# Excellent vs Excessive: Helping Trainees Balance Performance and Perfectionism

Kay M. Johnson , MD, MPH Stuart J. Slavin , MD Traci A. Takahashi , MD, MPH

The perfect is the enemy of the good.

—Voltaire

🕇 cenario: An inpatient attending physician notices that one intern works much longer hours than her fellow interns. The attending appreciates her conscientiousness and dedication to patients but notices she has trouble delegating tasks and worries she may be exceeding the 80-hour work limit. The long hours may adversely affect her wellbeing, personal life, and even future career success. The intern seems to appreciate the attending's feedback about time management strategies but continues to work late.

Physicians take pride in being perfectionists, setting high standards for patient care, teaching, and research. Attention to detail and capacity for hard work are required to succeed in college and medical school. However, when unchecked, perfectionism can become maladaptive, resulting in negative consequences such as anxiety, depression, and burnout in medical students, 1-4 residents, 5,6 and practicing physicians. 6 Some internal medicine residents identify perfectionism as a contributor to learning-related shaming experiences.7 Overwork and burnout are critical problems for physicians, with multiple systemic causes,8 and perfectionism magnifies this risk in many individuals. We believe that early recognition of maladaptive perfectionism can facilitate changes in expectations and behavior, allowing more efficient use of energy and improved quality of life. In this article we outline harms of maladaptive perfectionism, identify characteristics and behaviors that should raise faculty members' concern, and propose strategies to increase self-awareness of those affected and ways educators can avoid reinforcing perfectionism.

Maladaptive perfectionism is characterized by unrealistic standards, self-criticism, and failure to accept one's own best efforts.3 The large discrepancy between personal standards and self-perceived achievement and other cognitive distortions that often accompany maladaptive perfectionism (negativity bias, all-or-none thinking, personalization, and self-blame<sup>3,10</sup>) negatively affect trainee mental health. The prevalence of maladaptive perfectionism in residents and fellows is unknown, 11 but in a 2015 survey with a 93% response rate at a single large US medical school, 25.4% of first-year medical students screened positive for maladaptive perfectionism<sup>3</sup> using the validated Almost Perfect Scale-Revised.<sup>12</sup> In another study of US medical students in 2019,<sup>2</sup> 19% of respondents were classified as maladaptive perfectionists based on the Short Revised Almost Perfect Scale. 13

Maladaptive perfectionists' self-worth is overly dependent on striving and achievement. 4 Avoidance of negative judgement is a strong motivator. 15 Having a "fixed mindset" 16 has been associated with maladaptive perfectionism.<sup>17</sup> By contrast, a "growth mindset" encourages learning and effort, allowing constructive feedback to be valued and embraced. Those with a fixed mindset feel a need to repeatedly prove themselves; from that perspective, constructive feedback is perceived as an attack on one's character, and to be avoided.

Maladaptive perfectionism can result in inefficiency, missed opportunities, and suboptimal mental health. For example, excessive time spent aiming for exceptional patient care leaves little time for academic projects, innovation, self-care, and relationships. Fear of not meeting excessively high standards leads to procrastination and avoidance of taking on new challenges.

## **Helping Trainees Gain Self-Awareness**

Common characteristics and behaviors of maladaptive perfectionists<sup>4,15</sup> are listed in BOX 1. In our experience, perfectionists undervalue their time, so are not motivated to follow time-management advice until they have insight into the problem. We believe medical educators should learn to recognize maladaptive perfectionism as early as possible and provide feedback to help trainees gain insight and motivation to make cognitive and behavior changes that will maximize their effectiveness and help prevent negative outcomes. We have found several techniques to be useful (BOX 2).

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#### BOX 1 Common Characteristics and Behaviors of Maladaptive Perfectionists<sup>4,15</sup>

- Conscientious, rule-following, exaggerated sense of responsibility
- Low confidence/self-esteem
- Detail-oriented
- Stay at work later than their peers
- Work hard to avoid negative judgment
- Have difficulty delegating tasks to others
- Take time to make decisions
- Procrastinate on projects
- Sometimes avoid new challenges

Normalize perfectionistic tendencies as an occupational hazard. The stressors inherent to the practice of medicine, when added to the psychological characteristics of those who seek medical careers, make perfectionism an occupational hazard. Recognizing this susceptibility can help trainees take measures to protect themselves.

