

Pandemic Income Support Programs and Adolescent Mental Health in the UK, Ireland, and Australia

Gabriele Mari

Erasmus University Rotterdam

DCEDIY Growing Up in Ireland conference. Dublin, 9 October 2024



Motivation

- ▶ Boosts to safety net and ↑ job loss & unemployment during the COVID-19 pandemic
 - Focus on consequences for adults (Stantcheva, 2022)
 - What about intergenerational effects (Brand, 2015; Cooper & Stewart, 2021)?
- ▶ Policy experimentation in so-called 'liberal' welfare states
 - Strong evidence base for the US Child Tax Credit (Curran, 2022)
 - Boost to safety nets also in the UK, Ireland and Australia after a decade of cutbacks
 - Often aimed at households with a newly unemployed member
 - All measures expired in 2021-2 despite calls to make changes permanent

This study

1. **Who was reached and how did they fare:** Association between pandemic welfare receipt and children's mental health
2. **Disparate impact:** Disparities by gender, family income, household structure, and along the health distribution
3. **Country comparison:** Which policy lessons?

Pandemic welfare: Overview

Table 1: Overview of 'pandemic welfare' programs: most generous in Ireland and Australia

	Program	Since/to	Target	Amount	Relative to reference	Job search requirements
<i>UK</i>	Universal Credit ('uplift')	Mar 2020 Sept 2021	Recipients of primary social security program	£20 (€22) (weekly)	+28% on weekly rate	Suspended until June 2020
<i>Ireland</i>	Pandemic Unemployment Payment (PUP)	Mar 2020 Mar 2022	Previously (self-)employed who lost job	€203/350 (weekly)	83% of average earnings (up to 241% among low earners)	None until Oct 2021
<i>Australia</i>	Coronavirus Supplement	Apr 2020 Mar 2021	Recipients of nine social security programs (incl. JobSeeker Payment)	AU\$550 (€332) AU\$250 (€151) from Sep 2020 AU\$150 (€91) from Jan 2021 (fortnightly)	Around +100% JobSeeker's max rate	Suspended until July 2020

Note: 2020 prices. Sources: see, e.g., Hick & Murphy, 2021; Brioscù et al., 2021; Klein et al., 2022.

Pandemic welfare: Uptake

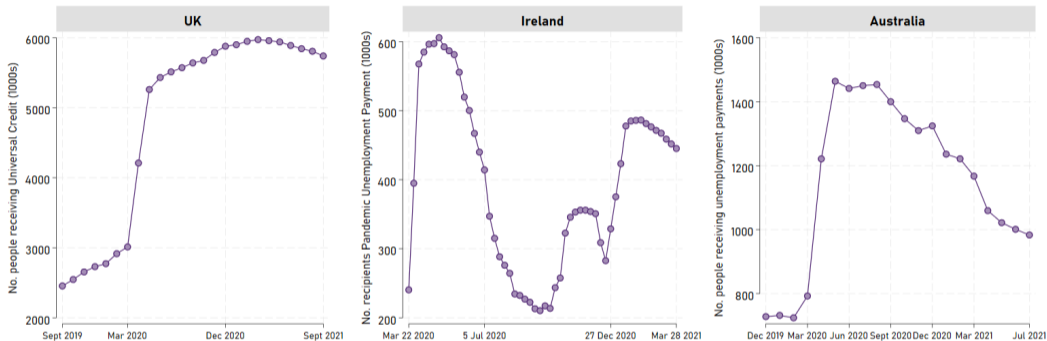


Figure 1: Uptake of pandemic welfare in selected countries¹.

¹Sources: <https://stat-xplore.dwp.gov.uk/> (UK); <https://data.cso.ie/> (Ireland); <https://data.gov.au/dataset/ds-dga-728daa75-06e8-442d-931c-93ecc6a57880/distribution/dist-dga-7074b124-ebcf-4eaf-99ad-909aae8989d6/details?q=> (Australia).


