

Inclusion and Belonging for Introverts (and Extroverts) in Graduate Medical Education

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The Challenge

During a graduating resident's exit interview, the resident told the program director, "I wonder if I really needed remediation of my inpatient medicine rotation. The attendings assumed, just because I'm naturally quiet, that I was indecisive or depressed. I've felt discriminated against throughout residency because I'm an introvert." What would you say to this graduating resident? How would you explore whether a resident is indecisive, lacks confidence, is less engaged or unhappy, or is just a quiet individual compared to colleagues who always speak up?

What Is Known

The American Psychological Association defines *introversion* as "orientation toward the internal private world of oneself and one's inner thoughts and feelings, rather than toward the outer world of people and things."¹ Introverts represent 30% to 50% of the population. With a lower threshold for stimulation in the amygdala resulting in higher sensitivity to environmental factors,² introverts may self-regulate their exposure to high-stimulus, fast-paced clinical settings, by acting reserved, being quiet, or seeking independent work. In contrast, extroverts have a higher amygdala threshold and are more likely to exhibit outgoing and decisive behaviors, may frequently interrupt others, or project overconfidence.²⁻⁴

In graduate medical education (GME), learner competency is typically assessed in clinical settings such as morning report, rounds, huddles, the operating room, and clinic. The increasing use of observable performance to assess competency has the potential for bias based on learner characteristics, including gender identity, race and ethnicity, and disability.⁵ Just as with other forms of bias, we need to recognize how implicit assumptions against quiet residents poses a "sociocultural problem" and a "measurement problem" when assessing learners in clinical settings.⁵ The former necessitates creation of introvert-supportive learning environments with equal opportunities to speak up and for deliberate practice. Similarly, the latter requires attention to crafting non-biased items on assessment forms, minimizing assessor rating variability, and ensuring adequate, appropriate assessment sampling.⁵

RIP OUT ACTION ITEMS

1. The emphasis on observed behaviors in clinical settings can inadvertently disfavor learners who are "quiet" (eg, introverts), obscuring their strengths.
2. Examine your own potential implicit biases (and those of your program) and how they may affect perceptions and assessments of learners with introverted or extroverted tendencies.
3. Review and modify existing teaching, advising, assessment, and leadership approaches for alignment with key specialty-specific performance expectations by context.

How You Can Start TODAY

1. **Know yourself.** Consistent with addressing any potential bias, reflect and consider whether your own personality type may potentially affect your perceptions and assessments of learners with introverted and extroverted tendencies.³ Do you prefer time to reflect before speaking up or are you willing to jump in? Do you prefer one-on-one discussions or thrive in team settings? If unsure, ask your colleagues to reflect on behaviors you frequently exhibit.
2. **Become "silent literate."** Identify and support the strengths of introverted learners, which include strong listening skills; focused, thoughtful decision-making; and compassion and empathy.³ Consider what attributes are influencing your teaching and assessment behaviors that potentially contribute to assessment bias in the clinical learning environment and suboptimal teamwork.
3. **Consider the context when assessing a resident's behavior.** Are some learners having more trouble expressing their ideas quickly in large groups but not during a one-on-one presentation? Do they have strong patient communication scores compared to peers? Do they speak up with a strong assessment and treatment plan when there is airspace or just say the first thing on their minds? Recognize those who display introverted vs extroverted behaviors and avoid labeling them as incompetent or arrogant based on first impressions in one context (ie, premature cognitive closure). Assure that performances across settings are considered by summative clinical competency committees.
4. **As a clinical teacher, make space for all.** When using "performance pedagogy," advise learners early on that they are expected to vocally participate. Provide wait

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time for introverted learners to respond, if appropriate, for the expected clinical performance. Use small group strategies (eg, think-pair-share) or a writing task, when possible (eg, write up appropriate clinical orders, patient education notes), to provide space for introverts. Close emails with an invitation to contribute.⁴ Encourage more extroverted team members to balance their contributions in support of the entire team and to utilize skills like summarizing what others have said or next steps. Give a time frame for responding: “In 10 seconds I’ll be asking our second-year residents to respond.”

What You Can Do LONG TERM

1. **Define and orient learners to the key specialty-specific performances by context.** Include those skills associated with team communication and performance, patient experience, and safe patient care. Highlight the need for immediate and concise communication in urgent or emergent settings and the requirement to voice a potential harm or risk to a patient consistent with your organization’s communication tool (eg, CUS: concerned, uncomfortable, safety issue). Reinforce the value of careful listening and the ability to incorporate others’ perspectives in your thinking and actions. During teaching and feedback sessions, orient and continuously reintroduce learners to job performance expectations (eg, speaking up for patient safety, communicating with care team in urgent situations, strong written communications, empathy) as essential for all physicians.
2. **Review assessment tools and leadership positions for biases.** Examine and revise existing assessment tools to ensure that key performance expectations are incorporated by context. For example, “Always interpersonally engaged with patients, families, and team members” is an item that may be easy to assess for highly verbal individuals but may not capture the nuanced performance of quieter individuals, especially given often limited direct observation of residents with patients/families. Ask faculty and residents who trend toward introversion to help review and revise assessment forms.
3. **Review and modify existing teaching, advising, and leadership approaches.** Consider how rounds and conferences are conducted. Do they incorporate a “pause” to allow all learners to comment? Is advance notice given for presentations? Do advisers collaborate with learners to provide practice and feedback with varied scenarios for those who are less likely to speak up? Encourage introverts to act extroverted to achieve their values (eg, lead a project).⁴ How do clinical competency committees weigh the introvert who is well prepared, an effective problem solver, a strong listener, and internally motivated as compared to an outgoing, first to speak up, and/or risk-taker extrovert? Rewrite the job description for senior residents/chief residents

to be inclusive of the breadth of skills needed, from one-on-one coaching for peers and persistence in completing tasks to listening with empathy and informed decision-making.

4. **Incorporate introversion/extroversion into bias training.** Add a sociocultural and measurement perspective to bias training for learners and faculty. Try a 5-minute icebreaker that reveals biases. Ask people to sit based on how they self-identify (eg, introverts on left) and ask each group to agree on and share one question they would like to ask the other group about being an introvert or extrovert. Provide development for faculty and learners that includes allyship⁴ and support of those who are quieter, more reserved, or overshadowed by others, and listening skills for those who may be too dominant.

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