



# Children's Socio-Emotional Outcomes at Age 5: Does childcare make a difference?

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# Motivation: Why childcare and social-emotional outcomes?

- Assessing socio-emotional development at early stage critical not only for children's current well-being but for 'school readiness' future educational outcomes and developmental pathways.
- Social gradients in socio-emotional outcomes visible from an early age, pre-school. May provide insights into processes that produce & reproduce inequalities
- Much recent international interest in the impact of childcare on child development, particularly for disadvantaged children (Ruhm and Waldfogel, 2012)
- Growing policy interest and development (in Ireland) in early childcare & education.



# Previous research

- Group care can enhance social skills & self efficacy (Peter et al. 2015; Deardon et al, 2010; Harrison 2008) but may also lead to behavioural difficulties, especially with long hours (NICHD ECCRN 2005). Mixed empirical results, effect generally small.
- In Ireland, Byrne and O'Toole (2015) found no independent effect of childcare type at 9 months on socio-emotional outcomes at age 3 (using GUI data)
- Childcare may act as a protective factor for low income / socially disadvantaged (Peng & Robins, 2010; Smart et al., 2008)
- Social background interactions mediated by quality (Sammons, 2010; Melhuish, 2015) and type of care (Smart et al., 2008)



# Research Questions

1. Is participation in different non-parental care types in the first three years of life associated with variation in socio-emotional outcomes (*social skills, emotional difficulties, conduct difficulties, hyperactivity, peer-problems*) at age five?
2. Does centre-based care effect different groups of children differently?



# Irish Context

- Rapid rise in female employment during the boom and expansion of childcare places, high fertility
- Largely market model of childcare in Ireland with low state intervention and very low government investment (McGinnity et al, 2015) though this is changing
- High level of private provision which is expensive: OECD (2014) estimates childcare costs to parents in Ireland among highest in Europe
- Issues around quality of care and low qualifications and pay of childcare workers



# The Growing Up in Ireland Infant Cohort

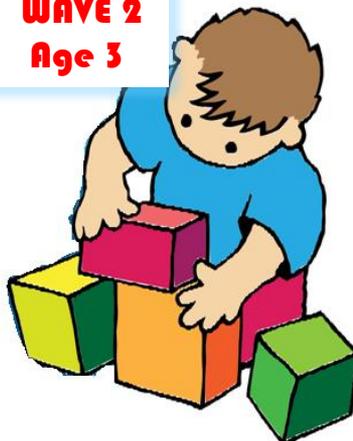
**WAVE 1**  
**Age 9m**



2008 (11,134)

Parent interview  
(face-to-face)

**WAVE 2**  
**Age 3**



2011 (9,793)

