



**Growing Up
in Ireland**
National Longitudinal
Study of Children

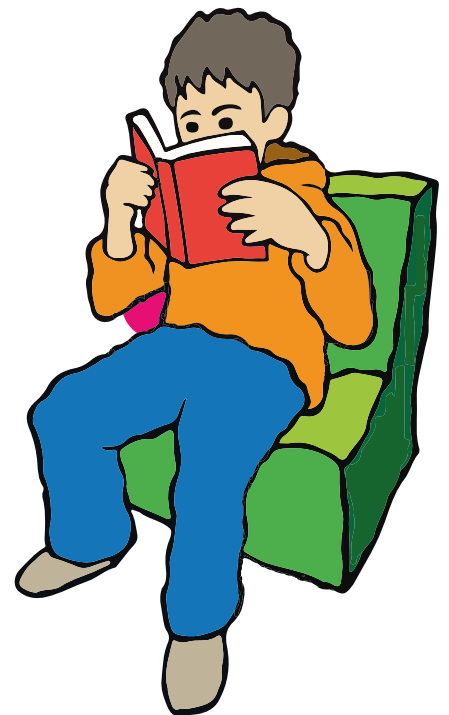


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THE LIVES OF 9-YEAR-OLDS OF COHORT '08

COHORT '08



REPORT 10



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**Eoin McNamara, Aisling Murray, Desmond O'Mahony,
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The views expressed in this report are those of the authors and do not necessarily reflect the views of the funders or of either of the two institutions involved in preparing the report.

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This report builds on work from earlier **Growing Up in Ireland** publications, including literature reviews and technical reports (see growingup.ie for a bibliography of all publications). We are grateful to all of the current and past colleagues responsible for producing these reports.

Special thanks go to the participating parents, children and school staff without whom this important national resource on the lives of children would not be possible.

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EXECUTIVE SUMMARY

INTRODUCTION

This report provides a descriptive analysis of the findings from detailed interviews conducted between June 2017 and April 2018 with 8,032 9-year-olds and their families from Cohort '08 (formerly known as the Infant Cohort) of the *Growing Up in Ireland* study.

These families were first interviewed when the Study Child was 9 months old (September 2008 to March 2009) and followed up at 3 years of age (January-August 2011) and 5 years of age (March-September 2013). An inter-wave postal survey was conducted when the cohort was 7/8 years of age (March-October 2016). Responses at 9 years of age represented 72 per cent of the original sample interviewed at Wave 1. The data have been re-weighted to account for differential response across different groups.

Capturing experiences and outcomes in middle childhood is crucial as peers become more important in children's lives and they take a more active role in shaping the nature of their play and activities. Middle childhood is also an important period for developing social and cognitive skills and for children's emerging self-concept. Behaviours at this stage, including physical activity and diet, may have longer-term consequences for physical health and well-being.

The report considers the developmental outcomes of the Study Children in four broad areas of their lives:

- Physical health and development
- Education and cognitive development
- Socio-emotional development and well-being
- Relationships with family and peers.

Because of the increased agency of children at 9 years compared with when they were younger, detailed findings are also presented on the kinds of play and structured and unstructured activities in which they engaged.


The report is descriptive in nature, outlining the main patterns found among the Study Children and how their experiences and outcomes varied according to a range of key family characteristics, including family structure, household income, social class and parental education, as well as the key child characteristic of gender. As well as cross-sectional analyses relating to experiences at 9 years of age, longitudinal analyses place these patterns in the context of earlier outcomes, especially at ages 3 and 5. These descriptive analyses point to potential areas for future research which could look in much greater detail at the personal, family, school and neighbourhood characteristics that shape their trajectories.

FAMILY STRUCTURE AND ECONOMIC CIRCUMSTANCES

The study findings yielded insights into (changes in) family structure, the employment status of parents and the families' experience of financial stress. Most of the Study Children had lived in a stable family structure to date: 76 per cent had always lived in a two-parent family while 8 per cent had always lived in a one-parent family. For those who experienced a change in family structure, moving from a one-parent to two-parent family was slightly more common than moving from a two- to one-parent structure (9% compared with 7%). As at previous waves, one-parent families were found to be more disadvantaged in terms of Primary Caregiver education, family social class and household income levels. Most (88%) 9-year-olds lived in families with other children, usually in two- or three-child households (72%). The vast majority (90%) of Study Children saw their grandparents regularly.

In two-parent households, the vast majority of Secondary Caregivers were in paid employment with almost two-thirds of Primary Caregivers employed, more usually on a full-time basis. Levels of employment in one-parent families were lower, with over half (58%) of these Primary Caregivers in paid employment. While paid employment contributed to household resources, significant numbers of families reported experiencing work-life conflict. For example, 55 per cent of Secondary Caregivers and 42 per cent of Primary Caregivers in paid employment reported missing out on family activities because of work.

Trends in financial stress (that is, the perceived ease of making ends meet) among the families were found to mirror broader patterns of economic growth and recession; the percentage of Primary Caregivers reporting making ends meet with great difficulty or with difficulty rose with the deepening recession from 13 per cent at 9 months to 26 per cent at 5 years in 2013,



before dropping back to 13 per cent at age 9 in 2017/2018. Financial stress was greater for one-parent families (29% vs 10% for two-parent families), in families where the Primary Caregiver had lower levels of education (23% for Junior Certificate or less vs 8% for degree or higher) and for the lower-skilled/never worked group (28% vs 5% for the professional social class).

PHYSICAL HEALTH AND DEVELOPMENT

The majority (79%) of 9-year-olds were reported to be *very healthy*, with the proportion increasing slightly (from 76%) since 5 years of age. Only a very small number (1%) were described as *sometimes quite ill/almost always unwell*, with the remaining 20 per cent being *healthy, with a few minor* problems. Children's health at 9 years of age was found to vary by household income, Primary Caregiver education and family structure, with those in two-parent families, in higher income households and having parents with higher levels of education more likely to have better health. Eighty-three per cent of those in the highest income quintile households were described as *very healthy* compared with 73 per cent of those in the lowest income quintile, with significant differences also evident by Primary Caregiver education (81% for degrees vs 75% for Junior Certificate) and family structure (80% for two-parent families vs 73% for one-parent families). Taking a longitudinal perspective, over half (55%) of Study Children were described as very healthy at 3, 5 and 9 years, with those from more advantaged groups more likely to be consistently healthy over time (for example, 62% for professional families compared to 47% for lower skilled/never worked families).

As well as being asked about the child's health generally, Primary Caregivers were also asked about whether their child had 'any long-standing illness, condition or disease'. This was the case for almost one-in-four 9-year-olds (24%) with asthma being the most common single condition (9% of the total sample). Boys were significantly more likely to have a long-standing condition than girls (28% vs 19%), as were those from lower-income families, from a lower social class or from families with lower parental educational attainment. The proportion with a long-standing condition had increased from earlier waves, being 16 per cent at age 3 and 19 per cent at age 5.

Over three-quarters (77%) of the Study Children were classified as non-overweight (including underweight), 18 per cent were overweight and 5 per cent were obese. Levels of overweight/obesity were higher among girls (24% compared with 21% for boys) and among less advantaged groups (for example, 31% for those whose Primary Caregivers had a Junior Certificate or lower qualification compared with 17% where they had a degree or higher). Levels of overweight/obesity declined between 3 and 5 years of age (from 24% to 19%) but increased again to 23 per cent by the age of 9. There was both continuity and change between 3 and 9 years of age. Fifteen per cent of those who were non-overweight at 3 became overweight/obese by 9 while 27 per cent of those who had been obese at 3 were non-overweight six years later. In total, 11 per cent of the Study Children were either overweight or obese at both 3 years of age and 9 years of age.

EDUCATION AND COGNITIVE DEVELOPMENT

The Study Children were asked about their perceptions of school, their teachers and their school subjects. A third of 9-year-olds always liked school, 62 per cent sometimes liked it and 5 per cent described themselves as never liking it. Attitudes to their teachers were more positive than to school; two-thirds always liked their teacher, 31 per cent sometimes liked them and only 3 per cent never liked them. Attitudes to Reading were more positive than attitudes to Maths or Irish, with 61 per cent always liking it compared to 48 per cent for Maths and 22 per cent for Irish. Over a quarter (28%) of 9-year-olds never liked Irish, a higher figure than for Maths (11%) or Reading (5%).

Significant gender differences were found in attitudes to school, teachers and subjects, with girls much more likely than boys to always like school (41% vs 25%), always like their teachers (73% compared with 59%), always like Reading (68% compared with 55%) and Irish (26% compared with 18%). Only in relation to Maths did boys have more positive attitudes than girls (54% compared with 42% always liking it). Family background differences in attitudes to school were much less marked than gender differences. However, those from more highly educated families were more likely to always like Reading (65% for children whose Primary Caregiver had a degree or higher qualifications compared with 54% for children whose Primary Caregiver had a Junior Certificate or less) and were less likely to never like Maths or Irish (23% never liking Irish compared with 37% respectively).

At 9 years of age, girls had only very slightly higher reading test scores than boys, but significant social gradients were evident by socio-economic background, with a gap of over two-thirds of a standard deviation between the highest and lowest social class and educational groups. Looked at longitudinally, analyses indicated a widening of the social gradient in test scores between 5 and 9 years of age. Indeed, children from highly educated families who had low vocabulary scores at 3 achieved higher scores at 9 than initially high-scoring children from less educated families.

SOCIO-EMOTIONAL DEVELOPMENT AND WELL-BEING

Socio-emotional well-being was measured in terms of parent and teacher ratings on the Strengths and Difficulties Questionnaire and children's own reports using the Piers-Harris Self-Concept scale. Both parents and teachers gave scores that indicated low average levels of socio-emotional difficulties and high average levels of *prosocial behaviour*. On average, boys were rated as having more difficulties with *conduct problems*, *hyperactivity/inattention* and peer relationship difficulties than girls, with girls displaying more *prosocial behaviours*. Looking at those in the highest decile (tenth), deemed to be 'at risk' of socio-emotional difficulties, clear socio-economic differences were evident. For example, 19 per cent of children whose Primary Caregiver had Junior Certificate education were in the 'at risk' decile compared to just 6 per cent where they had degree-level qualifications. However, persistent socio-emotional difficulties, that is, being in the 'at risk' decile at 3, 5 and 9 years were confined to a very small group of children, around 2 per cent of the total sample.

Similar socio-economic differences were found in relation to 9-year-olds reporting very low or low scores on the Piers-Harris Self-Concept scale. Self-perceptions were more negative among those from lower income families (27% in the lowest quintile vs 14% in the highest had 'very low' or 'low' scores) and in families where Primary Caregivers had lower levels of education (26% for Junior Certificate vs 13% for a degree or higher). Few, or only small, gender differences were evident in self-concept at 9 years of age.

RELATIONSHIPS

Both Primary and Secondary Caregivers reported relationships with their children that were generally close and not conflictual. In keeping with these patterns, most parents reported a parenting style characterised by very high *warmth* and *consistency*, and very low levels of *hostility* towards their child. Echoing parent reports, the majority of 9-year-olds reported that they got on very well with their mother and father (80% and 77% respectively), with girls reporting better relationships with their parents than boys. High levels of closeness and warmth were prevalent across social groups, but levels of conflict and hostility were somewhat higher among less advantaged groups; for example, more Primary Caregivers (17%) from lower skilled/never worked families reported high conflict levels than those in the professional group (8%).


Peer networks tend to assume more importance in middle childhood than at younger ages. More than 97 per cent of all children had at least one close friend, with more than 50 per cent described by the Primary Caregiver as having four or more friends. Children usually engaged in activities with their friends on two or three days per week. A significant minority (38%) of 9-year-olds indicated that someone had 'picked on them' in the last year. This most commonly took the form of verbal bullying (experienced by 21% of all children).

PLAY AND ACTIVITIES

The study findings yielded insights into 9-year-olds' involvement in a range of activities, including free play and play with friends, playing with electronic gadgets, physical activity and participation in organised activities. When asked about their three favourite activities, the Study Children most commonly mentioned football (including both soccer and Gaelic football) and using computers/tablets/laptops to play on the internet (both 27%). The next most frequently mentioned activities were interacting with friends in a non-sport situation and reading or writing (both 23%). In terms of organised activities, team sports, individual sports, and music/dance were the most common (66%, 62%, and 35% respectively). Involvement in organised activities was strongly structured by socio-economic background, with higher average levels of participation among children from higher social class or higher income families. For example, 45 per cent of those from the professional class were involved in music/dance activities compared to 24 per cent from the lower skilled/never worked group. Strong gender differences were also evident, with much higher levels of participation in music/dance and lower levels of involvement in team sports found among girls (52% vs 19% for music/dance; 57% vs 75% for team sports).

Information on levels of physical activity was collected from both the Primary Caregiver and the Study Child, with significant differences found between their reports. Over half of Primary Caregivers said the child was moderately to vigorously active for at least 60 minutes on nine or more days in the past fortnight and nearly two-thirds said that their child did 60 minutes of light exercise on nine or more days in the past fortnight. In contrast, only a quarter of children reported being physically active every day in the last week. Both parent and child reports indicated that levels of physical activity were higher among boys and among those from more advantaged families. The most common sports played by the Study Children were soccer (43%), Gaelic football (41%) and swimming (37%).

The vast majority (92%) of the Study Children reported having access to the internet, most commonly using an iPad or other tablet (56%), smartphone (17%) or games console (12%). Over two-thirds (69%) of children said this gadget belonged to them. The most common online activities (in the last week) were to play games alone (81%), watch YouTube videos (78%) and



search for information (55%). The 9-year-olds were much less likely to use the internet for doing homework (with 18% doing so). Over half (53%) of 9-year-olds reported that they were allowed to use the internet without their parents or another adult checking what they were doing.

Primary Caregivers were asked about the amount of time the child spent on TV and other screens during the week and at weekends. More screen time was evident at the weekends, with the proportion spending two or more hours increasing from 15 to 50 per cent for TV and from 9 to 34 per cent for other screen use. Screen time varied significantly by parental education; 27 per cent of 9-year-olds whose Primary Caregivers had Junior Certificate education watched more than three hours of TV on a weekday, compared to 16 per cent of children of those with degree-level education.

POLICY IMPLICATIONS

A principal aim of *Growing Up in Ireland* is to provide evidence to inform policy formation and design of services for families, children and young people. The broad scope of the study means that *Growing Up in Ireland* data have relevance to a large number of interrelated policy areas, including health, education, family policy and social welfare, among others. One overarching theme that emerges from the study findings is the extent to which children's experiences and outcomes were associated with the family circumstances into which they were born. Thus, whether family circumstances were examined in terms of social class, education and/or household income, 9-year-olds from more disadvantaged backgrounds were found to have poorer health, lower levels of physical activity, higher rates of overweight/obesity, more socio-emotional difficulties, less involvement in (largely paid-for) structured activities such as music and dance, and somewhat less positive views of school subjects. In the domain of cognitive development, the findings indicated that the gap in test scores by family background increased between the ages of 3 and 9. Thus, the different levels of economic, social and cultural resources possessed by families were associated with inequality in child outcomes. The Irish tax and welfare system is highly redistributive (Roantree, 2020), yet the differences that remain are significantly associated with inequalities in outcomes. Further research using *Growing Up in Ireland* data can pinpoint the factors underlying this socio-economic differentiation, identifying the risk and protective factors that shape child outcomes in order to target policy interventions in the most effective way. In particular, much could be learned by exploring the experiences of children from disadvantaged backgrounds who did not have poorer outcomes.

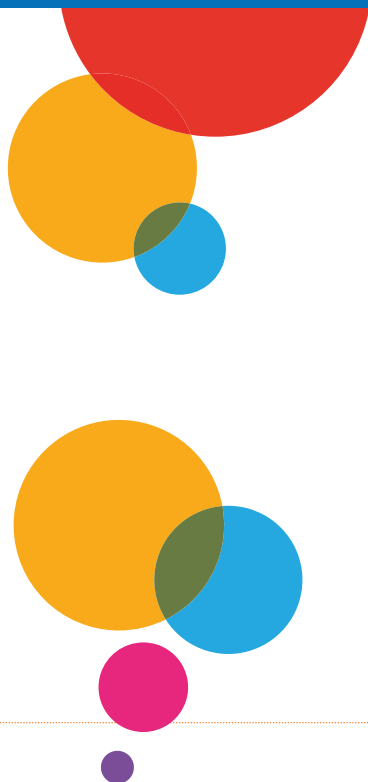
As well as highlighting social differences, the findings indicate the gendered nature of middle childhood. Significant gender differences were evident in the types of activities in which girls and boys engaged, particularly in relation to team sports and cultural activities. Furthermore, the patterns point to (some groups of) boys experiencing greater difficulties in relation to long-standing health conditions, school disengagement and socio-emotional well-being. The size of the *Growing Up in Ireland* sample provides considerable potential to unpack the interaction of gender and family background in influencing these outcomes as well as identifying the factors which explain, for example, lower levels of reading among boys and lower levels of physical activity among girls.

The longitudinal nature of the study provides rich insights into the trajectories taken by children from infancy to middle childhood. On the positive side, the results indicated that, for some outcomes, experience of difficulties was largely transitory. Thus, around two per cent of the Study Children were 'at risk' of socio-emotional difficulties across all three waves from 3 to 9 years of age. In contrast, however, some patterns such as overweight/obesity showed much more continuity across waves, indicating the importance of early intervention in preventing longer-term difficulties. Taking a longitudinal perspective allows for the identification of key turning points and protective factors in helping shape more positive outcomes among children. For the first time, this wave of data will allow for a comparison with the experiences of 9-year-olds a decade previously. Comparing Cohorts '98 and '08 will provide a useful way of disentangling broader societal and policy changes and the way they have impacted on 9-year-olds, adding to the evidence base provided by the *Growing Up in Ireland* study.



Chapter 1

BACKGROUND AND OBJECTIVES



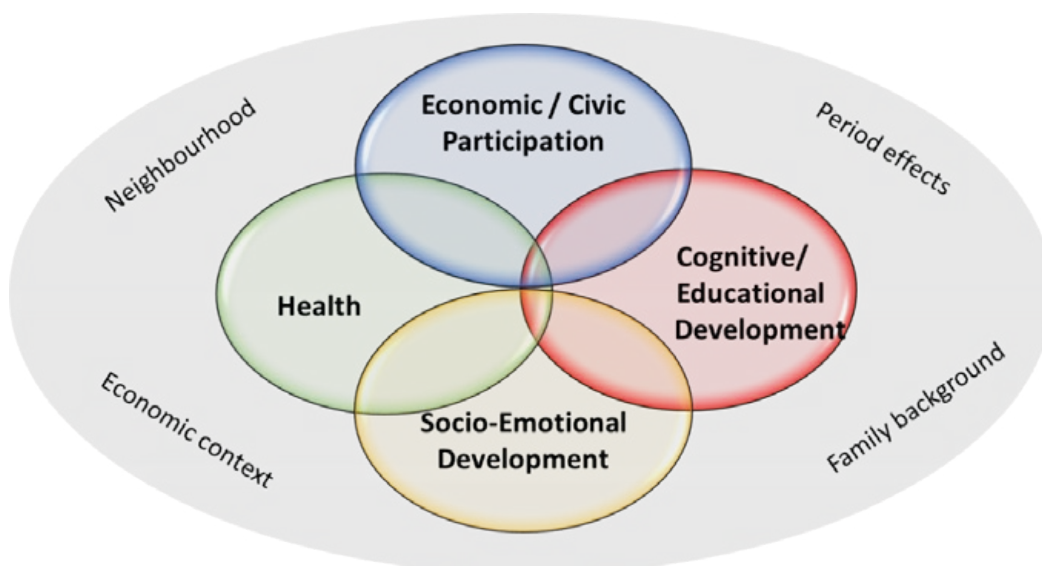
1.1 INTRODUCTION

Growing Up in Ireland is the national longitudinal cohort study of children. It started in 2006 and has been following two groups of children: Cohort '98 (so-called because most of them were born in 1998; it was formerly called the Child Cohort) and Cohort '08 (most of whom were born a decade later in 2008; formerly called the Infant Cohort). The children and families of Cohort '08 are the subject of this report. The families were first interviewed when the Study Children were 9 months old. They were re-interviewed at 3 years, 5 years and 9 years, with data also collected by a short postal questionnaire when the children were 7/8 years old.

