

THE
**PRODUCTIVE
RESEARCHER**



UNIVERSITY of
STIRLING



How to be a productive researcher (with less effort)

Rachel Norman

Cosmos 22/8/2018

BE THE DIFFERENCE

Disclaimers

Most of this comes from

The productive researcher by Mark Reed

He says

“my goal is not to squeeze more productivity out of already overworked researchers.I want to work easier. I want to be more productive so I can get my thinking time back and have more free time”

...and I do not practice what I am preaching effectively

Motivation

Motivation gives you drive, focus and staying power.

If you are motivated you will be more productive, so how do you recharge your motivation regularly?

Motivation

Motivation gives you drive, focus and staying power.

If you are motivated you will be more productive, so how do you recharge your motivation regularly?

Why are you a researcher?

What makes you excited to come to work?

If you can't get out of a task which is demotivating- can you change the way you think about it?

Motivation continued

- Did you set the goals you are currently pursuing yourself or were they imposed?
- Are there goals that you could set for yourself that you can believe in that will also enable you to get closer to institutional goals?
- Does feeling like a fake stop you from dreaming big? (I'll come back to this)

Relational goals

- How self- or other- regarding are your goals?
- Might the achievement of any of your more self regarding goals have a negative impact on others?
- How might others benefit when you achieve your goals?
- What single thing could you do that would have the greatest positive impact on the people you work closely with?

Imposter syndrome

Do paper and grant rejections make you doubt yourself?

Do you think that people are eventually going to catch you out and realise that you are a fraud?

Do you think that you don't deserve your successes (were they luck? Timing? ...)

Imposter syndrome

Do paper and grant rejections make you doubt yourself?

Do you think that people are eventually going to catch you out and realise that you are a fraud?

Do you think that you don't deserve your successes (were they luck? Timing? ...)

Welcome to Imposter syndrome- most of us get it at some point!

Imposter syndrome

Just because you fail sometimes does not mean you are failure.

Making mistakes does not mean you are a mistake

Try and put the rejection/ mistake in context. What can you learn from it? How do you make the next thing better?

Ways to combat imposter syndrome

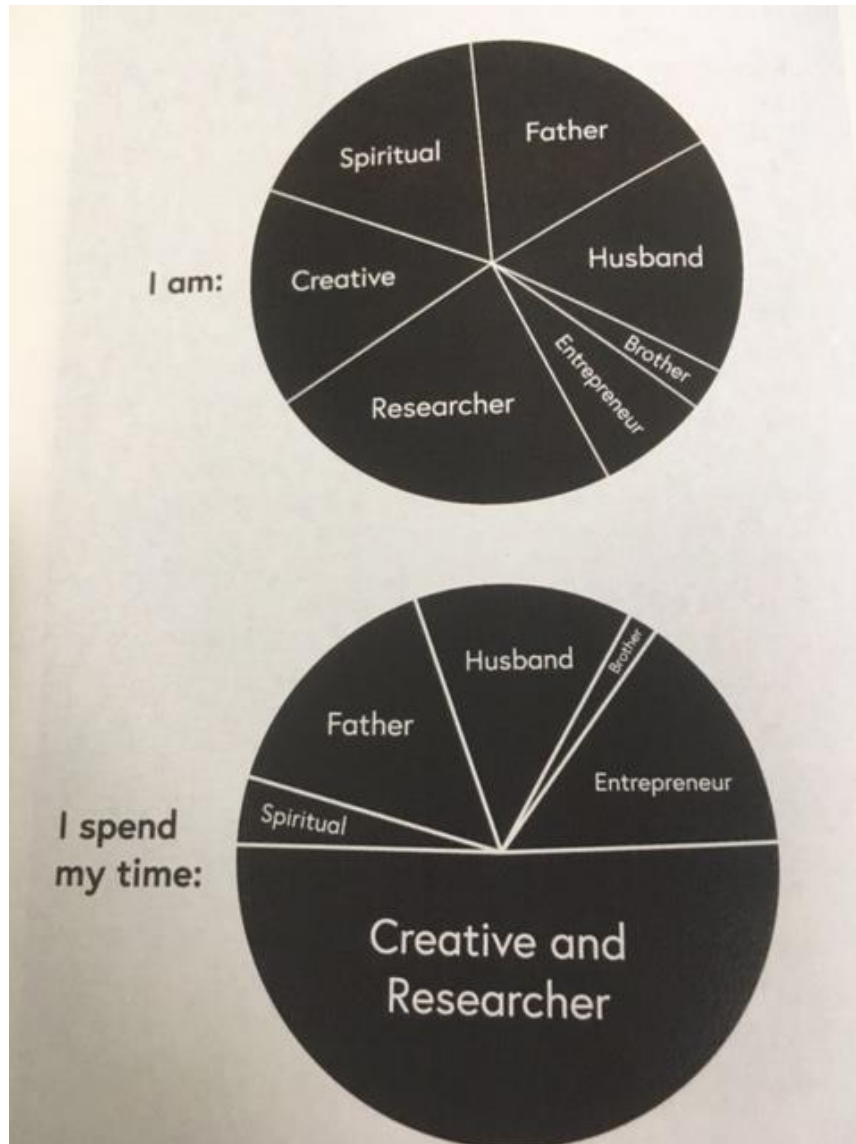
<https://www.themuse.com/advice/how-to-banish-imposter-syndrome-and-embrace-everything-you-deserve>