Ask trainees if perfectionism ever gets in the way of accomplishing their goals. The Starling curve, a concept learned in medical school, illustrating the association between preload and cardiac output, can

## BOX 2 Techniques for Discussing Maladaptive Perfectionism With Trainees

- Maladaptive perfectionists undervalue their time. Help trainees gain insight before delivering time management tips.
- Ask, "Do you ever think your perfectionism gets in the way of your goals?"
- Normalize perfectionistic tendencies as an occupational hazard in medicine.
- Note that highly successful people are less likely to be perfectionists.<sup>1</sup>
- Use a Starling Curve analogy: spending more effort on a task increases output to a point, after which output decreases.
- Invite a cost-benefit analysis. Have the trainee list, in 2 columns, the benefits of perfectionism vs the costs, then prompt them to consider additional costs (see text).
- Be gentle with feedback, to avoid exacerbating feelings of shame or inadequacy.
- Express confidence in their ability to grow.
- Avoid reinforcing maladaptive perfectionism, such as giving praise for being the last to leave work. Instead, offer praise for triaging and delegating tasks well.
- Role model discussing one's own mistakes, learning from failure, and balancing excellence vs perfectionism.
- Encourage a growth mindset, de-emphasizing the idea that some people are more talented than others.

be used as an analogy to show that as one spends more effort or time on work, output (quality or quantity) increases, but only until a certain point, after which output actually decreases. For example, the quality of a presentation generally increases with the number of hours of preparation. However, if the presenter stays up late the night before the talk to perfect their slides, they may be too sleep-deprived to speak effectively. The Inverted U<sup>20</sup> (also known as the Yerkes-Dodson law<sup>21</sup>) is a variation on this concept.

Perform a cost-benefit analysis of perfectionism. Ask the trainee to take a few minutes to list in one column all the benefits of perfectionism they can think of, and in a second column, all the costs. Then, prompt them to consider additional categories of costs which may not have occurred to them initially: costs to patients, colleagues, people they teach, career trajectory, their organization or society at large. It's easy for perfectionists to see how their behavior can harm themselves (lack of sleep, exercise, fun activities) and affect friends and family. But they may not have considered that perfectionism affects patients (when an overly thorough physician consistently runs late in clinic), colleagues (missed deadlines when collaborating; missed learning or leadership opportunities due to lack of delegation), students (role modeling of unrealistic expectations and poor well-being), their career trajectory (avoiding challenging opportunities, or completing fewer manuscripts due to procrastination); and their organization or society (spending excessive energy on patient care and documentation, with none left for leadership, quality improvement, advocacy, or mentoring). Being gentle with this feedback, to avoid exacerbating feelings of shame or inadequacy, is important, as is expressing confidence in their ability to grow.

## **Educators Inadvertently Reinforce Perfectionism**

Whether in direct feedback or on written evaluations, educators should avoid praising trainees for being the last one to leave for the day. Instead, positive feedback for improving specific skills and successfully prioritizing tasks by importance or urgency is more appropriate. Leaders of teaching sessions should demonstrate and encourage a growth mindset, highlighting personal progress in themselves and trainees, while de-emphasizing the idea that some people are inherently more talented than others. Educators should share how they balance excellence versus perfectionism, cope with setbacks, and learn from failure. They should encourage trainees

to utilize a compassionate rather than a critical voice about themselves. 10

### **Additional Interventions**

Brene Brown's popular book, *The Gifts of Imperfection*, <sup>23</sup> gives practical advice about recovery from maladaptive perfectionism. Cognitive behavioral therapy is an effective treatment. <sup>24-27</sup> Goals include exploring other aspects of self-worth besides achievement and decreasing self-criticism. <sup>14</sup> In a randomized controlled trial, short-term structured professional coaching, which included modules on growth mindset and perfectionism, improved emotional exhaustion, self-compassion, and imposter syndrome of surgical and nonsurgical residents. <sup>28</sup>

Systemic changes to medical school<sup>29</sup> and post-graduate programs can also change expectations and well-being. At one pediatric residency program, a resilience workshop including discussion of cognitive distortions that accompany maladaptive perfectionism was part of a multipronged intervention in 2015 to improve interns' mental health. The intervention led to lower levels of burnout and anxiety compared to historical controls.<sup>30</sup>

#### Conclusion

Based on the Accreditation Council for Graduate Medical Education's self-awareness and help-seeking subcompetency, trainees should gain fundamental knowledge of factors that impact personal and professional well-being<sup>31-33</sup>; we believe that maladaptive perfectionism is often one of these factors. Medical educators should learn to recognize maladaptive perfectionism, avoid reinforcing it, and encourage self-awareness. By providing feedback that normalizes maladaptive perfectionism as an occupational hazard and broadens their insight into the costs versus benefits of perfectionism, faculty may help affected trainees use their time and energy more productively, improving their mental health and career satisfaction.

