



Racial Criteria

(Stature, Skin Colour, Hair, Eye, Head, Nose, and Face)

Introduction

The racial criteria simply mean such characteristic features that can discriminate individuals of one community from that of another. In broader sense, prior to 1950, such attempts were made to categorize the population of the world into different races. Moreover, the first attempt was perhaps made in the beginning of the 20th century. Most Anthropologists acknowledge the feeling that people of one country are different from that of another country as well as people differed within the same country. They observed variable features among individuals and made several attempts to categorize human beings into certain pigeon holes like groups and thus the racial classification came into existence. The racial classification was simply meant to specify that how many different types of races are living in the world. And to categorize them as inhabiting different regions was a tedious task but still Anthropologists ventured to identify the major races as 1) The Caucasoid, referred as white skinned people 2) The Mongoloids, referred as yellow skinned people and 3) The Negroids, referred as black skinned people.



The Negros live close to the equator, the major areas of their habitat are part of African Continent. The Caucasoids are found in the areas above the equator basically in Europe, U.K., America, and Australia

The Asians, who had Mongoloid features, are present on the extreme North of the world as well as in Asia. Apart from these three major races, there are certain, sub races, which were identified by different researchers.

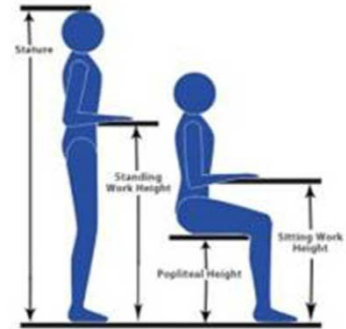
Coon, Garn & Birdsell attempted to classify the population of the world. Hooton came out with various morphological features and considered them as the criteria for differentiating races. He not only took morphological features and morphological variation but even considered stature, blood groups, fingerprint patterns and palmer main line formula into consideration. That is besides the fact that in due course of time UNESCO discarded the concept of race. Moreover, the term race was replaced by

ethnic groups. In the present day situation the term race has a limited usage where as the term ethnic group is used to represent people from different origin and countries.

Stature

Going by these features different researchers used somatometric and somatoscopic traits to classify human being into various groups or the races. The first and the most common criteria used by the researchers is stature or standing height vertex. Stature is a variable that sums up the total linearity of the body of an individual. And we also find that different climatic zones exhibit variation in features as well as in the height of individuals.

Martin 1927 suggested the following categories of stature for the purpose of classifying different population groups:-



Height categories	Range in cm.
Pygmies	up to 130
Very short	130 – 149.9
Short	150 - 159.9
Lower medium	160.0 – 163.9
Medium medium	164.0 – 166.9
Upper medium	167.0- 169.9
Tall	170.0- 179.0
Very tall	180.0 – 199.0
Giants	200.00 onwards

Accordingly, different categories based on stature were created from Pygmies to Giants. Pygmies are extremely short people and are confined to certain parts of Africa and in the Andaman and Nicobar Islands. They are so small that a ten year old child of another group may be taller than them.



The next category is that of very short individuals who are relatively taller than the Pygmies .Individuals falling in short category range in their height between 130 and 150 cm. Individuals belonging to this category inhabit Africa and Asia.

The next category is that of short statured people whose height varies from 150 to 160 cm which is nearly 5ft to 5ft 6 inches. This is an average height category of individuals and people of this height range are spread out around the world. People belonging to short category are there among Caucasoids, Mongoloids and Negroids.

The medium category individuals range in stature from 160 to 170 cm. These individuals are usually of average build. Some of them are thin and lean in their build while others have a stout build. Most people of European and Asian countries fall in the tall category. People inhabiting Northern part of India also fall in this category. This is followed by tall stature category. In this category the stature varies from 175 to 190 cm. One may come across tall people in parts of Africa, Europe, America, Arabia, Afghanistan, Pakistan and India. Finally, we have the category of very tall people whose stature ranges between 190.0 and 200.00 cm and are close to 7 feet in their height. Such people can be counted on fingers because there are very few people in this range of stature. The excessive tallness may be due to inheritance or because of gene mutations. People of this category are found in U.S., U.K. Australia, New Zealand, Africa and Asia. Finally the last stature category is that of Giants who are beyond 200.0 cm in their height. Such tall people are extremely few in number and could belong to Africa, Europe, U K or America. Stature has been considered as an important criterion for racial discrimination as the categories of stature are associated with the major races of the world.



