

Imposter Syndrome

Many individuals can relate to feeling anxious or inadequate during the first few days of a new job or students during their first few weeks of college. However, these feelings of inadequacy can be long lasting, inaccurate and can interfere with a person's view of themselves and thus affect their performance. This experience is known as imposter syndrome or imposter phenomenon. Imposter syndrome can be experienced by all age groups, occupations, and demographics. Research and literature have attempted to pinpoint the cause of these emotions and false perspectives, but further research must be done on techniques that can be used in order to offset this mindset.

Article 1: Intellectual Self-doubt and How to Get Out of It

Overview:

This article is published in the "American Journal of Pharmaceutical Education" and is a brief reflection from professor Adam Persky about his experiences with imposter syndrome, and ten steps that one can take to overcome similar experiences with imposter syndrome. He analyzes the ten steps and applies it to his own mindset.

Summary:

The author discusses his experiences with IP throughout his academic and professional career as a teacher. The ten steps to overcome imposter syndrome he references is from impostersyndrome.com and is listed as follows: breaking the silence (admitting you have imposter syndrome); separating feelings from fact; recognizing when one should feel fraudulent; accentuate the positive; developing a new response to failure and mistake making; right the rules (not acting under "misguided rules" like "I must know every answer" or "I cannot ask for help"); develop a new script (identify triggers); visualize success; reward oneself; and "fake it till you make it".

Application and Critique:

This article is a reflection of imposter syndrome from a professor, who expands the idea of IP from not only students but to faculty as well, as he references mentors and others in higher education that also struggle with IP. Since this article is a reflection of himself, the reader sees personal application of these rules, but there is no follow-up about how the implementation of these ten rules affected his IP.

Persky AM. Intellectual self-doubt and how to get out of it. *Am J Pharm Educ.* 2018 Mar;82(2):6990.

Article 2: Tackling Imposter Syndrome: a Multidisciplinary Approach

Overview:

The article is published in "Clinical Imaging" and is a reflection of imposter syndrome in the workplace and medical field from the perspectives of a psychiatrist, a diagnostic radiologist, an interventional radiologist, and a radiation oncologist.

Summary:

From assessing the perspectives described in the article, there are several key points that can be concluded. The article heavily stresses the impact that IP can have on work performance, and how in the healthcare industry IP is prevalent due to feelings of necessary perfection, and being in high stakes situations that require knowledge and expertise. One professional created the five R's that she uses to combat IP: Recognize it; rational thinking; reframe; ready; repeat. Several professionals also discuss the importance of representation of women and minority groups in the healthcare field, as having other individuals within one's demographic background in a similar position to oneself can diminish the feeling of being "out of place". Environmental factors can also be a component in IP; as the article discusses administrative instances where people may experience IP, and how including individuals and their ideas/perspectives can diminish an individual's feelings of inadequacy.

Application:

This article has multiple perspectives from different areas in the healthcare field and also includes the perspective of a psychiatrist. While reflecting on healthcare and administrative roles as a whole, this article is confined to the radiology field, so some of the experiences may be skewed. For example, some of the authors discuss lack of representation for women and minority groups, and in the pharmacy world there is almost equal representation of male and female pharmacists as a whole.

Arleo EK. Tackling imposter syndrome: A multidisciplinary approach. *Clin Img.* 2021

Article 3: Imposter Syndrome: Treat the Cause, Not the Symptom**Overview:**

Published in the Journal of the American Medical Association, this article challenges the mindset that IP is due to purely internal feelings, and instead analyzes the environment of the healthcare field as a whole and how the healthcare community contributes to IP.

Summary:

Imposter syndrome is extremely prevalent in the medical field. While most articles and journals focus on the individual and their own psyche, this article argues that the environment surrounding healthcare individuals is focused on perfectionism and high stress (long hours, caseloads, administrative tasks, etc), causing individuals to suffer from burnout, depression, and anxiety; all of these things can exacerbate IP. Diversity and minority groups are also mentioned, with a heavy emphasis on women in the healthcare field. Due to social constructs, women are more likely to minimize ambitions and avoid taking on new opportunities (for example, women are socialized to frame suggestions as questions in order to avoid seeming abrasive, and can be penalized for exercising power and volubility in a meeting). Overall, this article heavily emphasizes the environmental role in imposter syndrome and problems with the healthcare field that can contribute to these feelings.

