**ORIGINAL ARTICLE** 

# **Returning to the nest: Emerging adults living with** parents during the COVID-19 pandemic

Jennifer Prattley<sup>1</sup> | Tracy Evans-Whipp<sup>1,2</sup> | Karlee O'Donnell<sup>1,3</sup> Clement Wong<sup>1</sup> | Brendan Quinn<sup>1,4,5</sup> | Bosco Rowland<sup>1,6</sup>

<sup>1</sup>Australian Institute of Family Studies, Southbank, Victoria, Australia

<sup>2</sup>Department of Paediatrics, Royal Children's Hospital and The University of Melbourne, Parkville, Victoria, Australia

<sup>3</sup>School of Applied Psychology, Griffith University, Gold Coast, Queensland, Australia

<sup>4</sup>Behaviours and Health Risks Program, Burnet Institute, Melbourne, Victoria, Australia

<sup>5</sup>Department of Epidemiology & Preventive Medicine, Monash University (Alfred Hospital), Melbourne, Victoria, Australia

6Centre for Social, Early and Emotional Development, School of Psychology, Faculty of Health, Deakin University, Geelong, Victoria, Australia

#### Correspondence

Jennifer Prattley, Australian Institute of Family Studies, Southbank, Victoria, Australia Email: jennifer.prattley@aifs.gov.au

**Funding information** Australian Institute of Family Studies

#### Abstract

Changes in the working, study and social lives of emerging adults due to the COVID-19 pandemic have led to greater need for external supports. Many who lived independently may have sought that support by returning to live with parents. This study identifies factors associated with returns made between 2019 and 2020. It describes supports needed and obtained, relationships between parents and their resident emerging adults and identifies correlates of poor coping and high psychological distress. Data from the Longitudinal Surveys of Australian Youth and the Longitudinal Study of Australian Children were used and showed half of the emerging adults who moved did so due to COVID-19 restrictions. Loss of work and increased need for emotional and financial support were key drivers of moves. Nineteen per cent who returned found spending more time with family difficult and over half did not have their support needs fully met, increasing their odds of poor coping at that time (OR = 2.9, 4.3, respectively) and subsequent psychological distress (OR = 6.0). Families were an important source of support but could not necessarily mitigate all challenges; for some emerging adults, returning to live with parents gave rise to additional difficulties which negatively affected mental health.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2022 The Authors. Australian Journal of Social Issues published by John Wiley & Sons Australia, Ltd on behalf of Australian Social Policy Association.

#### **KEYWORDS**

Coronavirus pandemic, emerging adult, mental health, parentchild relationship, parental support

#### **1** | INTRODUCTION

As the COVID-19 pandemic emerged in early 2020, many countries introduced strict public health measures to control the spread of the virus. In March 2020, Australia imposed a nation-wide lockdown; people were only allowed to leave their homes for limited and strictly defined reasons including shopping, caregiving, exercise and essential work. This resulted in sudden disruption to employment, study and social connections. The longer-term consequences of these restrictions on individuals' social and emotional lives are not yet fully understood and will likely vary by individual across his/her lifecourse. This research focuses on emerging adults in Australia, aged 19–21 in 2020. Specifically, we concentrate on those who returned to live with parents during that time, after previously living away from the parental home. Understanding housing transitions and the role of parents and family in providing support is important for identifying those at risk of negative outcomes and for informing strategies for future disruptive events.

#### **1.1** | Emerging adulthood and leaving the parental home

"Young or emerging adulthood" is a phase in the lifecourse following adolescence where individuals take on "adult" roles and responsibilities and have increasing independence and autonomy (Arnett, 2000). While there is no clear consensus on the age range covered, this term widely refers to individuals in their late teens and mid-to-late twenties (Sawyer et al., 2018). Frequent and significant changes in education, employment, residential settings and social landscapes also characterise emerging adulthood in addition to age (Côté, 2006; Scales et al., 2016).

Two key markers of developing autonomy and independence are transitioning out of the parental home and entering and establishing oneself in the workforce, both of which are influenced by societal and economic conditions (Preetz et al., 2021; Scales et al., 2016). In recent decades, moves out have occurred at an older age, resulting in higher proportions of young people living with parents into their twenties or later (Tomaszewski et al., 2017). In 2001, 47% of men and 37% of women aged 18–29 in Australia lived with their parents; in 2017 these figures were 56% and 54%, respectively (Vera-Toscano, 2019).

#### **1.2** | Pandemic disruptions during the emerging adult phase

The COVID-19 pandemic resulted in disruptions to daily life for people across all age groups. Emerging adults are a particularly vulnerable population due to the often precarious nature of their employment and the importance of quality peer interactions to their well-being (Arnett, 2000; Subrahmanyam et al., 2020), which can protect against depression and anxiety (Magson et al., 2021). Periods of unemployment in this age group have been linked to concurrent psychological distress (Clark & Lepinteur, 2019), as well as future unemployment and ill-health (Franzén & Kassman, 2005). During the pandemic, Australian emerging adults have been especially disadvantaged compared with older adults by changes to employment (Australian Institute of Health and Welfare, 2021a;O'Keeffe et al., 2021). One study of over 7000 Australian adults estimated that 21% of those under 30 were made redundant or lost

their job or business due to COVID-19 compared with under 10% of the entire sample (Hand et al., 2020).

Research suggests reductions in physical peer interactions during COVID-19 restriction periods were associated with increased loneliness and lower social well-being (Biddle et al., 2020; Killgore et al., 2020), which in turn was associated with stress, anxiety and depression (Horigian et al., 2021; Lee et al., 2020). These impacts were particularly apparent among those living in states with higher COVID-19 case rates and more severe or multiple restriction periods (i.e. Victoria and New South Wales [NSW]) (Biddle & Gray, 2021).

#### **1.3** | Emerging adults returning to live with parents

Disruptions during the COVID-19 pandemic gave rise to an increased need for both financial and non-economic support among emerging adults from parents, other family members and government (Hand et al., 2020). Parents and family can promote resilience and provide support during times of difficulty and disaster (Banks & Weems, 2014; Swartz et al., 2011), and family connectedness is a protective factor against physical and mental health conditions (Viner et al., 2012). Hence, while returning to live with parents could be conceived as a backwards step in independence (Scales et al., 2016), it also represents a shift within an emerging adult's support network towards aid and assistance in times of need. Returning to live with parents could allow emerging adults to continue or commence positive developmental pathways (Scales et al., 2016) although as Fingerman et al. (2012) suggest not all necessarily receive the desired level of support. In their study of grown children, which included some residing with parents, one in seven received less parental support than they would like.

Evidence from before the pandemic suggested the likelihood of returning to live with parents, and of any resultant positive outcomes, was dependent on factors including emerging adults' relationship status; gender; family relationships; financial, housing, health and socioeconomic backgrounds of parents and location (Burn & Szoeke, 2016). Single emerging adults are more likely than those married or in de facto relationships to return to living with parents (Copp et al., 2017; Warner, 2013), as are females (Vera-Toscano, 2019). Parents with higher socioeconomic backgrounds and with higher levels of education may be better placed to support emerging adults to live independently (South & Lei, 2015; Stone et al., 2014).

The Australian government implemented financial support programmes to alleviate the impact of COVID-19-related public health measures on the labour market and personal incomes, including the "JobKeeper" subsidy and the "Coronavirus Supplement" (see Australian Institute of Health and Welfare (2021b) and Whiteford (2020) for details). Receipt of such payments may have been sufficient for some individuals to remain living out of the parental home. Alternatively, ineligibility or the extent of costs not covered might have increased the reliance of some emerging adults on parental resources, and the likelihood of returning to live with parents where continued independent living was not supported. Those who returned to live with parents may have faced differential employment outcomes as opportunities are, to an extent, determined by location (Gustafsson, 2021), which is often influenced by family wealth.

