

Intergenerational Persistence in Mental Health and Wellbeing: Evidence from Growing Up in Ireland

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Growing Up in Ireland Conference
October 2024

Motivation

- Family history of mental illness has been shown to be a powerful predictor of children's mental health problems (Fitzsimons et al. 2017).
- Poor mental health in adolescence has profound implications for young people's development, their educational attainment, and their mental health outcomes later in life.
- Evidence indicates that maternal depression is stronger than paternal depression on offspring's mental health.

Literature

- Using data from the MCS (England) measured at ages 11, 14 and 17, Crenna-Jennings (2012) found that and maternal depression in infancy was associated with higher levels of psychological distress in girls at age 17.
- Also using the MCS, Hope et al. (2019) found that prior, concurrent and, particularly, prolonged exposure to maternal distress was associated with poorer SDQ total scores among children aged 3-11 in England.
- Using data from the 1958 British Cohort Study, Johnston et al. (2013) found that that the inter-generational correlation was stronger through the maternal than the paternal line.
- Research using GUI has shown that maternal depression, but not paternal depression, is associated with poorer SDQ scores (Nixon, 2012; Nolan and Smyth, 2021).

Research aim and questions

The aim of this work package is to examine the association between parental depression and the mental health and wellbeing of children and young people.

- RQ 1. What is the relationship between parental depression and young people's depression?
- RQ 2. Does the timing of parental depression matter?
- RQ 3. What are the factors that explain these patterns?

In this paper we extend previous research in the Irish context to focus on the impact of parental depression on mental health in young adulthood, as reported by the young people themselves (previous research had considered outcomes such as the SDQ, reported by the parents)

Data and Sample

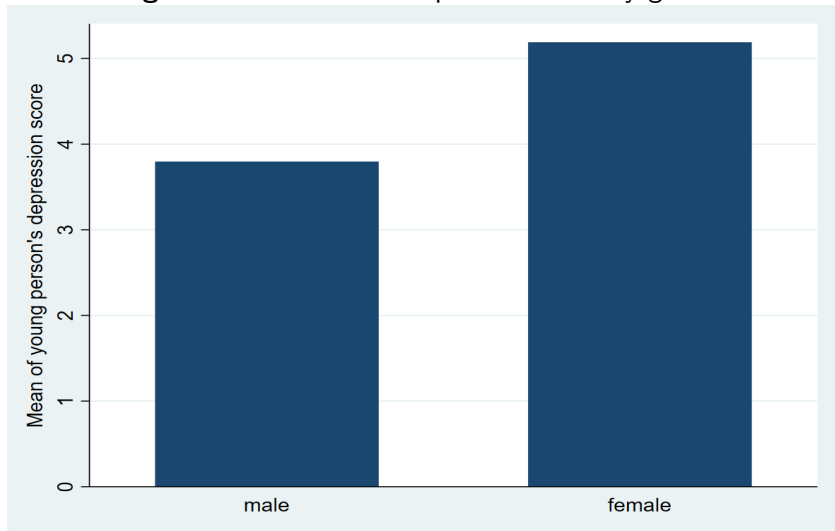
- Growing Up in Ireland (GUI) is the national longitudinal study of children and young people in Ireland ('98 Cohort).
- We measure depression via the Centre for Epidemiological Studies (CES-D) depression scale.
- We use the depression scores for mothers in all 4 waves when the young people are aged 9, 13, 17 and 20 and depression scores for the young person in wave 4 when they were aged 20, giving us an analytical sample of 3,920.
- We primarily focus on depression status i.e. a score of 7 or higher

CES-D scale

- 1. I felt I could not shake off the blues even with help from my family or friends
- 2. I felt depressed
- 3. I thought my life had been a failure.
- 4. I felt fearful
- 5. My sleep was restless
- 6. I felt lonely
- 7. I had crying spells
- 8. I felt sad
- Respondents can answer the following to the questions:
 - 0 = 'Rarely or none of the time (less than 1 day)'
 - 1 = 'Some or a little of the time (1-2 days)'
 - 2 = 'Occasionally or a moderate amount of the time (3-4 days)'
 - 3 = 'Most or all of the time (5-7 days)'

