

Geographical influence on digit ratio (2D:4D): a case study of Andoni and Ikwerre ethnic groups in Niger delta, Nigeria.

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ABSTRACT

OBJECTIVE: The role of geographical location on digit ratio (2D:4D) in ethnic groups within the same geographical location was investigated. 1402 subjects drawn from Andoni and Ikwerre ethnic groups in the Niger Delta region of Nigeria were randomly selected for this study. These comprised 702 (50.07%) Andonis of which 350 (24.96%) were males while 352 (25.11%) were females and 700 (49.93%) were Ikwerres of which 461 (32.88%) were males and 239 (17.05%) females. A digital vernier caliper was used to measure the lengths of the second digit (2D) and fourth digit (4D). The ratio 2D/4D was then calculated for each subject. The results obtained showed positive significant differences ($p < 0.001$) in the lengths of 2D and 4D between males and females in the two ethnic groups. It also showed significant ($p < 0.001$) sexual and ethnic differences within same geographical location. This suggests that 2D:4D is inherited but not necessarily influenced by geographical location.

Key words: Geographical influence, digit ratio, Andoni and Ikwerre