There is a growing body of literature examining the consequences on well-being of emerging adults residing with parents (Copp et al., 2017). For some, living with parents may negatively impact depressive symptoms (Copp et al., 2017) and subjective well-being, although this can be mitigated if there is a degree of autonomy and free choice over the move (Kins et al., 2009). Given the unforeseen and sudden introduction of pandemic-related restrictions, many emerging adults may have had limited choice or control over their circumstances and any resulting housing transition, impacting their ability to cope and psychological well-being. Furthermore, additional time spent with parents or family could cause tension with the emerging adult, rather than reduce stress. This could arise from limited opportunities for those living

WILEY-

with parents and under pandemic restrictions to socialise away from parents and conduct work or study; or conflict over rent or bills (Preetz et al., 2021). Existing evidence of relationships between emerging adults residing with parents is mixed, with instances of minimal conflict but also reports of negative feelings and irritation (Casares & White, 2018; Fingerman et al., 2017).

### 1.4 | Aims and research questions

Using data from the Longitudinal Surveys of Australian Youth (LSAY) and the Longitudinal Study of Australian Children (LSAC), this article investigates experiences of single emerging adults who began to live with parents during the first year of the COVID-19 pandemic. The aims were to:

- 1. Identify factors associated with moving to live with parents in 2019/20 and determine whether they differed between emerging adults who made this move due to COVID-19 restrictions and those who did not.
- 2. Investigate the types of support needed by emerging adults who began living with their parents during the first period of restrictions introduced between March and May 2020.
- 3. Describe the relationships between parents and their children who began living with them during the restriction period.
- 4. Examine the extent to which emerging adults who began living with their parents coped during the restriction period and their levels of psychological distress towards the end of 2020 as the pandemic progressed.
- 5. Identify factors associated with poor coping and with high psychological distress.

# 2 | METHODOLOGY

### 2.1 | Data

The structure of the LSAY and LSAC studies is detailed elsewhere (New et al., 2020). The studies received ethics approval from the Australian Institute of Family Studies Ethics Committee. In brief, LSAY follows several cohorts of young Australians annually from their mid-teens to mid-twenties across a 10-year period. This research uses Waves 5 and 6 from the 2015 cohort who were aged 15 at commencement. Most Wave 5 interviews took place between August and December 2019 when participants were typically 19 years old. Wave 6 was administered between June and December 2020 when most were 20 years old. LSAC is a biennial, multi-informant survey of two cohorts of children which commenced in 2004. This paper uses information from the kindergarten (K) cohort, who were 20/21 at Wave 9C1 in 2020. This Wave collected information about two periods of time: the initial restriction period March–May 2020, and when the survey was administered, between October and December 2020.

The Longitudinal Surveys of Australian Youth and the Longitudinal Study of Australian Children contain socioeconomic and demographic measures of the individual and their origin family throughout late adolescence and emerging adulthood. One key measure in both studies asked whether a residential change occurred specifically due to the COVID-19 pandemic, thus enabling the following analyses. LSAY provided a larger sample, which was used to model residential transitions, while LSAC contained nuanced information on family relationships and multi-dimensional measures of support to better characterise such transitions. LSAY Wave 5 and LSAC Wave 9C1 had high rates of attrition, which limited

statistical power to identify genuine effects. Survey weights did not effectively address this due to weak links between model predictors and weighting variables, treatment of extreme weight values in the studies and possible inapplicability of weights to surveys conducted online (Haddad et al., 2022; Lim, 2011; Mohal et al., 2021; The Longitudinal Study of Australian Children, 2021). The Household, Income and Labour Dynamics in Australia (HILDA) dataset was considered but discounted as participants' residential moves could not be attributed to COVID-19 restrictions.

#### 2.2 | Measures

Methods are described separately for LSAY and LSAC below.

### 2.2.1 | Moved to live with parents and reason for change

**LSAY** In each of Waves 5 (2019) and 6 (2020) an indicator of living with parents or not living with parents was derived (see Appendix A for details). Emerging adults who changed status from not living with a parent in 2019 to living with a parent in 2020 were designated as having moved to live with parents between the two surveys. There was no precise date available as to when the transition occurred, and it is possible that individuals made more than one such transition during that period.

Wave 6 respondents were asked to indicate the nature of any changes to their housing situation that they had "experienced due to government restrictions during the COVID-19 pandemic." This included "you had to move in with your parents or other relatives." Of the individuals identified as having moved to live with parents, those who indicated "yes" to this item were designated as having moved because of restrictions.

**LSAC** Respondents were asked whether they had moved house and/or changed the people they lived with during the restriction period March–May 2020. Those who responded "Yes" were asked whether they "began to live with their parents or their parents moved to live with them" ("Yes" or "No"). They were asked whether beginning to live with parents was "a result of coronavirus restrictions," with response options of 1 =Entirely, 2 =Partly and 3 =Not at all.

#### 2.2.2 | Employment and work

**LSAY** A categorical variable summarising work history was based on set of items from Wave 6 that indicated whether an individual had been in work for each month between March and June 2020 inclusive. This period was chosen because pandemic restrictions began in March and June was the latest month for which all LSAY respondents were asked about work activity. Categories were as follows: 1 = Worked continuously or started work (i.e. changed status from not working to working); 2 = Not worked in any month and 3 = Left work (i.e. changed status from working to not working).

**LSAC** One indicator captured changes to work during the initial restriction period (1 = Experienced a loss or temporary break from paid work, 2 = Did not have that experience; see Appendix A for details). A second captured respondents' self-reported employment status at time of interview (1 = Full-time employee, part-time employee, self-employed, employed unpaid in family business; 2 = Unemployed, seeking employment; 3 = Unemployed, not seeking employment).

5

WILFY-

# 2.2.3 | Types of support needed

The Longitudinal Surveys of Australian Youth participants were asked whether, in the past 12 months, they needed each of the following types of support from parents or other family members: financial; advice; emotional; practical assistance; technical support or guidance. Further explanation is in Appendix A. Response options for each were 1 = Yes, 2 = No. Those who replied "yes" were asked how much support of that type they needed since the beginning of the restriction period compared with usual, with choices ranging from 1 = Needed much more support to 5 = Needed much less support. For each type of support, an indicator was constructed with 1 = No support needed in last 12 months; 2 = Support needed in last 12 months but no change or less needed than usual; 3 = Support needed and more than usual.

Participants were also asked how often they felt they needed support or help but could not get it from anyone during the restriction period (1 = Very often; 2 = Often; 3 = Sometimes; 4 =Never).

### 2.2.4 | Worries and concerns during restriction period

The Longitudinal Study of Australian Children respondents were asked to rate how difficult each of the following was for them during the restriction period (1 = Very difficult to 5 = Very easy): not seeing friends/family in person; having to spend more time with family; not knowing how long isolation would last; missing events that were important to them.

### 2.2.5 | Parent-child relationship

As stated above, emerging adults were asked how difficult they found having to spend more time with family. Parents were asked how often they and the study child disagreed and fought; got on each other's nerves; yelled at each other; and argued and stayed angry at each other, with options from 1 = N ot at all to 5 = Almost all or all of the time. Questions were asked to families where the emerging adult was living with a parent at the time of the interview and were asked firstly about their current relationship, and secondly, retrospectively about the restriction period.

# 2.2.6 | Coping and psychological distress

The Longitudinal Study of Australian Children respondents were asked overall, how well they thought they coped during the restriction period (1 = Not at all; 2 = A little; 3 = Fairly well; 4 = Very well; 5 = Extremely well).

Psychological distress was assessed using the Kessler Psychological Distress scale (K10) (Kessler et al., 2002). Ten items asked about experience of anxiety and depression in the 4 weeks prior to interview. Scores were summed and totals categorised as: Very high (scores of 30–50), High (22–29), Moderate (16–21) or Low (10–15) (Australian Bureau of Statistics, 2012).

### 2.2.7 | Demographic measures

A number of other measures from LSAY and/or LSAC were used in the analyses and summarised here. Further details are available in Appendix A. Briefly, indicators from both surveys

WILEY

were: sex (1 = Male, 2 = Female); single status (1 = Single, separated, divorced, widowed, 0 =Otherwise); state of residence (1 = NSW; 2 = Victoria; 3 = Combined other states).

