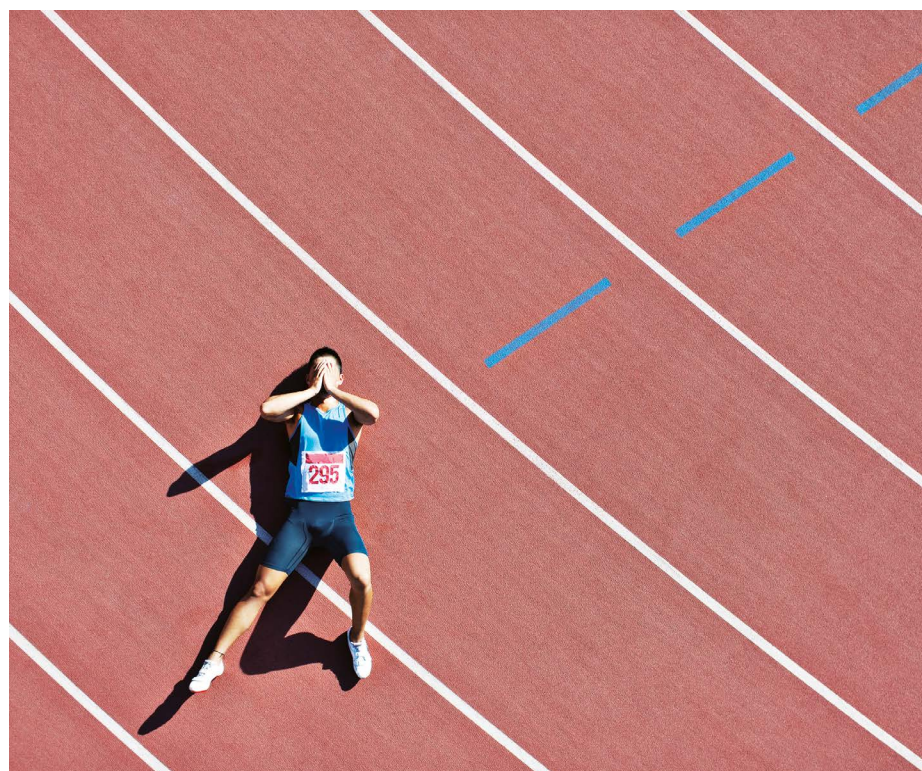




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Sports and science careers might be vastly different — but both can trigger an identity crisis.

AN ACADEMIC IDENTITY CRISIS

Overdoing PhD work can lead to loss of identity. Three things help recover it. **By Robert Seaborne**

During the final 18 months of my PhD programme, I became incredibly absorbed in my work. For months on end, I could be found toiling in the laboratory or writing in an office for 13–14 hours per day. Evenings and weekends that I once spent playing football, going to the gym or socializing were instead used to work on my experiments, read, write or analyse data. I became obsessed with my project. Every waking moment was spent furthering my studies. Every conversation I had revolved around my work. I had become the living embodiment of my PhD, and completely lost my sense of self. I had assumed a new identity: one that centred on my degree programme.

Identity crises are neither a new nor a

unique phenomenon. Elite athletes, for example, are particularly susceptible to them¹, and these events have severe psychological and performance-related effects. It's easy to imagine why: the life of an athlete is the relentless pursuit of perfection in an extremely volatile environment. That promotes extreme dedication, and a win-at-all-costs mentality.

Research suggests that athletes who

“Over time, I have slowly started to gain back an identity that I once lost to my PhD.”

identify entirely as athletes, as opposed to those who see being an athlete as only a facet of their personality, are at greater risk of mental-health damage when this identity is challenged, under threat¹ or removed entirely. These individuals have effectively built an entire identity around one component of their being. And when this identity is challenged or becomes strained, the individual perceives the threat as an attack or criticism of their entire person, leaving them psychologically and emotionally fragile. This is most strikingly seen in elite athletes who are forced to retire; this process effectively strips them of the one identity they have associated with for many years².

Elite sport and academia might seem like two completely distant worlds, but I think they are similar when it comes to their ability to trigger an identity crisis. Both are highly intensive, performance-driven, turbulent careers, with too many candidates trying to ‘make it’ compared with the number of places available.

My own identity had become entirely defined by my PhD work, and I had created a personality defined by just one aspect of my life. When this was under threat and challenged by poor results or failed experiments, I interpreted these outcomes as evidence that my entire identity was a failure or was insufficient. Consequently, my emotional and psychological outlook ebbed and flowed to the rhythm of my PhD. During the highs, I was motivated, excited and passionate about life. But during the lows, I became irritable, aggressive and both physically and mentally drained. I was unstable and unhappy.

