

Practical application of motivation theory to health professions education: a scoping review and examples for practice

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Background

Motivation theories that apply to education are jointly referred to as “achievement motivation” theories¹ (AM). AM theories and research examine how instructional design influences motivation². This research has primarily been conducted in K-12/general post-secondary education³⁻⁶ however, recent research has involved health sciences education (HSE) learners⁷⁻¹². AM includes multiple theories such as intrinsic motivation¹³, self-efficacy¹⁴, attributions¹⁵, achievement goals^{16,17}, and expectancy-value¹⁸, among others. AM explores why some students approach learning eagerly and are undaunted by setbacks, while other students make minimal effort or are discouraged by challenge.

Understanding how instructional practices foster AM is crucial to improving learning. For example, self-efficacy and goal orientation are predictive of the use of adaptive cognitive learning strategies¹⁹⁻²¹ and attributions affect student learning through their impact on self-determination and self-worth²². The focus of this project is to leverage AM theory for instructional design to enhance motivation in HSE learners.

Importance of this review to medical education

HSE professionals are beginning to recognize the essential role that motivation plays in learning^{7, 11,12}. Despite the recognition that motivation influences deeper learning^{21,22} and effectiveness of innovations⁸, many HSE professionals are unaware of how to influence motivation. This is understandable: motivation theory literature encompasses hundreds of articles every year. Expecting overtaxed HSE instructors to become familiar with this literature is unreasonable. The proposed project will produce a resource that surveys AM literature and offers examples of applying theory to practice. No such review has been published in HSE.

Methods and Rationale

This will be a scoping review (a review approach which maps key concepts and summarizes key findings and recommendations in complex bodies of literature)²³ investigating current AM theories and the resultant instructional design recommendations. Searches will be conducted within social cognition, psychology, educational psychology, and HSE literatures to synthesize theoretical concepts and findings relevant to motivation and instructional design. Development of the searches will be carried out in collaboration with a subject expert research librarian. Further assistance will be sought through consultations with HSE, instructional design, and educational psychology experts. Databases to be searched include the following (listed alphabetically): Academic Search Premier, Dissertation abstracts, ERIC, MEDLINE, PsychINFO, and Web of Science.

Impact of review on the practice of HSE.

As no reviews such as the one proposed here exist for HSE, providing a resource to HSE instructional designers to assist them in developing material and approaches to enhance motivation and engagement will benefit learners and instructors. Given the deeper learning associated with enhanced motivation^{24,25}, patients are likely to eventually benefit, too, from the proposed resource.

Finally, a coherent summary of AM theories and examples of application to HSE may inspire educators to become involved in motivation research. Increasing knowledge of motivation among HSE learners can add to theory, as these learners have been relatively absent from this body of research.

Feasibility

My dissertation examined AM²⁵. I have a familiarity with this literature which will allow me to efficiently search and summarize the major concepts. My work in HSE will be leveraged to develop clear examples from AM literature to design HSE instruction to enhance motivation.

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