Unique to LSAY were indicators of parental education (1 = Tertiary level or higher, 0 = Lower than tertiary); study status (1 = Full or part-time, 0 = Not studying); receipt of Youth Allowance/ABSTUDY (0 = No, 1 = Yes) and government payments, including JobKeeper (0 = No, 1 = Yes); provision of care for at least 1 month between March and June 2020 (1 = Yes, 0 = No), and who care was for (including own child, parent[s], other adult relative). Self-assessment of general health at the 2019 interview was categorised as 1 = Excellent, very good or good, 2 = Fair or poor. The same item was available from the 2020 survey, and responses to both were used to derive an indicator of change in health (1 = Improved; 2 = Same, 3 = Worse).

From LSAC, unique measures were socioeconomic status (1 = High advantage, 2 = Middle, 3 = Low advantage); study stress during initial restriction period (0 = Average, low, very low or did not study; 1 = High or very high); receipt of JobKeeper or the Coronavirus Supplement (1 = Yes, 0 = No); provided unpaid care as at time of interview (1 = Yes, 0 = No).

#### **2.3** | Sample selection and analysis

**LSAY** The LSAY analytic sample comprised single individuals who were living away from their parental home at time of interview in 2019. In the first stage of sample selection, individuals who were single at both their 2019 and 2020 interviews were selected (N = 2532). The sample was then restricted to those not living with a parent in 2019 (N = 486). Each of these respondents had a known residential status for 2020; missing data on other measures ranged from 1.0% to 1.6%. Eighteen cases with missing data were removed from subsequent analysis (see Appendix A for details).

**LSAC** The LSAC sample was identified from positive responses to the item "began to live with their parent(s) or their parents moved to live with them," detailed above (N = 105). Missing data on variables ranged from 1.0% to 8.6%, and cases affected were removed from the analysis. See Appendix A for details.

#### 2.4 | Analytic methods

We firstly calculated descriptive characteristics of the LSAY and LSAC samples according to whether respondents moved to live with parents and whether that move was attributable to COVID-19 restrictions.

Next, to address Aim 1, a multinomial logistic regression model was constructed to identify factors associated with moving to live with parents. LSAY data were used due to the larger sample size, availability of items indicating living arrangements prior to the pandemic, and monthly data on work. Outcome categories were as follows (1) not living with parents in 2020, assumed to have made no transition (2) moved to live with parents in 2020, attributed move to pandemic restrictions and (3) moved to live with parents in 2020, did not attribute move to pandemic restrictions.

Descriptive and regression methods were used to address Aims 2–5, using LSAC data about support needs, parent–child relationships and experiences during the initial COVID-19 restriction period. A series of logistic regression models examined firstly, associations with coping at that time and secondly, the presence of high psychological distress 7–9 months later. Each model was adjusted for sex, socioeconomic status and state of residence.

Analysis was undertaken in the R software environment (R Core Team, 2021), and data were unweighted.



#### 3 | RESULTS

#### **3.1** | Sample descriptions

**LSAY** Table 1 shows unweighted selected characteristics of the single emerging adults who were not living with parents in 2019 (N = 486), as well as according to whether they were living with parents in 2020 or had moved, and the reason for moving.

Those not living with parents in 2019 were majority female, full-time students and had tertiary-educated parent(s). Most had worked in the March to June 2020 period with over half (55.6%) having worked continuously or started work and 13.2% having left work during that time.

In this sample, 23.5% of respondents moved to live with parents between 2019 and 2020. Half of them (11.9% of those sampled) attributed the change to restrictions imposed during the COVID-19 pandemic. Respondents living in NSW or Victoria were over-represented in this group as were those who had not worked or left work between March and June 2020.

**LSAC** Ninety per cent of respondents who began living with their parents reported the change was either entirely (n = 67, 63.8%) or partly (n = 27, 25.7%) due to coronavirus restrictions. Table 2 contains selected characteristics of those who began living with parents during the initial restriction period (March–May 2020). Measures refer to status during that period, time of interview (Oct–Dec 2020) or both.

	Total (N = 486)		Not living with parents 2020 $(N = 372)$		Moved to live with parents due to restrictions (N = 58)		Moved to live with parents not due to restrictions (N = 56)	
	n	%	п	%	n	%	n	%
Female	287	59.1	220	59.1	35	60.3	32	57.1
Lived in NSW or Victoria	192	39.5	140	37.6	28	48.3	24	42.9
Work history March–June 2020								
Worked continuously or started work	270	55.6	211	56.7	24	41.4	35	62.5
Not worked any month	152	31.3	116	31.2	23	39.7	13	23.2
Left work	64	13.2	45	12.1	11	19.0	8	14.3
Study status 2020 interview								
Full-time	364	74.9	287	77.2	41	70.7	36	64.3
Part-time	23	4.7	18	4.8	3	5.2	2	3.6
Not studying	94	19.3	64	17.2	13	22.4	17	30.4
Received government payment	139	28.6	116	31.2	8	13.8	15	26.8
Parent education								
Tertiary level	374	77.0	286	76.9	47	81.0	41	73.2
Secondary level or below	104	21.4	80	21.5	10	17.2	14	25.0
Provided unpaid care for others March– June 2020	54	11.1	34	9.1	10	17.2	10	17.9

**TABLE 1** Selected characteristics of LSAY analytic sample<sup>a</sup> at time of 2019 interview (aged 19) and according to housing status in 2020 (aged 20)

Source: Y15 cohort, Waves 5 and 6.

<sup>a</sup>Single individuals living away from parental home in 2019.

	During restriction period March–May 2020		Time of interview Oct–Dec 2020	
	n	%	n	%
Female	79	75.2		
Lived with parents	105	100	52	49.5
High/very high psychological distress			47	44.8
Lived in NSW or Vic	52	49.5	48	45.7
Employment status				
Employed	50	47.6	71	67.6
Unemployed, not seeking employment	24	22.9	18	17.1
Unemployed, seeking employment	28	26.7	14	13.3
Loss or temporary break from paid work	31	29.5		
Received JobKeeper or Coronavirus Supplement	55	52.4		
Coped not at all or little	27	25.7		
Socioeconomic status				
High advantage			19	18.1
Middle			55	52.4
Low advantage			27	25.7

**TABLE 2** Descriptive statistics of 20/21-year olds who began living with parents during restriction period (n = 105)

Source: LSAC K cohort Wave 9C1.

Three-quarters of the sample were female and half lived with parents at time of interview. More participants were employed at the time of survey than during the restriction period (67.6% vs. 47.6%). One-quarter of the sample reported poor coping during the restriction period and 44.8% high/very high psychological distress at time of interview.

#### **3.2** | Factors associated with moving to live with parents

Table 3 presents results for key variables from the multinomial logit regression model predicting the odds of being in each of the two categories of returning to live with parents between time of interview in 2019 and 2020, relative to not living with parents in 2020. Results for control variables are in Appendix A.

After controlling for all variables in the model, results indicate those who were significantly most likely to move to the parental home due to COVID-19 restrictions lived in Victoria (RRR = 2.030, p = 0.059), had left work during the first 4 months of the pandemic (RRR = 2.148, p = 0.041) or were continuously out of work during that time (RRR = 2.095, p = 0.035). Government payments (e.g. JobKeeper) decreased the likelihood of moving to live with parents due to restrictions by approximately 68.3% (RRR = 0.317, p = 0.010). No association between these factors and moving to live with parents was found among emerging adults who moved for reasons other than COVID-19 restrictions. Those studying were less likely to move than non-students, irrespective of reason.

