in cranial measurements of temporally distinct North Indian population and providing updated sex discriminating formulae. A total of 483 adult (20-65yrs) crania representing contemporary and sub sub-recent populations collected from two medical colleges in North India. A total of 11 variables were measured to observe the changes in cranial dimension over time. Analysis of data demonstrated significant sexual and population (contemporary vs sub-recent sample) variations over time. The contemporary males and females exhibited larger cranial dimensions but it expressed less dimorphism than their predecessors. A trend toward brachycephalization was also observed in contemporary females. Maximum cranial length (84%) and biauricular breadth (79%) represent the most dimorphic variables for contemporary and sub-recent sample, respectively. The possible causes of such variations are discussed.

Key Words: Forensic Anthropology Population Data, Temporal changes, Cranial measurements, Discriminant function analysis, Sexual Dimorphism

Download English Version:

<https://daneshyari.com/en/article/95485>

Download Persian Version:

<https://daneshyari.com/article/95485>

[Daneshyari.com](https://daneshyari.com)