#### References

- Flett GL, Hewitt PL, Heisel MJ. The destructiveness of perfectionism revisited: implications for the assessment of suicide risk and the prevention of suicide. *Rev Gen Psychol.* 2014;18(3):156-172. doi:10.1037/gpr0000011
- Brennan-Wydra E, Chung HW, Angoff N, et al. Maladaptive perfectionism, impostor phenomenon, and suicidal ideation among medical students. *Acad Psychiatry*. 2021;45(6):708-715. doi:10.1007/s40596-021-01503-1
- 3. Hu KS, Chibnall JT, Slavin SJ. Maladaptive perfectionism, impostorism, and cognitive distortions:

- threats to the mental health of pre-clinical medical students. *Acad Psychiatry*. 2019;43(4):381-385. doi:10.1007/s40596-019-01031-z
- 4. Shafran R, Zafra Cooper Z, Fairburn CG. Clinical perfectionism: a cognitive-behavioural analysis. *Behav Res Ther*. 2002;40(7):773-791. doi:10.1016/s0005-7967(01)00059-6
- Tovilla-Zarate CA, Guízar-Sánchez D, Yoldi-Negrete M, et al. Suicidal ideation in psychiatry trainees. The impact of self-perceived mental health and perfectionism. *Asian J Psychiatr*. 2022;68:102938. doi:10.1016/j.ajp.2021.102938
- Craiovan PM. Correlations between perfectionism, stress, psychopathological symptoms and burnout in the medical field. *Procedia Soc Behav Sci.* 2014;127:529-533. doi:10.1016/j.sbspro.2014.03.304
- Bynum WE, Artino AR Jr, Uijtdehaage S, Webb A, Varpio L. Sentinel emotional events: the nature, triggers, and effects of shame experiences in medical residents. *Acad Med.* 2019;94(1):85-93. doi:10.1097/ACM. 00000000000002479
- 8. West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. *J Intern Med*. 2018;283(6):516-529. doi:10.1111/joim.12752
- Flett GL, Mara CA, Hewitt PL, Sirois F, Molnar DS. How should discrepancy be assessed in perfectionism research? A psychometric analysis and proposed refinement of the almost perfect scale—revised. *J Psych Assess*. 2016;34(7):718-732. doi:10.1177/ 0734282916651382
- Kelly JD. Your best life: perfectionism—the bane of happiness. *Clin Orthop Relat Res*. 2015;473(10):3108-3111. doi:10.1007/s11999-015-4279-9
- 11. Thomas M, Bigatti S. Perfectionism, imposter phenomenon, and mental health in medicine: a literature review. *Int J Med Educ*. 2020;11:201-213. doi:10.5116/ijme.5f54.c8f8
- Enns MW, Cox B. The Nature and Assessment of Perfectionism: A Critical Analysis. In: Flett GL, Hewitt PL, eds. *Perfectionism: Theory*, *Research*, and *Treatment*. American Psychological Association; 2002;33-62.
- Rice KG, Richardson CME, Tueller S. The short form of the revised almost perfect scale. *J Pers Assess*. 2014;96:368-379. doi:10.1080/00223891.2013.838172
- Egan SJ, Wade TD, Shafran R. Perfectionism as a transdiagnostic process: a clinical review. *Clin Psychol Rev.* 2011;31(2);203-212. doi:10.1016/j.cpr.2010.04.009
- 15. Myers MF, Gabbard GO. *The Physician as Patient: A Clinical Handbook for Mental Health Professionals*. American Psychiatric Association Publishing; 2008.
- Dweck CS. Mindset: The New Psychology of Success. Ballantine Books; 2006.
- 17. Chan DW. Life satisfaction, happiness, and the growth mindset of healthy and unhealthy perfectionists among

