

# Council of Australian Postgraduate Associations (CAPA)

2020-2021 Pre-Budget Submission (last amended: 25/8/20)

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Compiled with the assistance of the staff and office bearers of the Council of Australian Postgraduate Associations (CAPA) and its affiliated member organisations.

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#### **About CAPA**

The Council of Australian Postgraduate Associations (CAPA) is the peak body representing the interests of the over 455,000 postgraduate students in Australia. We represent coursework and research, as well as domestic and international, postgraduates. We are comprised of 28 university and campus based postgraduate associations, as well as the National Aboriginal and Torres Strait Islander Postgraduate Association (NATSIPA).

CAPA carries out its mission through policy, research, and activism, communicating the interests and issues of postgraduate students to higher education stakeholders as well as Federal and State Governments, Opposition parties, and minor parties.

## Summary

Australians have rightly celebrated leaders and experts around the country who have helped us navigate the coronavirus pandemic so well. Australia's approach to COVID-19 has made us the envy of the world, and we owe a lot of that to our primed and ready medical research workforce for ensuring science is there to help guide policy. With that in mind, there is a group of graduate researchers who don't feel so lucky, and they happen to be the next generation of brilliant talent. CAPA has been 'raising the alarm' about the precarious position facing postgraduate students' for years. COVID-19 has only exposed these cracks within the system even further. If we fail to support postgraduate students properly now, we are at risk of losing the next generation of brilliant talent. This will result in a 'brain drain where many graduates will instead venture overseas to explore more competitive career opportunities', or worse yet dropping out, because continuing their research is not financially sustainable. More importantly, we will also not possess the ability to respond to future pandemics, like we have to the current one. Our submission focuses on issues experienced by domestic and international postgraduate students. When it comes to funding support, they have been falling through the cracks. We recommend:

**Recommendation one:** That all domestic Higher Degree by Research students be paid a stipend for the duration of their research degree.

**Recommendation two:** That all domestic self-funded postgraduate students be eligible to receive Austudy, subject to means-testing

**Recommendation three:** That the Government provides ongoing adequate funding for university teaching and research.

**Recommendation four:** That the government provides a one-off payment to universities to support RTP scholarship extensions to 4.5 years for all HDR students at Australian universities.

**Recommendation five:** A Jobmaker initiative should include research jobs by increasing public research funding initiatives (e.g., ARC, NHMRC, research block grant, or other research infrastructure funding) that will stimulate industry collaborations that will create new jobs by developing new industries (e.g., start-ups/spin off businesses).

**Recommendation six:** That some attention and support be brought to addressing the mental health concerns of postgraduate students at universities, both coursework and research.

**Recommendation seven:** That the Government amends the Commonwealth Scholarships Guidelines to establish paid family violence leave, and provides an additional \$491,000 to universities to fund a family violence leave scheme for recipients of Research Training Program stipends.

## Research vs. coursework: A different kind of learning

There are major differences between research training and traditional coursework degrees. Coursework degrees are designed to pass on established knowledge to students. Research degrees are designed to develop new ideas and ways of doing things, offering students the opportunity to uncover and create new knowledge. PhDs, in particular, are based on a requirement of *originality*, and students' research must move beyond knowledge held even by that of their supervisors, who mentor them. The path to achieving new knowledge is often perilous and unpredictable, and the final destination or outcome is unknown. Research training enables postgraduate students to address future challenges in society, whether they be in academia or industry. The unique skill-set of research postgraduates has not gone unnoticed by experts either and are highly valued by industry employers. It is therefore crucial to consider that research student programs develop *original* research that is of benefit to society, while training highly qualified employees who will be essential to economic growth and pandemic recovery.

## HDRs: Australia's unrecognised research workforce

Research students aspire to solve real world problems, and to make the world a better place, often through a professional research career. The only recognised pathway to a career in research is either in industry or academia and it requires undertaking research training towards a doctorate

(PhD). During research training, students develop and share important new knowledge, by publication, which contributes to the university's world rankings and therefore boosts the Australian higher education sector's global reputation. Universities use these measures to distinguish themselves from each other and to attract international students to their campuses. Research students are the main source of hours spent conducting research and development in Australia, contributing 57% of universities' share of human resources dedicated to research (ABS 2018). Graduate researchers are the often unseen backbone of the national research output, without which Australian research would grind to a halt. They not only work on their own projects, particularly in STEM fields, graduate researchers contribute towards their supervisors' work, collaborate with other academics, and perform tasks such as training new students and may even engage in teaching activities, crucial for career development. For full-time graduate researchers, their responsibilities and tasks are similar to those of early career researchers.