Among the individuals who moved to live with parents for other reasons, a significant proportion provided care for others (RRR = 2.683, p = 0.019) in the first 4 months of the pandemic. There was some evidence of this among those who moved due to restrictions (RRR = 2.446, p = 0.063). It was not possible to determine the extent to which caring activities took place prior

WILF

	Moved to live with parents due to restrictions $(N = 55)$			Moved to large transmission of the second se	Moved to live with parents not due to restrictions $(N = 52)$		
	Reference	Reference: Not living with parents (N = 361)					
	RRR	SE	<i>p</i> -Value	RRR	SE	<i>p</i> -Value	
Female (ref: male)	1.194	.313	.572	.911	.285	.764	
State of residence (ref: combin	ed other s	states and territo	ries)				
NSW	1.101	.407	.814	1.041	.435	.923	
Victoria	2.030	.374	.059*	1.665	.646	.188	
Studying at time of interview 2020 (ref: not studying)	.477	.419	.077*	.474	.176	.045**	
Work history March–June 202	20 (ref: sta	ble or started wo	ork)				
Transitioned out of work	2.148	.840	.041**	1.122	.501	.796	
Consistently out of work	2.095	.351	.035**	.745	.280	.435	
Received government payment (ref: no)	.317	.444	.010**	.650	.236	.235	
Provided unpaid care for others (ref: no)	2.446	1.075	.063*	2.683	1.129	.019**	
Constant	.634	.677	.670	.480	.437	.420	

TABLE 3 Parameter estimates for multinomial logit regression model for moving to live with parents

*Note*: Model controls for general health 2019; change in general health 2019–2020; receipt of Youth Allowance/ABSTUDY; parent education.

Source: LSAY Y15 cohort, Waves 5 and 6.

Abbreviations: RRR = relative risk ratio; SE = standard error.

\*Denotes *p* < 0.1; \*\**p* < 0.05; \*\*\**p* < 0.01.

to a move occurring and when the emerging adult was living away from the parental home, or whether this finding reflects care given after the transition. Regardless, these results suggest provision of care occurred more frequently among those who moved to live with parents than their peers who did not. Across all who provided care (N = 54), 20.4% did so for their own parent(s), 44.4% for a child relative, and 29.6% for an adult relative who was not a parent (data not shown).

# **3.3** | Types of support needed by emerging adults who began living with parents

Seventy per cent of emerging adults who began living with parents needed at least four types of support from parents or family in the previous 12 months (Table 4), most commonly emotional support (81.9%), advice (89.5%) and financial assistance (69.5%).

Higher levels of support were needed by those who began living with parents across all domains since COVID-19 restrictions began. Compared with usual (i.e. prior to restrictions starting), more than half (53.3%) needed more emotional support, 51.4% needed more advice and 35.2% more financial support.

Nearly two-thirds (63.8%) of emerging adults who began living with parents reported they at least sometimes needed support or help but could not get it from anyone during the initial restriction period.

	Financia	al	Emotior	nal	Advice		Technic	al	Practica	ւ <b>l</b>
	n	%	n	%	n	%	n	%	n	%
Needed in the last 12 months	73	69.5	86	81.9	94	89.5	53	50.5	63	60.0
Needed in last 12 months, more than usual since restrictions started	37	35.2	56	53.3	54	51.4	17	16.2	27	25.7
Needed in last 12 months, same as usual since restrictions started	24	22.9	29	27.6	36	34.3	36	34.3	32	30.5
Needed in last 12 months, less than usual since restrictions started	10	9.5	1	1.0	4	3.8	0	0	3	2.9

**TABLE 4** Forms of support needed from parents or family by those who began living with parents during the restriction period (N = 105)

*Note*: Figures may not add to 100% due to missing data. Source: LSAC K cohort Wave 9C1.

#### 3.4 | Relationships between parents and emerging adult

For some emerging adults, the move to live with parents during the restriction period was short-term whereas for others, it was a longer-term arrangement. LSAC data showed that half of those aged 20/21 who began living with their parents during that time were living with them 7–9 months later. The experience was not easy for all; 19.0% of those who began living with parents found having to spend more time with family difficult or very difficult. Half (50.5%) found it easy or very easy and 23.8% neither easy nor difficult.

Parent/child relationships were also studied from the perspective of the parent (n = 42 after cases removed for non-response). Responses relating to the restriction period suggested a possible decline in parent/child relationships over time (Table 5). A higher proportion replied "not at all" to items about bugging each other or getting on each other's nerves (47.6%), yelling (81.0%) and arguing and staying angry (90.5%) during the initial restriction period than at time of interview. Appendix A contains more details on parent responses to all four items.

Despite the above, results indicated generally positive relationships in late 2020. Only one parent indicated disagreements happened "pretty often." Half responded "not at all" to disagreeing or fighting; 35.7% gave that response to bugging each other or getting on each other's nerves; 71.4% for yelling at each other and 36% for arguing and staying angry for a long time. The remainder of responses were "a little" or "sometimes."

# 3.5 | Factors associated with coping during the initial restriction period March-May 2020

One-quarter of emerging adults who began living with parents in the initial restriction period reported that overall, they coped "not at all" or "a little" during that time; that is, they coped

WILF

**TABLE 5** Responses to items on parent/child relationships from parents residing with study participant (N = 42)

		Restrict	ion period	Time of interview	
		March-May 2020		Oct–Dec 2020	
		n	%	n	%
Disagree and fight	Not at all	20	47.6	21	50.0
	A little/sometimes	21	50.0	20	47.6
Bug each other or get on	Not at all	20	47.6	15	35.7
nerves	A little/sometimes	22	52.3	27	64.3
Yell at each other	Not at all	34	81.0	30	71.4
	A little/sometimes	8	19.0	12	28.6
Argue and stay angry	Not at all	38	90.5	36	85.7
	A little/sometimes	4	9.5	6	14.3

Note: Figures may not add to 100% due to missing data.

Source: LSAC K cohort Wave 9C1.

less well than their peers who replied "fairly well" or better. Table 6 contains the results of models used to determine factors associated with not coping. Results for control variables are in Appendix A. Needing support but not receiving it at least sometimes was related to coping less well (OR = 3.450, p = 0.044), as was reported difficulties in spending more time with family (OR = 3.552, p = 0.028), not knowing how long the isolation period would be (OR = 5.392, p = 0.016) and not seeing friends or family (OR = 9.176, p = 0.038).

#### 3.6 | Factors associated with psychological distress Oct–Dec 2020

Around half of emerging adults who began living with parents during the restriction period were still doing so at the time of the survey. Those not with parents lived with others including partners, siblings, and non-relatives.

Results suggested an association between not coping well during the restriction period and psychological distress (Table 7; OR = 7.235, p < 0.01). No evidence was found for a gender effect or differences across states (see Appendix A), nor according to employment status or provision of caring. Assuming that those living with parents at the time of survey did so continually since the restriction period and, therefore, spent longer in that living arrangement than their peers, results showed no association between the length of time spent living with parents and distress levels, on average.

### 4 | DISCUSSION

This research explored the transition of independently living emerging adults back to living with parents during the COVID-19 pandemic. We aimed to understand: (1) reasons for return; (2) the role of parents and family in providing support; (3) parent-child relationships and (4) who was at risk of having difficulty coping and poor mental health. Findings suggest parents and families played an important support role during the restriction period but did not always fulfil the needs of emerging adults, with consequences for coping and mental health. This paper contributes to an expanding body of literature concerning the well-being of emerging adults who reside with parents (Copp et al., 2017).

WIIFY

	Coped not at all/a little during restriction pe (ref: coped fairly well or better)		
	OR	SE	<i>p</i> -Value
High or very high study stress during restriction period (ref: average or lower)	.737	.364	.536
Had loss or temporary break from paid work during restriction period (ref: no)	.399	.238	.123
Employment status during restriction period (ref: employed)			
Not employed, not seeking work	1.445	.923	.564
Unemployed, seeking work	2.551	1.460	.102
Received JobKeeper or the Coronavirus Supplement	.763	.370	.577
At least sometimes needed support but did not get it during restriction period (ref: always got support when needed)	3.450	2.120	.044**
Difficult or very difficult spending more time with family during restriction period (ref: easy/very easy/neutral)	3.552	2.050	.028**
Difficult or very difficult not seeing friends or family during restriction period (ref: easy/very easy/neutral)	9.176	9.820	.038**
Difficult or very difficult having unknown isolation period	5.392	3.780	.016**

**TABLE 6** Parameter estimates from logistic regression models predicting coping during the COVID-19 restriction period among young adults who moved to live with parents

Source: LSAC K cohort, Wave 9C1, N = 105. Each model controls for sex, socioeconomic status, state of residence during restriction period.

\*Denotes *p* < 0.1; \*\**p* < 0.05; \*\*\**p* < 0.01.

