Brian Arthur Christopher*, brian.christopher@unco.edu, and Gulden Karakok. The Relationship Between Pre-service Elementary Teachers’ Calibration, Mathematics Anxiety and Achievement.

The recent research study by Chang and Beilock (2016) indicates that math anxiety is highly prevalent in students’ learning, and in fact has significant negative relationship with math achievement. Hence, as educators we need to understand the factors that explain the relationship between math anxiety and achievement, and find ways to help students and enhance students’ comprehension and achievement of math. In this presentation, I share results of a study that explores this particular issue through the construct, calibration, and its relationship with math anxiety and achievement in pre-service teachers enrolled in a math content course. Calibration can be described as the alignment between what a person believes s/he is capable of and what the person is actually capable of. Through the correlational analyses, I found significant correlations between calibration and exam performance, calibration accuracy and math anxiety, math anxiety and exam performance. In the linear mixed model, calibration and math anxiety were significant predictor of math exam performance along with the interaction between calibration bias and teacher. These results indicate that as a student becomes more calibrated and less mathematically anxious, his/her exam score increases. (Received September 24, 2017)