

Motivation: An Integral Component of Resident Well-Being

Amber Deptola, MD

Despite many years of ongoing research, regulations, and initiatives to improve the well-being of our physician trainees, data show we have much more work to do.^{1,2} A largely untapped area of study and innovation in the well-being of medical trainees is motivation. While motivation carries no consensual definition in medical education, the social cognitive approach to understanding it is widely accepted in the literature.³ In this approach, motivation is “why people think and behave as they do,” and is influenced by both the self and one’s constant interactions with the environment.⁴ Here, I summarize the existing literature on motivation in graduate medical education (GME) and provide actionable recommendations for application of self-determination theory in the clinical setting with the goal of improving well-being.

Existing data demonstrate a correlation between motivation and well-being in medical students.⁵ We know that unwell residents may have worse reported patient care and patient satisfaction, and more professionalism lapses.^{6,7} On the other hand, individuals with more self-driven motivation (autonomous motivation) are less depressed, less burned-out and stressed, and have better engagement, adaptability, and learning outcomes.⁸ As resident roles, responsibilities, and work hours evolved, I have listened to residents increasingly express a lack of motivation in the patient care setting. A resident who enters internship ready to improve the lives of patients instead ends up feeling beaten down by the types of tasks they are given, often functioning on autopilot as patient care decisions are made by others, and isolating themselves as the patient care community quietly reduces their value in patient care. Encouraging and facilitating the autonomous motivation of trainees within the clinical environment is a potential way to improve resident well-being.

To foster motivation, we need to understand it and know how to facilitate it. In order to make the case for my later recommendations, I want to briefly summarize the most cited frameworks for motivation within an educational system. Maslow’s hierarchy of needs provided the initial scaffold for motivational

theories. Maslow’s hierarchy noted that people must have their basic needs (food, water, safety, belonging) met in order to achieve one’s potential.⁹ Hale and colleagues discussed how published studies on resident well-being may inform a modernized version of Maslow’s hierarchy of needs, where the needs are no longer hierarchical but instead dependent on each other to enable wellness.¹⁰ Since the time of Maslow, motivation science has focused on 3 primary theories: (1) self-theories of ability, (2) achievement goal theory, and (3) self-determination theory. Self-theories of ability are most well-known to the GME community as growth and a fixed mindset. In other words, how does an individual’s mindset about their potential ability influence their motivation?¹¹ Second, achievement goal theory says that an individual’s motivation is influenced by the goal in sight.¹² Achievement goals can be significantly influenced by how and when we assess a learner.

While self-theories of ability and achievement goal theory can greatly inform how self-factors and curricular factors influence motivation, self-determination theory (SDT) is the most readily applicable to a teacher and learner within the clinical setting and is the best studied in relation to well-being. Therefore, I want to more deeply explore the components of this theory and the potential ways that we, as educators in GME, may apply this theory in our clinical work alongside our trainees. According to SDT, autonomous motivation occurs when 3 central needs are met: autonomy, competence, and relatedness. Studies have shown that when these 3 central needs are met, individuals are more oriented to mastery and learning, view challenges as opportunities for individual growth, and are less likely to experience psychological distress or engage in maladaptive behaviors.⁸ Prior publications have outlined potential methods of fostering the 3 central needs of SDT in our learners.^{13–15} These methods can readily be translated to the clinical setting when working with trainees.

In the TABLE, I define the 3 central needs of SDT and reconcile prior published recommendations for applying SDT with my own experience teaching in GME. Having spent 20 to 25 hours per week in a supervisory role to residents in a multitude of patient care settings for the past 5 years, I have found that

TABLE

Recommended Methods and Language to Encourage Motivation Based on Self-Determination Theory

