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Experiences of female academics in Australia during COVID-19: Opportunities and challenges

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Experiences of female academics in Australia during COVID-19: Opportunities and challenges

Abstract

An online survey collected data on a range of female academic experiences globally gaining 260 responses with 144 Australian specific academics' responses (55% of total responses). The pandemic has highlighted positive opportunities such as online teaching and skill development, flexibility, time efficiency, increased collaboration, and time for research. In terms of challenges identified responses indicate an increased workload, less motivation for career progression, and perceptions of greater and obvious gender disparity and bias against female academics. Australia is often referred to as a 'lucky country' which can further be enriched though fostering its rich and diverse female academic community into the future. Rapid measures to support women immediately and with longer-term solutions that address gender equity is critical for female academics to ensure future engagement of female academics for positive economic and social growth as a nation.

Practitioner Notes

1. The current COVID-19 pandemic has effected female academics greater than male counterparts (research output, care duties and gender disparities).
2. Higher Education Institutions can continue to support female academics the flexibility to work remotely for time efficiency, flexibility to manage family and work and allow focussed time for research and planning for teaching
3. Workplace stress in Higher Education needs acknowledgement and action by managers at all levels to ensure female academics remain supported and safe in all aspects
4. Female academic career support at all levels is critical for long-term social and economic benefit
5. Expectations for female academics balancing work and home duties can be better understood and reflected in support mechanisms

Keywords

Female academics; support, career progression, academic motivation, higher education

Introduction

The global pandemic continues to challenge academics in the higher education (HE) sector and for women who “have been uniquely and disproportionately impacted” (ACTU, 2020, p. 4). This paper reports on the experiences of 144 female-identifying academics in Australian Higher Education Institutions (HEIs) on career progression, motivation and academic status since the start of the global pandemic in early 2020. The female focussed experience provides rich insight into the additional responsibilities that COVID-19 has required by *all* academics, but additionally for women as the primary carers creating greater hardship when already constantly facing reduced gender disparity (Malisch et al., 2020). Females face reduced recognition for their skills contribution as academic teachers and published researchers as well as under representation of in academia and leadership roles (Deryugina et al., 2021; Gabster et al., 2020; Krause, 2017). This paper offers reflections for the HE sector to continue to integrate and support the female academic workforce in Australian HEIs with a view on motivation and career progression where the current status of female leaders across Australia is low where the top leaders as Vice Chancellors is currently 28 per cent (Butler-Henderson et al., 2021) and only one third as Professors (Rea, 2018).

Australian context

Australia has 43 universities but extends to approximately 170 higher education providers registered with the national regulator, the Tertiary Education Quality and Standards Agency (TEQSA, 2022). Many academics in Australia commenced working from home (WFH) around March 2020 (Augustus, 2021) due to sporadic short and long lockdowns as new virus cases and variants have been detected and as a measure by both state and federal governments to contain the spread by restricting physical contact and movement. In October, 2021, it was reported that in Melbourne, the capital of the state of Victoria, held the world record for the longest lock down of 245 days (Boaz, 2021) from March 20, 2020 to November 11, 2020, with an additional short 10-day circuit-breaker lockdown from May 21, 2021 to May 31, 2021. Whilst academics are not novices in WFH or taking work home, aspects such as school, childcare, home help and in-home support have been cut off for many, creating new work-life balance (WLB) issues and challenges. The pandemic has had a profound effect on teaching and learning with the majority of teaching being replaced by remote, distance teaching and learning (Marinoni et al., 2020). In the HE sector, the performance of academics has been influenced by the extent to which they were technologically competent, how much support was offered through their HEI, their motivation level through remote teaching and their ability to adapt to managing WFH and WLB with care responsibilities intertwined with regular and sometimes increasing workloads due to the pandemic related remote work (Couch et al., 2021). The Centre for Future Work revealed that 40,000 tertiary education staff across Australia lost their jobs (Littleton and Stanford, 2021), indicating that higher education has been the hit hardest by COVID-19 with one in five tertiary roles lost in the 12 months to May, 2021 (Duffy, 2021). Currently, it seems that permanent rather than casual staff are now being targeted, which is ‘accelerating’ job losses in Australia (Duffy, 2021; Ross, 2021). With so many new challenges and losses, millions of employees have been re-evaluating their careers and priorities and how they choose to work, spend their time and how working remotely can create new opportunities (Lipman, 2021).

Working from home and balancing work and home

Implicit in work–life balance more often than not, lies work–family-balance, and where high-powered women manage to balance a “spectacularly successful career with a satisfying home life” (Rottenberg, 2014, p. 428). Women in particular have been impacted by care responsibilities,

creating a new challenge for all sectors (Nash & Churchill, 2020). Female academics have had to balance multiple roles in the environment, including routine domestic chores, caring for children and family members—which may have involved home schooling, whilst juggling their own teaching and research demands. Work-life-balance is positively associated with productivity, which is directly correlated with job satisfaction (Ravi & Anulakshmi, 2021). Some benefits being reported from WFH include the flexible working hours and autonomy as a key intrinsic factor influencing the acceptance of the new norm of working, (Mattey et al., 2020; McGaughey et al., 2021; Othman et al., 2021), increased collaboration and collegiality (Thorgersen & Mars, 2021; Watson et al., 2022), new opportunities to enhance teaching through mixed and online models (Marinoni et al., 2020) and increased productivity. Challenges include negative health outcomes (De Vos, 2020), anxiety, loneliness, reduced social interaction, communication, internet connectivity, social isolation (Leal Filho et al., 2021), distractions due to personal commitments, disturbance from family (Watson et al., 2022) and increased workloads (Chang & Fang, 2020; Oliveira et al., 2021). The challenges reduce the acceptance and ease of WFH. Additional teaching challenges to remote learning include academic teaching competence (Abdel-Gawad & Woollard, 2015; Hoq, 2020), technical infrastructure, access and pedagogies for remote learning (Zarei & Mohammadi, 2021). The literature highlights that remote teaching creates ever increasing and new challenges for academics.