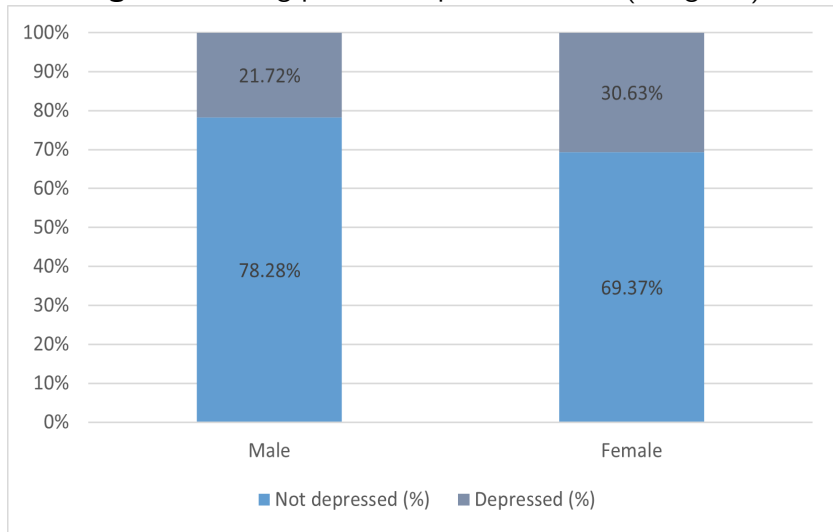
Young person's depression score (at age 20) by gender

Figure 1: Mean of YP depression score by gender



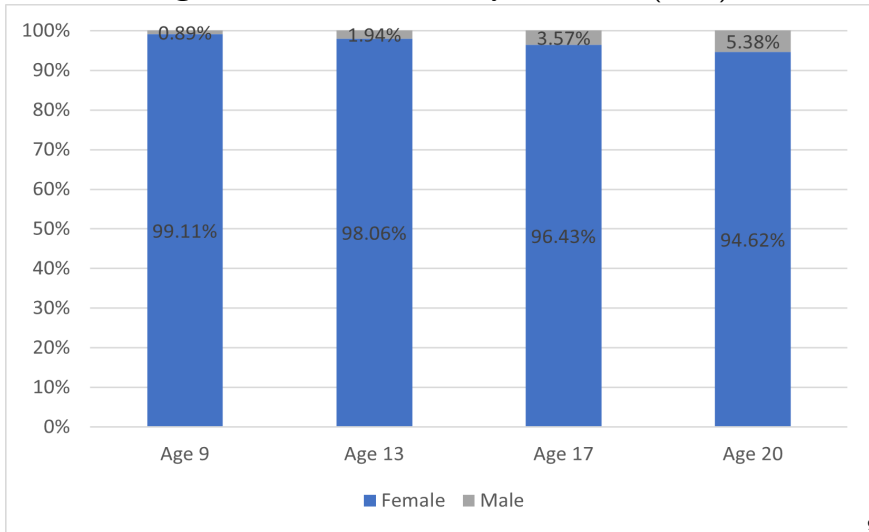
Young person's depression status (at age 20)

Figure 2: Young person's depression status (at age 20)



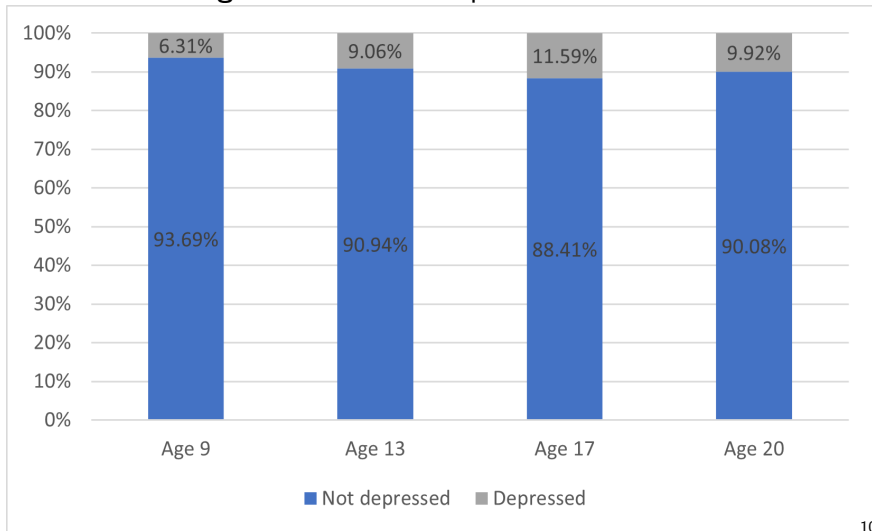
Gender of Primary Care Giver (PCG)

