

# The impact of COVID-19 on the well-being of Australian visual artists and arts workers

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## Abstract

In this paper, we assess the impact of the COVID-19 pandemic on the Australian visual arts sector. We base our analysis on the responses of over 1500 visual artists and arts workers to a survey conducted by the National Association for the Visual Arts (NAVA), the national peak body for the visual and media arts, craft and design sector in September 2021. NAVA employed this online survey to study the relationship between the pandemic and both the incomes and mental health of artists and arts workers. Using regression analysis, we find that there has been a significant impact for both artists and arts workers, with the severity of the impacts varying by gender, age and the availability of state-based and Australian Government support programmes. Reduced hours and loss of contracted work and commissions due to the pandemic were both related to declines in income and mental health outcomes for artists and for arts workers. Housing stress was associated with a higher likelihood of a significant or extreme mental health impact for artists and arts workers. In addition, artists' incomes and mental health outcomes were impacted when faced with a reduced ability to sell, although some artists were able to increase their online profiles.

## KEYWORDS

arts workers, Australia, COVID-19, mental health, visual artists

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## 1 | INTRODUCTION

The precarious nature of work in the visual arts and craft sector was well known prior to the pandemic. Those who work in the sector tend to hold multiple jobs and/or be self-employed with few-to-no employees in their arts practice. This results in less access to paid time off work or continuing income in case of illness. Earnings for many self-employed Australians across the workforce are also known to be low and unstable. For example, median earnings for part-time self-employed individuals with no employees were around 60% lower than for full-time paid employees in 2017 (Carney & Stanford, 2018). Furthermore, working conditions and the nature of precarious work itself are also connected to potentially detrimental health and well-being outcomes in general (Tuisku et al., 2016).

Government public health measures to contain the COVID-19 pandemic severely impacted the visual arts and craft sector. During lockdowns, art galleries and museums across the country were forced to close and on re-opening were severely restricted by social distancing and capacity restrictions. Art exhibitions, programmes and events, and festivals were cancelled, postponed or redesigned. In this paper, we empirically investigate the impact of COVID-19 specifically on the visual arts and craft sector using data collected from artists and arts workers through an online survey undertaken by the National Association of the Visual Arts (*NAVA*) in August and September 2021. *NAVA* is an Australian membership-based organisation established in 1983 that aims to improve conditions of work and practice in the contemporary visual arts sector. The survey was designed to collect information about the unique pressures that visual artists and art workers experienced during the COVID-19 pandemic. We employ this survey to discover the relationship between the pandemic and both the incomes and mental health of artists and arts workers.

Results of similar surveys in other countries show that lockdowns had profound effects on arts professionals. It is likely that the impact of COVID-19 manifested itself in diverse ways depending on the economic conditions and characteristics of each art form. Snowball and Gouws' (2022, p. 19) regression analysis of variables associated with business continuity in the cultural and creative industries during COVID-19 found that the most significant variable that predicted a negative impact was whether the business operated face to face. They also found a positive and significant correlation between career stage of the professional and business continuity. A study of resilience among artists and recipients of culture in Germany in the face of COVID-19 reported that age was a "protective predictor" in one subgroup (Frick et al., 2021, p. 7). Two further studies used regression techniques to analyse the impacts of COVID-19 on arts professionals in the early months of the pandemic. A study undertaken in the UK reported better well-being outcomes for older artists and those who increased their physical activity during lockdowns (Spiro et al., 2021). In another study conducted in the early months of the pandemic, of the impact of COVID-19 on Australian musicians' sentiments regarding their careers, it was found that they had a positive correlation between their current well-being and their assessment of the future overall health of the music industry. However, they also found that the correlation between the musician's current sentiment and their financial circumstances was less strong (Crosby & McKenzie, 2022).

## 2 | MAIN FEDERAL GOVERNMENT POLICY MEASURES

Australia was one of the few countries that was able to suppress community-acquired COVID-19 cases down to zero by using testing, contact tracing, border closures and lockdowns early on during the pandemic. However, this resulted in severe limitations on international and domestic travel. In March 2020, state governments began to close "non-essential" services, and many Australians could only leave their homes for a limited number of reasons (ABS, 2021a).

In April 2020, cases across Australia began to fall, and at this time, states and territories began adopting their own approaches to the pandemic, with some easing restrictions faster than others and endorsing future localised responses to any outbreaks. Additional waves of COVID-19 led to some states experiencing harsher restrictions than others. In May 2020, breaches in hotel quarantine led to a second strict lockdown in the state of Victoria from July to November 2020. The emergence of the Delta variant also saw long lockdowns in the second half of 2021 in New South Wales, Victoria and the Australian Capital Territory, whereas the other states and territories imposed only short lockdowns. Throughout 2020–2021, while maintaining a policy of strict border restrictions, Western Australia had some of the most relaxed internal restrictions in the country. Since the time of the survey, new COVID-19 strains and waves have arrived across the country. Further, visual artists and arts workers continued to be affected by cancellations and frequent rescheduling of public events and workshops, putting additional economic and mental health strains on them.

Due to large-scale business closures toward the end of March 2020, Australia experienced a considerable spike in unemployment and underemployment. This was particularly the case for the arts, as well as the service, and retail sectors (Raynor & Panza, 2021). The Australian Government responded by rolling out a succession of economic response packages to support households and business viability. In this section, we draw on a report to the Australian Government by the Australian Institute of Health and Welfare, *Australia's Welfare 2021* (2021, pp. 77–135), to describe two major policies: changes in the *JobSeeker* payments to support social welfare recipients and the introduction of *JobKeeper* payments that aimed to help employers keep their staff on payroll. Because of these impacts, there was an increase in housing insecurity. Thus, we also discuss policy interventions that were designed to alleviate housing stress.

## 2.1 | *JobSeeker*

The *JobSeeker* payment is the primary income support payment paid to working-age Australians who are looking for work or are earning under the income threshold.

<sup>1</sup>Receipt of this payment is typically subject to asset tests and mutual obligation requirements.<sup>2</sup> In response to COVID-19, the government made several temporary changes to these settings. The partner income threshold and taper rate were raised, and the liquid assets waiting period was suspended. Further, the government introduced a Coronavirus supplement of \$AU550 per fortnight in April 2020, which was paid to all *JobSeeker* recipients, regardless of how they had come to be receiving the payments. The Coronavirus supplement was cut to \$AU250 per fortnight at the end of September, and to \$AU150 from January 2021. At the end of March 2021, the supplement and other temporary changes ceased altogether. However, a permanent increase of \$AU50 per fortnight was introduced.

