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PhD survival guide – surviving and thriving during your PhD

Sitting onstage at my PhD graduation was one of my proudest moments. It represented years of hard work and sacrifice.

I sat on the raised platform overlooking the crowd while wearing a red graduation robe with silver trim and a black felt floppy hat. At that moment, it was easy to forget the journey to get there was less than smooth. At the end of my first year, my supervisor reported me as "at risk of failure". It was easy to forget that my primary supervisor relationship had broken down. It was easy to forget that I had broken a \$20,000 piece of equipment in my second year. It was easy to forget that I had failed more than I had succeeded.

Looking back on my PhD, the struggle was never the research – the issues arose from relationships, poor choices and bad planning.

I didn't glide gracefully through my PhD. Rather, I had managed to tumble through my PhD research, grabbed enough results on the way through to produce a thesis and survived long enough to end up in a silly floppy hat.

I know that many PhD graduates' experiences are the same. Many have survived, but only just. One wrong choice or ill-fated relationship could have derailed their chances of graduation.

Three years earlier, I started my PhD adventure, not knowing what a PhD was, how it worked, or even if I could finish. All I knew was that I had achieved a first-class master's degree from a UK university, which gave me a ticket to a PhD in Australia.

Brilliant! Bring on the sunshine, beaches, adventure and...wait...what...a literature review? Yuck.

The real challenge of working in academia and doing a large research project was soon apparent.

There were times when I questioned my ability to complete a PhD. Maybe I wasn't smart enough. After all, I was from a working-class background, the first person to go to University in my family, and perhaps I had peaked in my undergraduate degree.

Sure, I did well in my undergraduate degree – but this was different. I couldn't use the skills I had gained in revising and acing exams anymore. These skills were useless.

One of the main issues that I thought would become my downfall was my main supervisor's personality (I had three supervisors during my PhD) and how it clashed with mine. At the time, I was unaware of the internal politics playing out between my three supervisors and the constant academic struggle and games they were secretly playing between themselves. If I had known more about this extremely political side of academia at the time, maybe I would have been much more empathetic with my supervisors than I was. Or maybe it would have scared me away from academia altogether.

And then came my attitude towards my PhD.

I wasn't a particularly diligent PhD student; I struggled with managing my day and avoiding the lure of the student bar. In the early days, a PhD was a great opportunity to extend the student lifestyle I loved during my undergraduate and delay my adult life participation. Who wants to deal with a job, saving for a house, kids etc. Not me. I could get away with extending this lifestyle with the approval of society. After all, it was a PhD to help my career and turn me into a rich professor upon graduation.

I made my parents and family proud by simply being a PhD student. They didn't care about my progress with papers or research. Mere enrolment as a PhD student was enough. That fact certainly didn't help my motivation, and the allure of the student bar and Facebook was often too strong to resist.

Like most PhD students – I made it to the end despite those issues. Completely disillusioned with academia, I entered an industry role as an explosives chemist. I quickly learned that industry was not right for me, and I re-entered the academic system where I started a PostDoc, got funding and started playing the academic game. Over the ten years of being on the PostDoc treadmill and working in academia, I learned more about what I did wrong during my PhD and witnessed many PhD students commit the same mistakes as me.

Here is what I wish I had known about surviving a PhD and setting my future self up for success.

What this eBook will help you do

My hope for this e-book is that it will help you survive your PhD by giving you tools and confidence for tackling the common challenges that rear their ugly heads during academic research.

I will walk you through the process of doing a PhD and what you need to know about choosing a PhD supervisor, topic, and University. We will talk about the common issues that people face during their PhD and how you can deal with the unexpected twists and turns that inevitably happen during a PhD.

Interestingly, most issues are relatively easy (if not a little confronting) to solve. When PhD students came to me with problems, they typically involved people rather than research.

Therefore, this e-book can help you with whatever research field and topics you are investigating, as academia and the people performing research have more in common than we would admit.

In my mind surviving a PhD is not just about tackling the day to day issues but also being able to leave a PhD confident, motivated, and enjoying the last 3+ years of academic research.

There is no doubt in my mind that a PhD has the potential to provide you with skills and experiences for thriving outside of academia.

It's about making sure that you are not burnt out, disillusioned, or unprepared for life after graduation by the time you get there.

This ebook will give you a much clearer understanding of the important decisions before, during and after your PhD. The advice comes from my experiences and the changes in the academic system I witnessed during my 15 years in academia as a postdoctoral researcher and fellow.

Introduction

Taking on a PhD is something that many people do without considering the true nature of a PhD and what is involved in convincing some crusty, embittered academics that you are worthy of joining their club.

On the surface, a PhD looks like it has the potential to provide academic freedom, the chance to explore the unknown, and eureka moments to propel you forward and keep motivation high.

The reality is very different from the romantic ideas around the ivory towers and doing a PhD.

It's not particularly difficult to find someone who ended up hating the decision to do a PhD. My Youtube channel is filled with comments from people who have regretted the decision to undertake a PhD.

I'm actually regretting getting my PhD in nanomaterials... Graduated a year ago and I don't like any of the jobs I see in my discipline, only entry level jobs give me an interview, while my friends who did only masters are out there getting loaded...

I almost regret staying longer in my PhD program, it's been almost 2 years. I've been hopeful it would get better but it's only gotten worse and I have completely lost interest in working on anything academic. Good thing I have teaching that distracts me from my project tasks. After this semester (which in Germany end in March) I'll quit and be free!

Recently got my PhD in Business and Management last February. I absolutely agree with all of your reasonings. Honestly I regret my decision, since I totally burned my saving, career, and mental health to get this fancy title. I was an individual that easy to move on and quite confident, but because of my PhD experience, I have this traumatic memory every time I need to study or pick up something new now. If I could time travel to myself 5 years ago, I would slap me so hard to cancel this PhD journey of mine.

Maybe you are feeling the same as some of these people right now!

A range of factors come into play in determining whether or not a student enjoys their PhD or it is something that they have nightmares and PTSD about.

The good news is that understanding what a PhD is and how best to navigate some of the trickier aspects of academia can allow you to get out of a PhD, having enjoyed the process and avoided some of the common pitfalls that can lead to regret and panic after graduation.

Here are the common reasons people end up hating their PhD and why it is important to know what you are getting yourself into.

Why do people end up hating their PhD

Even though many reasons and personal situations cause people to hate their PhD, a few common reasons tie them all together.

Surviving a PhD means weathering the research process and the environment of academia whilst preparing yourself for the future and a post-PhD life.

Understanding why most people end up regretting that PhD will help you from making the same mistakes and using your PhD to your advantage for whatever future career you decide to go into.

It's not like anything they have done before

Qualifying for entry into a PhD position does almost nothing to prepare you for the realities of doing a PhD.

In your undergraduate years, the academic game revolves around holding large amounts of information in your brain and regurgitating it in response to exam questions and problems.

The undergraduate academic system trains you to be able to sit exams, not do research.

To qualify for a PhD (and be considered "clever"), you have to be good at exams. It is typical for people who are good at undergraduate exams to start conflating their identity with being the "clever one".

Once you start a PhD, it is common to have a quick and abrupt realisation that the ability to sit exams no longer helps you perform research.

An existential dread floods most first-year PhD students' thoughts because they are confronted with something they are not trained to do. Leading to feelings of imposter syndrome, depression, identity crisis (because you are meant to be the clever one) and many other debilitating thoughts.

The problem is that this is not explained to potential PhD students. It is nothing like undergraduate or master's level research. Some students flourish when tasked with this new challenge in the early days, whilst many feel overwhelmed and completely unprepared. And never really recover.

So, be kind to yourself in the early days of a PhD. You are worthy of being there and coming to terms with the new expectations, and the new skills you'll need to build will take a little time. It will feel alien at first, but it'll get better.

Expectations

No matter what you think about how your PhD will pan out it never goes as you expected, and the journey is always far tougher than you thought.

A good PhD student remains agile with their response to daily challenges but focused on the overall long-term goal of writing up a thesis or publishing peer-reviewed papers.

The expectations of what a student should be able to do upon graduating are also in stark contrast to the reality that exists after doing spit out the other side.

Many students do a PhD because they expect to be able to enter the academic workforce upon completion. The reality is that there are fewer and fewer academic positions advertised in increasingly competitive academic environments. Universities are run like a business, and cutting costs is the name of the game for even the most well-known institutions.

Many PhD graduates are unprepared for the realities of the career market upon completion of their PhD.

This e-book will help you formulate an exit strategy from academia to survive the process of doing a PhD and use the skills you have gained throughout your PhD in a career or job that you are excited to do.

Burn out

Burnout is a real outcome of a PhD for many students.

I have 6 months to submit my thesis for examination. I'm so exhausted after 6 years.

I am in the final year of Ph.D. Very exhausted from the process.

Working towards completing a thesis or publication of research for many years can leave you feeling exhausted, empty, and unable to cope. Common symptoms include:

- **Exhaustion** where people feel emotionally exhausted and unable to muster the energy for their research. It can sometimes manifest as physical symptoms like pain and digestive issues.
- Alienation from activities PhDs who are experiencing burnout find their research increasingly stressful and frustrating. They will start voicing cynical opinions about working conditions and their research team or supervisor. They may also increasingly distance themselves emotionally from people and feel numb about their PhD.
- **Reduced performance** people start becoming very negative about their research, making it hard to concentrate and remain creative.

Burnout is even more likely to occur if your PhD environment is stressful. The lead supervisor and lab culture typically curate a stressful PhD experience. Some of the more competitive research teams expect you to be working seven days a week and take no holidays.

I've heard horror stories of supervisors calling Sunday meetings to ensure everyone is in on the weekend. Avoid working for these academics.

This e-book will help you avoid burnout by alleviating the stress of your PhD environment and giving you the practical tools for overcoming some of the common hardships and issues faced by a modern-day PhD student.

Here are all of the important decisions to make before starting your PhD. It may take time to get through all of this, and you may even miss out on an intake deadline. Do not rush the decision or feel pressured into making one.

Before a PhD

The best way to survive your PhD is by preparing and planning before you even start.

Before your PhD, you have the opportunity and freedom to explore a range of topic choices, supervisors, universities, and more.

Most PhD students I have seen have not done much preparation before starting a PhD and have chosen to do their research with academics they have had previous experience with – even if it was not very pleasant.

In many cases, PhD students follow the path of least resistance when choosing their topic, supervisor and institution. If there is money on the table and a PhD scholarship opportunity, they do not spend enough time thinking about the fit between the supervisor, project, and themselves.

Before accepting your PhD position, your decisions will allow you to avoid some of the most common PhD mistakes, such as poor supervisor choice.

Understanding your motivations before starting your PhD will help you find a better fit for your supervisor and project for surviving your PhD.

Why do you want to do a PhD?

One of the first steps towards completing and surviving a PhD is understanding your goals and motivations. Taking a moment to look deeply into your motivation for doing a PhD can help you decide if doing a PhD is right for you.

Even though individual motivation among people pursuing a PhD varies, there tends to be a few common reasons for pursuing a PhD that pop up. These include:

- wanting to become a professor
- to pursue knowledge in an interesting field
- delaying getting a job and extending the student lifestyle
- not knowing what else to do
- external validation and proof of cleverness
- seeking praise from authority figures
- · and more.

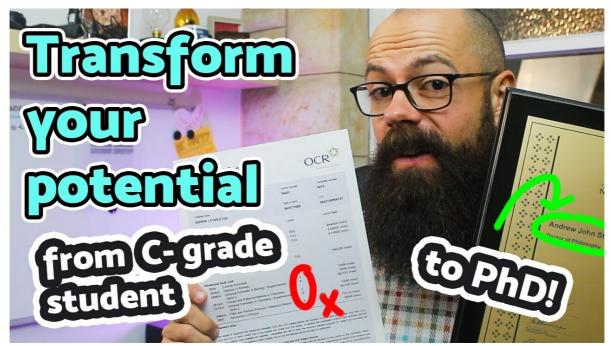
Society rewards people who seek knowledge and looks favourably upon further education. It can be very easy to convince your friends and family that you are pursuing your PhD for all the right reasons. Only you know what is going on in your mind, and there is likely something a little bit deeper going on for you to consider doing a PhD.

It is up to you to delve deep and understand why a PhD is attractive to you. Finding your true motivation will help you decide if a PhD is really the right choice for you and then help your motivation when times get tough.

My motivation? Probably not the best reason to do a PhD.

I had always overestimated my ability to perform well in exams. The teachers constantly told me how great I would do and predicted very high grades in my GCSEs and A-levels. The continuous praise meant that I wouldn't study as much as I should have and would always fall short of my and my teacher's expectations.

I talk more about my journey from C grade Student to PhD in my YouTube video.



A PhD was something that I could use to prove to myself and others that I was capable of achieving great things in academia.

Another weird quirk in my family was that my auntie would call me "the professor" from a very early age. It got so ingrained into my family narrative that I was given a scientific calculator for my fifth birthday. This is a bit weird, right? I mean, why does s 5-year-old need one?

I often wonder if this early conditioning from my family was why being the clever one was such a huge part of my identity and led to me pursuing the highest qualification I could obtain.

Interestingly, I wasn't always very good in school. I used to kick my primary school teacher and would regularly be sent home for non-compliance and disruptive behaviour. Weird that I stayed in as long as I did, given my turbulent start in education.

In a nutshell: I did my PhD because I needed to prove to myself and others that I could live up to their expectations, and moving to Australia seemed like a good idea.

