

The Interplay of Grit, Growth Mindset, and Academic Self-efficacy in Healthcare Education: Implications for Student Success and Professional Development

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Abstract

Introduction: Grit, growth mindset, and academic self-efficacy are psychological constructs being increasingly recognized as important to academic performance, emotional resilience, and clinical competency in healthcare students. While well established in international literature, their relevance remains largely untested in Sri Lankan healthcare education systems. This paper aims to highlight the necessity of including grit, growth mindset, and academic self-efficacy concepts in Sri Lankan undergraduate healthcare curricula.

Current context and challenges: Sri Lankan undergraduate medical and nursing students often undergo high levels of stress and academic pressure, putting them at risk of psychological distress, burnout, and lower academic achievement. Existing curricula predominantly address cognitive outcomes, often at the cost of psychological development. Cultural barriers and mental health stigma also often deter students from accessing timely care.

Recommendations: An integrated model of education that includes psychological skill development is required. Recommendations for integration include staff training in growth-oriented feedback, student peer mentoring, reflective learning, resilience workshops, incorporation of formative assessments, and the use of digital learning platforms. It is also necessary to promote psychologically safe learning environments and incorporate emotional and psychological well-being into normal teaching practices.

Conclusion: Sri Lankan health professions education must adopt evidence-based and context-sensitive pedagogies that foster grit, growth mindset and academic self-efficacy to produce competent, emotionally resilient, and self-regulated healthcare professionals. Institutional commitment and policy-level changes are required for sustainable academic performance and student well-being.

Keywords: Grit, Growth Mindset, Academic Self-efficacy, Student Resilience, Motivation,

Introduction

Academic proficiency in health care education has been traditionally considered a product of intellectual indicators such as intelligence quotient (IQ) and past educational attainment.

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However, the active, challenging, and lifelong nature of healthcare professions has revitalized attention to psychological constructs as being essential to student achievement. Of these, grit, growth mindset, and academic self-efficacy have become significant predictors of academic and clinical performance (Duckworth *et al.*, 2007; Dweck, 2006; Bandura, 1986). Grit in the form of persistence and passion over a long term, enables nursing and medical students to navigate the demanding requirements of



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clinical education, coursework, and extremely emotive states (Duckworth *et al.*, 2007). Likewise, growth mindset, the philosophical position that individuals' talents could be created out of raw ability with effort and learning acts as a determining motivational force that leads students to overcome obstacles and frame challenges academically (Dweck, 2006). Academic self-efficacy, derived from Bandura's theory of social learning, is the belief in one's own competence to execute academic tasks effectively (Bandura, 1986).

Current scenario and challenges

In Sri Lanka, medical and nursing students in particular face rigorous academic and practical requirements. According to a recent study by Liyanage *et al.* (2024), 41% of medical students reported poor sleep quality and 69.2% reported psychological discomfort during the national economic crisis. These findings are consistent with Hettiarachchi *et al.* (2021) and Gunawardena *et al.* (2020) who reported that Sri Lankan medical and nursing undergraduates are exposed to intense academic demands with insufficient coping infrastructure, leading to high levels of psychological distress and burnout. The lack of structured psychological development or resilience-building in curricula continues to worsen the situation, as previously highlighted by Ariyasinghe *et al.* (2015) and Kithmini *et al.* (2019). Furthermore, the absence of comprehensive mental health services in academic institutions and the continued stigma associated with seeking help exacerbate these psychological pressures. Furthermore, there is limited opportunity to develop emotional resilience or intrinsic drive in Sri Lanka's traditional educational system, which frequently places an emphasis on memorization and high-stakes tests.

Despite this high-pressure environment, most universities in Sri Lanka lack structured interventions to address students' emotional and psychological needs. Institutions rarely include mindset training, self-regulation strategies, or resilience-building exercises in their curricula. This gap highlights the urgent need to incorporate psychological

development into academic and professional training frameworks. When not addressed, these challenges contribute to high dropout rates, burnout during clinical training, and reduced readiness for real-world healthcare responsibilities.

Interrelationship and educational value

Academic self-efficacy, growth mindset, and grit are not separate qualities; rather, they work in concert to influence student conduct. For instance, students who have a growth mindset the belief that skills can be developed through effort are more likely to have grit, or perseverance, and self-efficacy, or confidence in their academic ability. Self-control, goal-setting, and reflective thinking are examples of adaptive learning behaviours that are encouraged by this interaction.

Students' self-efficacy affects their approach to academic work, willingness to ask for assistance, and capacity to persevere in the face of adversity. A growth mindset lessens performance anxiety and failure dread by redefining setbacks as teaching moments. Grit helps students stick with long-term objectives in the face of short-term setbacks. Further, these attributes support clinical judgement, moral behaviour, and the provision of compassionate care in addition to academic achievement. Therefore, encouraging these qualities at the undergraduate level is an investment in healthcare systems' future.

