Teaching "Quiet" Learners

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(with thanks to Drs. Heather Burrows, Amy Fleming, Sharon Kileny, and Meg Keeley)

Learning Objectives

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- Define the "quiet" learner
- Identify the reasons that a learner is "quiet"
- Recognize the benefits of being a "quiet" learner
- Strategize methods for engaging a "quiet" learner

Why is My Learner “Quiet”?

Why is my Learner 'Quiet"?

Temperament

- Introversion versus extroversion
  - The "quiet thinker"- reflective and thoughtful internally
  - Less likely to require external stimuli/validation
- Biologic basis for these behaviors
  - Kagan and Snidman *Galen's Prophecy: Temperament in Human Nature* (1994)
    - Introverts: low "amygdala threshold" for stimulation (high reactivity to environment) results in demonstration of introverted behaviors (shy, reflective).

Introversion and Extroversion

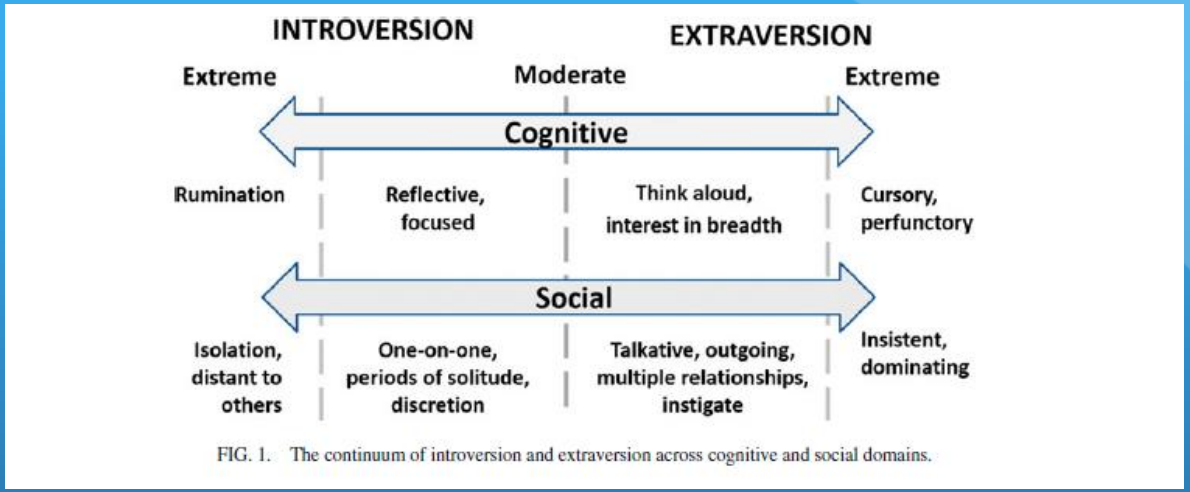

FIG. 1. The continuum of introversion and extraversion across cognitive and social domains.

- Reduced sociability and increased reflective thinking style are common elements of introversion across the research.
- Introverts tend to seek less stimulation from the external world, whereas extraverts tend to thrive or even "live" there.
- How well a person is adapting to his or her world depends on the goodness of fit between preferred style (basic tendencies) and the demand of the external world and culture.
- Either extremes of the introversion/extraversion continuum can have maladaptive implications when other behaviors are warranted.

Davidson B, *et. al.*,. "Introversion and medical student education: challenges for both students and educators." *Teach Learn Med.* 27(1): 99-104 (2015).

Extroversion as the US Cultural Norm

- Dale Carnegie: “How to Win Friends and Influence People”
- Transition from a Culture of Character to a Culture of Personality.
- Psychologists encouraged “personality transformation “ for shy kids.

Cain, Susan. *Quiet: The Power of Introverts in a World That Can’t Stop Talking*, New York: Crown Publishing Group, 2012.

Introversion in Clinical Medicine

"Among the stressors medical students experience is constant worry about impressing their attending physicians to obtain good evaluations. Medical students who are more reserved may find themselves on a team with outspoken peers and physicians whom they find intimidating. This dynamic adds to the stress of transitioning into a new educational style, different from that of the first and second years of medical school. Because of their anxiety and feeling intimidated, medical students who are introverted may struggle more, compared with extroverted classmates who are more at ease, to express themselves or take initiative. This reticence may be mistaken by attending physicians as lack of interest, a misinterpretation reflected on these students' evaluations as poor performance."

Noureddine L and Medina J, *Acad Med* 83 (6): 822 (2018)

Why is My Learner "Quiet"?

Learning style

- Didactic format: Gather knowledge from a scripted presentation
- Flipped classroom: Study at home, then work on live problem-solving during class
- Gamification of learning:
  - Flipped classroom or gamification can be individualized or team based
- "Pimping" (Brancati FL, JAMA, 1989; Detsky AS, JAMA, 2009)
- NOT every student does well in every environment

TABLE 1

Hypothesized goodness of fit between the student roles in various medical training contexts and introversion/extraversion style