You need to look at your past and determine whether a PhD is something you are genuinely interested in pursuing or it is a conditioned response to a deficit in some part of your life.

Writing down your goals and reasons for pursuing a PhD degree is important for starting strong.

Motivations

Take a moment and write out the five top reasons motivating you to pursue a PhD. I would encourage you to delve deeper than the easiest, socially acceptable answers. You know what I mean. Statements like "I'm so passionate about..." where people nod their heads and close lip smile at you.

This activity isn't a statement of purpose, and no one is marking you on it.

You can be as honest as you want.

Mine would read as follows:

- 1. To move to Australia and live in a country I loved during my year abroad. The student Visa requirements were very easy compared to immigrating.
- 2. To be different. I was never one to want to take the default path in life, and this was an opportunity to stand out and do something that not many people were doing.
- 3. Because it delayed my entry into the workforce, 9-to-5 job, and adulthood
- 4. To prove to myself (and my disappointed teachers of the past) that I could achieve that of a clever person.

I've been as honest as possible in the above five motivations.

On the surface, it would appear that I wouldn't be able to complete a PhD as none of them are the textbook statement of purpose answers we parrot back to institutions to get them to like us.

Nonetheless, I was capable of achieving my PhD within three years. There was enough motivation in the selfish reasons to help me to finish. I'm not saying these reasons are good, but they are my reasons.

Understanding your true motivation will help you when times get tough. And, when you're nearing the end, the motivation that bubbles up doesn't come from a good place. For example, "I just need to finish this f*cking thing" is perfectly acceptable if the hate can help push you through to the end.

Rage completing a PhD is more common than we all like to think.

Goals

Starting with the end in mind is an important part of surviving a PhD.

This next bit may not be nice to hear, but you are very unlikely to be the small percentage of PhD graduates in an academic position or permanent role. Over my time in academia, an increased casualisation of the workforce resulted in fewer permanent position roles.

There was less focus on new academic hires, with universities favouring much older and established professors with a track record of bringing money to the institution.

Therefore, if your sole goal of doing a PhD is to land an academic position, it's time to think again.

One of the main reasons I was so disillusioned with academia after graduating is that I did not have any long-term goals outside of my PhD. Upon graduation, I didn't know what I wanted to do.

Too many PhD graduates are the same. When I finally left academia, all of my colleagues said they wouldn't know what they would do if they left. Feeling trapped in an occupation is a nightmare.

It is important that when you start your PhD, you have some idea about the sorts of occupations that may interest you upon graduation. This understanding means that throughout your PhD, you will be able to look for opportunities to grow specific skills in certain areas to help support any career change or jump away from academia at the end of your degree.

Take a moment to write down your goals upon completion of your PhD.

Here are some examples of the sorts of goals you may want to achieve by the time you finish your PhD:

- to build up evidence of a skill valued by a certain job (such as coding, data science, medical writing, technical writing, science communication, project management)
- to make connections with potential industry employers
- improve my communication skills (public speaking, writing, technical documents)
- grow entrepreneurial skills to start your own business
- further study in other fields (MBA, Patent Attorney)

No matter what you want to achieve by the end of your PhD, you have to ensure that you have the skills and evidence necessary to convince someone to employ you or have the necessary skills for launching your own business.

Spend a bit of time thinking about what excites you about the future life you could lead after your PhD.

Getting away from the narrative that a PhD only qualifies you to pursue an academic career is an important step to surviving your PhD and getting out the other side with enthusiasm for the next stage of your career and life.

We have a habit of boxing ourselves into particular roles that we feel we should do rather than jobs and positions that we are genuinely excited about.

Even though you have a PhD upon graduation, there is no reason you can't go back to pursue a job that doesn't require a PhD, but you will find it much more fulfilling.

The PhD is not a one-way street to a certain career but another door that opens to other careers. A PhD very rarely closes doors on other opportunities that existed before.

Understand the sacrifices

Surviving a PhD requires you to understand the sacrifices you need to make beyond the time investment. Surviving a PhD means being comfortable delaying adult life for a few years to perform research in a university or research institution.

We all know that a PhD can take up to 7+ years (if you are in a country requiring a coursework component to be completed before starting your research). Still, you make other sacrifices, including not earning money, delaying starting adult life, and opportunity costs that may stop you from pursuing other more interesting pathways because you are focused on your PhD.

Money

A PhD doesn't look too bad in terms of payment to an undergraduate student. After all, you are being paid to go to university now. BUT there's a secret cost that many don't consider.

I remember thinking that it was great to be paid to study. However, the amount of money a PhD graduate gets from a scholarship covers living expenses and only a very small amount of savings.

If you consider doing a PhD from a purely financial perspective (that you will earn more money in the future), it is a silly decision. Not only do PhDs not earn significantly more money than master's graduates, but you may also be gaining interest on your undergraduate student loans putting you behind even quicker.

By pursuing a PhD, you are also delaying saving significant amounts of money you could earn in a job. This money may not matter much for the four or five years of your PhD research. But the compounding effect you are missing out of in such an early stage of your career may significantly impact the accumulated compounded interest you earn later in life.

A PhD impacts every aspect of your financial life, from saving for retirement to investing for the future.

It doesn't matter much when you are younger. You likely have no family, children or independents and all of the money you get goes to living and the odd luxury.

However, when you graduate, feel the biological clock ticking and want to start a family or buy a house, it will be much harder for you as you won't have laid the financial foundations like all of your friends the same age.

What can you do about it?

Look for ways to increase your income for your PhD.

It is becoming increasingly common to find industry-sponsored PhD scholarships. I know one person who did an industry-sponsored PhD position with a battery company. During his PhD, he received \$40,000 more than the PhD students around them and had a pathway to an industry job that valued his research afterwards.

No doubt, he was the envy of many a PhD student during my time at University.

Finding a PhD with an industry top-up for the scholarship is worth the extra hassle and effort due to the reduction in financial burden during your PhD and the prospects of entering a job after graduation.

There may also be many other scholarships that you can apply for. You can get a better idea of the ones you are eligible for by speaking to your office of graduate research before starting your PhD.

Delaying adulthood

A PhD is undertaken at a time during your life when you will have to delay participating in adult life for a little bit longer.

For most people, a PhD starts in the early to mid-20s – just when your friends have graduated from their undergraduate degree and are starting to earn enough money to do the "adult things" in life.

I know many graduates and academics who have waited to have children and buy houses and delayed these things until they were in a much more stable financial position at a university. Unfortunately, biology also plays a huge role in determining how easy it is to have children. Making it much harder to conceive if you wait until your mid or late 30s.

The financial aspects of the PhD, as discussed above, also make it very difficult for someone to purchase a house and start their adult life.

I was never really interested in any of these things, and, therefore, doing a PhD and delaying these things didn't bother me at all.

Just be prepared to meet up with your high school or undergraduate friends and feel like you are being left behind. No one will quite understand your desire to do a PhD and wonder why you continue studying at a university.

Opportunity costs

The last sacrifice you make by doing a PhD is missing out on other opportunities while focusing on your PhD.

A PhD is necessarily isolating and an introverted activity. Many hours sitting at your computer analysing data or researching in the lab or field mean that you are not exposed to the opportunities that fate and life throw your way.

Many people believe that being happy and successful in life means taking risks and following opportunities as soon as they pop up. Whether starting a business with friends or having that chance encounter with an influential person, a PhD stops you from committing to opportunities fully.

There are always opportunities and quirks of chance interactions after a PhD. The great thing about them happening when you are younger is that you can fail, learn and move on much easier towards the next opportunity without feeling pressured to succeed.

After finishing my PhD, I was employed for 13 months as an explosives chemist and then returned to academia for another ten years before leaving academia altogether and seeking other opportunities.

I have started multiple businesses and have settled on a mix of entrepreneurial endeavours that keep me interested and motivated. I always wonder if I would have ended up on this path should I have not done a PhD. However, I sincerely believe that the skills I learned and the experience I gained in project management, writing, communication, presentation, commitment, and long-term goal setting mean that I have been better positioned for the entrepreneurial lifestyle.

It has also provided a lot of credibility to my endeavours too.

Everyone's career path is different, and a PhD can certainly be very valuable to your future career no matter what you choose to do.

However, it is important to understand the sacrifices a PhD requires. There are a ton of disgruntled mid 30 PhD graduates who have not been able to make a career pivot as well as others.

For more information and further exploration of the harsh realities of a PhD check out my YouTube video.



You are now so much more informed about the realities of doing a PhD than most new PhD students. If this hasn't put you off pursuing a PhD, it's time to get into the nitty-gritty. Now let's take a look at the most important decisions for your PhD. The first: choosing the right topic for your PhD.

PhD Topic choice

One of the first things people should consider is the research topic and question.

It is very important to consider your research interests before applying to schools, universities, and supervisors. I have known many PhD students have continued with the same supervisor they did their master's research because it was easier than looking around.

This option is a great choice for some people, but, arguably, changing supervisors to match a PhD topic that aligns with your research interests will be a much better decision.

It is not important to understand exactly what area of research you want to go into or delve deep into your research question just yet.

Highlighting your general areas of interest within a broad field such as history, medicine, physics, chemistry, biology, social science, or other area is the best starting point.

In my experience, because I had done a chemistry undergraduate I knew that I wanted to go into a solar cell or renewable energy research area. You know, to do my bit for the world. Finding researchers and universities with research projects in my desired area of study was easy after knowing what I wanted to do.

In Australia, it is very common for PhD students to be told the exact topic of their PhD by supervisors. These academic supervisors often have a large research group with multiple streams of research. They need someone to continue research in an area that looks promising, take over from a graduating student or fill gaps in their research team that they have noticed.

On the other hand, it is also very common for PhD supervisors to help craft an entirely new PhD topic and question prospective graduates. Having the freedom to choose your PhD topic and craft with your PhD supervisor comes with pros and cons.

Both options can work very well, and whether or not you like to be told the research topic that needs investigating or want to find your niche is completely up to you. I entered a PhD with a research topic created by a new collaboration of three supervisors across two departments of the University of Newcastle in Australia. They had already highlighted key components of the research and literature for me to get started. I liked having the beginnings of the research project laid out for me, which allowed me to take it in my direction after doing a series of preliminary experiments.

If you have the luxury of crafting your topic, here is how I would choose a fantastic PhD topic.

The Holy Trinity of a good topic

Picking a fantastic topic comes down to the overlap of three important areas.

Firstly, it is something that you are interested in. Secondly, it is something that society values. And finally, it should be something that you can get good at and potentially become the best in the world at doing.

Your interests

Write down as specifically as possible your research interests. Is there a certain reason why you are keen on a particular area? Some of the most compelling reasons I have seen people doing a PhD are their firsthand experience of an issue. Whether it is a medical issue or a problem they have faced in a hobby or industry, they are currently living with the issue themselves.

It could be that you have always had a particular interest in a given area. It is common for us to enjoy astronomy, dinosaurs, chemistry, physics, and other nonSTEM subjects as children. Perhaps you have always been interested in how people respond to celebrities or public health advice. Maybe you have always been interested in why some social media or campaigns work better than others. No matter your interests, there is almost certainly an opportunity to do a PhD in it.

What do you find yourself reading about in your spare time? Have you got a lot of history with a particular subject or question? These are fantastic areas for you to think about the best PhD topic.

You will need to be able to stay interested in this topic for a very long time. Choosing a topic you have some connection to a demonstrated interest in already will certainly help.

A word of warning: I have always been careful to separate my professional life from hobbies used to rejuvenate myself. Turning a hobby into a PhD or choosing a topic around something you love to do can quickly kill the enjoyment of that topic. Before following a passion, make sure that it is something you genuinely want to pursue rather than the feel-good topic that provides an escape from academia.

Valued by society

Does society value your potential topic area?

I have seen that topics that are valued by society often have greater potential for grant money and are often much easier to promote and talk about to the University media department. Everyone is interested in food security, education and cool gadgets. Getting the media department excited about a nineteenth-century writer is much harder. Not impossible, but harder.

A good way to think about this is with the good old-fashioned pub test. If you were to walk into a pub and strike up a conversation with someone, would they be interested in your topic? Does it specifically address a human issue? If I said I was researching solar cells, most people had a general interest.

A good PhD topic is one in which there is a fair amount of societal value. Along with societal value comes money, greater opportunities to grow your professional and personal brand and a greater feeling of satisfaction.

That's not to say that popular opinion is the most important thing about your PhD. Choosing an obscure area to work on and then getting good at marketing that idea is also a valuable skill to build during your PhD. The unfortunate reality of choosing an area of study is that research needs money, and it's much easier to convince someone to part with money when your idea is valued by society.

Something you are good at

The last of the Holy Trinity of a great PhD topic is choosing something that you are good at. There is typically an overlap between things we are interested in and things we are good at, but they are not necessarily intertwined.

Having a skill in a particular area may help you decide on your PhD topic. For example, I was particularly good at the operation of instruments during my master's research. This propensity meant that I chose a PhD in which I could analyse solar cells via various microscopes and instruments. From atomic force microscopes to transmission electron microscopes, I learned to operate them all. And, without sounding big-headed, I was quite good at it.

Doing a PhD comes with the potential and opportunity to become the best in the world in a particular field. If you are already working with your strengths, you will be able to master something much quicker and enjoy the process.

Now that you know the Holy Trinity of choosing a PhD topic, some techniques will allow you to narrow down your search and topic.

Techniques for finding the best topic for you

Finding a great PhD topic relies on you not settling for the first thing you can come up with. There are rumours that Prof Stephen Hawking took an entire year to choose his PhD topic.

