Credit: Jesse Benjamin
Creative Services

Career satisfaction falls prey to bottomless demands

The pressure to publish during PhD training is only the beginning of a career in an environment that places intractable expectations on academics, argues Jennifer Lavers, a Lecturer in Marine Science; unrealistic demands to excel in publications, grants and outreach lead even outwardly successful academics to question their career choices.

I recall countless hours sitting across the desk from my PhD supervisor, requesting feedback on draft manuscripts and seeking his advice on fieldwork logistics. I respected his opinions and expertise, and I fondly remember his curious taste in music (there was a large poster of Prince in a purple jumpsuit hanging on his office wall). It seems remarkable now, but when I graduated, I'd yet to publish a single thesis chapter. I was immediately offered a postdoc position, so someone obviously had faith that my qualifications meant I could write and had other useful skills to offer. Over the next year, I was excited to publish six papers in journals relevant to my field. To this day, some of these journals don't have an impact factor. It was 2007 and I'd never heard of the phrases 'impact factor', 'citation score' or 'publish or perish'. It simply wasn't part of the conversation. Everyone was doing good science; what else mattered? I never considered how my choice of journal would mean these papers contributed nothing to my future career.

More than a decade has passed, and I now supervise PhD students of my own. The way we navigate through a career in research has changed drastically. For students, impact factor is part of week-one inductions, and terms like 'mental health', 'completion rates' and 'performance evaluation' now dominate the language we use. Journals that lack an impact factor have been downgraded from 'potentially does nothing for career' to 'complete waste of time and resources' according to a former employer. Of course, simply having an impact factor is no longer adequate, as many institutions set targets whereby papers published in journals with impact factors below a certain value mean staff don't get credit for this work on their annual performance evaluation.

Let's be honest, some of this change is beneficial, and it's not all bad news. For example, while impact factor targets were initially quite daunting (and often

impossible to achieve), they challenged me to think about the future of my research and to broaden the scope in ways that led to new collaborations and insights (and data that was actually publishable in journals that met those impact factor targets). But changes to publishing, and in academic life more broadly, has also led to side-effects that most of us experience, yet few want to talk about. I reluctantly detail some of my own personal experiences; of course, each person's experience with academia is different, and I'm acutely aware my own experience won't apply to everyone. It's also dangerous to share one's own experience in a world where keyboard warriors may attack everything, especially personal details. But I believe sharing stories will resonate with someone, and in doing so, help them feel less alone. That's important.

I've published more than 70 papers during my decade-long research career, including one of the most highly scored papers for my institution (based on Altmetrics). I'm incredibly fortunate to work with some truly amazing scientists whose skill and passion for key issues like diversity should inspire us all. I supervise a large number of hard-working young graduate students each year, all of whom publish, bring in funding and make me endlessly proud. I lecture across multiple undergraduate courses, which means I'm responsible for teaching around 100 students per year. My dedication to science communication has led to collaborations with incredible artists and filmmakers, people whose vision has helped translate my science into new and exciting 'languages' I never thought possible.

From the outside I may appear happy and successful, publishing papers, winning awards and garnering plenty of media attention. But this couldn't be further from the truth. I'm frequently bullied and struggle navigating the world of science while being young and female. Whatever success

I achieve, it's never enough. I'm told the grants are too small, journal impact factors are not high enough, or that I'm not collaborating with enough people from the right places. What no one hears about is the 12 years of short-term contracts, long periods of unemployment, uncertainty, high workload and zero opportunity for promotion. In some years my PhD students made more money than I did. I didn't tell them, even when they sat across my desk upset about not being able to pay their bills. It's in these moments I remember sitting across from my own PhD supervisor, relying on him for mental, financial and logistical support, but rarely considering what his world might look like. I treated him like a resource. In such a high-pressure world, we must all do better.

This is not about me but about the parts of my story that are shared in common with countless others. Permanent jobs in many areas of science (especially environmental science) are scarce and highly competitive. Is this wearing us down? Absolutely. Will some of these brilliant minds become casualties of a broken system, and will society lose out on their experience and passion? Sadly, it's already happening. Each week more and more scientists announce (usually privately, because that tends to be our style) they're opting for new career paths. They slip quietly out the (lab) door at a time when we need them the most. The publish-or-perish crisis starts with the expectations we place on PhD students, but that's only the beginning. And it affects us all. ■

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