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## Correlation and prediction : Interpreting the significance of $r$

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### ABSTRACT

Given the growing popularity of cephalometric programs for the personal computer, it is once again necessary for the specialty to confront the problem of prediction accuracy. The strength of the relationships upon which a prediction scheme is based is often assessed by means of the coefficient of linear correlation,  $r$ . Although it is common to judge the practical significance of a relationship by squaring the correlation coefficient, the present paper argues that the *index of forecasting efficiency*, the percentage reduction in error, is not only the more appropriate index, but also one that is easy to infer directly from  $r$ .

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