(ref: easy/very easy/neutral)

Difficult or very difficult missing important events during

restriction period (ref: easy/very easy/neutral)

Financial factors emerged as a strong driver of returning to live with parents, with those who were out of work/had lost work or not in receipt of government payments more likely to return due to COVID-19 restrictions (Aim 1). Similar findings were observed in a study of emerging adults in the UK (Gustafsson, 2021). Victorian residence was also independently related to returning home. After the nationwide lockdown in March–May 2020, the state of Victoria experienced a second virus wave, resulting in a strict restriction period spanning July–October. This likely led to some other reasons necessitating returns, such as increased need for emotional support.

1.641

.976

.405

Indeed, findings show that large numbers of returning emerging adults needed more emotional support and advice from their parents/family since the start of restrictions (Aim 2), confirming results from other studies (Hand et al., 2020; Tam et al., 2021). However, nearly two-thirds of those who began living with parents felt they at least sometimes could not get necessary help or support, placing them at higher risk of poor coping during the initial restriction period. Thus, while families are acknowledged as important sources of assistance in times of need (Swartz et al., 2011), this research shows they cannot necessarily mitigate all challenges and as discussed below, familial involvement can give rise to additional difficulties.

Findings suggest the experience of emerging adults and parents being confined together may have negatively impacted parent-child relationships (Aim 3). The majority of returning emerging adults reported positive family experiences during the restriction period, but onefifth reported difficulties spending more time with family, and this was related to poor coping and subsequent psychological distress. Parent responses suggested a possible decline in relationship quality in half of cases where their resident offspring were still living with them several months after the restriction period. A follow-up study with a larger sample is needed

	High/very high psychological distress, Oct–Dec 2020 (ref: low/moderate)			
	OR	SE	<i>p</i> -Value	
High or very high study stress at time of interview (ref: average or lower)	2.234	.266	.061*	
Employment status time of interview (ref: employed)				
Not employed, not seeking work	2.517	1.470	.115	
Unemployed, seeking work	.658	.417	.509	
Lived with parents at time of interview (ref: yes)	1.176	.514	.710	
Household gets along poor or fair (ref: good or better)	0.269	0.234	0.132	
Provide unpaid care (ref: no)	.757	.484	.663	
Coped not at all or a little during restriction period (ref: coped fairly well or better)	7.235	4.060	.0004***	

 TABLE 7
 Parameter estimates from logistic regression models predicting psychological distress among emerging adults who moved to live with parents

Source: LSAC K cohort, Wave 9C1, N = 105. Each model controls for sex, socioeconomic status, state of residence at time of interview.

\*Denotes *p* < 0.1; \*\**p* < 0.05; \*\*\**p* < 0.01.

to fully understand the nature and extent of relationship changes between parents and coresident emerging adult children over the course of the pandemic.

In examining coping and psychological distress (Aims 4 and 5), this study highlights a potentially vulnerable group of emerging adults. Although most who returned to live with parents coped at least fairly well during the restriction period, one-quarter did not. Consistent with other studies suggesting high levels of psychological distress among emerging adults during the pandemic (Australian Institute of Health and Welfare, 2021b), a notable proportion (45%) reported high or very high psychological distress later in 2020. Congruent with evidence demonstrating difficulty with limited in-person interactions with non-household members during restriction periods (Biddle et al., 2020; Killgore et al., 2020; Lee et al., 2020), our results showed that respondents who moved to live with parents and who found it difficult to not see friends or some family members, tended to cope less well.

Findings from this study align with emerging research suggesting that COVID-19 restrictions and their consequences have implications for developmental trajectories of emerging adults (Shanahan et al., 2020; Vehkalahti et al., 2021). Emerging adulthood is a time when young people predominately draw on parents and peers for support (Scales et al., 2016); however for some, excessive time with parents was detrimental to coping. This may reflect perceived loss of independence in moving to live with parents and frustrations arising from shifting dynamics of parent–child relationships (Burn & Szoeke, 2016). For those who moved to live with parents, restrictions limited in-person interactions with friends or peers and thus access to associated support, potentially impacting the way emerging adults satisfied their social and emotional needs. Further research on emerging adults who coped less well and experienced high psychological distress will help determine whether unexpected/unforeseen returns to living with parents during the pandemic has longer-term implications for mental health and the establishment of traditional adult roles.

A notable strength of this study was the use of LSAY and LSAC datasets to gain insight into the experiences of emerging adults who moved to live with their parents during 2020. Results should, however, be interpreted with key limitations in mind. The emerging adult samples from each dataset differed in composition and, to an extent, findings might be biased by those differences. The LSAC sample may have included cases where the parent(s), rather than the child, moved and it was

VILEY

not possible to determine the number of cases affected. The individuals in LSAY who moved for reasons not related to restrictions may have moved for other pandemic-related reasons or due to unrelated issues. Sample and attrition bias may impact how representative the LSAY and LSAC samples are to the broader Australian emerging adult population and the relatively small sizes limited our ability to produce population-weighted estimates and conduct in-depth multivariate analyses. LSAC participants self-reported coping and distress levels and observed associations may be subject to related bias. Lastly, potentially important factors relevant to emerging adult-hood transitions were unavailable for examination; for example, relationship breakdown, parental health, study completion and access to government services.

# 5 | CONCLUSION

Compared with previous years, the COVID-19 pandemic resulted in greater numbers of Australian emerging adults returning to live with parents. This study provides novel insight into their early experiences and contributes to the literature by examining factors related to this change and resulting impacts on family relationships and mental health. Findings suggest that although a positive experience for many, for others, returning to live with parents was associated with negative outcomes. Further research on this group will inform intervention and prevention efforts aimed at improving the mental health of vulnerable emerging adults in the years following the pandemic.

#### AUTHOR CONTRIBUTIONS

Jennifer Prattley: Conceptualization; data curation; formal analysis; methodology; writing – original draft; writing – review and editing. Tracy Evans-Whipp: Conceptualization; methodology; writing – original draft; writing – review and editing. Karlee O'Donnell: Writing – original draft; writing – review and editing. Clement Wong: Writing – original draft; writing – review and editing. Brendan Quinn: Writing – review and editing. Bosco Rowland: Writing – review and editing.

#### ACKNOWLEDGEMENTS

Views expressed in this publication are those of the authors and may not reflect those of the Australian Institute of Family Studies or the Australian Government. Open access publishing facilitated by The University of Melbourne, as part of the Wiley - The University of Melbourne agreement via the Council of Australian University Librarians.

#### ORCID

Jennifer Prattley b https://orcid.org/0000-0001-5295-5413

#### REFERENCES

- Arnett, J.J. (2000) Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480.
- Australian Bureau of Statistics (2012). 4817.0.55.001 Information Paper: Use of the Kessler Psychological Distress Scale in ABS Health Surveys, Australia, 2007–08.
- Australian Institute of Health and Welfare. (2021a) COVID-19 and the impact on young people. Canberra: AIHW.
- Australian Institute of Health and Welfare. (2021b) *The first year of COVID-19 in Australia: direct and indirect health effects*. Canberra: AIHW.
- Banks, D.M. & Weems, C.F. (2014) Family and peer social support and their links to psychological distress among hurricane-exposed minority youth. *American Journal of Orthopsychiatry*, 84(4), 341–352.
- Biddle, N., Edwards, B., Gray, M. and Sollis, K. (2020). Tracking outcomes during the COVID-19 pandemic (August 2020) Divergence within Australia. The ANU Centre for Social Research and Methods
- Biddle, N. and Gray, M. (2021). Tracking wellbeing outcomes during the COVID-19 pandemic (August 2021). ANU Centre for Social Research and Methods