Application:

This article assesses external factors that can contribute to IP, and delves further into environmental factors and disparities in representation that can cause IP. However, this article does not suggest or promote ways that one can fix these scenarios in the workplace.

Mullangi S, Jagsi R. Imposter Syndrome: Treat the cause, not the symptom. *JAMA*. 2019 Aug 6;322(5):403-404.

Article 4: Thoughts of being an imposter, in medical students**Overview:**

This article appeared in “The Clinical Teacher Journal” and discusses some of the observations the authors have made while teaching medical students. It begins with a simple background on IP, and then goes into the damaging effects of IP and later discusses ways in which medical school faculty can help students to deal with IP.

Summary:

The article begins with discussing how there is a balance that doctors and medical students have and that any extreme, from either being overconfident in their abilities, or not being confident at all, is bad. The origins of IP are mentioned, and it is also mentioned that a common belief of IP sufferers is that anyone who disagrees with them has been misled. A focus group is then mentioned where the author says that students she talked to said that IP has contributed to mental illness and impaired learning and that these thoughts lead to them feeling isolated. Said isolation may be reinforced by the culture of self-directed learning and a culture where insecurities and fears of incompetency are hidden.

The author then notes that literature is limited, but mentions that increasing awareness, having discussion groups, and counseling are most likely the best options.

Application:

The key takeaways from this article are that imposter syndrome does have a negative effect on student learning if left unchecked (however there was a note that a little bit of imposter syndrome was good due to motivating students to study). Other notes from this article involved the measures given to help deal with IP. Increasing awareness, peer discussion groups, and counseling are the best options for students according to this article. Other solutions involve addressing the culture of the institution itself, making sure it encourages asking questions and is careful to deliver feedback in a way that is constructive and helpful.

Warraich S, Swales C, O'Leary D. Thoughts of being an imposter, in medical students. *Clin Teach*. 2017 Dec;14(6):454-455.

Article 5: An Opportunity to Positively Influence Mentees

Overview:

This article appeared in the *Currents in Pharmacy Teaching and Learning* and discusses how mentors such as preceptors and faculty can help students handle IP.

Summary:

The article begins with a summary of the history of IP, and then delves into pharmacy student and new practitioner perspectives on IP. For new practitioners specifically, they suddenly become a pharmacist and have the same level of liability as a pharmacist of 20 years. However, these pharmacists may feel the same way when they have been put in a new position. Later, various perspectives on IP and how to handle it are presented stepwise.

Four steps are listed, and they are introducing the concept, sharing your struggles, providing feedback, and mentorship.

Gresham-Dolby C. Imposter syndrome: An opportunity to positively influence mentees. *Curr Pharm Teach*. 2021

Application:

Each of the four steps have strategies to help deal with IP. Introducing the concept involves making students familiar with the concept at orientation so that people could associate their feelings with a name. Sharing your struggles involves pharmacists from all different areas sharing their struggles in order for students to relate would be very helpful to students to recognize that everyone fails, no matter how successful they are. Providing feedback can be helpful for sufferers of IP because it allows them to build a framework to view their achievements and failures. Finally, mentorship would provide students a resource to discuss their feelings with.

Article 6: Imposter phenomenon in radiology: incidence, intervention, and impact on wellness

Overview:

This article appeared in *Clinical Imaging* and it focuses on the presence of IP at a radiology medical center. They had participants fill out surveys related to burnout and IP.

Summary:

83% of the faculty surveyed experienced IP, and it was also found that burnout is highly correlated with IP. After the results, some potential causes of IP were discussed, such as the rapid advancement in the field and a relative lack of positive reinforcement via patient feedback. The article then details some ways to help people to deal with this.

Application:

This study mentions that mentor programs and structured recognition platforms for achievement as effective interventions for IP in health professionals.

Deshmukh S, Shmelev K, Vassiliades L, Kurumety S, Agarwal G, Horowitz JM. Imposter phenomenon in radiology: incidence, intervention, and impact on wellness. *Clin Imaging*. 2022 Feb;82:94-99.