



Morphological Traits Among the Shorgir Rajput Endogamous Group

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Abstract

A total one hundred peoples samples were taken from the district Jind in Haryana during January, 2015 to June, 2015. Different types of morphological traits such as eye colour, ear lobe, mid pharyngeal hair, chin fissure, hair colour, nose tip and polydactylus/syndactylus were recorded during present study. Eye colour may varied from minimum 2 person (gray colour) to maximum 66 person (brown colour) with an average of 33.33 ± 1.77 ; hair colour may varied from minimum 12 person (light black colour) to maximum 75 person (dark black colour) with an average of 33.33 ± 1.77 and nose tip character may varied from minimum 8 person (upturn) to maximum 76 person (straight) with an average of 33.33 ± 1.77 . Also, 38% people with attached ear lobe and 62% people with free/non attached ear lobe; 20% people with midphyrngeal hair and 80% people without midphyrngeal hair; chin fissure are present in 24% people while it is absent in 76% people, and polydactylus/syandactylus are absent in all members of studied caste.

Keywords: Caste, Shorgir Rajput, Morphological Traits, Endogamous group, Haryana.

I. Introduction

Any organism has a variety of traits. It grows to a certain size, it has certain kind of organs, limbs or structure, it has teeth or shells or bones, and if it does they have various sizes and shapes; there are a great many such traits (Bhasin and Chahal, 1986). Every way which one organism differ from another constitutes a variation. Of course, some variations are more significant than others. Variation may be shown in physical appearance, metabolism, fertility, mode of reproduction, behavior, learning and mental ability, and other obvious or measurable characters. The environmental factors like the food, temperature etc. Influence the phenotype of individuals. Genetic changes are those that affect the genes. Polyploidy is an example of chromosomal mutation. Environmentally caused variation may result from one factor or the combined factors of several factors, such as climate, food supply, and actions of other organisms (Bhasin and Walter, 2001).

The Shorgir are a community of Rajput ancestry, who have taken to gunpowder-making. They get their name from the Hindi word shora, which means salt. The Shorgir are said to have originated in Rajasthan, and over time spread to Haryana (Rohtak, Hissar, Karnal, Jind, Kaithal, Kurukshetra and Sirsa) and Punjab. Shorgir community does not belong to Kumhar ancestry. This community has never been in matrimonial relations with Kumhar and their gotras also do not match with this caste. In fact this Shorgir community is one section of Rajputs which never embraced the Muslim religion as a result the people of this community had to migrate from Rajasthan to UP, Bihar, MP then back to Haryana and Punjab during the regime of Mughalas. While manufacturing gunpowder (shora) this community was called Shorgir (Sikerwal, R.P). Many efforts were made to bring this poverty afflicted community back into their original fold of Thakurs in 1936 by adopting the Roti-Beti Rishtah (matrimonial and family relations) by then clan leaders of Rajputs of

District Bhiwani. Main clans of Shorgir community are Shakshele (Sikerwal), Tapria, Dahria, Kamaithe, Kushmaria, Saria (Saroa), Slote (Solanki), Naele (Nalwa/Chauhan), Sharda, Songotia, Nimivansh etc (Sikerwal, R.P). Though most people of this community are wage labourers except a few farmers they have not forgotten their Thakurai. The ancient history of Aallah and Udal are read even at their homes. Due to less and scanty information are available on various aspects of morphological traits among the Shorgir Rajput endogamous group. Hence the present study was planned in identify various morphological traits among the Shorgir Rajput endogamous group in district Jind, Haryana (India).

II. Material and Methods

Jind district (between 75° 53' and 76° 47' East longitudes and between 29° 03' and 29° 51' North latitudes) is one of the 21 districts of Haryana state in northern India (Fig. 1). Jind town is the administrative headquarters of the district. It is part of Hisar Division and was created in 1966. The district comprises three sub-divisions: Jind, Narwana and Safidon. Jind sub-division is further divided into three tehsils: Jind, Julana and Alewa (sub-tehsil). Narwana sub-division is further divided into two tehsils: Narwana and Uchana (sub-tehsil), and Safidon sub-division is also divided into two tehsils: Safidon and Pillu-Khera (sub-tehsil). The district has a population density of 493 inhabitants per square kilometre (1,280/sq mi). Jind has a sex ratio of 870 females for every 1000 males, and a literacy rate of 72.7%.

