



MOTIVATION IN MEDICAL EDUCATION

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IMPORTANCE OF MOTIVATION

Motivation- the reason why somebody does something or behaves in a particular way.



Motivation. motivation noun - Definition, pictures, pronunciation and usage notes | Oxford Advanced Learner's Dictionary at OxfordLearnersDictionaries.com. (n.d.). Retrieved December 7, 2021, from <https://www.oxfordlearnersdictionaries.com/definition/english/motivation>.

Premium vector: Man with a backpack full of books climbs a mountain of books for a prize goal: Powerpoint background design, Cute Cartoon Wallpapers, personalised Childrens books. Pinterest. (2021, September 22). Retrieved December 9, 2021, from <https://pin.it/4dAxBaj>.

FACTORS THAT MOTIVATE STUDENTS TO OPT MEDICAL STUDIES.

• **Scientific:**

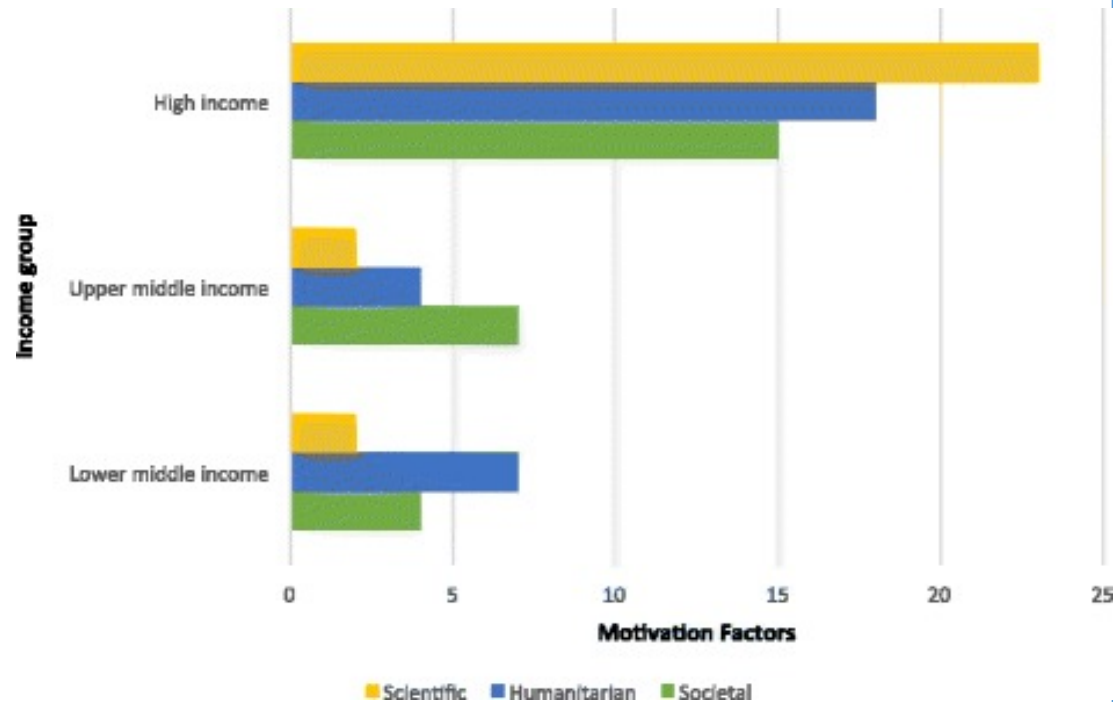
Interest in medicine
Flexible work hours
Work independence

• **Societal**

Prestige
Job security
Financial security

• **Humanitarian**

Serving the poor and under privileged



EDUCATIONAL PSYCHOLOGY BASED ON 3 DIMENSIONS:

**COGNITIVE
(WHAT TO
LEARN)**

**METACOGNITIVE
(HOW TO LEARN)**

***BEST
POSSIBLE
CURRICULA***

**MOTIVATIONAL
(WHY LEARN)**

Curricular trends in medical education and how they are oriented towards different components of learning, as suggested by the LOT model

