



**Towards an autonomy-supportive model of wellness in  
Canadian medical education**  
**Vers un modèle de bien-être favorisant l'autonomie dans  
l'éducation médicale canadienne**

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Article abstract

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**Approach:** Grounded in well-supported theory and empirical evidence, my central argument in this commentary is that IFWs are inappropriate, insulting, and psychologically harmful to learners, and that they need to stop.

**Contribution:** Extending prior work in this area, I first present three fundamental problems with IFWs. I then recommend a paradigm shift in how we are approaching “wellness” in medical education.

**Conclusion:** Finally, I provide an evidence-based roadmap, in self-determination theory, for how system-level improvements could be made in a timely, sustainable, and socially responsible way, that would benefit everyone in medicine—from leaders, to educators, to learners, to patients.

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## Towards an autonomy-supportive model of wellness in Canadian medical education

### Vers un modèle de bien-être favorisant l'autonomie au cours des études médicales au Canada

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### Abstract

**Purpose:** Learner distress is a huge problem in medicine today, and medical institutions have been called upon to help solve this issue. Unfortunately, the majority have responded not by addressing the system and culture that have long plagued the profession, but by creating individual-focused “wellness” interventions (IFWs). As a result, medical learners are routinely being forced to undergo training on resilience, mindfulness, and burnout.

**Approach:** Grounded in well-supported theory and empirical evidence, my central argument in this commentary is that IFWs are inappropriate, insulting, and psychologically harmful to learners, and that they need to stop.

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### Résumé

**Objectif :** La détresse de l'apprenant est un problème sérieux pour la médecine aujourd'hui, et les institutions d'enseignement médical ont été appelées à participer à sa résolution. Malheureusement, la majorité d'entre elles ont réagi par l'élaboration d'interventions axées sur le « bien-être » de l'individu au lieu de s'attaquer au système et à la culture qui minent depuis longtemps la profession. En conséquence, les apprenants sont contraints de suivre des formations sur la résilience, la pleine conscience et l'épuisement professionnel.

**Approche :** Fondé sur des données empiriques et une théorie éprouvée, l'argument central de mon commentaire est que ces interventions dans ce commentaire l'argument central selon lequel ces interventions sont inopportunes, insultantes et psychologiquement préjudiciables aux apprenants, et qu'elles doivent cesser.

**Contribution :** Dans le prolongement de travaux antérieurs dans ce domaine, je présente d'abord trois problèmes fondamentaux liés aux interventions individuelles favorisant le bien-être. Je préconise ensuite un changement de paradigme dans la manière d'aborder le « bien-être » dans l'enseignement médical. Enfin, je propose une feuille de route, fondée sur des données probantes et la théorie de l'autodétermination, pour apporter des améliorations en temps opportun, durables et socialement responsables au niveau systémique, des améliorations qui profiteraient à tous les acteurs du domaine médical, des responsables aux patients en passant par les enseignants et les apprenants.

### Background

Canadian national organizations such as the Canadian Medical Association (CMA), Association of Faculties of Medicine of Canada (AFMC), Royal College of Physicians and Surgeons of Canada (RCPSC), and College of Family Physicians of Canada (CFPC), have all integrated “wellness” into standards, guiding policies, and competencies for

medical students.<sup>1,2</sup> This way, “wellness” can be targeted and assessed, built into accreditation standards, and attempts can be made to share the onus of wellness with medical learners. In response to this, the Canadian Federation of Medical Students (CFMS) formed the Wellness Curriculum Task Force, in order to review, adapt, and help maximize these efforts. In 2020, they created the National Wellness Curriculum Framework,<sup>3</sup> which aims to

unify Canadian medical schools and faculties in reforming and taking an evidence-based approach to their wellness programming.

## The main problems with individual-focused wellness interventions (IFWS)

### Problem #1: Viewing wellness as a “competency”

Laudable as the above efforts have been, they all share one major weakness in common. They treat wellness as a “skill” or “competency,” when really it is a complex phenomenon that largely reflects an individual’s social environment.<sup>4</sup> Treating wellness like a “competency” or “skill” completely ignores this fact and, in doing so, it stigmatizes medical learners and harms their wellness.<sup>5,6</sup> In this sense, it is our medical leaders and educators that would benefit most from an educational wellness intervention—that is, on how to create learning environments and cultures that foster engagement, innovation, and wellness, rather than alienation, stress, and burnout.