The study is funded, overseen and managed by the Department of Children, Equality, Diversity, Integration and Youth in association with the Central Statistics Office. It has the primary objective of providing evidence to improve the understanding of children's and young people's well-being and development, which can then be used to inform government policy.

Growing Up in Ireland is a multi-domain study collecting information on a wide range of indicators of development, well-being and context – as summarised in Figure 1.1. The outcome indicators can be loosely divided into the developmental domains of physical health and development, socio-emotional well-being, education and cognitive development. For the older Cohort '98, these areas of research interest have been expanded to include economic and civic participation. To put this development into context, data on a variety of socio-demographic and other family-level variables are collected such as family size, household income, parental education and health, and neighbourhood characteristics.

Figure 1.1: Growing Up in Ireland as a multi-domain longitudinal study



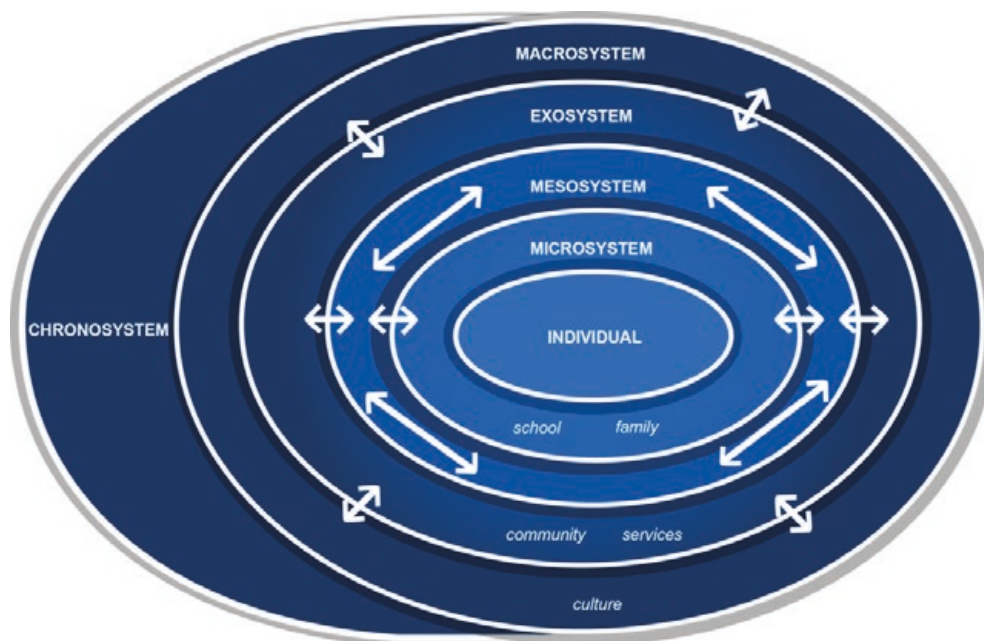
1.2 CONCEPTUAL FRAMEWORK

1.2.1 THE BIOECOLOGICAL MODEL

The conceptual framework for **Growing Up in Ireland** draws heavily on the bio-ecological model developed by Urie Bronfenbrenner (Bronfenbrenner & Morris, 2006; Figure 1.2). This model and other influences are discussed in detail in an earlier **Growing Up in Ireland** publication (Greene et al., 2010) so will be briefly summarised here.

The bio-ecological model proposes a framework in which to consider influences on the development of the individual both in terms of the 'distance' of that influence from the child and how different influences interact with each other to affect – positively or negatively – development. Influences may be individuals such as parents, groups of individuals (such as the school) or systems such as the macro-economy. One of the key influences is the individual themselves and the 'agency' that they use to shape the world around them. In Bronfenbrenner's model, these different influences are sorted into different systems (as illustrated in Figure 1.2) with the microsystem comprising those closest to the child and the most likely to directly influence their development. Parents, siblings, teachers and classmates are key components of the microsystem for most children at their current age of 9 years.

Figure 1.2: Bronfenbrenner’s ecological perspective on child development



Source: Adapted from Garbarino (1982).

The links between the various players in the microsystem in which the child directly participates is called the ‘mesosystem’ – for example, the interaction between parents and their children’s school principal or teachers. The ‘exosystem’ typically includes institutions and settings that have little or no direct contact with the child but exert important influence on their quality of life. For example, the local authority that determines the availability of funding for play spaces or community groups that support parents.

Table 1.1: Examples of *Growing Up in Ireland* variables in each bio-ecological layer

Bioecological model level	Factors
Child	Age, gender, health, temperament, cognitive ability
Microsystem	Family structure, parental health, parent-child relationship, parental education, peer relationships at school
Mesosystem	Links between those in the microsystem: parental work-life balance, parent-school engagement, relationship between close and extended family
Exosystem	Access to healthcare; school type, ethos and size; social welfare supports; community and church
Macrosystem	Citizenship, nationality, economic climate
Chronosystem	The timing of wider events such as societal change and economic booms/recessions

The ‘macrosystem’ consists of the cultural norms, attitudes and prevailing circumstances that shape the wider society. Examples include gender stereotypes, the prevalence of religious belief, attitudes to the rights of children or to migrants. Bronfenbrenner’s concept of the ‘chronosystem’ or ‘time and timing’ is the remaining system in the framework. This element refers both to the timing of historical events (such as the Great Recession of 2008-2013 or the Chernobyl nuclear disaster) that affect a whole cohort; and the timing of individual events that can alter a child’s trajectory (e.g. puberty, the early death of a parent – or, more positively perhaps, the family winning the lottery jackpot).

1.3 SIGNIFICANT EVENTS AND TIMING OF FIELDWORK

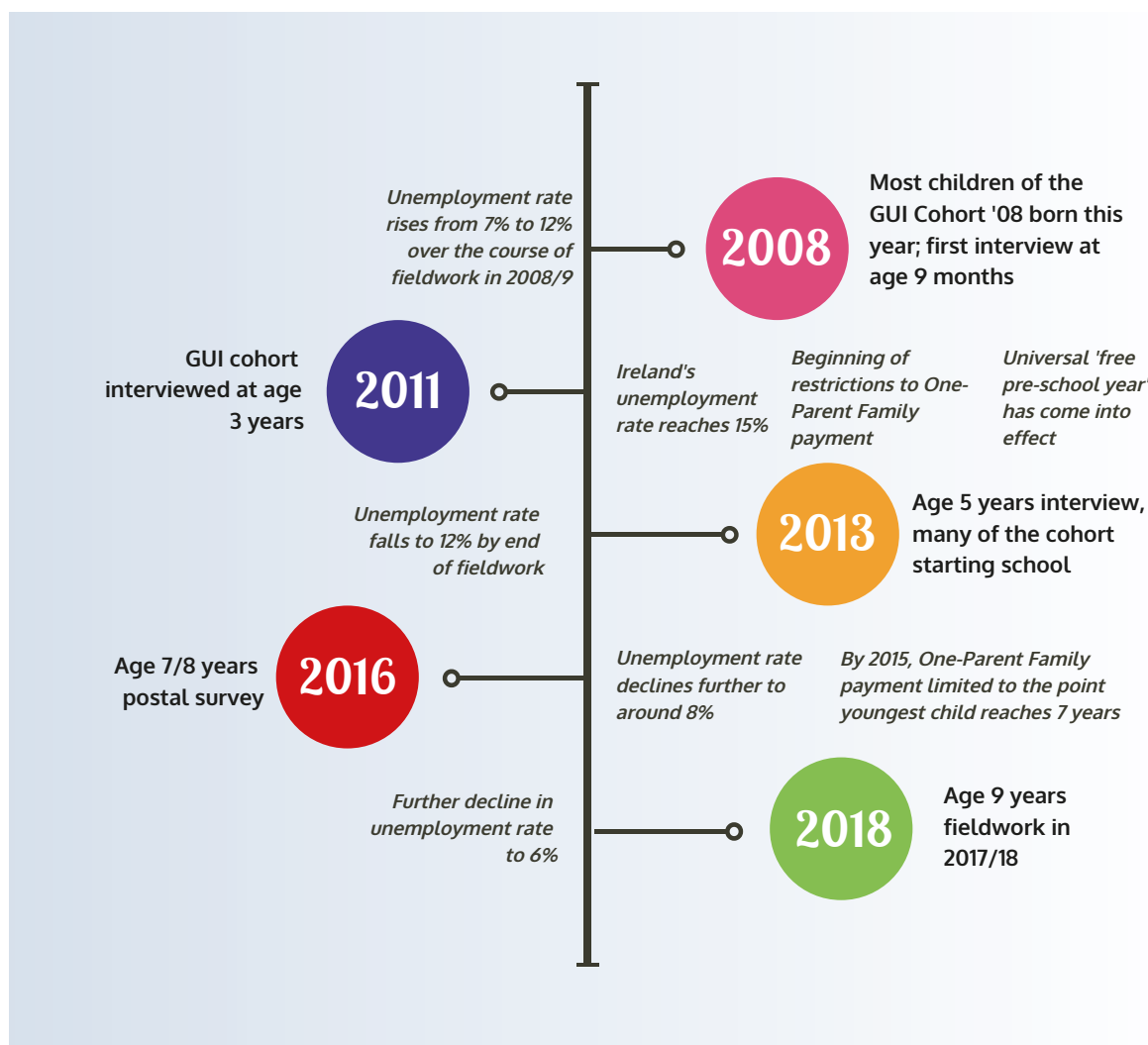
As noted above, the timing of wider events – the ‘chronosystem’ – can have an important bearing on outcomes for children and their families. One very significant event in the lives of these families was the Great Recession¹. The direct impact of a

¹ The impact of the COVID-19 pandemic and related restrictions is another example of the influence of the chronosystem on the lives of children and young people.

recession on families will be felt mainly through its impact on employment, but also through reductions in social protection payments and in public service budgets. Figure 1.3 indicates how the Irish unemployment rate fluctuated over the early years of Cohort '08, increasing sharply and rapidly while the children were growing from infants to 3-year-olds before steadily declining back to single digits by the time they were 9 years.

Other very significant policy changes in the period were the introduction of reforms to the One-Parent Family Payment, the introduction of the Jobseekers' Transitional Allowance (see Section 1.3.1) and the introduction of an Early Childhood Care and Education (ECCE) scheme introduced in 2010 (see Section 1.3.2) – also summarised in Figure 1.3. It was a period of societal change in other respects, with the introduction of same-sex marriage and abortion and international attention to the effects of climate change.

Figure 1.3: Timeline of the economic context through different waves of Cohort '08 between 9 months and 9 years



1.3.1 SOCIAL PROTECTION AND ONE-PARENT FAMILIES

Beginning in 2011, there were important changes to the eligibility criteria for the main social protection scheme for lone parents. Prior to these changes, lone parents were eligible to receive the means-tested One-Parent Family Payment (OPFP) until their youngest child turned 18, or 23 if the child remained in education. A lone parent could earn up to €146.50 per week without having their OPFP payment reduced.

The reforms were designed to increase the participation of lone parents in the labour market as their children grew older. The changes involved progressively reducing the age threshold of the youngest child (which determined eligibility for payment) so that by 2015, the lone parent would no longer be eligible for OPFP once the youngest child turned 7 years old.

A transitional payment, known as Jobseeker's Transitional payment (JST), was introduced in 2015 – available where the youngest child was between 7 and 13 years inclusive. To be eligible for JST, the lone parent does not have to actively seek employment but must engage with the Intreo service to identify training and employment opportunities.

The income disregard was progressively reduced from €146.50 per week in 2011 to €130 in 2012, €110 in 2013 and €90 in 2014. Although it had been initially planned² to reduce it to €60, it remained at €90 for three years; it was again increased to €110 per week in 2017, €130 in 2018 and €150 in 2019³.

1.3.2 CHILDCARE POLICY

Ireland has often been compared unfavourably to other countries in terms of childcare costs. The OECD (2016) found that across the OECD countries in 2012, the average childcare cost for an employed single parent was 15 per cent of the household income while it was 42 per cent in Ireland, the second highest childcare cost for single parents of all OECD countries. Until recently there were no studies looking at the impact of childcare cost on maternal employment in Ireland. Drawing on data from *Growing Up in Ireland*, Russell, McGinnity, Fahey, and Kenny (2018) show that a 10 per cent increase in childcare cost was associated with a half an hour reduction in maternal paid work per week.

The first universal Early Childhood Care and Education (ECCE) scheme was introduced in January 2010 and was available in the academic year preceding the start of primary school, although for a limited number of hours (three hours a day, five days a week and 38 weeks in the year)⁴. It was open to children between 3 years, 2 months and 4 years, 7 months. The *Growing Up in Ireland* 9-year-olds who are the focus of this report were among the first to benefit from this scheme when it was introduced. A study of these children at the age of 5 in 2013 indicated that nearly all of them (96%) availed of this scheme. It was particularly beneficial to children living in low-income families for whom early childhood education has been shown to have more of an impact (McGinnity, Russell & Murray, 2015): over a third of families of 5-year-olds in the lowest income quintile indicated that they would otherwise have missed out on pre-school compared to just 9 per cent of those in the highest income. On the other hand, higher income families were much more likely to have paid to 'top up' the free hours available under the scheme (Murray, McNamara, Williams & Smyth, 2019). The entitlement was increased from September 2016 to an average of 61 weeks (ranging from 51 to 88 weeks, depending on date of birth and age starting school)⁵. There was a further extension of the scheme from September 2018 when the entitlement was extended to two full academic years of ECCE⁶.

As well as the ECCE scheme, low-income parents could also avail of means-tested access to subsidised childcare through a number of schemes⁷ such as the Community Childcare Subvention programme - which paid part of the cost of childcare for low-income families at participating community not-for-profit childcare services and was available for 52 weeks of the year.

From late 2019, however, a single targeted childcare scheme (the National Childcare Scheme) replaced the existing targeted childcare subsidy schemes (though those already availing of the schemes could remain on them). It involves a means-tested subsidy available for children from 6 months to 16 years of age⁸. For children in the ECCE scheme, the National Childcare Scheme is available to cover the hours that the child is not in pre-school, up to a maximum of 45 hours per week if either parent (or carer) is in employment, education or training. At the time of the interview with the families of the 9-year-olds in 2017/2018, however, this national scheme was not yet in place.

1.3.3 FIELDWORK IN THE LIVES OF CHILDREN

Fieldwork with 9-year-olds and their families took place against the backdrop of specific policy provision and societal changes but also captured a particular stage in children's development. In middle childhood, peers become more important in children's lives, with relationships becoming more complex and children inclined to forge closer relationships with same-sex peers (Hartup, 1996; CDC, 2016; Bagwell & Bukowski, 2018). At the same time, relationships with family – particularly with parents – continue to be important for children at 9 years of age (Oswalt, 2010). Children's play and activities become more self-directed and more diverse in nature, involving: pretend play; practice play – play involving repetition of activities, often in order to practice skills; games with structure and rules; construction play – play involving building or art; and rough and tumble play (Bergen & Fromberg, 2009). Middle childhood is also an important period for developing social skills and for children's emerging self-concept (Carr, 2011; Erikson, 1959). By 9 years of age, children have adjusted to primary education

² In Budget 2012, <http://www.budget.gov.ie/Budgets/2012/2012.aspx>

³ There were other policies to facilitate a movement into work, such as the Back to Work Family Dividend (BTWFD), introduced in 2015.

⁴ The full title was Free Pre-School Year in Early Childhood Care and Education (ECCE).

⁵ <https://www.dcy.gov.ie/viewdoc.asp?DocID=4097>

⁶ <https://www.dcy.gov.ie/documents/earlyyears/20171012FAQsEarlyYearsBudget2018.pdf>

⁷ <https://www.gov.ie/en/publication/ea9ec3-transitional-rules-for-dcy-targeted-childcare-programmes/>

⁸ <https://ncs.gov.ie>

and have generally honed skills such as reading; the skills and dispositions they develop at this stage are predictive of later outcomes such as the ease of transition to second-level education and academic performance (Smyth, 2016). Similarly, the pattern of health behaviours at this stage, including physical activity and diet, may have longer-term consequences for physical health and well-being. Furthermore, childhood health problems may influence the trajectory of socio-emotional development, impact on educational attainment, and have repercussions for child self-esteem (Maslow, Haydon, McRee, Ford & Halpern, 2011).

The fieldwork therefore captured more detailed information on some aspects of children's lives that reflected the phase of middle childhood, such as friendship networks and activities, while at the same time maintaining longitudinal continuity in collecting evidence on parent-child relationships, usage of health services, socio-emotional well-being and other topics.

1.4 SAMPLE DESIGN AND RESPONSE RATES

1.4.1 WAVE 1 (9 MONTHS OLD)

As noted above, the children in Cohort '08 were recruited into the *Growing Up in Ireland* study at 9 months of age. The Child Benefit register was used as the sampling frame for the first wave. This sampling frame had a number of advantages: (a) it was a comprehensive, up-to-date listing of eligible members of the relevant population; (b) it had a wide range of relevant characteristic variables of claimants (mostly mothers); (c) and it was in an electronic form that could be accessed, by the Department of Social Protection, for sampling purposes⁹.

There was a total of 41,185 infants registered on the Child Benefit Register as having been born between 1st December 2007 and 30th June 2008. Children for inclusion in the study were sampled over this seven-month reference period, with a view to carrying out fieldwork for Wave 1 when they were 9 months of age, between September 2008 and March/April 2009. In order to ensure the sample was fully representative of the population, it was selected on a systematic basis, pre-stratifying by marital status, county of residence and nationality of parent as well as number of children for whom the Benefit was claimed – all variables which were available from the information recorded on the Benefit Register. A simple systematic selection procedure based on a random start and constant sampling fraction was used.

The final completed Wave 1 sample was 11,134 infants and their families, representing a response rate of 65 per cent (see Table 1.2).

Table 1.2: Fieldwork for Cohort '08 and response rate in each wave

Age	Timing	N completed	Response rate*
9 months	Sep '08-Mar '09	11,134	65%
3 years	Jan '11-Aug '11	9,793	90%
5 years	Mar '13-Sep '13	9,001	90%
7/8 years**	Mar '16-Oct '16	5,344	55%
9 years	Jun '17-Apr '18	8,032	88%

* Response rate is expressed as a percentage of the cases issued in the wave and still eligible (i.e. living in Ireland).

** The inter-wave survey of Primary Caregivers was conducted via postal questionnaire when the child was age 7/8.

1.4.2 INTERMEDIATE WAVES (AGES 3, 5 AND 7/8 YEARS)

The age 3 target sample contained the 11,134 Study Children (and their families) who participated in the first round of interviewing, less any families who were known to have moved outside Ireland in the intervening period. At 3 years of age, 9,793 families participated in the study, representing 90 per cent of those issued to interviewers and still eligible.

The target sample at age 5 was made up of those 9,793 children and families who participated at age 3 (excluding any who had moved outside Ireland). In addition, any families who had participated at Wave 1 but not in Wave 2, and who had not definitively refused to participate at the second wave, were included. In total, 9,001 families completed a Wave 3 interview, representing a response rate of 90 per cent of cases issued and still eligible.

⁹ Special permission was required to access the Child Benefit Register for sampling purposes and was possible only as the overall study is being conducted under the Statistics Act, 1993, which provides the legal basis of *Growing Up in Ireland*.

For the study at age 7/8, a single postal questionnaire was sent to the home with an accompanying letter and Information Sheet. The questionnaire was self-completed and returned by post by the Study Child's Primary Caregiver. A total of 5,344 questionnaires were returned, amounting to 55 per cent of those issued (or 48% of the families interviewed at 9 months of age).

1.4.3 THE 9-YEAR WAVE

A total of 10,052 children and their families were targeted in the 9-year wave of the study. This was made up of the families who had participated in the face-to-face interview at age 5, as well as a small proportion of those who had not participated in Wave 3 but who had participated at one of the earlier rounds of the study. The response rate in the current wave was 8,032, representing 88 per cent of cases issued to interviewers, or 72.1 per cent of the Wave 1 original sample. Further details on sample design and response rates can be found in the accompanying report on design, instruments and procedures for this wave (McNamara, O'Mahony & Murray, 2020).

