

FEATURES SECTION

Letters to the Editor

Dear Sir

Averageness as the ideal

I read with great interest Ray Edler's recent paper (2001).¹ I feel that as it stands, this concept is rather too simplistic. Journal readers will be aware that there are numerous different kinds of characteristics that can be measured on humans and require to be handled differently, both for formal statistical analysis and informal discussion. A glance at the issue of the journal issue that contains this article reveals several different kinds of variables, such as binary (gender), categorical (type of malocclusion), discrete (number of nights of in-patient stay), and continuous (ANB angle). Edler's discussion refers implicitly to characteristics that potentially vary on a continuum. I would like to point out that, even among characteristics of this type, there are unequivocally several different kinds. There are some characteristics that we want to be in the middle of the scale, some we want to be towards one end of the scale, and some we want to be right at one end of the scale.

The primary goals of orthodontic treatment are straightening of teeth and improvement of facial profile by jaw alignment, and are pursued for a combination of functional and aesthetic reasons. Certainly, for the issue of jaw alignment, the accepted ideal is somewhere in the middle of the scale. Indeed, I understand that the treatment goal does not explicitly take gender into account, even though Edler argues that what is socially regarded as ideal differs somewhat between males and females. Conversely, for straightness of teeth, the ideal is right at the end of the scale, the complete absence of irregularity. Much the same applies to another dental issue of cosmetic importance to the population, namely whiteness of teeth. Whitening toothpastes are marketed

and evidently sold at prices that are, in some cases, several times higher than those of standard pastes, to individuals who want a degree of whiteness at the extreme end of the scale. Strictly speaking, for whiteness read pearliness, rather than the kind of whiteness to which paint manufacturers aspire. Perfection, of both tooth alignment and pearliness, is enshrined in the standards to which dentures are produced. An appearance of pristineness seems to be the underlying goal here.

Many physiological parameters are governed by homeostatic mechanisms, and either very high or very low values are likely to indicate a diseased state. However, this does not imply that a value in the middle of the distribution observed in the population is ideal—irrespective of whether we consider the mean (average), median (middle value), or mode (most frequently occurring value). As a consequence of our lifestyle in Western societies, the distributions of parameters such as blood pressure or body mass index (weight in kilograms divided by the square of height in metres, a convenient measure of weight relative to height) are shifted well to the right of the values that carry the best prognosis for remaining healthy. For these characteristics, ideal values will tend to be those in the lower half of the distribution, but not right at the lower end. What is commonest in our society may be close to ideal for some characteristics, but certainly is not for others. It all depends on just what we are measuring.

Reference

Edler RJ. Background considerations to facial aesthetics, *J Orthod* 2001; **28**: 159–168.

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