### Problem #2: Targeting learners instead of the learning environment

The second problem is that IFWs send the message to learners that *they* are the problem (and not the *system* that is failing them). This message is not only out of touch but deeply offensive to learners. In fact, it borders on gas lighting, which is critical to avoid: presenting a false narrative to another person or group that leads them to doubt their own reality.<sup>7-9</sup> Brilliant and driven young adults are coming into medicine, to dedicate years of their lives to learning and service, and their wellness is being policed because the system is too “difficult” and “slow” to change. This excuse is unacceptable and overhauling our Canadian medical education system would be entirely feasible, if an overarching framework was in place. Just look at the global uproar and collective action taken to help those in Ukraine this year: at how swift and effective leaders were in standing up for what was right. Hence, it is not inability that stifles our progress with wellness in medicine—it is simply disorganization, diffusion of responsibility, and complacency that inevitably results.

### Problem #3: Anchoring instead of following sound empirical evidence

Finally, IFWs do not derive from quality empirical evidence.<sup>10</sup> Surely, individual attributes like resilience and mindfulness are consistently linked to lower burnout and higher well-being in the education literature.<sup>11</sup> In what

situation would these variables not correlate? The fact is that the learning environment (and not individual attributes) is known to be the primary driver of physician and trainee distress,<sup>12</sup> and IFWs have done little to nothing to improve this problem on a global scale.<sup>13</sup> Plus, even if IFWs did work, the most resilient of medical doctors are still displaying staggering rates of burnout.<sup>14</sup> Why then do we continue to lean on IFWs, and to research these types of interventions? This mindset and investment of resources overlooks what textbooks on social and contemporary educational psychology tell us about human motivation and wellness—science that everyone in medical education really needs to start paying more attention to.

## A brief overview of self-determination theory

Self-determination theory (SDT) is a world-leading theory of human motivation, development, and wellness.<sup>15</sup> With over 50 years of evidential support across different contexts and cultures (e.g., education, healthcare, organizations), it is perhaps the single best framework to help us understand and address the issue of medical learner distress, today. In short, SDT tells us that we, as human-beings, are social creatures with natural propensities towards personal growth, connection, and wellness, but that to function optimally, we require ongoing support for three basic psychological needs: autonomy (sense of volition), competence (sense of efficacy), and relatedness (sense of belonging).<sup>15</sup> According to SDT, affordances and barriers for autonomy will ultimately determine our ability to meet these needs.<sup>15</sup> Thus, SDT’s view is that autonomy-supportive environments will promote healthy coping, resilience, and wellness, while controlling environments will lead to stress, maladjustment, and ill-being.<sup>15</sup>

Indeed, studies in medical education strongly support this view. Learner need satisfaction and perceptions of autonomy support from their medical programs and instructors, for example, have consistently been associated with deeper learning, better academic performance, and a myriad of mental health benefits (e.g., higher resilience, mindfulness, adaptive coping, and psychological well-being).<sup>16-21</sup> Conversely, medical learner need frustration and perceptions of controlling learning environments have been associated with higher perceived stress, maladaptive coping, impostor phenomenon, and burnout.<sup>18,21-23</sup> It is for this reason—based on SDT’s good validity evidence and practical applicability—that scholars worldwide have, since

the 1990's or before, been calling for more autonomy-supportive medical education.<sup>16,24-31</sup> Whether because medical educators have thought of learners' psychological needs as luxury ingredients, or because they have not known how to translate theory into practice, these calls have continued to go unanswered. Structures and policies have continued to be upheld that lend to tradition and control, which motivate learners out of pressure and fear, rather than interest, joy, and self-determination. It is high time that we challenge these harmful ideologies and take meaningful action to remedy them.