## 2.2 | *JobKeeper*

The *JobKeeper* payment was introduced by the Australian Government in 2020 and paid to eligible businesses and not-for-profit organisations to support their employees so that they may continue to trade and keep their employees during the pandemic. Businesses were eligible for *JobKeeper* if their turnover was less than \$1 billion and, due to the pandemic, had an estimated decline of at least 30 per cent or turnover of above \$AU 1 billion with an estimated decline of at least 50 per cent. Initially, the payment amount was set at \$AU 1500 per fortnight. Eligible organisations had to pay their employees the full amount regardless of their usual salary. For some employees, particularly those working part-time, this meant a sudden increase in their take-home wage. Changes in the payment amount were made in September

2020 and January 2021, and eligibility criteria changed from “estimated decline” to “showing an actual decline” in turnover. The programme ended in March 2021. In response to further strict lockdowns in some states, the government introduced COVID-19 disaster payments for those who lost work due to stay-at-home restrictions from June to mid-October 2021 (Klapdor & Lotric, 2022).

### 2.3 | Housing assistance

In response to the significant increase in tenants who were at risk of or unable to pay their rent, the Australian Government announced a 6-month moratorium on evictions on 29 March 2020. Some states, such as Victoria, also introduced some financial assistance for tenants in the form of one-off grants. Additionally, some banks in Australia put in place short-term measures to assist customers who were having trouble making their mortgage payments.

## 3 | THE SURVEY AND DATA

In the 2021 Census, the *Australian Bureau of Statistics* (ABS, 2021b) counted 6793 visual arts and craft professionals in Australia. However, the ABS classifies the occupation of respondents according to the “main job” they held in the week before the Census date. Many visual arts and craft artists have multiple jobs in addition to their arts practice. Some of these may be related to their arts work, or they may be in an entirely different field (such as retail and hospitality). The data in this paper are based on a survey conducted by the *NAVA* that sought to capture the broadest possible range of artistic practices and careers. Eighteen months into the pandemic in 2021, the *NAVA* surveyed artists, arts workers and arts managers working in the visual arts and craft sector focussing on COVID-19 impacts. The survey was distributed via email to their database of artists, art workers and arts managers from 25 August 2021 to 5 September 2021. This included around 4,500 financial members of *NAVA* and 34,000 subscribers.<sup>3</sup> The link for the survey was also shared on social media to 28,000 followers on Instagram, 26,000 followers on Facebook and 7500 followers on LinkedIn. Respondents did not need to meet any criteria other than self-identification as an artist or arts worker in the Australian visual arts and craft sector. This meant that the *NAVA* survey was open to responses from a much wider population than the restricted number of 6793 visual arts and craft professionals reported in the 2021 Census.

At the time these data were collected, New South Wales, Victoria and the Australian Capital Territory were under severe lockdown conditions. Other jurisdictions had closed their borders to these states and territories, making both domestic and international travel virtually impossible for most Australians. The *Oxford Stringency Index* is a composite measure of the relative strictness of government lockdowns based on indicators including school closures, workplace closures and travel bans, ranging in value from 0 to 100 (strictest).<sup>4</sup> Using this rating, Australia was much more affected by COVID-19 restrictions than either the UK or the United States. Between 26 August 2021 and 5 September 2021, Australia had a rating of 71.76 compared with 43.98 for the UK and 56.02–52.30 for the United States.

The *NAVA*'s survey was designed to collect information about the unique pressures that artists and arts workers in the visual arts sector faced during the height of the COVID-19 pandemic in Australia. The survey asked respondents in each group about economic impacts, including changes in income, affects on income and government support and health impacts including mental health and housing stress experience. Artists were also asked about the impact on their arts practice. Respondents were asked to self-identify as primarily a visual artist

or primarily an arts worker based on which activity provided the largest part of their income. Of the 1546 responses, 1047 self-identified primarily as artists and 499 self-identified primarily as arts workers in the visual arts sector. Approximately 40 per cent of those who primarily identified as a visual artist also undertook activities as an arts worker. The analysis mainly focusses on the separate groups of visual artists and arts workers, but where results are significant for those who identified as an artist but also undertook arts work, we report on these.

### 3.1 | Impacts on those who identified primarily as visual artists

Summary statistics for the 1047 respondents who self-identified primarily as an artist are reported in [Table 1](#). Seventy-five per cent of respondents for artists were female with an average age of 52. Over 65 per cent of the sample lived in the two most populous states: New South Wales and Victoria. The mean income as a visual artist in 2020–2021 was \$AU 16,066, and the median income was \$AU 7416 with only around 30% earning more than 50% of their income as a visual artist during 2020–2021.<sup>5</sup> The main sources of income as a visual artist were sales (around 51%), commissions (19.5%), workshop fees, talks and other appearances (12%), salary (8.6%) and grant income (8.1%). While the characteristics for age are consistent with the results of the 2021 Census (ABS, [2021b](#)), for visual artists, the proportion that identifies as female is around 10 per cent higher. The higher percentage of female artists in our survey aligns more with the 2019 *Countess Report* (Prceovich, [2019](#)) that estimates that around 72% of graduating visual artists are female. No comparison can be made with the incomes of visual artists reported in the Census as it includes all income, and the *NAVA* survey focussed exclusively on income received as an artist.

Half of the artist respondents to the *NAVA* survey reported a significant or extreme change in income in 2020–2021 compared with pre-COVID-19 times. A small percentage (3.6%) applied for and received *JobSeeker* payments, and 14.2 per cent of the sample worked for an employer who applied for and received *JobKeeper* payments. As outlined previously in this paper, there were eligibility criteria associated with these payments, and not all artists and arts workers were eligible to apply for them. The main impacts on artists' incomes included reduced ability to sell (62%) and cancellation or postponement of contracted or commissioned work (52.8%). The main impacts on their arts practices were reduced ability to exhibit (77.7%), COVID-19 travel restrictions (71.3%) and reduced opportunities for professional development (51.9%). Over one-third (34%) of the sample developed online methods to present work, which suggests that artists were active in developing new ways to connect with audiences and sell their work.