1.5 ATTRITION AND REWEIGHTING THE DATA

Non-response and inter-wave attrition are unavoidable in longitudinal surveys, regardless of the tracking and conversion procedures employed. A detailed discussion of attrition and the re-weighting process can be found in the design report, as previously mentioned (McNamara et al., 2020).

In summary, the construction of the analysis weight for the 9-year data used in this report consisted of carrying forward the earlier weight (which controls for initial non-response and attrition up to the 5-year wave) and adjusting it for attrition between the 5-year and 9-year waves. The Study Team used the GROSS software, as in previous rounds of *Growing Up in Ireland*¹⁰.

The variables used to adjust for attrition and to generate the 9-year weights were those identified as being related to non-response. They included characteristics of the Primary Caregiver (age, education; work situation; where born; smoking, depressive symptoms); the family (family type, size, social class, income level housing tenure) and of the Study Child (gender, whether ever breastfed and health status at 9 months).

Most of these characteristics were measured at the 5-year interview, apart from those which would not change over time (such as Study Child's gender and Primary Caregiver country of birth). The weights were truncated to avoid giving undue influence on results to individual cases (or a small number of cases) and to avoid excessively large sampling variances¹¹. The distribution of the child and family characteristics in the completed 9-year sample when these weights are applied are within one-half of a percentage point of the population distribution for all of the characteristics examined.

The longitudinal population for the purposes of this *Growing Up in Ireland* report is made up of children and their families who participated in the study at 9 months of age and who continued to live in Ireland when they were 9 years old. Given the fixed sample design, it does not include children living in Ireland at 9 years of age but who were not resident in the country at 9 months. Children who were resident in Ireland at 9 months old but have since left the country were also excluded.

Given that the sample includes two subsets of children – those who participated in all (face-to-face) waves and those who participated in Wave 1 and Wave 5 but missed one or more of the intervening waves – two sets of weights were calculated. The first set applies to analysis based on the 8,032 families for whom there is a valid observation at 9 months and 9 years of age: in this report, this weight is used for cross-sectional analyses at 9 years of age. The second set of weights is based on the smaller set of 7,507 families who participated at all four rounds of face-to-face interviews (at ages 9 months, 3 years, 5 years and 9 years). This weight is used for longitudinal analyses in this report (e.g. comparing a characteristic measured at age 5 with an outcome at age 9).

¹⁰ See, for example, Gomulka, J., 1992. 'Grossing-Up Revisited', in R. Hancock and H. Sutherland (Eds.), *Microsimulation Models for Public Policy Analysis: New Frontiers*, STICERD, Occasional Paper 17, LSE. Gomulka, J., 1994. 'Grossing Up: A Note on Calculating Household Weights from Family Composition Totals'. University of Cambridge, Department of Economics, Microsimulation Unit Research Note MU/RN/4, March 1994.

¹¹ The weights were truncated to one-fifth of the mean at the lower end and five times the mean at the higher end.

1.6 ABOUT THIS REPORT

This report presents an overview of the lives of 9-year-olds growing up in Ireland in 2017/2018. Over five chapters, key statistics in the areas of family context, health, school and learning, socio-emotional well-being and relationships, and play and activities are presented. Each chapter introduces key literature in the area followed by a cross-sectional view of how the Cohort '08 members were faring at the age of 9 years. The analyses focus on, but are not confined to, presenting variation by one child characteristic i.e. gender, and four family characteristics (family structure, social class, Primary Caregiver education and household income). Family structure distinguishes between two-parent and one-parent families. Household social class uses the Central Statistics Office's Census of Population classification and is based on the occupation of the Primary or Secondary Caregiver, whichever is higher. In order to have sufficient numbers for detailed analysis, the Semi-skilled Manual, Unskilled Manual and Never Employed categories have been grouped together in this report. Primary Caregiver's educational level is based on the highest educational qualification achieved, ranging from Junior Certificate or lower to Degree or higher. Household income has been equivalised (to adjust for household size and composition) and divided into quintiles (fifths) for analytical purposes.

For selected variables, there is additional longitudinal analysis to consider the relationship between outcomes or characteristics at earlier ages and current well-being. A final summary chapter examines overarching themes which emerge in multiple domains of development and considers the policy relevance of a selection of key findings from the report.

The report refers to published findings from **Growing Up in Ireland** Cohort '98 at 9 years of age. However, no new analyses have been conducted to directly compare the two cohorts. Such an exercise would provide fascinating insights into how children's lives have changed over a decade but would require careful analyses to ensure that like is compared with like. This approach could usefully provide the basis for a future research agenda.

1.6.1 PRESENTING FINDINGS AND STATISTICAL SIGNIFICANCE

1.6.1.1 Confidence intervals and margins of error

The results reported here come from a sample survey, so that in generalising to all 9-year-olds it is necessary to take account of the degree of uncertainty involved, particularly when the number of cases in the **Growing Up in Ireland** sample is small. To give an idea of the extent of uncertainty, confidence intervals and significance tests are used. For instance, suppose the analysis suggests that 85 per cent of 9-year-olds live in two-parent families. The confidence interval is the range within which the 'true' population figure would be expected to be found in 95 per cent of samples of this type and size. It is typically interpreted as the 'likely range' for a statistic¹². If the confidence interval for the percentage of 9-year-olds living in two-parent families were 83 to 87 per cent, then in 95 per cent of samples of this size and type, the population percentage would be in that range. The *margin of error* is half the width of the confidence interval (2 percentage points in this example) and provides an alternative way of reporting on the width of confidence intervals. Thus, in this example, *'the percentage of young adults living in two-parent families was found to be 85 per cent, plus or minus two percentage points'* (the margin of error).

In general, for a smaller sample size the confidence interval will be wider (and the margin of error larger). When the results are presented in graph form, error bars are used to indicate the lower and upper bounds of the 95 per cent confidence interval. Where error bars would not be appropriate (e.g. a stacked bar chart), the margin of error is reported below the table instead.

1.6.1.2 Statistical significance

A related idea is that of statistical significance. This is typically used when comparing means or rates for two groups. A difference between two groups might be observed in the sample, but there is some uncertainty as to whether this reflects a difference in the population (or, more precisely, whether that kind of difference in the sample could have occurred by chance at a certain level of confidence). For instance, suppose that 82 per cent of the 9-year-olds in urban areas lived in two-parent families compared to 88 per cent of 9-year-olds in rural areas. Could a difference of this size have occurred by chance? If the confidence intervals for the two figures do not overlap, then in 95 per cent of samples of this size and type, a difference this large would not occur by chance. In other words, the difference is 'statistically significant'. When differences are reported as statistically significant, it means that we can be 95 per cent confident that a difference of this size in the sample reflects a difference in the population (sometimes interpreted as a 'true difference' as opposed to a difference so small, given the sample size, that it might be expected to have occurred by chance).

The findings and patterns discussed in the report are statistically significant at $p \leq .05$, that is using the 95 per cent confidence level. This can generally be seen in the charts, taking account of the margin of error. If a difference between groups does not reach this threshold of significance, it is not discussed in the text. In a very large sample, quite small differences between

¹² Although not, strictly speaking, technically correct, this interpretation is a useful simplification of its meaning.

the characteristics of subgroups may be statistically significant, in the technical sense that they are due to chance less than five times in 100. Although significant in that statistical sense, some of the differences may be relatively small and not of substantive importance (Wasserstein and Lazar, 2016). Therefore the report focuses on reporting differences between groups that are sizeable and not just statistically significant.

In addition, all of the figures presented are purely descriptive and should not be interpreted in any sense as reflecting a cause and effect relationship.

1.6.2 CONTENT AND ORGANISATION OF THE REPORT

Chapter 2 examines the family context of the 9-year-old child and how this has changed since they were 9 months old. It considers family type (one-parent or two-parent) and size; parental employment and work-life balance; financial stress; contact with other relatives, including grandparents; and use of out-of-school care.

Chapter 3 focuses on physical health and development at age 9 years. Core measurements (literal and conceptual) include parent-reported child health, chronic conditions, use of health services and weight status. An overview of the child's dietary habits is also presented in this chapter.

Education and cognitive development are reported in Chapter 4. It covers a broad range of relevant topics including the child's attitudes to school, parental engagement with school, the home learning environment and the 9-year-old's performance on two measures of cognitive development. This last section includes the first look at a new measure of selective attention that is novel to the *Growing Up in Ireland* study.

Chapter 5 discusses how 9-year-old children are faring in relation to their socio-emotional well-being and development. It provides summary statistics on a broad range of indicators within this domain such as behavioural issues and self-concept, including the child's own perspective for the first time with this cohort. This chapter also covers various aspects of the child's relationships with parents and peers, including their experience of bullying, as reported by both Primary Caregivers and children themselves.

The final results chapter, Chapter 6, focuses on the child's play and activities. It is a broad chapter encompassing physical exercise and sport, organised extra-curricular activities, and the child's own report of their favourite pastimes. This chapter also takes a look at the child's activities with family including activities with parents, chores they do to help around the house and not forgetting the family pet.

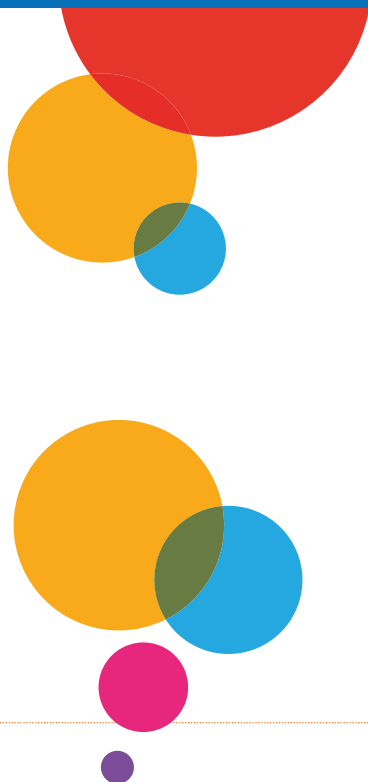
Finally, Chapter 7 draws together the main themes emerging from the report, highlighting the way in which the lives of 9-year-olds are shaped by the socio-economic circumstances of the family into which they were born and by their gender. It discusses continuity and change evident in the first nine years of the children's lives and points to potential levers for policy development and avenues for further research.





Chapter 2

FAMILY STRUCTURE AND ECONOMIC CIRCUMSTANCES



2.1 INTRODUCTION

This chapter describes the family context in which the 9-year-olds live as background to the discussion of outcomes later in the report.

Family background is associated with child outcomes in important ways and across a range of domains, including physical health, socio-emotional development and educational development (e.g. Waldfogel, Cragie and Brooks-Gunn, 2010; Hannan and Halpin, 2014). For instance, *Growing Up in Ireland* data have revealed associations between family socio-economic background and child overweight and obesity (Growing Up in Ireland Study Team, 2017a; Layte & McCrory, 2011). This pattern has been found across Europe, and children whose mothers have lower levels of education appear to be at greatest risk (McCrory et al., 2019). Lower maternal education was associated with poorer diet at age 9 (Layte & McCrory, 2011) and higher levels of screen time amongst children aged 7/8 (Growing Up in Ireland Study Team, 2017a).

The rates of income poverty and material deprivation have been higher for children than for adults throughout the period since the early 2000s (Watson, Maître & Whelan, 2012; Department of Employment Affairs and Social Protection, 2019). Compared to the 27 EU countries, child income poverty rates in Ireland are towards the middle of the distribution but are higher than in most of the EU15 (Watson, Maître & Whelan, 2012). Financial stress was particularly marked during the recession. In earlier waves of *Growing Up in Ireland*, parents in a quarter of families reported (great) difficulty in making ends meet, with a figure of about one-fifth when the child was 3 years old and one-in-eight when the child was 9 months old (Murray, McNamara, Williams & Smyth, 2019).

2.2 FAMILY STRUCTURES AT AGE 9 AND CHANGES OVER THE LIFE OF THE 9-YEAR-OLD

In this section, the structure of families of the 9-year-olds is examined: whether they are one- or two-parent, the number of children and how these vary by family characteristics such as income, education and urban/rural location. The section then looks at how much change or stability there has been in family structure over time.

Research has indicated that child outcomes are associated with family structure, though there is debate as to whether it is the one- or two-parent structure itself and any resulting differences in parenting processes that matters, or family instability or factors associated with lone parenthood such as levels of education, income and age of mother at the birth of the child (for a discussion, see Hannan et al., 2013). Waldfogel, Cragie and Brooks-Gunn (2010) examined why children who grow up in single-parent and cohabiting families were more likely to fare worse than children born into married-couple households. Their results suggested that family instability was more consequential than family structure for cognitive and health outcomes, while living in a one-parent family (whether or not that structure is stable over time) mattered more than instability for behaviour problems. In general, the research results point to the importance of a stable family structure. Drawing on data from the first wave of *Growing Up in Ireland*, Hannan and Halpin (2014) found that part of the difference between child outcomes in one- and two-parent families was due to the socioeconomic disadvantages faced by the former group. However, having taken account of socio-economic disadvantage, they found that a negative association between non-traditional family forms and early child educational outcomes remained.

2.2.1 FAMILY STRUCTURE (ONE- AND TWO-PARENT FAMILIES)

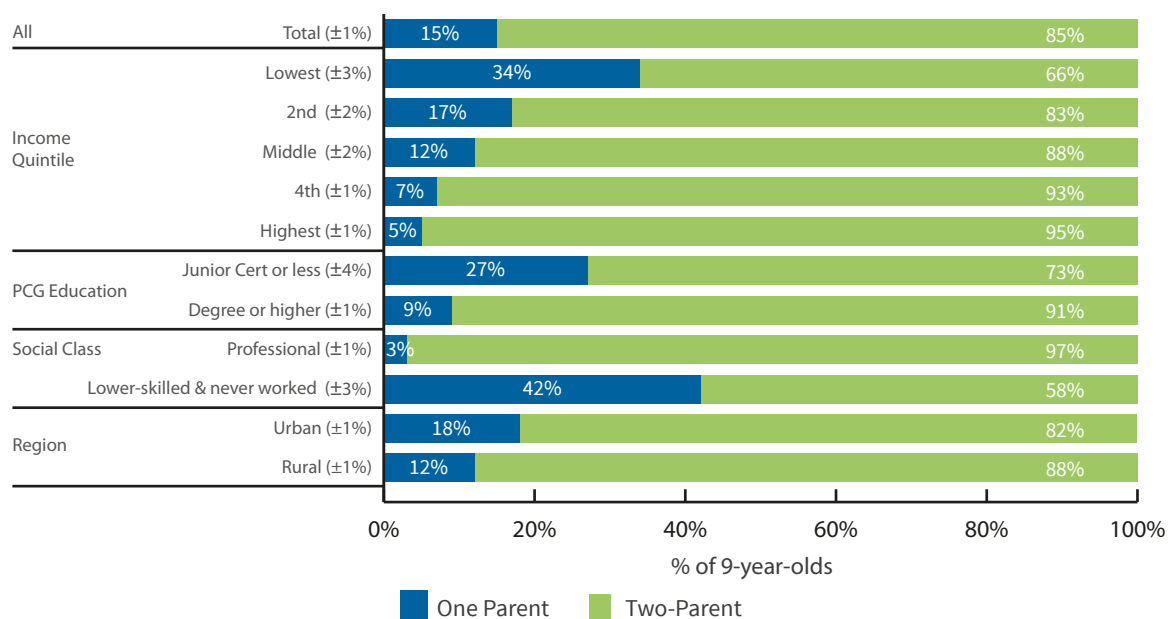
When the children were 9 months old, 86 per cent of them lived in two-parent families and 14 per cent lived in one-parent families. Over 70 per cent of the mothers of 9-month-olds were married and a further 15 per cent were cohabiting with a partner. Over one-quarter of the mothers (27%) and just under a quarter of the fathers (24%) were born outside Ireland (Williams, Greene, McNally, Murray & Quail, 2010).

At both 3 and 5 years of age, 86 per cent of the Study Children lived in two-parent families and the remaining 14 per cent lived in one-parent families. Among one-parent families, 42 per cent had been married to the child's other biological parent (Murray et al., 2019).

Figure 2.1 shows the association between family background characteristics at age 9 and whether the Study Child lived in a one-parent or two-parent family. Overall, 15 per cent of the 9-year-olds lived in a one-parent family and 85 per cent lived in a two-parent family – figures that are not statistically significantly different from the proportions at earlier waves. These overall figures conceal changes at the individual level, patterns which are discussed in Section 2.2.4.

The differences in the socio-economic circumstances of one- and two-parent families are also clear, with one-parent families being overrepresented in more disadvantaged groups in terms of income, education and social class. Figure 2.2 shows the percentage of one- and two-parent families in each income quintile. The income quintiles are based on equivalised (that is, adjusted for household size and composition), disposable income with each quintile representing one-fifth of the 9-year-olds. The figure shows that 34 per cent of those in the lowest income quintile were in one-parent families and 5 per cent of those in the highest income quintile compared to 15 per cent of the total sample. The differences were also found by the level of education of the Primary Caregiver and by social class. The social class differences were particularly marked ranging from one-parent families making up only 3 per cent of families in the professional social class to representing 42 per cent of those in the lower-skilled/never worked social class (including semi-skilled workers such as factory workers, unskilled workers such as labourers or cleaners and those who never worked). There was also a difference in the prevalence of one-parent families for 9-year-olds in urban (18%) and rural (12%) areas.

Figure 2.1: Percentage of 9-year-olds in one-parent and two-parent families by socio-economic characteristics

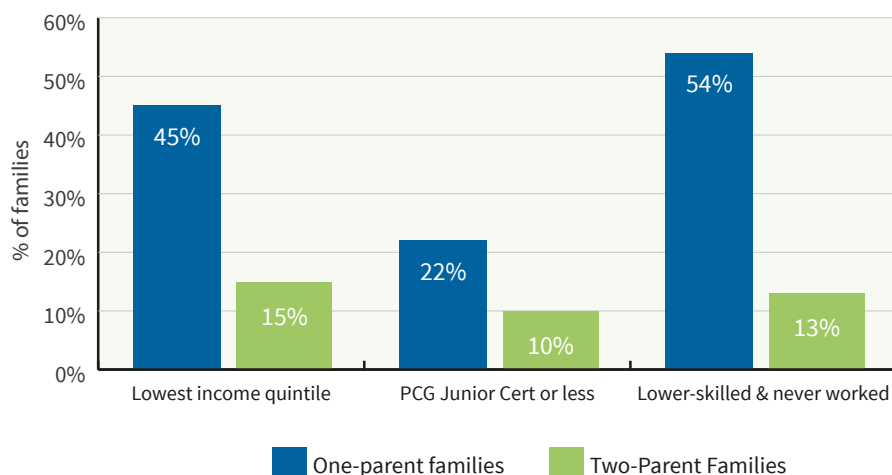


Note: Margins of error are shown in parentheses after the group label.

It should be noted that this chart shows the relationship between background characteristics and lone parenthood rather than representing a causal relationship. Further research could usefully unpack the main factors at play.

Nevertheless, the relative disadvantage of one-parent families is very evident. It can be seen more clearly for each family structure in Figure 2.2, which shows the percentage of one- and two-parent families in the least advantaged categories in terms of income, Primary Caregiver education and social class. One-parent families were three times as likely as two-parent families to be in the lowest income quintile; more than twice as likely to be in the lowest category of Primary Caregiver education and four times as likely to be in the lowest social class category.