Despite this close resemblance of graduate study to paid work, unfortunately most graduate students are doing this work for free. A breakdown of research contributions at Australian universities, illustrated in Figure 1, shows that despite postgraduate research students contributing to 56% of all paid research and development hours in universities (ABS 2018), Universities Australia estimates that only 40% of research students commence with stipendiary scholarship (personal communication). International education is Australia's 4th largest export, contributing up to 30 to 40% of some universities' income. Research students make Australian universities competitive, in the international education market, but most are not paid for their contribution. Those that are paid receive well under the national minimum wage, with the government stipend base rate being only \$28,092 in 2020 (RTP 2020). Furthermore, from 2012 to 2016, the number of stipends awarded annually remained stable at around 3,500, yet research student numbers increased by 5% over this period (CAPA 2018). The reason graduate students take up research is not for a lack of innovation or talent, or for the money. Their motivations are truly driven by passion for what they do.

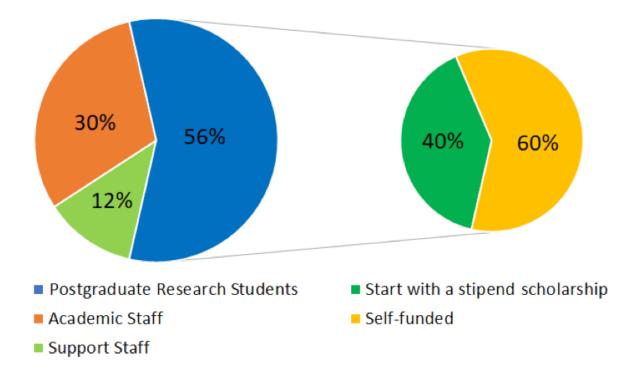


Figure 1: Paid research and development hours and percentage of students with stipends at Australian universities. Adapted from ABS (2018) report: Research and experimental development, higher education organisations, Australia, 2016 and UA personal communication.

# Long-term economic value of research training

The skills developed through the research training program, enable research postgraduate students to develop innovate solutions, to real life problems such as, minimising the effects of drought on our agriculture industries (Department of Agriculture ABARES 2019; CSIRO 2019); developing new low-cost manufacturing technology (Carbon Nexus 2018) and of course, developing a vaccine against COVID-19 (Mahar 2020). Research students contribute to local and international communities in broad and meaningful ways. According to Deloitte Access Economics modelling, for every \$1 invested in higher education research, \$5 is returned to Australia's GDP (Deloitte 2015). As mentioned previously, it is research students who contribute to more than half of all human resources to conducting research at Australian universities. Funding for research training must therefore be seen as an investment into the national economy, a key aspect of pandemic recovery and for the potential to create new industries, exports, and employment opportunities. We recommend that the Government grant a stipend to every research student. If current enrolment rates of graduate researchers are maintained, the cost of

this can be estimated by tripling stipend expenditure, from \$1.05 billion per year (ABS 2018) to \$3.15 billion per year. The additional cost to the Government would therefore be \$1.6 billion per year.

**Recommendation one:** That all domestic Higher Degree by Research students be paid a stipend for the duration of their research degree.

## Means-tested Austudy for all postgraduate students

Whilst the parallel implementation of the Jobseeker and Jobkeeper programs were intended to assist with supporting loss of income as a consequence of COVID-19; most domestic postgraduate students were locked out of either program. Most postgraduate students were employed as casual staff and not eligible for Jobkeeper. Jobseeker was also not applicable for postgraduates enrolled in full-time study. Centrelink study payments (Youth Allowance, Austudy, and Abstudy) are a universal entitlement for domestic undergraduate students, subject to means-testing. Despite the increasing importance of postgraduate study to beginning a career, the majority of postgraduate students are not eligible for any study payments. Domestic research students cannot access study payments, even if they have no income, and have therefore also not benefited from any COVID stimulus payments. Currently, a limited and patchwork income support system is in place, where domestic postgraduate coursework students may be eligible for study payments only if their course is listed as the minimum, fastest, or only pathway to gain an entry-level qualification for their profession (Australian Government, Department of Social Services, 2018).

Only 28% of courses at public universities are approved for income support (Council of Australian Postgraduate Associations, 2018). According to a survey conducted by Universities Australia, 18.2% of domestic postgraduate coursework students reported receiving a study-related Centrelink payment, and 7.2% reported receiving another Centrelink payment (Universities Australia 2018). This indicates that many postgraduate coursework students are receiving an unemployment allowance, despite being engaged in full-time study. A major recommendation of the 2008 Review of Australian Higher Education (known as the Bradley Review) was to reform the income support scheme, including by granting income support eligibility to all domestic Masters students. This was costed at \$186 million at the time (Bradley et al. 2008). We recommend that the Government invests in making postgraduate study accessible for all Australians. This would boost the long-term employment and earning prospects

of low income Australians who would otherwise be unable to take up postgraduate study, thereby reducing unemployment and increasing net taxable income over the long term.

