



How Do Childcare Arrangements Impact Education Outcomes?

Dr Gabrielle Garon-Carrier

HOW DO CHILDCARE ARRANGEMENTS IMPACT EDUCATION OUTCOMES?

A stimulating and nurturing early childhood experience is critical to achieving better educational outcomes in later life. But what are the best childcare arrangements? Is it better to be looked after by family members or a nanny at home, or would care provided by qualified carers in a more structured environment bring additional benefits? A large study by **Dr Gabrielle Garon-Carrier**, from the Université de Sherbrooke, Quebec, Canada, sought to find answers to these burning questions.

The Childcare Conundrum

Parents all over the world face difficult decisions about childcare arrangements. Should their child be looked after by a family member, friend, or neighbour until school age or would hiring a nanny with relevant experience and references be better? Would the child benefit from spending time in a professionally organised and run childcare facility? Financial implications, the potentially hurt feelings of willing relatives, and considerations about the location and opening hours of organised childcare facilities make these decisions particularly hard to reach. The stakes are high: A positive early experience is likely to influence later educational attainment and will have a profound influence on the future of the child. Sporadic news articles confuse the issue further, with some suggesting a benefit from participating in organised care, others questioning it.

So, what do scientists studying early child development think about this thorny issue? Canadian child psychologist and education expert, Dr Garon-Carrier from the Université

de Sherbrooke, points out that this problem is more complex and controversial than many of us might think.

A Confusing Picture

Formal childcare can take two forms, in which children either attend an organised centre or can be looked after by a trained, officially accredited carer in the home environment. The common feature of these arrangements is the professional training the caregivers receive. Informal care, in contrast, is provided by a willing family member, neighbour, or friend. For decades, scientists have been exploring how the outcomes of these arrangements compare, but unfortunately, the picture that emerges is both complex and confusing.

Dr Garon-Carrier explains that previous studies have often been limited in scope. She further notes that often children have been observed over only a short period of time and researchers have omitted crucial details from their evaluations. While difficult to record, follow and interpret, features such as



the education of the carers, the financial arrangements and social status of the family, and other circumstances will have a significant effect on outcomes.

For example, informal care provided by a well-educated grandparent in an affluent home is likely to be very different from what a child experiences when the carer is less educated, financially disadvantaged, or unemployed. Similarly, drawing conclusions on the effects of formal care is complicated by a range of factors, such as the number of hours of participation in organised care – the ‘dose effect’. Even the sex of the children seems to have an influence – perhaps surprisingly, boys seem to benefit more from formal childcare than girls. Obtaining a comprehensive picture is made even more difficult by



the reportedly different benefits of attending formal childcare arising from studies conducted in the USA, Canada and the UK.

Searching for Clarification

This lack of definitive data prompted Dr Garon-Carrier and her co-workers to embark on a large-scale longitudinal study on how childcare arrangements influence educational aspirations later in life. The researchers took a long-term view and examined the likelihood of the children embarking on higher education. They obtained access to a large database of children held by Statistics Canada, a state-run national information database.

From this database, families with at least one child aged 24 to 36 months in 1994/5 were selected. The families were interviewed every two years between 1994 and 2008, and information was gathered about childcare arrangements, child behavioural problems such as depression and separation anxiety, family income, and the working hours of parents. The working patterns of parents were ascertained and critically, information about formal and informal childcare. Establishing attendance at higher education was achieved through Canadian tax arrangements.

Of the participating children, 51% had never attended childcare and were exclusively looked after by a parent (usually the mother). The majority of these families were from lower socioeconomic classes. To analyse the remaining families, the researchers used complex statistics to compensate for the

large number of factors that could have potentially influenced the educational achievements later in the life of a given child. Briefly, this approach established pairs of children where the parental income, work arrangements and other parameters were comparable, and the pair differed only in having received childcare in either formal or informal settings.