- Identify What's Shaking Your Confidence- tell someone?
- Remind Yourself of All of Your Achievements
- Remind Yourself That the People Who Got You Here Are Incredibly Competent and They Did Not Make a Mistake
- Take a Risk – the worst that can happen is that it does not work
- Mentor other people- then you will realise how much expertise you have and how much you know

Take a Hard Look at Your Language and Update It

Do you say “I feel” a lot? How about using “I think” to start your sentences? Have you been pitching ideas prefaced with “It might just be me, but?” Rein in that doubt! Update your language with more confident, assertive phrases, and you’ll start to believe in what you’re saying. Assume your questions are valid, and that you’re probably not the only one to have them. Try: “I have a question—and I’m sure I’m not the only one.” Champion your ideas through more assertive language.

Work life balance



Consider how your identity as a researcher fits into your broader identity as a person.

Spend more time doing things which are Aligned with your identity and values.

In interviews with highly productive people:

Every one of the researchers I interviewed was a single minded prioritiser- because they had their priorities so clearly in their minds at all times.

This did not mean that they were single minded at the expense of those around them- quite the reverse

The two most common values cited were humility and trust- being approachable and open to criticism. Working in a team and trusting their colleagues.

Some practical ideas (finally)

- Make every two hours count, whether for work or play- divide time into two hour blocks- holding group meetings, reviewing papers, discussing things with students, listening to music, watching TV.
- Make every second of work time count so you don't have to work when you get home
- Have a small number of high priorities that you prioritize every day.
- Make a strategic plan for your day and don't do a task you "should" so (like email) as long as there is a more important unfinished task linked with your core goals.
- Prioritize being a good collaborator so opportunities keep coming your way- give feedback quickly and don't delay your part in the work so that people continue to work with you.

Carrot vs stick?

If you have a long list of dry and unrewarding tasks, lack of motivation can lead to procrastination and the tasks piling up.

You tell yourself that you need to do those things first and then reward yourself with doing something you want to do- but the tasks are never done:

Possible solution:

Each morning, when your mind is most fresh but motivation most weak focus on the thing you are most interested in. Then by lunch time you should be more energised and inspired to work through the dull tasks more effectively in the afternoon.

Approach problems differently

Instead of identifying the problems that you have to overcome to reach your goals (which is discouraging) think about your own strengths, capabilities and successes and what has enabled similar people to be successful

Don't take this too far! "We have all seen people with inflated egos who are blind to the carnage they create in relationships as they focus on their success to the exclusion of any admission of failure or weakness"

Measuring (and acknowledging) progress

Baselines and targets:

For big goals focus on baselines from which you can measure growth and celebrate progress (however small or slow) rather than fixing on targets.

If you want targets be prepared to change them if necessary rather than punishing yourself for taking longer than expected to reach them.

Learning to say no!

At a certain point in most careers there is a transition between wanting more opportunities to having too many!

The effect of saying yes to too many of these opportunities and demands is usually negative

We work far longer than is good for our health or our relationships

We allow things that are more important to us (that no one else is demanding we do) to be squeezed out

Why it is difficult to say no

- FOMO – concrete opportunity to build CV vs less tangible benefits of work-life balance and time to spend on projects which are important to us. “I can squeeze it in” “its only for a short time”
- We are letting other people down- is this reasonable? We are assuming that the person we decline will suffer as a consequence.

If you are someone who rarely asks for help then you might assume that other people are also like you and would only ask if they are in dire need. There are many people who ask for help all the time and expect most people to say no.

- If you don't do it will someone else have to- is that a good or bad thing for them?
- We feel flattered to be asked- we therefore think we are the only person who could do the job (succumb to flattery). How would you feel if you knew that someone else had been asked first and said “no”- does this change how you feel about the invitation?

Examples of saying yes and no to things

Invitation to present environmental research at an international conference – **no** - the time spent preparing for travelling to and engaging at the conference would be better spent creating an infographic, blog and social media strategy to promote the same paper with greater impact.

Examples of saying yes and no to things

Invitation to present environmental research at an international conference – **no** - the time spent preparing for travelling to and engaging at the conference would be better spent creating an infographic, blog and social media strategy to promote the same paper with greater impact.