WILFY

- Burn, K. & Szoeke, C. (2016) Boomerang families and failure-to-launch: Commentary on adult children living at home. *Maturitas*, 83, 9–12. https://doi.org/10.1016/j.maturitas.2015.09.004
- Casares, D.R. & White, C.C. (2018) The phenomenological experience of parents who live with a boomerang child. *American Journal of Family Therapy*, 46(3), 227–243. https://doi.org/10.1080/01926187.2018.1495133
- Clark, A.E. & Lepinteur, A. (2019) The causes and consequences of early-adult unemployment: Evidence from cohort data. *Journal of Economic Behavior and Organization*, 166, 107–124.
- Copp, J.E., Giordano, P.C., Longmore, M.A. & Manning, W.D. (2017) Living with parents and emerging adults' depressive symptoms. *Journal of Family Issues*, 38(16), 2254–2276. https://doi.org/10.1177/0192513X15617797
- Côté, J.E. (2006) Emerging adulthood as an institutionalized moratorium: risks and benefits to identity formation. In: Arnett, J.J. & Tanner, J.L. (Eds.) *Emerging adults in America: Coming of age in the 21st century*. Washington, DC: American Psychological Association.
- Fingerman, K.L., Cheng, Y.-P., Wesselmann, E.D., Zarit, S., Furstenberg, F. & Birditt, K.S. (2012) Helicopter parents and landing pad kids: intense parental support of grown children. *Journal of Marriage and Family*, 74, 880–896.
- Fingerman, K.L., Huo, M., Kim, K. & Birditt, K.S. (2017) Coresident and noncoresident emerging adults' daily experiences with parents. *Emerging Adulthood*, 5(5), 337–350.
- Franzén, E.M. & Kassman, A. (2005) Longer-term labour-market consequences of economic inactivity during young adulthood: A swedish national cohort study. *Journal of Youth Studies*, 8(4), 403–424. https://doi. org/10.1080/13676260500431719
- Gustafsson, M. (2021). Boom(erang) Time?: An analysis of younger adults living with their parents. Resolution Foundation
- Haddad, C., Sacre, H., Zeenny, R.M., Hajj, A., Akel, M., Iskandar, K. et al. (2022) Should samples be weighted to decrease selection bias in online surveys during the COVID-19 pandemic? Data from seven datasets. BMC Medical Research Methodology, 22(1), 1–11.
- Hand, K., Baxter, J., Carroll, M. & Budinski, M. (2020) Families in Australia Survey: Life during COVID-19: Report no. 1: Early findings. Melbourne: Australian Institute of Family Studies. (aifs.gov.au)
- Horigian, V.E., Schmidt, R.D. & Feaster, D.J. (2021) Loneliness, mental health, and substance use among US young adults during COVID-19. *Journal of Psychoactive Drugs*, 53(1), 1–9. https://doi.org/10.1080/02791072.2020.1836435
- Kessler, R.C., Andrews, G., Colpe, L.J., Hiripi, E., Mroczek, D.K., Normand, S.L.T. et al. (2002) Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32(6), 959–976. https://doi.org/10.1017/S0033291702006074
- Killgore, W.D.S., Cloonan, S.A., Taylor, E.C. & Dailey, N.S. (2020) Loneliness: A signature mental health concern in the era of COVID-19. *Psychiatry Research*, 290, 113117.
- Kins, E., Beyers, W., Soenens, B. & Vansteenkiste, M. (2009) Patterns of home leaving and subjective well-being in emerging adulthood: the role of motivational processes and parental autonomy support. *Developmental Psychology*, 45(5), 1416–1429.
- Lee, C.M., Cadigan, J.M. & Rhew, I.C. (2020) Increases in loneliness among young adults during the COVID-19 pandemic and association with increases in mental health problems. *Journal of Adolescent Health*, 67, 714–717. https://doi.org/10.1016/j.jadohealth.2020.08.009
- Lim, P. (2011) Weighting the LSAY programme of international student assessment cohorts. Adelaide: NCVER.
- Magson, N.R., Freeman, J.Y., Rapee, R.M., Richardson, C.E., Oar, E.L. & Fardouly, J. (2021) Risk and protective factors for prospective changes in adolescent mental health during the COVID-19 pandemic. *Journal of Youth* and Adolescence, 50, 44–57.
- Mohal, J., Lansangan, C., Gasser, C., Taylor, T., Renda, J., Jessup, K. et al. (2021) Growing Up in Australia: The Longitudinal Study of Australian Children – Data User Guide, Release 9C1, June 2021. Melbourne: Australian Institute of Family Studies.
- New, J., Ribar, D., Ryan, C. & Wong, C. (2020) Financial outcomes in adolescence and early adulthood in australian longitudinal data. *The Australian Economic Review*, 53(1), 126–138.
- O'Keeffe, P., Johnson, B. & Daley, K. (2021) Continuing the precedent: Financially disadvantaging young people in "unprecedented" COVID-19 times. Australian Journal of Social Issues, 57, 70–87. https://doi.org/10.1002/ajs4.152
- Preetz, R., Filser, A., Broemmelhaus, A., Baalmann, T. & Feldhaus, M. (2021) Longitudinal changes in life satisfaction and mental health in emerging adulthood during the COVID-19 pandemic. Risk and protective factors. *Emerging Adulthood.*, 9, 602–617. https://doi.org/10.1177/21676968211042109
- R Core Team. (2021) *R: A language and environment for statistical computing.* Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/
- Sawyer, S.M., Azzopardi, P.S., Wickremarathne, D. & Patton, G.C. (2018) The age of adolescence. *The Lancet Child & Adolescent Health*, 2(3), 223–228. https://doi.org/10.1016/S2352-4642(18)30022-1
- Scales, P.C., Benson, P.L., Oesterle, S., Hill, K.G., Hawkins, J.D. & Pashak, T.J. (2016) The dimensions of successful young adult development: A conceptual and measurement framework. *Applied Developmental Science*, 20(3), 150–174. https://doi.org/10.1080/10888691.2015.1082429

WILEY

- Shanahan, L., Steinhoff, A., Bechtiger, L., Murray, A.L., Nivette, A., Hepp, U. et al. (2020) Emotional distress in young adults during the COVID-19 pandemic: evidence of risk and resilience from a longitudinal cohort study. *Psychological Medicine*, 1-10, 824–833. https://doi.org/10.1017/S003329172000241X
- South, S.J. & Lei, L. (2015) Failures-to-launch and boomerang kids: Contemporary determinants of leaving and returning to the parental home. *Social Forces*, 94(2), 863–890. https://doi.org/10.1093/sf/sov064
- Stone, J., Berrington, A. & Falkingham, J. (2014) Gender, turning points, and boomerangs: returning home in young adulthood in Great Britain. *Demography (Springer Nature)*, 51(1), 257–276. https://doi.org/10.1007/s1352 4-013-0247-8
- Subrahmanyam, K., Frison, E. & Michikyan, M. (2020) The relation between face-to-face and digital interactions and self-esteem: A daily diary study. *Human Behavior and Emerging Technologies*, 2(2), 116–127. https://doi. org/10.1002/hbe2.187
- Swartz, T.T., Kim, M., Uno, M., Mortimer, J. & O'Brien, K.B. (2011) Safety nets and scaffolds: Parental support in the transition to adulthood. *Journal of Marriage and Family*, 73(2), 414–429.
- Tam, W.W.S., Poon, S.N., Mahendran, R., Kua, E.H. & Wu, X.V. (2021) Impacts of COVID-19 and partial lockdown on family functioning, intergenerational communication and associated psychosocial factors among young adults in Singapore. BMC Psychiatry, 21(1), 595. https://doi.org/10.1186/s12888-021-03599-z
- The Longitudinal Study of Australian Children. (2021) LSAC Technical paper No. 25, Wave 9C1 Weighting and Non-Response. Authors: Australian Bureau of Statistics LSAC processing team and the Australian Bureau of Statistics Household Survey Methodology team.
- Tomaszewski, W., Smith, J.F., Parsell, C., Tranter, B., Laughland-Booÿ, J. & Skrbiš, Z. (2017) Young, anchored and free? Examining the dynamics of early housing pathways in Australia. *Journal of Youth Studies*, 20(7), 904–926.
- Vehkalahti, K., Armila, P. & Sivenius, A. (2021) Emerging adulthood in the time of pandemic: The COVID-19 crisis in the lives of rural young adults in Finland. *Young*, 29(4), 399–416.
- Vera-Toscano, E. (2019) Family formation and labour market performance of young adults. In: Wilkins, R., Laß, I., Butterworth, P. & Vera-Toscano, E. (Eds.) *The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 17.* Melbourne: Melbourne Institute: Applied Economic & Social Research. The University of Melbourne.
- Viner, R.M., Ozer, E.M., Denny, S., Marmot, M., Resnick, M., Fatusi, A. et al. (2012) Adolescence and the social determinants of health. *The Lancet*, 379(9826), 1641–1652. https://doi.org/10.1016/S0140-6736(12)60149-4
- Warner, E. (2013) Young adults returning home: Why the need for multiple Australian perspectives? *Journal of the Home Economics Institute of Australia*, 20(2), 2–8. https://doi.org/10.3316/informit.093113087792956
- Whiteford, P. (2020). When the Coronavirus Supplement stops, JobSeeker needs to increase by \$185 a week. The Conversation [Online]. Available: https://theconversation.com/when-the-coronavirussupplement-stops-jobse eker-needs-to-increase-by-185-a-week-138417. [Accessed 28 February 2022].