Skin colour

Second racial criterion is the skin colour. We can observe variety of skin colours among the people living in the world. For example, if the parents of a child have fair skin colour, the children are expected to have fair skin colour. The dark skin colour develops according to the quantity of the melanin present in the skin. The melanin is a black pigment which varies from person to person. Some observers decide the skin colour by viewing the face of the individual, while some observe other areas of the body to identify the skin colour. It has been observed that the area which is exposed to sunlight is relatively darker than the unexposed areas of the body. Therefore the most appropriate body part to view the skin colour is the inner side of the upper arm as it remains in touch



with the body and has a lighter colour as compared to the outer (lateral) side of the upper arm. Using skin colour as a racial criterion the populations of the world are basically divided into three major racial categories. The white or light skin colour is more

often associated with the Caucasoids; the black skin colour is more frequently associated with the Negroids while the yellow or off white skin colour is invariably found among the Mongoloid people. Lushan and Fischer proposed the following categories of skin colour :-

A. Yellow

Yellowish White
Carmine White
Yellowish

A. White

Fawn White
Carmine White
Pinkish White

B. Brown

Light brown
Medium Brown
Dark brown
Reddish brown

C. Black

Grayish Black
Black

The yellow skin colour and its variants are associated with the Mongoloid people, while the White skin colour and its different shades are prevalent among the Caucasoids.

Different shades of brown colour are found among other Asian groups who are sub-types of Caucasoids and the American Indians who are variants of Mongoloids .The black skin colour is associated with the Negroids who are frequently present in Africa and parts of America besides some other Asia Pacific islands.

So using skin colour as a criterion we can differentiate individuals into major racial categories



Hair

Hair is another character which has been used as a criterion to discriminate races of the world. Apart from hair colour, hair texture also plays an important role in distinguishing the major racial groups. Hair texture helps in categorizing individuals into different groups as hair colour. Hair texture can be described in the following manner:-



According to Martin and Saller (1959) the hair texture can be categorized into following varieties:

1. Straight
2. Sleek
3. Flat waved
4. Broad waved
5. Narrow waved
6. Curly
7. Frizzly
8. Widely knit
9. Closely knit
10. Peppercorn
11. Spiral

First two varieties are most common among the Mongoloids while from third to sixth category hair are frequent among the Caucasoids while the remaining types from seventh to eleventh are observed among the Negroids



Fischer and Saller categorized different varieties of hair colour and suggested following types:-

1. Ash blonde
2. Light blonde
3. Blonde
4. Dark blonde
5. Light brown
6. Medium brown
7. Dark brown
8. Chestnut
9. Red

- 10. Reddish brown
- 11. Black

First five varieties of hair colour are frequent among the Caucasoids, while medium brown and dark brown varieties are more often found among the Mongoloids. The Negroids, however exhibit black hair colour as the most common type but they exhibit dark brown shade also. The chestnut colour is present among different European populations who are variants of Caucasoids. The red colour or the reddish brown colour is commonly found among the people of Scotland, and Iceland, who are a sub type of Caucasoids. The red colour is also present among certain European groups.

Other morphological features that can be employed in racial discrimination are:-

- Head form
- Eyes
- Nose
- Face

Head Form

Shape of the head pertains to observing the kind of head an individual has whether it is a **long, medium sized** or round /**broad head**. While studying the head it is necessary to know the length and the breadth of the head. So we measure the maximum head length and maximum head breadth and calculate an index which is known as the **Cephalic Index**. The Maximum head length is taken between **Glabella** and **Opisthocranion**.



Glabella is the most anterior point on the lower margin of the forehead between the eye brows in the **Mid sagittal plane**, when the head is oriented in ear-eye plane.

Opisthocranion is the posterior most point on the head in **Mid sagittal plane** which is farthest from the Glabella, when the head is oriented in ear-eye plane.

