

# Let's focus on the research process, not the outputs



*The outsized importance of publications has meant too many research students focus on featuring papers in prestigious journals, despite having success in doing so feeling like something of a lottery. To **Mattias Björnmalm**, a strong focus on the research output instead of the research process is detrimental to research itself. Research is about increasing our understanding of the world and helping to solve problems. At its best and most effective, this is a collaborative endeavour leveraging diverse skills and experiences. Ensuring we focus our definition of success around valuable contributions — instead of around the final output — would recognise and reward good research and researchers.*

My hand trembled with nervousness and anticipation. It was the start of my student research project. My supervisor had talked me through how “by doing X we will learn more about Y” and I was excited to get started.

A decade later when I talk to my own students I sometimes catch myself using another way to frame our work: “if we do X, and it ‘works’, then perhaps we can get into prestigious journal Y”. This is poison for an inquiring mind.

This thinking shifts the focus from the *research process*, to rest heavily on the *research output*. While I have been fortunate to work with many great researchers and mentors, I also know how common this type of thinking is around the world. While it may help advance some careers in the short term, it is doing us a disservice in the long term, for two reasons.

First, this is not the best way to train research students. With rejection rates for many prestigious journals exceeding 90%, many excellent manuscripts will undoubtedly be rejected. The individual researcher therefore has very little control over whether or not they can be published in these titles. If our definition of success is centred around getting into prestigious journals, I do not blame research students who feel that being successful in research is like a lottery. This is also a source of [uncertainty and stress for students](#), as diligence and good work are largely disconnected from outcomes in this “lottery” system, in which you can work yourself to exhaustion and still be no closer to “success”.

This has broader, societal effects as most research students will pursue careers outside of academia. If their experience has left them disillusioned, this is what they will share (consciously or subconsciously) with the world around them. This comes at a time when citizen ambassadors promoting science and research on matters such as climate change, vaccinations, and cultural heritage are needed more than ever. No one starts a research career thinking “how can I get this into a high-profile publication?”; they shouldn't finish that way either.

Secondly, a strong focus on the research output instead of the research process is detrimental to research itself. Research is about increasing our understanding of the world and/or helping to solve problems. At its best and most effective, this is a collaborative endeavour leveraging diverse skills and experiences. Hiring, funding, and many publication decisions, however, are inherently competitive.

This creates a tension between doing good, collaborative research on one hand, and being individually competitive on the other. Increased focus on the output exacerbates this tension as authorship assumes an [outsized importance](#). On the contrary, increased focus on the research process eases this tension when researchers are recognised for collaborative contributions (e.g. ideas developed, experiments/fieldwork conducted, data analysed, code developed, etc.). Ensuring we [focus our definition of success around valuable contributions](#) — instead of around the final output — would therefore recognise and reward good research and researchers.

Putting the focus back onto the research process is a multifaceted challenge. It requires cultural changes within the research community, such as those advocated by the [Leiden Manifesto](#) and the Declaration on Research Assessment (which has an excellent list of “[good practices](#)”). But I believe there are (at least) two concrete things individual researchers can do that will have substantial positive effects.

The first is to proudly share during their research. For example, colleagues and I have previously advocated for sharing research [methods](#), data, [videos](#), and similar. I am a [firm believer](#) that all well-designed and rigorously conducted research should be shared, regardless of whether it “worked” or not (e.g. produced statistically significant results) or the results were deemed “exciting enough”.

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Second is to be mindful of how we talk. Every now and then, when I catch myself talking about how to get into high-profile journals, I try to stop and think. Yes, publications are important, but they are not why we do what we do. I want to remain passionate about research, and a large part of that excitement comes from the fact that we cannot, by definition, know the answer to a new research question beforehand: we cannot know if it's going to "work" or not. But what we can do, is to nurture creative thinking, and take pride in rigorous approaches. That, to me, is what great research is. And that is what I want to instil in my students.

*Note: This article gives the views of the author, and not the position of the LSE Impact Blog, nor of the London School of Economics. Please review our [comments policy](#) if you have any concerns on posting a comment below.*

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