

## COMMENTARY

Effects of Vertical Positions of Anterior Teeth on Smile Esthetics in Japanese and Korean Orthodontists and Orthodontic Patients<sup>1</sup>

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Dental specialties have now paid great attention to appearance and esthetics. Optimal facial esthetics has become a major treatment goal in contemporary orthodontics. This paper evaluates the influence of vertical positions of anterior teeth on smile esthetics as assessed by Japanese and Korean orthodontists as well as by orthodontic patients.<sup>1</sup> Patients' smiling photographs, displaying first molar to first molar were constructed. Vertical positions of anterior teeth were evaluated after digital modification in 1-mm increments, from 5 mm upper lip coverage of the incisors to 5 mm gingival exposure. The result was concluded that the orthodontists and the female patients shared the similar preference in the smile evaluation of vertical positions of anterior teeth, whereas the male orthodontic patients were more tolerant of upper lip coverage of the anterior teeth.

The literature found a significantly different smile perception between Asian and Western societies. Specifically, the acceptable upper lip coverage for Asian females and males of the anterior teeth is 0 mm to 2 mm and 0 mm to 5 mm, respectively. In contrast, Kokich and colleagues<sup>2</sup> and Chang and colleagues<sup>3</sup> reported that  $\pm 4$  mm of gingival display is an acceptable threshold in the United States. Sharma and colleagues<sup>4</sup> further found no significant differences in smile characterization between the US Asian Indians and Asian Indians. Indians have received a great cultural influence from Western countries and delineates its culture from Eastern Asia. Therefore, the perception for smile esthetics is different between India and Japan or Korea. The appreciation of beauty appears bound to culture. Gummy smile has been considered frivolous in Asian culture. Male chauvinism is dominant in Japanese and Korean cultures as well as other Asian countries, which may have an impact on smile perception.

The information provided in this study appears important for ethnic and cultural consideration in Eastern Asia. The practitioners in Japan and Korea, perhaps Taiwan and China as well, would benefit from it. Force vectors during the orthodontic treatment should be directed toward achieving the acceptable vertical position of the anterior teeth–lip relationship as mentioned earlier. Applying the “planned incisor position” principle, or PIP,<sup>1</sup> in modern orthodontic treatment may take into account the combined factor of the gender, ethnicity, and culture in today's global world.

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