

## The concept of the 'normal' face

We may compare the measurements and proportions of the face to the so-called population norms (normative values) however in theory variations exist but in practice the need to apply a normative value exists after all individual variability is a fundamental principle in human biology.

Therefore it is necessary to consider age, sex, ethnic variability, developmental disorders, traumatic injuries and pathological conditions when measuring facial attractiveness.

## Proportion Indices

Linear (chord) or surface (arc) distances between two points of the skull is measured and the smallest measurement is represented as a percentage of the largest measurement (linear distances can be the measurement of two points inside the skull using an X Ray of the skull while surface distances are measurements between two points from the outside of the skull).

## Creating a proportion index or proportion indices

The smallest measurement (the numerator) is multiplied by 100 and divided by the largest measurement (the denominator)

## Types of proportion indices

- Areal (regional) indices - composed of linear or angular measurements from only one anatomical area.
- Interareal (interregional) indices - composed of linear or angular measurements from two or more anatomical regions.

## Important to consider

When comparing user proportion index value with the mean index value, if the measurements are within plus or minus one standard deviation of the mean then it is considered as normal proportions. If the values are plus or minus two standard deviations from the mean index value then that facial feature is considered as a deformity.

Sometimes if the range of variability is small in which case even a small difference from the mean may be perceived as a deformity.

## Facial Shape

Different facial shapes according to the frontal view of the face

- Overall facial shape - round, square and triangular
- Vertical facial height - reduced, normal and increased
- Transverse facial width - broad (wide), normal and narrow