Third PhD viva request of the year – no – I said yes to the last two which took more time than anticipated and I want to prioritize finishing another piece of work.

Mock viva request for a PhD student – yes – significant opportunity to help and give confidence to someone researching in my field who I can learn from

Co-I on environmental research project – no – limited potential for impact, limited funding and outputs, lots of meetings

Co-I on public engagement bid – yes- although even less funding and output potential than the previous example- potential for impact and opportunities to learn from new colleagues about how to do public engagement better.

Pre-review of a fellowship application for an early career colleagues- yes- my experience of funding panels has the potential to make a significant difference to the success of this application.

Balance

Balancing being a good member of the academic community with achieving your own goals. You need to do your “fair share” - workload model?

Think about each opportunity and what the costs and benefits will be.

Writing

Don't wait for an uninterrupted time to write:

Most people feel they need two or three uninterrupted days in a row to make progress- but that rarely happens so writing projects are postponed indefinitely.

One option:

Break writing task down into different sized chunks “write the introduction”, “write a paragraph about x” - identify slots of time in your schedule and match the right sized task to those holes.

Or:

Micro-writing- do an hour each morning before you start on the rest of the stuff.

Things to think about

How focussed are you when you write?

Do you prioritize thinking and resting time as well as time for reading and writing?

Do less to do more

“good enough”- tasks swell to fit the time you give them (I am writing this at 5.20 on Tuesday evening as this talk is on Wednesday lunch time!)

Could I have been more prepared? Yes. Would it have made this talk much better? probably not! (although that could go either way)- on the plus side I spent Tuesday morning working on a paper that is very important to me.

You need to be able to assess when “good enough” is OK- there are times when you definitely need to prepare thoroughly

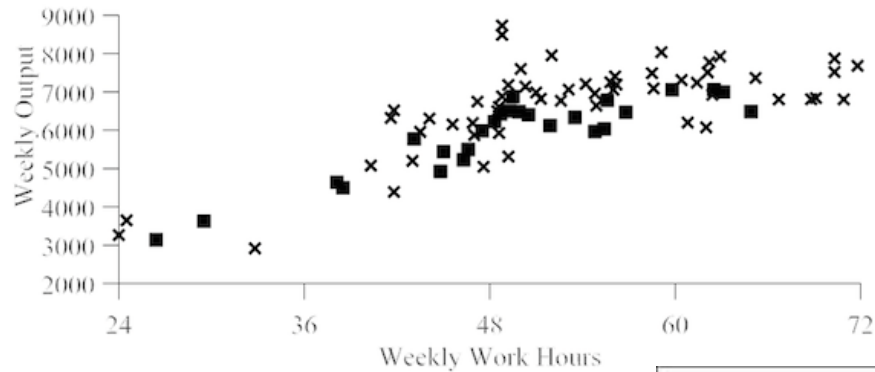
Good enough does not really work with papers- but working as a team means you can support each other to plug gaps- and take it in turns to lead. Writing circles band together to write a series of papers taking it in turns to be lead author.

Writing circle- is this how research groups could work- more likely with research grants?

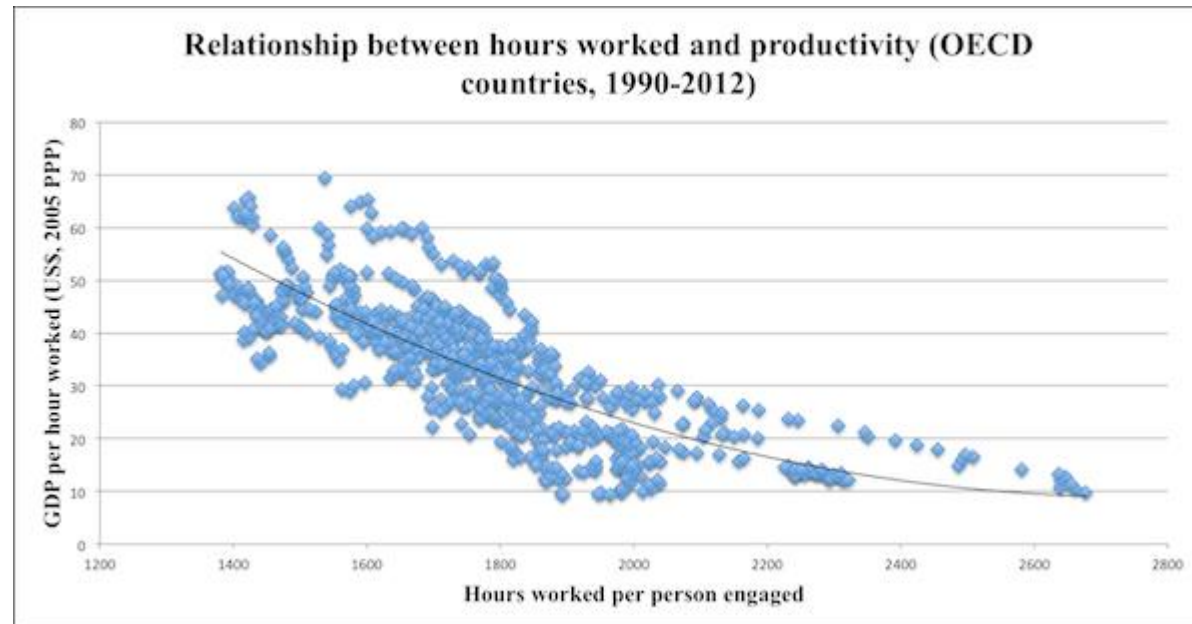
Team of 20 researchers from one project. The group norm was that anyone in the group could send a concept note to the group describing their next paper. Anyone from the group could then propose a contribution that they would like to make to the paper and the lead author would decide whether or not they thought the contribution would add value to the paper.