#### **AUTHOR BIOGRAPHIES**

Dr Jennifer Prattley is a social statistician in the Families, Society and Lifecourse Research team at the Australian Institute of Family Studies. She has extensive experience analysing Australian and international longitudinal cohort studies, investigating diverse topics including retirement and ageing; child and adolescent development; family, housing and employment transitions of young adults, and social connectedness and mental well-being of adult men. Methodological interests include concurrent analysis of data from multiple sources including longitudinal surveys, linkage and life/event history data.

Dr Tracy Evans-Whipp is a Research Fellow at the Australian Institute of Family Studies working primarily on the Longitudinal Study of Australian Children. Tracy is a population health researcher with experience in national and international longitudinal studies of children, adolescents and young adults. Tracy's research has centred around contextual influences on adolescent and young adult health and development with particular focus on school and workplace environments.

#### 

Karlee O'Donnell is a senior research officer in the Families, Society and Lifecourse Research team at the Australian Institute of Family Studies. With a background in psychology, Karlee's subject matter expertise spans factors that undermine or enhance well-being during adolescence and young adulthood. Karlee has a broad expertise in qualitative and quantitative data analysis, with a keen interest in longitudinal methods including multilevel modelling, cross-lagged panel models and latent growth curve modelling.

Dr Clement Wong is an economist at the Australian Institute of Family Studies experienced with quantitative analysis of large longitudinal datasets. His recent research has focused on the financial well-being, mental health and non-cognitive skills of young Australians, as well as their transitions to adulthood. His work applies survival analysis techniques, simultaneous equation modelling and other microeconometric methods.

Dr Brendan Quinn is a public health researcher with extensive experience working on diverse, multidisciplinary studies in Australia and internationally. Key professional interests include the use of alcohol and other drugs and associated harms, blood-borne virus transmission, health outcomes associated with criminal justice system involvement and men's health issues. As a Research Fellow with the Australian Institute of Family Studies' Families, Society and Lifecourse Research team, he primarily works on sentinel longitudinal studies, for example, the Longitudinal Study of Australian Children.

Dr Rowland is a registered psychologist who has over 20-year experience working as a scientist practitioner at the nexus of applied research, policy translation, policy rollout and scale-up. He is an experienced analyst and has published in a variety of forms and for a variety of audiences. He has experience working on large national and international cohort studies, specifically examining the role of risk and protective factors throughout the life course and during critical developmental ages and stages.

**How to cite this article:** Prattley, J., Evans-Whipp, T., O'Donnell, K., Wong, C., Quinn, B. & Rowland, B. (2022) Returning to the nest: Emerging adults living with parents during the COVID-19 pandemic. *Australian Journal of Social Issues*, 00, 1–23. Available from: <u>https://doi.org/10.1002/ajs4.235</u>

#### APPENDIX A

#### A.1 | Derivation of indicator of moving to live with parents (LSAY)

In Wave 5 (2019) and Wave 6 (2020), LSAY participants were asked a series of questions about their living arrangements, including "Do you usually live with your parents (or your partner's parents), family members, a guardian or somewhere else?" Response options were 1 = With parents, family members or guardian and 2 = Somewhere else. Items relating to the number of people in the household and the relationship of each person to the respondent were used to identify emerging adults who lived with non-parental family members only, from those who chose the first option. These cases, along with individuals who responded, "Somewhere else," were collectively denoted as not living with a parent in the relevant wave.

Emerging adults who changed status from not living with a parent at their interview in 2019 to living with a parent at their interview in 2020 were designated as having moved to live with

parent(s) between the two surveys. Note there is no precise date available as to when the transition occurred, and it is possible that individuals made more than one such transition during that period.

# A.2 | DESCRIPTION OF DEMOGRAPHIC AND OTHER MEASURES (LSAY AND LSAC)

The following measures were common to LSAY and LSAC and took the same structure in both, unless stated otherwise: Single people were identified as those who self-reported as single; separated; divorced or widowed. Sex was a binary indicator of 1 = Male, 2 = Female. State of residence was categorised as 1 = New South Wales; 2 = Victoria; 3 = combined other states and territories (including Queensland; Tasmania; Western Australia; South Australia; Australian Capital Territories; Northern Territory). In LSAY, state was taken at the time of interview (2019). In LSAC, respondents reported their state of residence during the restriction period March–May 2020 as well as at the time of their interview, October–December 2020.

Options for measuring parental socioeconomic status were limited across both surveys. Parents' highest education level was used from LSAY (1 = Tertiary level or higher, 0 = Lower than tertiary) as it had fewer missing data than alternatives. We used the SEIFA indicator from LSAC; however, there was a high level of missing data in the parent measure and to preserve sample size opted to use the study child rather than parent value. Where both parent and child data were available, most values were identical.

Different aspects of studying were captured from the two surveys. From LSAY, study status at the time of the 2019 interview was a binary indicator of 1 = Studied full or part-time, 2 = Not studying. From LSAC, we used a measure of each participant's level of stress related to studies during the initial restriction period (0 = Average, low, very low or did not study; 1 = High or very high).

Receipt of government payments and allowances was indicated differently. LSAY respondents were asked in the 2019 survey if they or their partner were currently receiving any government payments including JobKeeper (0 = No, 1 = Yes). Given only single people were selected for this research, most positive responses should indicate payments received by the respondent rather than a partner. Receipt of Youth Allowance/ABSTUDY was indicated separately (0 = No, 1 = Yes). In LSAC, all participants were asked if they had received the Coronavirus Supplement since March 2020, and those who were in work during the restriction period were asked if their income had been subsidised through the JobKeeper payment. This information was combined into an indicator of whether participants received either payment (1 = Yes, 0 = No).

Caring for others in LSAY was indicated using a variable that captured whether the respondent provided care for at least 1 month between March and June 2020 (1 = Provided care in at least 1 month, 0 = Otherwise). Respondents were also asked who they cared for (including own child, parent(s), other adult relative). Provision of care at time of interview in LSAC was indicated where participants responded "yes" to helping someone with a long-term health condition, disability or was elderly, for at least 6 months and unpaid, and "no" otherwise. It was not possible to indicate caring provision during the initial restriction period.

Two indicators of health were used from LSAY. The first showed self-assessed health at the time of the Wave 5 (2019) interview. Response options were a five-point scale from 1 = Excellent to 5 = Poor. The same item was available in the Wave 6 (2020) data, and both were used to derive an indicator of change in health. Improvement was indicated where the response in 2020 had a lower numerical value than in 2019; decline where it was higher; and no change if it was the same.

#### A.3 | TYPES OF SUPPORT (LSAC)

LSAC contained items on the following types of support:

• financial support: giving/loaning money, or helping with purchase of goods, paying bills or fees

# <sup>20</sup> WILEY

- advice: helping with a decision or suggestions about things the respondent could do
- emotional support: listening to concerns or supporting the respondent when they were upset or unwell
- practical assistance: fixing something, running errands, cooking a meal, driving places, caring for the respondent's children
- technical support or guidance: teaching the respondent how to fix or make something or financial skills

### A.4 | PARENT RESPONSES TO ITEMS ON PARENT/CHILD RELATIONSHIPS (LSAC)

Table A1 shows the number of responses to items on parent/child relationships at time of survey compared with during the COVID-19 initial restriction period, as given by parents. Parents were asked in cases where the child was residing with the parent.

