Belonging Without Controversy: Using Self-Determination Theory to Reframe Inclusion in Medical Education

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Belonging Without Controversy: Using Self-Determination Theory to Reframe Inclusion in Medical Education

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ABSTRACT

Issue: Global reforms under the banner of diversity, equity, and inclusion (DEI)—and more recently, justice-oriented frameworks such as justice, equity, diversity, decolonization, indigenization, and inclusion (JEDDII)—aim to strengthen belonging in medical education, yet DEI language and governance have become politicized in some jurisdictions, exposing institutions to audits, reputational attacks, and funding risks. **Evidence:** Self-Determination Theory (SDT) offers an evidence-based framework centered on relatedness—the universal psychological need for authentic connection—that can complement DEI/JEDDII efforts by translating inclusive aims into observable practices and measurable learner experiences, even amid contested discourse. This article situates belonging within relatedness, synthesizes international evidence, identifies structural barriers, and proposes multilevel strategies—policy, curricular, and bedside—for cultivating relatedness. **Implications:** By aligning belonging with universal psychological needs and defensible educational outcomes, institutions can sustain progress and meaningfully support medical learners in ethical and enduring ways.

Introduction

Belonging is recognized as a foundational need in medical education, where learners juggle high-pressure environments, rapid knowledge acquisition, and emotionally charged clinical encounters (Edgoose et al., 2022). At the same time, United States (U.S.) institutions increasingly face a practical dilemma: how to protect belonging while diversity, equity, and inclusion (DEI) language and structures have become politically contested in some jurisdictions, creating chilling effects, reputational attacks, audits, and funding risks (Blackstock et al., 2024; McGowan et al., 2025). Recent U.S. national analyses document a rapid expansion of legislation and policy actions targeting DEI offices, trainings, and governance structures in higher education, creating uncertainty for institutions responsible for health professions education, workforce development, and research (National Academies of Sciences, Engineering, 2025). In this climate, educators may feel pressure either to retreat from equity-oriented aims or to continue "doing the work" while carefully recalibrating language and program design to remain viable. What is needed is an approach to belonging grounded in universal human functioning—one that links learning environments to motivation and outcomes and remains resilient to shifts in political language.

Self-Determination Theory (SDT) is a widely validated theory of human motivation that explains how environments satisfy or frustrate basic psychological needs: autonomy (a sense of volition), competence (a sense of effectiveness), and relatedness (a sense of authentic connection) (Ryan & Deci, 2000). Across cultures, contexts that support these needs cultivate autonomous motivation—engagement grounded in interest and volition—leading to deeper learning, persistence, and well-being. When psychological needs are thwarted, motivation becomes controlled or disappears altogether, accompanied by stress, disengagement, and burnout (Ryan et al., 2022).

This article foregrounds relatedness because it maps most directly onto belonging, inclusion, and psychological safety; however, support for autonomy and competence is also necessary for sustaining relatedness in everyday training climates (Vansteenkiste et al., 2020). When learners can act in self-congruent and valued ways, connection deepens and learning

expands; when identity expression becomes constrained or contingent, relatedness grows fragile, and development narrows (Sheldon & Elliot, 1999; Vallerand, 2008).

I write from the perspective of my own background, experiences, and values, recognizing that they shape how I approach and interpret the issues discussed. As a white, cisgender man, I hold privilege within the social and professional structures of medicine and academia. While my insights are informed by professional expertise and alignment with Self-Determination Theory's principles, I remain mindful of the limitations and potential biases inherent in my positionality. Specifically, I recognize that I am not writing from lived experience of marginalization in medical training and that my expertise lies more in motivation science than in the full breadth of equity scholarship. I therefore aim to (a) situate SDT as complementary to (not corrective of) DEI frameworks, and (b) focus my claims on psychological mechanisms and education design features that can be observed, taught, and evaluated.

Defining belonging and relatedness

Belonging reflects the feeling of "having a place"—being accepted and included in a group or institution (Allen et al., 2021). Yet, belonging can exist without genuine connection. A learner may feel they deserve to be in medicine or are generally liked but still feel unseen or unable to bring their authentic self forward. SDT's construct of relatedness captures this deeper psychological need—to be known, valued, and respected as a whole person. This distinction aligns with broader educational and organizational scholarship differentiating surface-level inclusion from psychologically experienced belonging (Brown et al., 2025; Butler et al., 2025).