Questions in the survey about health impacts of the COVID-19 pandemic included impacts on mental health and housing stress.<sup>6</sup> Almost half of the artist respondents (48.3%) experienced either a significant or extreme impact on their mental health compared with pre-COVID-19 times, with around 10% experiencing an extreme impact. This is a similar finding to a survey of Australians aged over 18 conducted in August 2021 by Biddle and Gray ([2021](#)), who found that 10.1 per cent had levels of psychological distress that would identify them as being at risk of a serious mental health issue (measured using the Kessler Psychological Distress scale).<sup>7</sup> It is also aligned with the recent finding in the 2021 Census (ABS, [2022](#)) conducted in August 2021, where 10.3 per cent aged 15 and over responded to having been told by a doctor or nurse that they have a mental health condition (depression or anxiety).<sup>8</sup> Further, in the *NAVA* survey, almost one-third (31.5%) of the artist sample experienced housing stress. This is much higher than the percentage found by Biddle et al. ([2020](#)) in an earlier survey of Australians aged over 18 between April and May 2020, where the proportion of Australians reporting that they had not been able to pay their mortgage or rent on time increased from 6.9 per cent in April to 15.1 per cent in May.

TABLE 1 Summary statistics primary identification as visual artists.

Variables	% or \$
Significant/extreme change in income in 2020–2021	50.0
Significant/extreme mental health impact	48.3
Gender	
Non-binary	3.1
Female	74.9
Male	22.0
Age	
<30	7.6
30–50 years	34.0
50–70 years	50.1
70+	8.3
Residential location	
Victoria	33.4
New South Wales	34.9
Western Australia	5.9
Queensland	11.0
South Australia	5.6
Rest of Australia	9.2
Mean income	\$16,066
Median income	\$7416
>50% income derived from work as artist	30.7
Sources of artist income	
Sales	51
Commissions	19.5
Workshop fees	12.0
Salary	8.6
Grant income	8.1
Also undertakes arts work	39.8
<i>JobSeeker</i>	
Applied and received	3.6
Applied and ineligible	20.6
Did not apply	28.7
Not applicable	47.1
<i>JobKeeper</i>	
Employer applied and received	14.2
Employer applied and ineligible	3.0
Employer did not apply	23.1
Not applicable	59.7
Reduced hours for arts practice	35.3
Reduced ability to sell	62.0



TABLE 1 (Continued)

Variables	% or \$
Delayed artist payments	13.3
Cancellation or postponement contracted or commissioned work	52.8
Reduced ability to exhibit	77.7
Reduced professional development	51.9
Loss of supports from arts organisations	26.2
COVID-19 travel restrictions	71.3
Developed online methods to present work	34.0
Created digital artwork	17.8
Undertook visual arts learning opportunities	23.7
Undertook visual arts teaching opportunities	12.6
Experienced housing stress	31.5
Number of observations	1047

### 3.2 | Impacts on those who identified primarily as arts workers

Table 2 reports the summary statistics for the 499 respondents who self-identified primarily as an arts worker in the visual arts and craft sector. Over 74 per cent of the respondents were female with an average age of 49. Over 64 per cent of the respondents lived in the two most populous states: New South Wales and Victoria. The average income as an arts worker in 2020–2021 was \$32,344, and the median income was \$19,406. Over 60 per cent earned more than 50 per cent of their income as an arts worker during 2020–2021. The most common type of arts work selected for those who were arts workers only was administration/management, whereas for those who were also visual artists, it was educator/academic/teacher/public programming.

There is little other research on arts workers in the visual arts and craft sector to compare these data, and no single occupational category assigned for arts workers in the 2021 Census (ABS, 2021b). However, MacNeill et al. (2022) define this group by nominating occupational categories from the Australian and New Zealand Standard Classification of Occupations (ANZSCO) at the six-digit level code. Using this classification and data from the 2018–2019 Australian Tax Office (ATO), 58 per cent are female and in 2021, the mean and median salary or wages are \$AU 55,971 and \$AU 52,000, respectively. The data from the NAVA survey have a higher female representation and markedly lower mean and median incomes from arts work in the visual arts and craft sector. These differences may partly be explained by how arts workers are defined, since the determination of occupational category in the 2018–2019 ATO data is based on the occupation in which the taxpayer receives the greatest income, whereas the NAVA survey allows respondents to self-select their main occupation based on what arts-related work provided the largest part of their income. Another contributing factor may be that the ATO data report on income from all sources, whereas the NAVA survey reported on income in their capacity as an arts worker.

Over 40 per cent (41.1%) of arts worker respondents reported a significant or extreme change in income in 2020–2021 compared with pre-COVID-19 times. Almost 40 per cent of respondents experienced a loss of contracted work, and 46 per cent experienced a reduction in work hours. A small percentage (3.4%) applied for and received *JobSeeker* payments, and 17.2 per cent of the sample worked for an employer who applied for and received *JobKeeper* payments. Fifty per cent of respondents (50.9%) experienced either a significant or extreme impact on their mental health with 10 per cent experiencing an extreme impact, like Biddle and Gray's (2021) survey of the general Australian population and the 2021 Census (ABS, 2022). Further, around

TABLE 2 Summary statistics primary identification as arts worker.

<i>Variables</i>	<i>% or \$</i>
Significant/extreme change in income in 2021	41.1
Significant/extreme mental health impact	50.9
<i>Gender</i>	
Non-binary	3.2
Female	74.3
Male	22.4
<i>Age</i>	
<30	8.8
30–50 years	41.9
50–70 years	46.3
70+	7.6
<i>Residential location</i>	
Victoria	26.1
New South Wales	38.3
Western Australia	7.8
Queensland	12.2
South Australia	7.4
Rest of Australia	8.2
Mean income	\$32,344
Median income	\$19,406
>50% income derived from work as arts worker	61.1
<i>JobSeeker</i>	
Applied and received	3.4
Applied and ineligible	21.4
Did not apply	26.1
Not applicable	49.1
<i>JobKeeper</i>	
Employer applied and received	17.2
Employer applied and ineligible	3.0
Employer did not apply	27.7
Not applicable	52.1
Loss of contracted work	39.3
Reduction in work hours	46.3
Experienced housing stress	31.9
Number of observations	499

one-third (31.8%) also experienced housing stress—again, a much higher rate than Biddle and Gray (2020) found in the general Australian population pre-COVID-19.