Investigations were carried out following the standard technique (Wiener and Lourie, 1969; Jaggi and Yadav, 2014) to identified in the endogamous group of Shorgir Rajput in district Jind, Haryana (India). Total hundred peoples samples were taken from the district Jind in Haryana. Different types of morphological traits such as eye colour, ear lobe, mid pharyngeal hair, chin fissure, hair colour, nose tip and polydactylus/syndactylus were recorded during the present study.



Fig.1 Location of district Jind, Haryana (India).

III. Results and Discussion

Population genetics as a branch of genetics aims at the genetic composition of biological populations, and the changes taking place in it. Population geneticists pursue their goals by developing abstract mathematical models of gene frequency dynamics, trying to extract conclusions from those models about the likely patterns of genetic variation in Mendelian populations, and testing the conclusions against empirical data. Genetic variations between inter and intra populations are studied in terms of polymorphism of various genetic markers (Bhasin et.al.,1994).

Jaggi and Yadav (2014) observed . Morphological and behavioural traits. among the total 800 individuals (200 for each caste group) were examined for various castes i.e., Mallah are the traditional boatmen caste (Yamuna Nagar), Kumhar are also called prajapati spread over all Haryana, Banjara are called gypsies and described as nomadic people and Saini is a community of traditional agriculturists spread all over Haryana. Different types of morphological characters such as eye colour, ear lobe, mid pharyngeal hair, chin fissure, hair colour, nose tip and polydactylus/syndactylus were recorded during present study. Eye colour may varied from minimum 2 person (gray colour) to maximum 66 (brown colour) with an average of 33.33 ± 1.77 ; hair colour may varied from minimum 12 person (light black colour) to maximum 75 person (dark black colour) with an average of 33.33 ± 1.77 and nose tip character may varied from minimum 8 person (upturn) to maximum 76 person (straight) with an average of 33.33 ± 1.77 .

The frequency of free ear lobes was found to be highest in Mallah (88%) and lowest in Saini (46%). For black eye colour, the highest frequency was recorded in Mallah (89%) and lowest in Saini (36%). The frequency distribution of dark hair colour was found to be highest in Saini (90%) and lowest in Banjara (45%). All 3 morphological traits showed significant variations and heterogenous distribution (Jaggi and Yadav,2014). Similarly 38% people with attached ear lobe and 62% people with free/non attached ear lobe; 20% people with midphyrngeal hair and 80% people without midphyrngeal hair; chin fissure are present on 24% people while it is absent on 76% people, and polydactylus/syandactylus are absent in all members of studied caste.

Earlier coworkers like Malik et.al. ,1988; Bhasin et.al.,1992; Singh,1994; Chhikara and Yadav,2011; Jain et.al.,2013 observed that genetic variations between inter population and intra population, environment influence adaptation and physical anthropology is the main reasons for morphological traits variation. Similarly in the present study the main reasons for morphological variations is genetic variations between inter population and intra population, environment influence adaptation and physical anthropology.