PhD topics are best thought out in collaboration with current experts in the field and a series of simple questions that we will go through in detail below.

What do you like to do (actions involved)

I would recommend looking at a potential PhD topic from the point of view of the actions that you need to perform to answer the research question.

We can quickly become intellectual and academic when discussing PhD research questions. The reality of doing a PhD is that you have to perform tasks to generate knowledge. If you hate the task – you'll probably hate your PhD.

Research is a varied and broad term that encompasses a range of types of investigation.

My PhD involved synthesising semiconducting nanoparticles, characterising their physical and electrochemical properties and then incorporating them into solar cells. I didn't step into the lab while discussing the research topic, and I had no idea what was involved, but I knew that the physical chemistry techniques involved would likely be right up my alley.

Suppose you are a person who likes to be left alone to think about things. In that case, a PhD topic involving scouring the literature, formulating ideas, and coming up with your theories will be much better than a topic involving speaking to people to generate results.

On the other hand, many PhD topics involve students going out into the world and collecting data from field experiments. If you like being out and about for interacting with people – choose a PhD that'll allow you to do that.

There is a mode of research to suit nearly every type of person, and it is something that is significantly overlooked when choosing a PhD topic.

Explore and find gaps

Reading review articles and dissertations from previous PhD students will also allow you to find gaps in knowledge or obvious points of continuation.

Many PhD theses and review articles are available for free online. You can think of this process as a miniature literature review. It would help to focus on recent publications, for example, those published in the last five years and look at review articles to provide a broad overview.

When looking at the research, it is important to ask yourself some questions to work out the gaps to be filled.

- Could I put a spin on this research?
- What does the research show, and do I have any unanswered questions that need investigation?
- Could I make this better?
- How often is research published in this field? The more research, the more potential there is to generate new knowledge.

These four simple questions will help you determine whether or not there are gaps in the research that you would be excited to fill.

Arguably, talking with supervisors is the best way to determine a great topic. Take your list of potential research gaps to a supervisor who you think will be a good fit for your potential research field.

They'll happily provide you with their opinions about the proposed topics. And it is a great way to start building relationships.

Reach out to potential PhD supervisors

PhD supervisors and academics are the best people to speak to when deciding on a PhD topic. Speaking to a range of supervisors will allow you to stress test your idea. A great topic needs to be as watertight as possible. Otherwise, you could waste many years of your life on a topic that will go nowhere.

Your potential PhD supervisor has likely graduated many PhD students during their time in academia. They will have a much better idea about what makes a good PhD topic and will often help you refine the question and provide you with their thoughts about the gaps in the research field.

Speaking with a PhD supervisor at this early stage will also allow you to understand how the academic process works. Don't be surprised if they give it a thorough working over and find all of the potential shortfalls of your ideas. This teardown is what research is all about.

It would help if you aimed for at least three conversations with academics to help you formulate a great PhD topic. I have found that academics are very willing to give up time for potential PhD students as that is what their career relies on. That is, attracting many students to further their careers through the generation of papers and knowledge. The continual publishing keeps their careers alive and flourishing. Use this to your advantage and note any particular supervisor with whom you can get on well and enjoy the conversation.

If you cannot find an academic or supervisor, you can also talk to postdoctoral researchers and late-stage PhD students to formulate your ideas. They will almost certainly be happy to share their experience during their PhD and help you formulate your topic. Most are looking for any distraction, and your enthusiasm will be just what they want. Reach out via email.

Find the right sized topic

A good research topic is neither too broad nor too niche. There is a Goldilocks zone of perfect PhD topics that allow you to explore a little more, give you more opportunities for failure and recovery, and are narrow enough to answer a specific question adequately.

My recommendation for finding a great PhD topic is to niche up and down your particular area until you find one that allows you to have a little bit of wiggle room on the types of research knowledge you generate.

Finding the right-sized research topic can be one of the most challenging components of formulating the research topic. Too broad, and you'll find yourself trying to cover too many things in the limited time you have as a PhD student. Too narrow, and you may be locked into an idea that would never work without the opportunity of sidestepping the issue to continue to make progress.

Look at advertised PhD positions

There are now many places online to find advertised PhD positions.

When a large grant is awarded to a research project, the project team often expects to graduate a certain number of PhD students.

Because time is of the essence, they often place these on PhD aggregator sites and receive many applications worldwide.

The benefits of finding an advertised PhD position include:

- Money you know that a good amount of money is available to perform research and provide a scholarship.
- Hot topic and advertised PhD position means an ongoing interest in a particular research field and filling research gaps.
- Topic provided with large grants, it is likely that they already have a good idea about what they want PhD students to work on. Some people may not like this because it limits their creative input into the topic choice.
- Excitement never underestimate the power of excitement when a
 grant is awarded. An advertised PhD position often accompanies a
 certain level of excitement from even the saltiest and weathered of
 PhD supervisors. You could be a pet project for a while and be able to
 hold more of the attention of the supervisor, which can be a good
 and bad thing.

At the time of writing, the best places to find PhDs online:

- 1. DiscoverPhDs.com
- 2. FindaPhD.com
- 3. Postgrad.com
- 4. Postgraduatestudentships.co.uk
- 5. PhDstudies.com
- 6. Linkedin.com
- 7. Indeed.com
- 8. Nature.com

For more information on Choosing an awesome PhD topic check out my video.



Supervisor choice

Supervisor choice is one of the most important components of surviving your PhD.

A PhD supervisor will be responsible for guiding you, supporting you, and becoming one of the most annoying people in your life. Like everyone, every PhD supervisor is flawed in so many ways. Finding a PhD supervisor that matches your area of the proposed research, can communicate effectively, and matches your preferred supervisor style will make your PhD so much more enjoyable.

You just have to find a PhD supervisor that is flawed in a way that is compatible with how you are flawed.

A good supervisor is someone who:

- communicates effectively is able to help guide clearly and concisely and is open to discussion and conversations around the research.
- Is available many researchers are very busy and are often away or unavailable for long periods. A good supervisor is available to their students.
- Matches your preferred managerial style some people need micromanagers to keep them on track, while others prefer supervisors who are much more hands-off with their PhD students. Choose one that matches your preferred style of interaction.
- Provides growth opportunities a great PhD supervisor helps you grow as an academic and works with you to grow the skills you want to grow.
- A team player some academics take all of the credit for themselves and do not share their success with the team. Some of the best researchers and academics I have ever seen acknowledge the work of their PhD students and, therefore, the accolades they receive.

Here are all aspects of a potential PhD supervisor that will ensure that you survive your PhD.

Expertise

The first and most important aspect to check is their expertise.

A great PhD supervisor overlaps with the research topic of your choice. They should be knowledgeable in most (if not all) of the techniques you will be using to answer your research question.

You can often discover a potential PhD supervisor's area of expertise by looking at their university staff profile page. They love talking about their research on these pages. Some will also have a dedicated website for their lab too.

Most universities provide an area for academics to display current PhD students, recent publications, and research interests. I would highly recommend that you go through their staff page in meticulous detail.

Please go through all of the recent dissertations, theses, and peer-reviewed papers that they have recently published. Read as many of them as you can get your hands on. Reading these theses and the papers will allow you to see if this supervisor can help you with your research and whether or not you are interested in this supervisor's research area.

Reaching out to the potential supervisor and asking for an opportunity to talk through your proposed research topic will also help you determine a good match with expertise. Academics will happily share their ideas for your research topic and tell you if it aligns with their current research interests.

Getting a potential PhD supervisor to talk about their research areas is easy.

Every PhD supervisor loves to talk about their work. However, as they talk to you, are you interested in their research? Does it spark any joy? Are they excited when they're talking about it? These are all subtle cues that allow me to determine if this academic would be a good fit for your research topic.

Academics are famously very boring to listen to, but any attraction and interest in their area of research is a great sign at this early stage.

While you're meeting up with them, it is also very important to determine whether or not they have a personality that matches well with yours.

Personality match

Never underestimate the power and influence of a good manager or PhD supervisor. I have had several fantastic PhD supervisors and principal investigators in academia, and I have witnessed and had some not-sonice experiences too.

Unfortunately, the academic system tends to self-select for arseholes. To progress up the academic career ladder, it is common to find selfish, backstabbing, and non-collaborative personality traits being rewarded.

Luckily, a few absolute gem supervisors slip through the net. They may not be the most prestigious, well-known, or outspoken academics, but they will be amazing supervisors.

Do not be lured into thinking that the most prestigious academics are the best supervisors. They are almost always the worst supervisors. The more prestigious and academic becomes, the more PhD students they attract and the less time PhD students get with the supervisor one on one. You will have to find support in other forms from the research group, such as postdocs or senior PhD students.

That's not to say they can't be great research supervisors – it just gets much harder for them.

I would recommend sitting down for a simple conversation with any potential supervisor. Sitting with them, away from their office and work, allows you to see what sort of person you may be working with for the next few years.

Can this person hold a simple conversation with you? Are they friendly, engaging, and attentive during your coffee catch up?

Asking about their current research interests and what they do outside of their job has always been a fun way for me to get an idea of the person I will be working with. It's not necessarily a bad sign for them not to have any hobbies outside of academia. Still, I have found that academics with a good understanding and experience of work-life balance have been nicer to work for. They understand that people need to relax and find their work/life balance.

In short, if you can sit down with them and have a good conversation for half an hour without thinking they are a horrible person or them making you feel uncomfortable, you may want to add them to your shortlist.

Best questions to ask a prospective supervisor

While you are sitting down with a potential PhD supervisor, there are some important areas that you need to cover. Here are some awesome questions and lines of conversation that will enable you to keep the conversation flowing and find out if they are a good fit for you.

Get more information from my YouTube video on this subject.



Expectations of their PhD students

One of the first things I like to ask any potential academic supervisor is the expectations of the PhD students and research academics they supervise.

Quite often, this question is answered very aggressively. One of my postdocs supervisors expected me to produce five papers per year. By the way, that was not a realistic expectation. It gave me an idea of this supervisor's mindset in going into the project and was a good measure of the level of panic they felt in their careers.

Discuss expectations regarding how often they want to see you in the office and building, publication and conference outputs of their current PhD students, and levels of interaction they expect will allow you to work out if this PhD supervisor is a good fit for you.

Don't be put off by a PhD supervisor with high expectations. Often, the PhD supervisors inflate what they expect from their students because they are talking about a stretch goal. When you speak to their actual PhD students, you can double-check the levels of outputs they are achieving with them.

If you are put off by the level of work and commitment they expect from you, it may be a sign that your time under their tutelage will be filled with anxiety. Always ask for examples of PhD students who have achieved what they expect.

What their graduates are doing

Because a job in academia is so rare, many of their PhD graduates will end up doing other careers. For example, my primary PhD supervisor sent many PhD graduates into explosives manufacturing. There was a good crossover between the emulsion explosives industry and the colloid and surface science research that the supervisor was performing.

Many PhD graduates stay around in universities on leftover money, awaiting the next grant or opportunity to apply for funding. A supervisor who understands the outside world and will help you transition into industry or another career will be much better for your long-term career prospects.

If a PhD supervisor has many graduates in different roles, it demonstrates their ability to help mould their PhD students into professionals suitable for a wide range of careers. It would certainly be something I'd be happy to see in a potential supervisor.

Many universities are now employing academics who have industrial or professional experience. It is important to find out if your PhD supervisor has any experience with professional or industrial roles – even industrial collaborators at this point is a good sign. It shows they have some connection with industry that may help you in the future.

Availability

Ask how often the potential PhD supervisor meets up with their PhD students. Do they run a regular group meeting? Do they meet up regularly with all of their PhD students? Are they available most of the year for you to drop into their office? Some more "successful" academics are often away at conferences and collaborators, severely limiting their drop-in availability.

If they are away often or they do not run regular group meetings, you'll have to find other ways to seek support when you need it. This support can come from other people in the group and senior researchers.

Being able to drop in for a quick five-minute chat has proved invaluable during my academic career. I used it to keep up my momentum and to answer the silly little questions that could cause a complete halt to the research. Not all supervisors can do this, but it is typically a good sign when you find a very available supervisor for these quick questions.

Funding

You should ask how many of their PhD students are currently in fully-funded positions. A supervisor with many *self-funded* PhD students is a worry.

Ask about any potential funding from the University, institution, active grants, or top-up scholarships that can be applied to your research.

It is a bad idea to seek a self-funded PhD unless you have particularly strong financial foundations and can support your lifestyle for up to 7 years. More on that later!

Meet with current PhD students

Lastly, I would recommend asking to be put into contact with some of their current PhD or Masters's students. If they are cagey about providing the connection, it could be a red flag telling you that what they are saying is, at best, a lie or, at worst, manipulative.

Running the same questions past any of their current PhD students and looking for congruency and deviation from the supervisor's responses will help you determine how accurate they can judge their style of PhD supervision.

A word of warning: every PhD student finds fault with their PhD supervisor in some respect. As long as these faults are not bullying, professional negligence, or outright mean behaviour, it may not matter if the responses are negative, particularly from PhD students who are about to graduate. The toll of a PhD on a PhD student can cause a lot of negative feelings and outbursts. I think it just comes with the territory, unfortunately.

Choose a co-supervisor

One of the last important components of choosing a PhD supervisor is looking for an opportunity to incorporate a co-supervisor.

During my PhD, the relationship with my primary supervisor crumbled. In the second year, it became unworkable, and the Dean of the school advised me to switch my primary supervisor to one of my co-supervisors. I'm in no doubt that this saved my PhD.

