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**Students' difficulties in understanding of confidence intervals.**

Ben-Zvi, Dani (ed.) et al., The teaching and learning of statistics. International perspectives. Cham: Springer (ISBN 978-3-319-23469-4/hbk; 978-3-319-23470-0/ebook). 129-138 (2016).

Summary: There is substantial evidence that university students have considerable difficulties with basic concepts in understanding of statistical inference. This chapter presents the results of a study aiming to analyse the students' difficulties in understanding of confidence intervals at the level of a first course in statistics at university. To this end, a written test was applied to 33 students where they were asked to provide detailed explanation to their answers. The elements of meaning (extensive, ostensive, actuating, intensive and validating) present in students' responses are examined as revealing comprehension. The results point to several difficulties regarding confidence intervals which should be taken into account to improve the teaching and learning of this topic.

*Classification:* D75 K75

*Keywords:* confidence intervals; university; students' difficulties; elements of meaning

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