Recommendations for educational integration

A methodical, multi-layered strategy is needed to include these qualities into healthcare education in Sri Lanka (Frenk *et al.*, 2010). To integrate psychological growth into both formal and informal learning environments, institutions must make a sustained structural transformation.

1. Faculty development: Teachers are accountable for establishing the psychological climate of universities. Therefore, academics need to be instructed systematically on how to

promote a developmental mindset among students, offer constructive feedback, and maintain a psychologically safe learning environment. By openly discussing their own learning experiences and modelling resilience, teachers can de-stigmatize student struggles and reduce stigma related to academic and emotional challenges. Workshops on feedback techniques integrated with growth mindset principles should be regularly conducted for faculty members.

2. Peer mentorship programs: Systematic peer mentorship programs have the potential to significantly improve the academic self-efficacy of students. The emotional encouragement and experiential advice offered by senior peers, who have come through comparable scholarly pressures, prove to be an asset for junior students. The mentoring interactions help foster an ethos of openness, render difficulties ordinary, and aid in the formation of a stronger student community. Structured mentorship frameworks with clear training and evaluation mechanisms should be included in academic calendars to ensure continuity and effectiveness.
3. Reflective and feedback-oriented learning: The integration of reflective practices such as journaling, guided debriefing, and narrative writing encourages students to interact with clinical and academic experiences with greater self-awareness. Furthermore, the shift of attention from simple summative assessment to multiple formative feedback allows students to view their progress, identify areas of improvement, and build confidence over time. Assessment rubrics can be redesigned to include self-assessment and reflection sections, encouraging students to evaluate their own progress with respect to effort, persistence, and learning approach.
4. Resilience workshops and emotional skills training: Institutions need to create workshops for the development of emotional control, coping strategies, and

resilience among students. Workshops can be incorporated into professional development modules or student orientation packages. Exposure to these skills early on prepares students to better handle the psychological demands of healthcare education. It is advisable to partner with psychologists or mental health educators to deliver context-specific and evidence-based content during these workshops.

5. Support systems for technology: Online tools, including peer-support websites, self-assessment software, and guided reflection websites, can extend learning and emotional development beyond the classroom. These sites offer quiet, confidential support, particularly valuable in societies where discussing mental health openly might be taboo. Development of university-endorsed digital applications, Moodle systems with embedded content on grit, mindset, and academic self-efficacy can create accessible resources for all students.
6. Curriculum reform: Modules to maintain grit, growth mindset, and academic self-efficacy need to be formally introduced in the undergraduate program. This can be achieved either through intercalating modules that include cross-disciplinary methods bringing together psychology with medical and nursing education or through clinical education and reflective practice with these constructs. All these curricular innovations help facilitate longer-term student individual and professional development.

Policy and research implications

Sustained transformation in medical education requires policy-level interventions. National and institutional policies must promote the incorporation of psychological development as part of undergraduate education (General Medical Council, 2015). This would include initiating systematic mentorship programs, establishing integrated student wellbeing services, educating the educator on psychological literacy, and incorporating

psychological principles such as grit, growth mindset, and academic self-efficacy into the formal curriculum.

Furthermore, there is the need for locally relevant research. Educational authorities should fund the exercise of developing and validating transnational measurement tools for application to gauge grit, mindset, and academic self-efficacy within South Asian education and cultural environments. This will enhance the accuracy and relevance of psychological assessment in Sri Lankan healthcare education.

Longitudinal studies are also required in order to see how these traits emerge during students' courses of study through preclinical years into internship. The outcomes of such work can inform intervention timing and content. For example, first-year students transitioning from school to university can benefit from self-efficacy training, while final-year clinical students need special approaches to managing uncertainty, stress, and emotional burnout.

Interestingly, policies need to go beyond issuance and adherence to official adoption and ensure effective implementation. Program planning must include provisions for continuous student feedback and outcome evaluations. Colleges must be held accountable for ensuring these psychological interventions are available and effective.

Conclusion

To meet the increasing demands of the health care industry, Sri Lanka's educational landscape must focus not only on clinical proficiency but also on psychological preparation of its eventual health care givers. Teaching grit, growth mindset, and academic self-efficacy during undergraduate education is vital in helping produce emotionally stronger, self-directed, and versatile learners. By adopting evidence-based practice, developing context-specific policy, and demonstrating institutional commitment, Sri Lankan universities can offer the ability to shape a new generation of healthcare workers who are not

only proficient in practice but also psychologically equipped to handle the complex and challenging conditions of modern-day healthcare.

Competing Interests

The authors declare no competing interests.

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