## Using SDT to understand why medical learners are distressed

Ultimately, IFWs ignore the root cause of what makes a medical learner unwell—what frustrates their basic psychological needs—the learning environment. IFWs side-step this problem and focus, instead, on how medical learners can be mentally and emotionally tougher within the learning environment. This is akin to telling a group of professional athletes to run a marathon through a mud pit with hidden rocks and potholes. However, instead of improving course safety, we create novel strength training programs to build their quadriceps and lung capacity. Just as many of these athletes will go on to sustain injuries that threaten their health, development, and wellness, almost 50% of medical trainees world-wide are experiencing stress and burnout from comparably unsafe training environments.<sup>13</sup> We must do better to rally around and protect our medical learners, and to fix the underlying problem. To respect, invest in, and honour them.

### Relatedness frustration

When medical institutions tell learners that *they* need to be more “resilient”—ignoring the real illness that lies within the system—it deeply frustrates their sense of relatedness. In fact, it promotes feelings of resentment, distrust, and disengagement. This not only dampens learners' spirits and wellness, but it creates wedges between them and program. It also perpetuates the hidden curriculum in medicine, which is counterproductive for medical programs, learners, and the patients they care for.<sup>32</sup> Ask any medical learner in Canada how they feel when they hear the words “wellness” or “resilience”, and they will tell you all about this... And yet, medical learners are constantly reminded that being in medicine is a privilege, that they must adopt a “growth mindset,” maintain their wellness, and reach out for help if they are struggling. Is it any wonder why medical learner engagement in “wellness”

activities is generally poor, lamented, and unbeneficial, and why IFWs have added to their distress in many instances?<sup>10,33</sup>

### Autonomy frustration

Add to this the fact that IFWs are typically controlling (i.e., autonomy-thwarting), and the reason they are bad for wellness becomes clearer. At most medical institutions, IFWs are mandatory and force rather than encourage participation. They also tend to be squeezed into learners' schedules at inopportune times, or worse, assigned during their personal time. This shows complete disregard for learners' actual wellness and experiences with these interventions. Additionally, IFWs are seldomly well-explained to learners, which discounts their need for structured guidance and a rationale and excludes them as stakeholders. IFWs also tend to be prescriptive and superficial, often being delivered as compulsory online modules or in ways that are didactic and redundant (e.g., focusing on “healthy diet” and “regular exercise and sleep”). These approaches not only neglect individual differences in knowledge and experience but add further content to medical learners' plates, which are already overflowing. Finally, medical educators tend to formally assess learners on their “wellness,” which directly undermines their intrinsic motivation to engage in IFWs. Again, this explains why policing medical learner wellness is patronizing and likely exacerbating of their stress and risk for mental illness.

### Competence frustration

How long are we going to sit back and ignore these red flags? And how are learners supposed to feel when their own leadership—who teach them never to miss red flags on a patient history, and to always treat the root causes of illness—disown their own teachings? The culture in medicine makes it hard enough as it is for learners to share their concerns about wellness or mistreatment with their programs, due to stigma and fear of the unintended consequences.<sup>34,35</sup> Proof of this is evident in the rates of medical learner distress and suicidal ideation compared to the percentage that seek help for it throughout their medical education.<sup>36</sup> Emerging evidence also suggests that medical learners' need for competence is one of the strongest predictors of their resilience to stress.<sup>19</sup> Hence, by adding further barriers to psychological need satisfaction, IFWs may actually drain learners' mental resources to deal with the learning environment.<sup>19,21,37</sup>

## Paradigm shift: from control and distress to autonomy and wellness

By now it ought to be clear why IFWs are a way of the past. They simply operate above what frustrates learners' basic psychological needs. Again, SDT considers these needs as ultimate obstacles to wellness.<sup>22,38-40</sup> This is why mindfulness teaching and burnout modules are really not useful, as they only fuel the transgenerational "if you can't make it, you're not tough enough" legacy.<sup>41</sup> Abraham Maslow would scoff at this emphasis of esteem and self-actualization when learners' physiological and security needs are not even being met. Ironically, deprivations of this sort are well-known to medical learners, who for years are forced to adapt to hypercompetitive, toxic, and psychologically unsafe learning climates. Belittlement, humiliation, and discrimination, immense performance pressure, disrupted sleep, and little to no time for self-care... These problems are "normal" in medicine and are finally gaining attention now that people have started to come forward and bravely share their traumatic experiences, for the sake of others.<sup>42-44</sup>