It is well known that COVID-19 has wrought devastation on the economy, affecting casual workers the most. Approximately half of the casual academic workforce in universities are HDR students. However, HDR students are disqualified from welfare and government aid provided during this pandemic, even though the federally administered Research Training Program (RTP) stipend, which supports HDR students, provides remuneration at less than minimum wage. Furthermore, around 60% of students are non-recipients (do not receive any scholarship support for their studies) and are living beneath the poverty line without access to substantial government subsidies, i.e. Austudy. This puts many students at risk of terminating their studies. Students in this position are required to undertake job-seeker activities, even though they would be unable to work full-time due to their studies. Postgraduate research students have not received any support through the COVID-19 stimulus package, as they are not eligible to receive Austudy. Yet HDR candidatures have been seriously disrupted by COVID-19 restrictions, especially among students who are midway through fieldwork, labwork, or face-to-face qualitative research. Research students' contributions to knowledge need to be supported through access to financial support, when needed. Sixty percent of research students start their studies without a stipend (Universities Australia personal communication). Those not currently on stipends need to be eligible to receive Austudy. While HDRs are contributing original knowledge, they are also students, with plans to seek immediate post-PhD employment and opportunities. They offer significant capabilities to contribute to their future employers, bolstered by networking undertaken and discoveries made during their candidatures. They plan research and development careers for which their higher degrees are considered essential. In this way, they are comparable to any other Australian citizen receiving Austudy.

**Recommendation two:** That all domestic self-funded postgraduate students be eligible to receive Austudy, subject to means-testing.

## Secure research and teaching funding

Imagine being a smart graduate, only a few years out from completing a PhD, building a career as a research leader, testing hypotheses, developing new treatment models, taking on your own PhD students. Doing what the system demands, you would devote months to writing applications for funding, to pay for the research and your own salary. Only to have your application rejected

time after time. Not for a lack of quality or innovation, but simply because there are not enough grants or fellowships available from the government at this level. For the lucky few who are successful, government fellowships only cover around 60% of the salary costs. Research institutes and universities are expected to plug this funding hole. Except, due to government funding cuts, universities have become reliant on highly volatile sources of funding such as philanthropy, fundraising, or returns from investments and commercial revenue. All of which have fallen in recent months and will not recover for a while to come, when the true economic impact of the pandemic takes hold. The economic downturn from COVID-19 has only made an already precarious situation for researchers much worse and we have managed, until now.

Revenue from international education is also down. International students make up a large proportion of enrolments and their fees made up over 26% of university income last year. While COVID-19 is slowing across Australia its impact on tertiary education is intensifying. There will be a need to find different ways of operating with a loss of income stream on this scale. With overseas travel restrictions lasting months even into next year - how will universities be adequately funded? Sustained decline in international enrolments is leaving universities underfunded and not able to produce vital research. Universities typically spend most of their surplus on propping up research, a crucial activity, because most funding bodies only pay around three-quarters of what it costs the university to carry out a research project. The sector and nation will be permanently transformed. But it is all the more painful because universities have been relying on the surplus from international students' higher fees to subsidise vital research. The negative impacts of these reduced sources of revenue will disproportionately harm the next generation of research leaders. We cannot afford to allow this economic downturn to damage our research sector, to the point of no return. It is no wonder that the morale among our best and brightest has never been lower. What message are we sending out to aspiring researchers such as Masters students, undergraduates and high-school students of today? This pandemic has placed a spotlight on how the Australian university funding system is broken and we now have a golden opportunity to rebuild it into one that works.

Current levels of Federal Government funding are insufficient to support the teaching and research conducted in Australian universities. This results in universities increasing their reliance on alternative sources of funding which compromise their purpose as fostering knowledge and promoting education for public good. The purpose of publicly funded research is to develop new knowledge, innovation and technology to benefit national interests. CAPA welcomes the recent establishment by the Minister for Education, the Hon. Dan Tehan, of the two working groups for Research Sustainability and the National Priorities and Linkage Fund, to revamp the way in which research is funded. However, the government reduced research funding by \$328.5 million

over the course of three years, as announced in the December 2018 Mid-Year Economic and Fiscal Outlook (MYEFO). In addition to that, Minister Tehan, recently announced that student contributions for Humanities, Commerce and Law degrees will increase – further reducing the government contributions to universities. We truly hope that a more favourable model for teaching and research funding will come out of this chaos, and therefore strongly recommend that university teaching and research be properly funded, so these important pillars of our community are not compromised but rather thrive instead. Moreover, this does not come at a long-term cost to the Australian taxpayer. Research conducted by Australian universities provides demonstrable economic benefits. For every \$1 invested in higher education research, \$5 is returned to Australia's GDP (Deloitte 2015). The majority of research in Australia is conducted at our world class universities. We therefore argue that a decline in public investment in research puts the Australian economy at risk. In addition, we call for a 4% annual increase in base funding for national research agencies and government research institutions, including universities.

