



Parental mediators of socio-economic achievement gap in early childhood: Simultaneous Investigation of Investment and Stress Models in Ireland

Berçem Demirel

Completed in partial fulfilment of the MSc in Applied Social Research (2021)

Trinity College Dublin

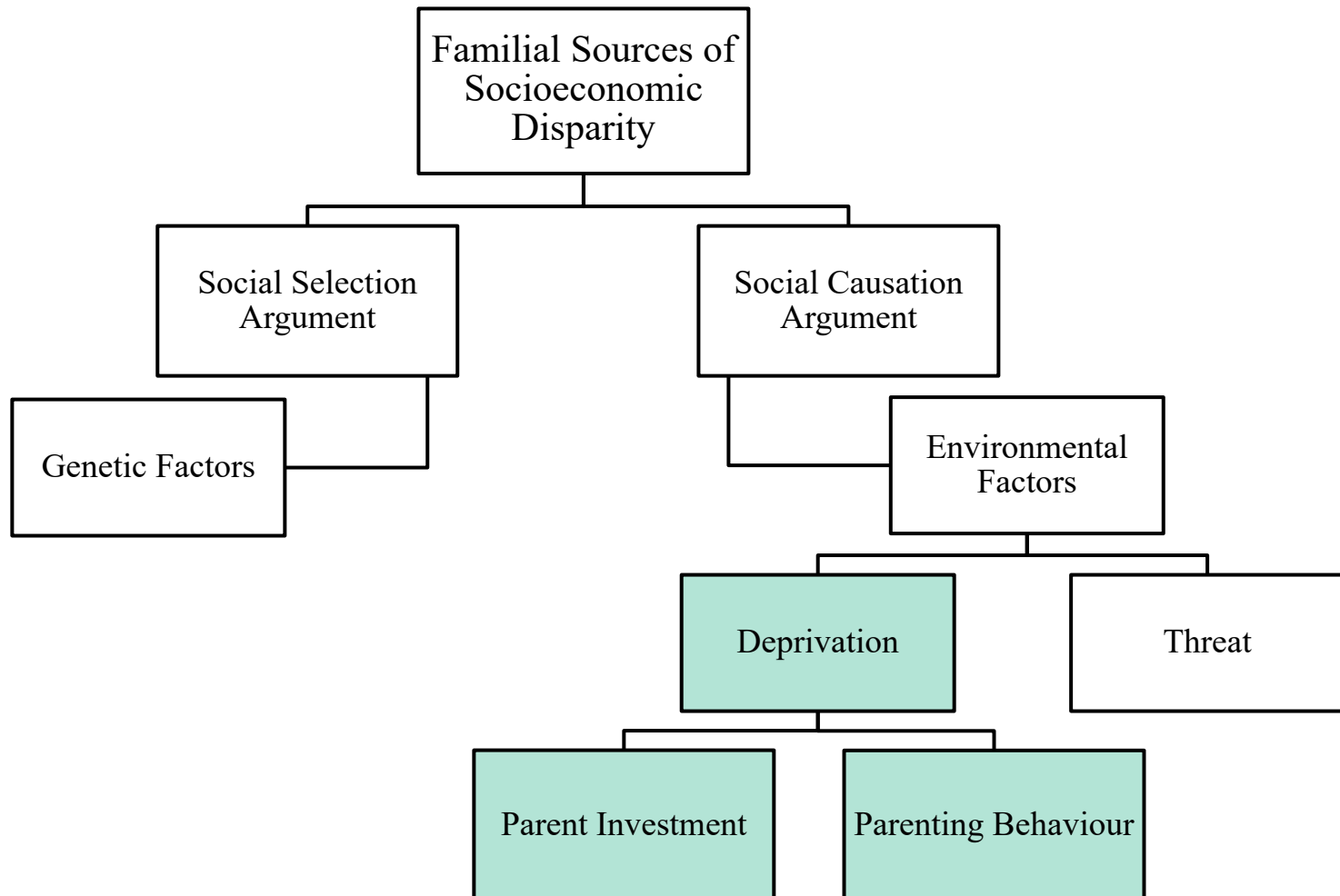
Under the supervision of Siobhan Scarlett