Figure 2.2: Percentage of one- and two-parent families in the most disadvantaged income, education and social class groups¹³

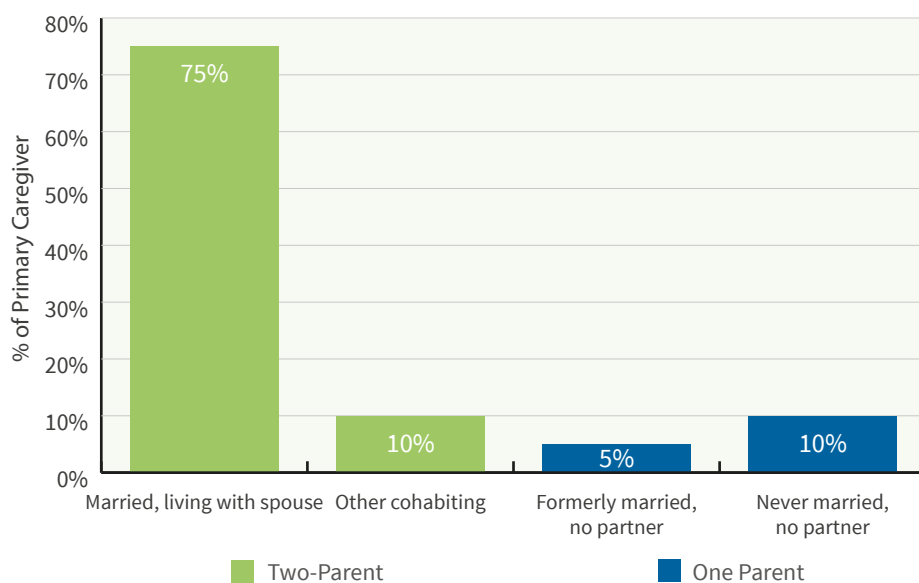


Note: Margins of error are, at most, ±3% for each group.

2.2.2 MARITAL STATUS OF PRIMARY CAREGIVERS

Figure 2.3 shows the marital/cohabiting status of the Primary Caregiver. Three-quarters of 9-year-olds lived with both married parents; one-tenth lived with cohabiting parents; one-twentieth with a formerly-married Primary Caregiver and one-tenth with a never-married Primary Caregiver.

Figure 2.3: Marital status of Primary Caregiver of the 9-year-olds



Note: Margins of error are, at most, ±1% for each group

Among one-parent families, there were about twice as many Primary Caregivers who have never married as those who were formerly married.

Of the Primary Caregivers who were married and living with their partners, most (85%) had been married since 2008 or earlier¹⁴. However, 15 per cent had married in 2009 or later – after the birth of the Study Child. This indicates the complex nature of family formation, with marriage sometimes taking place after the birth of the Study Child.

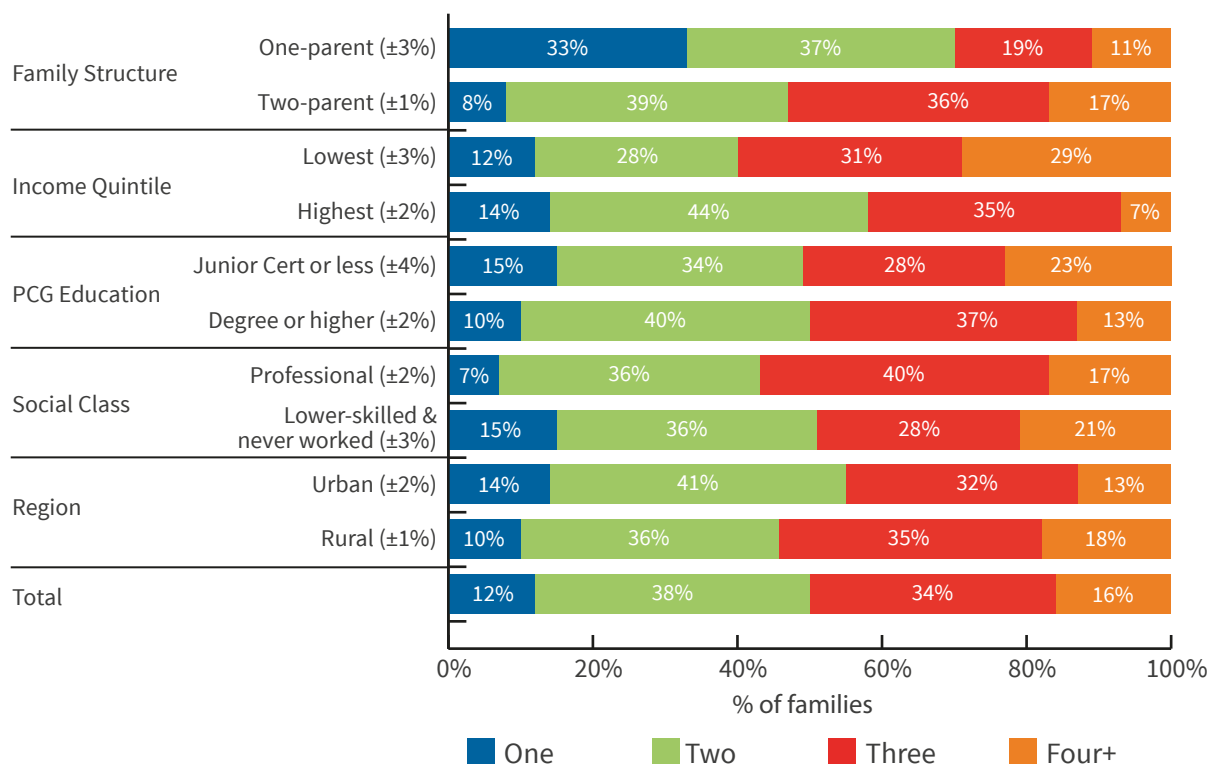
¹³ Throughout the report, graphs show the margin of error at alpha = .05.

¹⁴ The Study Children were born between December 2007 and June 2008.

2.2.3 FAMILY SIZE

At 5 years of age, the majority of children lived with at least one other child under 18 with the ‘two-parent and two or more children’ family type accounting for 78 per cent of families with a 5-year-old (Murray et al., 2019). Figure 2.4 shows the number of children under 18 by family structure and other family characteristics when the Study Children were aged 9. Overall, 12 per cent of 9-year-olds were the only children in their households; 38 per cent lived in two-child households, 34 per cent in three-child households and 16 per cent in households with four or more children.

Figure 2.4: Number of children by family characteristics



Note: Margins of error are shown in parentheses after the group label.

One- and two-parent families differed markedly in terms of the number of children in the household. One-parent families were much more likely to have just one child (33% vs 8%) and they were much less likely to have 3 or more children (30% vs 53% of two-parent families). Two-child families were the single biggest group for both family structures, however (37-39%).

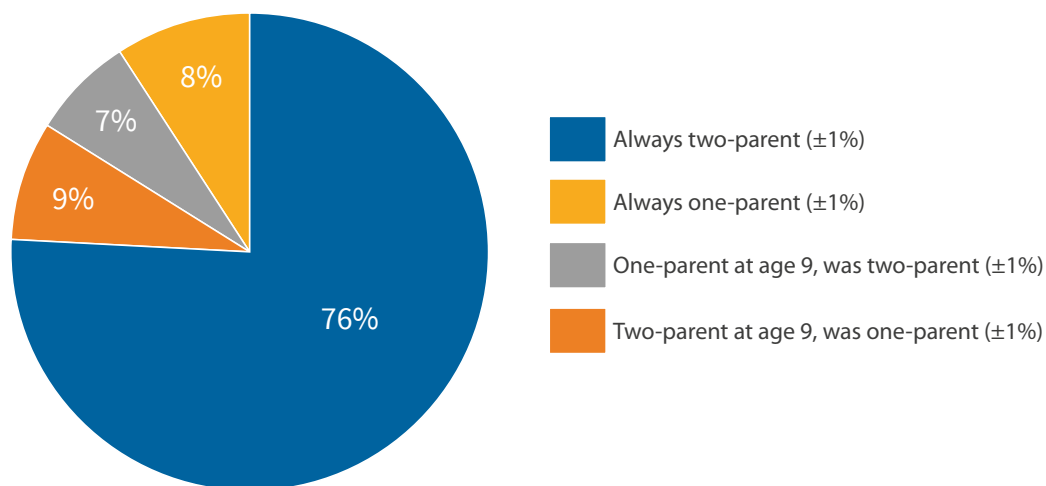
Family size differed significantly across income quintiles: 29 per cent of 9-year-olds in the lowest income quintile were in families of four or more children, compared to just 7 per cent in the highest-income quintile. The highest income quintile was much more likely to have two children than the lowest income quintile (44% vs 28%).

The larger families of four or more children were also more prevalent where the mother had the lowest level of education (23% compared to 13% where the mother had a degree or higher) and were slightly more common in rural than urban areas (18% vs 13%). Families in the lowest social class were more likely to have only one child (15% vs 7% for professionals) or have a large family (21% having four or more children compared with 17% of professionals).

2.2.4 CHANGE IN FAMILY STRUCTURE OVER TIME

Although the overall percentage of one- and two-parent families has remained very similar since the Study Children were 9 months old, there has been a good deal of change over time for individual families. Figure 2.5 shows the percentage of 9-year-olds by whether the family structure was the same or had changed over the course of data collection at the ages of 9 months, 3 years, 5 years and 9 years. Just over three-quarters of the Study Children had always lived in a two-parent family and 8 per cent had always lived in a one-parent family. Consequently, 84 per cent of families had the same structure at each of these time points, but 16 per cent had experienced a change in structure.

Figure 2.5: Percentage of 9-year-olds by family structure over time



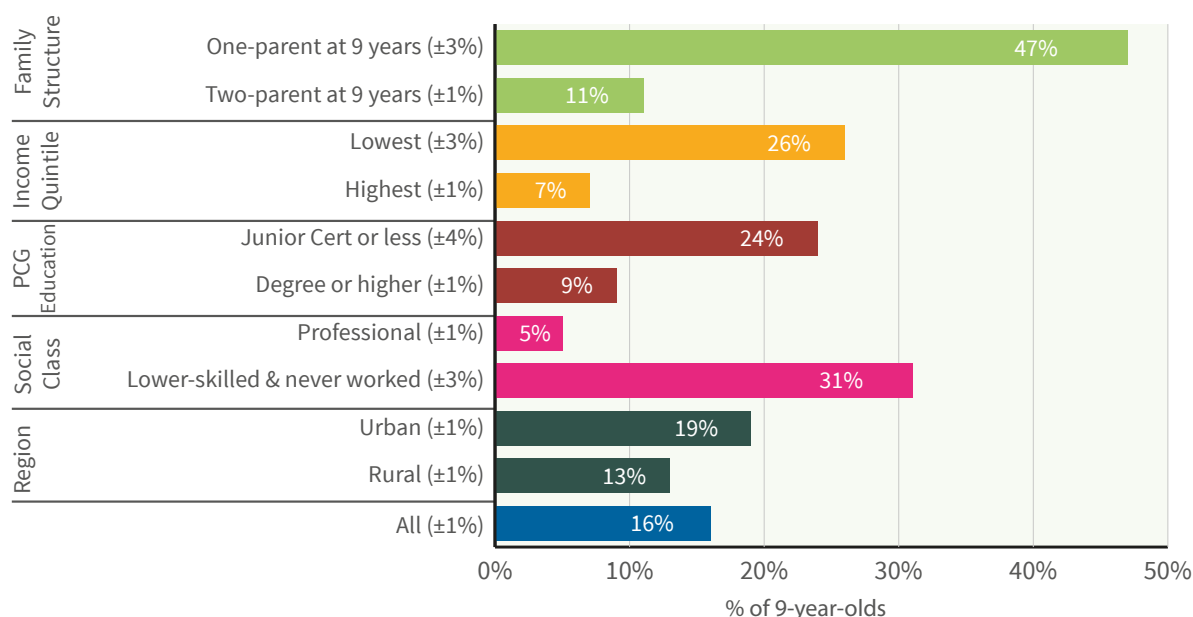
Note: Margins of error are shown in parentheses after the group label.

At 9 years of age, 9 per cent of Study Children lived in a two-parent family but had lived in a one-parent family at one of the four time points; 7 per cent of the Study Children lived in a one-parent family at 9 but had lived in a two-parent family at some point. While most two-parent families were stable in terms of structure, the one-parent families had experienced much more change: 47 per cent of the one-parent families in the 9-year wave had experienced a change in structure.

A small proportion of families experienced more than one change in structure: for instance, moving from two-parent to one-parent and back to two-parent. This happened for 3 per cent of the families of 9-year-olds overall; 2 per cent of two-parent and 7 per cent of one-parent families.

Figure 2.6 shows that, in general, the Study Children in families with more disadvantaged characteristics were more likely to have experienced a change in family structure: 26 per cent of the lowest income quintile; 24 per cent of those whose Primary Caregiver was in the lowest education category and 31 per cent of those who were in the lowest social class, compared to the overall figure of 16 per cent. Those 9-year-olds living in urban areas were also more likely to have experienced change in family structure: 19 per cent compared to 13 per cent among their rural counterparts. As with the patterns observed earlier, these are correlations and cannot be regarded as causal without further analyses.

Figure 2.6: Percentage of 9-year-olds who experienced change in family structure since they were 9 months old by family characteristics



Note: Margins of error are shown in parentheses after the group label.

2.3 PARENTAL EMPLOYMENT AND WORK-LIFE BALANCE

Parental employment status has an important bearing on the resources available to families as well as on the time spent with children, work-life balance and the use of non-parental care arrangements. McGinnity, Murray and McNally (2013) drew on the 9-month-olds' data to investigate which mothers take up paid employment after their infants are born; the extent and nature of non-parental childcare for infants prior to 9 months; and the association between childcare choices and infant health. The authors found that highly-educated mothers were more likely to return to work than those with lower levels of education, but only when paid maternity leave had ended.

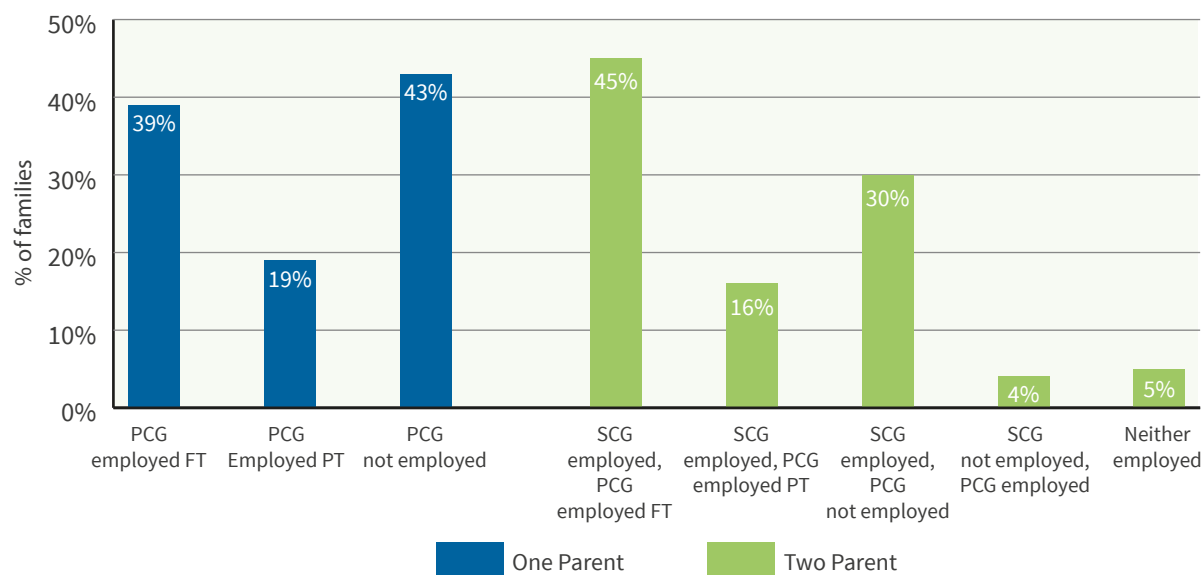
Analysis of the families when the Study Child was 5 years old indicated that 55 per cent of Primary Caregivers (mostly mothers) were in employment outside the home and 35 per cent were *looking after the home*. Most (84%) Secondary Caregivers (mostly fathers) were at work (outside the home) and just 1 per cent described themselves as *looking after the home*. Of mothers in employment, nearly half felt they had 'missed out on home or family activities' because of work responsibilities and over one-quarter said they had to 'turn down work activities or opportunities' because of family responsibilities (Murray et al., 2019). Secondary Caregivers were more likely to report missing out on home or family activities (54%) but were less likely to indicate turning down work activities (19%) (Murray et al., 2019).

2.3.1 PARENTAL EMPLOYMENT STATUS AT AGE 9 YEARS

Figure 2.7 shows the work pattern of the Primary Caregiver in one-parent families and of both the Primary and Secondary Caregivers in two-parent families of the 9-year-olds. Virtually all the Secondary Caregivers work full-time, but a substantial proportion of the Primary Caregivers work part-time, so their work-pattern is broken down based on whether they work 20 or fewer hours per week (part-time) or more than 20 hours per week (full-time).

In over half of one-parent families, the parent is employed, usually full-time (39% vs 19% part-time). In two-parent families, the most common pattern is one where both parents work full-time (45%), followed by that where only the Secondary Caregiver is employed (30%). In 16 per cent of two-parent families, the Secondary Caregiver works full-time, and the Primary Caregiver works part-time. The percentage of two-parent families where neither parent is in employment (5%) or where only the Primary Caregiver is in employment (4%) is much smaller.

Figure 2.7: Parental employment pattern by family structure



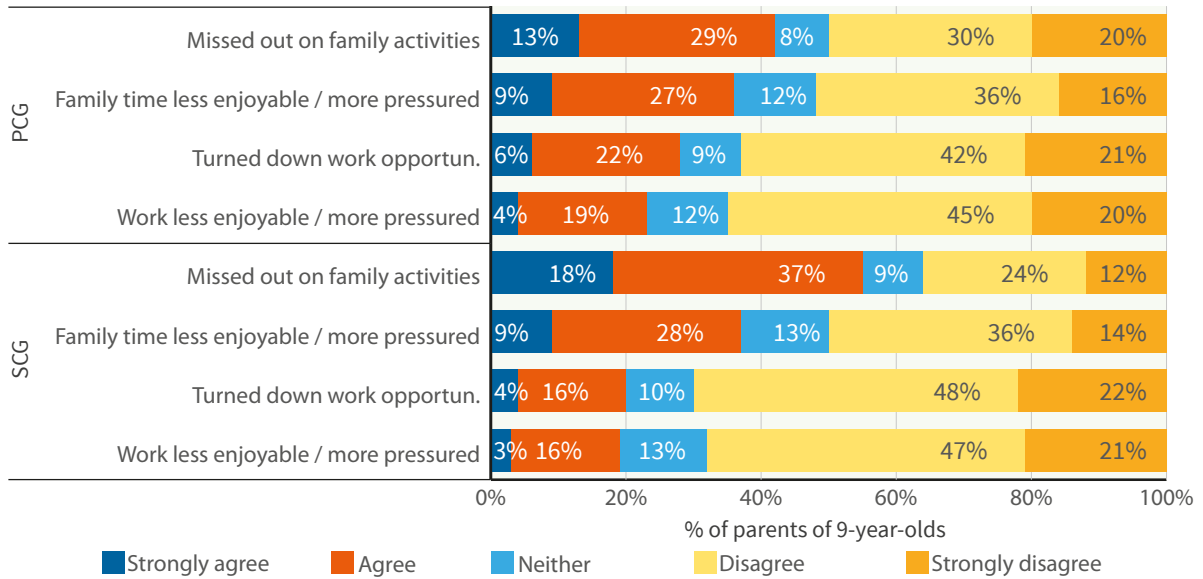
Note: Margins of error are, at most, $\pm 3\%$ for one-parent families and $\pm 1\%$ for two-parent families.

2.3.2 WORK-LIFE BALANCE

Figure 2.8 shows the percentage of Primary and Secondary Caregivers who reported experiencing work-life conflict: missing out on family activities because of work, family time being less enjoyable because of work pressure, having to turn down work opportunities because of family responsibilities or finding work less enjoyable because of family responsibilities. Over half (55%) of Secondary Caregivers reported missing out on family activities because of work and a significant minority (42%) of Primary Caregivers also reported this experience. Over a quarter (28%) of Primary Caregivers and a fifth of Secondary

Caregivers indicated that they had turned down work opportunities because of family commitments. In addition, more than one third (36% of Primary Caregivers and 37% of Secondary Caregivers) felt that family life was less enjoyable and more pressured because of work responsibilities.