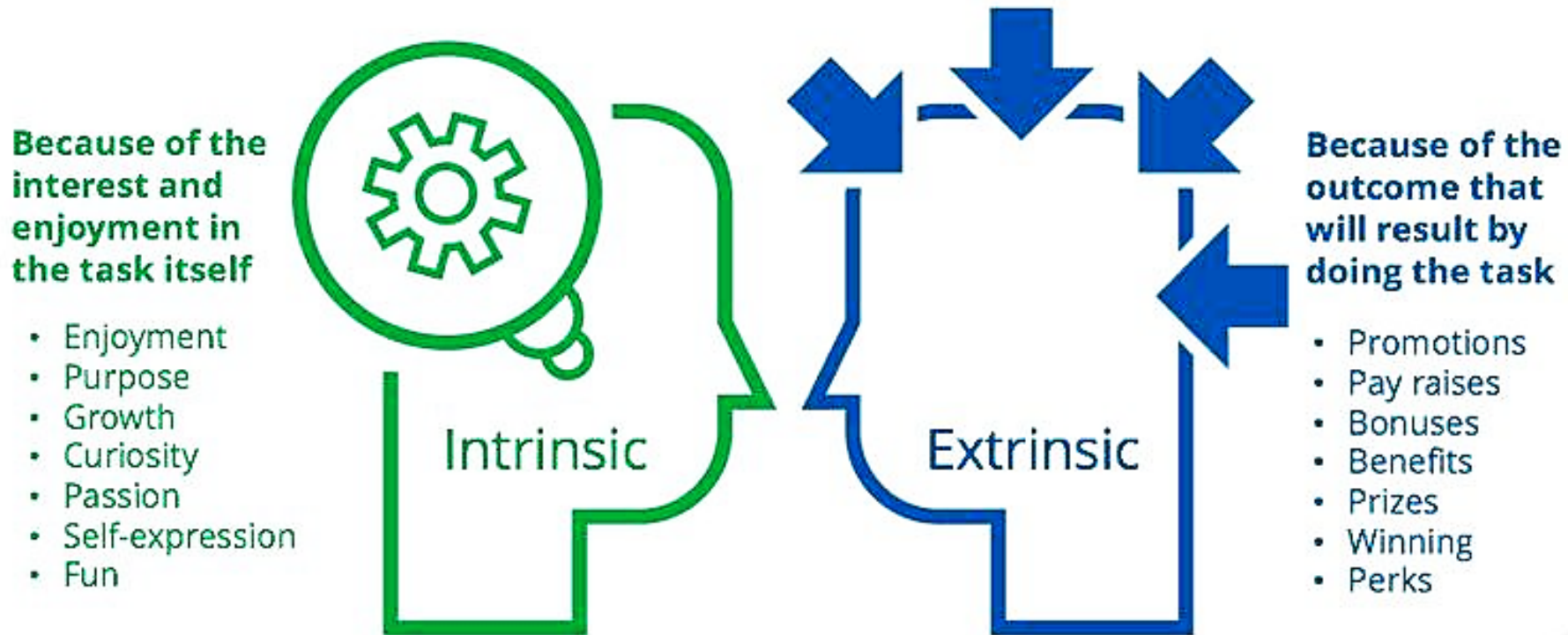
Date of origin	Curricular trend ^{ref}	Oriented to component*		
		Cognition	Motivation	Metacognitive regulation
18th–19th centuries	Apprenticeship model ⁴⁰	++	—	+
1910	Flexner model ^{2, 43}	++	—	—
1952	Case Western Reserve University model ⁴⁷	++	+, implicit	++
1968	Problem-based learning model ⁵⁰	++	+, implicit	++
1995	Integrated curriculum model ^{54–57} —horizontal and vertical	++	+, implicit	++
1998	Outcome-based education ⁶¹	++	—	++
1999	Spiral curriculum model ⁶⁶	++	+, implicit	++
2004	Experience-based learning model ⁶⁰	++	++, in development	++
2005	Longitudinally integrated clerkships (LICs) model ⁶⁹	++	+, implicit	++

* Level of orientation toward specific component: + indicates low, ++ indicates high. For motivation, the authors have also indicated whether the orientation is implicit, stated, or in development.