Pandemic welfare: How households (parents) experienced payments

- ▶ In the UK, mixed experiences
 - Uplift was a lifeline for some (Patrick et al., 2022)
 - Insufficient amount, often not felt at all, new expenses (Brewer & Patrick, 2021; Wood & Bennett, 2023)
- ▶ In Australia and Ireland
 - Buffer to financial stress, positive for health (Smyth & Murray, 2022; Botha et al., 2022)
- ▶ Uncertainty in all countries: temporary measures, return of conditionalities (Whelan, 2022; Klein et al., 2022; Wood & Bennett, 2023)
- ▶ Ripple effects on children: possible channels
 - ↓ Financial and psychological stress
 - ↑ Afford essentials (and beyond), sustain remote learning

Data


- ▶ Longitudinal surveys
 - UK Household Longitudinal Study COVID-19 Survey ($n = 1,816$)
 - Growing Up in Ireland (Infant Cohort '08, $n = 2,683$)
 - Longitudinal Study of Australian Children (Cohort B, $n = 3,312$)
- ▶ Data collection in 2020-2021
- ▶ Focus on adolescents: age 10-17 across surveys
- ▶ Parental reports on receipt of pandemic welfare
- ▶ Children report on their own mental health

Mental health

- ▶ Measurement instruments differ across surveys
 - Strengths and Difficulties Questionnaire (UKHLS)
 - Mental Health Inventory (MHI-5, GUI)
 - Kessler Psychological Distress Scale (K-10, LSAC)
- ▶ All extensively validated questionnaires that tap into children's mental health
 - Large overlap in survey items 
 - Either correlates of or screening tools for depression (e.g. Kessler et al., 2001; Cuijpers et al., 2009; Goodman et al., 2010; Griffith & Jones, 2019)
- ▶ Coding: standardised (SD units), higher scores correspond to better health

Empirical approach

$$Y_{i,t} = \alpha + \beta IS_i + \mathbf{X}_i \gamma + \delta Y_{i,t-1} + \epsilon_i \quad (1)$$

- ▶ IS_i = dummy for receipt of income support
- ▶ \mathbf{X}_i 
- ▶ Value-added approach ($Y_{i,t-1}$):
 - Adjust for previous (pre-pandemic) mental health measurement for the same child
 - Separate policy effects from selection/targeting
- ▶ OLS (average effects) + quantile regression to examine inequality (Borgen et al. 2023)
- ▶ Heterogeneity: income group and household structure ($t - 1$), gender differences
- ▶ Survey weights and robust standard errors throughout

Main findings

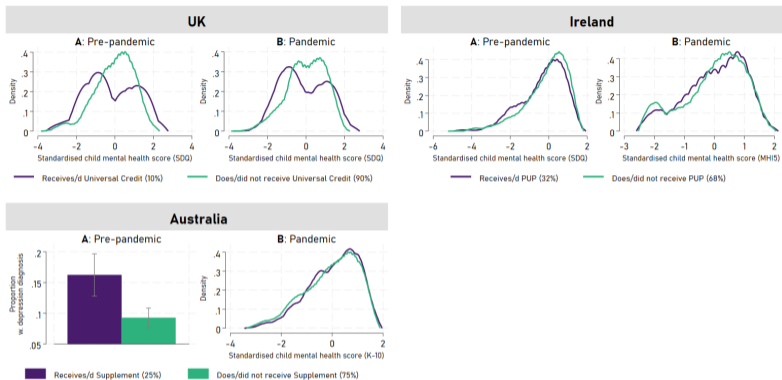


Figure 2: Child health z-score distributions across countries depending on receipt of pandemic welfare programs.

- ▶ Programs reached children all along the health distribution, but disproportionately those faring worse than their peers before the pandemic
- ▶ During the pandemic, more children with average or better relative health when receiving payments





Main findings

Table 2: Linear regression estimates for the conditional association between pandemic income support receipt and children's mental health z-scores. Robust standard errors in parentheses.

	Children's mental health		
	<i>UK</i>	<i>Ireland</i>	<i>Australia</i>
Household receives/d pandemic income support	-0.107 (0.094)	0.058 (0.055)	0.205*** (0.049)
Pre-pandemic mental health	0.718*** (0.022)	0.206*** (0.025)	0.423*** (0.077)
Other covariates	Yes	Yes	Yes
Unweighted <i>N</i>	1,816	2,683	3,312

Note: * $p \leq 0.1$; ** $p \leq 0.05$; *** $p \leq 0.01$.