- Hong Kong Chinese gifted students. *Roeper Review*. 2012;34(4):224-333. doi:10.1080/02783193.2012.715333
- 18. Gerada C. Unhealthy perfectionism. *BMJ*. 2019;364:1438. doi.org/10.1136/bmj.l438
- Peters M, King J. Perfectionism in doctors. *BMJ*. 2012;344:e1674. doi:org/10.1136/bmj.e1674
- Hebb DO. Drives and the CNS (conceptual nervous system). *Psychol Rev.* 1955;62(4):243-254. doi:10.1037/h0041823
- Nickerson C. The Yerkes-Dodson law of arousal and performance. *Simply Psychology*. Published November 15, 2021. Accessed April 2, 2023. https://www. simplypsychology.org/what-is-the-yerkes-dodson-law.html
- 22. Bynum WE, Varpio L, Lagoo J, Teunissen PW. I'm unworthy of being in this space: the origins of shame in medical students. *Med Educ*. 2021;55(2):185-197. doi:10.1111/medu.14354
- 23. Brown B. *The Gifts of Imperfection*. Hazelden Publishing; 2010.
- Chand SP, Chibnall JT, Slavin SJ. Cognitive behavioral therapy for maladaptive perfectionism in medical students: a preliminary investigation. *Acad Psychiatry*. 2018;42(1):58-61. doi:10.1007/s40596-017-0708-2
- Lloyd S, Schmidt U, Khondoker M, Tchanturia K. Can psychological interventions reduce perfectionism? A systematic review and meta-analysis. *Behav Cogn Psychother*. 2015;43(6):705-731. doi:10.1017/S1352465814000162
- Shafran R, Egan S, Wade T. Overcoming Perfectionism 2nd Edition: A Self-Help Guide Using Scientifically Supported Cognitive Behavioural Techniques. 2nd ed. Robinson; 2018.
- Radhu N, Daskalakis ZJ, Arpin-Cribbie CA, Irvine J, Ritvo P. Evaluating a web-based cognitive-behavioral therapy for maladaptive perfectionism in university students. J Am Coll Health. 2012;60(5):357-366. doi:10.1080/07448481.2011.630703
- 28. Fainstad T, Mann A, Suresh K, et al. Effect of a novel online group-coaching program to reduce burnout in female resident physicians: a randomized clinical trial.

- *JAMA Netw Open.* 2022;5(5):e2210752. doi:10.1001/jamanetworkopen.2022.10752
- Slavin SJ, Schindler DL, Chibnall JT. Medical student mental health 3.0: improving student wellness through curricular changes. *Acad Med.* 2014;89(4):573-577. doi:10.1097/ACM.0000000000000166
- 30. Slavin S, Shoss M, Broom MA. A program to prevent burnout, depression, and anxiety in first-year pediatric residents. *Acad Pediatr*. 2017;17(4):456-458. doi:10.1016/j.acap.2016.12.016
- 31. Edgar L, Roberts S, Holmboe E. Milestones 2.0: a step forward. *J Grad Med Educ*. 2018;10(3):367-369. doi:10.4300/JGME-D-18-00372.1
- 32. Vermette D, Doolittle B, Gielissen KA. Assessing well-being in Milestones 2.0: a case for flourishing-focused advising. *J Grad Med Educ*. 2022;14(4):390-393. doi:10.4300/JGME-D-21-00970.1
- Edgar L, McLean S, Hogan SO, Hamstra S, Holmboe ES. The Milestone Guidebook. Accreditation Council for Graduate Medical Education. Published 2020. Accessed April 2, 2023. https://www.acgme.org/globalassets/MilestonesGuidebook. pdf?ver=2016-05-31-113245-103&ver=2016-05-31-113245-103



Kay M. Johnson, MD, MPH, is Attending Physician, Hospital and Specialty Medicine, VA Puget Sound Health Care System, and Associate Professor of Medicine, Division of General Internal Medicine, University of Washington School of Medicine; Stuart J. Slavin, MD, is Senior Scholar for Well-Being, Accreditation Council for Graduate Medical Education; and Traci A. Takahashi, MD, MPH, is Attending Physician, General Medicine Service, VA Puget Sound Health Care System, and Associate Professor of Medicine, Division of General Internal Medicine, University of Washington School of Medicine.

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Corresponding author: Kay M. Johnson, MD, MPH, VA Puget Sound Health Care System, kay.johnson2@va.gov