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## **COMPARATIVE STUDY OF THE FINGERPRINT PATTERNS IN MARINDUQUE AND MANILA, PHILIPPINES**

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### **ABSTRACT**

This study determined the fingerprint patterns of 61 families living in Marinduque, Philippines. This data was compared with the data previously collected from Metro Manila in terms of the most common fingerprint pattern (among the males and females) as well as total ridge counts (TRCs). Also, the study aimed to determine the relationship among the different familial relationships. Direct counting was used consisting of 116 individuals (63 males and 53 females). In the two (2) populations, loops are the most commonly found fingerprint pattern and arches are the least common in both males and females. The frequency of loops is highest followed by whorls and arches in the two (2) populations. In the Marinduque population, TRCs ranged from 38-328 (male) and 56-219 (female). Using Mann-Whitney U test, there is a significant difference between the values of parental TRC of the two populations indicating sexual dimorphism. The Pearson correlation coefficients were significant for mother-child and midparent-child ( $\alpha = 0.01$ ). Only the Marinduque population showed no significant relationship for parent-parent relationship. It is recommended that further studies on fingerprints of individuals with congenital diseases be conducted. Moreover, a greater sampling size should be obtained as well as more accurate methods of sampling.

**Keywords:** fingerprint, fingerprint pattern, frequency pattern, midparent-child, mother-child, sexual dimorphism.