Figure 2.8: Percentage of Primary and Secondary Caregivers experiencing work-life conflict (where the parent is in employment)

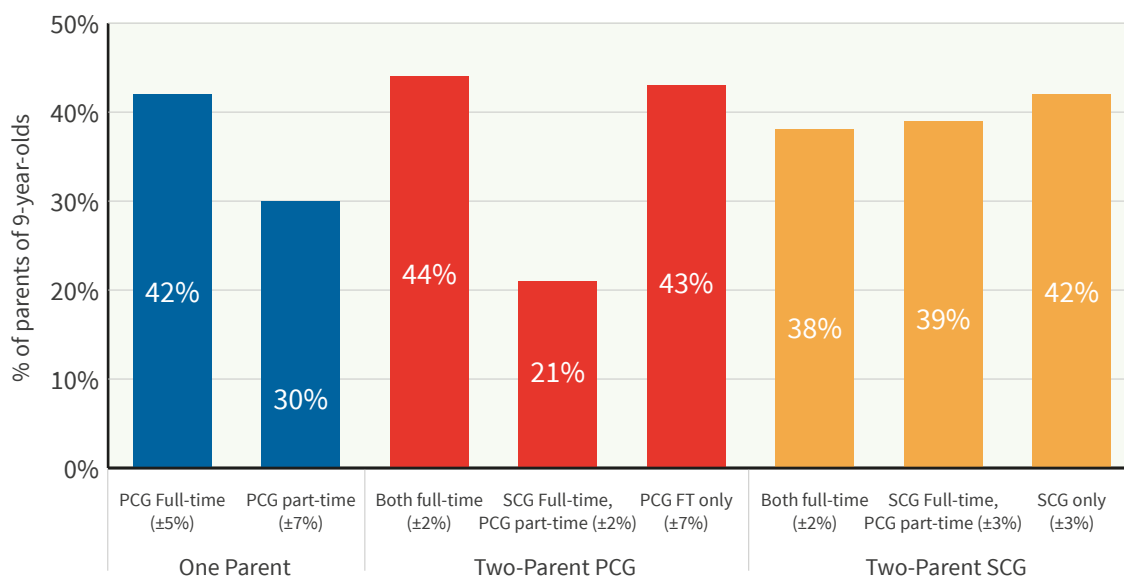


Note: Margin of error is, at most, 1.3% for PCG and 1.4% for SCG.

A composite measure was derived which indicated the proportion who agreed or strongly agreed with two or more of the work-life conflict items reported above. Figure 2.9 shows the percentage of Primary and Secondary Caregivers experiencing work-life conflict by work pattern and family structure. In one-parent families, parents working full-time were more likely to report two or more work-life conflict issues than those working part-time (42% vs 30%), but it is worth noting that lone parents working part-time were more likely to report issues than their equivalents in two-parent families (30% compared with 21%).

In two-parent families, the Primary Caregiver was slightly more likely than the Secondary Caregiver to report two or more work-life conflict issues among those working full-time (44% vs 38%). Primary Caregivers who worked part-time were much less likely to report two or more issues (21%) than those working full-time (44%). Whether the Primary Caregiver worked full-time, worked part-time or was not in employment was not associated with whether the Secondary Caregiver reported two or more work-life conflict issues. In other words, part-time working by the Primary Caregiver appeared to reduce work-life conflict for the Primary Caregiver but not for the Secondary Caregiver. This is consistent with the finding from other research that fathers (and most Secondary Caregivers are fathers) do not take on an equal share of unpaid caring and household work when mothers are in employment (McGinnity & Russell, 2008).

Figure 2.9: Percentage of Primary and Secondary Caregivers experiencing two or more work-life conflict issues by parental work pattern and family structure



Note: Margins of error are shown in parentheses after the group label.

2.4 FINANCIAL STRESS

The previous chapter showed that the timing of fieldwork with the Cohort '08 families meant that they were first recruited just as the Great Recession was beginning in Ireland and that the interviews at age 3 took place at the peak of the recession while the 5-year interviews took place just as the recovery was beginning.

The impact of the recession was evident in a number of other studies drawing on *Growing Up in Ireland* data. Watson, Maître, Whelan and Williams (2014) found that family economic vulnerability, defined in terms of low income, economic stress and household joblessness, increased during the recession. Levels of economic stress increased from 15 to 25 per cent for the Cohort '98 families and from 19 to 25 per cent for the Cohort '08 families¹⁵. Economic vulnerability, particularly where it was experienced on a persistent basis across several years, was associated with a detrimental effect on the child's socio-emotional well-being (Watson et al., 2014).

Again drawing on *Growing Up in Ireland* data for both cohorts, Whelan, Watson, Maître and Williams (2015) found that the factors affecting economic vulnerability were broadly similar for both cohorts. Economic vulnerability was associated with lone parenthood, particularly for those with more than one child, lower levels of Primary Caregiver education and, to a lesser extent, younger age of Primary Caregiver at child's birth, number of children and a parent leaving or dying. The associations were particularly strong for vulnerability that persisted across two waves.

Nixon, Layte & Thornton (2019) conducted an analysis of how the economic recession affected experiences of economic strain and stress within families and how this, in turn, was associated with parenting and the socio-emotional and behavioural adjustment of 3-year-olds in 2011. The detailed analysis indicated that parental depression, marital satisfaction and parenting all played a role in mediating the impact of economic hardship (such as arrears and difficulty making ends meet) on children's socio-emotional well-being. The results suggested that economic hardship has an important influence on parental depressive symptoms and marital satisfaction but had a weak association with parenting. Instead, economic hardship affects parenting and children's emotional and behaviour difficulties, indirectly, through its effects on depressive symptoms.

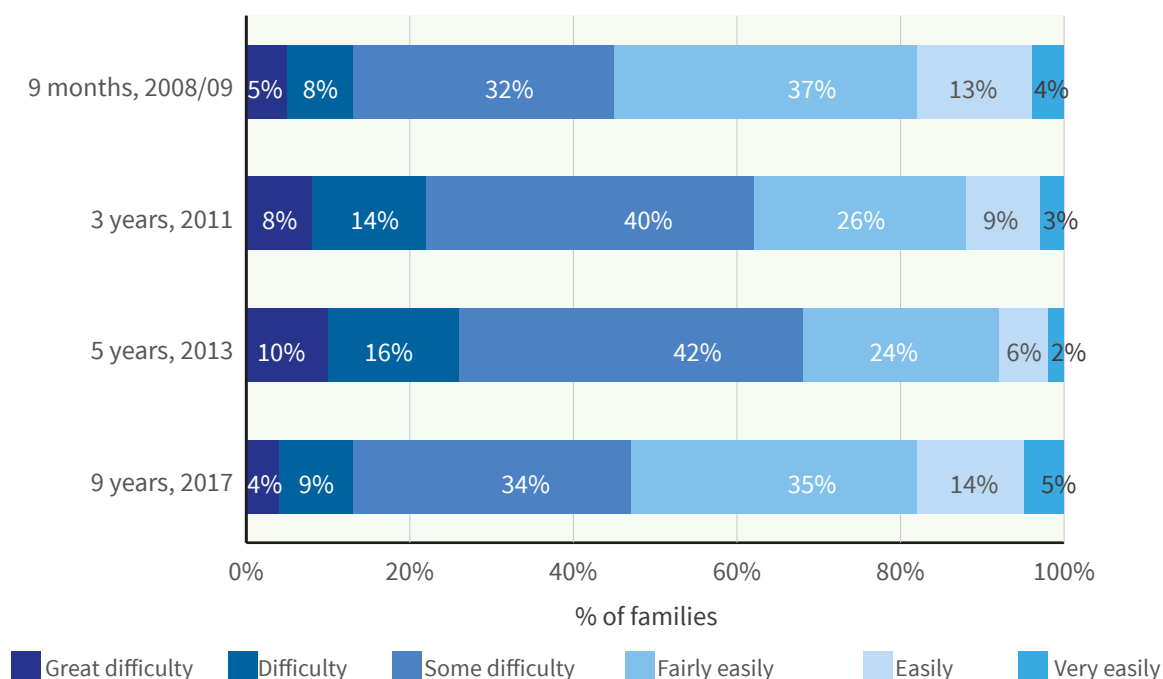
2.4.1 TRENDS IN FINANCIAL STRESS

Financial stress, as captured by an item on the level of ease or difficulty in making ends meet, is an important indicator of financial difficulties that might not be picked up by a focus on income alone (Watson et al., 2014; Whelan et al., 2015). As shown by the darker bars in Figure 2.10, the level of financial stress experienced by the Cohort '08 families increased as the

¹⁵ The initial level of economic vulnerability was higher for Cohort '08 than for Cohort '98 because the recession had already begun by the first wave of interviews with Cohort '08 and the families were already feeling its effects. The first wave of interviews with Cohort '98 took place earlier, mostly before the recession had begun.

recession progressed from 2008/2009 to 2013 before falling back again by the time the children were 9 years old in 2017. The percentage of Primary Caregivers reporting making ends meet with great difficulty or with difficulty rose from 13 per cent at 9 months in 2007/2008 to 22 per cent at 3 years in 2011 and 26 per cent at 5 years in 2016 before dropping back to 13 per cent at age 9 in 2017/2018¹⁶. This cannot be seen as the ‘pre-recession’ level, as the recession had already begun by the time the Cohort ‘08 families were interviewed in the first wave. Earlier analyses of *Growing Up in Ireland* data showed that the level of financial stress experienced by the families of the 9-month-olds in 2008/2009 was already higher (13% compared with 8%) than it had been for the older Cohort ‘98 families who were interviewed about a year earlier in 2007/2008 (Watson et al., 2014).

Figure 2.10: Extent of ease or difficulty making ends meet at each wave



Note: Margins of error are, at most, ±1.1%.

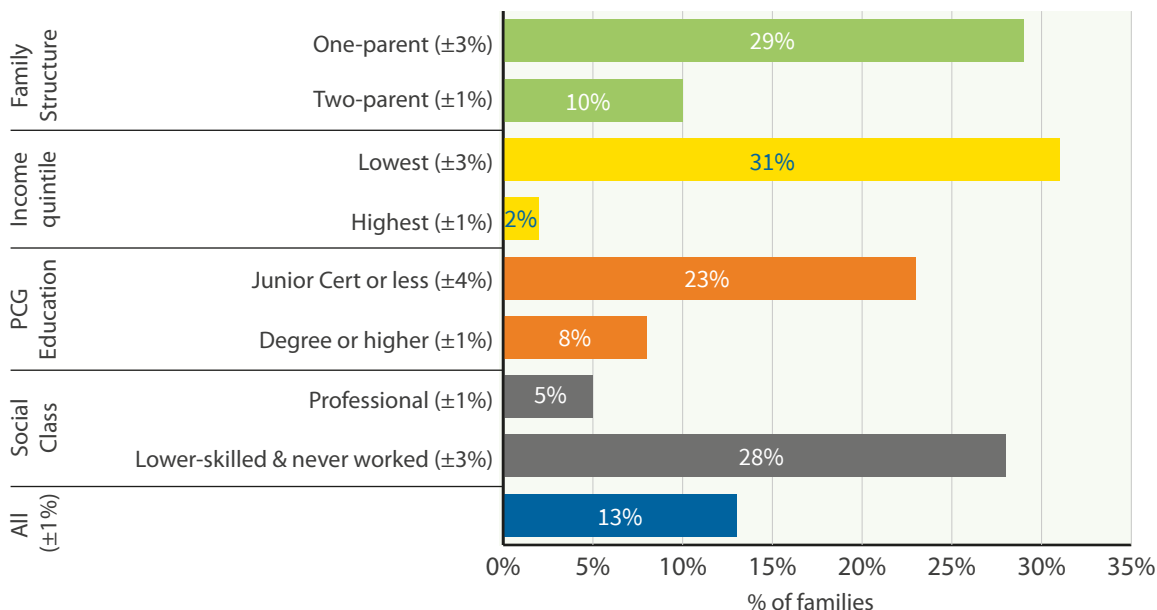
The percentage of families reporting being able to ‘make ends meet’ *easily* or *very easily* moved in the opposite direction: falling from 17 per cent when the Study Child was 9 months old; to 12 per cent at 3 years; 8 per cent at 5 years and rising up to 19 per cent at 9 years of age.

2.4.2 SOCIO-DEMOGRAPHIC DIFFERENCES IN FINANCIAL STRESS

Figure 2.11 shows that the percentages of Primary Caregivers reporting *difficulty* or *great difficulty* in ‘making ends meet’ varied by family characteristics at age 9. It was higher for one-parent families (29% vs 10% for two-parent families); where the Primary Caregiver had lower levels of education (23% for Junior Certificate or less vs 8% for degree or higher); and for the lower-skilled/never worked than the professional social class (28% vs 5%). As expected, the association with income quintile was strong (31% for families in the lowest income quintile and 2% for families in the highest income quintile). However, the association with income level was not perfect since the indicator of financial stress may have been capturing aspects of the family financial situation not adequately captured by income, such as an accumulation of debt or unusual expenses associated with illness or disability.

¹⁶ Because of its smaller sample size, the results of the postal survey at age 7/8 are not included here. Nevertheless, there was evidence of improvement at this stage: over one-third of Primary Caregivers said their family was better off in 2016 than they had been in 2013 (McNamara, Murray and Williams, 2019).

Figure 2.11: Difficulty or great difficulty making ends meet by family characteristics at age 9



Note: Margins of error are shown in parentheses after the group label.

2.5 CONTACT WITH GRANDPARENTS AND OTHER RELATIVES

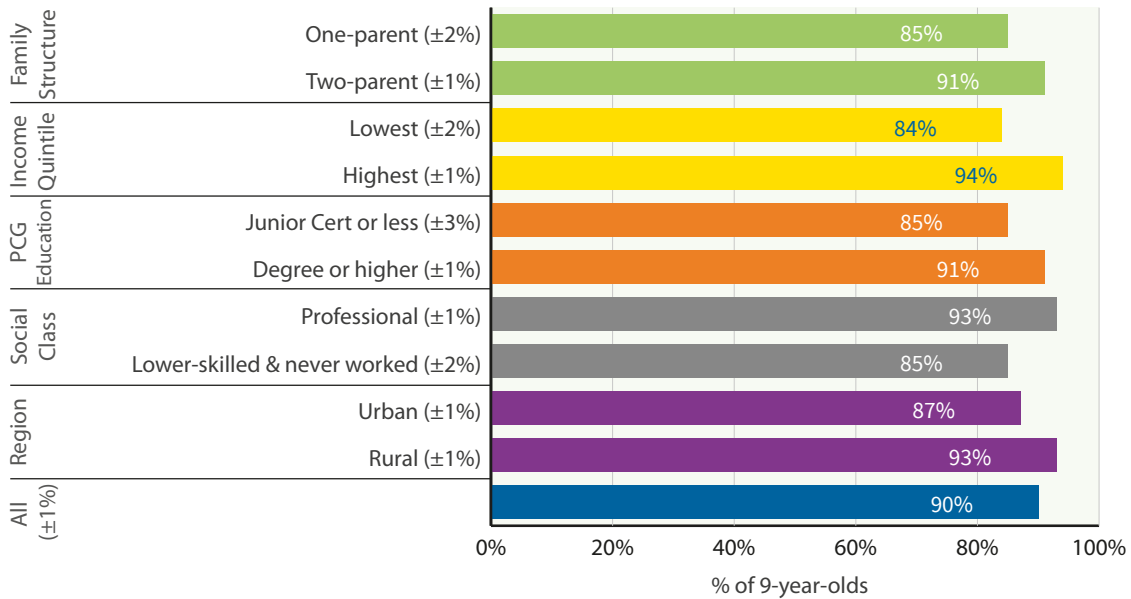
Involvement of children’s extended family may contribute to the child’s socio-emotional development; however, research exploring the role of other family members has been limited. Data from Cohort '98 indicated that 66 per cent of 9-year-olds in that cohort in 2007/2008 had frequent contact (*quite a lot*) with their grandparents (Williams, Greene, Doyle, Harris et al., 2009). As with parents, grandparents may model appropriate social and emotional behaviours and help children learn how to interact successfully with others. Grandparents also play an important role in childcare, as evidenced by the fact that just over one-fifth of children in two-parent families where both parents work were usually taken care of by grandparents when they were too sick to attend school (Growing Up in Ireland Study Team, 2018).

2.5.1 TRENDS IN CONTACT

Figure 2.12 shows that the vast majority, 90 per cent, of 9-year-olds saw at least one grandparent regularly (that is, at least once or twice a month)¹⁷. The figures were even higher among families living in rural areas (93% vs 87% in urban areas). They also tended to be higher in the more advantaged families: 91 per cent in two-parent families vs 85 per cent in one-parent families; 94 per cent in the highest vs 84 per cent in the lowest income quintile; and 93 per cent for families in the professional social class vs 85 per cent in the lower-skilled/never-worked social class. This may be because advantaged families were more likely to have a car to travel to grandparents, had more resources available to acquire housing close to the extended family or were more likely to have at least three grandparents still alive.

¹⁷ The answer categories for contact with grandparents were different for the two cohorts so cannot be directly compared.

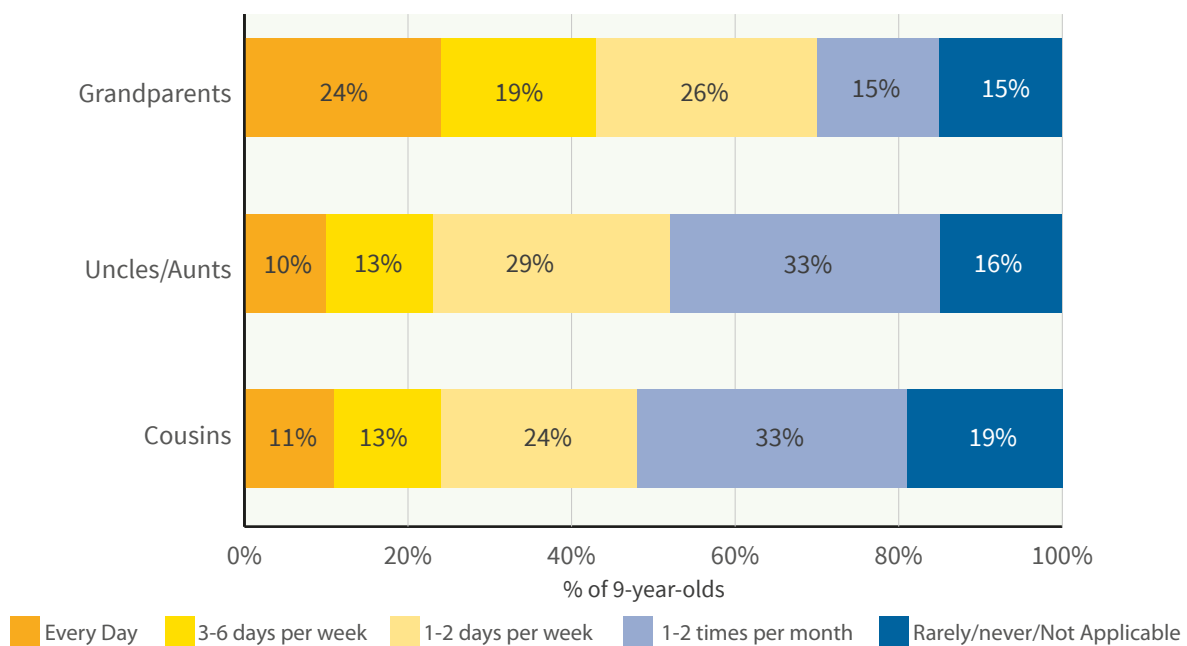
Figure 2.12: Regular contact with child’s grandparent(s) by family characteristics at age 9



Note: Margins of error are shown in parentheses after the group label

Grandparents tended to be seen more frequently than other relatives living outside the household, such as uncles, aunts or cousins, as shown in Figure 2.13. Nearly one-quarter of 9-year-olds saw their grandparents every day, with 69 per cent seeing grandparents at least once a week. About one-in-ten saw their uncles, aunts or cousins every day with roughly one half seeing these relatives at least once a week.

Figure 2.13: How often 9-year-old child saw grandparent(s) and other relatives



Note: Margins of error are, at most, ±1%.