Biddle and Gray (2021) found that those who lived in Sydney and Melbourne tended to experience a worsening in mental health outcomes in August 2021 compared with the rest of Australia, and that psychological distress in August 2021 was higher for those aged 18–44 when compared to February 2017 but had improved for those aged 55 years and over. The 2021 Census (ABS, 2022) also found that those aged 15–49 were more likely to have reported having



a mental health condition (10.9%) than those who were aged over 50 (9.4%). Similar findings were found for both visual artists and arts workers in the *NAVA* survey, with those under 40 in both groups having both higher extreme and significant impacts, compared with no-or-little impact. Artists and arts workers in Victoria reported the highest extreme impact.

## 4 | REGRESSION RESULTS

We use a logistic regression analysis to understand in greater detail the variables that were associated with changes in incomes and mental health for both visual artists and arts workers. This is not intended to establish causal relationships but rather to investigate correlations that may still reveal useful information for policymakers. The regression analysis empirically investigates the characteristics and circumstances of those who primarily self-identify as visual artists and those who primarily self-identify as visual arts workers associated with two outcome variables<sup>9</sup>:

- (i) experiencing a significant or extreme change in their income compared with pre-COVID-19 times; and
- (ii) experiencing a significant or extreme change in their mental health compared with pre-COVID-19 times.

We estimate four logistic regressions. Thus, for each outcome variable, we estimate a regression for those who self-identified primarily as visual artists and for those who self-identified primarily as visual arts workers. The explanatory variables used in the regressions for visual artists for outcome variable (i) include indicator variables to account for demographic information including the following: gender (non-binary/female/male), age (<30/30–50/ 50–70/70+) and residential location (Victoria/New South Wales/Western Australia/ Queensland /South Australia/rest of Australia). Many artists receive income from multiple sources (Throsby & Petetskaya, 2017). To account for heterogeneity among artists and their art practices, we include an indicator that takes a value 1 when more than 50 per cent of their income is derived from work as an artist and 0 otherwise. We also include an indicator variable that takes the value 1 if they are also a visual arts worker and 0 otherwise. To measure access to government support, we included indicator variables for *JobSeeker* and *JobKeeper* payments (applied and received, applied and ineligible, did not apply and not applicable). Also included are indicator variables to allow for the potential impacts on their arts practice during 2020–2021 because of the COVID-19 pandemic. These took the value 1 if the impact occurred and 0 otherwise. Potential negative impacts included reduced hours for arts practice due to increasing income generation through nonarts employment; reduced ability to sell work; delayed artist payments; cancellation or postponement of contracted or commissioned work; reduced ability to exhibit; reduced professional development; loss of supports from arts organisations (such as studio space); and COVID-19 travel restrictions. Potential positive or unexpected impacts included developed online methods to present work; created digital artwork; undertook visual arts learning opportunities; and undertook visual arts teaching opportunities. The same explanatory variables were included for outcome variable (ii) and also included whether they experienced housing stress during 2020–2021.

The explanatory variables used in the regressions for visual arts workers for outcome variable (i) include the demographic variables gender, age and residential location as described above. Also included was an indicator variable that took the value 1 if more than 50 per cent income was derived from work as an arts worker and 0 otherwise. As above, indicator variables were included for *JobSeeker* and *JobKeeper* payments. Indicator variables are included to account for potential impacts on their arts work during 2020–2021 because of the COVID-19

pandemic. These included the following: loss of contracted work and reduction in work hours. The same explanatory variables were included for outcome variable (ii) and in addition also included whether they experienced housing stress during 2020–2021.

All regressions estimated used the logit specification. Note that in each case, multicollinearity is not a serious concern. The pairwise simple correlation coefficients of the explanatory variables have absolute values all less than 0.7, and the variance inflation factors corresponding to the explanatory variables are all  $<0.4$ . For each regression, the estimated regression coefficients, their statistical significance, likelihood ratio (LR) chi-squared test and the McFadden (1974) pseudo  $R^2$  are included in the Appendix: Tables A1 and A2. The LR chi-squared test is one way of evaluating the overall model fit where a significant LR chi-squared test indicates the model containing the explanatory variables is a significant improvement in the fit over the intercept-only model. In our study, based on the LR chi-squared test, each regression represents a significant improvement in fit relative to the intercept-only model. For McFadden (1974) pseudo  $R^2$ , Hemmert et al. (2018) recommend that for sample sizes greater than 200 values within the range 0.09–0.16 indicate a good model fit and values beyond 0.16 indicate an excellent fit. In our study, we obtain values of the McFadden (1974) pseudo  $R^2$  for each regression that range between 0.121 and 0.210 indicating that the models estimated are either a good or excellent fit.

The average marginal effects are reported in Tables 3 and 4. Figures 1 and 2 plot the estimated coefficients of the logit regressions for both outcome variables for visual artists and arts workers, respectively, indicating those characteristics and circumstances of individuals that are associated with each outcome variable.

For those who primarily identify as visual artists, Table 3 and Figure 1 highlight that those aged 30–70+ and those that applied and received *JobSeeker* payments were more likely to have experienced a significant or extreme fall in income in 2020–2021 than in pre-COVID-19. In addition, those artists who received  $>50$  per cent of their income derived from work as an artist were also more likely to experience a significant or extreme fall in income in 2020–2021 compared with pre-COVID-19, which suggests that those artists who were more reliant on income as a visual artist were worse affected. The impacts on arts practice that were associated with a significant or extreme fall in income in 2020–2021 compared with pre COVID-19 included reduced hours for arts practice, reduced ability to sell, cancellation or postponement of contacted or commissioned work and COVID-19 travel restrictions. However, those artists living in Western Australia and those artists who were able to undertake visual arts teaching opportunities were less likely to experience a significant or extreme fall in income. This can perhaps be explained by the far lighter restrictions in that state throughout most of the pandemic.

For the mental health impacts outcome variable, visual artists who identified as female, and who also undertook work as an arts worker, and those who applied for and received *JobSeeker* payments were more likely to experience a significant or extreme impact. Women with childcare obligations saw a substantial and unequal increase in unpaid work because of the restrictions in place due to COVID-19, and this may account for impacts on mental health (Johnston et al., 2020). Impacts on arts practice that were associated with a significant or extreme mental health impact included reduced ability to sell, delayed payments and loss of supports from arts organisations such as studio space.

