November 22<sup>nd</sup> 2017

Task Number: 2017-009

Article Title: Study of Fingerprint Pattern and Gender Distribution of Fingerprints

Date Published: Not specified

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## Article's Subject Matter:

- Fingerprint pattern distribution between female and male
- Determining sex from fingerprint ridge count

## Key Points in Article

- <u>Highest percentage of pattern in both male and female is the ulnar loop followed by</u> <u>whorls then arches</u>
- Male ridge count was slightly higher than female overall.

## Fallacies and or Issues

- Numerous spelling and grammatical errors within the paper. One grammatical/spelling error caused confusion as to the meaning of the sentence within the Discussion: "These findings are almost <u>in consistent</u> with the present study findings....."
- The first "aim" of the study was reported as being "...to determine the fingerprint pattern in males and females...." I believe this should have been "to determine the distribution percentages of pattern types between males and females".
- The pattern type designations were not identified. It was assumed that they utilized the Henry system.
- One of the "aims" of the study was to determine male and female sex from fingerprint ridge count. Although the study looked at ridge count it did not test the theory that ridge count could determine sex of the donor
  - The reported "mean" ridge count difference between males and females was insignificant to be applied in any practical situation (Male = 12.58, Female = 12.03)
- The reviewer assumes that they are speaking about the ridge count between the delta and the core however they do not define this anywhere in the paper.
- The Discussion reviews previous studies on this topic, however the presentation is confusing: "Igbigbi and Msamati observed in indigenous black Zimbabweans and found that ulnar loops were the most predominant digital pattern type in both males and females, followed by whorls in males and arches in females. Similar findings were noticed in the present study except arches in females as stated in the above study."
- Overall the reviewer did not feel this study contributed any new revelations to the discipline.