Heterogeneous responses to pandemic support in detail

1. Girls report better health more often than boys 
 - In households with lower incomes (UK, Ireland) and headed by a single parent (Australia)
 - Targets of cutbacks before pandemic (Daly, 2019; de Gendre et al., 2021; Mari Keizer, 2024)
 - Girls struggling with mental health in the period (e.g. Mendolia et al., 2022)
2. Better health reported also in households with relatively higher incomes (Australia & Ireland), two-parent households (Ireland) 
 - Opposite is true for the UK
 - Larger reach of (generous) schemes
3. *Worse* health reports among boys in households with lower incomes 
 - Remote learning (Ireland) and bullying (Australia)  Exploratory analyses

Synthesis: Who's better (worse) off with pandemic support?

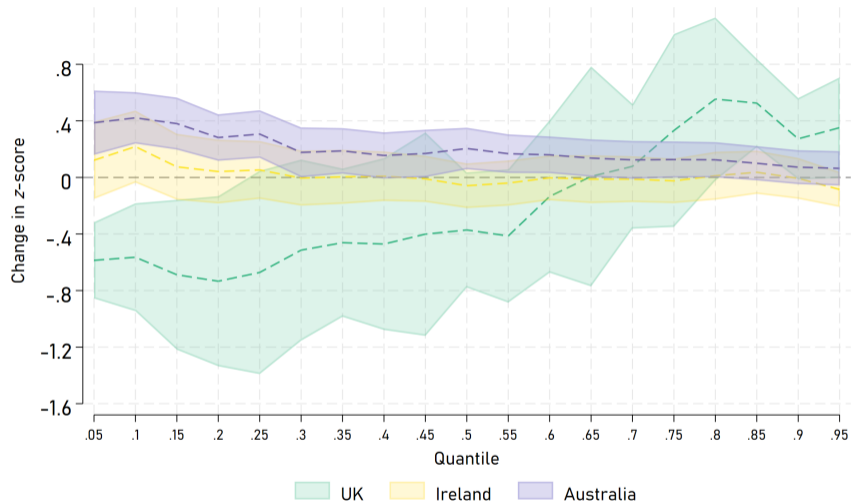


Figure 3: Unconditional quantile regression estimates and 95% confidence intervals for the association between access to pandemic welfare and mental health z-scores across countries. [▶ Gender differences](#)

Conclusions

- ▶ Income support provided some relief to younger generations during the pandemic
 - Generous, far-reaching, and comprehensive programs (Australia): ↑ reported health, ↓ inequality
 - Generous and far-reaching programs (Ireland): ↑ reported health, = inequality
 - Meagre, complex, and targeted programs (UK): ↓ reported health, ↑ inequality
- ▶ No silver bullet
 - Girls fared better, boys worse off in some households receiving support
 - More research needed on gendered dynamics when parents access income support
- ▶ Now rolled back, measures often benefited adolescents in households targeted by austerity
 - Considering impacts on child health can help (re)design income-support programs

Thank you!

mari@essb.eur.nl



Working paper available here: <https://osf.io/preprints/socarxiv/pzr4k>

Pandemic welfare: Child poverty

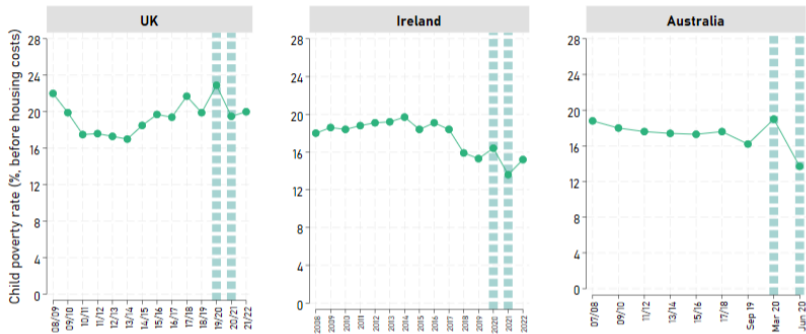


Figure 1A: Child poverty rates decreased (\downarrow 15-28%, 3-5 points) when pandemic welfare measures were in place.¹

¹Sources: <https://www.gov.uk/government/statistics/households-below-average-income-for-financial-years-ending-1995-to-2022> (UK); <https://data.cso.ie/> (Ireland); <https://povertyandinequality.acoss.org.au/poverty/percentage-of-children-in-poverty-from-1999-2019/> (Australia).

