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EDG520: Learning Theories (OA)

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Article Critique

Article: The Importance of Students' Motivation for Their Academic Achievement – Replicating and Extending Previous Findings.

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This article was edited by Daniel Danner, adjunct professor at the University of Applied Labour Studies of the Federal Employment Agency in Germany and reviewed by Laura C. Healy, lecturer at the Nottingham Trent University in the United Kingdom.

This paper is based on a research project that aimed at replicating the findings of previous studies on diverse motivational constructs as predictors of school students' academic achievement. Previous studies found that the majority of motivational constructs predicted academic achievement beyond students' intelligence. Previous studies also found that students' ability self-concepts and task values were more powerful in predicting their achievement than the goals and the grounds for achievement.

This study took place in Germany. A sample of 345 students from two German schools participated on a voluntary basis. Participants from one of the schools were attending 11th grade. The other school included 11th and 12th graders. According to the research paper, the students that participated in this research project, represented the typical population of this type of school in Germany. The majority of students were Caucasian who came from a medium to high-economic status. The sample comprised 200 girls and 145 boys.

The aim of this study was to examine the relative importance of the most important achievement motivation constructs in predicting school students' achievement. However, the researchers extended the previous work by including diverse motivational constructs as well as students' intelligence and prior

achievement as achievement predictors (one sample). The study's achievement criteria included assessing all predictors on the same level of specificity. This study was based on the following research question:

“What is the relative importance of students’ domain-specific ability self-concepts, task values, goal orientations, and achievement motives for their grades in the respective domain when including all of them, students’ intelligence, and prior achievement simultaneously in the analytic models?” (Para. 13)

According to the authors, achievement motivation stimulates and directs behavior toward achievement. Achievement motivation is not a single construct but encompasses several constructs such as motivational beliefs, task values and achievement motivation.

The researchers based their work on previous findings by several researchers, including Robbins et al., 2004; Hattie, 2009; Plante et al., 2013; Wigfield et al., 2016, Murphy and Alexander, 2000 among others. The researchers state they took a social-cognitive approach to motivation. The researchers analyzed previous research on the theoretical relations between achievement motivation and academic achievement. The researchers also examined previous research on the empirical evidence on the relative importance of achievement motivation constructs for academic achievement.

The researchers supported the idea that students’ beliefs on motivation are related to their academic achievement.

Ability self-concept, task values, goal orientations, achievement motives, intelligence and academic achievement were measured using several instruments.

Ability Self-Concept. Ability self-concepts, according to Peiffer, Ellwart and Preckel (2020), ability self-concepts (SC) and self-efficacy (SE) are self-perceptions that affect students’ success in educational settings. According to Peiffer, Ellwart and Prekel (2020): “Ability self-concepts (SC) comprise mental representations of students’ own abilities in academics in general or in specific academic domains”. (Para. 2).

According to Schunk (2014), Motivational and Affective Factors indicate how motivation and emotions affect the learning process and are APA learner-based principles.

According to Schunk (2014), the nature of the task can stimulate the learner's motivation. The nature of the task includes the level of difficulty, alignment to personal interests, and novelty. In addition the learner's motivation will increase if the task offers personal choice and the learner can have some control over the task.

The researchers assessed students' grades in German, math and their overall GPA (grade point average). The scales used for this study were: School in general, math and German.

The results of this study showed that in all three domains (i.e., school in general/math/German), students' ability self-concepts had the strongest associations with subsequent grades, except for students' performance-avoidance goals, the other motivational constructs were also strongly related to school grades.

The researchers of this study, demonstrated through their findings the correlation between students' beliefs and their achievements. The authors of this study show the importance of students' ability self-concepts, their task values, learning goals, and motivation for achievement toward students' grades in different academic subjects. The researchers show that students' beliefs go above and beyond intelligence and prior achievement. Findings also showed the role of students' motivation for academic achievement. According to the researchers, the students' ability self-concept was the most important motivational predictor of students' grades "above and beyond differences in their intelligence and prior grades" (p. 43).

The authors of this study suggest further research using other motivation constructs such as self-efficacy.

From my perspective, this study shows the importance motivational and emotional influences have on learning and that how much a person learns and what they learn is influenced by their motivation to learn and their belief about their ability to learn. According to Schunk (2014), beliefs about learning, interests and goals are also important factors in students' motivation to learn.

Having said that, according to Schunk (2014), the affective factor includes the learner's emotional state and habits of thinking are part of the affective factor. This study took place in Germany, the students that participated in this study were mainly Caucasian and came from middle to high-end socio-economic homes.

From my point of view, if this study was replicated in other countries and in other suburban areas of lower socio-economic status, the results may have been very different. Furthermore, this study does not seem to

take diverse learners and diverse socio-cultural backgrounds into account. In my opinion, especially in schools like the one I work in, understanding students' language and culture is central to supporting students' learning. The affective factor is one that cannot be underestimated. Finally, as Schunk (2014) stated, habits of thinking are part of the affective factor. In lower socio-economic areas, students may need to be taught positive habits of thinking. In my opinion, social emotional learning and motivational constructs may have to be researched hand in hand to obtain more accurate results.

Having said that, I believe it is important to pinpoint that the correlation between students' beliefs and their achievements was strong. Furthermore, the study showed the importance of students' ability self-concepts, their task values, learning goals, and motivation for achievement. The researchers also showed that in this study students' beliefs went above and beyond intelligence and prior achievement. As an educator, I believe this study will help me research strategies that help my students believe in themselves irrespective of their current level of ability. From my perspective, this study has corroborated the importance of mindset and has confirmed my firm belief in Carol Dweck's "Mindset" and "The Power of Yet".

References

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