**Recommendation three:** That the Government provides ongoing adequate funding for university teaching and research.

# 'Timely completions'

Since the pandemic, many research students have lost their main source of income, usually from casual teaching (May 2012). Inadequate access to income was already a major contributing factor to poor mental health among students and many now face graduating during a severe economic downturn, and poor career outcomes. This already challenging situation is exacerbated by the growing financial and workload pressures wrought by the COVID-19 pandemic. Financial stress is a major cause of mental ill-health among students, made worse by poor employment prospects. Our recommendations would protect students from the very worst of these impacts. The government must ensure that students are able to complete their degrees, and can offer their valuable skills and expertise in our collective efforts to rebuild Australia, so that our investment in them is not wasted. Our world class researchers must be celebrated for the good work they do.

Research students are currently expected to submit their work for examination at the end 2 years (EFTSL) for Masters by Research candidates and 4 years (EFTSL) for PhD candidates. However, HDR stipends can be shorter. Federal Legislation states that RTP funding may cover up to 2 years (full-time) for Masters by Research students and 3 to 4 years (full-time) for PhD students, at the discretion of the Higher Education Provider (HEP) (Federal Register of

Legislation 2017). Masters by Research degrees are relatively uncommon, but universities often push their PhD students to complete within 3 years. For those fortunate enough to receive a living stipend in addition to their tuition-fee waiver scholarship, most only receive it for 3 years, with an additional 6-month stipend extension granted under exceptional circumstances at the discretion of the university. Self-funded students who receive only a tuition-fee waiver scholarship are likewise expected to complete within 4 years (EFTSL).

The Federal government has announced that RTP scholarships can be extended to a maximum of 4.5 years, increased from 4 years for PhD students and up to 2.5 years, for Masters research students. We welcome this amendment, however, the provision of these extensions remains at the discretion of universities and CAPA is concerned that without financial support, universities will not be able to implement 6 month extensions without sacrificing future research student enrolments. Typically, RTP stipends offered to PhD students at universities are only provided for 3 years with some opportunity for extensions to 3.5 years. While the Federal government announced the extension, it has not provided additional money in support. As such, universities are expected to fund this shortfall – at a time when universities are expected to lose \$19 billion in the next three years. Despite strong advocacy from students and university staff, universities have refused to provide affected students with additional scholarship extensions. HDR students are most vulnerable to the lack of targeted financial assistance from universities and the government. They usually take longer to complete their theses than is covered by their RTP stipends or maximum candidature lengths. However, HDR students often receive no income support during their degrees, which leads to non-completions or delayed completions, resulting in a loss of future workforce potential and the cost of incomplete training. Interestingly, figures from the International Doctoral Education Research Network show that only 36% of PhD students complete their degrees within 4 years, 53% within 7 years, and 65% within 10 years (The Australian 2016). All this suggests that a lot of candidates complete their degrees ultimately supporting themselves, and as many of them started, with no income for their work.

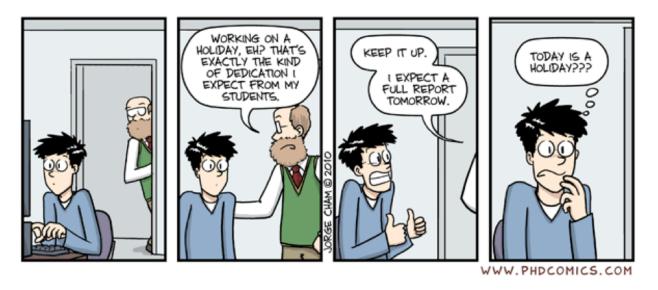


Figure 2: Research students are expected to sacrifice weekends and holidays in order to complete tasks necessary for their projects and training.

This comic (Figure 2) is unfortunately an accurate depiction of research students' workloads in Australia. Guidelines state that full-time research students should commit a minimum of 32 hours per week (full-time) to their research. However, 76% of PhD students said they regularly spend over 41 hours a week completing their theses (Woolston 2017, see Figure 3 below).