Mental health: survey items

- ▶ Strengths and Difficulties Questionnaire (SDQ, UK - UKHLS)
 - "I am often unhappy, down-hearted or tearful"
 - "I am easily distracted, I find it difficult to concentrate"
 - "I worry a lot"
- ▶ General Health Questionnaire (GHQ-12, UK - COSMO)
 - ".. feeling unhappy or depressed?"
 - ".. able to concentrate?"
 - ".. lost sleep over worry?"
- ▶ Mental Health Inventory (MHI-5, Ireland)
 - ".. been a very nervous person?"
 - ".. felt so down in the dumps that nothing could cheer you up?"
- ▶ Kessler Psychological Distress Scale (K10, Australia)
 - ".. feel nervous?"
 - ".. feel so sad that nothing could cheer you up?"



Covariates

Table 1A: Adjustment set across surveys.

Adjustment set	UK	Ireland	Australia
Sex of the child	x	x	x
Age of the child	x	x	x
Household size	x	x	x
Time of the interview	x	All Dec. 2020	x
Area of residence	x	Not asked	x
Past/current COVID-19 infection in the household	x	x	x
Income quintile group at $t - 1$	x	x	x
Single-parent household at $t - 1$	x	x	x
Child mental health at $t - 1$	x (SDQ score)	x (SDQ score)	x (Depression)

Heterogeneity: UK

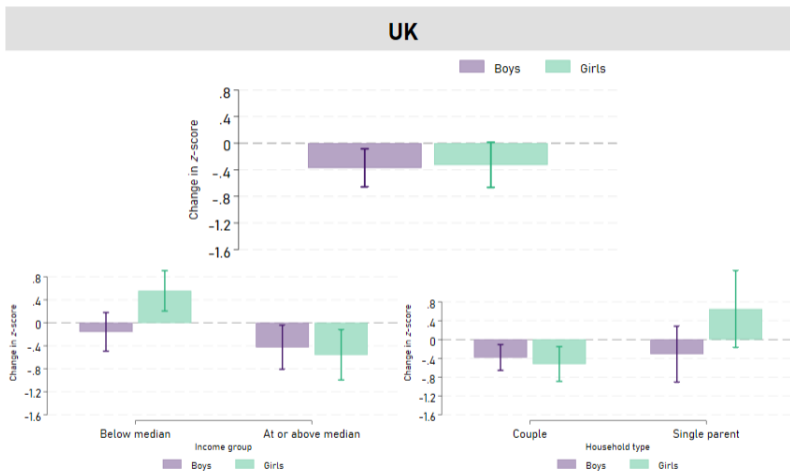


Figure 2A: Receipt of pandemic welfare and child health by sex, income group, and household structure.

Heterogeneity: Ireland

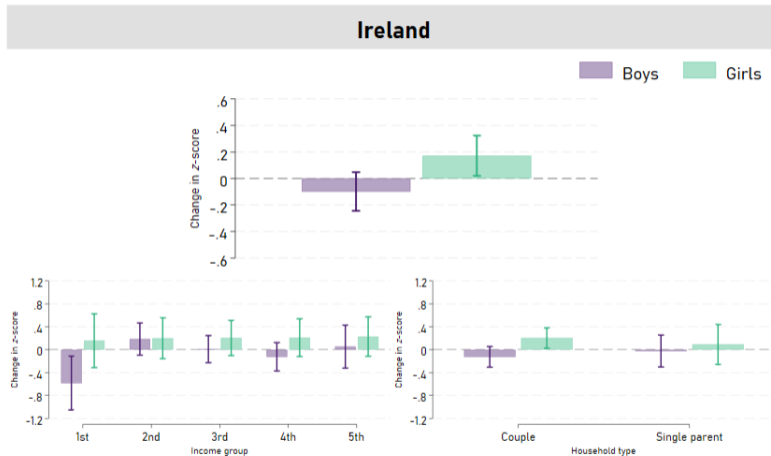


Figure 3A: Receipt of pandemic welfare and child health by sex, income group, and household structure.

