

MEASURING ACADEMIC AGENCY IN UNIVERSITY STUDENTS

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BACKGROUND

The transition from secondary to tertiary education can be challenging, as students must adapt to the independence of university learning (van der Meer, Jansen & Torenbeek, 2010). These challenges are compounded in complex STEM disciplines, such as anatomy (Schutte, 2006). Students' agency – their capacity to make intentional choices to alter the course of their learning - may play a key role in adjusting to STEM at university (Jääskelä, Poikkeus, Vasalampi, Valleala, & Rasku-Puttonen, 2017). The aim of this study was to develop a measure for agency and determine the influence of agency on academic achievement.

METHODS

First year anatomy students (n=131) completed open-ended questions designed to examine six aspects of agency – self-efficacy, perceived control, motivation, intentionality, forethought, self-reactiveness, and self-reflectiveness. Student responses were subjected to thematic analysis.

RESULTS & DISCUSSION

A principal component analysis of scores generated from student responses revealed three key factors of agency – action, metacognition and self-efficacy. When all other variables were controlled, agency had a significant positive impact on academic achievement ($R^2=0.32$), although action was the only factor of agency that was significant. These results suggest that developing students' agency in first year may ease the transition from school to university and improve outcomes.

REFERENCES

- Jääskelä, P., Poikkeus, A.-M., Vasalampi, K., Valleala, U. M. & Rasku-Puttonen, H. (2017). Assessing Agency of University Students: Validation of The AUS Scale. *Studies in Higher Education*, 42, 2061-2079.
- Schutte A.F. (2016) Who is repeating anatomy? Trends in an undergraduate anatomy course. *Anatomical Sciences Education* 9, 171-178.
- van der Meer, J., Jansen, E., & Torenbeek M. (2010) It's almost a mindset that teachers need to change: first - year students' need to be inducted into time management. *Studies in Higher Education* 35, 777-791.

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