#### OVEREXTENDED AND STRESSED

Long hours in the laboratory and other demands have taken a toll on PhD students' well-being and mental health.

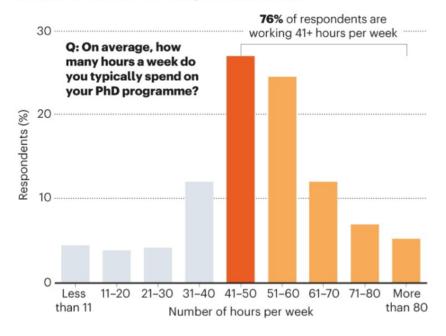


Figure 3: Average working hours of a PhD program (n=6,000). From Woolston, C., 2017

Unfortunately, this is the reality for most research students. With reduced candidature durations, many students forfeit weekends and holidays in order to complete on time. This leads to an unhealthy work-life balance and serious mental health issues. Policies that pressure students to complete within 3 years, take on employment, or face enduring financial hardship only work to slow down or halt candidatures. It is not feasible for most to complete a PhD degree in any less than three years. During this time, students are not only expected to develop original work that will contribute significantly to their field of knowledge, but also to gain practical skills necessary for career development. Anxiety about the future also drives students to take on additional research workloads during their candidacy. Evidence shows that candidates who are behind or ahead of their research program schedule, experience heightened distress but not those who are on schedule (Levecque, Anseel, De Beuckelaer, Heyden & Gilse, 2017). Such circumstances have been worsened by the current pandemic, as noted in this quote collected by CAPA

"[T]he main aim of my topic is to perform experiments on human participants - which I will not be able to do for 6 months, possibly even longer" - PhD candidate from University of Queensland.

Since early on in the pandemic, CAPA has received countless reports from student representative bodies, showing that research students' candidatures are being seriously disrupted. As a result of COVID-19 restrictions, students who are midway through fieldwork, labwork, or face-to-face qualitative research have been forced to pause their research and completely alter their methodologies, while others have faced working-from-home challenges including increased care responsibilities, inappropriate workspaces or internet access, supervision difficulties, worsening mental health and domestic violence issues. Social distancing measures have required that students cancel research which involves interaction with people, fieldwork, travel and access to facilities and technologies. The delay in research output, coupled with the limited access to resources, has caused tremendous anxiety and hampered productivity among HDR students. While students have appreciated efforts to ensure they remain well, universities have failed to communicate to students how to navigate this working environment of remote supervision and research, leaving it to the HDR students to 'figure it out' for themselves. This has unfortunately left many students feeling that the only solution is to exit. Research students are currently better off pausing their candidature and progress, taking a leave of absence, and claiming Jobseeker payments, rather than continuing their research without a stipend. At a time like now, continuing and promoting research is more important than ever, and research students must be supported. A new study from the University of Sydney has revealed that almost half of surveyed PhD students considered disengaging from studies due to the pandemic, 5% are or are about to experience homelesness and 11% are skipping meals. Of the 1,020 participants surveyed, 53% said their employment has been negatively impacted by the pandemic, 75% said they expected to

experience financial hardship, and almost a fifth had trouble paying for bills or medicines (Johnson *et al*, 2020). CAPA has heard similar stories from students all around Australia. These issues urgently need to be addressed. We therefore recommend that to prevent the next generation of talented researchers, falling through the cracks, that the government provide a one-off payment to universities to support RTP scholarship extensions for all HDR students at Australian universities.

**Recommendation four:** That the government provide one-off payments to universities to support RTP scholarship extensions to 4.5 years for all HDR students at Australian universities.

## **Employment: Current and future opportunities**

The motivation to undertake a research degree varies significantly between individuals: some undertake a PhD to improve their job prospects, some pursue a career change, while others wish to develop new knowledge. A highly skilled research workforce is critical for our innovation economy. Australia's HDR training system provides this skilled workforce, contributing substantially to research and innovation across government, non-government, academic and industry sectors. The unique skill-set of research postgraduates has not gone unnoticed in industry, as is evident from the Quality Indicators for Learning and Teaching (QILT) 2019 Employer Satisfaction Survey (see Table 1 below). Research training enables postgraduate students to address future challenges in society, whether they be in academia or industry. This is shown in the following testimonial, written by an employer discussing a PhD-holding employee.

"When I say that [this PhD graduate] can do everything, I mean that if there is something he does not know how to do, it is not an obstacle... he will find solutions to the things he cannot do" (Couston and Pignatel 2018, p. 54).