Long hours culture

People typically become more productive if they work shorter hours.



- x 100 Women Turning Fuse Bodies
- 40 Women Milling a Screw Thread



Topical aside



Spend less time on emails and meetings!

Stop comparing how many emails you had when you came back off holiday to everyone else- everyone feels the same pressures- do our conversations reinforce the feeling we are too busy? Can we change that? Do we all feel we are the most overworked?

Possible email solutions:

One touch- act on, file or delete each email the first time you open it.

Zero inbox- deal with every query regularly

Still both mean email rules your life!

- Do a scan of the most urgent emails first thing in the morning and only reply to those. Ignore the rest until a time when you are feeling less productive
- Set aside a fixed period of time to look at them each day, don't have them open all day.
- If you have a writing deadline put an out of office reply up and say you are working towards an important deadline and will not be checking emails all week

How many reviews should I do?

Three times as many papers and grants as you submit- since each one will get three reviews

Choose ones from which you think you will learn something

How many meetings are enough?!

Meetings are a good way of communicating with colleagues and moving forward together in collective endeavours

What is the point of the meeting? If it is just to update people, is there a more efficient way to do this?

Do you have to be at a meeting? If there is nothing on the agenda that you have to speak about or comment on then do you need to be there? There might be an important social or cultural reason for being there

How do you manage meetings that are going round in circles and overrunning?

Accountability

(achieving success)

Do you have a colleague that you can share your goals with?
Arrange to check in with them again to see how things are going.
There is some evidence that those that wrote their goals down and shared them with a friend were more likely to reach them.

Be realistic

Goals that stretch you intellectually are good but you were never going to write 6 papers this summer!

Instead of ending each day thinking about what you have not crossed off your list, think about what you have achieved and acknowledge that. You will have achieved something, even if it is responding to emails or contributing to meetings!

Take home messages

- Can we change the culture of how we think about our work?
What are the things which make us happy at work?
- What methods can we use to refresh our motivation regularly?
- Can we motivate ourselves differently so that we drive our goals and therefore we are more likely to achieve them?
- Can we find ways to make sure we work on our most important (to us) things every week to keep motivation going?
- Be more realistic about what can be achieved.
- Break goals up into small chunks which can be fitted into your timetable.
- Limit email and social media time each day
- Acknowledge achievements rather than berating yourself for things still to do.

What works for you?

Links sent in after the session...

Inbox Zero - Merlin Mann

<https://www.youtube.com/watch?v=z9UjeTMb3Yk>

<http://www.43folders.com/izero>

Getting Things Done (The Art of Stress-Free Productivity) - David Allen

https://en.wikipedia.org/wiki/Getting_Things_Done

<https://gettingthingsdone.com/five-steps/>

Eisenhower Decision Matrix (Important/Urgent quadrants)

https://en.wikipedia.org/wiki/Time_management#The_Eisenhower_Method

Bullet Journaling - The Analog System for the digital age

<http://bulletjournal.com/>

Kanban Method (To Do - Doing - Done post-its)

<https://lifehacker.com/productivity-101-how-to-use-personal-kanban-to-visuali-1687948640>

<https://blog.hubstaff.com/kanban-with-trello/>

Pomodoro Technique (25 min work : 5 min break)

https://en.wikipedia.org/wiki/Pomodoro_Technique

iOS 12 - Screen Time (Daily App Limits)

<https://www.macrumors.com/how-to/how-to-use-screen-time-in-ios-12/>

StayFocusd (Stay Focused) - Block sites after an allotted amount of time.

<https://chrome.google.com/webstore/detail/stayfocusd/laankejkbhbdhmpfmgcngdelahlfoji?hl=en>

Evernote - Note and Task system manager.

<https://evernote.com/>

Pomodoro - Work and then break system.

<https://tomato-timer.com/>

Mendeley - but I am sure people use this already or something equivalent.