

Beyond the Household: Child-Centred Multidimensional Deprivation and Household Income in Ireland

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Introduction

Studies have shown that in higher-income countries, lower household income does not always overlap with child deprivation e.g. (Chzhen et al., 2018; Main & Bradshaw, 2012).

This study examines the degree of overlap between low household income and multidimensional child deprivation in Ireland.

Objectives:

- 1. To develop a child-centred multidimensional deprivation index with GUI '08 Cohort data, using the United Nations Convention on the Rights of the Child (UNCRC) (1989) as a guide to select indicators of deprivation.
- To use this index to gain a new perspective on the association between household income and multidimensional child deprivation in Ireland.
- By using a child-centred measure, this study addresses the limitations of Ireland's official household-based measure of deprivation (SILC).
 - Although it provides a strong tool in predicting child-specific deprivation (C. T. Whelan & Maître, 2012), it cannot capture the specific items that deprived children go without, nor considers the potentially unequal distribution of resources within households (Kerrins et al., 2011).

Theoretical Background

• This study is grounded in a relative conceptualisation of poverty emerging from Peter Townsend's (1979) definition:

"Their resources are so seriously below those commanded by the average individual that they are, in effect, excluded from ordinary living patterns, customs and activities" (p. 31)

- It conceptualises poverty as multidimensional and best captured at the individual level.
- Using the CRC to select child deprivation indicators
 - Acknowledges that poverty denies children their internationally enshrined rights (Gordon et al., 2003).

 Means that the final indicators are important to any child's development, regardless of their socio-economic status, culture, or country of residence (De Neubourg et al., 2013).

Existing Literature

International studies

- Some studies employ participatory approaches to developing child-centred deprivation indices e.g. (Main & Bradshaw, 2012; Sollis, 2019).
- Others rely on alternative methodologies e.g. UNICEF's Multiple Overlapping Deprivation Analysis (MODA) approach (de Neubourg et al. 2013) e.g. (Chzhen et al., 2018; Chzhen & Ferrone, 2017).
- These studies found that not all deprived children lived in income-poor households (Chzhen et al., 2018; Chzhen & Ferrone, 2017; Main & Bradshaw, 2012).

Existing Literature

Irish studies

Many Irish studies employ the existing 11 item household-level deprivation measure with SILC or GUI data e.g. (Gibbons et al., 2023; Li & Chzhen, 2024; Regan & Maître, 2020; Russell et al., 2025; C. T. Whelan & Maître, 2012).

Others have developed new child-centred multidimensional deprivation measures emerging from GUI data:

- 'Multi-Dimensional Deprivation Among 9-Year-Olds in Ireland: An Analysis of the Growing Up in Ireland Survey', Williams et al. (2014)
 - Used a cross-section of GUI data ('98 cohort at age 9)
- 'The Dynamics of Multidimensional Poverty in a Cohort of Irish Children', Madden (2022)
 - Longitudinal approach, using data from the '98 cohort at 9, 13, and 17.

Methodology

'08 Cohort at ages 9 (Wave 5, 2017/18) and 13 (Wave 6, 2021/22)

- Captures the transition from primary school to secondary school, and the transition from childhood to adolescence.
- Final sample consisted of 5,442 children.

Dimensions and Indicators

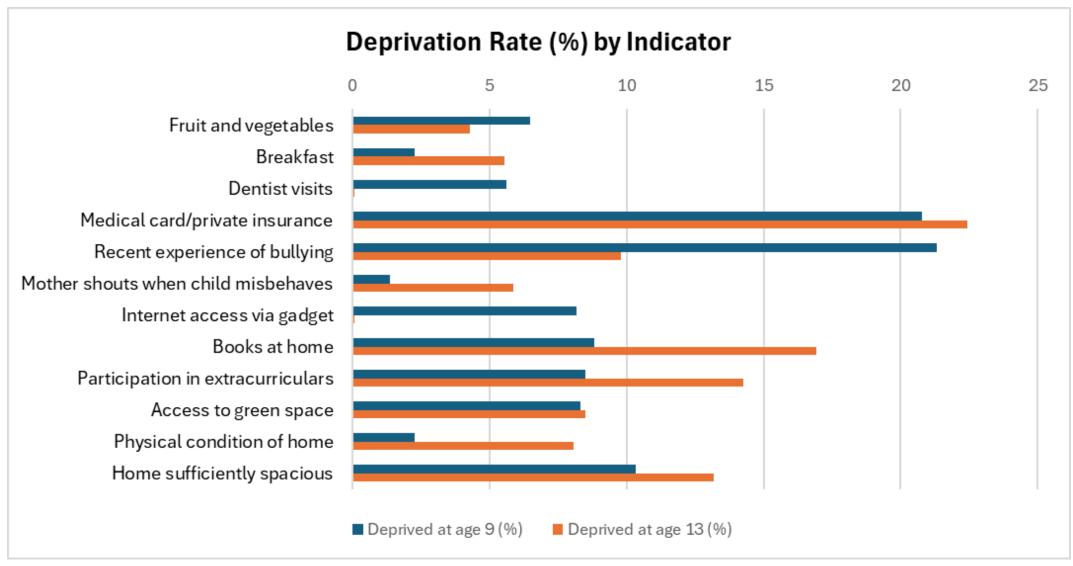
- Six dimensions were identified using the CRC: nutrition, access to healthcare, protection from violence, access to information, leisure and housing.
- Inconsistencies in the variables available at each wave mean indicators are not identical between waves.
- Each dimension is composed of two indicators.
- Union approach- if a child is deprived according to one indicator in a dimension, they are deprived in that dimension.
- Multidimensional deprivation rate = % of children deprived on 2+ dimensions