Parent interview

Child completes  
cognitive and  
physical tests

**WAVE 3**  
**Age 5**



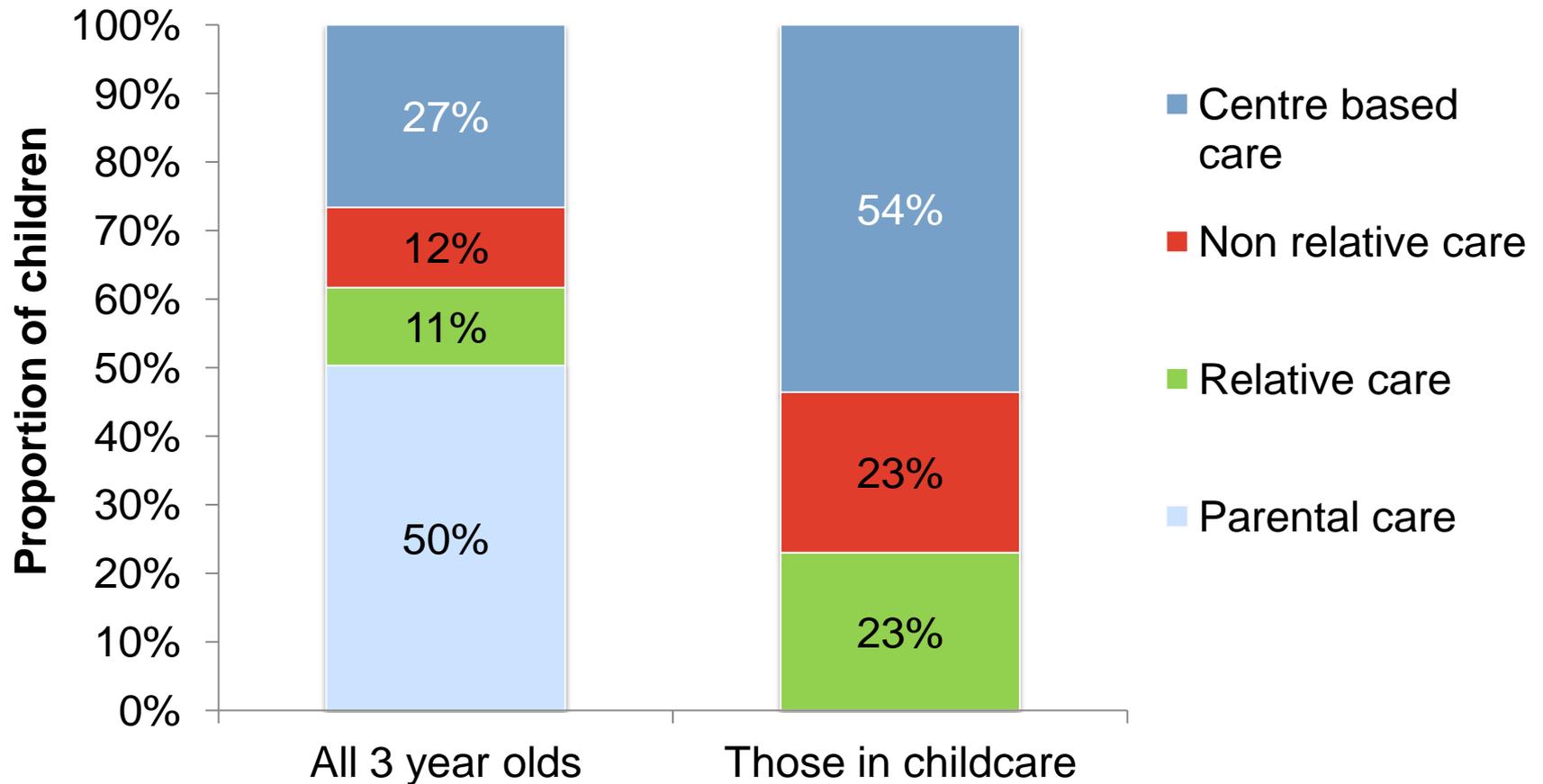
2013 (9,001)

Parent interview  
Child completes  
cognitive tests

Teacher evaluation of  
child's cognitive ability  
and socio-emotional  
adjustment



# Main Care Type at Age 3





# Measuring Socio-Emotional/ Behavioural Outcomes

- The Strengths and Difficulties Questionnaire (SDQ) assesses behavioural and emotional adjustment and comprises five sub-scales: pro-social, emotional difficulties, conduct difficulties, hyperactivity, peer-problems (Goodman, 1997)
- Completed by the Primary Caregivers (usually mothers) and Teachers at Age 5, we use both measures

Pro-Social Sub Scale	Responses
Considerate of other people's feelings	<p style="text-align: center;">Not true Somewhat true Certainly true</p>
Shares readily with other children...	
Helpful if someone is hurt...	
Kind to younger children	
Often volunteers to help others	



# SDQ total difficulty: 4 sub-scales

Emotional problems scale	Hyperactivity scale
Often complains of headaches...	Restless, overactive...
Many worries...	Constantly fidgeting or squirming
Often unhappy, downhearted	Easily distracted, concentration wanders
Nervous or clingy in new situations	Thinks things out before acting
Many fears, easily scared	Sees tasks through to the end
Conduct problems Scale	Peer problems scale
Often has temper tantrums or hot tempers	Rather solitary, tends to play alone
Generally obedient...	Has at least one good friend
Often fights with other children	Generally liked by other children
Often lies or cheats	Picked on or bullied by other children
Steals from home or elsewhere	Get on better with adults than other children



