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## Compensatory developmental interactions in the size of permanent teeth in three contemporary populations

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### ABSTRACT

The purpose of this study was to determine whether developmental interactions exist between the mesio-distal diameters of the first and second developing teeth in each of two morphologic tooth classes. The interactions were evaluated for the maxillary and mandibular incisors and premolars. Measurements were obtained on the dentitions of three contemporary samples from Iowa, Egypt and Northern Mexico.

The findings from this study indicate that developmental interactions are present in the mesio-distal diameters between the first and second developing teeth within the two morphologic tooth classes evaluated, namely incisors and premolars. In other words, the mesio-distal diameter of the first developing tooth significantly influences the size of the second developing tooth within the same morphologic class.

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