Heterogeneity: Australia

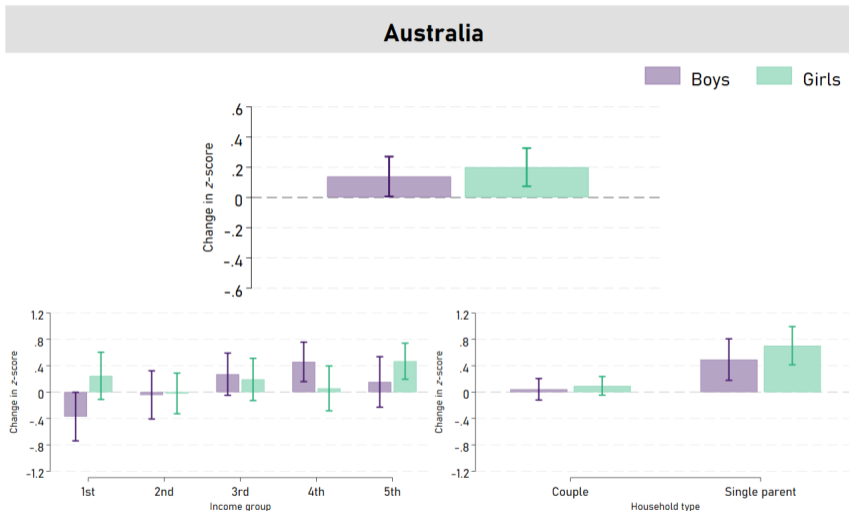


Figure 4A: Receipt of pandemic welfare and child health by sex, income group, and household structure.

Gender differences along the health distribution

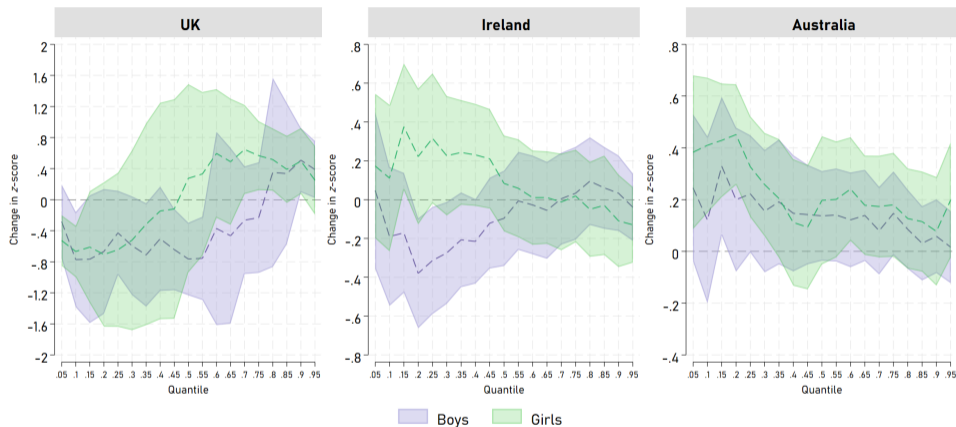

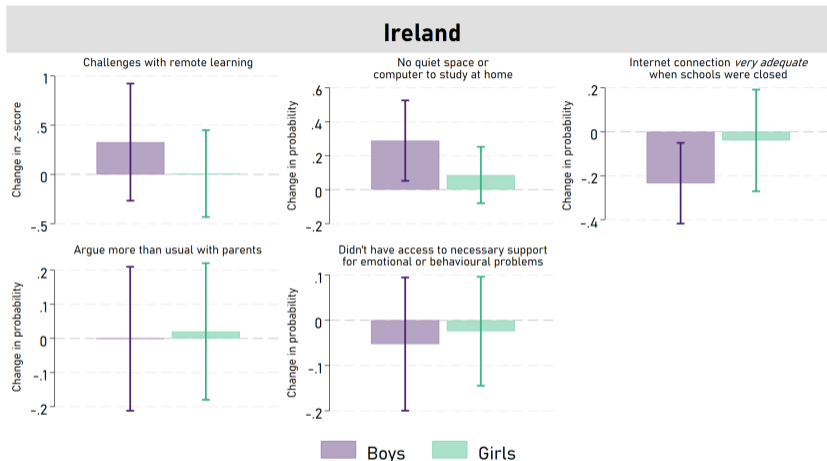


Figure 5A: Unconditional quantile regression estimates and 95% confidence intervals for the association between access to pandemic welfare and mental health z-scores across countries. Separate models for boys and girls. 