Learners often confront a tension between their need for relatedness and the demand to fit in. Fitting in frequently requires curating identity—emphasizing some traits while muting others—to secure acceptance (Vaa Stelling et al., 2023). Under such conditions, psychological needs are not simply unsupported but turned against one another: autonomy is sacrificed to gain approval, leaving relationships conditional and fragile or preserved at the cost of connection, resulting in isolation (Neufeld & Babenko, 2024). These dynamics foster assimilation rather than genuine belonging and undermine learning and well-being (Holding et al., 2020). By contrast, environments that intentionally cultivate relatedness allow learners to be seen and valued for who they are—not merely how they

perform—supporting deeper engagement and more equitable learning climates (Kusurkar, 2024). This challenge is often amplified for learners from historically marginalized groups, including racialized, LGBTQ+, and/or first-generation learners, and those living with disabilities (Anjorin & Busari, 2024).

Traditionally, DEI programs have addressed these issues. More recently, equity efforts in higher education have expanded to encompass justice-oriented frameworks such as JEDDII—justice, equity, diversity, decolonization, indigenization, and inclusion—which seek not only access and representation but structural and relational transformation by redesigning policies, norms, and everyday interactions so that learners experience dignity, legitimacy, and safety (Wang et al., 2024). Importantly, DEI and JEDDII initiatives are grounded in robust theoretical traditions and a growing empirical literature across education and the social sciences. In this paper, I reference DEI/JEDDII to acknowledge this broader justice scholarship and to position SDT as a complementary implementation lens—particularly for translating inclusive intent into lived relational experience—rather than as a replacement framework.

However, in contemporary political discourse—especially in parts of the U.S.—the language and symbols of "DEI" have become discursively loaded and, at times, conflated with partisan constructs. In some jurisdictions, this politicization has led to defunding, policy restrictions, and the closure of DEI offices (Blackstock et al., 2024; McGowan et al., 2025). The practical question for educators, therefore, is not whether inclusion matters but how to sustain evidence-informed belonging in ways that remain implementable, defensible, and durable.

Because U.S. academic institutions exert substantial global influence, these dynamics extend beyond national borders. Partner schools may reasonably worry that programs explicitly branded with DEI language could jeopardize collaborative grants, scholarships, or regulatory approvals. Educators also express concern that constraints on DEI terminology may affect accreditation expectations; for example, recent revisions to Liaison Committee on Medical Education (LCME) standards reflect evolving legal and legislative constraints in certain jurisdictions (LCME, 2025).

SDT complements DEI and JEDDII efforts by offering a psychologically precise account of how inclusive climates become lived educational experiences. In line with calls for theory-informed cultural transformation in healthcare (Blackstock et al., 2024), and higher education more broadly (McGowan et al., 2025), supporting universal psychological needs—particularly

relatedness—helps educators translate inclusive intent into observable interpersonal practices and measurable educational outcomes, without reliance on politicized labels.

Why relatedness is critical in medical education

SDT defines relatedness as the need to feel connected, valued, and authentically understood by others (Ryan and Deci, 2000). It differs from superficial connection—politeness, networking, or transactional collaboration—because it rests on unconditional acceptance. When relatedness is supported, learners experience psychological safety and are more willing to seek feedback, disclose uncertainty, and engage deeply in learning. When relatedness is thwarted, learners may remain socially present but feel unseen or conditionally accepted, contributing to need frustration and feelings of inadequacy (Neufeld et al., 2023).

Evidence for the centrality of relatedness bridges the learning lifespan. A meta-analytic review of secondary education demonstrates that students' sense of school belonging is consistently associated with motivational engagement, social-emotional functioning, and academic persistence, with smaller but reliable associations with achievement (Korpershoek et al., 2020). Experimental work with adolescents shows that enhancing relatedness improves both motivation and skill acquisition (Kaefer & Chiviacowsky, 2021). In undergraduate STEM programs, relatedness,more than competence alone,predicts academic persistence and achievement (Hilts et al., 2018). In medical education, relatedness accounts for a substantial share of the association between instructional climate and student well-being (Neufeld & Malin, 2020).

Larger-scale syntheses reinforce these findings, demonstrating that relatedness-supportive learning environments reliably predict engagement, performance, and well-being across educational contexts (Howard et al., 2025). A systematic review in health sciences education similarly identified rapport-building behaviors, such as instructor warmth and genuine interest in learners, as stronger motivators than specific instructional techniques (Orsini et al., 2015). In clinical settings, psychological safety—rooted in interpersonal familiarity and supportive leadership—predicts clinicians' willingness to speak up about errors and risks (Wawersik et al., 2023). Collectively, these findings position relatedness not as a luxury but as a prerequisite for learning, engagement, and safe practice (Howard et al., 2025; Ryan et al., 2022).