Some Unexpected Findings

On average, 83% of the initially studied children completed at least one year in higher education. However, this number was lower (79%) amongst individuals attending formal childcare and higher (89%) in those who were looked after informally in their childhood. As might be expected, Dr Garon-Carrier and her co-workers also found that girls and children of well-educated parents usually achieved better. However, there were two unexpected trends. First, children attending informal childcare were more likely to pursue higher education. Second, children in middle- or higher-income families attending formal childcare were less likely to participate in higher education. In contrast, children from poorer, often out-of-work households were helped by attending formal arrangements.

Dr Garon-Carrier and her team did not expect to see such a difference between the outcomes for children from lower vs higher-income families attending formal childcare arrangements. She was even more surprised that children attending informal childcare were doing better in terms of enrolment in higher education, regardless of the financial state of the families.



To further understand these unexpected findings, the researchers undertook more in-depth analyses in which they compared two types of formal arrangements: childcare provided in organised central facilities or provided at home by a trained and accredited carer.

Explaining the Benefits of Informal Arrangements

Despite further investigation, no differences in the probability of pursuing higher education were found between children attending formal childcare arrangements in a central facility or at home, which further underlined that informal arrangements resulted in better long-term educational prospects.

Dr Garon-Carrier herself believes that selecting 24- to 36-month-old children for the study may have been a reason to explain these findings. She points out that at this age, interpersonal interactions with an emotionally involved carer may be more important than developing social skills by interacting with a group of other children. At a later age, the importance of these factors may change. Thus, selecting an older age group at the start of the study may have resulted in different conclusions. These findings also imply that similar children from underprivileged backgrounds do not always benefit from the same level of emotional support in informal care arrangements. Consequently, this vulnerable group seems to benefit more from the presence of a qualified carer from a younger age.

Dr Garon-Carrier also believes that the practicalities of investigating the influence of early childcare on the likelihood

of attending higher education also affected outcomes. To allow such long-term follow-up, children who were aged 24 to 36 months had to be selected from 1994/95. It is important to mention that the quality of organised formal childcare in Canada has changed significantly since the mid-90s. Providers are better trained, the facilities are more strictly regulated, and are increasingly being inspected by local government agencies to ensure education quality. Thus, repeating this study in a decade could bring about different outcomes.

Important Conclusions

The importance of childcare provision does not only affect individuals and their families. Improving educational outcomes for vulnerable groups is the best way to improve their life chances, benefitting both the individual and society. Unfortunately, recent studies have shown that Canada lags behind comparable countries in providing childcare for working families. Recognising the importance of these early interventions, the Canadian government has announced the provision of a \$30 billion investment over the next 5 years for the development of a nationwide childcare network.

The work of Dr Garron-Carrier and her co-workers demonstrates the long-term effects of attending childcare arrangements at the age of 24 to 36 months, with measurable consequences in educational attainment 20 years later, in early adulthood. In particular, demonstrating the beneficial effects of early organised childcare attendance on the futures of vulnerable children will be critical in shaping educational policies for years to come.



Meet the researcher

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Dr Garon-Carrier completed her undergraduate studies at the Université Laval and then her PhD at the same university in 2016. This was followed by postdoctoral research at Goldsmiths, University of London. After working for the Canadian Government, she became an assistant professor in the Department of Education at Université de Sherbrooke. Her work is focused on the early-life factors affecting school readiness and educational achievements in later life. She has published extensively on the development of early numeracy and its role in scholarly achievements, the factors influencing motivation during school attendance, and the development of separation anxiety during pre-school childcare. The importance and impact of this work have led Dr Garon-Carrier to hold a Tier 2 Canada Research Chair on school readiness, the inclusion of vulnerable populations and social adjustment, and to see her work feature regularly in the media.

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FUNDING

Social Sciences and Humanities Research Council of Canada
Fonds Québécois de la Recherche sur la Société et la Culture
Canadian Institutes of Health Research
Université de Sherbrooke

FURTHER READING

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