Academic career progression challenges during COVID-19

Academic progression through promotion of academic level is a key element of measure of success for those in academia as recognition of research and teaching outcomes. Gender disparity experienced by female academics has a negative impact on female progression, professional identity, advancement, workload and wage gaps (Bowyer et al., 2022; Savigny, 2014). Career progression had stalled for almost 40% of academics and equally around the same reporting that it has progressed well for them during the COVID pandemic (Kolakowski et al., 2021). The rates of employment for academics took a major hit ranging from 10% to 70% decline depending on university and faculty. With thousands of casual employees losing their jobs the question of academic progression was replaced with financial survival of institutions (Heffernan, 2020). Apart from teaching positions disappearing funding opportunities for research were also lagging during this period. The impact on research output on women was immediate with men's research submissions to journals increasing by 50% and single-authored articles by women dropping (Duncanson, 2021). While public universities in Australia seem to be bearing the brunt of these job losses (McGregor, 2021), females' jobs have taken a hit harder than their male colleagues with eight per cent in April 2020 losing their jobs (Wood et al., 2021). Women seem to be the most affected, as results show that more than 24 % of the jobs lost were held by females compared to 16 % by males (Littleton and Stanford, 2021; McGregor, 2021). With women experiencing greater job losses, the impact on career progression will be seen in the coming years with further studies.

Method

Context

The current global pandemic, which started in late 2019, has impacted all facets of life on a scale which has not been seen in the modern era. Academic research has flourished during this period, as academic researchers across the globe try to capture its effect everywhere including higher education, from the rapid transition to online learning, to its effects on students, staff, and changes in working environments to name a few. An internet search of “COVID and Higher Education” articles since 2020 shows close to 90,000 papers/articles/book chapters/books published already

on COVID-19 higher education related topics. The pandemic has created this rapid increase and interest in global research so everyone is better able to understand and respond effectively through the voices of respondents whose lives are impacted (Vanderhout et al., 2020). The pandemic has highlighted the difficulties for *all* genders/non-binary academics in adapting to rapid changes, however, the researchers have taken a particular interest in female-identifying academics' experiences as a novel and rich aspect of academia which calls for special attention and understanding implications for career trajectories and motivation.

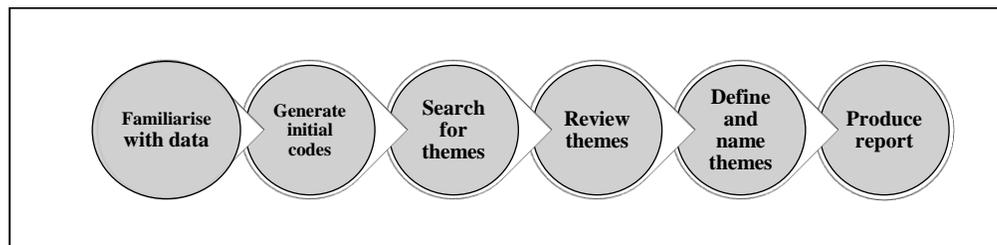
Data development, collection and analysis

Ethics approval for this study was received through the University of Western Australia (REF: ET000781). An online survey was developed to collate data from the specific cohort of female academics across the globe, using a mixed-method approach with both open and closed questions. There were 33 questions in total with 24 being closed questions including demographics, and nine open-ended questions, asking specific perceptions about the academic workload (teaching and research), career progression, support, motivation, and academic leadership. The specific questions being reported from the larger online survey are perceptions from Australian, female-identifying academics. The specific questions are below.

1. How motivated are they feeling about their academic career progression since the start of the pandemic (including contributing factors to their motivation)?
2. What are their perceptions on the level of opportunities to progress as a female academic and about female academic status at their institution?

A number of ways to invite participants were sought from the researchers who were spread across two Australian states and continents. The main source of invitation came from email distribution lists within each university in which the authors are based. Following the ethics protocol for data collection, the researchers were able to request participation through formal processes within their higher education institutions and personal, academic networks using the approved ethics' communication for academic mailing lists, individual email or social media requests including LinkedIn, Twitter, Facebook, and WhatsApp. Data were collected from July to October 2021 with the participants spanning across the globe to seek participation. For this current paper however, only the Australian-based perspectives are reported.

Thematic analysis has been used for the open-ended questions and descriptive statistical analysis for all closed questions. The specific thematic applied was inductive thematic analysis, often used in mixed-method designs as the theoretical flexibility of thematic analysis makes it a more straightforward choice than approaches with specific embedded theoretical assumptions (Creswell, 2003). Thematic analysis is a commonly used tool in qualitative research adopted to identify, analyse, describe, organise and report themes found within a data set (Kiger & Varpio, 2020; Nowell et al., 2017; Terry et al., 2017). An inductive thematic approach allows research findings to emerge from frequent, dominant, or significant themes inherent in raw data as used in grounded theory (Braun & Clarke, 2006; Liu, 2016). The thematic analysis process model is represented Figure 1 using Braun & Clarke's (2006) six-step model.

Figure 1*Thematic analysis process*

Results

Demographics

Location and HEI type

There were 144 responses from female-identifying academics working in Australian HEIs (or had worked in a HEI since February 2020) providing the basis of data for this paper. The majority of responses (39%) came from Western Australia (WA) followed by Victoria (VIC; 24%); one participant worked across two states (QLD and WA). There were no responses from the Northern Territory (NT) although invitations requesting survey completion were conducted during the data collection phase. The majority of respondents (92%) worked/had worked in a public HEI since February 2020 and less than (10%) in private HEIs. All respondents had worked from home/remotely (100%) at least once since February 2020 (see Table 1).

Table 1

Demographics by Australian State/Territory and HEI type

Total number (%)	State/Territory	Public HEI Number (%)	Private HEI Number (%)
3 (2%)	ACT	3 (2%)	Nil
5 (3%)	SA	4 (3%)	1 (4%)
8 (6%)	TAS	8 (6%)	Nil
15 (10%)	QLD	14 (10.5%)	1 (4%)
21 (15%)	NSW	18 (13.5%)	3 (13%)
35 (24%)	VIC	32 (24%)	2 (39%)
56 (39%)	WA	53 (40%)	3 (36%)
1 (1%)	QLD/WA	1 (1%)	1 (4%)
Total=144 (100%)	Total=133	Total=133 (92%)	Total=11

(8%)

**Worked from home
remotely since Feb 2020** Yes=144 (100%)
No=0 (0%)

Academic level, work status and age

The majority of respondents in this study (55%) were in a full time, ongoing permanent academic role and overall, most responses came from employees in a 'lecturer' role (36%). Most respondents (65%) were at early-mid stage [levels A/B/C academic] as Associate lecturer/Lecturer/Senior lecturer, and (35%) were at the higher levels of the academic trajectory [levels D/E] in Australia at Associate Professor/Professor/Adjunct Professor.