Figure 3: Gender of Primary Care Giver (PCG)



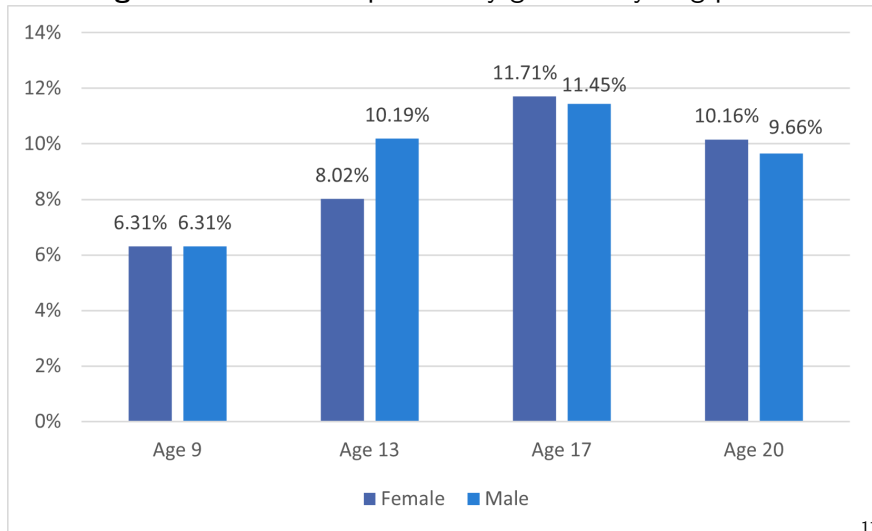
Maternal depression over time

Figure 4: Maternal depression over time



Maternal depression by gender of young person

Figure 5: Maternal depression by gender of young person



Results (1)

Figure 6: Probit regression

YP depression status	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Maternal depression status	.463	.07	6.61	0	.326	.601	***
Constant	-.69	.024	-29.12	0	-.736	-.643	***
Mean dependent var		0.262	SD dependent var			0.440	
Pseudo r-squared		0.010	Number of obs			3701	
Chi-square		43.077	Prob > chi2			0.000	
Akaike crit. (AIC)		4214.652	Bayesian crit. (BIC)			4227.085	

*** $p < .01$, ** $p < .05$, * $p < .1$

Results (1)

Figure 7: Average marginal effects

YP depression status	Coef.	St.Err.	z	P> z	[95% Conf. Interval]
Maternal depression status	0.149	0.022	6.720	0.000	0.106 0.193

Results (2)

Figure 8: Probit regressions

YP depression status	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Maternal depression status	.438	.072	6.12	0	.298	.578	***
Female	.284	.045	6.29	0	.196	.373	***
Single parent household	.106	.063	1.68	.093	-.018	.229	*
Urban	.108	.045	2.39	.017	.019	.196	**
Constant	-.907	.041	-22.30	0	-.987	-.827	***
Mean dependent var		0.262	SD dependent var			0.440	
Pseudo r-squared		0.022	Number of obs			3701	
Chi-square		93.385	Prob > chi2			0.000	
Akaike crit. (AIC)		4170.344	Bayesian crit. (BIC)			4201.425	

*** $p < .01$, ** $p < .05$, * $p < .1$

Results (2)

Figure 9: Average marginal effects

YP depression status	Coef.	St.Err.	z	P> z	[95% Conf.	Interval]
Maternal depression status	0.139	0.022	6.210	0.000	0.095	0.183
Female	0.090	0.014	6.380	0.000	0.063	0.118
Single parent (YP age 20)	0.034	0.020	1.680	0.092	-0.006	0.073
Urban	0.034	0.014	2.400	0.017	0.006	0.062

Results (3)