13th Annual
Research
Conference
2021

Background

- Persistent socioeconomic disparity in educational outcomes in Ireland and elsewhere ([Chmielewski, 2019](#))
- Can be traced back to cognitive competencies in early childhood
 - Association between SES and cognitive abilities
 - As early as 2 years old ([Noble et al., 2015](#))
- Role of family processes ([Bronfenbrenner and Morris, 1998](#))
 - Environmental factors
 - Deprivation ([Sheridan & McLaughlin, 2016](#)): absence of social and cognitively stimulating resources in low-income households

Background



Background

- Deprivation and models of mediation

1. Family Investment Model

- due to insufficient economic resources, parents cannot sufficiently invest in their child's social and cognitive development (Conger and Donnellan, 2007).

2. Family Stress Model

- material hardship causes increased stress in parents, which in turn leads to family conflict and negative parenting behaviour, resulting in poor child outcomes (McLoyd, 1998).

Background

- Intersecting pathways acknowledged in theory but rare in empirical research (for examples: see Gershoff, Aber, Raver and Lennon, 2007; Nievar, Moske, Johnson and Chen, 2014)
- Relevant research in the Irish context (Nixon, Layte and Thornton, 2019; Hoyne and Egan, 2018; Quigley & Nixon, 2016)
 - No simultaneous investigation
 - Over-emphasis on behavioural aspects
- No clear borders classifying the indicators of parenting practices and parent investment
- What parents can provide to their children, in terms of material resources vs. how they treat their children
 - conceptually sound
 - empirically distinct in their relation to child cognitive competence (Yeung, Linver and Brooks-Gunn, 2002; Gershoff, et al., 2007)

Theoretical Discussions & Policy Discourse

- Tendency to **overemphasize** the importance of **behavioural** aspects of social & cognitive stimulation (i.e.: parenting practices)
- Critical accounts
 - shift in policy → from welfare provisions to the micro-management encouraging parents to interact more positively and be more involved in their children's learning
 - neoliberal discourse → “parental values” of the disadvantaged parents as the problem (La Placa and Corlyon, 2016).
 - not enough evidence to support the widespread claim that “parenting matters more than parents’ socioeconomic status” (Hartas, 2014:2)
- Important to conceptualise parenting behaviour not only as a potential factor of child cognitive outcomes but also as **an outcome of a deprived and stressful environment**

Current study

1. How do the proposed pathways of family stress and investment models intersect in the Irish context?
2. What are the relative impacts of income, material hardship, distal environmental stressors, parent investment and parenting behaviour on cognitive performance in 5-year-olds?
3. Does parenting stress affect how parents invest in learning materials & structured activities and their parenting behaviour across SES variations?
4. What are the roles of material hardship and distal environmental stressors (neighbourhood factors) in explaining parenting stress?

Data & Variables

- Infant cohort of GUI → Wave 3: 5 years (n = 9,001)