I graduated towards the end of 2018, and it has taken me a full year to truly discover, understand and reflect on what this identity crisis was, how it affected me and what mechanisms helped me to overcome it. Identifying and developing these coping strategies was crucial, and would have served me very well had I been advised of these tactics early in my studies. Here I describe three mechanisms that worked for me, in the hope that they might benefit those who are currently in, or who might encounter, a similar scenario.

Exercise

Sport has always been a huge part of my life, but was something that I had lost during the intense periods of my PhD programme. Following the successful defence of my dissertation, I suddenly had a lot of spare time at weekends and evenings. So I decided to restart my outdoor exercise habits. I joined

a local football team and a gym, and I began recreationally going rock climbing and playing tennis. Committing to exercise and competitive sport again has helped me to have another element of my life to focus on outside academia. It gives me a lot of perspective, and helps me to counterbalance the challenges I face during my research career.

Sleep

During the most intense periods of my PhD programme, I prioritized my work over everything else – including getting enough sleep. Your mind works in a much more efficient and productive manner if you are getting sufficient amounts of quality sleep. With this comes a better ability to interpret, process and deal with challenges at both the emotional and psychological level.

Reading

As researchers, we tend to be inquisitive and eager to learn. I realized that if I was to try to resolve my psychological state, then I needed to understand the issue. And so, I read. I read books about how to control the mind^{3,4} through to ones about the habits of highly successful chief executives⁵, businesses⁶ and past and present sporting greats^{7,8}. They helped me to learn a little about how the mind works, and how I can better control my own.

As a result, I slowly began to feel more at ease with my thought processes, and began to understand more about who I was. Over time, I have slowly started to gain back an identity that I once lost to my PhD.

Maintaining your personal identity in a career that is highly volatile, stressful and intense is difficult, and your sense of self can so easily be lost. However, it is crucial to differentiate yourself from your work in order to maintain both your mental and physical health. It is important to understand that successes and failures in your research career do not and should not define who you are. You are a person long before you're a PhD researcher.

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MEN SELF-HYPE THEIR PAPERS

Sensationalistic words attract citations – and men more often use them. **By Chris Woolston**

A language analysis of titles and abstracts in more than 100,000 scientific articles found that papers with both first and last authors who were women were about 12% less likely than male-authored papers to include sensationalistic terms such as 'unprecedented', 'novel', 'excellent' or 'remarkable'. The study, published in *The BMJ*¹, also found that papers missing such words garnered significantly fewer citations.

Researchers tracked 25 positive terms in clinical-research articles published between 2002 and 2017, and input the authors' names into the Genderize database to predict their genders. The team then created models that compared the citation rates and word choice of articles published in the same journals in the same year with the same subject keywords.

The articles in each comparison were presumably of similar quality, but those that had positive words in their title or abstract

"Is language a mirror of society, or does it shape society?"

garnered 9% more citations overall, and 13% more citations in high-impact journals.

The relative reluctance of female authors to use self-flattering words could contribute to a gender gap in citations and impact, says lead author Marc Lerchenmueller, an economist at the University of Mannheim in Germany and the Yale School of Management in New Haven, Connecticut. In the big picture, he adds, these results should encourage scientific authors and editors to think about word choice and its effects. "Scientists should discuss whether using such sales terms is a disservice to the scientific enterprise," he says.

An increasing practice

The discussion seems to be becoming more important: the analysis also found that such self-flattering words were 80% more common in 2017 than they were in 2002. Lerchenmueller notes that this time period marked an explosion in the number of published articles. "Authors are trying to present

research as favourably as possible to attract attention," he says.

At this point, it's impossible to pinpoint exactly why male and female authors would take a different approach to promotional language, Lerchenmueller adds. He points to decades of studies suggesting women are more likely than men to face a backlash from peers and society when they stray beyond stereotypical norms. Women who have been chastised in the past for being too forceful or boastful might edit themselves and tone down their language, he says. Sensationalistic words could also be added or removed at some point during the editorial process – and Lerchenmueller thinks that this possibility warrants closer examination.

The impact of words

This relative lack of inflated language in female-authored papers echoes a 2019 experimental study published by the National Bureau of Economic Research², showing that women gave themselves relatively poor marks in interviews, performance reviews, job applications and other settings. "We found a large and robust gender gap in self-promotion," says Christine Exley, who is a business-administration researcher at Harvard Business School in Boston, Massachusetts. In one measure, women were less likely to describe their performance favourably when selecting from a list of potential adjectives that ranged from 'terrible' to 'excellent'. Exley notes that in an experimental setting, women should have felt no fear of backlash for over-hyping themselves – but the gender gap still persisted.

Lerchenmueller feels that his study touches on some important philosophical questions about the power and meaning of words. "Is language a mirror of society, or does it shape society?" In the world of science, he says, language seems to both reflect and promote bias – and female researchers are facing the consequences.

Chris Woolston is a freelance writer in Billings, Montana.

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