

# Comparison the shade of upper central incisor with three shade guides

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## Abstract

### Background and Aim:

Tooth shade selection has long been a challenge in dentistry. According to huge number of edentulous people, in need for prosthetic treatment, determination of natural teeth shade distribution is necessary. Based on deficiencies in regard to prevalence of tooth shade and their matching shade guides, this study was designed to compare upper central incisors shade with three different shade guides.

### Methods and Materials:

This cross-sectional study was conducted on 120 maxillary central incisors of dental students, all over 18 years old. Census of the students was performed to complete sampling. After stain and plaque removal two observers (a dental student and a prosthodontic) determined the shade of upper right or left incisor visually and then by aid of three different shade guides (Polident, Ivoclar Chromascop, Vitapan classic). In order to compare the chosen shades by the two observers and also to with the shade guides kappa coefficient was used.

### Results:

58.3% of the samples were female and 41.7% were male. The average age was  $24 \pm 3.5$  years with minimum 19 and maximum 41 years. The highest rank reported by the two observers in Vita classic shade was A hue (prevalence: 77-78%) followed by A2 (42.9%, 45.9%) and A1 (23.5%, 25%). Hue C had the least prevalence (1.2%). Shade selection by Ivoclar chromascop shade guide revealed that the color (120) and the color (110) had the greatest prevalence (44.2% and 41.7% respectively). In Polident shade guide group, the color (Y1) had the highest prevalence (71.7%).

**Conclusion:** According to the findings distribution of natural teeth shade is higher in Vita classic shade guide which makes it a more practical guide. The shades in Ivoclar and Polident guides were found in smaller proportion of natural teeth determining their lower matching to natural teeth.

**Key Words:** shade guide, maxillary incisor, removable denture

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