2.6 OUT-OF-SCHOOL CARE

The type of childcare used by families will depend on the age of the child, on the employment situation of the parents, and on their capacity to afford childcare. Analyses by McGinnity et al. (2013) showed that at 9 months, just under 40 per cent of infants were in regular non-parental childcare¹⁸. Of these children in non-parental childcare, 42 per cent were cared for by relatives (mostly grandparents); 31 per cent by non-relatives (mostly childminders) and 27 per cent were in centre-based

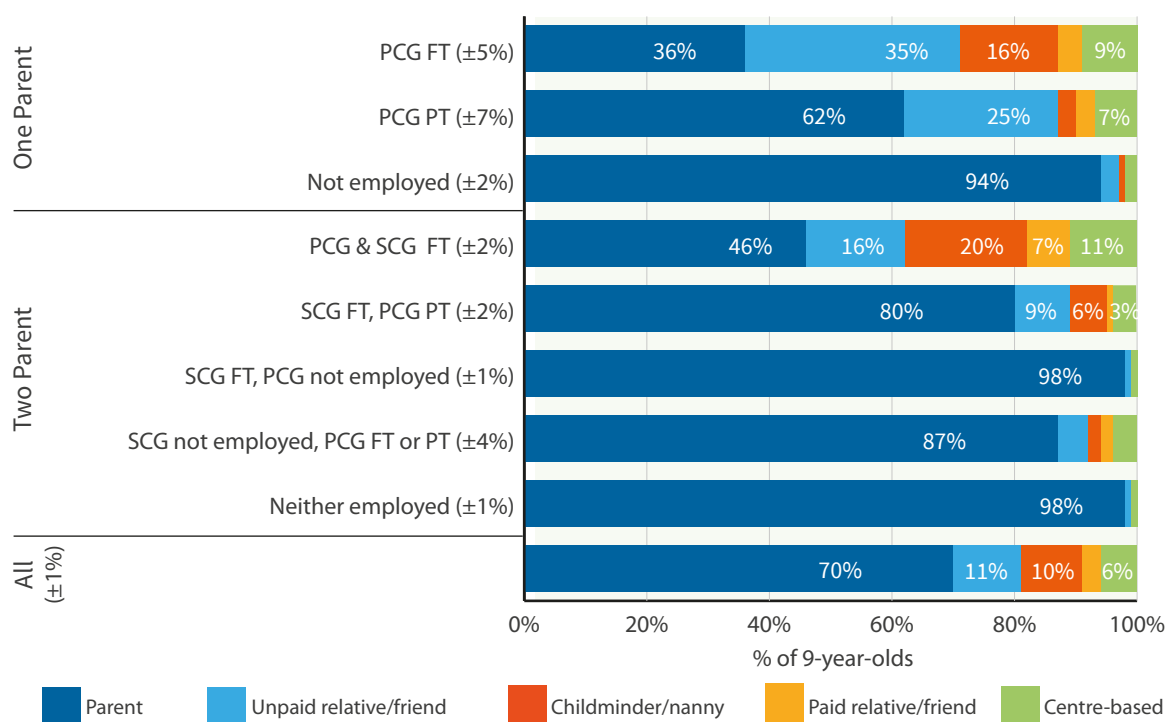
¹⁸ In the 7/8 year postal survey, a similar proportion (40%) were regularly cared for by someone other than the parent(s).

care. Relatives were more likely to be the carers in the case of low-income families and younger mothers. Analyses of data on Cohort '08 in earlier years showed that the introduction of the Free Pre-School Year in 2010, and its subsequent expansion into the Early Childhood Care and Education (ECCE) Scheme, had been important in extending access to this type of care and education to the Study Children from lower-income backgrounds who would not otherwise have been able to avail of it (Murray et al., 2019). By the time the Study Children were 9 years old, the type of childcare needed will have changed to that provided before or after school hours.

2.6.1 TRENDS IN OUT-OF-SCHOOL CARE AT AGE 9

Primary Caregivers of the 9-year-olds were asked to indicate the main type of 'out-of-school care' used for the child during term-time, that is, 'on a regular basis outside of holiday periods and weekends'. Figure 2.14 shows the main form of out-of-school care by the employment profile of the parents. Overall, 70 per cent of 9-year-olds were mainly cared for outside of school hours by the *Primary Caregiver or resident partner*; 11 per cent were cared for by an *unpaid relative (or family friend)*; 10 per cent by a *childminder or nanny*; 6 per cent in a centre-based setting (such as *after-school care or a homework club*) and just 3 per cent by a *paid relative (or family friend)*. The parents were likely to be the main providers of out-of-school care where the Primary Caregiver was not employed: 94 per cent in one-parent families; 98 per cent in two-parent families where only the Secondary Caregiver was employed and 99 per cent in two-parent families where neither parent was employed. The parents were also the main providers in families where the Primary Caregiver worked part-time (62% in one-parent and 80% in two-parent families). In two-parent families where the Primary Caregiver was employed (either full- or part-time) but the Secondary Caregiver was not employed, the parents were the main providers of out-of-school care in 87 per cent of families.

Figure 2.14: Type of out-of-school care by employment profile of one-parent and two-parent families



Note: Margin of error is no more than the figure shown in parentheses for each group.

Unpaid relative care was particularly important for employed lone parents (35% where the lone parent worked full-time and 25% where they worked part-time). In two-parent families, unpaid relatives were the main providers of out-of-school care for 16 per cent of families where both parents worked full-time and in 9 per cent of families where the Primary Caregiver worked part-time and the Secondary Caregiver worked full-time.

A childminder or nanny provided out-of-school care for one-fifth of two-parent families where both parents worked full-time and in 16 per cent of one-parent families where the parent worked full-time. Centre-based care was relatively uncommon overall (6%) but was most likely to be used in two-parent families where both parents worked full-time (11%).

Table 2.1 shows the Primary Caregivers' responses to a question on the cost of out-of-school care for the 9-year-old, for those families paying for this care. The median cost was €7.00 per hour, ranging from €6.00 for centre-based care, through €6.25 for a paid relative to €8.10 for a paid childminder. The median number of hours of care varied less, ranging from nine to ten per week.

Table 2.1: Median hourly cost and median number of hours per week for paid out-of-school care

	Hourly cost	Hours per week
	Median	Median
Paid Childminder/nanny	€8.10	10
Paid relative	€6.25	10
Centre-based	€6.00	9
All paid care	€7.00	10

2.7 SUMMARY

The main focus of this chapter was to provide contextual information on the families of 9-year-olds to facilitate the interpretation of the relationship between family background and the outcomes discussed in later chapters.

Most 9-year-olds lived in two-parent families, with just 15 per cent in one-parent families. Although the overall percentage was similar at 9 months, 3 years, 5 years and 9 years old, this masked some change at the level of the individual child, particularly in one-parent families. While most two-parent families were stable in terms of structure, the one-parent families had experienced much more change: 47 per cent of the one-parent families in the 9-year wave had been two-parent families at an earlier wave.

One-parent families tend to have a more disadvantaged profile in terms of income, education of the Primary Caregiver and social class.

In one-parent families, 29 per cent of the Primary Caregivers worked full-time and another 19 per cent worked part-time. In two-parent families, the most common work pattern was for both parents to work full-time (45%); followed by families where the Secondary Caregiver worked full-time and the Primary Caregiver did not work (30%), and those where the Secondary Caregiver worked full-time and the Primary Caregiver worked part-time (15%).

Among parents in employment, both the Primary and Secondary Caregivers were more likely to agree that work pressure impacted on family activities and family time, than that family responsibilities impacted on work opportunities or enjoyment of work. The impact of work on family life was stronger for Secondary than for Primary Caregivers, linked to the fact that more of them are working full-time. In two-parent families where both parents worked full-time, the Primary Caregiver was more likely than the Secondary Caregiver to report two or more work-family-conflict issues (44% vs 38%). Primary Caregivers who worked part-time were much less likely to report two or more work-family conflict issues (21%) but lone parents working part-time were more likely to do so (30%) than those in two-parent families.

Financial stress was measured by the ease or difficulty reported by the Primary Caregiver in 'making ends meet'. There was a clear increase in the percentage reporting *great difficulty* or *difficulty* in making ends meet as the families moved through the recession; from 13 per cent at 9 months in 2007/2008 to 22 per cent at 3 years in 2011 and 26 per cent at 5 years in 2016 before dropping back to 13 per cent at age 9 in 2017/2018. Financial stress was also strongly affected by indicators of family disadvantage, such as low income, lower social class and the Primary Caregiver having lower levels of education and was much higher in one- than in two-parent families.

The extended family was important in the lives of 9-year-olds, with 90 per cent of them seeing at least one grandparent regularly. The levels were higher among more advantaged families (possibly reflecting a greater access to transport) and also among those in rural areas. Grandparents tended to be seen more frequently than other relatives living outside the household, such as uncles, aunts or cousins: 69 per cent of 9-year-olds saw grandparents at least once a week.

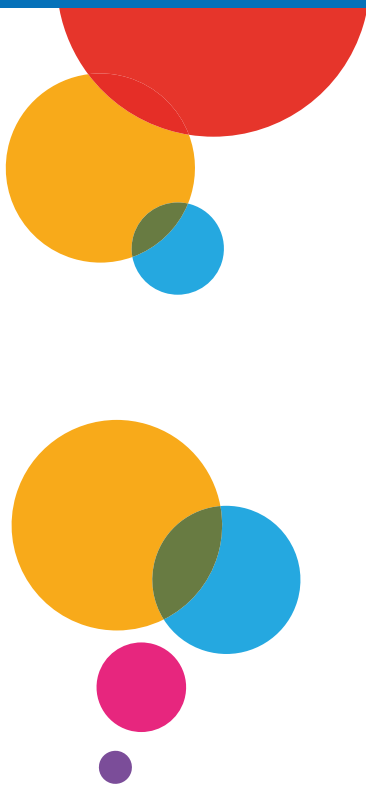
Most (70%) 9-year-olds were mainly cared for outside of school hours by a parent; 11 per cent were cared for by a relative on an unpaid basis; 10 per cent by a childminder or nanny; 6 per cent in a centre-based setting (such as after-school care or a homework club) and just 3 per cent by a relative or friend on a paid basis. Even when both parents worked full-time, a substantial proportion of Primary Caregivers reported the main out-of-school care was provided by a parent (46%). Unpaid-relative care was particularly important for employed lone parents (35% where the Primary Caregiver worked full-time). Care by a childminder/nanny was more common in one-parent families where the Primary Caregiver worked full-time (16%) or in two-parent families where both worked full-time (20%). Among families paying for out-of-school care, the median number of hours was nine to ten per week and the median cost was €7 per hour, ranging from €6.00 for centre-based care to €8.10 for a paid childminder.





Chapter 3

PHYSICAL HEALTH AND DEVELOPMENT



3.1 INTRODUCTION

This chapter presents updated data on the physical health and well-being of 9-year-olds in *Growing Up in Ireland's* Cohort '08, with a particular focus on general health, long-standing health concerns, overweight and obesity, and diet.

Physical health acts as a key indicator of a child's overall well-being and development. This is particularly apparent given the fact that ill-health can impinge on many other aspects of a child's life, including family and peer relationships, attendance and performance at school, socio-emotional and mental well-being, and potentially civic engagement too. The foundations of good physical health throughout the life-course are established in childhood. Equally, health trends (both positive and negative), including dietary habits, physical activity levels (Telema, 2009) and weight management (Singh, Mulder, Twisk, van Mechelen & Chinapaw, 2008), tend to track through childhood into adolescence and adulthood. Ensuring good physical health in childhood and beyond is a complex issue as it is influenced by a wide range of factors, including individual and family characteristics and behaviours, the socio-economic environment and the physical environment too.

Good physical health and normal growth enables participation in a wide range of enjoyable and enhancing childhood activities. To date, the majority of children in *Growing Up in Ireland* have enjoyed good health; for example, 80 per cent of 7/8-year-olds were recently reported as being *very healthy, no problems* (Growing Up in Ireland Study Team, 2017a). However, a minority do experience issues and whilst the experience of poor or ill-health can be unpleasant in and of itself, it can have additional negative effects on other aspects of a 9-year-old's development and well-being. This is particularly true for those dealing with long-standing health concerns; the implications for and needs of children and families dealing with chronic illness are often many and complex.

Engagement in free-time activities and opportunities to socialise with peers may be compromised amongst children dealing with long-standing health concerns; evidence suggests that the degree of impairment associated with the illness as well as the visibility of the condition may affect peer relationships (Martinez, Carter & Legato, 2011). Absence from school, as well as socio-emotional difficulties associated with long-standing illness, may also affect the child's educational attainment (Moonie, Sterling, Figgs & Castro, 2008); according to the Longitudinal Study of Australian Children, children with specific healthcare needs had poorer academic trajectories across the early primary school years (Goldfeld, O'Connor, Quach, Tarasuik & Kvalsvig, 2015). Results from *Growing Up in Ireland's* Cohort '98 also revealed that 9-year-olds with a chronic health condition performed worse on standardised tests of Reading and Maths compared to children with no condition (Layte & McCrory, 2013). Chronic illness can also have a more widespread negative impact on the functioning and quality of life of other members of the child's family (Bouma & Schweitzer, 1990).

Numerous indicators of physical health and well-being have been recorded and reported on at all previous waves of the *Growing Up in Ireland* study. In general, the results have been very positive; the vast majority of parents consistently reported that their children were in good health; 98 per cent said their child was *very healthy or healthy, but with a few minor problems* at both 3 years of age and at 5 years of age. At age 3, 16 per cent of parents reported that their child had 'any long-standing illness, condition or disability'; this figure increased slightly to 19 per cent by age 5. Levels of overweight and obesity have also been recorded across all waves of the study and have been found to be relatively stable in early childhood (at the group level, but with some individual level change). Based on age- and gender-specific BMI cut-offs, at 3 years of age 18 per cent of children were classified as overweight while 6 per cent were classified as obese; these figures were 15 per cent and 6 per cent, respectively, at 5 years of age.

As a large proportion of health services in Ireland are monitored and funded by the State, it is an area with scope for considerable policy leverage. Promoting child health and well-being are key concerns for policy-makers. According to the 2017 UNICEF Innocenti Report Card of young people, Ireland was ranked 22nd of 40 developed countries for child health and well-being (UNICEF, 2017)¹⁹. Accordingly, childhood health is a core target of government policy initiatives. The most recent national children's strategy, *Better Outcomes, Brighter Futures* (Department of Children and Youth Affairs, 2014), recognises the importance of encouraging a healthy lifestyle for children among its priorities for 2014-2020; key outcomes include encouraging young people to be 'active and healthy' and 'improving child health and well-being', through the promotion of an active lifestyle and better diet. The National Healthy Childhood Programme emphasises the need for all children to have access to high-quality integrated services (HSE, 2017).

¹⁹ Key indicators of good health and well-being included neonatal mortality, adolescent suicide, mental health symptoms, drunkenness and teenage births (UNICEF, 2017).

3.2 GENERAL HEALTH AND LONG-STANDING CONDITIONS

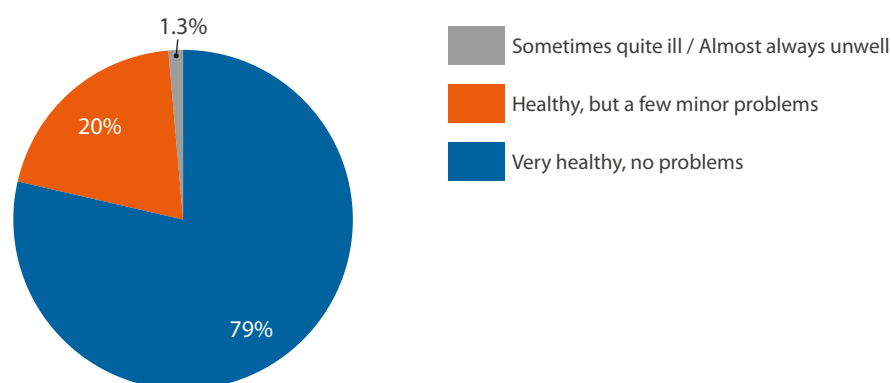
Parental report of a child’s general health gives a useful overall perspective of the child’s physical well-being and this information has been collected at all previous waves of *Growing Up in Ireland*. The prevalence of chronic illness or health conditions is another useful indicator of general child health.

At the current wave, the Primary Caregivers answered several questions about their child’s health; how they would describe their child’s current health, with answers ranging from *very healthy, no problem* to *almost always unwell*. They were also asked if their child had ‘any long-standing illness, condition or disability’. They reported on the specific nature of the condition, whether it had been diagnosed by a medical professional and if it hampered the child in their daily activities.

3.2.1 GENERAL HEALTH AT AGE 9 YEARS

As at previous waves of the study, the majority of Study Children were reported to have good general health; 79 per cent were described by their Primary Caregiver as *very healthy, no problems*, 20 per cent were *healthy, with a few minor problems* and the remaining 1 per cent were described as *sometimes quite ill* or *almost always unwell* (Figure 3.1).

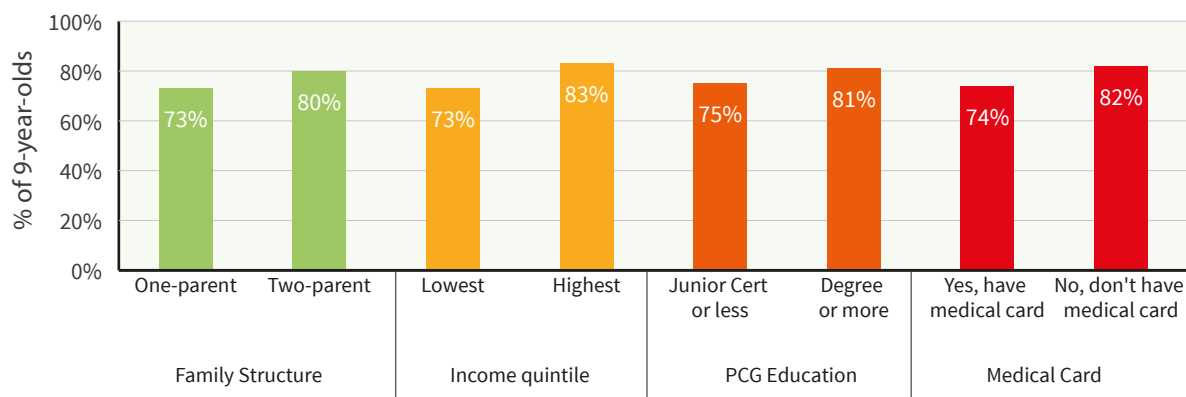
Figure 3.1: Primary Caregiver’s report of Study Child’s general health at 9 years of age



Note: Margin of error is, at most, ±1%.

Focusing specifically on those study children classified by their parents as being *very healthy* (79% overall), significant differences were observed according to key socio-demographic variables (Figure 3.2). Those from two-parent families were more likely to be classed as *very healthy* than those from one-parent families (80% vs 73%), as were those from the highest-income households compared to those from the lowest (83% vs 73%), and for those from families where the Primary Caregiver had degree-level of education than those with Junior Certificate or less (81% vs 75%). The differences in terms of Medical Card cover mirror those for income; 74 per cent of those children who were covered by a Medical Card had *very good health*, compared to 82 per cent for those children who did not have Medical Card cover.²⁰

Figure 3.2: Percentage of 9-year-olds classified as very healthy, according to key socio-demographic variables



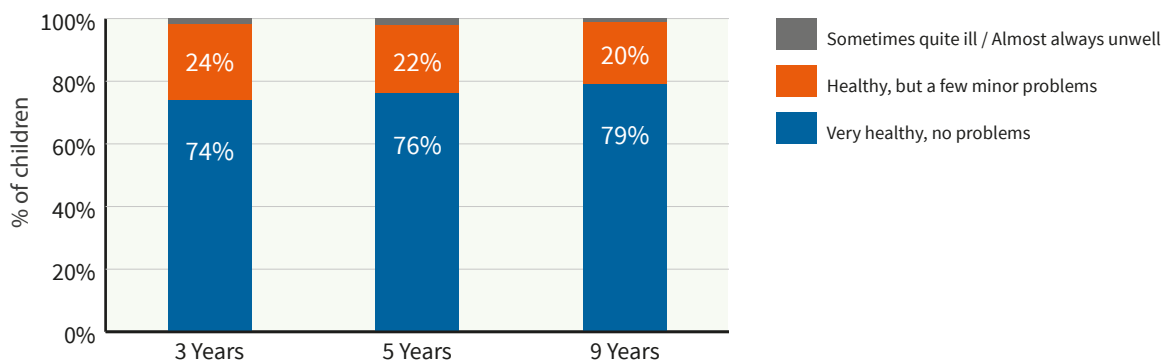
Note: Margins of error are, at most, ±1%.