Both these measurements are taken with the help of spreading caliper. So after measuring the length of the head we measure the breadth of the head. Breadth of the head is obtained as the maximum transverse distance between two Euryon points.

Euryon is defined as the most lateral point on the region of parietal eminence; this point is not fixed and is located by exploration where ever we can get the maximum breadth. Head

breadth is obtained at right angles to the maximum head length when the head is oriented in ear-eye plane.

Using the length and the breadth of the head we calculate the Cephalic Index, which is obtained by the dividing the maximum head breadth by the maximum head length and multiplying it by hundred. Based on the value of the Cephalic Index individuals are categorized as Dolichocephalic Head. It is a long head and the value of the index is up to 76.0, it is considered to be medium category head or Mesocephalic type when the value is above 76.0 and below 81.0. It is considered as broad when the value of the index is beyond 81.0. Going by these values we broadly discriminate people.

For looking at the shape of the head we observe the contour of the head from top to get an idea. Using the Cephalic Index as a criterion of the head form, Dolichocephalic type of head are common among the Negros because they have the longest heads. The length of the head may vary between 18 cm to 22 cm while the breadth would be between 13 cm to 14 cm. As the difference between length and the breadth, the net result would be a Dolichocephalic head.

In the case of the Caucasoid, the head would be invariably Mesocephalic type, i.e., neither too long nor too narrow. Caucasoids inhabit in America, Europe, Australia, parts of Asia where we find the Mesocephalic type of heads. The broad or round heads are found invariably among the Mongoloid people. Going by their head dimensions it is observed that the difference between the head length and the head breadth is very less thereby resulting into a very high value of the index which may be beyond 81. Such heads are identified as Brachycephalic heads. So this is taken as an important discriminating feature as it can easily differentiate the three major races on the basis of the Cephalic Index.

Eye



Another important feature which we have in this module is **the eyes**. The eyes are to be observed for two different aspects. One is about the axis of the eye. The axis of eye is to be viewed from the inner part of the eye where the upper and the lower eye lids meet to the lateral side, where the lower and upper eye lid margins meet (outer canthus). We consider these two points and draw a line and observe whether it is horizontal, inclined inwards or inclined outwards. Invariably the Caucasoids and Negroids have horizontal axis while the Mongoloids exhibit inward or outward slant in the axis of the eyes. But this is not a very important racial discriminating criterion as compared to the colour of the eyes or the fold of the eyes. It has been observed that the Negros have wide open eyes as compared to the Caucasoids who exhibit invariably the average opening of the eyes. The Mongoloids invariably exhibit a typical type of fold which is known as the Epicanthic fold. Due to the presence of this fold they cannot open their eyes completely and it appears that their

eyes are half open or the half eye is closed. The fold covers the iris portion to a level that the complete iris is not seen. This is the natural adaptation of the Mongoloids because they live in a snow bound areas and the snow glare which can damage their iris.

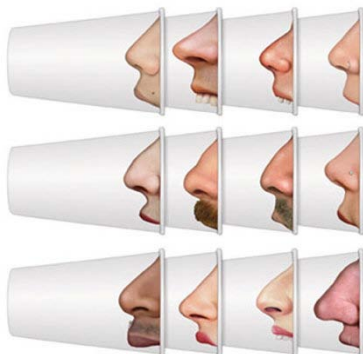
The third component of the eye is the eye colour. The eye colour varies from the dark to the light shades. There exists an association between the hair colour and the eye colour. The dark colour or black eyes are associated with black or dark brown hair colour. Both the associated characteristic features are present among the Negros. It has been observed that the Negros have jet black eye colour and their hair colour is also black The Caucasoid, on the other hand shows the maximum variation in their eye colour as well as maximum variation in their hair colour .



The light brown, medium brown and the dark brown shades of the eye colour are not very common among the Caucasoids. Similarly the blonde colour eye which is giving the bluish tinge, the ash blonde, the red, grey and greenish colour is quite frequent among the Caucasoids. These colours are associated with light shades of the skin colour and hair colour.

The Caucasoids exhibit maximum variation in the eye colour, the Mongoloids normally have black, dark brown and medium brown coloured eyes. So the eye colour can be taken as a strong criterion for discriminating the races.