Training Context and Student Role(s)	Goodness of Fit Between Style and Role[a,b]	
	Introvert	Extravert
Didactic lecture: Active listening, take notes	High Thoughtful notes	Medium Losing interest or focus
Anatomy lab: Dissect cadaver; identify body organs and systems	High Attention to detail	Medium Works well in teams
History and physical diagnosis: Practice interviewing and examination skills with peers and patients	Medium Active listening with patients	Medium Greater ease initiating conversations; narrowing diagnostic differential prematurely
Discussion group (less structured): Share thoughts on readings, issues	Low More likely to listen than contribute	High Willing to initiate conversations and assert opinions
Case-based group (more structured): (e.g., PBL) Think aloud; present learning objective	Low Likely to listen carefully, but not verbally participate unless called upon	High Likely to participate; may "speak before thinking"
Group project: Multiroles such as brainstorm, plan, research, synthesize, document, present	Varies; high to low Good listening skills; able to adopt and offer different perspectives; may withdraw or not provide input if not sought out	High Assume leader role; may be less aware of less active peers; may compete with others for space/attention
Clerkship presentation: (e.g., morning report) Present, think aloud	Medium Less comfortable taking lead in presenting; more likely to have considered various aspects of case	Medium Less likely to have considered details or case as a whole before speaking
Case discussions: (e.g., "table rounds") Think aloud	Low Seeking more information to raise certainty	High Willing to offer explanation with less available information
Bedside hospital rounds (as group): Observe, shadow, inquire, explain	Low May tend to stay in the background, try to avoid being called out	High More comfortable with responding without all the information; may inadvertently suppress input from others in the group
One-on-one with clinic preceptor: Observe, shadow, inquire, explain	High-Medium May thrive in a respectful relationship that recognizes strengths/weaknesses	Medium May thrive in a respectful relationship that recognizes strengths/weaknesses

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Why is My Learner "Quiet"?

Cultural/Background

- Some learners have been raised in environments where learners do not speak "out of turn"
  - Respect
  - Intimidation
- These behaviors are difficult to change in a short period of time, such as a clinical rotation.

Why is My Learner "Quiet"?

Knowledge/Confidence issues

- Lack of foundational knowledge from the pre-clinical years may bode poorly for a learner on the wards or in clinic.
- The inability to translate pre-clinical knowledge into the clinical realm may result in anxiety/stress in presentations/discussions, leading to "quiet" demeanor.
- Making a mistake may damage the student's confidence ("fear of failure")
- Many students start medical school with a lack of confidence or develop this feeling over time.
  - "Imposter syndrome"

Why is My Learner "Quiet"?

Team Dysfunction

- Junior learners can sense when there is an ongoing negative dynamic between senior team members
  - Disagreement over management
  - Personal Dislike/disregard for each other
- Interprofessional teams also may breed discord due to hierarchical traditions or lack of professionalism

Why is My Learner "Quiet"?

Health and Family Stressors

- Many students who were able to manage chronic illnesses (i.e., T1DM, IBD, ADHD) in preclinical years struggle in the clinical years
  - Special accommodations
  - "Embarrassed" about disease
- New onset/new diagnosis of disease, including learning disabilities and mental illness, cause learners to retreat.
- Family/life crises generate anxiety and reticence in learners.
- Alterations in sleep/wake patterns make engagement on rounds difficult.
- Oral presentations are the bane of many introverts' existence…but also drive anxiety in extroverts!

Why is My Learner "Quiet"?

- Apathy
  - "I'm only here because the school says I have to be"
  - Probably the hardest student to engage in a learning environment
  - Demonstrates no interest in the material being taught and/or has another interest that "supersedes" your content
  - May be related to a medical concern (i.e., depression/dysthymia)

Important Guidelines for Medical Educators with "Quiet" Learners

- Don't think of introversion as something that needs to be cured.
- Learning styles are different, and as an instructor, you must use multiple modalities to reach your students.
- Cultural humility will allow you to reach learners whose backgrounds differ from your own.
- Put your learners in a position to "show what they know" and learn from you simultaneously.
- Set overarching goals for team members, especially when interprofessional education is concerned.
- Early, open, and honest communication with your learners experiencing challenges is key.
  - May involve discussions with their learning specialists, physicians, college advisors/coaches
- Pair/group learners with complimentary strengths.

The Roosevelts

- Eleanor: “Slow to laugh, bored by small talk, serious minded”, “empathetic”.
- Franklin: “…loved parties, flirting, and gossip….”frivolous man about town”…”mediocre scholar”

Cain, Susan. *Quiet: The Power of Introverts in a World That Can’t Stop Talking*, New York: Crown Publishing Group, 2012.

Tips for Small Group Learning

- Advance notice of expectations-must observe how they think to evaluate them
- Asynchronous discussion boards or e-mail discussions may help "quiet" learners.
- The pregnant pause: 5-10 seconds for the introvert to formulate ideas when a spontaneous response is needed.
- Having small groups with moderated conversations, giving everyone a chance to participate.
  - "Still the gunner"
- Teaching students skills in active listening, reflection, and mindfulness

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Tips for Clinical Learning

- Advance notice of expectations-must observe how they think to evaluate them
- Speak with learner individually prior to oral presentations—practice, anticipate questions
- Control the extroverts and gunners—wait 5 seconds after questions or select responder
- Allow more senior learners to lead rounds
- Evaluate written work

Tips for “Quiet” Learners

- You are adult learners.
  - Assume responsibility for your education.
- Discuss your challenges with your educators early
  - Alert your residents/attendings/faculty
  - Seek those supports as soon as possible
- Must introverts “fake it” to succeed in medicine?
  - Cain
    - Free Trait Theory
    - Self Monitoring
    - Restorative Niches
  - Recall, living at extremes of introversion or extroversion is not beneficial.