## **EDUCATIONAL DOWNLOAD**



# Avocado toasted: Mythbusting "Millennials," "Generation Z," and generational theory

Benjamin Holden Schnapp MD, MEd<sup>1</sup> | Trudi Cloyd MD, MSc<sup>2</sup> | Nicholas D. Hartman MD, MPH<sup>3</sup> | Tiffany Moadel MD<sup>4</sup> | Sally A. Santen MD, PhD<sup>5,6</sup> | Michael Gottlieb MD<sup>7</sup> |

### Correspondence

Benjamin H. Schnapp, University of Wisconsin School of Medicine and Public Health, Madison, WI 53705, USA.

Email: bschnapp@gmail.com

When younger learners look disengaged from on-shift teaching, appear absorbed by technology, or are less receptive to feedback after shift, they are often derided as "Millennial learners," Born from 1980 to the late 1990s, Howe and Strauss define seven characteristics of Millennials, describing them as "sheltered," "special," "team-oriented," "confident," "conventional," "achieving," and "pressured," while Generation Z (born from the late 1990s-2010) has been described as "technology-obsessed," "cautious," and "individualistic." However, the data to support generalizations based on any generational cohort are quite limited and rely on stereotyping at the expense of evidence-based teaching. By inaccurately grouping learners by generation, we negate the individuality of learners with generalizations and ignore our commonalities. Herein, we challenge the myth of learner generations and propose strategies to overcome three common issues in the clinical environment that are falsely attributed to younger learners.

One attribute commonly ascribed to younger generations of learners is an obsession with technology. Prior literature suggested that some younger learner groups (referred to as digital natives) may be more adept at technology than older learner groups (referred to as digital immigrants), but this concept has now been

debunked—differences in technological skill are better attributed to differences in exposure to technology rather than year of birth.<sup>2</sup> This false assumption may cause educators to assume that learners are disengaged if they are looking at their phone, when in reality they may be watching a video to refresh their skills on an upcoming procedure. Clinical education should focus on identifying and embracing the ways technology can enhance education and clinical practice. This can include advising learners on how to best utilize clinical decision support tools, which can improve evidence-based care.<sup>3</sup> It also includes best practices for thoughtful utilization of novel free open-access medical education (FOAM) resources at the bedside for enhancing knowledge acquisition and patient care, as many of these resources have been shown to offer high-quality content.<sup>4</sup>

Another common trait attributed to younger learners is the need for frequent praise and recognition for their efforts. Individuals from younger generations are often characterized as having received more "participation trophies" than in prior generations, causing them to seek positive feedback and resist guidance on their performance. Educators making this assumption about younger learners may be in danger of jeopardizing their own credibility by giving positive but

Supervising Editor: Dr. Sam Clarke.

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<sup>&</sup>lt;sup>1</sup>University of Wisconsin School of Medicine and Public Health, Madison, Wisconsin, USA

<sup>&</sup>lt;sup>2</sup>Columbia University Irving Medical Center, New York, New York, USA

<sup>&</sup>lt;sup>3</sup>Wake Forest School of Medicine, Winston-Salem, North Carolina, USA

<sup>&</sup>lt;sup>4</sup>Zucker School of Medicine at Hofstra/Northwell, Manhasset, New York, USA

<sup>&</sup>lt;sup>5</sup>University of Cincinnati College of Medicine, Cincinnati, Ohio, USA

<sup>&</sup>lt;sup>6</sup>Virginia Commonwealth University, Richmond, Virginia, USA

<sup>&</sup>lt;sup>7</sup>Rush University Medical Center, Chicago, Illinois, USA



## "Millennial Learners" RE-FRAMES STEREOTYPES TECHNOLOGY-ENHANCED Technology Incorporate new technology into existing lesson plans Obsessed Identify only resources for asynchronous learning Resistant to READY FOR QUALITY FEEDBACK Feedback Establish an educational alliance Give directly observed, timely, specific, and actionable advice Shortened **Attention Span HUNGRY FOR ENGAGING CONTENT** Utilize presentation best practices, e.g. interact Reduce cognitive load, e.g. limit text on slides

FIGURE 1 Stereotypes commonly associated with younger generation learners, along with more helpful reframes for each

insincere feedback or withholding necessary corrective feedback. There is no evidence to support emotional fragility as generational, and issues with feedback delivery and receptivity are longstanding. Regardless of generation, delivering effective feedback and constructive criticism can best be approached by following best practices like offering timely and specific advice after shift and engaging in an educational alliance with the learner. Educators can also mentor learners to address individual challenges with feedback receptivity and develop a growth mindset.

Faculty also conceptualize younger learners as having a shorter attention span than older generations, but in doing so, may miss the opportunity to reflect carefully on the quality of their own teaching. Evidence for shorter attention spans in younger learners is lacking. Research dating back decades suggested that attention spans wane at around 10–15 min.<sup>6</sup> However, this is based on extremely poor quality data, such as self-reported attention.<sup>6</sup> Moreover, competing demands at the individual level (e.g., sleep deprivation, hunger) or environmental level (e.g., surrounding distractions, poor instructor engagement) appear to be the primary drivers of attention.<sup>6</sup> Regardless of generation, attentional issues should be addressed by reducing cognitive load, utilizing engaging approaches to clinical teaching, and ensuring that learners have their basic needs met while on shift (Figure 1).

How should faculty think about engaging with learners from a different generation than themselves? Rather than unique populations with special interests and needs, learners of all generations need educational best practices such as active learning, retrieval practice, and spaced repetition of content. Further, by conceptualizing every generation of learners as similar to themselves, faculty avoid unhelpful overgeneralized assumptions about learner issues and can focus on investigating the true problem at hand.

### ORCID

Benjamin Holden Schnapp https://orcid. org/0000-0001-5031-8269 Sally A. Santen https://orcid.org/0000-0002-8327-8002 Michael Gottlieb https://orcid.org/0000-0003-3276-8375

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**How to cite this article:** Schnapp BH, Cloyd T, Hartman ND, Moadel T, Santen SA, Gottlieb M. Avocado toasted: Mythbusting "Millennials," "Generation Z," and generational theory. *AEM Educ Train*. 2022;6:e10757. doi:10.1002/aet2.10757