



## **The relationship between learning approaches and students' achievements in an introductory statistics course in Finland**

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The aim of the study was to investigate the relationship between learning approaches and students' achievements in an introductory course of statistics at the University of Helsinki, Finland. These topics have been studied extensively, but surprisingly there is not much published research related specifically to the statistics education, although statistics is needed and taught everywhere, especially as a minor subject. The current research was based on ASSIST measurement instrument and its condensed version that has been recently suggested for multinational studies in statistics education. This was the first study of the learning approaches in the history of this course. At this stage, the data were analysed by descriptive statistics and exploratory factor analysis that revealed a clear three-factor structure of the learning approaches. Preliminary results concerning the relationship between the learning approaches and students' achievements were found by correlations between different scales and variables. This research is a part of a larger multinational study on learning approaches in statistics. It includes students from Italy, Australia, Argentina, Turkey, and Vietnam.

**Keywords:** learning approaches in statistics; ASSIST; students' achievements; multinational study.