When educational ecosystems support relatedness, benefits cascade across individual, team, and organizational levels. Psychological safety—the relational climate described by Edmondson (1999)—enables learning from error and adaptive practice. Autonomy and competence are amplified as learners embrace challenges, persist through setbacks, and integrate feedback more deeply (Kusurkar et al., 2013). Relationship-centered pedagogies, supported by leaders who normalize reflection and dialogue, can disrupt entrenched inequities and foster transformative learning across health professions education (Sukhera et al., 2025). Longitudinal clerkships, mentorship programs, and affinity spaces further strengthen relatedness, narrowing performance gaps and enhancing engagement for learners from historically underrepresented groups (Van Schalkwyk et al., 2019).

These findings underscore a broader point: inclusion and belonging are strengthened when learning climates support the psychological needs that underpin motivation.

Barriers to relatedness in medical education

Despite its importance, relatedness is routinely undermined by structural and cultural features of medical training. Frequent short-term rotations require learners to repeatedly reestablish relationships with supervisors and teams, fragmenting trust and limiting meaningful feedback (Biggs et al., 2018). Hierarchical questioning practices, such as high-pressure Socratic quizzing or 'pimping,' are often framed as rigorous teaching but function primarily through intimidation and public evaluation. SDT helps clarify why these approaches are counterproductive: they elicit controlled motivation rooted in shame rather than curiosity or growth, increasing stress and discouraging learners from voicing uncertainty or asking questions critical to patient safety (Malin & Palmer, 2025). Learners from historically marginalized groups often face additional identity threats and unequal treatment, increasing cognitive and emotional load while reducing psychological safety (Johnson et al., 2025). These dynamics mirror broader organizational and cross-cultural findings showing that short rotations, high power distance, and evaluative surveillance suppress trust, speaking up, and learning (Kusumoningrum et al., 2026).

While political debate has narrowed attention to contested DEI terminology, SDT offers an evidence-based framework for inclusion by focusing on relatedness—the universal need to feel authentically connected and valued. Anchoring inclusive practice

in SDT allows educators to link learning climate to trackable outcomes such as engagement, persistence, and well-being (Howard et al., 2025). This reframes inclusion not as a compliance obligation but as a core educational design principle that can be operationalized through teachable interpersonal practices and measurable psychological-need indicators, alongside existing equity metrics.

Moving from principle to practice: a multilevel strategy

Safeguarding relatedness requires coordinated action across three interlocking levels—macro, meso, and micro—each reinforcing the others. Consistent with socioecological models, policies shape programs, programs shape day-to-day practices, and those practices ultimately determine whether learners experience belonging (Kusumoningrum et al., 2026). Recent critical scholarship further underscores that when initiatives operate primarily at the symbolic or programmatic level, without attention to how they are enacted in everyday interactions, they may fail to support, or even inadvertently harm, learners from historically marginalized groups (Chambers & O'Brien, 2025). Here, "macro" refers to institutional and accrediting policies; "meso" to programmatic and curricular structures; and "micro" to day-to-day supervisory and team interactions. Together, these levels operationalize SDT by translating psychological needs into lived educational experience.

Macro-level strategies

At the macro level (policy, accreditation, and funding), institutions can make psychological need support an explicit quality commitment by pledging to cultivate autonomy, scaffold competence, and affirm relatedness in every learning space. Accrediting bodies (e.g., Accreditation Council for Graduate Medical Education (ACGME), LCME, and international counterparts) could reinforce this by integrating SDT language into existing learning environment and professionalism standards, giving programmes a theory-based vocabulary for demonstrating inclusion without relying on politicized terminology. In parallel, institutions can treat relatedness as a trackable indicator of training quality by adding learner psychological-need metrics alongside duty hour and patient safety reporting. Finally, grant and reporting templates can shift from ideology-coded checkboxes to learning-climate and psychological-need support plans, linking resources

to measurable educational and safety outcomes (e.g., Entrustable Professional Activity progression, remediation rates). Where political or legal scrutiny extends beyond program titles to the substance of educational activities themselves, the goal is not "evasion," but durability: preserving evidence-informed, learner-supportive practices by articulating them through psychologically precise, educationally defensible, and evaluable mechanisms.

Meso-level strategies

At the meso level (program and curricular), educational leaders from undergraduate medical education to residency and fellowship can design training structures that intentionally support basic psychological needs. Learning activities can be mapped to their dominant need, with assessment-dense periods balanced by relational buffers, such as narrative medicine seminars, peer teaching, or facilitated small-group reflection, to restore authenticity and connection. Longitudinal coaching infrastructures can be credentialed in need-supportive communication, with aggregate learner-reported need satisfaction used for program evaluation and quality improvement, reviewed alongside milestone dashboards. Programs can further promote continuity by anchoring each learner to a stable relational dyad (e.g., a clinical coach and a near-peer mentor) across clerkships, residency blocks, or subspecialty rotations, while using brief, end-of-rotation measures of relatedness to monitor learning climate trends over time, rather than evaluate individual learners. Because relatedness is co-produced, faculty development should be coupled with parallel supports for staff and learners, including shared norms for welcome, feedback, and speaking up.