Table 2

Demographics by employment status and academic level

Work status	Role						Number (%)
	Associate Lecturer	Lecturer	Senior Lecturer	Associate Professor	Professor	Adjunct Professor	
Casual/Sessional	6	9	0	0	0	0	15 (10%)
Adjunct: Paid	0	0	0	1	0	0	1 (0.7%)
Adjunct: Unpaid	0	0	0	1	0	1	2 (1.3%)
Part-time (contract role)	0	7	3	2	1	0	13 (9%)
Full-time (contract role)	1	8	2	3	3	0	17 (12%)
Part-time (ongoing, permanent role)	0	9	5	3	0	0	17 (12%)
Full-time (ongoing, permanent role)	0	20	24	26	9	0	79 (55%)
Total	7 (5%)	53 (36%)	34 (24%)	36 (25%)	13 (9%)	1 (1%)	Total=144 (100%)

A further breakdown of Table 2 data into age groups, showed that the majority of respondents were from the 45-54 years' age range (37%) and at the lecturer level. The older age group may be indicative of female academics entering academic work later in their careers or gaining academic promotion due to care responsibilities prior to age 45 years. See Table 3.

Table 3

Demographics by academic level and age range

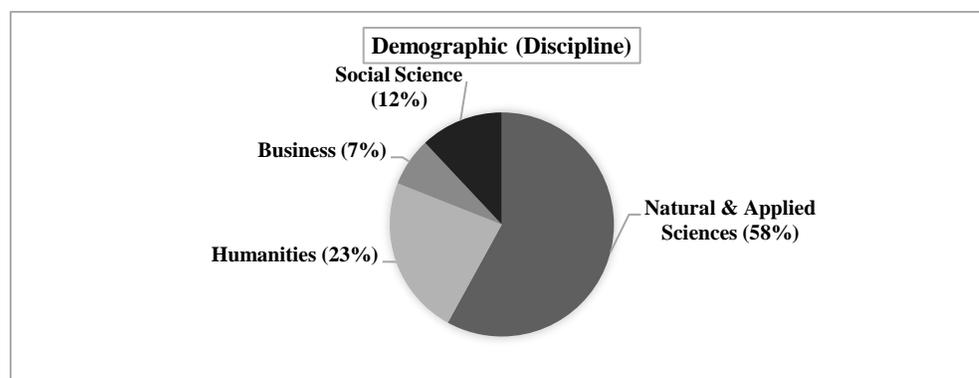
Age range (years)	Academic Role Title						Total Number (%)
	Associate Lecturer	Lecturer	Senior Lecturer	Associate Professor	Professor	Adjunct Prof	
25-34	2	17	2	0	0	0	21 (15%)
35-44	2	17	11	7	0	0	37 (26%)
45-54	2	13	13	20	6	0	54 (37%)

55-64	0	5	7	9	7	1	29 (20%)
65+	1	1	1	0	0	0	3 (2%)
Total	7 (5%)	53 (36%)	34 (24%)	36 (25%)	13 (9%)	1 (1%)	Total =144 (100%)

The discipline areas selected by respondents have been categorised into four main discipline areas (i) Humanities/Social Sciences (arts, education, and social science), (ii) Natural and Applied Sciences (engineering, health and medical, maths, computer science, information technology) and (iii) Business (business and law). Most respondents (58%) were in the Natural and Applied Sciences (mostly in health and medical sciences [51%]). See Figure 2.

Figure 2

Demographics by academic discipline



Care responsibilities

Most respondents had additional care responsibilities: (60%) had children and (33%) with broader care responsibilities including children with special/additional needs, elderly parents or other family members requiring care (see Table 4).

Table 4

Demographics by family and care responsibilities

	Number (%)
Children	87 (60%)
Nil children	57 (40%)
“Additional care” responsibilities (including children/parents/other family members requiring care)	Total= 48 (33%) Elderly parent/s= 30 (21%); Child with special/additional needs= 10 (7%) Other family member =7 (5%)

Motivation

The survey asked two questions about career motivation, one closed and one open-ended question. The respondents mostly stated feeling *less motivated* to progress in their career (69%) and (26%) stated they were more motivated (see Table 5).

Table 5

Motivation levels (career progression)

Motivation level	Number (%)
Less	100 (69%)
More	38 (26%)
Neutral	7 (5%)

More motivated

From the academics that felt *more motivated* (26%), the themes to emerge from their qualitative responses related to the contributing factors towards their motivation level were (i) leadership role/opportunities (58%), (ii) research, and (iii) greater flexibility. See Table 6.

Table 6

Factors contributing to more motivation (career progression)

Theme	Number (%)
Leadership role/ Opportunities	26 (68%)
Research	6 (16%)
Flexibility	2 (58%)

The pandemic period has created some new leadership opportunities as stated by respondents. In respondent [ID_39], achieving a promotion and greater leadership role led to her increased motivation. In respondent [ID_26], new opportunities for innovation have opened leading to motivation and again with respondent [ID-30], the value of the unit has been recognised by the HEI, increasing motivation level.

The pandemic coincided with a change in role for me, taking on coordination of a University degree program. Note that this degree program was fully online before, during and after Covid 19. I was also promoted to senior lecturer. These two changes have been motivating for me since the start of 2020. [ID_39]

I have had more opportunities to demonstrate leadership and innovation in my practice [ID_26]

My role has a clear focus on up skilling and supporting the teaching practice of academics across the institution. The pandemic has highlighted the value and importance of my unit, and therefore provided many opportunities that had previously been difficult to come across [ID_30]

Respondent [ID_117], an early career academic at lecturer level, highlights a shift in workplace culture where this respondent reflects on being motivated to work harder to become more employable elsewhere.

Seeing changes in my supervisor and other bosses, a change in the work culture - these have made me more determined to complete my PhD so I'm more employable elsewhere [ID_177]

Being able to have greater flexibility has also shown to be a motivating factor for career progression in the female academic respondents allowing them the opportunities to have more balance with home/family duties as shown by respondents [ID_28 and 55]:

I find work more manageable now I can be at home for a few days a week [ID_28]

The change in perspectives surrounding working from home and flexible work arrangements makes an academic career more appealing- as long as these initiatives continue to be seen favourably and are supported [ID_55]

Less motivated (career progression)

As can be seen below in Table 7, two key themes emerged from responses around the factors contributing to academics (69%) feeling *less motivation* for career progression, namely workload/work-life balance (57%), and a lack of support (44%). In their open-ended responses, participants expressed a number of factors. See Table 7.

Table 7

Factors contributing to less motivation (career progression)

Theme	Number (%)
Workload/work-life balance	54 (54%)
Lack of support	40 (40%)
Re-evaluation of life/career	6 (6%)

Workload/work-life balance lessening motivation

When examining the qualitative responses for the theme of less motivation for career progression, as shown in Table 7, the 'workload/work-life balance' had the highest response. Respondents provided deep and reflective insights:

The juggle between work and home duties felt more intense during Covid. I have begun to question how realistic it is to think I can juggle an academic career with raising children, plus also providing support to elderly parents, whilst my husband works full-time. I feel as though something needs to give and worry that the only thing that really can is my work. I have been exhausted for a long time and trying to stay positive but it's hard to sustain [ID_28].