Table 1: Percentage of employers indicating they are "satisfied" or "highly satisfied" with graduate skills. From the QILT 2019 Employer Satisfaction Survey

	Under-graduate	Postgraduate coursework	Postgraduate research
Foundation	93.9	92.4	97.5
Adaptation	88.9	90.2	95.1

Collaboration	91.5	84.8	90.4
Technical	94.2	92.5	98.3
Employability	87.1	85	90.7
Overall satisfaction	85.8	82.7	89.7

Research positions at universities are already highly casualised (May 2012), and this is now expected to worsen. A recent Rapid Research Information Forum (RRIF) paper, entitled 'Impact of the pandemic on Australia's research workforce', warns that 'negative employment' impacts from the pandemic will be disproportionately felt by junior researchers, recent graduates, early-career and mid-career researchers, and women (Australian Academy of Science, 2020). Around 21,000 university staff (FTE) are expected to lose their jobs with many already gone. Many of these are casuals who are also often HDR students (May 2012). According to the report, 'journals are already observing that since the COVID-19 crisis began, submissions from women are underrepresented and articles authored solely by women are particularly affected' (Australian Academy of Science 2020, p. 5). As HDR students lose work and therefore income, we will see a major negative impact on completion rates. Financial difficulties will result in non-completions, and measures need to be taken to protect these students' income (CAPA, 2018). Current research students now face major career uncertainties upon completion. This is expressed in the following comment, collected by CAPA from a PhD student at the University of Western Australia.

"I think it would be good if they were more upfront and accepting of the fact we may not achieve as much from home because it may not be an ideal work environment, even for people who do not have kids or frontline jobs, and because we are experiencing a lot of worry about the present and uncertainty about our futures" - PhD Candidate from the University of Western Australia.

As we move into a phase of economic recovery, many students will be wishing to secure professional employment in the field of work for which they have studied. Research students were already at risk of being perceived as 'overqualified', especially those with doctoral qualifications. The economic downturn will likely worsen the severity of this current job scarcity. CAPA is concerned that without a proper plan in place to create professional jobs for postgraduate students, this will remain an unfulfilled wish for many. An investment in research initiatives to create professional jobs will pay dividends in the long term. As already outlined, for

every \$1 invested in higher education research, \$5 is returned to Australia's GDP (Deloitte, 2015). We therefore recommend any Jobmaker initiative should include research jobs by increasing public research funding initiatives (e.g., ARC, NHMRC, research block grant, or other research infrastructure funding) that will stimulate industry collaborations that will create new jobs by developing new industries (e.g., start-ups/spin off businesses)

**Recommendation five:** A Jobmaker initiative should include research jobs by increasing public research funding initiatives (e.g., ARC, NHMRC, research block grant, or other research infrastructure funding) that will stimulate industry collaborations that will create new jobs by developing new industries (e.g., start-ups/spin off businesses)

## Mental health among postgraduate students

One in two PhD student's experience psychological distress. One in three are at risk of a common psychiatric disorder. Postgraduate students experience heightened mental distress compared to the normative population (Levecque, Anseel, De Beuckelaer, Heyden & Gilse, 2017). While there is a need for more Australian-based research, larger sample sizes and national and university data to be routinely collected and reported, we can identify students in higher risk groups as PhD students, international students, rural/regional and remote university students, law/medicine and students from low socio-economic backgrounds. It has been widely acknowledged that the pandemic will have dire mental health consequences for many Australians, worsening the already poor mental health of research students. These circumstances are even worse for international students, who now face further risks of mental health difficulties due to their increasingly uncertain candidatures and financial burdens. In 2019, the Victorian Coroners Prevention Unit found 27 international students in the State had died by suicide between 2009 and 2015. The coroner said this was likely an underestimate. International students are currently at a serious and elevated risk of mental health difficulties due to the increased pressures of the COVID-19 pandemic (Soong and Procter, 2020).

A 2018 Universities Australia survey reported that many students are 'doing it tough' to the extent of being unable to afford basic necessities and being forced to miss classes to work. While struggling to 'make ends meet' during their time at university, many students are also accruing significant future debt. In 2016-17 the estimated average student HELP debt was \$19,100, taking approximately 8.8 years to repay. With the lowered income repayment threshold to just \$45,000, HELP debt is no longer put off until the debtor is "earning a decent wage" as was the case in the past. A growing body of literature is showing that student debt has negative effects on student and post-study wellbeing, including poorer mental health. Similarly, graduate students experience higher levels of stress due to financial responsibilities. Equally stressful is the fact

that PhD students face uncertainty about the future, such as funding for research and what they are going to do after a PhD, all of which has been exacerbated by the COVID-19 pandemic.

