

Imposter Syndrome: How to Recognize and Combat It

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Mentoring in CSE and Beyond: Personal Support in Professional Development—Patty Baskin, Leslie Neistadt, and Barbara Gastel have long been leaders for the CSE Mentorship program. Based on a session from the 2024 CSE Annual Meeting in Portland, they have developed a series of articles on mentorship. The other two articles are available here: <https://doi.org/10.36591/SE-4704-02>; <https://doi.org/10.36591/SE-4704-04>

Most of us doubt ourselves, at least occasionally, and some of us do so more often than others. In life, and particularly at work, do you

- see each new challenge as the one that will finally reveal you as a fraud?
- view any success as a fluke?
- assume responsibility for everything that goes wrong?
- define competence as absolute perfection?
- overprepare to cover your perceived ineptness?
- procrastinate so you have a ready excuse for a poor result?
- fear both failure and success?

If you answered yes to any of these, you might have imposter syndrome, which has been described as the pervasive feeling of self-doubt, insecurity, fraudulence, and incompetence, often despite voluminous evidence to the contrary and despite the positive opinions of others. It is not listed in the *Diagnostic and Statistical Manual of Mental Disorders*,¹ and no formal definition or list of diagnostic criteria exists.

Imposter syndrome as a psychological phenomenon was first described in the 1970s, when Oberlin psychologists Pauline Clance and Suzanne Imes began talking about their shared sense of not being good or smart or hard-working enough. They suspected they were not the only ones and so studied 150 women: accomplished professionals and excellent students. Even though the participants were

successful by every measure, many believed they had fooled everyone into thinking well of them and that one day, the truth would be discovered, and they would be identified as frauds.

Clance and Imes wrote up their findings, and though the article was rejected by several journals, it was eventually accepted by *Psychotherapy* in 1978.² They proposed that the cause of imposter syndrome is multifactorial, involving the culture, environment, and family dynamics and suggested that it stems from a failure to feel validated in childhood. Some parents have completely unrealistic expectations for youngsters. Conversely, other parents are overly critical. In both cases, the offspring see their self-worth as contingent on achievement and an inability to attain perfection as failure. Some researchers have blamed structural problems and systemic inequalities and thought the aim should be to address these factors, not to pathologize the individuals. Clance and Imes agreed with many of these ideas. Clance subsequently developed the Imposter Phenomenon Scale.³

Who experiences imposter syndrome? Data on the prevalence and demographics are lacking. Anecdotally, the topic has received a good deal of attention, as evidenced by the more than 200 articles in PubMed, with a rapid proliferation in the past few years. Amazon has more than 450,000 links, and Google has more than 12 million links.

In a 2016 study by Villwock et al⁴ of a medical school class, one-fourth of the male students and one-half of the females expressed symptoms of imposter syndrome. Whether women are truly more vulnerable than men is unclear; it may simply be that women are more willing to admit it. Smart, successful, conscientious, and perfectionistic people are most susceptible. They may feel they need to work twice as hard to be half as good, but their efforts are never enough.

Imposter syndrome can be particularly prevalent in historically marginalized populations, who may feel pressure to represent their entire group. It also tends to affect individuals who differ in any way from the majority of their peers: by gender, race, disability, or another aspect, such as being a first-generation college student. Alienation and feeling undervalued and less competent than peers may result, leading to increased stress.

Among the accomplished people who have experienced imposter syndrome are

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- Author Maya Angelou: "I have written 11 books, but each time, I think 'uh oh, they're going to find me out now. I've run a game on everybody, and they're going to find me out.'"⁵
- Astronaut Neil Armstrong: "I just look at all these people and think, what the heck am I doing here? They've made amazing things. I just went where I was sent."⁶
- Associate Supreme Court Justice Sonia Sotomayor: "I have spent my years since Princeton, while at law school and in my various professional jobs, not feeling completely a part of the worlds I inhabit. I am always looking over my shoulder wondering if I measure up."⁷
- Actor Tom Hanks: "No matter what you've done, there comes a point where you think, how did I get here? When are they going to discover that I am, in fact, a fraud and take everything away from me?"⁸
- Actress and director Jodie Foster: "I thought everybody would find out, and they'd take the Oscar back. They'd come to my house, knocking on the door: 'Excuse me, we meant to give that to Meryl Streep.'"⁹
- Actress Meryl Streep: "You think, 'Why would anyone want to see me again in a movie? And I don't know how to act anyway, so why am I doing this?'"⁹

So, if you have imposter syndrome, what can you do? A number of things¹⁰⁻¹⁶:

- Remember that most people experience this at one point or another; you're not alone.
- Reframe those negative thoughts. Maybe your mistake isn't actually catastrophic?
- Personalize less and contextualize more. It's not necessarily all about you!
- Separate feelings from reality. Feeling that you're a fraud doesn't automatically make you one.
- Stop setting unrealistic goals. Acknowledge that life is imperfect, you're going to make mistakes, and sometimes "good enough" is sufficient.
- Learn to accept positive feedback with a simple "thank you" rather than a lengthy explanation of all the ways in which you failed to measure up.
- Keep a log of those compliments and refer back to them as needed.

Consider several real-life frauds. Elizabeth Holmes convinced investors to back her Theranos blood-testing company, which was based entirely on unproven and discredited claims. Bernie Madoff created the largest Ponzi scheme in history. How much time do you think they spent worrying about imposter syndrome?

If actual frauds rarely experience imposter syndrome, maybe the corollary is that if you do have it, then chances are you're not a fraud!

About the CSE Mentorship Program. The mentor/mentee relationship (dyad) is a 1-year commitment (from one CSE annual meeting to the next) that usually involves regular phone calls and may include other activities of interest to the mentor and mentee. If you are interested in acting as a mentor for a CSE colleague, fill out an application for the mentoring program on the CSE website (<https://www.councilscienceeditors.org/mentorship-program-info>). If you would like to HAVE a mentor, you'll also apply on the CSE website. Many CSE members have indicated their enthusiasm about mentoring their colleagues.

The Mentorship Committee. The Committee, which always welcomes new members, oversees the program, matches the dyad pairs after screening applications, and provides basic training materials for the dyad pairs to begin their relationships. These training materials include 3-month guides for both members of the dyad, suggesting optional discussion items for each meeting, with the pairs encouraged to be flexible to make the partnership most effective.

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