Table 1 Deprivation Dimensions and Indicators

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Corresponding		Age 9 (Wave 5)			Age 13 (Wave 6)		
UNCRC Article	Dimension	Indicator Question(s)	Deprivation Threshold	Resp- ondent	Indicator Question(s)	Deprivation Threshold	Resp- ondent
Article 24	Nutrition	In the last 24 hours has Child had fresh fruit? / In the last 24 hours has Child had cooked vegetables? / In the last 24 hours has Child had raw vegetables or salad?	answered "Not at all" to each question.	M	How many portions of fruit or vegetables would Child usually have in a day?	Deprived if answered "None."	М
		Does child usually have something to eat before going to school?		М	How often do you have breakfast (either at home or at school)?	Deprived if answered "Less than once a week/Never."	С
	Access to Healthcare	Which of the following best describes how regularly child visits the dentist?	answered	М	Which of the following best describes how regularly Child visits the dentist?	Deprived if answered "Never."	М
Article 24		Is child covered by a medical card? / Is child covered by private medical insurance?	Deprived if answered "No" to both questions	M	Is Child covered by a medical card? / Is Child covered by private medical insurance?	Deprived if answered "No" to both questions	М
	Protection from Violence	Has child been victim of bullying in last year?	f Deprived if answered "Yes."	М	Has child been a victim of bullying in last 3 months?	Deprived if answered "Yes."	M
Article 19		How often do you do the following when child misbehaves? - Shout or yell at him/her?	Deprived if answered "Regularly/ Always".	M	When you misbehave, how often do your parents shout at you?	Deprived if answered "Always".	С

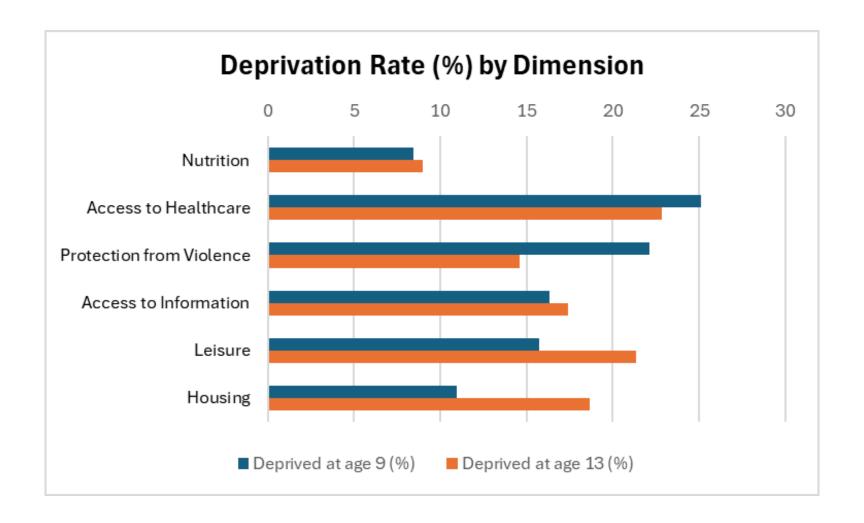
Corresponding	Table 1 Continued						
Corresponding UNCRC Article	Access to Information	Do you have a computer, iPad, smartphone, or other	Deprived if answered "No."	С	Does Study Child have access to the internet through a smartphone,	Deprived if answered "No."	М
Articles 13 & 17		can use to access the internet?			tablet, laptop or other computer?		
		About how many children's books does child have access to in your home now, including any library books? Would you estimate:	Deprived if answered "None", or "Less than 10."	M	How many books (including e-books) does Study Child have access to in the home?	Deprived if answered "None", or "1 to 10."	M
Article 31	Leisure	During an average week, does child participate in Team sports / Individual sports / Drama classes / Arts and craft / Youth club / Religious club/group/ Music/dance / Scouts/guides/ boy's brigade/ girl's brigade / Other activities?		M	How often do you play sports with a coach or instructor, or as part of an organised team? / How often do you take part in dance lessons? / How often do you take part in art, crafts, drama or music lessons, clubs or rehearsals? / How often do you take part in club or groups (e.g. Guides, Scouts, youth club, community, church groups)?	answered "Less often or never" to all.	С
		There are safe parks, playgrounds and play spaces in this area.	Deprived if answered "Strongly disagree."	М	Is there a park, beach or green space within 2 kilometres of home	Deprived if answered "No."	M
Article 27	Housing	Accommodation: Poor conditions in the home (damp, drafts, leaks etc.	answered "Yes."	M	Leaking roof/ damp walls /rot in windows or door frames - Problems with your accommodation		M
		Accommodation: Too small	Deprived if answered "Yes."	М	Too small, not enough space - Problems with your accommodation	Deprived if answered "Yes."	М