Rural and regional, Aboriginal and Torres Strait Islander and international students are at greater risk of mental health problems at universities. For these people, the stressors of university life can be compounded by relocation from families, friendship and support networks, cultural connections and traditional lands. Any of these factors can lead to an early course exit. Negative and harmful experiences on campus can further impact mental health outcomes and the need for support services such as, results from the AHRC change the course report, on sexual assault and harassment at Australian universities. The LGBTQI community has their own unique risk factors and may experience discrimination in their research community as a result of their identity. Australian research suggests that among university student populations more than half are unlikely to seek help for mental health issues (Stallman & Shochet, 2009; Wynaden, Wichmann, & Murray, 2013). This is especially true for international students. Students report not wanting to be seen as less capable than their peers, personal stigma and/or not knowing where to seek help as major obstacles (Eisenberg, Downs, Golberstein, & Zivin, 2009). The impact of mental ill health is early departure and loss of future workforce potential. Not to mention the economic impact to government and universities due to the cost of incomplete training.

It is all too common to see PhD students work themselves to the point of physical and mental illness in order to complete their studies. It is less common to see PhD students who feel that they are under such pressure that the only option is suicide. But it does happen. There is a culture of acceptance around mental health issues in academia – and this needs to change. In Australia 35.4% of students had thoughts of self-harm or suicide with 50.9% of students having thoughts of suicide at least once in the previous year and 14.8% making at least one attempt (NUS and Headspace 2017). Plenty of students have sought out mental-health care in graduate schools but not all of them did so successfully. Some reported that they tried to seek care, but their universities didn't offer timely counselling to graduate students. Others reported month-long waiting lists and that counselling is only offered on a short-term basis. A study of eight university counselling services in Australia and New Zealand found that 100% agreed severity and complexity had increased, 64% were unable to respond to all requests within 2 weeks and there were inadequate staff to student ratios on average 1:3000-5000 students.

Yes a PhD is hard, but the frequency of these problems shouldn't scare prospective students away from pursuing PhDs. They should be prepared going in to think about how they will handle psychological challenges as well as intellectual ones. Firstly it's really important for students to scope out support services that the university offers. This can mean everything from university counselling services to student support groups, as well as establishing a support network. A general feeling of isolation can also weigh down graduate students who spend much of their time buried under a pile of books or alone in a lab. Joining and participating in social activities and

departmental culture cubs, socials etc is so important. To increase mental health awareness there is currently a blended version of Mental Health First Aid training for tertiary students (online component currently funded by the Australian Government). However they are only limited to certain courses and do not apply to HDR students. An accredited Mental Health First Aider can help a person who is developing a mental health problem, experiencing a worsening of an existing mental health problem; or in a mental health crisis, and the support can be given until appropriate professional help is received or the crisis resolves.

It's common knowledge that getting a PhD is hard. It's meant to be. Some even say that if you're not up all night working or skipping meals, you're doing it wrong. While PhD students are not so naive as to enter the program expecting an easy ride, there is a cost to the endeavour that no one talks about, a psychological one. But keeping problems hidden, and the often-Darwinian culture among graduate students competing for a handful of professorial jobs; too many people assume that psychological problems are only for the weak. In essence, many PhD students are so accustomed to hard work and self-discipline that they beat themselves up when their efforts to manage depression fail to generate perfect results.

It's important that both prospective and current PhD students directly confront the tenuous realities of the academic job market and plan accordingly with career training. Uncertainty about the future can take a major toll on students, but they're less likely to suffer if their entire identities aren't tied to graduate school. The aim is to achieve a balance in life so that a rich world of family, friends, and hobbies give fulfillment where work may not (Figure 4). Practicing mindfulness is a trainable skill that may enhance resilience to suicidality among vulnerable groups. Findings suggest that mindfulness protects against suicidal desire in conditions of heightened risk and adversity by enhancing one's orientation towards a life worth living. But it cannot be used as a complete strategy. It is a tool, not a silver bullet, and must be used in combination with other services and not as a replacement for them.



Figure 4: The pressure to meet unreasonable deadlines drive most research students to live unbalanced lifestyles; suppress basic human behaviours such as working long hours into the night (sometimes in isolation), neglecting personal health and diet, and social interaction.