# Research Question 1

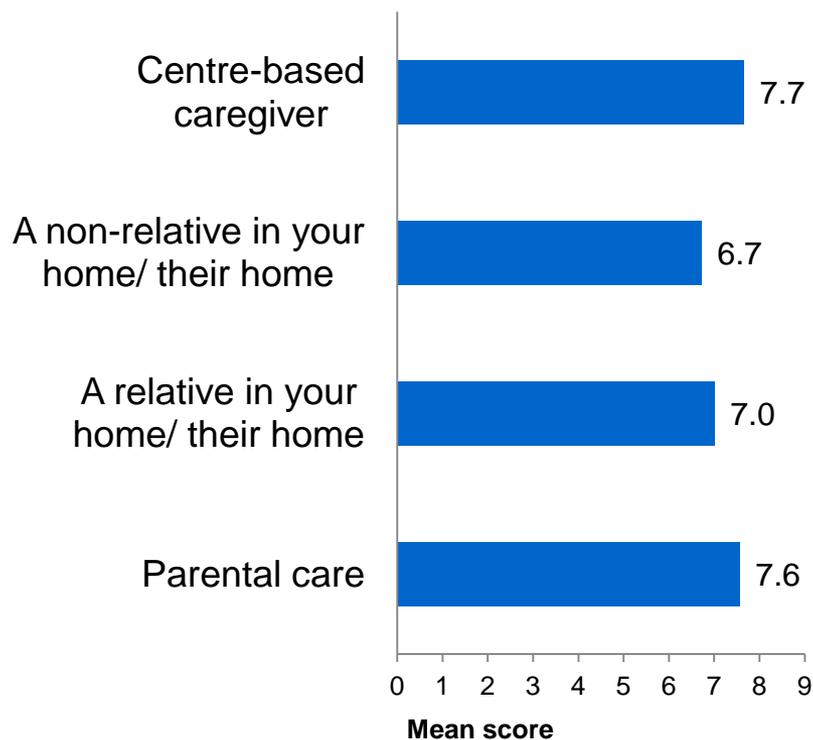
1. Is participation in different non-parental care types in the first three years of life associated with variation in socio-emotional outcomes (*social skills, emotional difficulties, conduct difficulties, hyperactivity, peer-problems*) at age five?



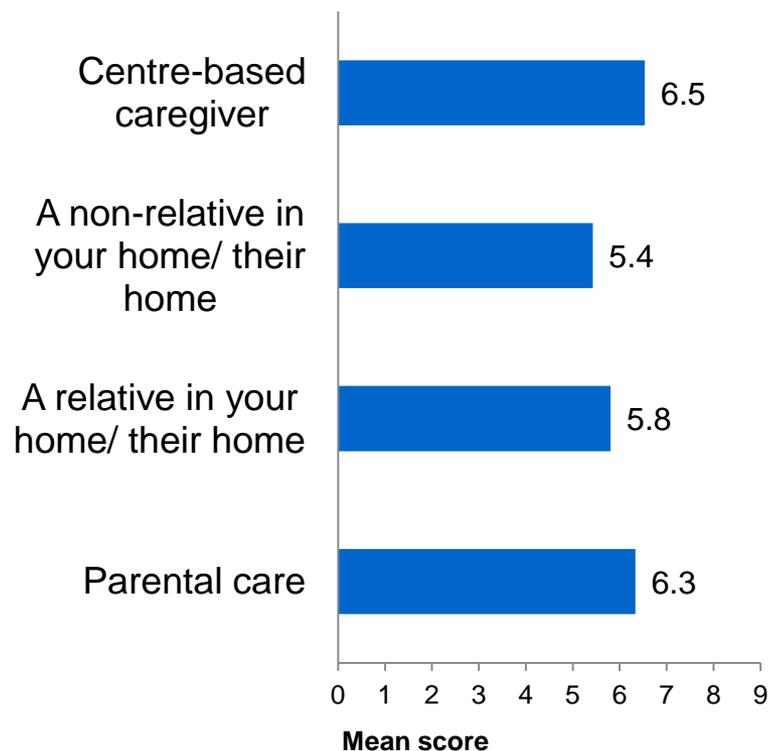
# Total Difficulties Scores at Age 5 by care-type (No controls)

