

The Relationships Between Need for Cognition,  
University Students' Learning Tendencies,  
Academic Performance, and Year of Study

Jesse R.W. Windsor

Brandon University

82:449: Undergraduate Honors Thesis

Supervisors: Dr. N. Edguer & Dr. S. Gadbois

May 1, 2018

Previous research in the area of education and students' learning in university has shown that recognizing the intrinsic value of learning as much of the content as one can (a deep learning approach) for its own sake, being engaged in doing so (cognitive engagement), finding confidence in becoming more knowledgeable and able to learn (academic self-efficacy), and being able to regulate yourself (academic self-regulation) as you learn and progress through your education are all beneficial tendencies that students may employ in order to be successful. Additionally, enjoying and being motivated to engage in complex thinking (i.e., one's need for cognition; NFC) is an important factor in how successful students are their in post-secondary education. With that being the case, it was expected that how much students report enjoying and being motivated to engage in complex cognitive endeavors would be related to how engaged students are, how confident they are in learning, how much they self-regulate themselves academically, how much they recognize the intrinsic value of learning, and how deeply they learn the material will all be related to how well students' perform (based on their cumulative GPA's). In other words, having a greater NFC should benefit students in developing the learner tendencies and performing well, especially for students in the final years of their undergraduate degree. This study also predicted that students' year in university would be important in how motivated students were, how deeply they learned the material, how engaged they were in their studies, how confident they were, and how much they regulated themselves academically. Specifically, as students become more experienced academically they would become more engaged, more confident, etc., and that the development of these skills/tendencies would be more related to academic success for students in the second half of their education that they are for students just beginning university.

A total of 207 Brandon University undergraduate students from the psychology, sociology, and education departments participated in this study. Some participated for course credit and some did not. Participants were recruited from various courses in the winter term. For those who chose to sign up, scores were obtained for need for cognition, students' learning approaches, their perception of the intrinsic value of learning, their academic self-regulation, their academic self-efficacy, and their levels of task engagement. These scores were obtained by administration of five self-report questionnaires that participants completed during pre-determined data collection periods.

Results showed that although no differences were found for the year of study comparisons, across the entire sample NFC, the five learner variables (i.e., cognitive engagement, etc.), and academic performance were all related with one another in that as students' reported levels of NFC increased so did their cumulative GPA and the learner variables. Furthermore, as expected, NFC accounted for a significant portion of the variance in cumulative GPA.