A sample of responses highlights the extreme burden female academics have been experiencing. Increased workload, exhaustion, burnout, feeling less opportunity and impact on mental health were all mentioned in the comments below:

I feel 'burnt out' as I have been working increased hours and there is more demand on my time from students who are still studying somewhat remotely [ID_102]

Exhaustion, stress, interrupted and irregular home-schedule, inability to pursue opportunities due to travel restrictions, unable to focus, my management perceive me to be less capable (more distracted) than before and avoid giving me development opportunities ("she's obviously not coping") [ID_61]

Being deluged with extra workload pushed me to total burnout [ID_104]

Workload had a toll on my mental wellbeing as the days were filled with emails (you could never win the war with your mailbox). Content had to be changed for the online delivery. Online delivery did not go smoothly. Tech was glitchy, everyone was tired of online classes [ID_75]

Lack of support reducing motivation

Responses related to a lack of support, extended to support from leadership of their HEI: “lack of care about staff wellbeing during pandemic, invisible leadership that is not inclusive and has poor communication style [ID_62]”; a lack of support for the increased workloads: “Too much work and not enough support. I don’t want to get a promotion to get even more work with no additional support [ID_103]”; lack of support for teaching/research and a lack of support for female academics: “Even less support to female academics, male senior academics are even more advantaged and drive the environment [ID_2].”

The results support the lack of management of chronic workplace stress identified by WHO (2019). WHO identified feeling depleted or exhausted and reduced professional efficacy as workplace stress. Further (Boxall et al., 2020) specifically point to increased stress women have faced especially to do with caring for themselves, and loved ones. In addition, these authors detail an increase in domestic violence during the COVID-19 pandemic, adding yet another stress predominantly for women although this aspect was not addressed or reported in this study.

Re-evaluating priorities

A small percentage of respondents stated a re-evaluation of their priorities during this pandemic which is well reported in the greater current literature. Many people are choosing to change career or quit their current employment and alter their lives as a result of experiencing the pandemic changes (Leong, 2021) and there is now the “window of opportunities is wide open” (Kelly, 2021) for employees and for employers such as the higher education sector to better support academics achieve these opportunities.

Academic Progression

A closed question asked participants to select how they perceived their *opportunity to progress* in their career since the onset of COVID-19. As reported in Table 8, just over half (54%), stated they felt *no different* in their level of opportunity to progress in their career as a female academic and almost two out of five female academics (39%) stated feeling there is less opportunity to progress in their career with 7% stating there were more opportunities for female academics. Although over half of the respondents stated there was no difference in opportunity for career progression in this response, their motivation level to progress has been dramatically reduced (69%), as per Table 7 results above.

Table 8

Opportunities for career progression

Perception level	Academic career progression	Number (%)
No difference		77 (54%)
Less		56 (39%)
More		11 (7%)
Total= 144 (100)		

Female academic status perceptions

A majority of respondents (56%) perceived that the female academic status is *no different* in their HEI since the start of COVID-19 and (28%) selected 'less' and (3%) felt female status was greater and (13%) stated they were unsure. As reported by the Australian Unions (2021) Report on how women have been impacted by the pandemic (i.e., challenges, discrimination, and negative impacts), respondents of the current study have reiterated this point several times. While women have been gaining better access to paid work over the decades, they still face challenges and discrimination in the work environment and society in general as reported by (Bailey et al., 2016). As one respondent wrote: "What's the point? More work for minimal pay rise. I'm a hamster on the patriarchy's wheel [ID_125]", the perceived gender disparity may be causing female academics to 'give up' and not pursue academic careers or promotional recognition. See Table 9 below.

Table 9

Perception of female academic status

Perception of female academic status at their Higher Education Institution.	
Level	Number (%)
No difference	80 (56%)
Less	41 (28%)
Unsure	18 (13%)
Greater	5 (3%)
Total=144 (100%)	

The comments from the female academics reiterate the literature on lack of motivation, increased workload and greater gender divide. The Australian government response is seen as inadequate in addressing greater inequalities and increasing workloads and family pressures (Australian Unions, 2021). Statements from the respondents of the current study reinforce these pressures:

There is a general expectation that women should be able to manage both home and work, without either having an impact on each other. I have seen men being promoted or awarded opportunities as they don't have to juggle work with home schooling" [ID_118]

Academia has essentially collapsed in on itself since the pandemic began. I no longer feel motivated to work in the field [ID_138]

We already know that there is a disparity for female academics in academia and I don't know whether I was oblivious to it or so focused on what I was doing to really recognise it but during the pandemic this seems to have become more accentuated and the role of the female academic seems to be less respected than before in some situations [ID_102]

I had hoped, by this stage, that the culture of women carrying everyone in terms of service and teaching would have changed, but alas - no. The men are still getting all the grants, and all the kudos. I keep watching average men get promoted and amazing women either not, or not being encouraged to go for promotion. It's heart breaking. It makes me wonder what I will have to do before I go up for Professor [ID_134].

Discussion

This paper adds to the growing research literature about the challenges being faced by Australian female academics since the current COVID-19 pandemic including a belief that the pandemic will further increase the existing gender inequalities (Alon, 2020). This study has affirmed this belief through the many qualitative comments made by female academics on their own perceptions of decreased motivation for career progression, increased disparity, and bias in promotional aspects. Respondents report greater gender bias against females and hardships including increased workloads and having to balance families, care and domestic duties and increases in academic teaching and research workloads.

The massively excessive workload arising out of University responses to COVID-19, and the way my university handles promotion (particularly the new approach), has made it impossible for me to progress in the area I work. If it were somehow possible, the impact and workload on those at higher levels is not attractive [ID_109].

Female significance in Australian workforce

Research into feminist interests plays a key role in challenging and unpacking assumptions, beliefs and misunderstanding of the roles that females play as academics (amongst other global roles) (Couch et al., 2021). Unpaid workloads have increased reporting women do most of the domestic work (80%), care responsibilities have increased to (38%) and women take on more parental leave to care for young children. Many work part time and women in Australia will retire with less superannuation (20%) than men (Wood et al., 2021). Women represent over half (59%) of the HE workforce, bringing in revenue over \$3 billion (Statistics., 2020).

Australian female academics need to be supported through policies that recognise female status in academic work regardless of family status, support flexible work arrangements, provide adequate care funding and support academic promotion. The Australian economy can benefit through female participation in the workforce (Boxall et al., 2020) equating to \$70 billion per year in gross domestic product (GDP) with greater return to the Government through the increased revenues (Pennington & Stanford, 2020). If the Australian government invests in care, women can take advantage to attend to paid work (Wood et al., 2021) and access opportunities for promotional recognition and success through continuity of work. Supporting female academics and their

prominence in academia as Gabster et al. (2020) state is critical in ensuring career progression and in overcoming the many challenges faced by females in the pre-COVID period.

