

[Falk, Michael](#)

**Relative deficiency of kernel type estimators of quantiles.** (English) Zbl 0533.62040  
[Ann. Stat. 12, 261-268 \(1984\)](#).

Summary: In this paper the asymptotic relative deficiency of the sample  $q$ -quantile with respect to kernel type estimators of the  $q$ -quantile is evaluated. The comparison is based on the mean square errors of the estimators. The result suggests a purely analytic measure of performance within the class of kernels. It is notable that a similar situation occurs when kernel estimators of a distribution function are studied.

**MSC:**

[62G05](#) Nonparametric estimation  
[62G20](#) Asymptotic properties of nonparametric inference  
[62G30](#) Order statistics; empirical distribution functions

Cited in **50** Documents

**Keywords:**

kernel type estimators of quantiles; mean square errors of estimators; Bahadur approximation; asymptotic relative deficiency; sample  $q$ -quantile

**Full Text:** [DOI](#)