As discussed earlier in this paper, one-third of visual artists were found to have experienced housing stress. The results here indicate that this is associated with a higher likelihood of a significant or extreme mental health impact. Those in the younger age group ( $<30$ ) were also more likely to experience a significant or extreme impact on their mental health. However, those living in Western Australia or South Australia were less likely to experience a significant or extreme impact on their mental health. However, developing online methods to present work and undertaking visual arts teaching opportunities seemed to offer some protection against a significant or extreme impact on mental health.

TABLE 3 Average marginal effects for visual artists (positive indicates a decline).

Variable	Decline in income	Decline in mental health
Non-binary	0.0229	0.139
Female	0.0167	<b>0.0919***</b>
30–50 years	<b>0.130**</b>	<b>-0.142**</b>
50–70 years	<b>0.233***</b>	<b>-0.276***</b>
70+	<b>0.239***</b>	<b>-0.377***</b>
Victoria	-0.00545	0.0815
New South Wales	0.00782	-0.0755
Western Australia	<b>-0.195***</b>	<b>-0.163**</b>
Queensland	-0.0496	-0.0813
South Australia	-0.115	<b>-0.132*</b>
>50% income is derived from work as an artist	<b>0.113***</b>	0.0245
Visual arts worker	0.0453	<b>0.0644**</b>
Applied and received <i>JobSeeker</i>	<b>0.247***</b>	<b>0.233***</b>
Applied and ineligible <i>JobSeeker</i>	0.0607	0.0143
Did not apply <i>JobSeeker</i>	-0.0381	0.00586
Employer applied and received <i>JobKeeper</i>	0.0155	-0.00380
Employer applied and ineligible <i>JobKeeper</i>	0.0374	-0.0673
Employer did not apply <i>JobKeeper</i>	-0.00154	0.0472
Reduced hours for arts practice	<b>0.104***</b>	0.0305
Reduced ability to sell	<b>0.158***</b>	<b>0.0809**</b>
Delayed artist payments	<b>0.0750*</b>	<b>0.0758*</b>
Cancellation or postponement contracted or commissioned work	<b>0.175***</b>	0.00787
Reduced ability to exhibit	0.0609	0.0174
Reduced professional development	0.0448	0.0463
Loss of supports from arts organisations	0.0401	<b>0.0915**</b>
COVID-19 travel restrictions	<b>0.0791**</b>	0.0560
Developed online methods to present work	-0.0473	<b>-0.0555**</b>
Created digital artwork	-0.0582	0.00152
Undertook visual arts learning opportunities	0.0213	-0.0523
Undertook visual arts teaching opportunities	<b>-0.0706*</b>	<b>-0.0956**</b>
Experienced housing stress		<b>0.132***</b>
<i>N</i>	1047	1047

Note: \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ . Average marginal effects reported. For factor levels, this is the discrete change from the base level.

The bolded numbers represent significant results.

Table 4 and Figure 2 highlight that of those who primarily identify as an arts worker, those who applied for and received *JobSeeker* payments or applied but were ineligible for *JobSeeker* payments were more likely to experience a significant or extreme fall in income in 2020–2021. This was also the case for those that experienced reduced work hours and loss of contracted work. Those aged over 50, however, were less likely to experience a significant or extreme fall in income in 2020–2021.

TABLE 4 Average marginal effects for arts workers (positive indicates a decline).

Variable	Decline in income	Decline in mental health
Non-binary	0.0130	0.0784
Female	0.0737	0.0475
30–50 years	0.0734	–0.135
50–70 years	<b>0.190***</b>	<b>–0.321***</b>
70+	<b>0.249**</b>	<b>–0.384***</b>
Victoria	0.0507	0.0967
New South Wales	0.0699	–0.0514
Western Australia	–0.0854	–0.190*
Queensland	0.0171	–0.125
South Australia	0.0642	–0.0596
Reduction in work hours	<b>0.178***</b>	0.0536
Loss of contracted work	<b>0.330***</b>	<b>0.120**</b>
Applied and received <i>JobSeeker</i>	<b>0.336***</b>	<b>0.322***</b>
Applied and ineligible <i>JobSeeker</i>	<b>0.112**</b>	–0.0451
Did not apply <i>JobSeeker</i>	–0.0265	0.0397
Employer applied and received <i>JobKeeper</i>	–0.0340	–0.0962
Employer applied and ineligible <i>JobKeeper</i>	0.0411	–0.0272
Employer did not apply <i>JobKeeper</i>	–0.00513	–0.00700
>50% income is derived from work as arts worker	–0.0163	–0.0155
Experienced housing stress		<b>0.138***</b>
<i>N</i>	499	417

Note: \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ . Average marginal effects reported. For factor levels, this is the discrete change from the base level.

Those who worked as arts workers were more likely to experience significant or extreme impacts on their mental health if they experienced loss of contracted work, applied for and received *JobSeeker* and experienced housing stress. However, those aged over 50 were less likely to experience significant or extreme mental health impacts.

## 5 | DISCUSSION

The survey clearly demonstrates a significant and negative impact on both incomes and the mental health of visual artists and arts workers. Reduced hours of work and loss of contracted work due to the pandemic were both related to declines in income and mental health outcomes for all visual artists and arts workers. One significant finding of this paper is that younger visual artists and arts workers were most likely to experience a decline in mental health. In addition, we found that all visual artists and arts workers who experienced housing stress also reported a significant or extreme decline in mental health.

We also find that given other factors accounted for, a greater decline in mental health outcomes was observed for those who primarily identified as visual artists and also as female. However, as childcare obligations of respondents were not included in the *NAVA* questionnaire, further investigation is warranted to determine the degree to which this may be a contributing factor to decline in mental health.

