

MID-PHALANGEAL HAIR, HAND CLASPING AND HANDEDNESS AMONG KHATRIS AND BANIIYAS OF PATIALA, INDIA

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Mid-phalangeal hair, hand clasping and handedness have been examined in 425 adult subjects from two endogamous groups of Patiala, Hindu Khatri (230) and Baniyas (195). In a majority of subjects (53.73% in males and 46.35% in females) mid-phalangeal hair appears to be completely absent. The highest frequency of this trait is found in the combination III-IV and, when considering individual digits, on IV (around 50%). As for hand clasping, R-type appears to be more frequent in Khatri and L-type in Baniyas. Right handedness appears to be by large more frequent in both groups and sexes.

A sample of 230 Hindu Khatri (100 M and 130 F) and of 195 Baniyas (86 M and 109 F) above 18 years of age and drawn from educational institutions of Patiala city, have been examined with respect to mid-phalangeal hair, hand clasping and handedness. Related individuals were excluded. The results are shown in Tables 1 (hand clasping and handedness) and 2 (mid-phalangeal hair).

Hand clasping of the Right type (R/L) appears to be frequent in Khatri, whereas the Left type is more frequent in Baniyas. The difference is significant, in contrast with Tiwari and Bhasin (1967b).

Right handedness appears to largely prevail in all groups.

Except for hand clasping, no significant differences have been found between the two groups.

Table 1. *Hand clasping and handedness among Khatri and Baniyas (% values)*

Group	N	Hand Clasping		Handedness		
		R/L	L/R	Right	Left	Both
Khatri males	100	74.00	26.00	96.00	2.00	2.00
Khatri females	130	64.42	35.38	96.92	1.54	1.54
Baniya males	86	34.88	65.12	95.35	4.65	0.00
Baniya females	109	46.78	53.22	95.42	2.74	1.85

$$\chi^2 = 70.7575, 1 DF, P < 0.001 \quad \chi^2 = 1.8639, 2 DF, 0.30 > P > 0.50$$

Table 2. *Mid-phalangeal hair among Khatri and Baniyas (% values)*

Group	Hand	In various combinations										On different digits				
		II-III IV-V	III-IV-V	II-III-IV	III-IV	IV-V	III	IV	None	II	III	IV	V	None		
Khatri males (N = 100)	R	3.00	5.00	1.00	19.00	0.00	2.00	14.00	56.00	4.00	25.00	43.00	8.00	56.00		
	L	4.00	8.00	2.00	22.00	0.00	0.00	10.00	54.00	4.00	26.00	44.00	7.00	54.00		
Khatri females (N = 130)	R	4.62	4.62	0.76	30.00	0.00	2.30	12.30	45.39	5.38	39.23	55.08	7.61	54.39		
	L	5.38	6.92	1.54	28.46	0.00	1.54	12.30	43.84	6.15	41.53	55.00	10.77	43.84		
Baniya males (N = 86)	R	4.65	5.81	0.00	25.58	0.00	1.16	11.63	54.32	3.70	37.02	43.02	9.88	54.32		
	L	4.65	8.14	0.00	26.74	0.00	1.16	11.63	50.62	3.70	35.84	43.02	14.81	50.62		
Baniya females (N = 109)	R	2.75	3.67	2.75	33.03	0.00	0.00	13.76	44.04	2.75	38.53	46.78	4.58	44.04		
	L	1.83	5.54	2.75	31.19	0.00	0.00	15.59	43.12	3.67	38.53	48.62	6.42	43.12		

$\chi^2 = 2.5802, 1 DF, 0.20 > P > 0.10$

The majority of subjects in both groups show absent mid-phalangeal hair, with average values of 53.73% in males and 46.35% in females. Similarly high values have been found in Tibetans (55.75% in males and 68.81% in females, cf. Tiwari and Bhasin 1969), as well as in Garhwal Brahmins and Rajputs (Tiwari and Bhasin 1967*a*) and in four Assam tribal groups: Nokote Nagas (Kumar 1955) and

Khasi, Lushai and Mikir (Mukerjee 1963). When the trait is present, the highest incidence is found on digit IV. The more frequent combination appears to be III-IV, with higher values for the left hand in males, but for the right hand in females. Similar results were obtained on Tibetans (Tiwari and Bhasin 1969) as well as in Japanese (Dansforth 1921 and Boyd 1950).

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