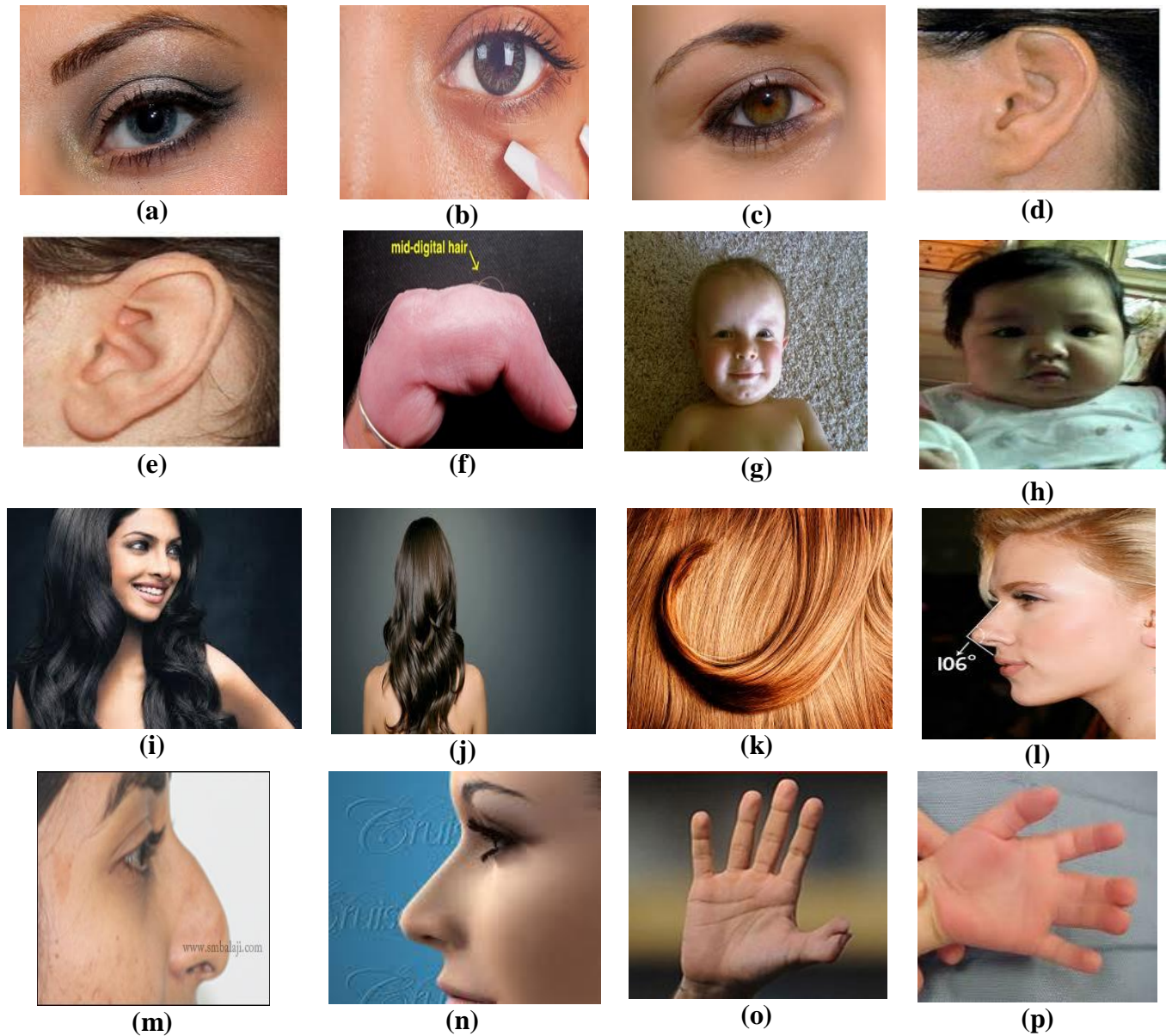


Fig. 2 Morphological traits among the Shorgir Rajput endogamous group, i.e., (a) black, (b) gray, (c) brown colour of eye; (d) attach ear lobe, (e) free ear lobe; (f) mid phyrngeal hair; (g) chin fissure present, (h) chin fissure absent; (i) black, (j) black light, (k) brown colour of hair; (l) upturn, (m) bent, (n) straight nose tip; (o) polydactylus and (p) syandactylus of fingers.