²⁰ Medical Card eligibility criteria are discussed in detail in Section 3.3, but the main criterion is low income. Children with illnesses such as cancer may also qualify.

3.2.2 LONGITUDINAL TRENDS IN GENERAL HEALTH

Primary Caregivers had previously been asked about their child’s general health, at both Wave 2 (age 3) and Wave 3 (age 5) of the study. Similar rates can be observed at all three waves, although Study Children’s overall general health did seem to improve over time; significantly more were classified as *very healthy, no problems* at 9 years (79%) than at 5 years (76%) or 3 years (74%). It is important to consider that this trend may be amplified by increased attrition amongst those Study Children with poor health at younger ages, a pattern that cannot be fully accounted for in reweighting the data.

Figure 3.3: General health status at ages 3, 5 and 9 Years

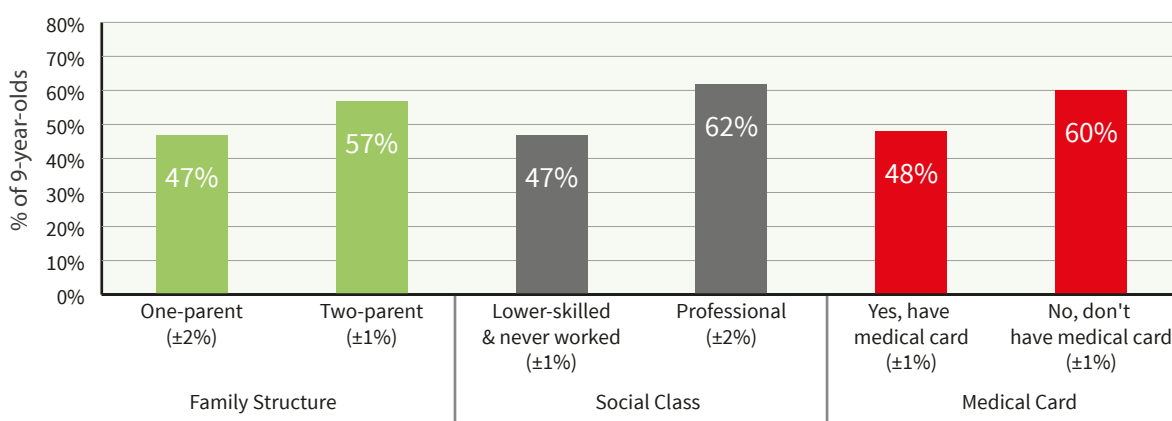


Note: Margins of error are, at most, ±1%.

Looking at general health status from a longitudinal perspective, the results are broadly positive; the majority of children (55%) were very healthy at the three most recent waves of the study, and just 5 per cent were *sometimes quite ill or almost always unwell* at any wave.

Over half of all children (55%) were reportedly *very healthy* at age 3, 5 and 9 years. Focusing on this subgroup in more detail, some significant differences can be observed according to key socio-demographic variables (Figure 3.4). Notably, those from two-parent families were more likely than those from one-parent families to be consistently reported as *very healthy* (57% vs 47% for those from one-parent families), as were those from higher social classes compared to those from lower social class groups (62% for those from professional families, compared to 47% from families classed as lower skilled or never worked), and those without Medical Card cover (60% vs 48% for those with Medical Card cover). Girls were also more likely than boys to be reported as *very healthy* across all waves (57% vs 53%).

Figure 3.4: Percentage of 9-year-olds who were very healthy at every wave, according to key socio-demographic variables



Note: Margins of error are shown in parentheses after the group label

3.2.3 CHILDREN’S LONG-STANDING ILLNESSES, CONDITIONS AND DISEASES

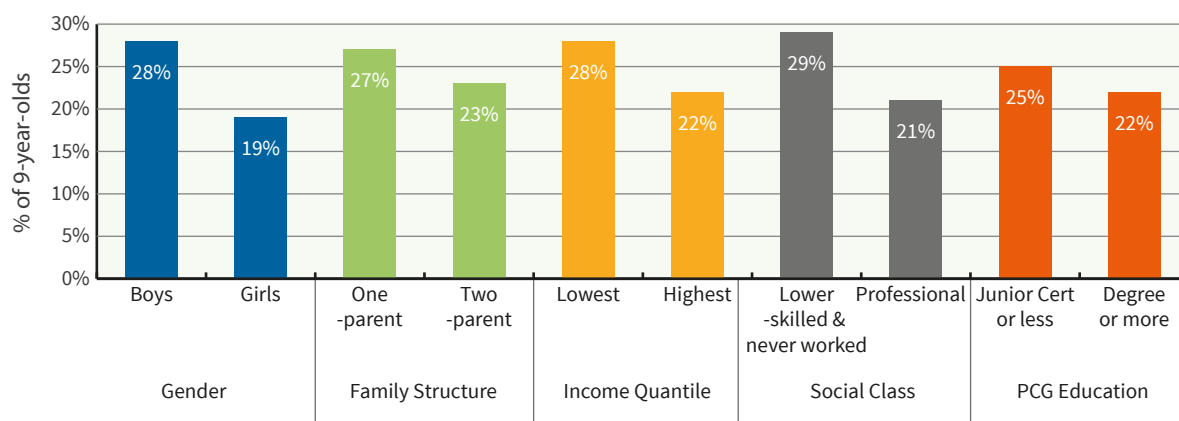
The presence of chronic health conditions during middle childhood may have implications for child development and psychological well-being; the 2006 Irish HBSC study²¹ demonstrated that children aged 10-17 with a chronic illness or disability

21 The wide-ranging Health Behaviours in School Aged-Children study (HBSC) draws cross-sectional information from representative samples of school-age children from the ages of 11 – 15 in 33 countries (Currie, Griebler, Inchley, Theunissen, Molcho, Samdal & Dür, 2010).

reported lower life satisfaction than the general population, and this was particularly pronounced amongst children whose daily activity was impaired due to their condition or disability (Molcho, Gavin & Nic Gabhainn, 2008). Evidence suggests that childhood health problems may influence the trajectory of socio-emotional development, impact on educational attainment, and have repercussions for child self-esteem (Maslow, Haydon, McRee, Ford, & Halpern, 2011).

Almost one-in-four parents (24%) reported that their child had a long-standing illness, condition or disease; 16 per cent of children had one such condition, 4 per cent had two conditions and 3 per cent had three conditions. Looking at the prevalence of long-standing conditions in terms of key socio-demographic variables, some significant findings were observed. The largest difference found was by gender, with boys significantly more likely to have a long-standing condition than girls (28% vs 19%). Differences were also evident by family structure (27% for one-parent families vs 23% for children from two-parent families); those from lower-income families, from a lower social class or from families with lower parental educational attainment were more likely to have a long-standing illness or condition (Figure 3.5).

Figure 3.5: Percentage of 9-year-olds with a long-standing illness, condition or disability, according to key socio-demographic variables

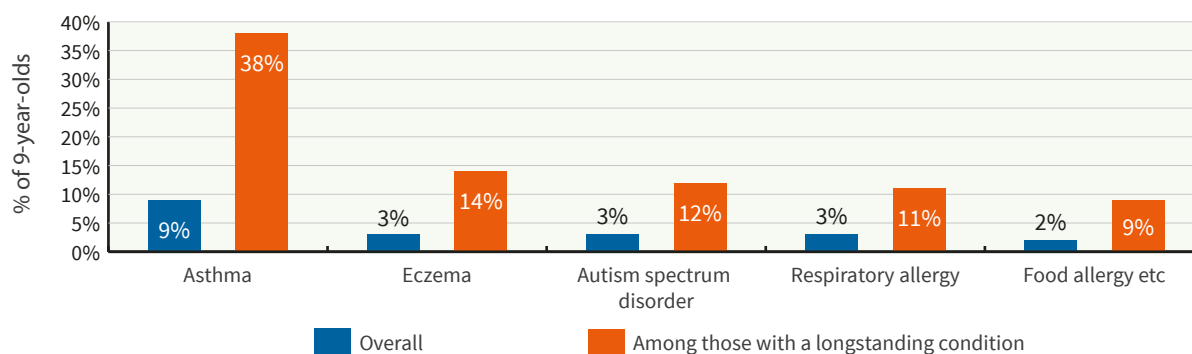


Note: Margins of error are, at most, ±1%.

In terms of the exact nature of the long-standing condition, illness or disease, asthma was the most commonly reported issue (9% overall; 38% amongst those with a long-standing condition). This was followed by eczema (3% overall), autism spectrum disorder (3% overall), other respiratory allergies (3% overall) and food allergies (2% overall; Figure 3.6).

Looking at these results in the context of data collected from similar international research, the prevalence rates of chronic illnesses vary significantly across studies, often because of differences in the measurement strategy. Data from the Avon Longitudinal Study of Parent and Children suggested that 44 per cent of children (aged 0-9 years) had at least one chronic condition recorded at some time in that period (Cornish, Boyd, Van Staa, Salisbury & Macleod, 2013). The most common issue was a skin condition such as eczema, reported by 25 per cent of children, whilst 19 per cent of children reportedly had asthma. According to the Medical Expenditure Panel Survey, examining the prevalence of chronic health conditions in a cohort of 66,000 American children aged 0-18 years, 12 per cent of children were reported to have at least one of these conditions, with asthma being the most common (9%; Miller, Coffield, Leroy & Wallin, 2016).

Figure 3.6: Prevalence of the most common long-standing illnesses, conditions and diseases at 9 years of age

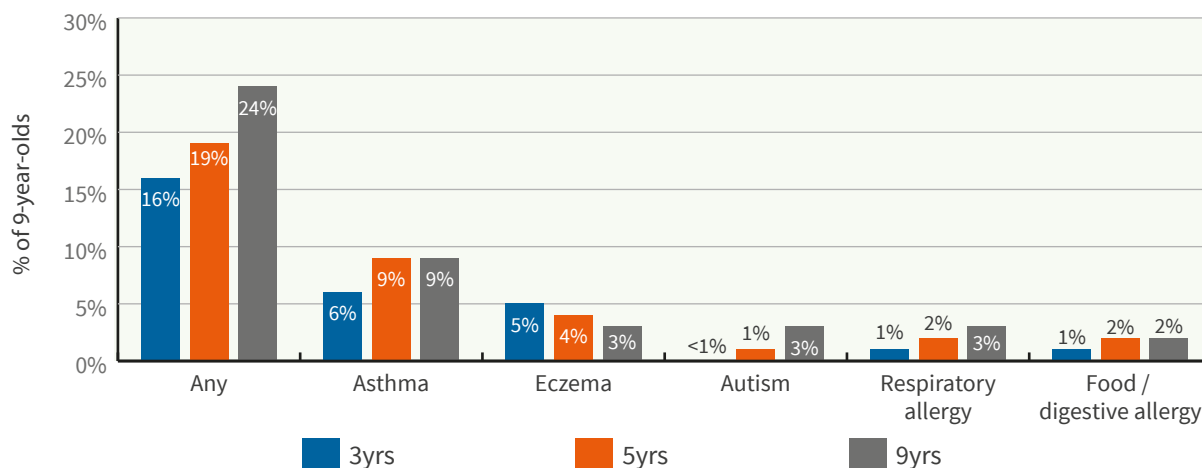


Note: Margins of error are, at most, ±1% overall and ±2% for those with a long-standing condition.

3.2.4 LONGITUDINAL TRENDS IN LONG-STANDING ILLNESSES, CONDITIONS AND DISEASES

Parents were also asked about the prevalence of long-standing diseases at previous waves of the study, when the Study Child was 3 and 5 years old. A clear trend of increasing prevalence from ages 3 to 9 can be seen, from 16 per cent overall prevalence at age 3 to 19 per cent at age 5 and 24 per cent at age 9 (Figure 3.7)²². This is reflected in an increase in the prevalence of some specific conditions, including asthma (increasing from 6% overall at age 3 to 9% at age 9), autism (increasing from 0% to 3%), respiratory allergies (1% to 3%) and food allergies (1% to 2%). Conversely, the prevalence of eczema or other skin allergies decreased from 5 per cent at age 3 to 3 per cent at age 9 years. Increased prevalence of conditions such as asthma and autism may be partly explained by virtue of the fact that chronic illnesses need to be present for a sustained period of time before they can be classified as ‘chronic’. The ability to accurately diagnose asthma in children under the age of 5 years is also considered problematic (Yang, Gaffin & Radhakrishnan, 2019).

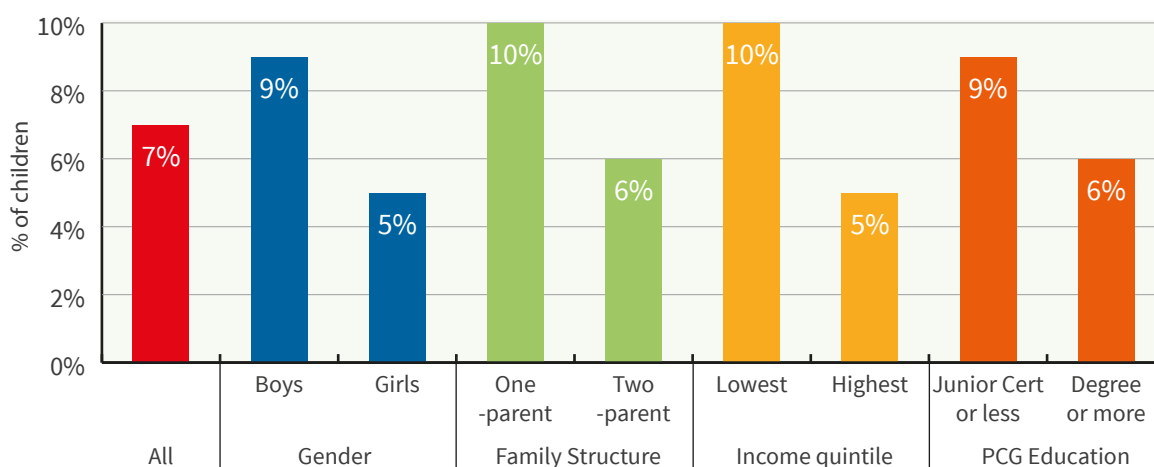
Figure 3.7: Prevalence of long-standing illnesses, conditions and diseases at ages 3, 5 and 9 years



Note: Margins of error are, at most, ±1%.

Almost 7 per cent of children were reported as consistently having a long-standing illness, condition or disease at ages 3, 5 and 9 years. Again, some interesting trends were observed when focusing on the make-up of this subgroup (Figure 3.8). Significant gender differences can be observed; boys were considerably more likely to have a long-standing condition at all three ages (9% vs 5% of girls), as were those from one-parent families (10% vs 6%). Similar trends were observed according to equalised family income (10% in the lowest quintile vs 5% in the highest quintile) and parental educational attainment (9% vs 6% for those with low vs high parental educational attainment).

Figure 3.8: Percentage of children who had a long-standing illness, condition or disease at ages 3, 5 and 9 years, according to key socio-demographic factors



Note: Margins of error are, at most, ±1%.

22 These figures are based on those interviewed at all three waves. The increased prevalence may indicate formal diagnosis of a recurring condition (for example, asthma after recurring respiratory problems or identification of autism spectrum disorder).

3.3 MEDICAL CARD COVER AND HEALTH SERVICE UTILISATION

The ability to access and utilise healthcare services in a timely manner can have a significant and lasting positive impact on child health (WHO, 2014). General practitioners (GP) play a key role in providing primary care services, as well as providing referrals essential for many secondary healthcare services. The average cost of a GP visit in Ireland currently stands at €52.50 (Connolly, Nolan, Walsh & Wren, 2018), with children and adults usually charged the same amount. A key commitment of the *Better Outcomes, Brighter Futures* strategy (Department of Children and Youth Affairs, 2014), was the introduction of universal GP care for all children, given that early intervention and prevention is essential for improving child health outcomes.

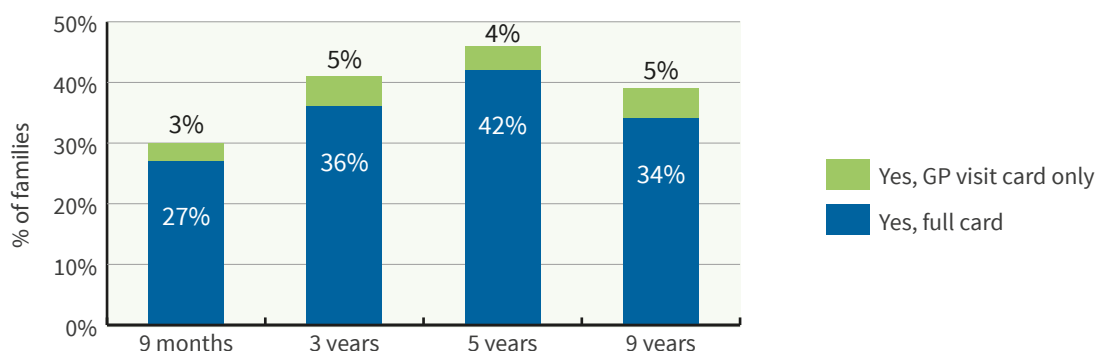
Currently in Ireland, free GP visits are available for all children aged under six years and all adults aged 70+ years, with phased plans to extend free GP visits to all under-18s (Government of Ireland, 2016). Simultaneously, some citizens are entitled to public health services in Ireland. Full medical cardholders are entitled to free public health services (including GP services), while GP visit cardholders are entitled to free GP consultations and may avail of the universal subsidised prescription medicines through the Drugs Payment Scheme. Eligibility is assessed primarily on the basis of an income means test.

3.3.1 MEDICAL CARD COVER

At all waves of the study to date, Primary Caregivers have been asked whether they (and their child) had free healthcare through either a Medical Card or GP visit card cover. At 9 years of age, 34 per cent of families (including the 9-year-old) held a full Medical Card, while 5 per cent availed of the GP visit card only (Figure 3.9). A further 2 per cent of all 9-year-olds had Medical Card cover independently of their family. In terms of the socio-demographic background of those with a Medical Card (39% overall had either a Medical Card or GP-only card), relative representation was highest amongst one-parent families (78%), those families in the lowest income quintile (82%), and those families in the lowest social class (79%). This is as expected given that these factors are independently linked to the income means test used to gauge Medical Card eligibility.

Whilst the percentage of families holding a Medical Card was higher at age 9 than when the child was 9 months old (27% had a full Medical Card and 3% had the GP visit card), it actually represents a significant reduction from 5 years of age, when 42 per cent of families had a full Medical Card and 4 per cent had a GP visit card²³. These changes in Medical Card cover broadly reflect wider economic conditions in Ireland at the time, in terms of both employment levels and household income²⁴. The cohort was 9 months old in 2009, just prior to the recession, but was subsequently in the midst of the recession during data collection at age 3 (2010-2011) and age 5 (2013). However, by the time data were being collected for the current wave at 9 years (2017), the Irish economy had recovered from the recession and unemployment levels had improved significantly.

Figure 3.9: Family Medical Card cover over time



Note: Margins of error are, at most, ± 1%.

