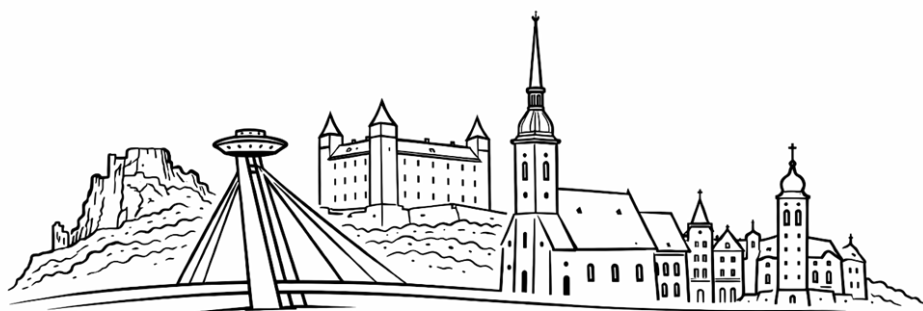




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SEXUAL DIMORPHISM OF DERMATOGLYPHIC PATTERNS IN NORTH MACEDONIA

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Introduction: Dermatoglyphics is the scientific study of epidermal ridges and their configurations on fingers, palms, and soles. It analyzes patterns formed by skin ridges: loops, arches, and whorls, developed during early fetal gestation, which are genetically determined, permanent and unique to individuals. Objective: an analysis of individual dermatoglyphic characteristics was conducted among adults of Macedonian and Albanian ethnicity.

Material and methods: The study included 234 healthy examinees, palm prints were taken and dermatoglyphic parameters were read, classified and then compared with the dermatoglyphics research published by other authors. Imprinting was done by the Cummins and Midlo's ink method. The reading and classification of dermatoglyphics is according to Henry's system.

Results: Loops (ulnar) were most present patterns followed by circular, arcuate and complex patterns which are present in small percentage, in both genders, radial loop is only present on the second finger for both genders. There are differences on right hand for the II, IV and V finger and on the left hand for the III, IV and V finger between males and females, also in palmar spaces significant differences were noticed for the III and IV interdigital space and hypothenar. The triradii formula for females is: $a > b > d > c > t$; for males the formula is: $a > t > b > c = d$, additional triradii are rare in both genders. The Δ angle is within the range of 32°-55° in females and, 33°-50° in males, most often 40° in both groups.

Conclusion: The results in this population research have shown similarities and differences in the prevalence of some dermatoglyphic features in males and females. The fingerprint patterns are valuable markers and with the inclusion of other parameters, this method can be used in different populations.

Keywords: dermatoglyphic patterns, palm prints, sexual dimorphism