SELF DETERMINATION THEORY

- Founded by Edward Deci and Richard Ryan in the 1980 (University of Rochester, New York)

INTRINSIC VS. EXTRINSIC MOTIVATION: WHY WE DO WHAT WE DO



Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*. 2000;55:68-78.

Controlled Motivation

Autonomous Motivation

**Lower Motivational Quality
(e.g. performance & well-being)**

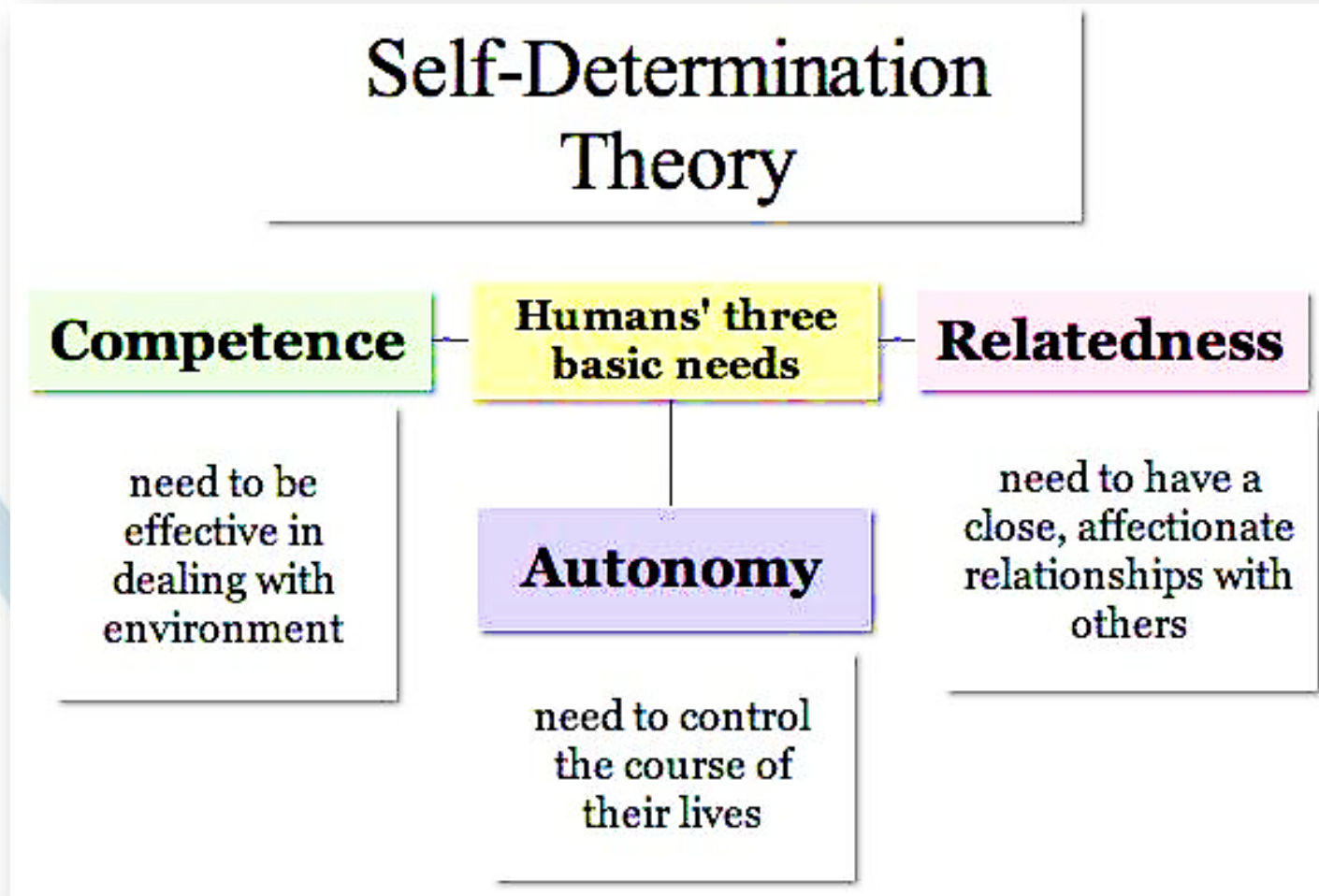
**Higher Motivational Quality
(e.g. performance & well-being)**