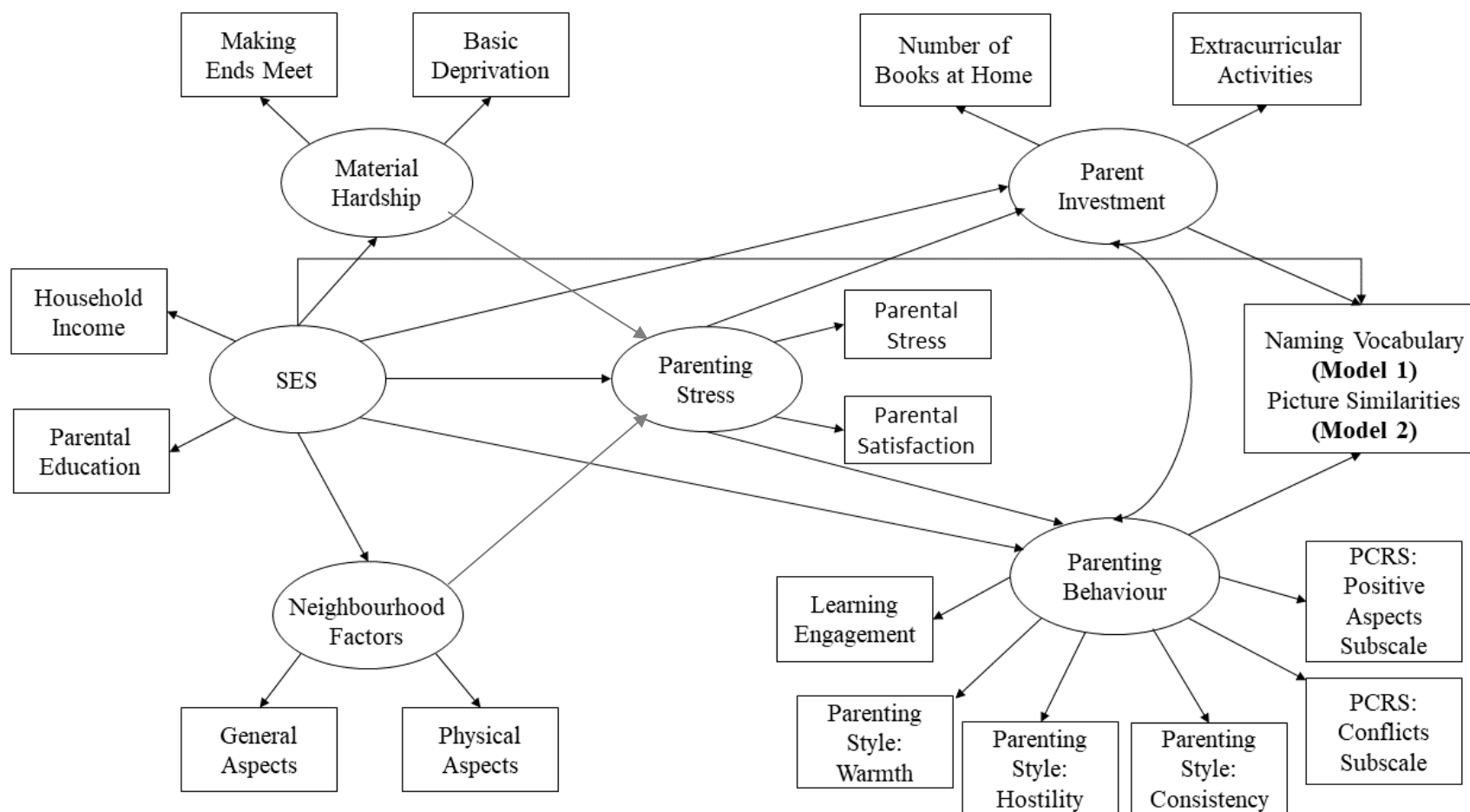
Primary Outcome Variables: Naming Vocabulary & Picture Similarities

Primary Predictor: Socioeconomic Status

Mediating Variables	
Material Hardship	Difficulty Making Ends Meet
	Basic Deprivation Scale
Neighbourhood Factors	General Aspects of Neighbourhood
	Physical Aspects of Neighbourhood
Parenting Stress	Parental Stress
	Parental Satisfaction
Parent Investment	Extracurricular and Out of Home Activities
	Number of Books at Home
Parenting Behaviour	Child-Parent Relationship Scale
	Parenting Style
	Learning Engagement