The only way forward has got to be through a paradigm shift in medicine: towards autonomy support and trust and away from control. To move away from individual factors involved in wellness towards addressing systemic factors.<sup>45</sup> To teach learners about human psychology and wellness rather than target them in some "intervention". Doing this would not only bolster their ability to maintain their wellness, but it would allow them to become better physicians and inspire them to improve our medical system. As others and I have emphasized before,<sup>46</sup> detrimental gaps continue to exist between what well-supported theories like SDT tell us and what policies continue to be upheld in medical education, for the sake of "accountability." Until we take our learners' basic psychological needs seriously, and until we transform the learning environment to better support them, we will not see any improvements in their wellness. We either continue to ignore what history and rigorous evidence tells us, or we accept this fact and come together to close these gaps. I recommend the latter and that we use SDT's framework to help guide us there.

## Translating theory into practice in medical education

To translate SDT's principles into practice, leadership should start by taking its universal needs-based framework and applying it as a guiding principle or filter to assess, reform, and improve every policy, document, and educational experience learners interact with (see Fig. 1).

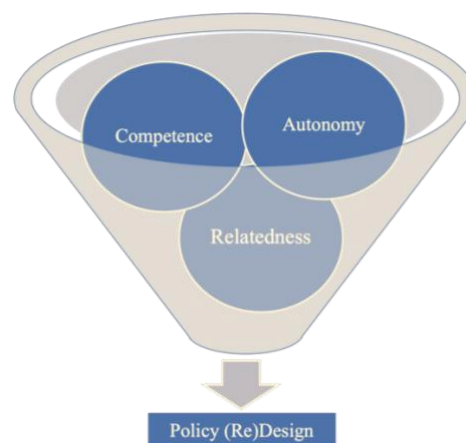


Figure 1. Applying SDT's needs framework in medical education

Examples of this would be in evaluating aspects such as:

- Language and tone of voice used in communications (e.g., emails) to learners
- Design (e.g., content, volume, and intensity) of course work and clinical rotations
- Policies involving curricular scheduling, student attendance, and sick/vacation days
- Approaches to teaching, evaluation (e.g., field notes and EPAs), and feedback
- Policies and supports surrounding examinations and remediation
- Transparency and rationale behind professionalism, equity, and inclusivity standards
- Motives for and content of wellness curricula: to be for learners (for self-awareness and self-regulation), rather than about them (for external regulation, testing, and accreditation).

To do this, medical programs would ask themselves one question: is this matter (or person in charge of it) supportive, neutral, or hindering of students' three basic psychological needs? Anything judged to hinder these needs would be flagged for modification or replacement—e.g., syllabi that use controlling language (e.g., you "must",

“will” and “should”), threats as motivators (e.g., “you must do X or it is a breach of professionalism and will require remediation”), and rules without a meaningful rationale (e.g., “attendance is mandatory, no exceptions”). Anything neutral (i.e., neither controlling nor autonomy-supportive) would be earmarked for justification or improvement. Anything supportive (e.g., policies that emphasize students’ interests, goals, and values, that provide structured guidance on how to be successful, and that offer choices) would remain or be improved wherever possible. This does not necessarily mean that content must change, since there are clearly objective requirements that each medical institution must follow. Rather, it means adjusting the design and delivery of such content so that medical students can learn it without having to sacrifice their basic needs for wellness. This filtering process has been used to great effect in SDT-based interventions in education and health contexts.<sup>47-50</sup>

Doing this effectively will require consensus and objectivity about how each aspect being evaluated will support these basic psychological needs. This is where drawing on the extant SDT literature and consulting external council—e.g., experts in social and contemporary educational psychology—would be especially valuable. In fact, a medical education system whose design so profoundly impacts learners’ motivation, health, and well-being, should have this expert oversight regardless of its guiding principles. The CFMS Health Promoting Learning Environment Task Force could also be a valuable ally, given that its sole mission is to help medical schools improve the learning environment. Valuable as their work has been to advocate for medical students,<sup>3,51,52</sup> their lack of an overarching theory of wellness such as SDT, which provides a blueprint for re-shaping environments and cultures, has greatly limited their impact at a national level. The suggestions in this commentary could therefore open new doors for the CFMS to be the driving force of the changes that we so desperately need—i.e., through a systematic change process.