Having a co-supervisor means that you will have extra opportunities for feedback and meetings with a knowledgeable academic. The co-supervisor should have complementary and slightly overlapping skills with your primary supervisor so that they can help you if things go poorly with your primary supervisor.

I recommend chatting with various academics and asking them if they are up for a co-supervisor working relationship with your prospective primary supervisor.

The co-supervisor should be invited to every meeting and interaction that you plan with your primary supervisor. They may not always turn up, but regularly having them in the meeting will help shape your PhD project and provide you with an extra set of eyes for covering research gaps and blindspots.

The co-supervisor can be officially designated to your project, or it can be much more of a casual relationship.

Some universities also provide mentoring schemes for young academics and PhD students, and you should reach out to the research office to see if you can and roll. I had a mentor throughout my PostDoc, and it was invaluable for providing me with perspective on the choices and interactions that I had with my supervisory team.

University/Institution choice

Where you decide to do your PhD will dictate your lifestyle and the types of opportunities and experiences you are exposed to throughout your research.

I have always been one to choose my academic institutions based on how comfortable I would be on their campus and living in the city. In hindsight, these are not the best ways to decide where to do your PhD as there are other incredibly important components about choosing your university or institution.

If you are worried about getting a job in academia upon graduation, no doubt graduating with a PhD from one of the world's top universities will set you out from the pack. Academia is still full of snobbery when it comes to where you have gone to school.

My master's supervisor in the UK was dismissive that I wanted to do my PhD in Australia. He told me that there was very little academic prowess given to PhDs from down under and that I should be applying to Oxford and Cambridge. I wasn't interested in living in the UK anymore, and my PhD was a way for me to live in Australia. I dismissed his advice as outdated opinions from a crusty and out of touch academic.

Being on the other side now of a 15-year career in academia, I completely agree with his advice. I have seen people with PhD's from Oxford progress quickly up the academic career ladder as research institutions highly value them. I think this is partly because of the reputation of the country's oldest universities and the connections and networking opportunities that they are exposed to during their PhD. Other universities want to get in on those sweet networks too.

One of the most important videos on this subject was talking about whether you should aim for a top university. If you haven't watched it already – I suggest you go and give it a watch.



The good news is that if you do not want a career in academia, you have plenty of opportunities for fantastic schools worldwide.

A PhD is a fantastic opportunity to explore a new country or live in a new city. I would highly recommend visiting the University and city that you intend on doing a PhD in to get a feel for if you would be comfortable living there for a few years. There is no point in moving to a university for its reputation if you will be deeply unhappy during your time outside of research.

Being unhappy outside of your research will only contribute to the feelings of depression and anxiety, and it will make it much harder for you to push through for multiple years to complete your PhD.

Location

Where the University is located in the world is a very important aspect of surviving a PhD. It determines what type of lifestyle you will lead during your PhD and how easy it is to get support from your oldest friends and family. Moving to the other side of the world is not necessarily a great way of keeping those relationships and support networks alive.

I used my PhD as a way to move to a country where I preferred the lifestyle. I exchanged the grey and drizzly weather of the UK for the sun and beaches of Australia.

Moving to the other side of the world meant it would be much harder to see my friends and family. However, with the advancements in technology, it has been easier to keep in contact. We can now talk for free. When I started my PhD, we'd spend a lot of money talking on the phone!

Many people choose to do a PhD in the universities where they have done their undergraduate or master's. They choose universities close to their home and do not want the hassle of moving internationally, or to another city, alongside doing a PhD.

As comforting as it is, try not to limit your choice of University to the ones in your home city. Look much further afield, and you'll find more opportunities.

One of the sad realities of academia is that it is now much harder to stay in a university throughout your entire career. You must follow the money and successful PhD graduates in academia often have to jump around to many countries before landing a permanent position.

When it comes to choosing where to do your PhD, I recommend going where you feel most comfortable. It could be as simple as connecting particularly well with a potential PhD supervisor, or you fell in love with the city or surroundings.

Choosing a reputable university is also very important if you want your PhD recognised by employers.

Another important factor about the location is whether or not it puts you in an area that makes your research easier to perform. For example, if you are a marine biologist, choosing a university close to the ocean and the areas you are interested in studying makes a lot of sense.

Expertise and equipment

One aspect that I would look into when choosing a university to do your PhD in is the expertise and equipment available to you as a PhD student.

Universities often have a wide variety of research interests. With a broad range of research interests comes a huge variety of academics with differing skills.

You could choose a university based on the academics that the University employs. It may be a great sign if a particular cohort of professors is at a university to help you with your proposed research topic by bringing a unique combination of skills or knowledge.

The other important aspect of a university is the equipment or physical instruments to help you with your PhD. I did a physical chemistry PhD and, therefore, I needed access to a range of analytical techniques. Most universities have some of these techniques but ensuring that I had everything I needed to perform my research was important for keeping up the momentum.

When you speak with a potential PhD supervisor, another important question you may want to ask is how readily available is the equipment to PhD students. I have found that most universities have very good access to a range of instruments through a booking system and training sessions if required. Some instruments are very expensive to run. Therefore, the usage may be limited by the University or your supervisor, who may not be able to afford the amount of instrument time you need. Double-check before starting your PhD that you can access the equipment you need when you need it.

Funding

I believe in never starting a PhD without funding from the university or a recently awarded grant.

It is becoming more common for PhD students to do self-funded research. Given the amount of money universities make and funding availability, the burden of financing research should not come down to an individual. A PhD is not worth getting yourself into many thousands of dollars worth of debt as a return on investment has not been demonstrated. A master's degree will be a much better return on investment for you.

Also, it is important to understand what happens if you need an extension to your funding. It is very common for PhD students to extend their PhD research by months and, sometimes, years. Most universities and research supervisors can help support the research for another six months to a year.

Asking about the worst-case scenario, should you require an extra few months to complete your PhD, will help alleviate any sense of panic should you get to the end and need to extend.

In some institutions, other smaller grants are often available for things such as printing your thesis, binding it, and getting it proofread by an editor.

Be aware that there are different rules for international students and domestic students. Typically extension funding is more available to domestic students than to international PhD researchers.

As an international student, I was awarded an international fee waiver that paid my student international fees for three years and a PhD scholarship for the same amount of time. If I were to have handed in my PhD thesis one day later, it would have cost me AU\$20,000 to reenroll for that year. Not an ideal situation.

Doublecheck all of the information and opportunities when it comes to funding. Financial stress is one of the first things that can derail a PhD and cause it to be much harder than necessary. Go through your finances and ensure that you have enough money and resources to live for multiple years to focus on your PhD.

Nothing kills creativity quicker than worrying about basic survival needs such as food and shelter.

Mental health tune-up

Before your PhD, it is also very important that you lay the foundations of good mental health and prepare yourself by learning specific methods for handling anxiety and uncertainty.

Due to the ever-evolving nature of research, a PhD is full of stress. Sometimes you will go months without feeling you have achieved anything other than failing at your research. Building up your resilience will help you survive your PhD.

Putting in a little effort to ensure that you are fit, healthy, and mentally prepared before your PhD is important.

Learn your unique stressors

Before starting a PhD is very useful to learn what your stressors are.

Each person has a different reaction to stress because everyone has a unique way of perceiving things and understanding the world.

Certain situations such as sleep, job demands, relationship conflicts, or poorly working technological tools can cause you to trigger your stress response.

When you encounter stress, many psychological changes can occur and often trigger the fight or flight response.

Please take a moment to reflect on the things in your life that cause you to increase anxiety or things you actively avoid because you know that they stress you out. Sometimes in a PhD, there is no avoiding these stressors, but knowing about them will allow you to identify things to tackle when you have a fresh mind or avoid doing when you are running low on mental resources.

For me, it's the basic things like not getting enough sleep and not eating healthily that can cause me to feel as if the whole world is against me. Taking a moment to reflect on my feelings and knowing that I feel not so great because of these two basic things helps me manage.

The top causes of stress include:

- Finances have you recently argued with loved ones about money or are you feeling guilty about spending money on nonessentials? This could be the early stages of financial stress.
- Work do you intend on having a part-time job alongside your PhD?
 Some people may feel overwhelmed with their busy job or career,
 resulting from too much work, job insecurity, dissatisfaction with the career, or conflicts with boss and co-workers.
- Personal relationships are you too busy to spend time with someone you love? Are you having difficulty communicating with your partner? These symptoms are a sign of stress that will only worsen during your PhD. It's time to tackle that problem head-on.
- Personality quirks are you a perfectionist who brings unnecessary stress into your life because you have very high standards of what you should be able to achieve.

Write down some moments in your life that causes stress. Identifying them will allow you to take a moment to look after yourself should you fill the anxiety rising.

Grow support networks

Before a PhD, you should look at the support networks available to help you get through your PhD.

These networks can be family and friends, but they can also be professionals and other mentoring services available through your university. Some universities provide student counselling and mentoring for early career researchers and PhD students.

Speaking openly and honestly with your next of kin about what you are entering into is an important step to surviving your PhD. It was amazing how many people didn't know what a PhD was or how much stress occurs during the process. There is a misconception among some people that it is just a continuation of studying. Therefore, they expect you to be as available as during your undergraduate years.

If you are an international student making sure that you have scheduled some catch-ups with old friends is always a fantastic way of refreshing your motivation. Even if it is over a conferencing service such as zoom, it'll be a lifeline essential for surviving your PhD.

Please make a list of all available services to you through your University, and make sure that you use them.

Grow your tool kit

The last thing that would be very beneficial for you to help you survive your PhD is to grow your mental health toolkit.

There are many resources online that help you build the techniques. Some of the most important areas to grow your toolkit include:

- communication learn ways to say what you think and methods to manage those awkward conversations with PhD supervisors.
- Stress buildup strategies allow you to deal with anger and anxiety when things aren't going your way. Things not going your way will happen a lot during your PhD.
- Mindfulness mindfulness has been scientifically proven to help you accept your current situation and improve overall well-being.

Recommended mental health tool kits and apps.

Here are some of the best online mental health toolkits you can use to ensure that you are in the best frame of mind for starting your PhD. And that you have the tools necessary for overcoming the uncertainty and challenges that a PhD will inevitably pose.

Apps

- Headspace best for stress management through mindfulness
- Moodtools MoodTools is an app for students who feel sad or depressed. MoodTools aims to lift your mood by taking a simple depression test before having you enter a thought diary.
- Self-Help for Anxiety Management by the university of west England for managing and tracking anxiety.

One on one therapy

- Talkspace Talkspace and Verywell came together to create an online therapy space that many students could benefit from. There are licensed therapists available right away to help you.
- Betterhelp BetterHelp costs around \$240 per month to start, but it allows you to talk to a live therapist from anywhere on live video.
- Wellnite same day doctor consultation for those on a budget.

What to do to prepare for your PhD

There are a few things that you should do to prepare for a PhD once you have been accepted and you are waiting for that all-important first day.

Interestingly these things have nothing to do with your PhD topic or reading literature before your official start. There are many more important things to focus on.

Let's take a look.

Create a PhD bucket list

One of the most important things to do before starting your PhD is to write a quick bucket list of items that you would feel sad if you missed out on for the next few years.

This list might include meeting up with friends or family, travelling overseas, reading that book you always wanted to read, or any other activity you would feel sad if you missed out on during your PhD.

Ensuring that you enter your PhD without having this thing looming over your head will make it much easier to stay focused and avoid any regrets from the distractions of a significant and long-term project.

Go and see your friends or family in a different country or city. Take the long weekend trip with your partner that you've been talking about for the last few months. Finish that online course that you always told yourself you would finish. Whatever it is, please don't put it off until the end of your PhD now is the time to get those un-finished PhD bucket list things off your to-do list.

With all of these bucket items completed, you'll feel much more focused.

Discover the tools

During your PhD, you will rely on various tools to help you work smarter and not harder. These come in four different flavours: software tools, hardware tools, specific tools, and health tools.

- Software tools find all PhD-specific apps and online productivity that will help you during your PhD. You're not interested in purchasing them all or doing anything beyond knowing they exist. Having a broad selection of options will allow you to choose the appropriate one when you get to a sticking point in your PhD or need help in a certain area. More apps and productivty tools are coming out every year for academics and PhD students. Make sure you know about them. Work smarter, not harder.
- Hardware tools a good future proof laptop is an essential part of a PhD project. Some universities provide a laptop upon starting your PhD, whilst others expect you to bring your own. I recommend purchasing a laptop with all of the processing power you will need to perform your PhD research. Some people will need a strong GPU laptop that can handle 3D rendering, whilst others will get away with a less powerful laptop for word processing and internet searching.
- Specific tools do you have any specific tools required for your PhD? These tools may include notebooks, diaries, or equipment that will make your PhD much better. For example, I needed a good set of lab personal protective equipment and a nice pen to help me write down my experiments.
- **Health-related** find all of the tools that help you. I have tried a number of them and find guided meditation apps and breathing guides very helpful for staying mindful and reducing my anxiety. See the list above for my recommendations.

Spend a couple of afternoons searching for these tools and acquiring them if you have the means to.

Get used to your new surroundings

Before starting your PhD, it would help if you visit your new University or institute to work out all of the essential areas like finding the quiet study zone and where you will be working. The first day of a PhD can be very stressful if you enter unfamiliar situations and locations.

This exploration only needs to happen a couple of days before you start, but the better you can be.

