Intrinsic motivation in education is associated with deep learning rather than surface learning, higher academic performance, greater creativity, higher self-esteem, and a more positive attitude towards learning. SDT holds that three basic psychological needs must be fulfilled to stimulate and sustain intrinsic motivation:

- **Autonomy**: The perception of having choice in learning tasks.
- **Competence**: The feeling of being capable of mastering the material and being good at knowledge or skills tasks.
- **Relatedness**: The feeling of belonging to a learning group or a professional learning community and feeling valued by significant others like parents, teachers, peers, and patients.

SDT describes motivation as a continuum spanning from amotivation through extrinsic motivation to intrinsic motivation. SDT holds that three basic psychological needs must be fulfilled to stimulate and sustain intrinsic motivation.

- **Amotivation**: Lack of determination, motivation, and intention to act.
- **Extrinsic motivation**: Behavior that is regulated by external forces.
- **Intrinsic motivation**: Behavior that is regulated fully autonomously, from genuine interest or enjoyment, and perceived as originating completely within oneself. Within the scope of extrinsic motivation, behavior is externally regulated to four different extents:
  - **External regulation**: Behavior that is regulated by external forces, such as pressure from others, rules, regulations, rewards, and punishments—none of which are felt as free choice.
  - **Introjected regulation**: Behavior that is regulated by accepted rules, often affected by guilt or shame.
  - **Identified regulation**: Behavior that is regulated by externally originated behavior patterns that have become personally valued, endorsed, and internalized.
  - **Integrated regulation**: Behavior that is regulated by values that have become deeply integrated within the self and hardly recognized as external. External regulation is perceived to originate from completely outside the self and is the least autonomous regulation of behavior. The other states of extrinsic motivation vary in the perceived locus of origin from internal to external according to their placement in the continuum.

Examples of SDT Applied to Medical Education

- A selection procedure for medical school that creates a feeling of “I’ve really proven to be competent enough to start medical school!” or “This school really wants me to be a part of its community!” among the students is likely to boost intrinsic motivation to study, as it satisfies the needs of competence and relatedness.
- If, during their clerkships, medical students are trusted to perform small but meaningful tasks without direct supervision, their intrinsic motivation is likely to increase through satisfaction of all three SDT needs—autonomy, competence, and relatedness—as they are legitimately participating in the medical community.
- Opportunities for enrolling in elective modules that students identify, shape, and even organize themselves are likely to boost students’ intrinsic motivation through valuing their autonomy.
- Mentoring during all phases of medical education, including residency training, can stimulate intrinsic motivation by supporting trainees’ feelings of relatedness.

References:


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Self-determination theory (SDT). Founded by Edward Deci and Richard Ryan from the University of Rochester (New York) in the 1980s, is a general motivation theory that encompasses all activities in life, be they in education, sports, or some other domain. SDT states that human beings have a natural tendency to develop towards autonomous regulation of behavior. In principle, human beings are intrinsically motivated to learn and to take on challenges. Motivation is important in education as it impacts learning outcomes and the well-being of students.