## The change management process

Ultimately, the change management process consists of two main elements that any organization can employ: the change proposal and the implementation phase. The change proposal involves outlining the change and its details, while the implementation phase involves trialling and optimizing it. These two aspects break down into eight smaller steps which are outlined below. A visual depiction of the change management process and how it could be

used to leverage SDT’s principles—to reform, modernize, and deliver the highest quality of medical education the world has ever seen, that truly supports wellness—is provided in Appendix A (adapted with permission by the *WalkMe* Organization, based on their Change Management model).<sup>53</sup>

- 1) Establish a sense of urgency
- 2) Build guiding coalition
- 3) Create the approach (vision and strategy)
- 4) Communicate the change vision
- 5) Implement the change (empower and enable action)
- 6) Create short-term wins
- 7) Monitor progress (consolidate gains)
- 8) Anchor into culture

## Leveraging the change management process in medical education

We are past the point of urgency (point #1) and addressing the state of our medical education system is considered a true emergency. SDT is also a very well-supported framework (point #2) that can guide the creation of a vision and approach (point #3)—in this case, towards a more autonomy-supportive culture of wellness in medicine. Points #4-8 fall to medical institutions and leaders to enact, but with substantial managerial freedom, given that SDT provides the philosophical “ingredients” for success, but not a rote recipe on how to use them.

## Measurability, replicability, and quality improvement

Monitoring progress (point #7) occurs in conjunction with pre-existing strategies that work, through SDT’s validated and widely used measurement instruments. These are freely available at [www.selfdeterminationtheory.org](http://www.selfdeterminationtheory.org), and include detailed scale descriptions, various domain-specific versions (including different languages and contexts), and references to studies that have used each scale, along with their psychometric properties. Examples of a few scale categories include a) the *Climate Questionnaires*, b) *Basic Psychological Need Satisfaction and Frustration Scales*, and c) the *Motivator’s Orientations Questionnaire*. These measure a) individual perceptions of autonomy support from authority figures in learning, healthcare, or work environments, b) levels of need satisfaction vs. frustration



in specific settings, and c) how autonomy-supportive authority figures feel they are towards others, respectively.

Finally, based on enacting steps #1-7, SDT's principles can be anchored into the culture in medical education (point #8). This is ultimately the end-goal and purpose of the present commentary: to show how the medical system and culture can be improved, through adoption and implementation of SDT's humanistic principles. What needs to be highlighted, though, is that organizational culture is not equal to "values." Culture is equal to values plus behaviour. In other words, if we want the culture to change in medicine, and for medical learners to be well, we must prioritize what evidence tells us that learners truly need for wellness. Chantal Levesque-Bristol's book, *Student-Centered Pedagogy and Course Transformation at Scale – Facilitating Faculty Agency to Impact Institutional Change*, and Megan Brown et al.'s book *Applied Philosophy for Health Professions Education* each provide a solid foundation to start from that medical leaders and educators can learn from and apply to the medical school context.

## Tying everything together

In sum, how wellness is currently being viewed and approached in medical education is highly problematic, and it needs to change. Learners know that medical training is tough, but the last thing they need is to be coddled or have their wellness legislated by their medical programs. What they need is for organizational leaders (e.g., the AFMC, CMA, RCPSC, CFPC, and CFMS) to address the systemic structures that frustrate their basic psychological needs. Kidlin's law states that if you can write the problem down clearly, it is half solved, as you will then know what steps to take to solve it.<sup>54</sup> This commentary does that and outlines how—through a paradigm shift towards a culture of autonomy support in medicine—we can take meaningful steps to mitigate the problem of medical learner distress. Such a movement is overdue and would greatly benefit our leaders, educators, learners, and patients. It would breathe new life into a medical system that longs to foster excellence and wellness but is unnecessarily hindering them instead.

**Conflicts of Interest:** I am the sole author and take full responsibility for the content of this manuscript. I have no conflicts of interest to declare.

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## Appendix A. Change management process