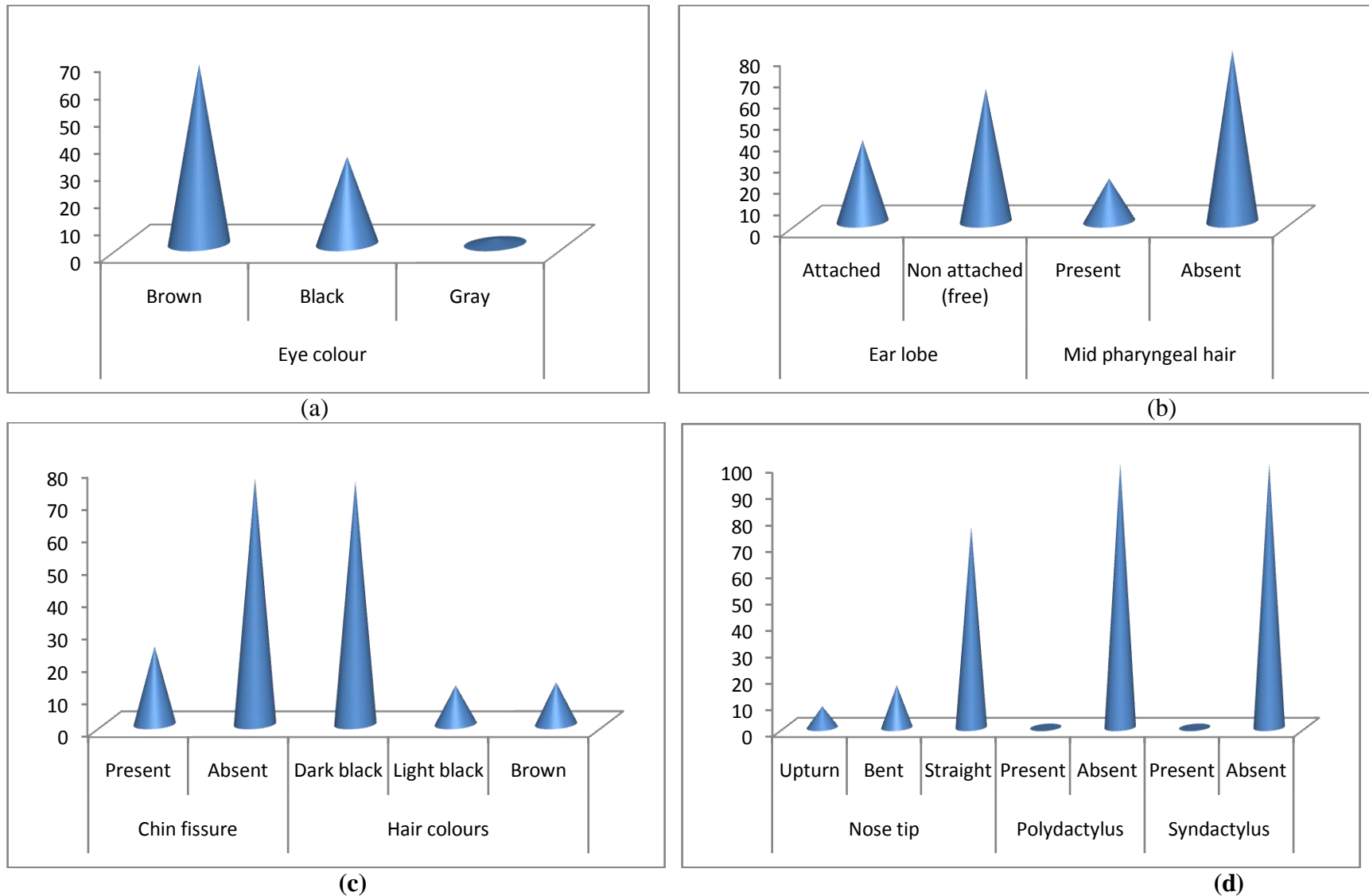


Fig. 2 %age of total numbers (out of 100 samples) of Morphological traits among the Shorgir Rajput endogamous group in district Jind, Haryana (India).

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