

Some Morphogenetical and Behavioural Traits in the Sunni Muslims of Jammu and Kashmir, India

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ABSTRACT A total of 135 Sunni Muslims belonging to the Ahmadiyya sect and inhabiting the Hari Pari Gam of the Pulwama district of the Northernmost border Indian state of Jammu and Kashmir have been surveyed for 14 different genetical, morphological and behavioural traits.

There are several 'traditional traits' which physical anthropologists have employed in characterization of different world populations during over last one century. The usefulness of these traits as judged by their ability in providing valuable information on morphological and biological differences among populations has been well demonstrated in Indian studies carried out by Sanghvi (1953) and Karve and Malhotra (1968).

SUBJECTS AND METHODS

A total of 135 Sunni Muslims (100 males and 35 females) belonging to the Ahmadiyya sect and inhabiting the Hari Pari Gam of the Pulwama district of the Northernmost border Indian state of Jammu and Kashmir has been investigated for fourteen different genetical, morphological and behavioural traits viz., hairy pinna (in males), mid-phalangeal hair, digital hair, ear lobe attachment, tongue folding, tongue rolling, length of index finger relative to ring finger, length of second toe relative to great toe, handedness, hand clasping, arm folding, palmaris longus, ear tubercle and thumb flexibility following the standard techniques (Weiner and Lourie, 1969).

RESULTS AND DISCUSSION

The results of this study are presented in table 1. This table shows that the Sunni Muslims of the Kashmir valley are characterised by the

presence of ear tubercle and absence of hairy pinna, while hair have been observed on mid-phalanges and digits in 34.1% and 77% subjects, respectively. The frequency of ear lobe attachment has been found 14.8%. Index finger is shorter than the ring finger in 74.1% cases, and the second toe is shorter than the great toe in about half the cases (53.3%). All the individuals surveyed are able to fold their tongues, while only 23.7% are able to roll it. The incidence of right type of hand clasping and arm folding are 61.5% and 60%, respectively, and all the subjects are right handed. Palmaris longus could be observed in 63.7% cases and thumbs were flexible in 44.4% cases.

A large number of studies on various genetical, morphological and behavioural traits have been reported from different parts of India (Bhasin, 1988). Incidentally, no such work has been carried out in Kashmir valley. The present investigation therefore provided baseline data on fourteen such characters on the Sunni Muslims of this Northernmost border Indian state. However, to fully appreciate the extent of variabilities of these morpho-genetic traits in Kashmir valley, further studies on different religious and ethnic groups inhabiting the valley are required.

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Table 1: Distribution of various genetical, morphological and behavioural traits in the Sunni Muslims of Kashmir valley

<i>Trait</i>	<i>Number observed</i>	<i>Frequency observed</i>
Hairy pinna		
Present	0	0.0
Absent	100	100.0
Mid-phalangeal hair		
Present	46	34.1
Absent	89	65.9
Digital hair		
Present	104	77.0
Absent	31	23.0
Ear lobe attachment		
Attached	20	14.8
Free	115	85.2
Absent	0	0.0
Tongue folding		
Able	135	100.0
Unable	0	0.0
Tongue rolling		
Roller	32	23.7
Non-roller	103	76.3
Length of index finger relative to ring finger		
II<IV	100	74.1
II>IV	35	25.9
Length of second toe relative to great toe		
II<I	72	53.3
II>I	63	46.7
Handedness		
Right	135	100.0
Left	0	0.0
Hand clasping		
Right	83	61.5
Left	52	38.5
Arm folding		
Right	81	60.0
Left	54	40.0
Palmaris longus		
Present	86	63.7
Absent	49	36.3
Ear tubercle		
Present	135	100.0
Absent	0	0.0
Thumb flexibility		
Flexible	60	44.4
Non-flexible	75	55.6

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