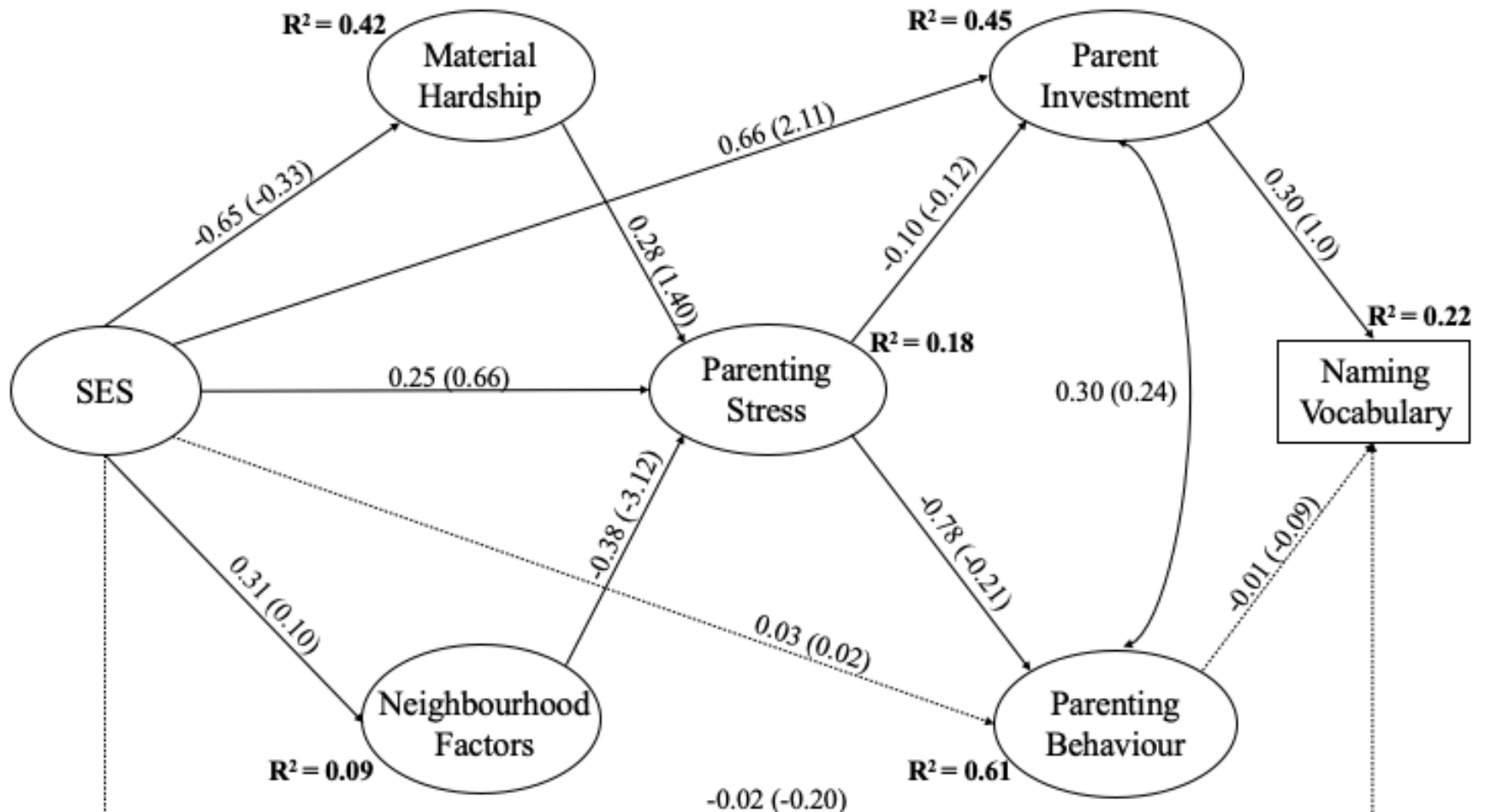
Hypothesised models

- Analysis: Structural Equation Modelling (SEM)