In supporting students to complete their studies the Higher Education Standards Framework stated that every institution should have an institution-wide mental health strategy and implementation plan. Despite this, students and academics view researcher development services as unnecessary, or as an "admission of defeat". To use them, is to announce that you are not a perfect researcher. Some students are forcibly removed from these sessions by their supervisors. Students feel like it is not 'okay' to admit that they are not 'okay'. Australia currently lacks nationally recognised and endorsed guidance to support universities to deliver best practice responses. Mental health and wellbeing is not a focus of higher education policy nor are higher education settings identified in mental health policies. Student poverty, as a contributor to poor mental health, must be addressed in policy initiatives. At an institutional level, we need advisers, doctoral programs, and institutions to do better. Among other things, they should provide affordable and accessible mental-health support to graduate students — regularly, not just when crisis hits. We need to normalise open discussions about mental health in graduate school, national and university data to be routinely collected and reported and to prepare students for the realities of the academic job market. Graduate school policies should make it possible for students to access mental health leave as needed, and ensure that students take the annual leave to which they are entitled. Supervisors should be trained in recognising mental health issues in their students and be able to refer these students to available resources. Services must have enough available sessions to actually deal with mental health issues (many only provide 6 per year) and to make sure mental health limits are not based on semesters as these don't apply to research students.

**Recommendation six:** That some attention and support be brought to addressing the mental health concerns of postgraduate students at universities, both coursework and research

#### Family violence leave for graduate researchers

Graduate researchers in receipt of Research Training Program stipends have access to some leave provisions. However, family violence leave is missing from the current leave provisions. In the higher education sector, paid domestic violence leave is a standard entitlement in Enterprise Agreements. All universities except one (QUT) have dedicated additional paid leave for domestic violence, usually 5 or 10 days per year (Kenna, 2018). A postdoctoral researcher is able to access family violence leave if they need it, yet the graduate researcher who does the same work at the next laboratory bench does not have this option if they are to experience domestic violence

Outside of the higher education sector, domestic violence leave is becoming more common, with many of Australia's largest companies offering paid domestic violence leave. We anticipate that the vast majority of research students would not access domestic leave provisions. According to a report by The Australia Institute, in each year only 1.5% of female employees and 0.3% of male employees are likely to use paid domestic violence leave (Stanford, 2016). While leave entitlements generally include 10 days of paid domestic violence leave, these are rarely utilised in full, with female employees who take domestic violence using an average of eight days, and males an average of six days (Stanford, 2016).

There are two options for funding domestic violence leave for graduate researchers. The Government could require universities to offer domestic violence leave using the block funding they are already provided, with an amendment to the Commonwealth Scholarships Guidelines legislation. Or, the Government could provide additional funding for the cost of domestic violence leave. Using the above assumptions that 1.5% of female and 0.3% of male employees would access leave in any given year, and the average number of leave days taken; and the current low rate of pay of Research Training Program stipends, we have determined that this would cost \$491,000 per year.

Domestic violence leave for research students would have a large impact on the few who need it, as well as reifying the Government's commitment to supporting victims of family violence. We therefore implore the Government to provide this small pool of funding.

**Recommendation seven:** That the Government amends the Commonwealth Scholarships Guidelines to establish paid family violence leave, and provides an additional \$491,000 to universities to fund a family violence leave scheme for recipients of Research Training Program stipends.

#### **Concluding remarks**

Research students contribute 56% of research and development hours in Australian universities, but only 40% of them begin their studies with a stipend to cover their living expenses. In a global pandemic, the effects of which will be felt for many years, cutting-edge research is more important than ever to our nation's recovery. Yet many postgraduate coursework and research students now face additional financial and employment barriers to their completion, and have seen few benefits from the COVID-19 stimulus package. Students are at a high risk of mental health difficulties due to financial hardship and stress; international students are particularly at risk. However, it is these brilliant and talented students that are on the cutting edge of minimising the effects of drought on our agriculture industries or developing new low-cost manufacturing technology and - of course - developing a vaccine against COVID-19. Research students aspire to solve real world problems, and to make the world a better place, often through a professional research career. The only recognised pathway to a career in research-either in industry or academia--requires undertaking research training towards a doctorate (PhD). During their research training, students are encouraged to publish their research, contributing to the university's world rankings, sharing important new knowledge, and boosting the Australian higher education sector's global reputation. Universities use these measures to distinguish themselves from each other and to attract international students to their campuses. Graduate researchers are the often unseen backbone of the national research output, without which Australian research would grind to a halt. They not only work on their own projects. Particularly in STEM fields, graduate researchers contribute towards their supervisors' work, collaborate with other academics, and perform tasks such as training new students and may even engage in teaching activities. For full-time graduate researchers, their responsibilities and tasks are similar to those of early career researchers. Moreover, this does not come at a long-term cost to the Australian taxpayer. Research conducted by Australian universities provides demonstrable economic benefits. For every \$1 invested in higher education research, \$5 is returned to Australia's GDP (Deloitte 2015). Funding for research and research training must therefore be seen as an investment into the national economy, a key aspect of pandemic recovery and for the potential to create new industries, exports, and employment opportunities. If not, we are at risk of the next generation 'brain drain' that will be impossible to recover from.

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