Figure 10: Probit regression

YP depression status	Coef.	St.Err.	t-value	p-value	[95% Conf	Interval]	Sig
Maternal depression status	.436	.072	6.08	0	.295	.576	***
Female	.285	.045	6.29	0	.196	.373	***
Single parent household	.106	.063	1.68	.092	-.017	.23	*
Urban	.108	.045	2.40	.017	.02	.197	**
Mothers' education – None or primary	-.144	.202	-0.71	.478	-.54	.253	
Mothers' education – Lower secondary	.107	.1	1.07	.283	-.088	.303	
Mothers' education – Upper secondary	-.01	.063	-0.15	.879	-.134	.115	
Mothers' education – Non degree	.006	.069	0.09	.929	-.13	.142	
Mothers' education - Degree	.031	.076	0.41	.682	-.118	.18	
Constant	-.916	.061	-15.08	0	-1.034	-.797	***
Mean dependent var		0.262	SD dependent var			0.440	
Pseudo r-squared		0.023	Number of obs			3701	
Chi-square		95.724	Prob > chi2			0.000	
Akaike crit. (AIC)		4178.004	Bayesian crit. (BIC)			4240.168	

*** $p < .01$, ** $p < .05$, * $p < .1$

Results (3)

Figure 11: Average marginal effects

YP depression status	Coef.	St.Err.	z	P> z	[95% Conf.	Interval]
Maternal depression status	0.138	0.022	6.160	0.000	0.094	0.183
Female	0.090	0.014	6.380	0.000	0.063	0.118
Single parent (YP age 20)	0.034	0.020	1.690	0.092	-0.005	0.073
Urban	0.034	0.014	2.400	0.016	0.006	0.062
Mothers' education – None or primary	-0.046	0.064	-0.710	0.478	-0.172	0.080
Mothers' education – Lower secondary	0.034	0.032	1.070	0.283	-0.028	0.096
Mothers' education – Upper secondary	-0.003	0.020	-0.150	0.879	-0.043	0.036
Mothers' education – Non degree	0.002	0.022	0.090	0.929	-0.041	0.045
Mothers' education - Degree	0.010	0.024	0.410	0.682	-0.037	0.057

Initial results

- Those whose mother is depressed are more likely to be depressed themselves (at age 20).
- Females are more likely to be depressed than males.
- Those living in single parent households more likely to be depressed compared to those living in two parent households.
- Initial findings indicate maternal education does not have a significant effect on young people's (age 20) mental health.

Next steps

- Examine effects of maternal depression in early life (i.e. age 9, 13 and 17).
- Examine the effects of other important independent variables such as financial strain, parent-child relationships, marital stability and relationship quality.
- More work trying to better understand the intergenerational correlation of parental and offspring mental health.
- Methods to tackle this?

Conclusions

- Initial results indicate those whose mother is depressed (when the young person is aged 20) are more likely to be depressed themselves.
- Females are more likely to be depressed than males (at age 20).
- Those living in single parent households more likely to be depressed compared to those living in two parent households.
- Further work will attempt to unpack the intergenerational correlation of parental and offspring mental health.

References

- Crenna-Jennings W. Young people's mental and emotional health: trajectories and drivers in childhood and adolescence. London: Education Policy Institute 2021.
- Fitzsimons E, Goodman A, Kelly E, Smith J. Poverty dynamics and parental mental health: Determinants of childhood mental health in the UK. *Social Science & Medicine*. 2017 Feb 1;175:43–51
- Hope S, Pearce A, Chittleborough C, Deighton J, Maika A, Micali N, et al. Temporal effects of maternal psychological distress on child mental health problems at ages 3, 5, 7 and 11: analysis from the UK Millennium Cohort Study. *Psychological Medicine*. 2018/06/11 ed. 2019;49(4):664–74
- Johnston D, Schurer S, Shields M. Exploring the intergenerational persistence of mental health: Evidence from three generations. *Journal of Health Economics*. 2013 Dec 1;32(6):1077–89.
- Nixon E. How Families Matter for Social and Emotional Outcomes of 9-year old children. Dublin: Stationery Office; 2012. (GUI Research Report No. 4).
- Nolan A, Smyth E. Risk and Protective Factors for Mental Health and Wellbeing in Childhood and Adolescence. Dublin: Economic and Social Research Institute; 2021. Report No RS120.

Thank you for listening.
Any feedback would be greatly appreciated.