

An Exploratory Examination of the Use of Co-Occurrence Network Analysis to Assess the Anxiety and Beliefs in College Students When Performing Mathematical Computation

Christoper Magalis¹, Rick Parente², and Jaclyn Kenney²

¹Towson University

²Affiliation not available

February 03, 2020

Abstract

This study used co-occurrence network analysis to study the experience of college students when solving statistics or algebra problems. Students generated words to describe their perceptions of solving a standard deviation problem and a quadratic computation. Results indicated that the statistics problem was associated with words indicating “anxiety” and “confusion”. Conversely, words, such as “relaxed and ”familiar” were used to describe solving the quadratic computation. Additionally, rating scales measuring statistics anxiety, math anxiety, and math helplessness, showed that math anxiety tended to predict statistics anxiety for all students, above and beyond math helplessness.

Hosted file

An Exploratory Examination of the Use of Co.docx available at <https://authorea.com/users/718040/articles/703338-an-exploratory-examination-of-the-use-of-co-occurrence-network-analysis-to-assess-the-anxiety-and-beliefs-in-college-students-when-performing-mathematical-computation>