Findings: Deprivation Rates



Note: N=5,442

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Distribution of dimensional deprivations at ages 9 and 13

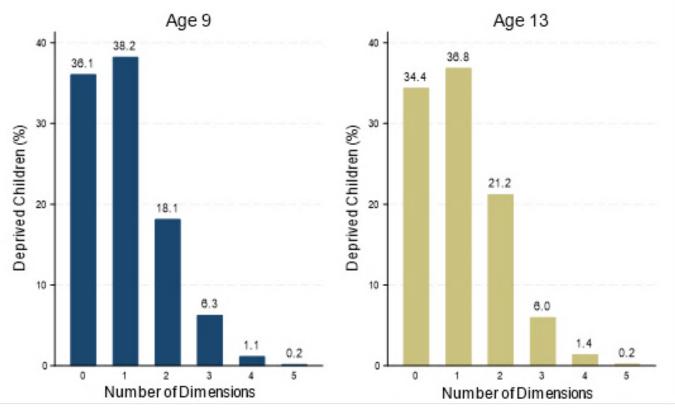


Table 2 De	Deprivation Rate at Each Wave				
	Rate (%)	Rate (%)			
	at Age 9	at Age 13			
Multidimensional	26	29			
Deprivation (2+)					

Note: N=5,442

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Key Takeaways

- At both age 9 and 13, over one fifth of children did not have either private health insurance or a medical card.
 - Inclusion of older children in the free GP visit card scheme could be beneficial.
- At 13 there were much higher shares of children deprived on the leisure and housing dimensions than at age 9.
 - Deprivation in the leisure dimension at 13 could have increased due to the higher costs associated with teenage children or reflect lower participation in the aftermath of COVID.
 - Increased housing deprivation could reflect overcrowding due to the addition of siblings.
- The multidimensional deprivation rate varied slightly (26% at age 9, 29% at age 13).
- Varying deprivation indicators mean we cannot know if findings represent real change over time
 or are artefacts of measurement.

Findings: Income and Deprivation

Share (%) of Multidimensionally Deprived Children within each Income Quintile

	Age	9	Age 13			
Income quintile	Deprived (%)	Not Deprived (%)	Deprived (%)	Not Deprived (%)		
1 st	37	63	36	64		
2 nd	30	70	35	65		
3 rd	25	75	31	69		
4 th	22	78	27	73		
5 th	15	85	17	83		

Note: Income category "1st" denotes the lowest income quintile. Since shares of multidimensionally deprived children in the "Missing" income category are excluded from this table, N =5,016 at age 9 and N=4, 937 at age 13.

Average marginal effects from logistic regression of multidimensional deprivation status on income quintile.

	(1)		(2	.)
	Age 9	Age 13	Age 9	Age 13
Income quintile (ref: 5 th quintile)				
1 st	0.22***	0.19***	0.10**	0.10**
2 nd	0.16***	0.18***	0.08**	0.10**
3 rd	0.10***	0.14***	0.05*	0.09**
4 th	0.07**	0.10***	0.05	0.07**
Missing	0.09**	0.09**	0.05	0.05
Child's gender (ref: Male)				
Female			-0.02	0.04*
Mother's age group				
(ref: 50 or older)				
20-39 years			0.08	0.17***
40-49 years			-0.02	0.04*
Family status (ref: Couple family)				
Lone parent family			0.09**	0.06*
Mother's highest educational level				
(ref: Postgraduate)				
School			0.21***	0.21***
Higher Education			0.07***	0.11***
Mother's employment status				
(ref: Employed)				
Studying/Training			0	0.10
Not in work			-0.02	-0.05*
N	5,442	5,442	5,442	5,442

Note: * p<0.05, ** p<0.01, *** p<0.001. The dependent variable in logistic regression (1) without controls and (2) with controls is a binary indicator variable for multidimensional deprivation status. Income category "1st" denotes the lowest income quintile. Reference categories are included in brackets.

Policy Implications

- Supplementing existing household deprivation and income measures with a child-specific deprivation index at the national level would provide policy makers with comprehensive information on children's personal and household circumstances.
 - This data could be used to better target policy interventions in combatting and preventing child poverty and deprivation.
- Since not all multidimensionally deprived children live in low income households, nonmonetary policy interventions in Ireland have the potential the be effective in meeting immediate needs.
- The dimensions of deprivation identified in this study highlight areas where interventions could be beneficial in improving children's well-being e.g. GP visit cards, subsidised leisure activities, etc.

Thank you!