# A.5 | ITEMS ON CHANGES TO EMPLOYMENT DUE TO CORONAVIRUS RESTRICTIONS (LSAC)

Wave 9C1 included 24 items on changes to work due to COVID-19 restrictions and nine of these related to loss or reduction in wages through, for example, loss of job, being temporarily stood down, a reduction in the rate of pay, having to take unpaid leave or a self-employed business ceasing trade (Table A2). These items in LSAC helped distinguish instances where an individual may experience no technical change to employment but faced significant changes to

		Restriction period, March-May 2020			
	Time of survey, Oct–Dec 2020	Not at all	A little/sometimes		
Disagree and fight	Not at all	14	0		
	A little/sometimes	6	21		
Bug each other or get on nerves	Not at all	15	0		
	A little/sometimes	5	22		
Yell at each other	Not at all	30	0		
	A little/sometimes	4	8		
Argue and stay angry	Not at all	35	1		
	A little/sometimes	3	3		

**TABLE A1** Number of responses to items on parent/child relationships from parents (N = 42)

Source: LSAC K cohort Wave 9C1.

TABLE A2 Items on changes to employment due to coronavirus restrictions

Asked to respondents who were an employee during COVID-19 restriction period

I was temporarily stood down\*

My hours of work were reduced\*

My hours of work were increased

My patterns of work changed

My employer stayed the same but the type of work I did changed (e.g. home delivery rather than table services for a restaurant)

My rate of pay was reduced\*

My rate of pay was increased

I did not receive a bonus or pay rise that I was anticipating

My employer's business ceased operating permanently\*

TABLE A1 (continued)	
My employer's business ceased operating temporarily*	
I lost my job, but my employer's business did not cease operating*	
I was required to take paid leave	
I was required to take unpaid leave*	
My employment was not affected by coronavirus restrictions	
Asked to respondents who were self-employed during the COVID-19 restriction period	
My business hours were reduced <sup>*</sup>	
My business hours were increased	
My patterns of work changed	
The type of work my business conducted changed (e.g. home delivery rather than table servic restaurant)	e in a
I earned less money <sup>*</sup>	
I earned more money	
I needed to reduce staff	
My business ceased operating permanently <sup>*</sup>	
My business ceased operating temporarily <sup>*</sup>	
My business was not affected by the coronavirus restrictions	

\*Denotes used to derive employment change variable. Source: LSAC Wave 9C1 K cohort.

	n	%			
LSAY sample of single emerging adults living independently of parents in 2019 ( $N = 486$ )					
Study status 2020 interview	5	1.0			
Received government payment	8	1.6			
Parent education	8	1.6			
Change in general health between 2019 and 2010 interviews	5	1.0			
LSAC sample of emerging adults who started living with parent(s) during in 2020 ( $N = 105$ )	itial restriction	n period March–May			
State	4	3.8			
Socioeconomic status	4	3.8			
Employment status at time of interview	2	1.9			
Difficulty spending more time with family during restriction period	7	6.7			
Difficulty not seeing friends or family during restriction period	5	4.8			
Difficulty having unknown isolation period	6	5.7			
Difficulty missing important events during restriction period	9	8.6			
Provide unpaid care	1	1.0			
Coped during restriction period (ref: coped)	1	1.0			
Psychological distress at time of survey	3	2.9			

TABLE A3 Number and percentage of missing values by variable

Source: LSAY Y15 cohort Waves 5 and 6; LSAC Wave 9C1 K cohort.

work in terms of working hours and/or income. By comparison, the wording of the LSAY data leads to the simple interpretation of work as the actual supply of labour.

Specifically, respondents were asked: "As a result of the coronavirus restrictions did any of the following happen to you?" Response options in each case were 1 = Yes, 2 = No and participants were designated as either 1 = Experienced a loss or temporary break from paid work or

WILFY

# WILEY-

2 = Did not have that experience, if they indicated "Yes" to any of the nine items marked in Table A2.

#### A.6 | MISSING DATA

Table A3 shows variables from each of the LSAY and LSAC samples that had missing data. Cases with missing data were removed from the analysis.

# A.7 | FACTORS ASSOCIATED WITH MOVING TO LIVE WITH PARENTS: FULL RESULTS

Table A4 replicates Table 3 from the paper but includes results for control variables of general health 2019; change in general health 2019–2020; receipt of Youth Allowance/ABSTUDY; parental education.

 TABLE A4
 Parameter estimates for multinomial logit regression model for moving to live with parent, including control variables

	Moved to COVID-	live with pare 19 restrictions	ts due to $(N = 55)$	Moved to live with parents not due to COVID-19 restrictions $(N = 52)$			
	Referenc	Reference: Not living with parents $(N = 361)$					
	RRR	SE	<i>p</i> -Value	RRR	SE	<i>p</i> -Value	
Female (ref: male)	1.194	.313	.572	.911	.285	.764	
State of residence (ref: combin	ned other s	tates and territ	ories)				
NSW	1.101	.407	.814	1.041	.435	.923	
Victoria	2.030	.374	.059*	1.665	.646	.188	
Studying at time of interview 2020 (ref: not studying)	.477	.419	.077*	.474	.176	.045**	
Work history March–June 202	20 (ref: stat	ole or started w	vork)				
Transitioned out of work	2.148	.840	.041**	1.122	.501	.796	
Consistently out of work	2.095	.351	.035**	.745	.280	.435	
Received government payment (ref: no)	.317	.444	.010**	.650	.236	.235	
Provided unpaid care for others (ref: no)	2.446	1.075	.063*	2.683	1.129	.019**	
Fair/poor general health 2019 (ref: good or better)	.374	.760	.195	.771	.581	.654	
Change in general health 2019	-2020 (ref:	improved)					
Same	.279	.902	.157	.605	.757	.507	
Worse	.041	1.393	.022**	.739	.930	.744	
Received Youth Allowance/ ABSTUDY (ref: no)	.980	.361	.956	.604	.406	.214	
Parent tertiary educated (ref: no)	1.048	.402	.908	.991	.376	.980	
Constant	.634	.677	.670	.480	.437	.420	

\*Denotes *p* < 0.1; \*\**p* < 0.05; \*\*\**p* < 0.01.

Source: LSAY Y15 cohort, Waves 5 (2019) and 6 (2020).

Abbreviations: RRR, relative risk ratio; SE, standard error.

#### A.8 | COPING AND PSYCHOLOGICAL DISTRESS WITH SOCIODEMOGRAPHIC CONTROLS

Table A5 contains results of an unweighted logistic regression model for coping during the COVID-19 restriction period controlled for sex, state of residence during restriction period and socioeconomic status (SEIFA). Table A6 shows the same for levels of psychological distress between October and December 2020.

**TABLE A5**Parameter estimates from logistic regression model for coping during the COVID-19 restrictionperiod adjusted for sociodemographic factors

	Coped not at all/a little during restriction period (ref: coped fairly well or better)						
	OR	SE	<i>p</i> -Value				
Female (ref: male)	1.404	.840	.571				
State of residence during restriction period (ref: combined other states and territories)							
NSW	1.789	.997	.297				
Victoria	1.088	.666	.890				
Socioeconomic status (ref: high advantage)							
Low advantage	1.206	.827	.785				
Middle advantage	.460	.304	.240				

Source: LSAC K cohort, Wave 9C1, N = 105.

\*Denotes *p* < 0.1; \*\**p* < 0.05; \*\*\**p* < 0.01.

TABLE A6Parameter estimates from logistic regression model for psychological distress at time of interviewadjusted for sociodemographic factors

	High/very high psychological distress, Oct-Dec 2020 (ref: low/moderate)		
	OR	SE	<i>p</i> -Value
Female (ref: male)	1.948	0.996	0.192
State of residence at time of interview (ref: combined other states and territories)			
NSW	.677	.334	.428
Victoria	1.428	.772	.510
Socioeconomic status (ref: high advantage)			
Low advantage	.891	.575	.859
Middle advantage	1.001	.579	.998

Source: LSAC K cohort, Wave 9C1, N = 105.

\*Denotes *p* < 0.1; \*\**p* < 0.05; \*\*\**p* < 0.01.

WILFY