

## Lay People Perspective on Smile Esthetics: How does Age Influence?

Cynthia Malquichagua<sup>1\*</sup> and Katty Ríos<sup>2</sup>

<sup>1</sup>University of Santo Toribio de Mogrovejo, Chiclayo-Peru

<sup>2</sup>Scientific University of the South, Lima - Peru

**\*Corresponding author:** Cynthia Malquichagua Veramendi Jr, University of Santo Toribio de Mogrovejo, Chiclayo-Peru.

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Aesthetics play an important role in people's lives; and facial appearance has a profound influence on personal attractiveness and self-esteem. This appreciation of beauty is influenced by individual factors such as gender, age, and ethnicity; as well as, by education, the influence of marketing, the media, fashion, culture, history and art [1, 2].

The anatomical region that plays the most important role in a person's physical attractiveness is the face; and after the eyes, dental appearance is the second most important aspect of facial attractiveness. Smiling is the most common facial expression used to express kindness, agreement and appreciation; in which, an aesthetic smile plays a fundamental role [1, 3, 4]. The perception of beauty in a smile depends on its composition and rules that have been proposed in natural dentition [3, 5, 6].

Dental researchers have proposed various definitions and concepts of beauty and aesthetic proportions, especially for anterior teeth; since these teeth play a fundamental role in the aesthetics of the smile. The position of the upper anterior teeth is a fundamental component of an attractive smile, determined through common sense and professional evaluation. Several components play an important role in creating an attractive smile; such as, an adequate smile arc, the state of the buccal corridors, the golden ratio and the proportionality and symmetry of its components [3, 4]. The golden ratio was the best-known metric used to find an aesthetic ratio between the upper anterior teeth [1, 3, 7].

Many studies have identified and debated the factors that play a role in an attractive smile. It appears that the size of the teeth and their alignment, visibility of the teeth and the position of the upper lip have the greatest effect on creating an attractive smile. In addition, the minimum gingival exposure while smiling is assumed to be more aesthetic, than an exposure greater than 3 mm. Another important factor is the parallelism of the maxillary anterior incisal edges and the lower lip and their asymmetry. Different parameters have been used to provide an objective aesthetic analysis in a systematic and dynamic way, including the coinci-

dence of the midline; as well as, the symmetry on both sides of the median line [5]. Not only the size and shape of the lips must be analyzed (static analysis), but also, the amount of gum tissue exposed during movements (dynamic analysis). Some of the parameters of the smile change with age, especially the exposure of the maxillary and mandibular teeth during the smile, many of the other parameters are constant.

Aesthetics affects both a person's quality of life and well-being and is an important reason for patients to visit the dentist. Patients consider the replacement of an anterior tooth to be much more urgent than replacement of a posterior one [6]. Furthermore, it appears that people are also able to recognize the characteristics of an ideal smile. However, many specialists do not pay much attention to correcting small asymmetries or dissimilarities, since they believe that most patients cannot detect them. On the other hand, the definition of dental beauty differs between populations, regions, countries and even continents [5]. Dental beauty is also dynamic, with its parameters changing over time. Currently, interest in cosmetic dentistry has increased, resulting in individuals of different ages seeking orthodontic treatment. Age is a factor that affects the perception of the aesthetics of the smile [8]. As well as it is influenced by personal experiences and social environment; Furthermore, numerous studies have concluded that the professional and general population differ considerably in their preferences for what they consider an aesthetic smile [9].

It is clear that people can identify several factors that affect the aesthetics of the smile, perception is defined as a cognitive process that involves the interpretation of a stimulus and the recognition of the object through a sensation. This process is based on previous experiences and represents the instrument by which one becomes familiar with the environment, the perception has a psychological basis; and therefore, it is not simply allied with the sensation, generally the perceptions of others can produce an environment that can affect the social and intellectual development of a person, it has been confirmed that the perceptions of others

can influence the way a person acts and even result in long-term developmental changes and varying levels of achievement. It is accepted that there is often a discord between the opinions of people and professionals in Regarding dental aesthetics, therefore, doctors can expect that their patients are more attentive to some dental aesthetic factors than to others. In addition, it is important to define the thresholds of aesthetic acceptability for facial and dental aesthetic problems: that is, the minimum level of aesthetic harmony that an outside observer can approve as pleasant [10].

The upper anterior teeth are a key aesthetic component of a smile. Three aesthetic smile variables associated with upper anterior teeth and age-related changes have recently received considerable attention: the position of the incisal edge of the maxillary central incisors, the maxillary gingival exposure, and the presence of a black triangles between the central upper incisors [8].

Sriphadungporn, conducted a study in Thailand, evaluating the influence of age on the aesthetic perception of the smile, dividing it into two groups: a) Young: 15 to 29 years old and b) Older: 36 to 52 years old; finding a similarity between both groups regarding the perception of the attractiveness of the smile with respect to the positions of the incisal edge of the upper central incisors; Likewise, it was found that when the upper lip covered the maxillary teeth, the perception was negative; this was probably caused by the assumption that less visualization of the gingival is a sign of aging [8]. Likewise, a study by Al taki carried out in Saudi Arabia revealed that an excessive display of the gingiva known as a "gummy smile" can be an unattractive smile with an acceptance of up to 1mm of gingival visualization between its two study groups, group of dentists with a mean age of  $34 \pm 7.81$  and ordinary people between  $36 \pm 8.62$  years. (9) On the other hand, in the same study, they showed that of both age groups (15-29 years) and (3652 years) with regard to the effect of the aesthetics of black triangles between the central maxilla and the incisors were similar. These findings indicate that the older group was more tolerant of having a black triangle compared to the younger group. This is probably due to the fact that black triangles are more common in the adult population; since aging leads to a reduction in the height of the interdental papilla. Therefore, older people are probably more tolerant of this appearance [8].

Different studies report that age also influences the aesthetic perception of the smile; above all, when the diastema of the midline and the black triangle are evaluated; concluding that younger age groups are more critical than older subjects [1, 5, 8, 9]. Finally, dentists should complement their technical skills and scientific knowledge with a knowledge of art to achieve symmetry,

harmony, balance and proportion in their treatment; However, since the concept of beauty is subjective and broad, it is difficult to establish ideal standards, therefore, before starting a treatment, the preferences and expectations of the patients should be considered, taking-into account their age [6].

### Conflicts of Interest

The authors declare no conflicts of interest

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