Some other ideas for getting used to your new surroundings include:

- Finding the food on campus. Many universities have great food available on site, but the privatisation of many universities' food halls means it can get a little bit expensive. Look for options outside of the University and where the best food is. If in doubt, bring a lunchbox from home.
- Grab a campus map and go for and explore. Have a good walk around and link up places you will visit the most, including your desk, meeting spaces, supervisor's offices, admin offices, libraries, food, accommodation, and any areas you will be performing research.
- Admin universities are full of bureaucracy and red tape. You may need to spend an afternoon getting all of your university administration sorted, including your student or library card, parking card, tech stuff, and access to the university's online software.
- Find out about extra work you can pick up on campus to improve your finances. E.g. tutoring, marking papers, student support etc.

Do as much as you feel comfortable with, and you have time for. There is no need to go through everything in the above list, but getting as much done as possible will mean that you can walk into your first day as a PhD student with a much clearer head. You won't have to worry about all the annoying little admin things that can take up so much time and kill momentum and mood when you are most excited about your future work.

For more information, check out my YouTube video where I go through what you need to do before a PhD.



During a PhD

Congratulations on getting admitted as a PhD student. The first few days of a PhD aren't the time to ease yourself into the new lifestyle or give yourself a couple of months off. Setting the right routines can help you build and keep the momentum.

Surviving your PhD once you have decided on the topic, supervisor, University, and all other preliminary questions are about staying focused, productive, and looking after yourself to the point where you can handle many years of doing your PhD research.

This section will cover the common issues PhD students face and some of the essential habits that you need to adhere to from day one of your PhD. Let's get you acting and thinking like a successful PhD student.

Of course, there's no possible way to cover every individual issue that would arise during a PhD, but many students face the same issues no matter the PhD's subject or the country in which they are researching.

Essential habits to set from day one

Surviving your PhD means setting foundational habits and routines from day one.

Many PhD students like to "ease in" to their PhD. I don't blame them. Getting to the first day of your PhD can seem like an uphill struggle, and it is only natural to take a moment to take your foot off the accelerator (or 'gas' as my US friends might say). Unfortunately, these early habits of reduced commitment and diligence during your PhD can have massive long-term implications.

I was certainly one for going easy on myself in my PhD's early and midstages. The lack of commitment meant a bit of a rush to get publishable results towards the end of my PhD. The good news is that a quick mind shift and reinforcement of commitment to your PhD can quickly turn things around if you are starting to fall behind. No matter what stage of your PhD you have decided to "take things seriously", here are the foundational and essential habits you need to cultivate for daily improvement and a near guarantee of finishing your PhD.

Time blocking

Time blocking is one of the essential habits you can get into during your PhD. Take a moment to jot down regular activities that you perform every week. That could be writing, researching, reading, communicating, admin work (such as emails), and any teaching that you may do.

Placing these essential weekly work commitments into a workable weekly schedule means that you will always find time for the most important things for your PhD.

I like to work in one and 1/2 hour blocks.

I set a timer on my computer or smartphone and do not change activity or focus until the timer has run down. It took a little bit of time to get to one and a half hours' worth of focused work. If that seems too long to stay focused, you can start with 45 minutes and slowly work your way up for a longer time over a couple of months.

Turning your attention to a key priority for your research and PhD thesis submission from the first week of your PhD will pay off in the long run.

If you do not have enough tasks to fill a full one and $\frac{1}{2}$ hour time block, you can batch together tasks until you have enough to keep you busy for one and $\frac{1}{2}$ hours. For example, if you only have a few emails to send, wait until you have about one hour's worth of email or admin activities before setting aside a time block.

Check out the perfect daily PhD schedule to ensure you start and stay strong through your PhD.



Working on the things that matter the most

Most things that we do in life can be completed by focusing on up to 3 key activities. We sometimes mistake busyness for productivity and make ourselves unnecessarily stressed by filling our day with non-essential actions and tasks

I could spend a full day busily working on several fragmented tasks and feel like I have gotten nowhere. I'm sure that you have experienced the same feeling.

There are some key activities that you should do first and protect at all costs.

For most PhD students, that could be:

- Finding and reading papers to formulate new ideas and understand the latest movement in the field.
- Creating data. Whether in a laboratory or using other techniques to generate new knowledge, you should protect time dedicated to generating novel data and ideas. You will not get your PhD without it.
- Communicating results. Communicating the results of your research, meeting with your supervisors to talk about your progress, or attending conferences and online symposia for researchers in your field.

There are many ways that other people (PhD students, academics and professional staff) like to suck up your time. If the activities do not contribute to your PhD's main components, you should consider whether or not they are truly important.

Learning to say no is a very important skill to learn.

Learning to say no to people professionally and politely will help you during your PhD and help you afterwards in your professional and personal life.

We all only have so much time each day, and a PhD student can easily get distracted by side projects, unreasonable requests for help or research assistance, and much more. A PhD will require you to prioritise. Being a bit selfish with your time feels rude at times, but I've never had a bad response from saying no in the right way.

I try not to hide behind excuses or lies. I often say that something isn't a priority for me or that I'm focussing on other things. Create some soft no responses for yourself and use them frequently.

Reading

Reading is one of the things that many PhD students put off the most because it doesn't feel like it is productive or immediately useful. However, setting aside at least one focused reading block per week for searching for and reading any new papers in your research field will help you in several different ways.

The most important thing we can do during our PhD is formulating new ideas. However, these ideas rarely come from thin air or moments of inspiration. Our brains are amazing at being creative, connecting ideas, and making new ideas relevant to our PhD work.

Feed your brain new ideas and information regularly to keep it creative.

Reading regularly also helps you when it comes to writing your peer-reviewed papers and thesis. Academic writing is far from easy as it is very technical and dense. The more familiar you can become with the style of writing that you will eventually be expected to write will help you during any article writing or thesis chapter drafting.

Eat the frog

An important part of getting a PhD is facing the difficult and unglamorous tasks you don't want to do. In a book by Brian Tracy, "eating the frog" is introduced.

Your 'frog' is the biggest, most important task you are most likely to procrastinate on if you don't do something about it.

Everyone has an activity that they do not want to do. You will procrastinate over that activity for as long as possible before time pressure or guilt/anxiety forces you into action. One of the best ways to overcome this procrastination is to decide that you will tackle the most difficult and annoying task on your to-do list every morning.

Any time you procrastinate on an important task, you delay stress and anxiety until later in your PhD. Do this enough, and your PhD will be far more stressful than it needs to be. The anxiety not only builds up. There seems to be a multiplying factor when too many things are left to the last minute.

Make a deal with yourself to 'eat the frog' every morning and as often as possible. It will help increase the momentum and be even more productive throughout the day. When the most important task is out of the way, it will give you a sense of satisfaction and relief too. It is a lifelong skill that will help you in your future career.

Incidentally, it is why I love running in the mornings. I'm getting the worst bit of the day out of the way!

We all love thinking that the easy admin tasks will help us build up the momentum. The reality is that understanding and delineating between important tasks, and those that are not important is the key to finishing your PhD on time.

Avoiding comparison

From very early on in your PhD you will be comparing your progress to your colleagues and people around you.

The truth is that everybody's PhD is unique to them, and the journey they will take will also be very different.

If you have planned well in the stages before your PhD, it will be more likely that your PhD will continue progressing with only minor bumps. However, many PhDs go through very rough patches where everything seems to be going wrong because of unforeseen circumstances.

Looking around at your PhD cohort is a bad way of determining whether or not you are making progress. Only compare your current situation to yourself one month ago or one year ago. As long as you can see progress (including failure), you are headed in the right direction, no matter how slow and tedious it may feel.

Another reason why the comparison is a bad idea is that If you ask any PhD student about their research, they are likely to only talk about the best bits of their research and not tell you about the true struggles and doubts they are having. We are all guilty of putting on our best face.

Meeting up with people with who you can speak openly and share experiences freely will help you understand your feelings and help you learn that what you are currently feeling is common among PhD researchers and academics alike.

Regular communication with the supervisor team

One of the last foundational and essential habits you need to cultivate is regular communication with your supervisor team.

Academic PhD supervisors can be very busy people. It can be months before they think about asking you for an update. In academia, the squeaky wheel gets the oil a lot of the time, and if you are not forcing yourself into their inbox or office, it's very easy for them to ignore their commitment as a supervisor.

Planning a regular meeting with your PhD supervisors in person is very important. If they cannot meet you in person, I have seen students and postdoctoral researchers email a PowerPoint summary of their work to their supervisors.

Make time for communication and interaction with your supervisor team as they will help you identify any early-stage issues, and they will have a much better idea of if you are at risk of failure.

Here are my top tips for running a great meeting with your supervisors.



Dealing with criticism

One of the hardest things about receiving being a PhD student and academic is the constant barrage of criticism. Research is a fantastic place for developing ideas, testing the limits of solutions and being a little Dickhead.

Not all criticism is created equally, and in the academic world, constructive criticism can help you further your research and career. Criticism for the sake of being nasty can come from people who are insecure about their position and research. It can cause unnecessary anxiety and confusion in the receiver of the feedback.

To understand whether or not someone is providing you with constructive criticism, think about what they are saying in the framework presented by a 2018 study from the United States of America.

Constructive criticism is when:

- it is from a position of care delivered by someone worthy of your respect.
- The message needs to be well-intentioned and targeted appropriately to guide how you can improve.
- It should be delivered with acknowledgement of your current emotional state and overall motivation.

These three markers of constructive criticism can help you decide whether or not someone is trying their best to help you get better or that they are there to be nasty.

If you suspect that someone is providing criticism for criticisms sake, you can decide to leave the meeting or ignore their advice and put it down to bad interaction. I know this is easier said than done, but going through the above bullet points after a bad interaction will help you frame the discussion in a much healthier light.

One of the first things that I remind myself of before going into an academic supervisor meeting is adopting an apprentice mindset. No matter what stage of my research career I have been in, I have always approached supervisor meetings with the same attitude, and it helped me avoid feeling attacked.

Here is an introduction to the apprentice mindset that I try and develop in myself.

The apprentice mindset

To me, the apprentice mindset is one where I allow the information to enter my brain and notebook without judgement.

Allow the information you are given to become facts. As they are spoken, do not try to assess them. Do not place your own meaning on the words that are being spoken.

When I am sat down with a supervisor, I remind myself that every bit of feedback is not good or bad; it just is (I like to refer to it as mouth noise). Things become good or bad when we place them in our narrative. It takes a little bit of practice, and I was the first to immediately take offence to anything that I perceived as questioning my intelligence or capability.

The apprentice mindset requires you to seek information and improvement. Your supervisor should always be trying to help you with your research and help you to become a better academic.

Listening, understanding, and assessing each bit of information will help you find the bits of gold in the barrage of information that research meeting normally comprises.

Understanding the intension

Understanding the intention of the criticism is one of the first steps in taking on the information. The first reaction many people have two criticism is to defend themselves. Criticism often comes with the unfortunate insinuation that you are not good enough and fail in some research aspect.

Taking an apprentice mindset and not putting your lens on it will help you understand the intention of the feedback.

If the criticism comes from someone who cares about your progress and specifically references an area you want to improve, the intention should be viewed as trying to help you.

In the early stages of your supervisor meetings, talking about areas that will help you the most may be worthwhile. Instead of allowing an open criticism forum, narrow it down to the areas you think you need to improve.

I have seen open forum criticism take a terrible turn when people use it to further their power trip. I could often pick who was having a bad day by the comments they'd make in the departmental seminar.

Ask questions

To give me the ability to step back emotionally from the criticism, I ask questions.

Asking questions does two things. Firstly it allows me to cool down if the criticism is something I don't agree with, and secondly, it helps me get to the root cause of the criticism and provides further help to improve something.

Giving constructive criticism is a relatively tough activity. Even the least empathetic person may try to make the criticism less aggressive but, in doing so, may confuse the topic even more.

Asking questions when you are receiving constant criticism is a great way to work out any specific actions that you could take to alleviate their concerns. You may find that you are already doing it or planning to rectify the situation in a way that they are suggesting. This turns the one-way criticism into a conversation.

After a few questions, you may find that the initially proposed criticism has been changed into something more specific and actionable, which helps everyone involved.

When that happens, I find myself in a much better headspace, and the back and forward between my supervisor and myself helps me feel like part of the solution and not just a cause of the problem.

Remember to thank your supervisor or constructive criticism giver at the end of the meeting. Thanking them will give them the confidence to be more direct with you and help calm your knee-jerk reactions if you feel attacked.

Find people who help

When I receive criticism, I often take note of those who genuinely and helpfully and those who struggle to do so.

Should I need any support, I will prioritise seeking assistance from the people I respect and have my best interests. I will do my best to avoid people I've noticed are nasty and provide feedback in a non-helpful way.

Find people who can also help you unpack any information you have just been given at the supervisor meeting. I recommend that you approach someone familiar with the supervisor or academic in question and more senior to you in the research group.

Everyone has their quirks and finding someone who has experience with a particular supervisor will help you distinguish personality quirks from genuine help. A quick run down over a cup of coffee is sometimes all that is needed to reframe an awkward conversation.

As you become a senior member of a research group, you may want to reach out to newer members to help them reframe conversations and criticism.

Make an action plan

Taking control of any criticism and truly owning it is a great way to overcome any criticism.

Waiting for a good time for the emotions to subside after any particularly harsh criticism and turning that criticism into an action plan can be a fantastic way to boost your motivation and own the next step.

By splitting up the criticism into two or three actionable steps for the near future, you acknowledge a deficit that needs to be corrected. You have turned the criticism into your next steps.