A new way of work creates another newer way to work

Flexible work-from-home policies from the higher education institutions are also critical in the ongoing pandemic period and into the future. The current pandemic has highlighted that female academics can work effectively from home and appreciate the ability to have the option to do so. Greater work flexibility has proven to be positive for productivity, achievement and engagement (Mattey et al., 2020). There is an immediate need for female academics to access quality funded care to support the increased care responsibilities during the pandemic causing increased stresses both work-related and financial. Paid pandemic leave that support female academics can assist females if required to isolate or for casual academic staff who do not receive any paid sick leave.

The data from this Australian survey has highlighted the impact that an increased workload has on female academic including: reduced motivation for career progression; feelings of reduced female academic status and thus adding to the overall perception and value of the female academic; greater stress, burnout and feelings of being overwhelmed with negative mental health. There is a strong rationale for HEIs to review their policies on academic workload management to support work-life balance, especially for female academics, during unprecedented times, such as a pandemic (Okeke-Uzodike & Gamede, 2021). Examples of comments from respondents supporting the reform to occur include:

Overworked, not recognised, male counterparts with fewer domestic, carer, and admin/engagement roles at work gain much more advancement opportunity. Deck is stacked against females, exhausted and no hint that this might change [ID_104].

Lack of support & recognition of differential impact on women with small children. Seeing men with less qualifications/experience being given opportunities ahead of me/other women [ID_131]

Supporting this general feeling of a lack of academic progression is well reported in the literature by (Alon, 2020; Oleschuk, 2020) and reinforced by respondents in this study.

I felt there has been minimal support for female academics looking after children in terms of career progression [ID_173].

As seen in the results about motivation for career progression, a high percentage (70%) stated feeling *less* motivated. This poses a new challenge for the higher education sector if it is to continue to retain female academics in the workforce. This finding further supports the work of Duncanson et al. (2020) with the Australian higher education sector where “The structure of labour and reward at universities has long followed gendered lines”. During the pandemic, these lines have become more entrenched. This research work presented in this paper suggests that there is immediate short term and long term need to address these challenges so as to ensure a fairer playing field. These include policy changes and funding to support females to provide adequate care. Career progression has stalled for almost 40 per cent of academics and equally around the same reporting that it has progressed well for them during the COVID pandemic (Kolakowski et al., 2021). Academic leadership roles can be achieved through academic promotional ladder as teaching and mostly research hurdles are met through strict higher education (HE) criteria. However, in this current pandemic period, research output has had a high reduction of papers across many disciplines including health and humanities (Amano-Patiño et al., 2020; Gabster et al., 2020).

Motivation and increased workload

If employees are to fully embrace this ‘new way’ of working, it is imperative for organisations to proactively design and implement human resource (HR) policies which support the welfare of employees (Ravi & Anulakshmi, 2021). The imperative extends beyond simple WFH policies to ensuring that staff wellbeing is catered for and the work-life balance (WLB) is managed. Organisations which adopt effective policies supporting this can benefit from a happier workforce (Bloom & Van Reenen, 2006). Stress and WLB are reported as being interconnected, and the conflict of WLB for employees is an important consideration for all organisations and should be part of any organisation’s development (Oludayo et al., 2018). The new way of working remotely also causes privacy concerns, as home life and work life start to blend, commonly referred to as a ‘never-ending shift’, where women’s lives, homes, children, and ‘mess’ are monitored through cameras (Boncori, 2020).

An increase in workload since the pandemic started has been noted, with the increasing encroachment of digital technologies into private lives, raising the expectations that employees are always available and contactable. The typical academic tasks which are completed in the office environment such as teaching, are assumed to take longer when conducted from home. This can be attributed to a number of reasons, including the requirement of training in working in the online space and to be able to respond to the changes resulting from confinement (Gonzalez et al., 2021).

Feeling overwhelmed

Many respondents in this study indicated feeling overwhelmed due to fear of job losses, a lack of hope for the future of an academic trajectory and increased workloads: “Lack of permanent work opportunities, bigger workloads, less time for family life [ID_73].”; “Unemployment and no future [ID_263].” The Australian Productivity Commission has warned of increasing risk to employees as more people work from home may be overlooked for promotion and opportunities (Ferguson, 2021), placing female academics at higher risk again.

Feeling overwhelmed by workload as a teaching and research academic. Both parts of my role could be full time positions so I am constantly struggling to meet deadlines and still do other 'academic' duties like be in committees, present at conferences, participate in peer review of grants/manuscripts [ID_262].

As the pandemic continues, due to its unpredictable trajectory seen since early 2020, organisational support and job stress are key factors influencing the acceptance of the ‘new way’ of working online. The forced adoption of using technology independently at home, to conduct routine tasks, has posed a challenge for many employees causing academics increased stress (Hadiwijaya & Sentanu, 2021). Work-related stress impacts people negatively, both physically and emotionally (Kotteeswari & Sharief, 2014) and therefore institutions are faced with making decisions which consider how to best support staff remotely, and to minimise work-related stress.

The corruption and nepotism evident in restructuring academic workforces (said to be in the name of financial losses due to the pandemic). I do not want to be a part of this [ID_111].

The increased workload for typically routine tasks, slowly generates professional wear and tear. In their study Gonzalez et al. (2021) report a high increase (50 %) in the workload of academics during remote lockdowns, and a statistically significant correlation between professional burnout, and the increase in hours dedicated to work. This was further correlated with emotional exhaustion and depersonalisation.

Although the increased workload was not confined to a specific gender, with the closure of schools as well, females faced the increased burden of childcare responsibilities coupled with household domestic roles and responsibilities. The blurring of boundaries between home and work increases as “living spaces were transformed into places of learning, childcare and work” (Augustus, 2021). Australian females have also faced “intense challenges to combine paid work with family and caring responsibilities” (Augustus, 2021; McGregor, 2021). The “impact of this increased workload resulted in lower psychological wellbeing and health difficulties, as well as limiting career development and progression (Augustus, 2021).

