An investigation of attribution theory with College Algebra students via Mathematics Attribution Scale (MAS): Implications to Teaching and Learning Undergraduate Mathematics.

Essentially, causal attribution deals with the manner individuals attribute the causes of their successes and failures. For example, in an achievement motivation task, such as mathematics, students tend to evaluate the outcome of their performance by ascribing their success and failure to ability, effort, luck, or task difficulty. Obviously, attribution ascriptions do have learning implications particularly in a subject matter like mathematics. Students who believe that ability is the only relevant factor in predicting success in basic mathematics as opposed to quality of effort may have difficulty pulling themselves up with their bootstrap in a mathematically sense. Mathematics Attribution Scale (MAS) was developed by Fennema, Wolleat and Pedro (1979) for ascertaining the attributions ascriptions of high school students. This study investigated the psychometric qualities of MAS using college algebra students. The idea is to determine its validity at the college level. The implications to learning and teaching mathematics which are offshoots from this study will be presented as well. (Received September 18, 2009)