

Finger Dermatoglyphic Variation Among the Yanadis : A Tribe from Andhra Pradesh, India

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ABSTRACT A sample of 230 Yanadis (115 males and 115 females) from Yerpedu Mandal, Chittoor district of Andhra Pradesh were studied for qualitative and quantitative finger dermatoglyphic characters. Among qualitative and quantitative characters, bisexual differences have been observed, but statistically these are non-significant.

INTRODUCTION

A number of dermatoglyphic studies were carried out among Yanadis (Raghavaiah, 1962; Sreenath, 1977; Vasulu, 1990). In the present paper, an attempt has been made to report the finger dermatoglyphic variables—finger patterns and ridge counts among the Yanadis (males and females) who are inhabiting in the Yerpedu Mandal of Chittoor district, Andhra Pradesh. Yanadis are believed to have been derived from the Chenchu of Nalla Malai forest of Andhra Pradesh (Raghavaiah, 1962). It is a hunting and fishing tribal population.

MATERIAL AND METHODS

Bilateral rolled finger ball prints of 230 unrelated Yanadi individuals (115 males and 115 females) were collected from six villages, Yerpedu Main village, Potumalgunta, Isukathagelu, Pathaveerapuram, Rajulapalem and Venkata-palem of Yerpedu Mandal, Chittoor district of Andhra Pradesh. The method of analysis were those of Cummins and Midlo (1961). In case of ridge counting, general rules adopted by Holt (1949) are followed.

RESULTS AND DISCUSSION

It is observed from the table 1, that the frequency of whorls is found to be higher among the males than among the females (44.2% and 37.7%, respectively). The incidence of radial

loops and arches is high among the females (4.0% and 5.7%, respectively), than the males (2.7% and 4.5% respectively). The pattern intensity index occurs more among the males (14.0) than the females (13.3), (Table 2). The mean total finger ridge count and absolute finger

Table 1: Distribution of basic pattern types on the fingers among the Yanadis

Sex/Hand	Digital patterns				
	Whorls	Loops			Arches
		Ulnar	Radial	Total	
Male					
Right	49.4	43.7	3.0	46.6	4.0
Left	39.0	53.6	2.3	55.9	5.0
R+L	44.2	48.6	2.7	50.3	4.5
Female					
Right	38.7	52.5	4.5	57.0	4.2
Left	36.7	52.7	3.5	56.2	7.1
R+L	37.7	52.6	4.0	56.6	5.7

Table 2: Distribution of papillary indices among the Yanadis

Sex/Hand	Digital indices		
	Pattern intensity		
	index	Furhuta's index	Dankmeijer's index
Male R+L	14.0	86.1	10.2
Female R+L	13.3	66.7	15.0

Table 3: Frequency of Total Finger Ridge Count (TFRC) and Absolute Finger Ridge Count (AFRC) among Yanadis

Sex	Mean $\pm$ S.E.	S.D. $\pm$ S.E.	Variance
<i>1. Total Finger Ridge Count (TFRC)</i>			
Male	133.5 $\pm$ 3.4	36.3 $\pm$ 2.4	1317.5
Female	126.1 $\pm$ 3.6	38.5 $\pm$ 2.5	1484.4
<i>2. Absolute Finger Ridge Count (AFRC)</i>			
Male	173.4 $\pm$ 6.3	67.1 $\pm$ 4.4	4507.4
Female	164.3 $\pm$ 7.5	80.7 $\pm$ 5.3	6513.7

ridge count is found to be higher among the males than the females, but the bisexual differences are statistically not significant (Table 3).

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