Higher score = More Difficulties

### Parent-rated total difficulties



### Teacher-rated total difficulties





# Modelling – add factors expected to be linked to socio-emotional development ('controls')

Group of characteristics	Specific measures
Child Characteristics	Birth weight, gender, whether hampered by chronic ill-health/ disability, number of siblings, whether started school by 5 year interview
Parental Characteristics	Mothers age, lone parent, mother born abroad, mother stress scores, mother depression scores, mother parenting style
Household Characteristics	Family social class, whether family are income poor, if the family have experienced difficulty in making ends meet and whether they are in mortgage/rent arrears
Neighbourhood Characteristics	Score on neighbourhood rating scale



# SDQ by care type (compared to full-time parental care) with full set of controls

Rated by	Effect	Relative care	Non relative care	Centre based care
Parents rating	Pro-social strengths	↑	ns	ns
	Total Difficulties	↓	↓	ns <sup>1</sup>
Teacher rating	Pro-social strengths	↑	↑	ns
	Total Difficulties	ns	↓	↑ <sup>2</sup>

1. Parent scores centre-care: lower emotional and peer problems, but higher conduct problems. When combined no difference in total.
2. Teacher scores centre-care: driven by higher conduct and hyperactivity scores

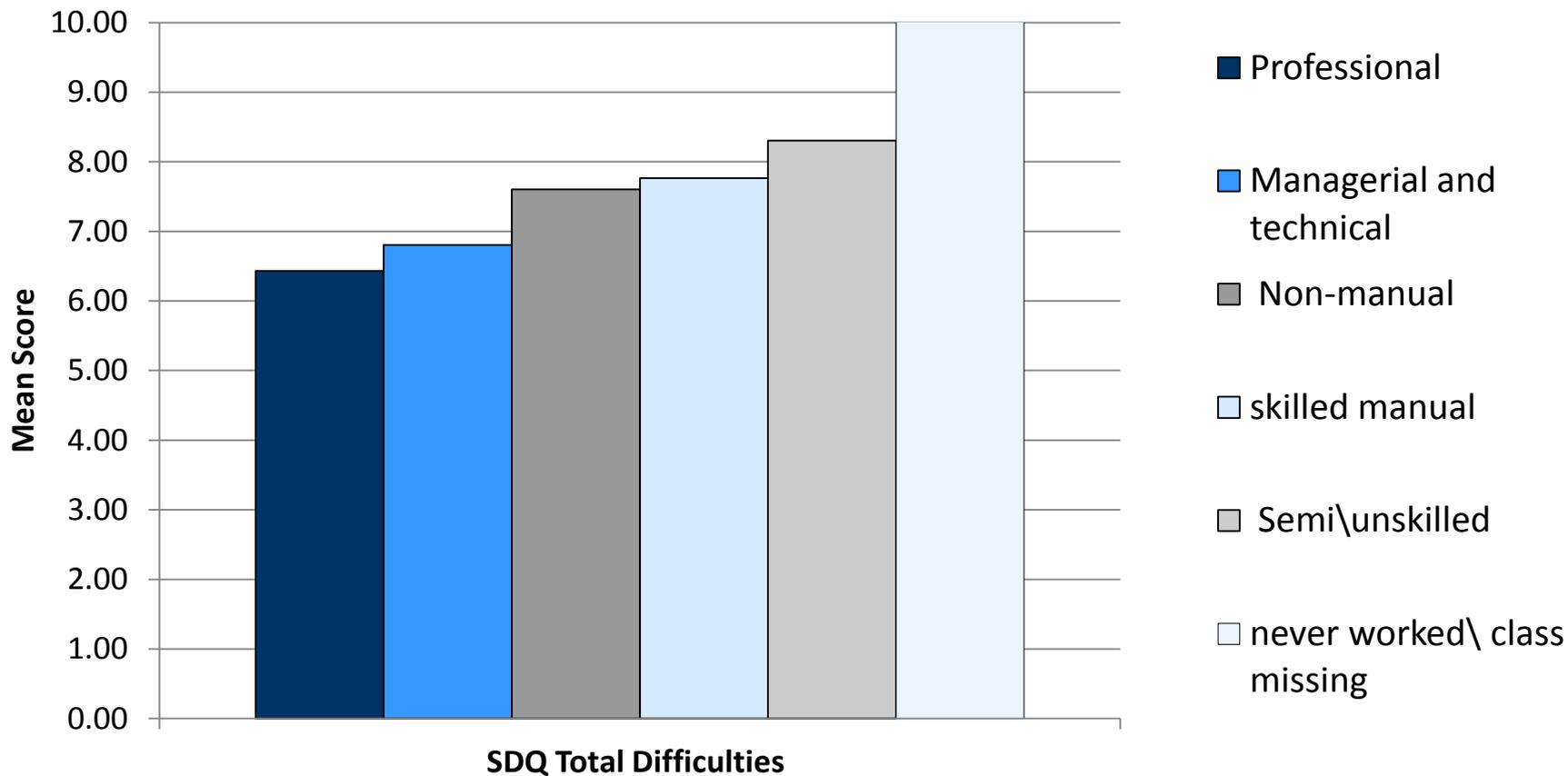


# Research Question 2

2. Does centre-based care effect different groups of children differently?



# SDQ (parent rated) by Social Class; Age 5





# Group Differences in Centre Care effects

	Teacher-rated Total difficulties	Teacher-rated Pro-social	N
Centre care compared to parental care			
No social class or semi/ unskilled	-.738#	+.171	1,212
Other social class	+.438**	-.118#	6,597
Income poor at w2	-.03	+.126	1,881
Not poor	+.328 *	-.126*	6,494
Lone Parent	-.596	+.353 #	961
Two parent	+.377 *	-.142 *	7,414

\*\*< .005 \* <.05 # <.10

Models control for child, family and neighbourhood characteristics. Separate models are run for the advantaged and disadvantaged sub groups.