Micro-level strategies

At the micro level (faculty–learner encounter), SDT-oriented faculty development focuses on the specific supervisory behaviors that determine whether learners experience psychological safety and unconditional positive regard. Supervisors are trained to make authenticity permissible by narrating diagnostic reasoning and using brief storytelling to normalize struggle, welcoming divergent viewpoints and naming difficult emotions without pathologizing them. These relational signals are paired with competence-supportive feedback and deliberate entrustment of meaningful clinical tasks, conveying trust while avoiding controlling language and micromanagement. In practice,

Table 1. Operationalizing relatedness support across levels of medical education.

Level	Goal (need-support target)	Example actions	Expected outcomes
Macro (Policy and Accreditation)	Embed SDT needs—autonomy, competence, and relatedness—into institutional policy and quality metrics	• Incorporate "psychological needs" language into learning-environment standards • Replace DEI checkboxes with "Learning Climate and Psychological Need-Support Plans" • Monitor relatedness through climate dashboards and accreditation reports	• Greater institutional coherence and transparency • Reduced polarization around contested terminology • Enhanced learner satisfaction, retention, and trust
Meso (Program and Curricular)	Foster relational continuity and community belonging within training programs	• Map curricular activities to dominant needs (autonomy, competence, relatedness) • Balance high-assessment periods with relational buffers (e.g., narrative sessions, peer teaching) • Train and credential coaches in need-supportive communication	• Stronger mentorship relationships • Improved engagement and EPA progression • Greater sense of psychological safety and inclusion
Micro (Faculty–Learner Encounter)	Cultivate authenticity and psychological safety in daily supervision	• Invite learner reflection and emotional expression • Model fallibility and empathy • Provide growth-oriented feedback • Conduct "relational audits" after key encounters	• Enhanced mutual trust and openness • More effective feedback exchanges • Lower burnout for both learners and educators

Note. Items adapted from key applications of Self-Determination Theory (SDT) literature on autonomy, competence, and relatedness in higher education (e.g., Legate & Weinstein, 2025; Yasué et al., 2024) and medical education (e.g., Anjorin & Busari, 2024; Edgoose et al., 2022; Kusurkar, 2024). EPA = Entrustable Professional Activity; DEI = Diversity, Equity, and Inclusion.

this involves co-constructing management plans, calibrating guidance rather than over-directing, and attending to subtle cues of conditionality in tone, timing, and body language. Video-based reflexivity and peer observation support this awareness, while post-event debriefs incorporate a brief relational audit, asking whether hierarchy suppressed learner voice or whether established trust enabled timely speaking up and recovery. Faculty who adopt these SDT-aligned practices report higher teaching satisfaction and lower burnout, underscoring that need-supportive supervision sustains educators as well as learners (Cheon et al., 2014).

The Table 1 below summarizes practical strategies for fostering relatedness across medical education levels. Together, these strategies translate relatedness from an abstract concept into a measurable and actionable driver of inclusion across the continuum of medical education.

Several validated instruments can support evaluation of the learning environment and training climate across macro, meso, and micro levels. Programs can assess learners' experiences of psychological need satisfaction and frustration using the Basic Psychological Need Satisfaction and Frustration Scale (e.g., Chen et al., 2015) and assess autonomy-supportive learning climate using the Learning Climate Questionnaire (e.g., Williams & Deci, 1996). Psychological safety can be monitored at the team or program level using Edmondson's widely used psychological safety scale (Edmondson, 1999), while belongingness can be assessed with medical-education-specific tools such as the Exeter Belongingness Assessment Tool (Daniels et al., 2024) or other validated measures of belonging in clinical placements. Importantly, these tools are intended to inform program evaluation and learning environment improvements, not to assess individual learners.

Conclusion

The imperative to support medical learners' belonging—relatedness in particular—must not be sidelined by shifting political dynamics surrounding DEI language. If anything, the need to foster belonging has never been more urgent. SDT anchors belonging in a universal psychological need, and decades of evidence show that when learners experience authentic connection, they learn more deeply, sustain well-being, and provide safer patient care (Howard et al., 2025; Ryan et al., 2022).

Crucially, SDT does not adjudicate debates about equity priorities or justice frameworks. Rather, it offers a complementary, empirically grounded account of how inclusive intentions translate into everyday educational experience. Basing reform in psychological science allows inclusion efforts to remain measurable, defensible, and durable across political cycles. Framing belonging through SDT offers a path forward, guided by evidence, sustained through practice, and responsive to the realities of medical training.

Disclosure statement

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