I often like to start my supervisor meetings with any criticism I received in the last meeting and discuss the specific actions I took to address each one. In research, action is power and turning criticism into action fuel has been a way for me to turn any potential negative feelings into a feeling of progress.

Working without structure

Undergraduate university life is pretty well structured. As soon as you sign up for a course, you know exactly when the lectures are taking place, where to take the exams, and exactly what to study. Sometimes you're even told the books to read, and you are given a set collection of example exam questions.

For students going straight from undergraduate to PhD life, the lifestyle change can be a huge shock. It is less of an issue for other people who have spent a little bit of time in a job before deciding to do a PhD.

A PhD often has some structure to it. These include first-year confirmation talks, yearly review meetings, and other administrative meetings the University imposes. However, there are often huge periods of many months where you are left to your own devices.

Distraction, procrastination, and a definitive short-term outcome mean that many PhD students get lost very quickly. What feels like a nice relaxing afternoon one day can easily snowball into many weeks' worth of non-advancement.

Here are my top tips for working without a structure during your PhD.

Treat it like a "job."

The first thing I noticed about people who did not finish their PhD was that they did not turn up to the University very often.

In a research environment, very few people notice your comings and goings. If I wasn't in my office in my PhD, I could have been in a lab somewhere around the University or out with a collaborator. No one would have known if I was sitting at home watching Netflix.

Turning up and creating a routine at a university is the first step to creating momentum and progress through your PhD.

Deciding to turn up between certain hours will ensure that you are ready for research. You can occasionally work from home if you want but turning up somewhere has a huge effect on your mindset and motivation. I know that turning up often forces me into action because "I'm here; I might as well get something done".

Not turning up to your research group or office can be the first warning sign to a supervisor that things are not going well.

Most motivated PhD students like to keep regular 9-to-5 office hours at a minimum. There are times when their research requires them to stay later or turn up earlier but overall, their mission is to turn up every working day at the same time.

Some research groups require much more commitment from their researchers, including a seven-day working week and many late hours. Balancing work time with relaxing time is important if you will survive the marathon of a PhD research project.

Avoid being sucked into unreasonable work hours because someone else is in the office.

Agree on milestones

It is very important to agree with your supervisor on some short-term milestones to keep on track. Many people delay the work until the last moment to achieve any key performance indicators or milestones they have previously agreed with the supervisor.

After a while, in academia, you will notice that many academics leave work until it is due. One of my friends likes to remind me that any task is like a gas, filling up the available space you give it.

Having short term goals means that you will be less likely to procrastinate on the most important thing during your PhD – collecting and analysing research results.

One of my favourite milestones that I'd like to stick to during any research project is to create a unique table, graph, or set of data points for publication every week or fortnight.

I found that focusing on collecting data and producing results meant that everything else flowed naturally. When I had analysed the data from my research and formatted it into a table, graph, or schematic, it was then easy to create presentations, outlines of papers, and weekly updates for my supervisory team.

Fortnightly focus on knowledge generation will help keep everything flowing.

I liked to organise a fortnightly meeting with my supervisors to present the results. I told them to expect me to produce some original data that we could talk about. Sometimes I would slack off for a day or so after the meeting, but I always ramped up again to discuss results at our next meeting.

Setting short-term goals helped me during my PhD, postdocs, and even supervising masters and PhD students.

Crafting the perfect working environment

I believe that there is a strong connection between your work and the environment you create for yourself.

Unfortunately, many PhD students get put into open-plan offices that are incredibly difficult to concentrate in. Crafting the perfect research environment may mean moving your dedicated laptop to a quieter spot in your office or learning where the quiet parts of the library are located.

One of the great things about being a PhD student is working from home regularly. Only work from home if you have a dedicated task to assign a good amount of time. Working from home can quickly become just as distracted by pets, family, children, and other distractions.

Create a research environment that is quiet, comfortable, allows focused work, and has minimal distractions. I often leave my smartphone or any other device in a separate room or drawer to be 100% focused on the task at hand.

A good set of noise-reducing headphones can also help you reduce the amount of distraction you experience throughout the day.

Never feel like you need to work in a certain area if it not helping your focus.

Social Isolation

Many people choose a PhD due to its academic independence and freedom. Unfortunately, there is a darker side to doing a PhD that not many people consider until it is too late.

A PhD can be one of the loneliest journeys to take for some. You may have students in the same research group, department, and even master's or summer research students performing similar research to you, but loneliness hits everyone.

PhDs require you to turn up and make decisions largely on your own and deal with problems that no one else has tackled before. If something doesn't go right, it is mostly down to your past decisions and actions. Some people find it incredibly liberating as they finally have ownership of their academic careers. Others feel like they carry around the burden of making decisions and anxiety about what the future holds for their research.

As a PhD student, you may be working alone a lot of the time. I remember working on my own in a windowless lab to create semiconducting polymer nanoparticles for solar cells. I was able to play music, listen to podcasts, and try my best to interact with any passing academic to alleviate any boredom. Unfortunately, Occupational Health & Safety quickly took away listening to podcasts and music through headphones at my University. However, I still did it when no one looked to combat my feelings of social isolation.

To make things worse, the amount of commitment required for a PhD decreases the amount of interaction with your friends and family. Not many people outside of academia understand what a PhD is. What a PhD student does remains a mystery to those who have never been in academia.

There is no wonder this combination causes significant feelings of isolation in some PhD students.

Luckily, there are many ways to overcome loneliness and social isolation while doing a PhD.

Join a common interest group

Do you have a hobby that you have been doing for many years? Do you want to start a new hobby outside of your PhD to take your mind off things?

One of the best refresh buttons I could recommend is finding a common interest group that has nothing to do with your PhD and is completely separate from academia.

Early in my career, I had someone tell me not to give up any of my hobbies during my PhD. Continuing to participate in hobbies gives you something to look forward to and allows you to take a break from your PhD. I also find that speaking to people in the "real world" that have nothing to do with research helps me find perspective.

One of my favourite hobbies during my PhD was playing Brazillian percussion. I had been in a samba band from the age of 11, and it allowed me to interact with a community of people with hugely varied backgrounds. During my undergraduate years, it enabled me to interact with the local community in Swansea. Getting outside of the student and academic bubble is very important for allowing you to see that the real world continues if things don't go well.

I continued to play samba during my PhD with a band in Newcastle, Australia, which helped me forget about my PhD worries for only a couple of hours a week.

I now run a samba band in Adelaide, Australia, and strive to make it a warm and welcoming place for people from any walk of life.

If you have any particular hobbies that you want to start – doing it alongside your PhD may be the perfect opportunity. As long as it does not take away from your work hours and is a hobby that gives you energy, it won't get in the way.

Participate in, or start social functions

Many universities run social events for students and PhD researchers. I would recommend seeing if there are any opportunities to attend student functions. In my experience, these can be a little lame if they are run by someone who is forced to run the social events. However, there have been some excellent events, and it tends to be the simple ones that are the biggest hit.

International lunches, movie nights, pizza afternoons, and simply going to a pub or equivalent have been the best I have attended.

If your university does not have a specific PhD student event committee, you should consider starting one. The benefits of starting up your own group are that you get full control of the events and run exactly how you want them.

Universities often have grants and money that you can apply for student-focused events. Reach out to your research office to find out if support is available.

I recommend keeping it as simple as possible if you are starting your own. Often, these postgraduate events are too academic-focused and simply putting money into an activity and allowing people to socialise results in a good time for most people.

Take a regular holiday

If you are feeling particularly lonely and isolated, consider taking a break. Taking a break is sometimes all that is needed to feel refreshed.

Sometimes PhD supervisors do not like the idea of their students taking long holidays, so see if you can weave in some narrative around doing it for your PhD. Visiting a friend in another country that's also working at a university that you can claim as collaboration. Emailing a few other academics in another university to meet up with can help bring a PhD supervisor on board with taking a trip to another country or city.

Many holidays also work wonders. You don't need to leave your PhD for weeks at a time. It may just be a couple of days working from home or a local coffee shop.

I regularly work in coffee shops and public libraries to give myself a break from my usual environment. Visiting a local coffee shop regularly will help increase the chances of becoming friendly with local and regular patrons.

Seek help and advice

If you are struggling with your mental health and notice a significant decline, it may be time to seek professional help and advice.

Many challenges come with doing a PhD, and your internal struggles are some of the hardest to overcome. There is no harm in being vulnerable and reaching out to support networks or professionals.

Reaching out can be the hardest thing to do because of your identity as a PhD student. It's hard to admit that things aren't going well when your entire being and identity are based on being a clever and capable person.

Many people do not want to betray an image of failure.

However, sharing your frustrations with a friend or colleague will deepen that relationship, and you'll probably find that they are feeling the same as you are or have done at some point.

Supervisor issues

A supervisor can make or break a PhD. Building a good relationship with your PhD supervisor is essential for surviving your PhD.

That's not to say that the relationship can turn sour during your PhD. My primary supervisor decided that I needed an intervention during my second year despite having plenty of research and excellent results. It was recommended to I change my primary supervisor to my co-supervisor to avoid the issues presented by my initial supervisor.

I would argue that the majority of PhD issues that occur are due to poor supervisor relationships. PhD supervisors are complex people, and it can be very difficult when you have tried your best and, for some reason, they turn against you.

Universities often have procedures and methods for counselling and mediation between supervisor and student, but many do not.

It would help if you also remembered that PhD supervisors are subject matter experts, and they have no formal qualifications in managing people. Universities often supply potential PhD supervisors with only a couple of workshops, and then they supervise students.

Universities are slowly getting better at training potential PhD supervisors, but it relies on their enthusiasm to seek out the training in the first place.

Here are some regular issues that PhD students encounter with their PhD supervisors.

High expectations

Dealing with a supervisor's high expectations can be frustrating for new PhD students. When you first speak to a PhD supervisor about their expectations, you will often be told the stretch goals rather than what their current supervised students are achieving.

There is no doubt that the number of papers and outputs expected of PhD students has increased dramatically. When I first entered my PhD in 2007, the number of papers expected from me was never mentioned, and there was no real focus on publishing during your PhD. The academic game hadn't quite got to the point it has now.

However, when I first got my first postdoc position in 2012, the game changed, and people were publishing as much as possible.

The high expectations set by a PhD supervisor are a knee-jerk reaction to the change in the academic game over the past few years. They probably didn't write a load of papers during their PhD, but they expect you to be pumping out peer-reviewed papers like your life depends on it. Their whole career relies on gaming the academic system, and you are part of their plan for academic domination.

I always take a supervisor's expectations with a grain of salt. I do not take their number of papers per year seriously unless they can prove to me that it is what their research group is pumping out.

Some types of research allow you to publish a lot. For example, during my PhD, one of my colleagues was investigating surface interactions of ionic liquids. Changing the ionic liquid and surface resulted in a whole new paper. They understood the academic game and were publishing as much as possible. My research, and many other types of research, are not as conducive to that level of publication output.

Lack of availability and support

There are many different types of PhD supervisors, from micromanagers (someone who wants to know what you are doing at all stages of your PhD) to supervisors with so many students they may not even remember your name.

Some PhD supervisors are so hands-off that you may have trouble getting their attention.

Academic supervisors are typically incredibly busy people balancing various academic tasks, with PhD supervision being only one. Sometimes the supervisor may spend so much time applying for grants, playing academic politics, and performing administrative roles for the University that they offer very little support or feedback when you need it the most.

When the communication lines go silent between a PhD student and a supervisor, some students are worried that they will be bugging the supervisor too much when they are busy. You can often find yourself stuck in a cycle of worry. Worried about having no contact and then worried about bugging them too much.

Trying to get hold of them by multiple pathways works the best. Email is becoming less and less effective at grabbing the attention of PhD supervisors, and calling directly to their office by phone or arranging a meeting to meet in person can be some great ways to break the communication issues.

It is not rude to contact your PhD supervisor and follow up via another method of communication.

To make the meeting process much smoother, I recommend meeting up with the supervisor about your problem and offering solutions to that problem and asking them to choose the one they think is best. Sometimes a PhD supervisor cannot give you their full attention, and several solutions will allow them to skip the hard part of the interaction, the thinking. Once they realise that your interactions will be swift and to the point, they will be more likely to meet up in person and offer quick advice when you need it.

Expanding the people you seek advice from is also a great strategy for keeping your momentum up. Are there other researchers, postdocs, and senior PhD students to ask for advice? In large research groups where you are less likely to receive one-on-one attention from your supervisor, you can find supplementary support from others in the group.

If you are always hitting a brick wall and your supervisor is completely uncontactable, it may be time to change or look at co-supervision options.

Contradictory advice

I had three supervisors during my PhD, and one of my postdoc projects had five supervisors. So many people ended up on this project because it brought a large amount of money to the University. They all wanted part of that money lodged against their name for future promotion opportunities. I can assure you that their input to the project was not equal.

The issue with such a large cohort of research supervisors is that you can often end up with contradictory advice or unhelpful advice that will get you nowhere.

I used to approach the supervisors who I knew had direct experience in the problem I was trying to solve and did a little mental arithmetic to weigh up the value of advice given by one supervisor over another.

Often, supervisors make up things as they are going along. They may have more experience, but sometimes they know as much as you and make mouth noises to seem knowledgeable and fill the silence.

Being a PhD student means taking on a load of different types of information and synthesising it down into actionable steps. If you receive contradictory advice, I recommend taking what you see as the best advice from multiple sources and putting them together into a solution. Going against what your primary research supervisor has suggested is perfectly fine if you can provide evidence that an alternative approach may work better.