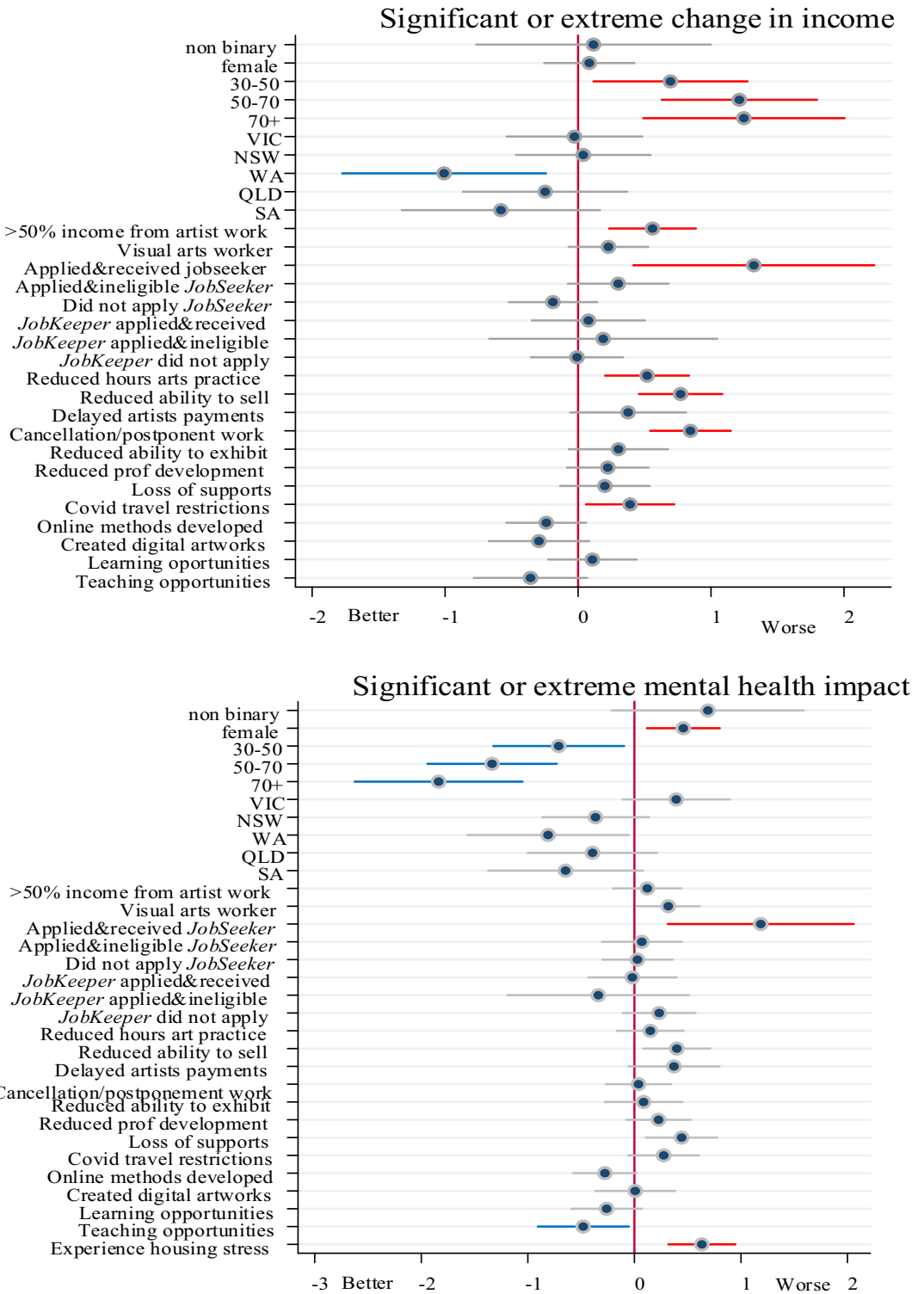


FIGURE 1 Estimated coefficients for visual artists.

