

TWIN STUDIES IN GROWTH AND SENESCENCE

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Chronological Development of Bones and Teeth

A twin study *

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The hereditary component of the chronological development of bones and teeth has been studied, in 40 twin pairs aged 5-7 years, through dental age (defined on account of the mineralization of the permanent dentition's dental buds) and bone age (defined on account of the presence and form of the hand ossification nuclei).

The statistical analysis shows a correlation coefficient of 0.95 in MZ and 0.84 in DZ twins for dental age; and of 0.94 in MZ and 0.81 in DZ twins for bone age.

The following are therefore the estimates of the hereditary component (based on Holzinger's formula) for the two parameters studied:

Parameter	Hereditary component (\hat{H})	Probable error [$Pe(\hat{H})$]
Dental age	0.68	0.14
Bone age	0.67	0.13

* For the complete study, cf. II.1, in:

L. Gedda, G. Brenci (1969). Biology of the gene: the ergon/chronon system. *Acta Genet. Med. Gemellol.*, **18**: 329-379.

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