There is typically a point midway through your PhD where you can develop a better intuition for the direction you should take your PhD. Opening clear communication with your PhD supervisor about what you think is an important step toward becoming an independent academic.

Bullying

Bullying is a real and serious issue in academia. Bullying happens among researchers and is also often directed toward PhD students.

If they yell at you, make inappropriate comments, put you down in front of other people or keep attacking you personally, it's time to reconsider your supervisor choice.

The power imbalance between a PhD supervisor and their students makes this difficult to navigate. If you speak up, they may make your life more difficult than it needs to be. If you do nothing, they will continue with the toxic actions. The longer you are in a power imbalance and bullying situation, the harder it is to do anything because it erodes your ability to speak up and attacks your self-confidence.

Some famous researchers are massive bullies, and it is known that it is part of working for them. Bullying is never right, but the amount of money they bring into the University often means complaints are ignored.

Stepping away from a bully PhD supervisor is the only real power you have. It will certainly be a stressful time, and it may always seem futile but walking away from any toxic situation always works out best in the long run.

Seek out other PhD supervisors that are willing to take you on and, if you deem appropriate, make explicit complaints to the appropriate people. Complaints are often sent to the Dean of the school, university research departments, and research deans. There should be plenty of failsafes put in place to make a complaint safely.

I have ended meetings early with supervisors who started to bully me. I've outright told a supervisor that I would not be spoken to like that and ended the meeting early. Removing yourself from a situation is often the best way to deal with a bully. These people thrive on control, and removing yourself from their control (even just out of a meeting) can shortcircuit them.

Speak up and make complaints, especially on behalf of someone who cannot speak up for themselves for whatever reason.

Dealing with failure

During a PhD, you become more comfortable with nothing than failure. No matter how much planning you do, failure is a certainty when doing new and interesting research.

Failure is an inevitable part of academic research.

Failure can happen when you:

- perform an experiment
- apply for a grant application
- submit a paper for peer review

Ask any researcher their success rates compared to the failure they experience, and you'll discover exactly how much resilience is required to continue with a career in academia. No wonder some of these PhD supervisors are so bitter and resentful of the academic system.

That doesn't mean that it is any less hurtful when it happens. Failure is often a cause of significant stress, damaging a person's mental health and ability to progress through their PhD.

Learning to reposition the negative outcome as extra information to move forward is the ultimate mindset to achieve success.

One of the things I like to remind myself of is that failure is not fatal unless I give up. Learning what doesn't work during your PhD is just as important as finding the things that work. Shifting your mindset and honestly and openly sharing failure can help it become normalised within your group and should be celebrated.

In the start-up world, they often host "fuck up" nights where they share the worst failures of their career. Normalising failure in such a way and showing that it is part of a process that is not fatal can be very empowering for young researchers. I wonder if there is a place in academia for the same presentations?

Here are some cheeky techniques that can allow you to overcome the emotional baggage that often accompanies any sort of perceived failure:

- celebrate your courage to take risks celebrate a rejection from a
 journal. When you have completed a grant application, celebrate the
 submission rather than the outcome. Emphasize your ability to do
 things rather than the outcome, and you'll feel much better and
 accomplished.
- Openly share your failures in 2016, a Princeton University professor published his CV of failures. This publication was a fantastic way of showing the true trajectory and resilience of a life in academia. Knowing that you are not alone and that many other successful people have suffered their fair share of failures is valuable in helping you reframe what failure is and what it means most of the time, nothing.
- Never view anything as your last chance or the thing to skyrocket your career. We tend to overemphasise the effect something will have on our careers. Often, the outcome does not surpass our expectations, and it is the daily grind and willingness to continue despite difficulties that define a career.
- Give yourself time to grieve embracing the feeling and giving yourself a moment to feel the feelings is perfectly okay. Academics are not cold hard robots without feelings even though sometimes it may feel that way. Taking the afternoon off to look after yourself and feel sad is great. Sometimes, we need a break from our troubles to put them into perspective. Rather than giving up, take a break.

Academic Politics

While doing a PhD, you will notice that academic politics runs deeply and strongly throughout the department.

Academic politics describes the complex human landscape found in universities and research institutions. Research academics have often invested years and dedicated a lifetime to reach the pinnacle of expertise in a narrow field. As soon as they feel threatened, they may act out instinct or self-preservation.

Each research group is like its own castle, and the supervisor will protect their small amount of academic real estate and research money viciously.

Academics are constantly jostling for positions in their department, field, and standing in their speciality. The more successful an academic becomes, the higher the level of politics they need to get involved in. They are constantly trying to win grant agencies' money while competing directly with potential collaborators and colleagues.

The strange balance between collaboration and competitiveness means that narrow-minded turf wars are common.

I'm not quite sure what drives this level of politics. It is most likely a combination of money, ego, systemic failings, and other factors. There is no doubt that academic politics can become incredibly vicious.

I have seen academics forego publication because of author order on a peer-reviewed paper. I have witnessed snide remarks from academics towards others in the same meeting. Everyone just pretended that it didn't happen, and I think the bullies of the academic world thrive in this environment.

My recommendation for any PhD student who experiences academic political fighting is to stay out of it. Your supervisor may have an ongoing feud with certain other academics in the department. They may talk about their competitor's research in less than favourable ways. They may even outright dislike them as a person. I have seen my fair share of horrible comments directed toward people in the same department as my supervisor.

Just because your PhD supervisor or group has historical issues, I would avoid parroting anything you hear. As you continue in academia, you'll find that the community is very small, and unless you have power, certain political alignments may come back to bite you later on.

As hard as it is to remain neutral, it is one of the best ways to ensure career longevity and favourable recommendations upon graduation.

Even though we think of academic politics negatively with infighting, backstabbing, and other unethical behaviour, there are some political methods to help your PhD.

Using politics to your advantage

Thriving in an academic career beyond a PhD requires getting on well with a broad range of people and personalities. If someone likes, respects and trusts you, they are much more likely to want to work with you, more willing to help you when things are tough and will look much harder to find an outcome to benefit everyone. They will avoid the zero-sum game that academia is often accused of.

To be trusted in academia, you need to show that you are trustworthy. This type of positioning is all about playing a long-term gain. Being honest and open will help you find collaborators that you like working with and open up opportunities with other nice people.

I believe that academia is a great mirror. You often get back what you put out in the world. If you are constantly lying, acting cynically, and actively disadvantaging a competitor, this is the type of collaborator and career you will receive.

That's not to say that this is rewarded by the broader academic system in which research happens. Unfortunately, a successful academic is often rewarded for less than ethical behaviour by the academic system.

However, many academics are nice to collaborate with and always take opportunities to help others and colleagues. The nicest academics I have ever worked with often had broader experience in industry and had a good work-life balance.

Finding mutually beneficial pathways and outcomes may be tougher in the short term but will pay dividends in the long run. Try your best to see through the behaviour to understand the needs of your fellow academics and work towards a solution that benefits everyone. Breaking through some of the tough external exteriors of academics can sometimes be tough as they are the product of a very competitive academic system. Sometimes, all you need to do is to acknowledge someone's expertise if you feel they are feeling threatened or recognise the legitimacy of their concerns when they raise doubts.

Even the most battle-hardened academic often feels threatened and ignored.

The politics will change from country to country and institution to institution but being nice, amenable, and working well with others is a universal trait that will lead you to greater things.

Financial pressures

Avoiding financial pressures during your PhD will mean that you give yourself plenty of opportunity for creative thinking and less time worrying about paying for human basics such as shelter and where your next meal is coming from.

Students are very good at living on a tight budget. Undergraduate life often requires you to have a part-time job and survive on a very limited income. Whether you are living on a student loan or your savings, undergraduate university life is often simple but sufficient.

A PhD often comes with a scholarship or stipend paid monthly throughout the research project. I remember thinking that I would be loaded because it was my first ever regular income guaranteed for three years.

However, it can be very easy to spend more than your income. Setting up a budget, saving early, avoiding taking out loans, and sourcing another form of income such as scholarships or a part-time job can alleviate some experience financial pressures during a PhD.

Self-funded PhDs

I always recommend avoiding doing a self-funded PhD. It is one of the worst returns on investments you can make in education. If you are funding your PhD, you will likely spend thousands of dollars supporting your lifestyle and achieving a qualification that only pays 3% more than a Masters's qualification on average.

My strong recommendation is only to take up a PhD accompanied by a grant or stipend. Some countries pay PhD students to get their qualifications from an overseas university which may be another great offer if your country does not have many high-ranking and well-renowned universities.

Budgeting

Budgeting is one of the most important things that a PhD student can do. It helps you prepare financially for your PhD by considering all of your expenses, including tuition, rent, food, transportation, and other costs. Setting up a budget is a fun academic task, but many people struggle to stick to their plan once life and fun get in the way.

One of the best books I have read for budgeting comes from the Barefoot Investor. I highly recommend that you buy a copy of this book and set up the different accounts for:

- Splurging take 10% of your income and use it on the fun things in life. Spend this as you want.
- Smile account save 10% of your income and place it in an account that is harder to access but will allow you to do less common, more expensive fun things like go on holiday or weekends away.
- Emergency fund/fire extinguisher save up a six-month emergency fund so that should the worst happen, you will not become financially ruined. Things pop up in life, and you will need the money to cover the costs associated with the unexpected.
- Daily expenses 60% set aside enough monthly income to pay any living costs completely.

Cutting down on costs

If you cannot earn more money, saving on costs is another way to make your money go further.

Avoiding spending money on unnecessary gadgets and items, cooking at home instead of eating out, moving in with roommates to split the cost of rent and other bills and signing up for websites that offer good deals are all ways of saving money during your PhD.

Eating healthily and cheaply is completely achievable as a PhD student. There are subreddits dedicated to this purpose, and you can use meal planning apps such as Mealimes (my favourite) to purchase healthy meals with minimal waste.

Unnecessary spending can be very hard to cut out because of the amount of advertising and promotion of products we get as part of our daily lives, before making a purchase wait two or three days before pushing the buy button.

Working part-time

During my undergraduate, I worked in the university, and I took on extra paid roles during my PhD to increase my income.

Many on-campus jobs are a fantastic way of earning money whilst staying close to your on-campus commitments.

I worked as a laboratory demonstrator for undergraduate chemistry labs during my PhD. I also marked exam papers for a professor who didn't want to mark them himself at the end of the year.

I often ran private tutoring sessions for students who needed to revise for their chemistry undergraduate exams. I would earn \$50 per hour helping students with exam questions the week leading up to the exam. The private tutoring was my go-to quick money solution during my PhD as it was flexible hours, on campus, and completely within my zone of expertise.

Other on-campus jobs included exam adjudication and administrative roles for the department or university.

If you need a boost in your income, working a part-time job will help take the financial stress away from your PhD. However, make sure that it does not absorb too much time out of your PhD, and you need to reserve a focused box of time regularly to get to the finish line. Protect the core activities of doing a PhD. Earning money can be a very attractive distraction throughout your research.

International student issues

Being an international PhD student is a particularly challenging adventure. Learning a new language, writing technical language, getting used to a new culture and being far away from your support networks add to the stresses of doing a PhD.

Doing a PhD in a country that is not your native country can be a very rewarding experience. You will make new friends, learn about different parts of the world, travel to new places, and participate in a whole new set of opportunities. In some countries, getting a PhD from an internationally renowned institution is valuable when you return home.

International mobility has never been so easy. In 2016 more than 4.8 million students crossed an international border to pursue their study goals.

Here are some of the issues that are unique to international students and the best way to help minimise the effect of each one on your ability to get and pursue a PhD.

Applying from afar

Applying for a PhD as an international student is very different to that of a domestic student.

Typically, a domestic student would have a one-on-one meeting with a supervisor or potential PhD group to understand the group culture and get a sense of the personality match between themselves and the academic.

Unfortunately, international PhD students have to rely on emails, phone calls, and zoom meetings to glean the same amount of information.

When I was applying for a PhD position in Australia, I reached out to all of the potential supervisors via email to understand their research interests and if there was a potential to obtain a fully sponsored PhD position. I had positive responses from three academics who had funding and were looking for students to take up PhD positions.

I was in a fortunate position to be able to travel to Australia to meet up in person with each of the potential research supervisors. International students are an excellent resource for PhD supervisors, and the University often makes a fair amount of money from international students. If you can also travel to the country that you are considering doing your PhD - it will help a lot with choosing your research and supervisor.

I understand that many people are not in the fortunate position to travel to meet up with potential academics, so, at the very least, you should arrange a zoom meeting to go through the sorts of questions that we highlighted earlier in the book.

Connecting with any potential supervisors early in the application process is an important step in looking for opportunities to be part of their research group.

Besides the research supervisor, you should also reach out to the university postgraduate student services office or equivalent. They will be able to advise you on all of the appropriate steps to take and are very friendly in my experience. As I said, the University wants international students because they typically account for a lot of the university's revenue.

There is also no reason you need to launch into a PhD with a potential supervisor right away. There are many opportunities to do international summer scholarships or a summer study abroad program at the University of your choice. Doing a shorter research project will give you the experience and knowledge of what it is like to work with a particular research group. You can use that as a much better indicator of whether or not you want to be pursuing your PhD at that university or not research group.

Maybe starting with a master's and upgrading to a PhD will also benefit people who aren't sure if a particular supervisor or research group is right for them.

Visas and conditions

Moving to a new country to work and study often requires a lot of bureaucracy and paperwork.