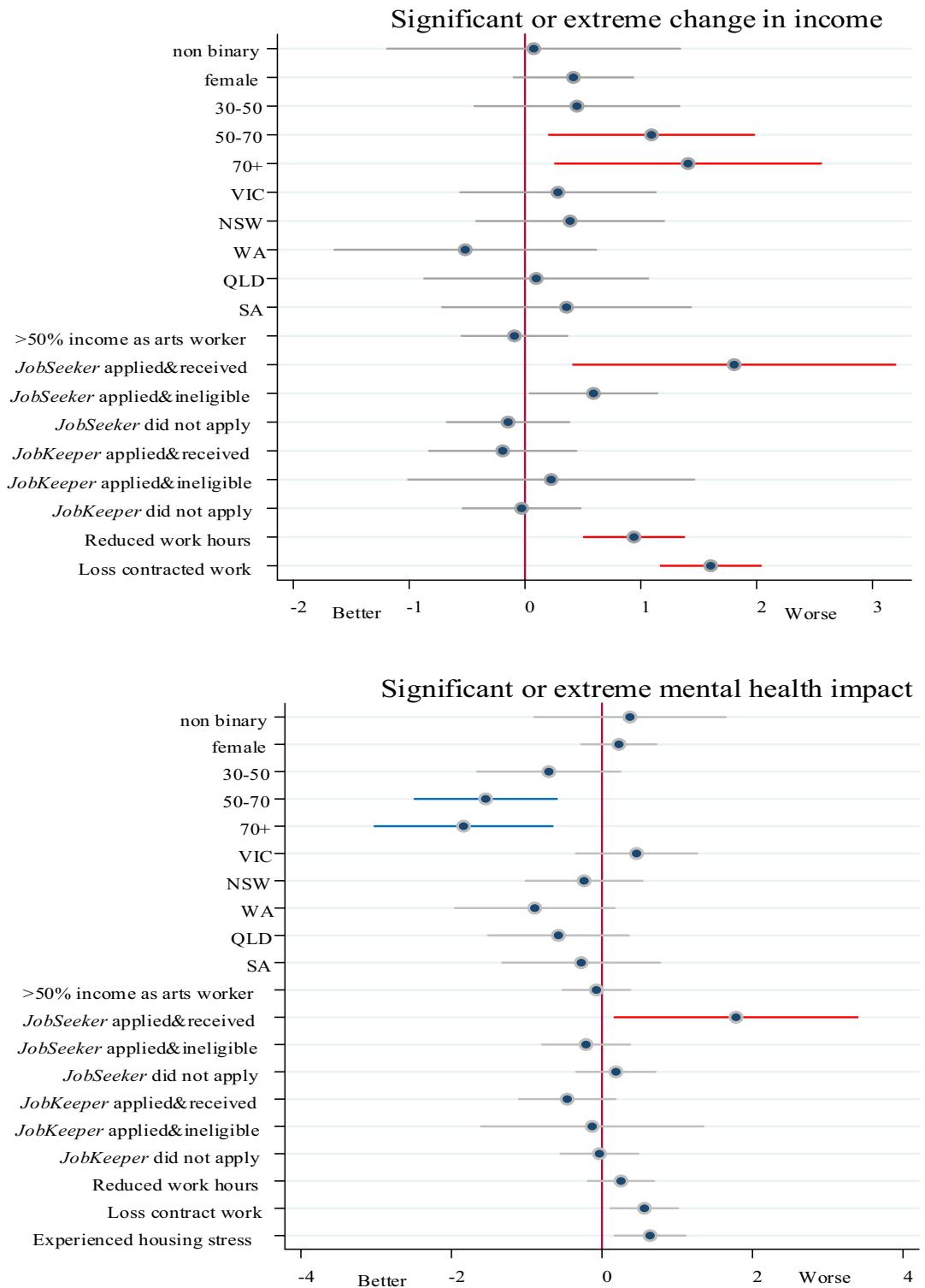


FIGURE 2 Estimated coefficients for arts workers.

The COVID-19 pandemic created severe travel and transport restrictions that reduced the ability for artists to sell their work. These restrictions and the loss in income from potential art purchasers resulted in limiting current sales, future sales and contract work. However, not all impacts were universally negative. Some artists increased their online presence to present and sell their work. Those able to take advantage of teaching and learning opportunities in the visual arts experienced a positive influence on both their incomes and mental health.

For those who identified primarily as arts workers, reduced hours and loss of contracted work were both related to declines in income and mental health outcomes. These workers were also potentially the recipients of income supplements under the federally funded *JobKeeper* payments to their employers. However, we found no significant impact for the *JobKeeper* payment for either outcome variables for both artists and arts workers. This may be due to the timing of the survey since the *JobKeeper* programme had finished by August 2021. However, a large proportion of artists selected “not applicable” in response to the question as to whether they had received *JobKeeper* (60%), and many responded that their employer did not apply (23%). This may be because many artists are self-employed and may not have been able to satisfy the eligibility requirements by being able to show an estimated or actual decline in their turnover.

As noted by Australia Council of the Arts (2020), the *JobKeeper* programme was unlikely to support a large proportion of the creative workforce given the high levels of casualisation and freelancing that characterise this industry. A similarly large proportion of arts workers indicated that their employer did not apply for *JobKeeper* (28%), or it was not applicable to them (52%). Those who identified primarily as artists and were also arts workers were most likely to be engaged in educator/academic/teacher/public programming in their arts work. Thus, they are most likely to be working in the education sector, and those employed in the university sector were generally not eligible for the *JobKeeper* programme (Senate Select Committee, 2021). As government entities, some local, state and national galleries also were not eligible for *JobKeeper* programme. As such, artists who were engaged in professional roles with these galleries were unable to access the support provided by the *JobKeeper* programme.

A small proportion of both artists and arts workers applied for and received *JobSeeker* payments (between 3 and 4%). However, they also experienced significant or extreme impacts on both income and mental health. The Coronavirus supplement to the *JobSeeker* payment had effectively doubled the rate of *JobSeeker* although at the time of the survey, it had ceased. Since then, there has been a permanent increase of \$50 per fortnight, but the payment remains well below the poverty line, which may account for the negative impacts on both income and mental health.

In summary, our findings demonstrate multiple negative impacts of the COVID-19 pandemic on livelihoods and well-being of visual artists and arts workers in Australia, which accords with the findings reported by Biddle and Gray (2020, 2021) for the general population. We find that artists and arts workers were strongly affected by the COVID-19 restrictions as were those in other professions dominated by the self-employed and those individuals with scarce resources to rely on. These results are also consistent with findings internationally, with a strong consensus among the research that early career and or younger arts professionals were most impacted in terms of financial security and overall well-being. Some artists were able to invest in their digital capacity and skills to enable the promotion of their work when other traditional methods were not available, and travel was restricted. This provided potential opportunities to sell their work and stay engaged with the sector, which may have had a positive impact on their mental health.

Several limitations to this study should be noted. Unfortunately, the survey was not part of a longitudinal study; consequently, there were no earlier pre-COVID-19 survey results for comparison. The actual population of visual artists and arts workers is unobserved; thus, it is difficult to know the degree to which our sample is representative. As noted, the ABS



only records visual artists where this is their “main job” the week prior to when the Census is conducted, and there is no single occupational category assigned for visual arts workers. Additionally, the *NAVA* survey used here records a higher response rate for females than that reported in the 2021 Census (ABS, 2021b) for visual artists and appears to align more closely to the 2019 *Countess Report* (Prcevich, 2019) where it is estimated that 72 per cent of graduating visual artists are female. A degree of selectivity bias may be introduced in our results if those who experienced hardship were more likely to respond. Finally, questions regarding income changes could have been more detailed to aid in accurately reflecting the COVID-19 impact.

## AUTHOR CONTRIBUTIONS

**Jenny Lye:** Conceptualization; methodology; data curation; formal analysis; writing – review and editing; funding acquisition; writing – original draft. **Joe Hirschberg:** Conceptualization; methodology; formal analysis; data curation. **Grace McQuilten:** Funding acquisition; writing – review and editing; writing – original draft; project administration. **Chloë Powell:** Funding acquisition; writing – original draft; writing – review and editing; project administration. **Kate MacNeill:** Funding acquisition; writing – original draft; writing – review and editing; project administration. **Marnie Badham:** Funding acquisition; writing – review and editing; writing – original draft.

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## CONFLICT OF INTEREST STATEMENT

The authors have no perceived, potential or actual conflicts of interest, either financial or nonfinancial, that may have influenced this research.

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## ENDNOTES

- <sup>1</sup> Pre-COVID-19, the amount of income a person could earn before their payment rate was reduced is \$AU106 per fortnight.
- <sup>2</sup> Mutual obligations include looking for work or engaging in activities that will assist with finding work in future.
- <sup>3</sup> *NAVA* subscribers register for free to receive regular arts sector information, whereas a *NAVA* financial membership offers a range of professional services, resources and programmes for a fee.
- <sup>4</sup> See <https://www.bsg.ox.ac.uk/research/research-projects/COVID-19-government-response-tracker>
- <sup>5</sup> Note that all dollar amounts are in Australian dollars.
- <sup>6</sup> Housing stress is defined as more than 30 per cent of income dedicated to housing costs.
- <sup>7</sup> The Kessler Psychological Distress scale is a 10-item questionnaire and is based on questions about anxiety and depressive symptoms that a person has experienced in the most recent 4-week period.