Re-evaluation of priorities and re-thinking work

The pandemic has caused many people to re-evaluate their priorities as the world faces global sickness and deaths, increased remote work, having to juggle home duties, children, caring for others whilst working with reduced job security and mass job losses in academia. The current study adds to the growing literature and supports the research. It has been reported that up to 48 % of American employees have re-thought their employment positions during the pandemic with 53% reporting they would change to a new industry during or post-pandemic (Kelly, 2021) and is being referred to as ‘the great resignation’ with similar trends being predicted for Australian employees (Leong, 2021). Factors leading to these trends are being attributed to things such as the mode of remote working freeing up time and ability to share the care responsibilities, work-life balance with increased flexibility, less travel and realisations of greater importance of health, family and personal values (Kelly, 2021; Leong, 2021). Employees are now re-evaluating their lives as expressed by one respondent: “Seeing so many colleagues let go from universities, while working all hours to keep up, starting to really wonder 'what's the point? [ID_118].” Employees are seeking better compensation and benefits in a job that supports them professionally whilst providing the work-life balance (Newsroom, 2021) they have now experienced. One respondent expressed the following:

Opportunities for full-time academic contracts are even less frequent than pre-COVID. Despite being part-time in my role, my workload is very high and the workload of my more senior colleagues is excessively high. The pandemic has forced me to re-evaluate my priorities and consider whether the difficult work/life balance in academia (which appears to worsen as you progress) is still something I want to pursue [ID_25]

I have been able to put the importance of career progression and status into perspective - there are other things that are more important [ID-66].” The importance of health and family have become prioritised in this pandemic period (Leong, 2021) and is reiterated by a respondent: “Seems less important in the scheme of things, family and health more important [ID-80].

Perceptions of further division between gender advantages

The Workplace Gender Equity Agency (Agency, 2020) reported that women are experiencing greater gender divide and segregation in Australia compared with other OECD countries. Comments in this research under this sub-theme support the findings of the Workplace Gender report.

The pandemic has highlighted inequities between the experiences of men and women in academia and research- and I feel slightly more determined than previously to push past those barriers. Also - having come through this difficult time and survived (definitely NOT thrived), I feel somewhat more confident I can continue to push through difficult times [ID_18]

Even less support to female academics, male senior academics are even more advantaged and drive the environment [ID_1]

In addition, although academia and education are increasing as feminised workplaces with (47%) in the workforce but still only a third at professorial level (Rea, 2018), women have experienced greater job losses and security (Wood et al., 2021) despite being highly qualified, skilled or experienced.

I see most other female academics being negatively affected and feel the need to push forward as many female academics as possible [ID_46].

Reduced academic status (as a female)

A number of respondents commented on their perception of *less support* for female status during COVID which was a reason contributing to female academics' feelings of being less motivated to progress in their careers.

Seeing men with less qualifications/experience being given opportunities ahead of me/other women [ID_227]

My university opened promotion applications in July 2020. It is now end of August 2021, and they still have not processed the applications for Levels [Associate Professor & Professor] I feel disrespected & under-valued by my employer, especially as, during that time, I have a) worked longer hours to get teaching online; and b) made significant achievements in my career through avenues outside the university (i.e. I am respected & advanced in my field, but not by my employer) [ID_90].

If female academics are truly valued and supported then HEI leadership in Australia (and beyond) must respond respectfully by listening to the diverse voices and experiences of the critical cohort of women. The contribution of women to the HE sector in Australia is extensive through teaching and research whilst managing household duties and manage with others in the house such as elderly parents, children, schooling, housemates/friends with ease (as stated by respondents). The two comments below highlight how respondents have experienced a lack of support and perceptions of gender bias.

"I felt there has been minimal support for female academics looking after children in terms of career progression [ID_93]

Overworked, not recognised, male counterparts with fewer domestic, carer, and admin/engagement roles at work gain much more advancement opportunity. Deck is stacked against females, exhausted and no hint that this might change [ID_182].

Despite female academics' contribution, males continue to gain promotions regardless of their research productivity or family circumstance (González Ramos & Bosch, 2013).

We already know that there is a disparity for female academics in academia and I don't know whether I was oblivious to it or so focused on what I was doing to really recognise it but during the pandemic this seems to have become more accentuated and the role of the female academic seems to be less respected than before in some situations [ID_102].

Limitations

The authors fully acknowledge the limitations of this current study including being a small sample of a large cohort of academics globally and their experience during COVID-19. It is acknowledged that there are stark differences in isolation rules, quarantining, and freedom of movement and in days in lockdowns across the various Australian states and territories. Melbourne experienced the longest lock-down in the world, and across the country whereas Western Australia experienced limited lock-down periods causing minimal disruptions. There was no representation of responses from the NT providing a gap in the experiences of those academics. A follow-up focus groups with participants would have allowed for greater depth of discussion and exploration of responses' meanings and interpretations, however, timelines and organisation of meetings via online formats would have been the only option and were not seen as possible by the researchers within the timeline scope.

Summary

The current study has reported on the motivation levels towards academic career progression since the start of the current pandemic. Results show that the majority of respondents of this study felt less motivated in their career progression and that the status of being a female academic is less now in their Australian Higher Education Institution. Contributing factors have included extreme workloads with perceived lack of support to manage increasing workloads and leadership from HEIs that does not support female academic growth for research and career progression. The majority of respondents were at lecturer level and mature-aged, permanent full time academics. Continued and greater research in the experiences of female academics is necessary in Australia to better understand the lived experience, to nurture academic motivation and progression and to foster new and younger females into higher education whilst adequately promoting female academics throughout their career. Women play a significant role in the Australian workforce and have lagged behind men in pre-pandemic times and continue in current pandemic times. It is time to truly integrate recognition of female academics' skills, experiences, teaching and research output and positive contribution to the Australian economy.