In your initial research, check the country's entry requirements. There are often different Visa options for students with various conditions. For example, I was able to get a student visa to study in Australia, but I could not work. I needed to apply for a visa extension of work to earn money alongside my PhD. It was a simple process but still delayed my ability to earn money by six months – very frustrating.

I found a very supportive and knowledgeable international student support person at the University who talked me through my visa options. Some universities do not allow international students to receive financial aid. Before moving to a country, make sure that you know the financial pressures you may be under because of strict Visa conditions. Sometimes, like in my case, the University also required me to have private health insurance/for my entire PhD. An extra expense that I wasn't expecting to pay.

Culture differences

Adjusting to a new culture can be a very alienating experience. As we grow up in a particular country, we get used to the traditions and customs of that country and absorb all of the unspoken rules. Moving to a new country means discovering all of these unspoken rules again.

I remember having a detailed and in-depth conversation with a Chinese postgraduate researcher about initial greetings in Australia. Who you hug, kiss on the cheek, and who you shake hands with. It wasn't until trying to break down the weird social norms that I realised this could be quite a minefield for someone from a different culture.

As difficult as it is and as silly as you may feel, I highly recommend staying clear of any expat societal bubble in the early days of moving to a new country. It may be easy to hang out with people from your home country, but fully embracing your new life will pay off in the long run.

It is important to expand your comfort zone to open up new and exciting experiences. You do not have to leave behind your identity. Making friends with domestic and other international students will be the best way to integrate your new PhD experience fully.

One of the things I love about university culture is the ability to find many social and volunteering groups for making new friends. I was a member of multiple societies in my undergraduate years, which opened up a wide range of experiences and the beginnings of lifelong friendships.

I made friends with people from Africa, Colombia, Germany, Australia, France, and many other countries connected through extracurricular activities and my PhD research.

Research suggests that international students help and support each other by passing on information and experience they have gained themselves.

Quite often, international university student groups offer an informal initiation of newcomers so that they do not experience the same difficulties as their friends. Forming and joining a strong community of other international students may be the key to starting your PhD strong.

They will have been through everything you have been through, and this high empathy for your current situation will be an important aspect of forming a strong bond. Understanding that you are not alone and having a safe space for the unique challenges international PhD students encounter is an important part of transitioning to a new culture.

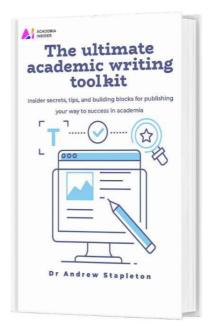
It can be very hard to break into a domestic student friendship group. International students quite often develop superficial relationships with domestic students. However, participating in extracurricular activities is the best way of breaking down this barrier.

Step outside of your sign of comfort, connect with other international students that have been through the same thing and open yourself up to new experiences and opportunities.

Writing your PhD thesis/publications

During your PhD, you will be judged on whether you are worthy of the qualification in two ways.

Firstly, you can choose to do a PhD by publication. This submission type is where you produce multiple peer-reviewed academic articles in journals related to your field of study. It is normally between three and five peer-reviewed papers printed or submitted during your PhD. Doing a PhD by publication requires ongoing continual effort to publish results from the moment you start your PhD.



If you haven't already, I recommend that you read my other ebook. This ultimate academic writing toolkit. This ebook will help you write peer-reviewed journal articles throughout your PhD and academic career.

Even though it is becoming more common, many people prefer to write a thesis at the end of their PhD.

The second way you can choose to complete your PhD is by writing a thesis. A thesis is a culmination of all of the pieces of work and research results that you have produced during your PhD. It can be difficult to find a logical pathway through all of the years of your PhD research results and logically present them to external reviewers. Writing a PhD thesis in chronological order is often not the best way to present the data or your research story.

Writing a thesis or dissertation is different from anything you would have written in the past. My master's thesis was way shorter and less comprehensive than my PhD thesis.

Many people think you need to present something amazingly groundbreaking to pass your PhD. This assumption is not true. As long as your thesis contributes some novel information to the field and your PhD supervisor is satisfied with the contribution's quality and size, you will be fine.

Writing a thesis is long, complicated, and can include some very dark moments of self-doubt. However, here are some of the top tips for surviving writing your thesis.

Make time for writing

Writing a PhD thesis or a publication for peer-reviewed means making a contract with yourself to write regularly. Make an appointment with yourself to write. I like to put focused amounts of work into writing, and I allow my brain to spill ideas onto a keyboard for about one hour to $1\frac{1}{2}$ hours.

Even though there is a very small chance that you will feel inspired, Never wait for the moment of inspiration to hit; sit down and start writing. Writing time is a time to be tough with yourself. Do not look up from the keyboard or page until you have put out at least one hour of good brain spillage.

You may find that you are more inclined to sit down and write in the mornings. If this is the case, make sure that you are sat your computer when you are most likely to complete the hour and a $\frac{1}{2}$ of writing.

Sometimes you'll have an idea and want to write about it. Do not ignore these moments of inspiration. Carrying a notepad and pen with you during your PhD time will help you capture those fleeting creative ideas as they pop into your head.

There were plenty of times when I didn't feel like writing my thesis. However, I sat down and started writing. Sometimes, I wasn't proud of my writing, but with a small amount of editing, even the most stupid sentences can become precise and impactful.

You will find that, over time, writing for large blocks of time becomes much easier. I find it helpful to have the same routine before writing. Typically, that would involve getting a cup of herbal tea and a small sweet treat to give me the boost of energy to open up the appropriate word or LaTex document. I find it very easy to write when I am in an environment with minimal distractions. For me, that was mainly the University library's silent study areas.

Dealing with writer's block

A small hack that I learned was that if you are suffering from writer's block, you should turn on a speech to the text tool and talk your thoughts aloud. Switching between physical typing and talking has been excellent for increasing my productivity and busting through any writer's block.

Get regular feedback from your supervisor

Get regular feedback from your PhD supervisor as soon as you have completed a section of your thesis. There is no need to hand your PhD supervisor a thesis at the end of the process. You can hand them little bits and pieces for comments as you are going along.

I highly recommend getting your PhD supervisor onboard with this mode of feedback.

They may feel intimidated and delay marking pieces of writing that are too big. Giving them sections of a chapter and asking for feedback means that you will be able to adjust your writing style and improve as you are writing. You'll not make the same mistakes as you continue to fill out the sections of your thesis.

Set mini goals

Consider your thesis a series of smaller chunks. Set mini goals to write a certain number of words in a small chunk per week. I find it particularly useful to visualise these small goals, such as dots on a piece of paper or paper clips that you move from one jar to another upon completing a certain number of words.

Do not think of your thesis as one mountain to be scaled but rather a series of small steps that will lead you to the greater goal of a long and detailed thesis.

Progress over perfection

No matter what you do, you need to protect the momentum you build up from writing. The unglamorous truth of writing a thesis is that most of us do whatever we can to get through.

Don't expect your writing to be perfect the first time you draft out a section or chapter. Keep on moving forward, and do not allow your brain to stop spilling out the ideas and words.

Your new mantra should progress over perfection.

A good thesis is one that is signed off by the examiners. They are not expecting groundbreaking writing. They expect you to communicate your ideas clearly. Keep on writing and edit later.

To get through writing, you will also have to find out what works for you. One of my friends would eat copious amounts of chocolate to fuel his writing during the day. Other people find that they need to be writing at night and then sleep throughout the day. I needed lots of caffeine and chocolate to push through the brain fog that sometimes accompanies a big writing project.

I quickly switched to bananas and dates when I realised that it wasn't a sustainable solution to my writing goals.

Getting to the end of your thesis will be tough. Keep moving little by little. If you can't write for one hour, write for 10 minutes. Do whatever you can to keep that forward momentum going.

Writing your thesis is quite an exhilarating prospect once you round the final corners. A lot of people feel lost when they finally submit. Here's what you need to do to make sure you are happy and excited for the next stage of life upon completion.

Lay the foundations for escape

From the first moment of your PhD, you have to start thinking about how you will get out the other side in one piece. Most PhD students leave academia and go into other careers and professions.

You can aim for an academic position, but you must have backups for when things don't work out. Not because you are not capable but because of factors outside of your control, such as availability of funding and government policy changes that change where most of the research money ends up being spent.

Laying the foundations for your escape into "real life" outside the ivory towers is important for surviving your PhD. If you set up your PhD as a way to build skills that are valued by your prospective career, you'll feel much less cheated in the end.

Opportunities to build skills

As you are doing your PhD, you should be looking for opportunities to build up skills in areas that aren't directly related to your research. Skills that you could build include communication, writing, learning particular research techniques, contributing to books, or whatever else you think would be helpful for your prospective careers outside of academia.

I told my PhD supervisor that I was very interested in lecturing and teaching. Universities at the time were starting to introduce teaching-focused research fellows, and that seemed like it was right up my alley. I spoke to my PhD supervisors and subsequent postdoctoral supervisors about my desire to do more teaching.

Within a couple of months, I found myself standing in front of 300 eager first-year chemistry students, and it was the most terrifying but rewarding experience of my academic career.

Even though I haven't ended up in a university teaching-focused research role, the presentation skills and the ability to do a full semester of lecturing in front of that many people taught me many things. I now often contribute to the Adelaide University winter science communication school (partly for fun). It was easy to convince them of my skills after showing how much lecturing experience I had under my belt.

Another side project that I undertook was to create a blog that combined science communication and irreverent comedy. It was a weird mix but was something I enjoyed a lot.

I was convinced that I wanted a career in science communication, and looking for opportunities to build those skills was harder than I initially thought. Therefore, I created an opportunity for myself by starting a science communication website and blog. This website gave me the evidence I needed to convince Science Alert editors to give me my first paid science communication role. It wasn't a lot of money, but it would have been harder for me to get on the first rung of the science communication and writing ladder without the evidence I had built up.

That brings me to the next point of leaving academia successfully, creating evidence for a portfolio of your newfound skills that prospective employers love.

Create evidence/portfolio

As you are building skills, remember to create a portfolio or collection of evidence that you could show off to potential employers.

Because I wanted to become a science communicator, I started a blog, and I posted to it regularly to show my enthusiasm for writing. I also volunteered with Australia's Science Channel and RiAUS, producing blogs for their website.

This experience led me to become a volunteer writer for Australian quarterly and Australasian science. Building up these pieces of evidence over a couple of years meant that I was able to apply for an internship at Cosmos Magazine. The editor noted my enthusiasm for writing in popular science publications as the reason for being selected for the internship.

I also started a Podcast with a couple of friends about life in academia called Publish, Perish or Podcast, which ran for five years. When I knew I wanted to leave academia, I did everything I could to build up skills that employers of science communicators would love for their employees.

Network and attend functions

During your PhD, and especially towards the end, I recommend attending some professional networking functions. Try to get an idea of where people in your desired career path are meeting and the events they are attending.

For example, I paid for entry to the South Australian Science Awards to network with people from different science communication publications. I tried my best to have a casual conversation with them and ask them what I would need to do to get started with a career in these areas. I also signed up for an Australian Science Communicators membership and attended their conference for a couple of years to get close to people in the industry.

Whatever industry you are looking to break into after your PhD, I recommend reaching out to people. My experience is that they have always been very welcoming and will always take the time to grab a coffee.

At one point, I thought I wanted to go into a patent attorney role after my PhD. I reached out to people I knew in the industry and asked them for a coffee catch up to discuss entry into the career. I got an email when they were looking for a trainee patent attorney – it wasn't a fit with my expertise, but it shows that I was at the front of their minds.

Any connection you can make to make your transition out of academia or a PhD into a fulfilling career will be very valuable. Keep track of contacts and follow up with them after giving you their business card.

If you want more of a rundown on leaving academia and preparing for your career change, my video will talk you through the pathway that I took and a roadmap for success.



After a PhD

After your PhD, there is always a sense of melancholy. I think it's because no one moment defines finishing a PhD.

There are plenty of little steps that could be celebrated. When you first submit your PhD thesis for marking, when you receive the reviewer's feedback, when you submit your final draft, when you receive a letter from your university, when you go up and receive the award from the Vice Chancellor. All of these seem like reasonable times to celebrate.

I would recommend celebrating as soon as you get the acceptance letter from your university. This letter is the first time you would have been called "Dr" and I think that it is the best time to celebrate properly. If you have followed all of the steps in this survival guide, you will likely be better positioned to leave your PhD behind and move forward into your preferred career. You may want to do a postdoc after your PhD to further your research and understanding in a particular field; you may want to leave academia altogether.

But, after your PhD is important that you don't look back. Many people are suckered into doing a PhD because it is the path of least resistance. I hope this e-book has helped you understand that surviving a PhD starts from the very first day you decide to do a PhD. With the appropriate research, conversations, and decisions, you will be able to survive your PhD and get out the other side feeling proud, accomplished, and energised to continue your journey.

Thank you for reading

Thank you for choosing to buy this e-book. I hope that it has helped you understand the decisions and actions needed to survive a PhD.

If you find your early academic career stressful, I want to extend an invitation to join my members-only community of PhD students and academics.

You can find more information about the community at academiainsider.com/community.

People are saying some awesome things about the support it provides to them!

I want to express my gratitude for the amazing group of people assembling on this platform! I've read through most of the posts/threads and have learned so much already, so thank you!

- Community Member

You can also find more help writing for your thesis and peer-reviewed publications in my other publication – the ultimate academic writing toolkit. You can find this at my academia insider website.

I shall continue to publish videos on my YouTube channel, and I want to wish you the best of luck in your Academic career!

Dr Andy Stapleton

Andrew Stapleton