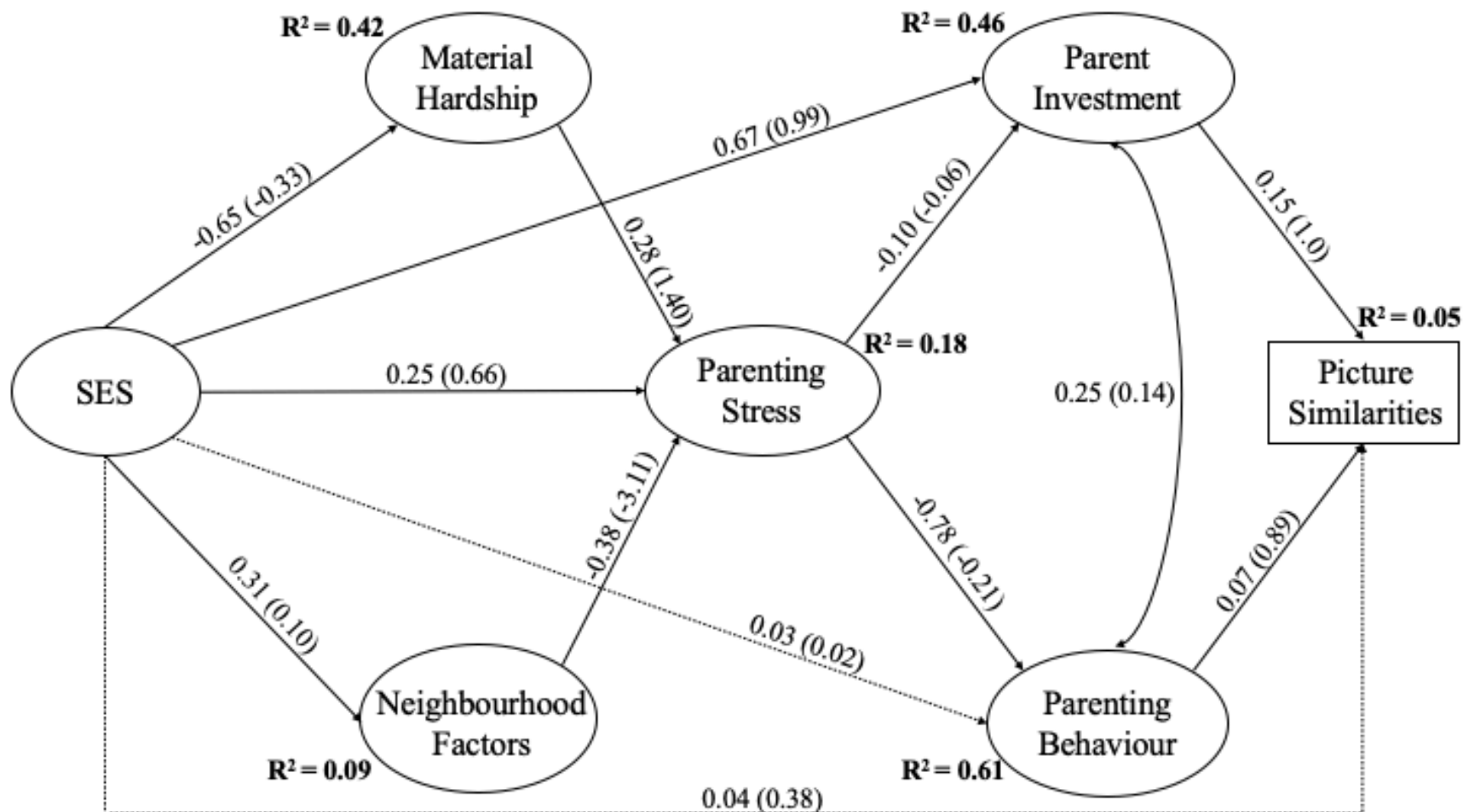
Results

- The model predicting Naming Vocabulary



Results

- The model predicting Picture Similarities



Discussion

- Simultaneous investigation of Investment and Stress Models
 - Among various physical and psychosocial elements of the immediate environment, those that are more dependent on the material resources, parent investment, were found to mediate the relationship
 - Distinguishing the “cost-free” parenting behaviour from more income-dependent parental resources
- Parenting in context
 - SES becomes a potential risk factor for unfavourable parenting when coupled with parenting stress stemmed from financial strain.
 - inclusion of distal processes advanced our ability to unpack the complex environment of poverty through which the parenting stress was more clearly described.