References

- Abdel-Gawad, T., & Woollard, J. (2015). Critical success factors for implementing classless e-learning systems in the Egyptian higher education. *International Journal of Instructional Technology and Distance Learning*, 12(4), 29-36.
- ACTU. (2020). *Leaving women behind: The real cost of the Covid recovery*. Retrieved 6 January 2022 from <https://www.actu.org.au/our-work/policies-publications-submissions/2020/leaving-women-behind-the-real-cost-of-the-covid-recovery>
- Alon, T., Doepke, M., Olmstead-Rumsey, J and Tertilt, M. (2020). *The impact of COVID-10 on gender equality*. National Bureau of Economic Research (NBER). <https://doi.org/10.3386/w26947>
- Augustus, J. (2021, 14 May). The impact of the COVID-19 pandemic on women working in Higher Education. *Frontiers in Education*. [opinion article] <https://doi.org/10.3389/educ.2021.648365>
- Bloom, N., & Van Reenen, J. (2006). Management Practices, Work—Life Balance, and Productivity: A Review of Some Recent Evidence. *Oxford review of economic policy*, 22(4), 457-482. <https://doi.org/10.1093/oxrep/grj027>
- Boaz, J. (2021). *Melbourne passes Buenos Aires' world record for time spent in COVID-19 lockdown*. ABC. Retrieved Oct 10 from <https://www.abc.net.au/news/2021-10-03/melbourne-longest-lockdown/100510710>
- Boncori, I. (2020). The never-ending shift: A feminist reflection on living and organizing academic lives during the coronavirus pandemic. *Gender, Work & Organization*, 27(5), 677-682. <https://doi.org/10.1111/gwao.12451>
- Bowyer, D., Deitz, M., Jamison, A., Taylor, C. E., Gyengesi, E., Ross, J., Hammond, H., Ogbeide, A. E., & Dune, T. (2022). Academic mothers, professional identity and COVID-19: Feminist reflections on career cycles, progression and practice. *Gender, Work & Organization*, 29(1), 309-341. <https://doi.org/10.1111/gwao.12750>
- Boxall, H., Morgan, A., & Brown, R. (2020). The prevalence of domestic violence among women during the COVID-19 pandemic. *Australasian Policing*, 12(3), 38-46. <https://doi.org/10.52922/sb04718>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Butler-Henderson, K., Percy, A., & Kelder, J. (2021). Editorial Celebrating women in higher education on International Women's Day. *Journal of University Teaching & Learning Practice*, 18(3). <https://doi.org/10.53761/1.18.3.1>
- Chang, C.-L., & Fang, M. (2020). E-Learning and online instructions of higher education during the 2019 novel coronavirus diseases (COVID-19) epidemic. *Journal of Physics: Conference Series* <https://doi.org/10.1088/1742-6596/1574/1/012166>
- Couch, D. L., O'Sullivan, B., & Malatzky, C. (2021). What COVID-19 could mean for the future of “work from home”: The provocations of three women in the academy. *Gender, Work & Organization*, 28, 266-275. <https://doi.org/10.1111/gwao.12548>
- Creswell, J. W. (2003). A framework for design. *Research design: Qualitative, quantitative, and mixed methods approaches*, 9-11.

- De Vos, J. (2020). The effect of COVID-19 and subsequent social distancing on travel behavior. *Transportation Research Interdisciplinary Perspectives*, 5, 100121. <https://doi.org/10.1016/j.trip.2020.100121>
- Deryugina, T., Shurchkov, O., & Stearns, J. (2021). Covid-19 disruptions disproportionately affect female academics. *NBER Working Paper Series*, Working Paper 28360 <https://doi.org/10.3386/w28360>
- Duncanson, K., Weir, N., Siriwardhane, P and Khan, Tehmina. (2021). *How COVID is widening the academic gender divide in Australia*. OCUFA Journal of Higher Education. Retrieved November 3 from <https://academicmatters.ca/how-covid-is-widening-the-academic-gender-divide-in-australia/>
- Ferguson, K. (2021). *Beware, workers are about to pivot with their feet*. Financial Review. Retrieved January 7 from <https://www.afr.com/work-and-careers/workplace/beware-workers-are-about-to-pivot-with-their-feet-20211018-p590xu>
- Gabster, B. P., van Daalen, K., Dhatt, R., & Barry, M. (2020). Challenges for the female academic during the COVID-19 pandemic. *The Lancet*, 395(10242), 1968-1970. [https://doi.org/10.1016/S0140-6736\(20\)31412-4](https://doi.org/10.1016/S0140-6736(20)31412-4)
- Gonzalez, E. P. R., Otalvaro, A. M. R., Argel, M. N. M., & Urzola, A. U. (2021). Professional burnout and increased workload during covid-19 in higher education teachers in monteria-colombia. *European Psychiatry*, 64(S1), S267-S268.
- González Ramos, A. M., & Bosch, N. V. (2013). International mobility of women in science and technology careers: shaping plans for personal and professional purposes. *Gender, Place & Culture*, 20(5), 613-629. <https://doi.org/10.1192/j.eurpsy.2021.718>
- Hadiwijaya, H., & Sentanu, I.G. (2021). Effects of WFH (Work From Home) Policies, Perceived Organizational Support, Job Stress, and the Ability to Use Technology on Lecturer Performance During the New Normal. 3rd Annual International Conference on Public and Business Administration (AICoBPA 2020).
- Heffernan, T. (2020). Academic networks and career trajectory: 'There's no career in academia without networks'. *Higher education research & development*, 1-14.
- Hoq, M. Z. (2020). E-Learning during the period of pandemic (COVID-19) in the kingdom of Saudi Arabia: an empirical study. *American Journal of Educational Research*, 8(7), 457-464.
- Kelly, J. (2021). *Millions of workers plan to switch jobs in pursuit of a work-life balance, growth opportunities, remote options and being treated with respect*. Forbes. Retrieved January 14 from <https://www.forbes.com/sites/jackkelly/2021/06/23/millions-of-workers-plan-to-switch-jobs-in-pursuit-of-a-work-life-balance-growth-opportunities-remote-options-and-being-treated-with-respect/?sh=747a8ea52365>
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846-854. <https://doi.org/10.1080/07294360.2020.1799948>
- Kolakowski, H., Shepley, M. M., Valenzuela-Mendoza, E., & Ziebarth, N. R. (2021). How the Covid-19 Pandemic Will Change Workplaces, Healthcare Markets and Healthy Living: An Overview and Assessment. *Sustainability*, 13(18), 10096.