- <sup>8</sup> How the COVID-19 pandemic specifically affected the mental health of many working in the arts has been discussed by Flore et al. (2020).
- <sup>9</sup> A logistic or logit regression allows the estimation of a regression with a binary-dependent variable. One aspect of this method is the need to apply a transformation of the estimated coefficients to obtain the marginal effects (e.g. Chapter 14, in Wooldridge et al., 2021).

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## APPENDIX

TABLE A1 Regression results for visual artists.

Variable	Decline in income		Decline in mental health	
	Estimated coefficients	t-Statistic	Estimated coefficients	t-Statistic
Non-binary	0.116	0.26	0.690	1.50
Female	0.0845	0.49	0.459***	2.63
30–50 years	0.695**	2.35	−0.711**	−2.27
50–70 years	1.213***	4.07	−1.336***	−4.31
70+	1.247***	3.23	−1.838***	−4.57
Victoria	−0.0272	−0.10	0.393	1.53
New South Wales	0.0391	0.15	−0.364	−1.43
Western Australia	−1.008**	−2.57	−0.810**	−2.09
Queensland	−0.247	−0.78	−0.393	−1.27
South Australia	−0.580	−1.52	−0.646*	−1.74
>50% income is derived as an artist	0.560***	3.36	0.121	0.74
Visual arts worker	0.228	1.49	0.318**	2.11
Applied and received <i>JobSeeker</i>	1.322***	2.86	1.186***	2.66
Applied and ineligible <i>JobSeeker</i>	0.302	1.56	0.0702	0.37
Did not apply <i>JobSeeker</i>	−0.189	−1.11	0.0288	0.17
Employer applied and received <i>JobKeeper</i>	0.0780	0.36	−0.0188	−0.09
Employer applied and ineligible <i>JobKeeper</i>	0.189	0.43	−0.338	−0.78

TABLE A1 (Continued)

Variable	Decline in income		Decline in mental health	
	Estimated coefficients	<i>t</i> -Statistic	Estimated coefficients	<i>t</i> -Statistic
Employer did not apply <i>JobKeeper</i>	-0.00775	-0.04	0.233	1.33
Reduced hours for arts practice	0.519***	3.22	0.150	0.94
Reduced ability to sell	0.771***	4.82	0.398**	2.47
Delayed artist payments	0.376*	1.69	0.372*	1.70
Cancellation or postponement contracted or commissioned work	0.845***	5.45	0.0389	0.25
Reduced ability to exhibit	0.304	1.59	0.0863	0.46
Reduced professional development	0.224	1.43	0.226	1.47
Loss of supports from arts organisations	0.201	1.17	0.443***	2.58
COVID-19 travel restrictions	0.391**	2.30	0.275	1.63
Developed online methods to present work	-0.239	-1.56	-0.277*	-1.82
Created digital artwork	-0.294	-1.53	0.00752	0.04
Undertook visual arts learning opportunities	0.108	0.63	-0.260	-1.54
Undertook visual arts teaching opportunities	-0.358	-1.64	-0.480**	-2.20
Experienced housing stress			0.633***	3.94
Intercept	-2.932***	-6.59	-0.359	-0.83
Pseudo $R^2$	.164		.151	
(LR) Chi-squared test	237.549***		218.661***	
<i>N</i>	1047		1047	

Note: \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

TABLE A2 Regression results for visual arts workers.

Variables	Decline in income		Decline in mental health	
	Estimated coefficients	<i>t</i> -Statistics	Estimated coefficients	<i>t</i> -Statistics
Non-binary	0.0758	0.12	0.372	0.57
Female	0.418	1.59	0.225	0.88
30–50 years	0.449	0.99	–0.706	–1.45
50–70 years	1.093**	2.42	–1.544***	–3.20
70+	1.408**	2.40	–1.838***	–3.04
Victoria	0.285	0.66	0.459	1.12
New South Wales	0.390	0.94	–0.237	–0.60
Western Australia	–0.516	–0.89	–0.893*	–1.65
Queensland	0.0975	0.20	–0.579	–1.21
South Australia	0.359	0.65	–0.275	–0.51
Reduction in work hours	0.941***	4.25	0.253	1.13
Loss of contracted work	1.604***	7.26	0.564**	2.45
Applied and received <i>JobSeeker</i>	1.806**	2.54	1.782**	2.16
Applied and ineligible <i>JobSeeker</i>	0.592**	2.10	–0.212	–0.71
Did not apply <i>JobSeeker</i>	–0.145	–0.54	0.186	0.69
Employer applied and received <i>JobKeeper</i>	–0.192	–0.59	–0.461	–1.41
Employer applied and ineligible <i>JobKeeper</i>	0.226	0.36	–0.130	–0.17
Did not apply <i>JobKeeper</i>	–0.0286	–0.11	–0.0335	–0.13
>50% is derived from work as arts worker	–0.0907	–0.39	–0.0734	–0.32
Experience housing stress			0.640***	2.66
Intercept	–2.899***	–4.37	0.680	1.06
Pseudo $R^2$	.210		.121	
(LR) Chi-squared test	141.677***		69.729***	
<i>N</i>	499		417	

Note: \* $p < .1$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ .

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**Jenny Lye** is an associate professor/reader in the Department of Economics, University of Melbourne. She has an extensive international publication record in areas of theoretical and applied econometrics and statistics. Her recent research includes publications in the statistical analysis of issues in tertiary education and she is currently researching in the area of cultural economics. She is currently receiving funding from the Australian Research Council for the Linkage Project “Ambitious & Fair: Strategies for a Sustainable Visual Arts Sector”.

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**Kate MacNeill** is a Professor in Arts and Cultural Management. With a background in law and economics she had experience in policy work in the government and non-government sector, before obtaining a PhD in Art History. Her research is in the areas of law and artistic practice, leadership in the arts and cultural sector, and ethics and creative practices. She is receiving Australian Research Council funding for the project: *Ambitious & Fair: Strategies for a Sustainable Visual Arts Sector*.

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