

Digitalizing Aesthetics in Prosthetics, Correlating Face with Tooth Form

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Abstract

Aim: The purpose of this study was to generate the computer based programme which will prove its efficacy in analysis of the co-relation between aesthetic factors i.e. face form, tooth form and relative size ratio and to evaluate the same in the Indian population.

Material & Method: Two hundred undergraduate dental students (100 males and 100 females) whose age ranged between 20-25 years having healthy natural central incisors with minimal restorations were selected. A digital camera SONY DSC-H55 with 14 megapixels was used for the study. Customized software was developed with the help of a software engineer. Using a standardized procedure, three photographs of full face, central maxillary incisor, and face with maxillary incisor teeth were clicked. Photographs were uploaded in the software and a) Analysis of face form versus tooth form (Qualitative analysis). b) Analysis of Relative size ratio (Quantitative analysis) was done by following multiple tabs in a sequential manner. **Results:** The qualitative analysis revealed only 23% correlation between face and inverted tooth form. Quantitative analysis revealed the Relative Size Ratio of face and teeth was in the range of 13 to 16 for females and 15 to 16 for males. **Conclusion:** Insignificant co-relation was found between Face form and teeth form on Indian population and a particular range of relative size ratio of Bizygomatic width to width of maxillary central incisors was observed, which varied based on gender.