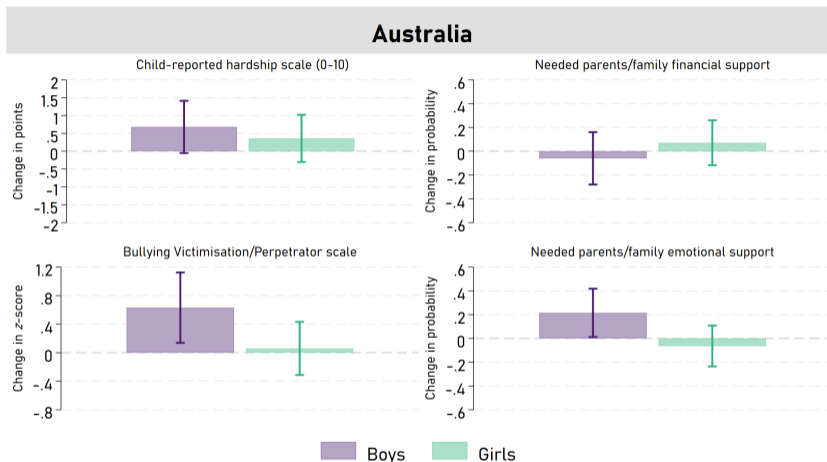
Mechanisms: exploratory analyses



*Households with lower incomes (1st quintile)

Figure 6A: Receipt of pandemic welfare and wider social environment.

Mechanisms: exploratory analyses



*Households with lower incomes (1st quintile)

Figure 7A: Receipt of pandemic welfare and wider social environment.

Robustness: child fixed effects

Table 2A: Linear regression estimates for the conditional association between pandemic income support receipt and children's mental health z-scores. Robust standard errors in parentheses.

	Children's mental health	
	<i>UK</i>	<i>Australia</i>
Household receives/d pandemic income support	-0.501*** (0.193)	0.153* (0.093)
Child & wave fixed effects	Yes	Yes
<i>N</i> (excluding singletons)	1,263	2,292

Note: * $p \leq 0.1$; ** $p \leq 0.05$; *** $p \leq 0.01$.

Sensitivity: different health measures

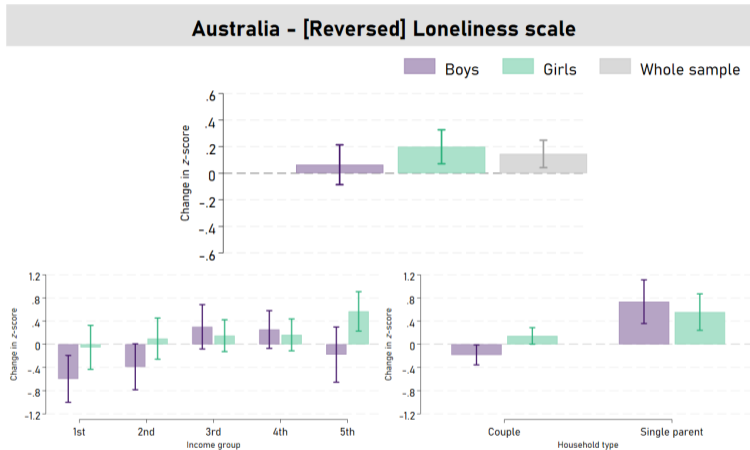


Figure 8A: Point estimates and 95% confidence intervals for the association between access to pandemic welfare and mental health z-scores (reversed Loneliness scale, Hughes et al., 2004) across groups in Australia (unweighted $N = 3,024$).