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*The Angle Orthodontist*: Vol. 69, No. 4, pp. 334–344.

## Morphology and growth in convex profile facial patterns: A longitudinal study

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### ABSTRACT

Two groups of females, one with normal anteroposterior jaw-base relationships and the other with distal jaw-base relationships, were selected at age 6 and compared longitudinally up to age 18. The purposes of this study were, first, to reveal morphological factors that caused or contributed to a distal jaw-base relationship, and second, to compare growth in the two groups. A distal jaw-base relationship is not a morphological entity caused by some specific aberration in the cranial base or jaws. Rather, it is the result of a combination of predisposing deviations with varying degrees of gravity. A short mandibular corpus and a large MP-SN angle were the only deviations with significant group differences. Distal jaw-base relationships generally worsened with age as compared with normal anteroposterior jaw-base relationships. Inadequate increase in mandibular corpus length in the 6- to 12-year period contributed to the worsening, as did the mandible growing more vertically than normal after age 12.

**KEY WORDS:** Cephalometrics, Longitudinal, Convex profile, Distal jaw-base relationship, Females.

Submitted: July 1998

Accepted: December 1998.