

# Implicit Theories of Intelligence as a Correlate for Pre-Service Elementary Education Majors' Change of Musical Self-Efficacy

## Abstract

Self-efficacy (personal capability beliefs) and implicit theories of intelligence (entity vs. incremental) have been examined in a variety of musical contexts; however, the relationship between these two constructs has yet to be explored in the field of music. The purpose of this study was to investigate elementary education majors' ( $N = 44$ ) musical self-efficacy in relation with their implicit theory of intelligence and to examine whether differences existed in these constructs for musicians and non-musicians. Elementary education majors enrolled in a music methods course at a southern university were surveyed using a Musical Background Survey (MBS), a Music Teaching Self-Efficacy Questionnaire (MTSEQ), and Carol Dweck's (1999) Implicit Theory of Learning Survey (ITLS). The MBS was used to determine musician status. Pretest and posttest data was collected using the MTSEQ, which measured students' musical self-efficacy across a variety of musical domains at the beginning and end of a music methods course. The ITLS was administered at the beginning of the semester to measure students' global views of intelligence. Independent t-tests revealed that musician status had no significant effect on either the pretest or the posttest musical self-efficacy scores; however, paired sample t-tests showed significant differences in pretest and posttest gain scores, regardless of prior musical experience. Results of the ITLS showed that many students enrolled in this course had a malleable (changeable) sense of their own intelligence. Pearson  $r$  correlations between students' gain scores on the MTSEQ and their ITLS scores was determined to be a non-significant correlation. Dweck's ITLS is a global measure of intelligence—not music specific. Because music is personal, and musical ability is highly correlated to attributions of success or failure in a musical context, the low correlation could be the result of the survey instrument not measuring musical ability/intelligence in this specific domain. Conclusions of this study indicate that the development of domain-specific measures of musical ability/intelligence would be helpful in investigating possible correlations with growth of musical self-efficacy.

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