Discussion

Limitations

- Parental depression would be a more ideal measure
- Cross-sectional data → the temporal direction of the relationship could not be established



13th Annual
Research
Conference
2021

Thank you!

Berçem Demirel

demirelb@tcd.ie

References

- Bronfenbrenner, U., & Morris, P. A. (1998). *The Ecology of Developmental Processes*. 19.
- Chmielewski, A. K. (2019). The Global Increase in the Socioeconomic Achievement Gap, 1964 to 2015. *American Sociological Review*, 84(3), 517–544.
<https://doi.org/10.1177/0003122419847165>
- Conger, R. D., & Donnellan, M. B. (2007). An Interactionist Perspective on the Socioeconomic Context of Human Development. *Annual Review of Psychology*, 58(1), 175–199. <https://doi.org/10.1146/annurev.psych.58.110405.085551>
- Gershoff, E. T., Aber, J. L., Raver, C. C., & Lennon, M. C. (2007). Income Is Not Enough: Incorporating Material Hardship Into Models of Income Associations With Parenting and Child Development. *Child Development*, 78(1), 70–95.
<https://doi.org/10.1111/j.1467-8624.2007.00986.x>
- Hartas, D. (2014). *Parenting: A New Culture War for Parents*. Palgrave Macmillan.
<http://public.eblib.com/choice/publicfullrecord.aspx?p=1645521>
- Hoyne, C. & Egan, S., (2018). The effect of the home learning environment and parental involvement on cognitive development in early childhood. In: Growing Up in Ireland 10 th Annual Research Conference.

References

- La Placa, V., & Corlyon, J. (2016). Unpacking the Relationship between Parenting and Poverty: Theory, Evidence and Policy. *Social Policy and Society*, 15(1), 11–28.
<https://doi.org/10.1017/S1474746415000111>
- McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist*, 53(2), 185–204. <https://doi.org/10.1037/0003-066X.53.2.185>
- Nixon, E., Layte, R. & Thornton, M. (2019). *Growing Up in Ireland: The effects of economic recession and family stress on the adjustment of 3-year-olds in Ireland*. (Infant Cohort Research Report No. 8). Dublin: The Stationery Office.
- Noble, K. G., Engelhardt, L. E., Brito, N. H., Mack, L. J., Nail, E. J., Angal, J., Barr, R., Fifer, W. P., Elliott, A. J., & in collaboration with the PASS Network. (2015). Socioeconomic disparities in neurocognitive development in the first two years of life: SES Cognitive Disparities During Infancy. *Developmental Psychobiology*, 57(5), 535–551.
- Quigley, J. & Nixon, E., (2016). Parental Investment & Child Development. In: J. Williams, E. Nixon, E. Smyth and D. Watson, (ed.), *Cherishing All the Children Equally? Ireland 100 years on from the Easter Rising*. Cork, Ireland: Oak Tree Press.
- Sheridan, M. A., & McLaughlin, K. A. (2016). Neurobiological models of the impact of adversity on education. *Current Opinion in Behavioral Sciences*, 10, 108–113.
<https://doi.org/10.1016/j.cobeha.2016.05.013>

References

- Yeung, W. J., Linver, M. R., & Brooks–Gunn, J. (2002). How Money Matters for Young Children's Development: Parental Investment and Family Processes. *Child Development*, 73(6), 1861–1879. <https://doi.org/10.1111/1467-8624.t01-1-00511>