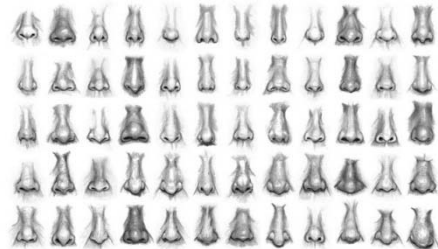
Nose



The next important feature that we have is the **nose**. Nose is one of the most important features of the face which is used for identifying people and as well as discriminating them from different ecological regions. The variation in the size and the shape of the nose can be observed by viewing the profile of the nose. The profile of the nose as seen from the side is known as nasal bridge. Nasal tip is that portion of the nose where nasal bridge and nasal septum meets. It is the anterior most part of the nose. Nasal septum is more or less horizontal base of the nose. For racial discrimination purpose we observe whether the profile of the nasal bridge is straight, concave, convex or angular. Subsequently we look at the tip of the nose to find out whether the tip is pointed, round, bulging or is it beak-shaped. These features of the nose have some kind of association with the major racial groups because individuals, who possess the pointed tips, generally belong to the Caucasoid category. The round nasal tip is a Mongoloid feature.

They have concave bridge and the nasal root area is wide and almost flat at the level of the face. These are the typical features of the Mongoloids.

The Negros on the other hand possesses a very prominent broad nose. If we calculate the Nasal index of Negros, the index value would be very high (may be 90.0 or above) because the difference between the nasal breadth and the nasal height is very little. Their nose is as broad as it is long. While the Caucasoid have the longest nose, it is usually long and narrow in its shape and form. The Mongoloids have the short nose they are perhaps the people with the shortest nose the broad noses are associated with the Negros,



Face



Observation of **face** is another criterion for classification of race. To observe at the face of an individual, we need to see form of the face, starting right from the upper most margin of the head to the chin, and the jaw portion, and going by this observation we can decide whether the shape of the face is broad, round, long, narrow, elliptical, squarish, pentagonal or hexagonal. These are the variations observed in the facial form. While observing the face, we have to follow the procedure of viewing her face from the upper margin and then viewing the facial breadth at the level of zygomatic area and moving down towards the lower jaw.

The lower jaw breadth may be greater than the facial breadth or lesser than the facial breadth (this is an important feature in deciding the shape of the face) and finally we observe the chin to decide whether it is round, flat, pointed, squarish or with a depression and then finally decide the shape of her face. Some people have very pointed chin so the lower part of the face become very pointed here while others have very broad face and they show extreme breadth. Some people have very broad jaw because they show greater portion. If this portion is broad and if this portion is narrow the shape of the face is Identified as elliptical because it becomes pointed and narrow and this is the flat portion. Facial form has been taken as criteria for classifying individuals. The Negros has invariably elliptical and long face.



The Caucasoid have both long face as well as medium shaped face. Pentagonal face is observed in some Caucasoids and in some Mongoloids but Negros do not normally

have Pentagonal shaped face. But they may show at times a squarish face or quadrangular face. So this consideration may be taken as the criteria for identification and to discriminate races. But going to the outline, of the face it is more important in the identification that you have a typical type of face through which you could be identified with. But in certain cases you cannot say with certainty if the person is Caucasoid because his face is oval or Negros or Mongoloids. Mongoloids face is generally round or broad because Caucasoids and Negroids do not have round face. But instead they invariably have a longer faces, or inverted elliptical, or egg shaped face. So going by this variation, we can to some extent differentiate the major racial category.

CONCLUSIONS

In this module we have tried to show the application of different somatometric measurements and somatoscopic (morphological) observations in racial classification like skin colour and hair form and colour to distinguish major races of the world. The different stature categories ranging from pygmy, short, medium, tall, very tall to giant have been used to differentiate Caucasoids, Mongoloids and Negroids. Different shades of skin colour and hair colour have also been used to distinguish the major races. Similarly head form, eyes, nose and face form are also important criteria used for discriminating the major racial groups. The different forms of head have been used in the form of Cephalic index and its association with Caucasoids, Mongoloids and Negroids.