Central Need Definition	Methods to Foster the Need	Language Examples
Autonomy: the desire to make one's own choices	Be "the guide on the side"	"I'm here to ensure patient care is safe, of high quality, and to teach. I'd like you to lead the rest and I'll weigh in as needed."
	Give choice and flexibility	- In situations where there are multiple right answers: "What would you like to do?" - In situations where there are fewer right answers: "What is your assessment of the situation? I would see 2 options here. . .which would you like to pursue?" "While my usual practice would be to use X drug because of ____, your choice of Y drug is also an acceptable option." "I will leave it up to you, but I would consider doing ____."
	Be approachable	"Here is my cell number. . .call or text with any questions."
	Facilitate sharing of ideas	"What other options are there?"
	Identify what an individual wants	"I want us to meet as a group this afternoon to do some teaching. What would you want to learn about?"
Competence: the desire to feel effective in challenges that match a person's capacities	Move from using recall questions to using reach questions that do not have a single right answer. What might force the learner to think?	- Recall: "What antibiotic is first-line for treating strep pharyngitis?" - Reach: "What would you do differently if the patient had a penicillin allergy listed?" - Reach: "I'm going to push you a bit. How would your management change if patient X was immunocompromised?"
	Align at least one task a day with growing knowledge and skills	"Hey—why don't you have student Y make that phone call? Listen in, jump in if you need to, and then you can teach her all of your tips when the call ends." "What are you working on that I can help you with during this rotation?"
	Revise tasks that are unrealistic as they lead to a feeling of lack of efficacy	"I'll be surprised if we're able to coordinate patient X's transfer today. Let's start the conversation and expect that it may take a few days. If he transfers earlier, that's great."
	Recognize small and large successes	"It's really helpful that we were able to get the blood culture results from the other hospital." "Wow, that was a tough family conversation. Good job taking pauses to let them digest the information you were sharing."
	Give objective feedback	"Thanks for taking charge when Mr. X complained of chest pain. I took some notes on what I saw that went well and what could have gone better. Can I share this feedback with you now?" "I'd like to give you some feedback on how I observed Mr. M reacting when you communicated XYZ."

TABLE

Recommended Methods and Language to Encourage Motivation Based on Self-Determination Theory (continued)

Central Need Definition	Methods to Foster the Need	Language Examples
Relatedness: a desire to feel valued and to have a sense of belonging	Introduce yourself and others	▪ “Hi, I’m _____ and I’m the attending on team B. You’re the resident joining us today? What is your name?”
	Call people by name	▪ “Andrea, how are you?”
	Be inclusive of others in both patient care and non-patient care activities during the workday	▪ “Hey John, do you want to run down for coffee with me?”
	Name emotions you (and your team) may be feeling	▪ “We’ve been rounding since 7 AM, and if I need a break, I’m guessing you do too. When should we meet back up?” ▪ “Wow, this was really an emotionally exhausting morning on rounds. How is everyone doing?”
	Value all contributions, big or small	▪ “I know faxing that information was not easy. It was a big help to patient X’s care though, so thank you.”
	Ask about and assign value to life outside of work	▪ “Tell me more about your kids.”

SDT is relevant, makes my teaching more efficient, and results in an observably motivated and happier resident. These strategies work best when started during expectation setting on day one of a clinical rotation. First, setting expectations with your team early allows you to get to know one another, which fosters relatedness. Second, by setting expectations for respective team members’ roles, you can communicate early that autonomy in care is a priority, which then allows you to both hold yourself accountable to your promise of autonomy *and* set boundaries that later enable you to be more intrusive in care when needed for the patient. Third, day one is the optimal time for team members to set goals. Setting goals encourages the learner to strive for competence that is appropriately challenging and gives you something to purposefully observe and give feedback on throughout the rotation. Within the TABLE, there are additional recommendations for language that can be used at any time during patient care. I have found it to be immensely helpful to turn back and review these 3 needs when I notice a resident seems to be struggling. Ask yourself: Am I allowing the right amount of autonomy? What am I doing to encourage the trainee to develop competence? Am I facilitating relatedness within our team and the greater clinical environment? At the end of a rotation, attendings may also ask the learner to give feedback on how well they (the attending) did in facilitating these 3 needs during the rotation.

The literature supporting SDT’s relationship with motivation and well-being should encourage our

community to more broadly integrate it into our teaching and supervision. Further studies are needed to understand more objectively which specific interventions within the clinical setting result in improved motivation.

In conclusion, the well-being of our trainees is multifactorial but significantly impacted by the environment in which they work. Strategies such as those suggested in the TABLE can foster motivation in our trainees, which may result in gains for the trainees themselves, the teams they work with, and the patients they so much want to treat.

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Amber Deptola, MD, is Associate Program Director and Assistant Professor of Medicine, Washington University, St. Louis.

Corresponding author: Amber Deptola, MD, Washington University, St. Louis, amberzdeptola@wustl.edu, Twitter: @AmberDeptola