

[\[Print Version\]](#)

[\[PubMed Citation\]](#) [\[Related Articles in PubMed\]](#)

The Angle Orthodontist: Vol. 64, No. 6, pp. 419–424.

A longitudinal evaluation of open mouth posture and maxillary arch width in children

Alan M. Gross, PhD;^a Gloria D. Kellum, PhD; Diane Franz, BA; Kathy Michas, BS; Michael Walker, BA; Monica Foster, MA; F. Watt Bishop, DDS, MS

^aPsychology, University of Mississippi, University, MS 38677

ABSTRACT

Open mouth posture and maxillary arch width were assessed annually for 4 years in a group of children. While younger children exhibited high levels of open mouth posture, this behavior decreased significantly over time. Racial and sex differences, as well as a race-by-time interaction were also evident. The children displayed a significant increase in maxillary arch width across time with sex and racial differences in this growth pattern. Subjects were classified as exhibiting primarily open mouth or closed mouth posture. Although both groups showed increased maxillary arch widths over time, the closed mouth subjects showed significantly greater maxillary arch growth.

A. M. Gross, Professor of Psychology, University of Mississippi

G. D. Kellum, Professor of Communicative Disorders, University of Mississippi

D. Franz, K. Michas, M. Walker and M. Foster are doctoral students in clinical psychology, University of Mississippi

F. W. Bishop is an orthodontist and director of F. Watt Bishop and Associates, Oxford, MS

KEY WORDS: Maxillary arch width, Mouthbreathing, Open mouth, Children, Habit.