- No significant effects for parent-rated SDQ for advantaged or disadvantaged groups (total difficulties and pro-social)



# Outcomes of centre-based care for Disadvantaged Groups

- Centre-based care had a positive effect on teacher-rated socio-emotional development for a number of disadvantaged groups
- Centre care is associated with a reduction in total difficulties for children in the lowest social class categories and
- An increase in pro-social scores for children from lone parent households.



# Caveats

- Effect sizes are small – not surprising that parenting and other family factors are a stronger predictor of children's SE development. Also found by Belsky et al. 2007; Hanson & Hawkes, 2009; Melhuish et al., 2015.
- Differences in parents' and teachers' assessment of children's socio-emotional development is consistent with international literature; due to different contexts and nature of relationship both valid.
- No measures of quality of care received – could disguise differential effects of poor and high quality care.



# Conclusions 1

- Socio-emotional adjustment important for acquisition of skills that allow children to participate in social interactions, influences current wellbeing, school readiness, educational attainment & developmental pathways.
- Care type – initial differences mostly due to selection but some positive effects for relative care and non-relative care on SE outcomes.
- Centre care – small neg effect on teacher scores, parents mixed (lower emotional & peer problems, but higher conduct problems).
- Overall effect sizes small. Family & child characteristics more important.



# Conclusions 2

- Some differential effects for disadvantaged/advantaged groups but these are again very small in size. Nowhere near enough to level playing field.
- Childcare also facilitates parental employment which indirectly influences SE development through household income, poverty reduction.
- For further info see:  
**<http://www.esri.ie/publications/childcare-early-education-and-socio-emotional-outcomes-at-age-5-evidence-from-the-growing-up-in-ireland-study/>**