- Kotteeswari, M., & Sharief, S. T. (2014). Job stress and its impact on employees performance a study with reference to employees working in Bpos. *International Journal of Business and Administration Research Review*, 2(4), 18-25.
- Krause, S. F. (2017). *Leadership: Underrepresentation of women in higher education*. Northcentral University.
- Leal Filho, W., Wall, T., Rayman-Bacchus, L., Mifsud, M., Pritchard, D. J., Lovren, V. O., Farinha, C., Petrovic, D. S., & Balogun, A.-L. (2021). Impacts of COVID-19 and social isolation on academic staff and students at universities: a cross-sectional study. *BMC Public Health*, 21(1), 1213. <https://doi.org/10.1186/s12889-021-11040-z>
- Leong, L., Ross, M and Tickle, M. (2021). *Here comes the great resignation. Why millions of employees could quit their jobs post-pandemic*. ABC News. Retrieved January 6 from <https://www.abc.net.au/news/2021-09-24/the-great-resignation-post-pandemic-work-life-balance/100478866>
- Liu, L. (2016). Using Generic Inductive Approach in Qualitative Educational Research: A Case Study Analysis. *Journal of Education and Learning*, 5(2), 129-135. <https://doi.org/10.5539/jel.v5n2p129>
- Malisch, J. L., Harris, B. N., Sherrer, S. M., Lewis, K. A., Shepherd, S. L., McCarthy, P. C., Spott, J. L., Karam, E. P., Moustaid-Moussa, N., Calarco, J. M., Ramalingam, L., Talley, A. E., Cañas-Carrell, J. E., Ardon-Dryer, K., Weiser, D. A., Bernal, X. E., & Deitloff, J. (2020). Opinion: In the wake of COVID-19, academia needs new solutions to ensure gender equity. *Proceedings of the National Academy of Sciences*, 117(27), 15378. <https://doi.org/10.1073/pnas.2010636117>
- Marinoni, G., Van't Land, H., & Jensen, T. (2020, 27 May). IAU global survey on the impact of Covid-19 on higher education around the world. *IAU Global Survey Report*. UNESCO. Retrieved 7 January, 2022 from https://www.iau-aiu.net/IMG/pdf/iau_covid19_and_he_survey_report_final_may_2020.pdf
- Mattey, C., Hilberath, C., Sibilio, N., Aurora, J., & Ruiz, H. (2020, June). *Personalisation for your people: How COVID-19 is reshaping the race for talent*. McKinsey & Company. Retrieved 7 January 2002 from https://image-src.bcg.com/Images/ANZ-Personalisation-for-your-people_tcm87-251462.pdf
- McGaughey, F., Watermeyer, R., Shankar, K., Suri, V. R., Knight, C., Crick, T., Hardman, J., Phelan, D., & Chung, R. (2021). 'This can't be the new norm': academics' perspectives on the COVID-19 crisis for the Australian university sector. *Higher education research & development*, 1-16. <https://doi.org/10.1080/07294360.2021.1973384>
- McGregor, K. (2021, 20 September). *Study finds 40, 000 tertiary jobs lost during pandemic*. University World News. Retrieved 20 September from <https://www.universityworldnews.com/post.php?story=20210917061003607>
- Nash, M., & Churchill, B. (2020). Caring during COVID-19: A gendered analysis of Australian university responses to managing remote working and caring responsibilities. *Gender, work, and organization*, 27(5), 833-846. <https://doi.org/10.1111/gwao.12484>
- Newsroom. (2021, 15 December). *75% of Americans are ready for a reset, and nearly two-thirds say support from family and friends will help take the leap*. Prudential. Retrieved December 17 from <https://news.prudential.com/75-americans-are-ready-for-reset-and-nearly-two-thirds-say-support-from-family-and-friends-will-help-them-take-leap.htm>

- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1609406917733847. <https://doi.org/10.1177/1609406917733847>
- Okeke-Uzodike, O., & Gamede, V. (2021). The Dilemma of Unrelenting Workload Amidst Covid-19 Pandemic: An Agenda for University Female Academics. *Journal of Research in Higher Education*, 5(1). <https://doi.org/10.24193/JRHE.2021.1.1>
- Oleschuk, M. (2020). Gender Equity Considerations for Tenure and Promotion during COVID-19. *Canadian review of sociology = Revue canadienne de sociologie*, 57(3), 502-515. <https://doi.org/10.1111/cars.12295>
- Oliveira, G., Grenha Teixeira, J., Torres, A., & Morais, C. (2021). An exploratory study on the emergency remote education experience of higher education students and teachers during the COVID-19 pandemic. *British Journal of Educational Technology*. <https://doi.org/10.1111/bjet.13112>
- Oludayo, O. A., Falola, H. O., Obianuju, A., & Demilade, F. (2018). Work-Life balance initiative as a predictor of employees' behavioural outcomes. *Academy of Strategic Management Journal*, 17(1), 1-17.
- Othman, S., Awis, M. L., Samad, S. A., & Harun, A. F. (2021). Consolidating work from home as the new norms: internal vs external factors among UiTM staff. *Advances In Business Research International Journal*, 7(1), 65-80. <https://doi.org/10.24191/abrij.v7i1.13504>
- Pennington, A., & Stanford, J. (2020). *Gender Inequality in Australia's Labour Market: A Factbook*. The Centre for Future Work. Retrieved October 4 from https://www.futurework.org.au/gender_equality_still_far_off_in_australia_s_labour_market
- Ravi, N., & Anulakshmi, M. R. (2021). Work from Home and Employee Productivity during COVID-19. *Asian Basic and Applied Research Journal*, 14-21.
- Rea, J. (2018). Feminisation of higher education internationally. *Agenda*, 26, 36. National Tertiary Education Union. Retrieved 10 February 2022 from https://issuu.com/nteu/docs/agenda_26
- Savigny, H. (2014). Women, know your limits: cultural sexism in academia. *Gender and Education*, 26(7), 794-809. <https://doi.org/10.1080/09540253.2014.970977>
- Australian Bureau of Statistics. (2020). *National, state and territory population*. Retrieved January 8 from <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/jun-2020>
- TEQSA. (2022). *Statistics report on TEQSA registered higher education providers 2018*. Retrieved 10 February 2022 from <https://www.teqsa.gov.au/latest-news/publications/statistics-report-teqsa-registered-higher-education-providers-2018>
- Terry, G., Hayfield, N., Clarke, V., & Braun, V. (2017). Thematic analysis. *The SAGE handbook of qualitative research in psychology*, 2, 17-37. <https://doi.org/10.4135/9781526405555.n2>
- Thorgersen, K. A., & Mars, A. (2021). A pandemic as the mother of invention? Collegial online collaboration to cope with the COVID-19 pandemic. *Music Education Research*, 23(2), 225-240. <https://doi.org/10.1080/14613808.2021.1906216>

- Vanderhout, S. M., Birken, C. S., Wong, P., Kelleher, S., Weir, S., & Maguire, J. L. (2020). Family perspectives of COVID-19 research. *Research Involvement and Engagement*, 6(1), 69. <https://doi.org/10.1186/s40900-020-00242-1>
- Watson, R., Singh, U., & Nair, C. S. (2022). Higher education academics' perspectives. In S. a. M. Goncalves, S (Ed.), *Pandemic, disruption and adjustment in higher education* (Vol. 53). Brill. <https://doi.org/https://doi.org/10.1163/9789004512672>
- Wood, D., Griffiths, K., & Crowley, T. (2021). *Women's work: The impact of the COVID crisis on Australian women*. Grattan Institute. Retrieved 7 January 2022 from <https://apo.org.au/sites/default/files/resource-files/2021-03/apo-nid311282.pdf>
- Zarei, S., & Mohammadi, S. (2021). Challenges of higher education related to e-learning in developing countries during COVID-19 spread: a review of the perspectives of students, instructors, policymakers, and ICT experts. *Environmental Science and Pollution Research*, 1-7. <https://doi.org/10.1007/s11356-021-14647-2>