AMOTIVATION	EXTRINSIC MOTIVATION				INTRINSIC MOTIVATION
	External Regulation	Introjection	Identification	Integration	
- Lack of perceived competence or lack of value	- External rewards or punishments - Compliance - Reactance	- Ego involvement - Focus on approval from self and others	- Personal importance - Conscious valuing of activity - Self-endorsement of goals	- Congruence - Synthesis and consistency of identifications	- Interest - Enjoyment - Inherent satisfaction

De Loof, Haydée & Struyf, Annemie & Boeve-de Pauw, Jelle & Van Petegem, Peter. (2021). Teachers' Motivating Style and Students' Motivation and Engagement in STEM: the Relationship Between Three Key Educational Concepts. *Research in Science Education*. 51. 10.1007/s11165-019-9830-3.

Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*. 2000;55:68-78.

SDT holds that three basic psychological needs must be fulfilled to stimulate and sustain **intrinsic motivation**:



Ryan RM, Deci EL. Self-determination theory and the facilitation of intrinsic motivation, social development and well-being. *American Psychologist*. 2000;55:68–78.

Ryan & Deci, *self-determination theory, Autonomiamotivi: Determination quotes inspiration, Self Determination, Motivation Theory*. Pinterest. (n.d.). Retrieved December 9, 2021, from <https://pin.it/71Ge8Le>.

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.

Strategies positively effecting to medical students intrinsic motivation to learn

➤ Enhance the perception of the value of the activity

1. Explore students' expectations and projects
2. Explain the purpose of the material taught
3. Promote activities that challenge students
4. Make learning a problem-solving task
5. Strengthen the links between theory and practice

➤ Enhance perceived self-efficacy

1. Promote success and motivating assessments, and support failure
2. Take into account the consequences of vicarious experience
3. Provide well-meaning feedback
4. Allow students to undertake teaching duties

➤ Enhance the perception of controllability

1. To give them the opportunity to make choices.

MOTIVATION IN EDUCATION IS IMPORTANT FOR:

- Deep learning
- Good academic performance
- Positive well-being
- Satisfaction of the student



- In the case of medical education the intrinsic motivational reforms will contribute toward students' becoming good doctors who are interested on medicine and lifelong learning.

Kusurkar, Rashmi A. MD, PhD; Croiset, Gerda MD, PhD; Mann, Karen V. MSc, PhD; Custers, Eugene PhD; ten Cate, Olle PhD Have Motivation Theories Guided the Development and Reform of Medical Education Curricula? A Review of the Literature, *Academic Medicine*: June 2012 - Volume 87 - Issue 6 - p 735-743
doi: 10.1097/ACM.0b013e318253cc0e

Moll-Khosrawi, P., Cronje, J. S., Zöllner, C., Kubitz, J. C., & Schulte-Uentrop, L. (2021, April 29). *Understanding how the motivational dimension of learning is influenced by clinical teaching in medical education: A prospective cohort study*. *Annals of Medicine and Surgery*. Retrieved December 4, 2021, from <https://www.sciencedirect.com/science/article/pii/S2049080121003162>.