3.3.2 GP VISITS

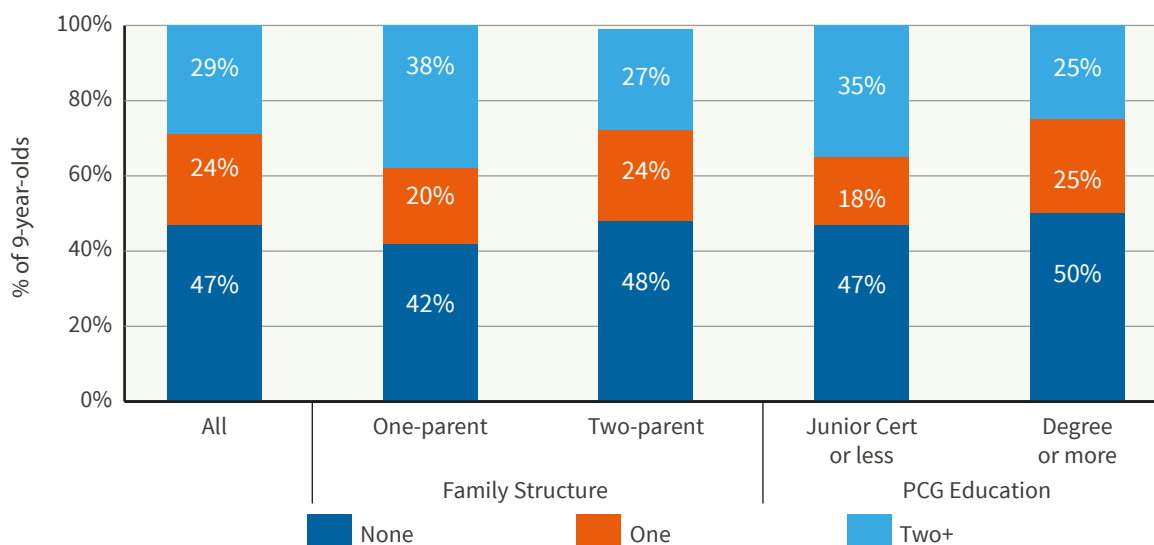
Parents were asked about how often their child used healthcare services, in terms of both GP visits and nights spent in hospital. Nearly half of all study children (47%) had not attended a GP service at all in the last year, while 24 per cent had visited a GP once and the remaining 29 per cent had visited a GP twice or more (Figure 3.10). No differences in frequency of GP visits were observed in terms of gender, although children from one-parent families were more likely to attend a GP at least twice (38% vs 27% for children from two-parent families). Similar differences were observed according to parental education;

²³ Again, it is important to consider that this trend may be amplified by increased attrition amongst those Study Children with poor health.

²⁴ Changes in economic circumstances were the main driver of changes in Medical Card access over the period, with few changes in entitlement for children other than the extension of full Medical Cards to all children in receipt of Domiciliary Care Allowance. What was covered by the Medical Card changed somewhat, with the introduction of prescription co-payments in 2010 and an increase in these co-payments from 2013.

the percentage of Study Children attending the GP at least twice was higher in lower educated families compared to higher educated families (35% vs 25%). This finding is of some concern as it is indicative of income- and/or class-related inequalities in child health, a trend which has been widely established in international health research (Currie et al., 2012).

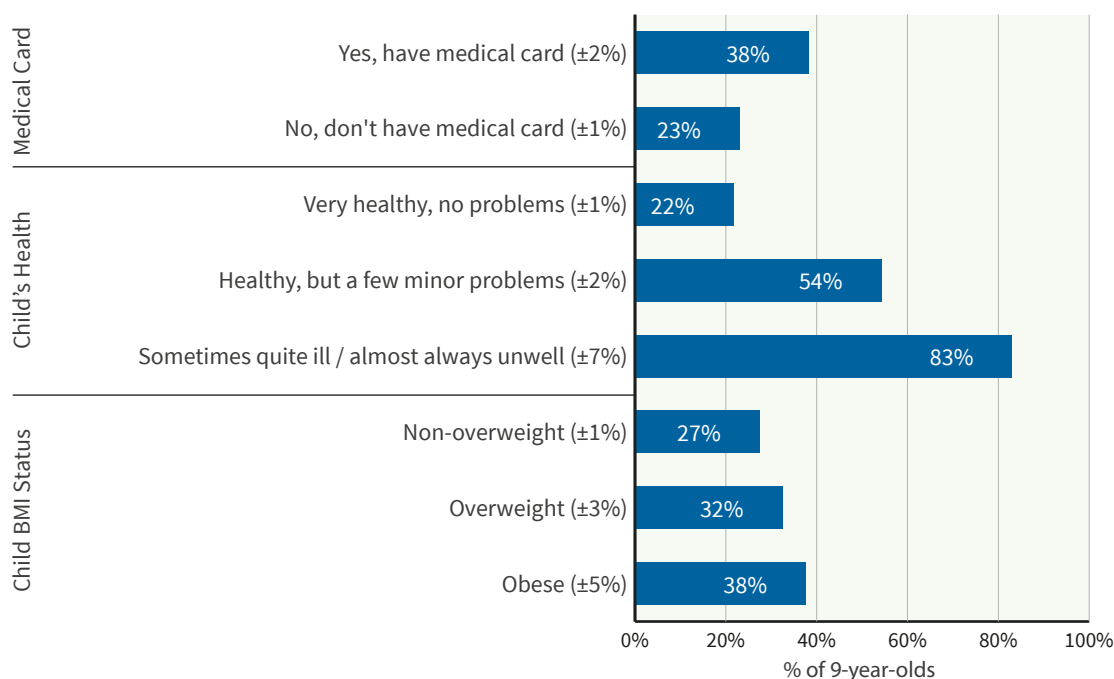
Figure 3.10: Number of general practitioner visits for the 9-year-old in the last 12 months, according to key socio-demographic variables



Note: Margins of error are, at most, ± 1% for all and for two-parent families; ±3% for one-parent families; ±4% where PCG has Junior Cert or less and ±2% where PCG has degree or more.

General practitioner visits also differed according to Medical Card cover. Almost 40 per cent of children that had Medical Card cover had attended a GP at least twice in the last year, compared to 23 per cent for children without Medical Card cover. As expected, the number of GP visits was closely associated with the Study Child’s general health status; only 22 per cent of those reported as *very healthy, no problems* attended a GP at least twice in the last year, but this figure rose to 83 per cent for those reported as being *sometimes quite ill or almost always unwell*.

Figure 3.11: Proportion with two or more general practitioner visits in the last 12 months, according to key health-related variables



Note: Margins of error are shown in parentheses after the group label.

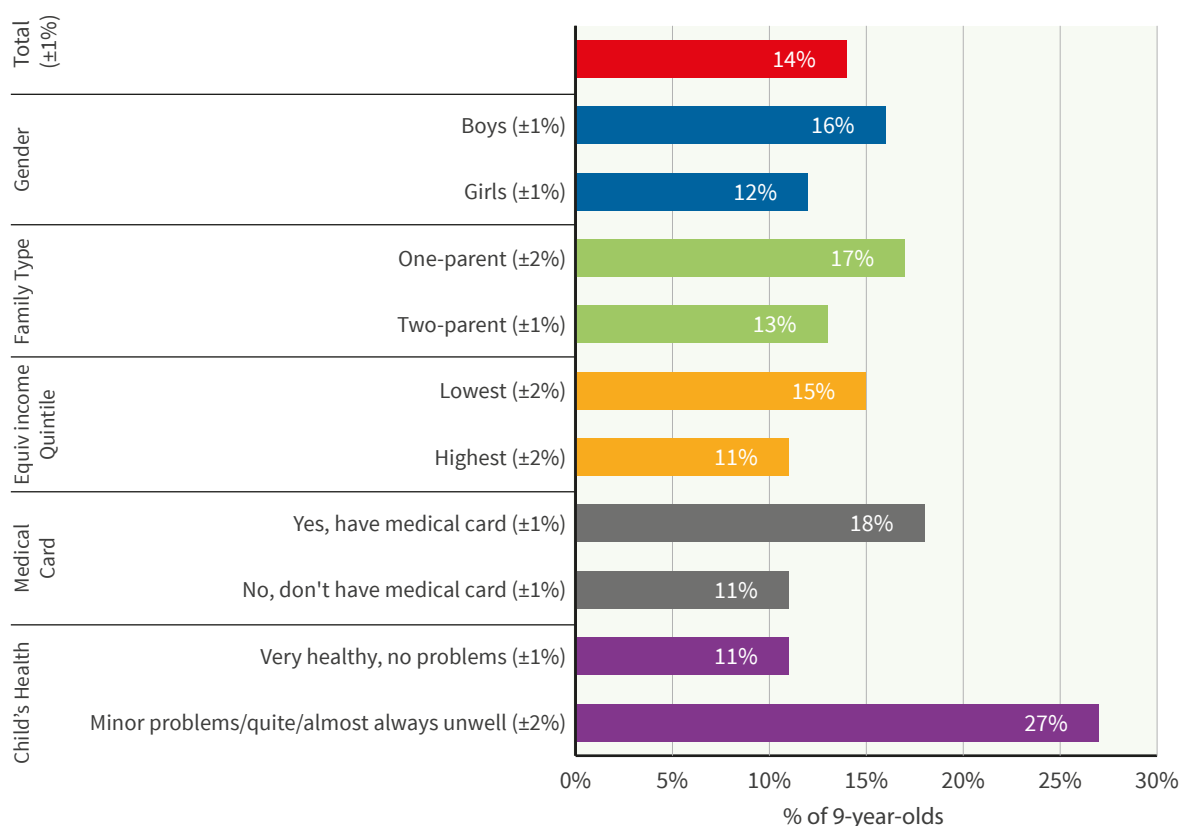
Similar differences were observed according to BMI status, with more obese children visiting a GP at least twice than non-overweight children (38% vs 27%). This is a particularly interesting finding as it points towards potential associations between overweight/obesity and poor health²⁵. The long-term effects of obesity, experienced in later life, are well established; these include type 2 diabetes, cancer and cardiovascular disease (Pi-Sunyer, 2009). However overweight and obese children are at increased risk of negative health outcomes in the short-term too, including asthma and metabolic syndrome (Kelsey, Zaepfel, Bjornstad & Nadeau, 2014); this may somewhat explain the greater frequency of GP visits amongst overweight and obese 9-year-olds.

3.3.3 HOSPITAL STAYS

Parents were also asked how many nights their child had spent in hospital since the last *Growing Up in Ireland* interview (at age 5). In total, 14 per cent of 9-year-olds had spent a night in hospital since their last interview at age 5 (Figure 3.12); 6 per cent had spent one night and 8 per cent had spent more than one night. Gender differences were observed in terms of overnight stays in hospital; more boys had spent one (7%) or more nights (9%) in hospital than girls (5% and 7%, respectively). Like GP visits, socio-economic variations were also observed; those from one-parent families were more likely to stay in hospital overnight than those from two-parent families (17% vs 13%), as were those from the lowest income families (15% vs 11% for those from the highest income families).

Medical cardholders were also more likely to stay in hospital overnight than those without (18% vs 11%); this may be explained by the association between negative health outcomes and socio-economic status, given that Medical Card eligibility is means-tested based on the Study Child's family income and also granted to those with serious health conditions. As expected, the greatest differences in overnight stays in hospital were according to the child's general health; over a quarter of children who had *minor problems or were sometimes quite ill or almost always unwell* had spent at least one night, compared to just 11 per cent of those described as *very healthy, no problems*²⁶.

Figure 3.12: Proportion of 9-year-olds who had spent at least one night in hospital since last interview (at age 5), according to key socio-demographic variables



Note: Margins of error are shown in parentheses after the group label.

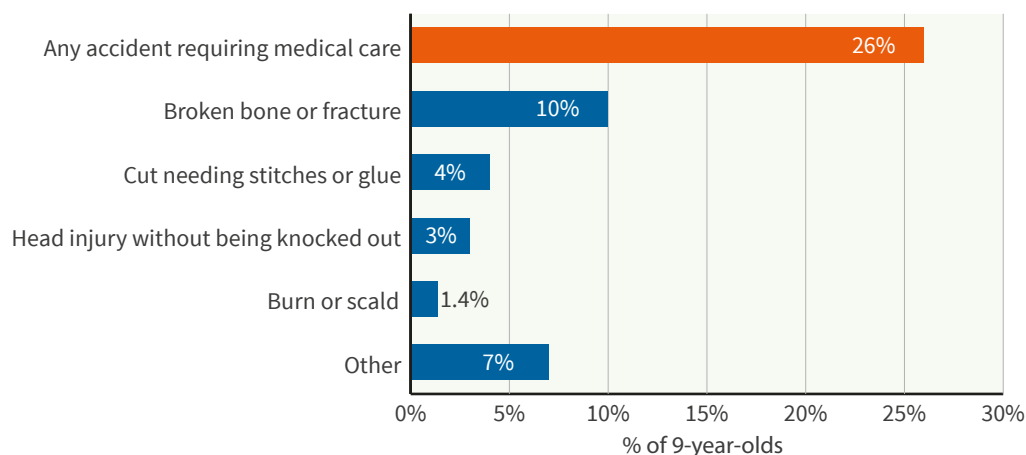
²⁵ These patterns may also reflect the socio-economic gradient of overweight/obesity (see Section 3.4).

²⁶ The least healthy groups cannot be distinguished here because of small numbers.

3.3.4 HEALTH SERVICE UTILISATION AFTER INJURY

Some healthcare utilisation related to accidents or injuries. Twenty-six per cent of all 9-year-olds had been taken to a doctor, health centre or hospital because of an accident or injury since age 5 (Figure 3.13). For the most recent injury, the most common reasons were for broken bones or fractures (10% of all 9-year-olds), for a cut needing stitches or glue (4%), for a head injury without being knocked out (or losing consciousness; 3%) or for burns/scalds (1.4%).

Figure 3.13: Reasons why 9-year-old required a visit to a doctor, health centre or hospital after an accident or injury

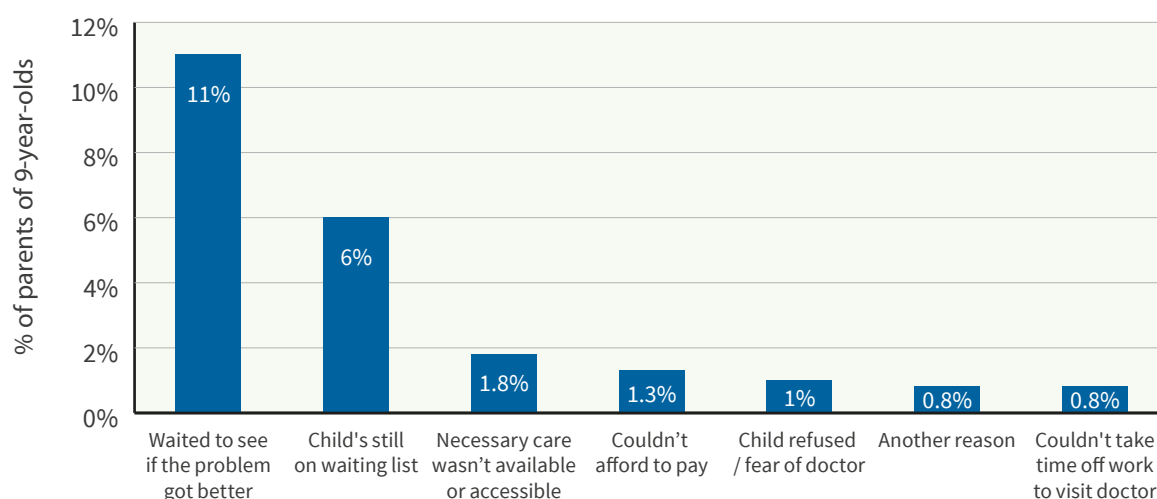


Note: Margins of error are, at most, ±1%.

3.3.5 REASONS FOR NOT AVAILING OF HEALTHCARE

Primary Caregivers were asked if there had been an instance in the last 12 months when their child ‘needed medical care or treatment for a health problem but he/she did not receive it,’ for a range of specified reasons. The question was intended to capture access to all types of healthcare. The most common answers were that the parents *wanted to wait and see if the problem got better* (11%), the child was still *on a waiting list* (6%) or the necessary medical care *was not available or accessible* (1.8%). A small number of parents said they did not seek medical treatment because they *couldn’t afford to pay* (1.3%). In total, 17 per cent of parents indicated that their child had needed medical care in the last 12 months but did not receive it.

Figure 3.14: Main reasons why parents didn’t avail of healthcare for their child, even when they needed it (expressed as a percentage of the total sample)

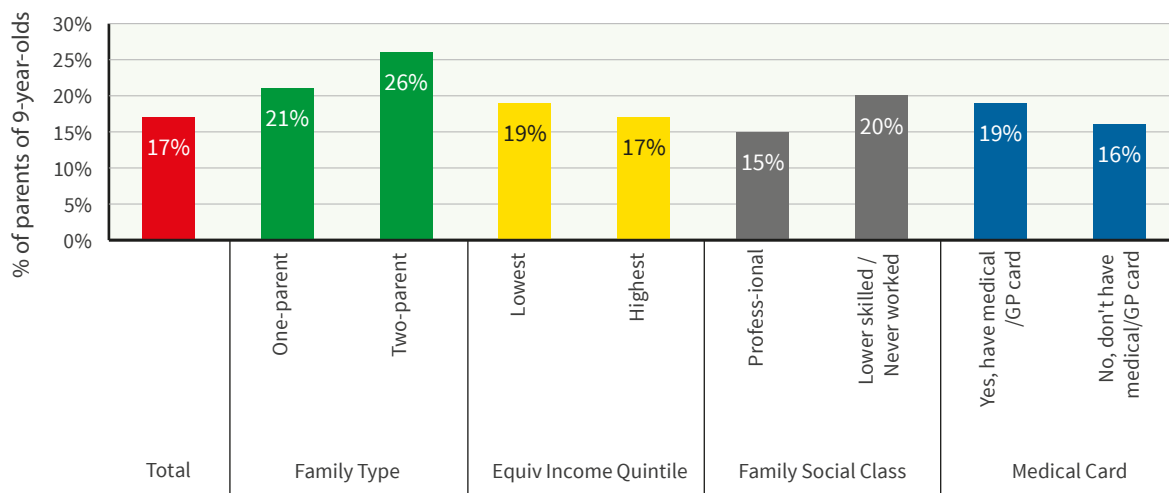


Note: Margins of error are, at most, ±1%.

Of those who did not avail of healthcare when needed (17% overall), a significantly greater percentage came from one-parent versus two-parent homes (21% vs 16%), and from lower-skilled versus professional class families (20% vs 15%). However, no significant differences were observed according to family income – and this is reflected in the fact that an inability to afford healthcare was offered as a reason by just 1.3 per cent of all parents. Significantly more parents who had Medical Card cover

(for their child) did not avail of healthcare when needed (19% vs 16%), suggesting that timely access to healthcare is more complex than just free GP care. As seen above, waiting lists were the second most commonly-cited reason why children did not avail of healthcare when they needed it.

Figure 3.15: Percentage of Primary Caregivers who did not avail of healthcare for their child, even when they needed it, by key socio-demographic characteristics



Note: Margins of error are, at most, ±1%.

3.4 OVERWEIGHT AND OBESITY

The prevalence of childhood overweight and obesity continues to rise worldwide (World Health Organization, 2017), while a recent Irish government report, *A Healthy Weight for Ireland*, has described this issue as one of the biggest health burdens facing modern Ireland (Department of Health, 2016). According to figures from Cohort '98 measured in 2007-2008, at age 9, more than a quarter of children were overweight/obese; 19 per cent were overweight and 7 per cent were obese (Layte & McCrory, 2011). Childhood obesity increases the risk of many negative health outcomes in later life, but adverse effects such as metabolic syndrome can be seen in childhood or adolescence (Weiss et al., 2004). The negative effects of obesity are not confined solely to physical health; research has also demonstrated that children who are obese are more likely to experience bullying and self-esteem issues (Van Geel, Vedder & Tanilon, 2014).

In the current wave of the study, height and weight measurements of the Study Child and both parents (where possible) were recorded at home by a trained interviewer. This information was used to calculate body mass index (BMI)²⁷. BMI status was then established; parents and children were classified as underweight (adults only), non-overweight, overweight or obese, based on internationally recognised cut-offs for both children²⁸ and adults²⁹. The child guidelines are age- and gender-specific; they are based on and linked to the corresponding adult BMI cut-offs (Table 3.1).

Table 3.1: International BMI cut-off guidelines for adults

BMI Status	BMI value range	Notes
Underweight	<18.5	applied to adults only
Non-overweight	≥18.5, <25	also referred to as 'normal weight'
Overweight	≥25, <30	
Obese	≥30	

²⁷ Body mass index (BMI) was calculated as weight (kg) / height (m)².

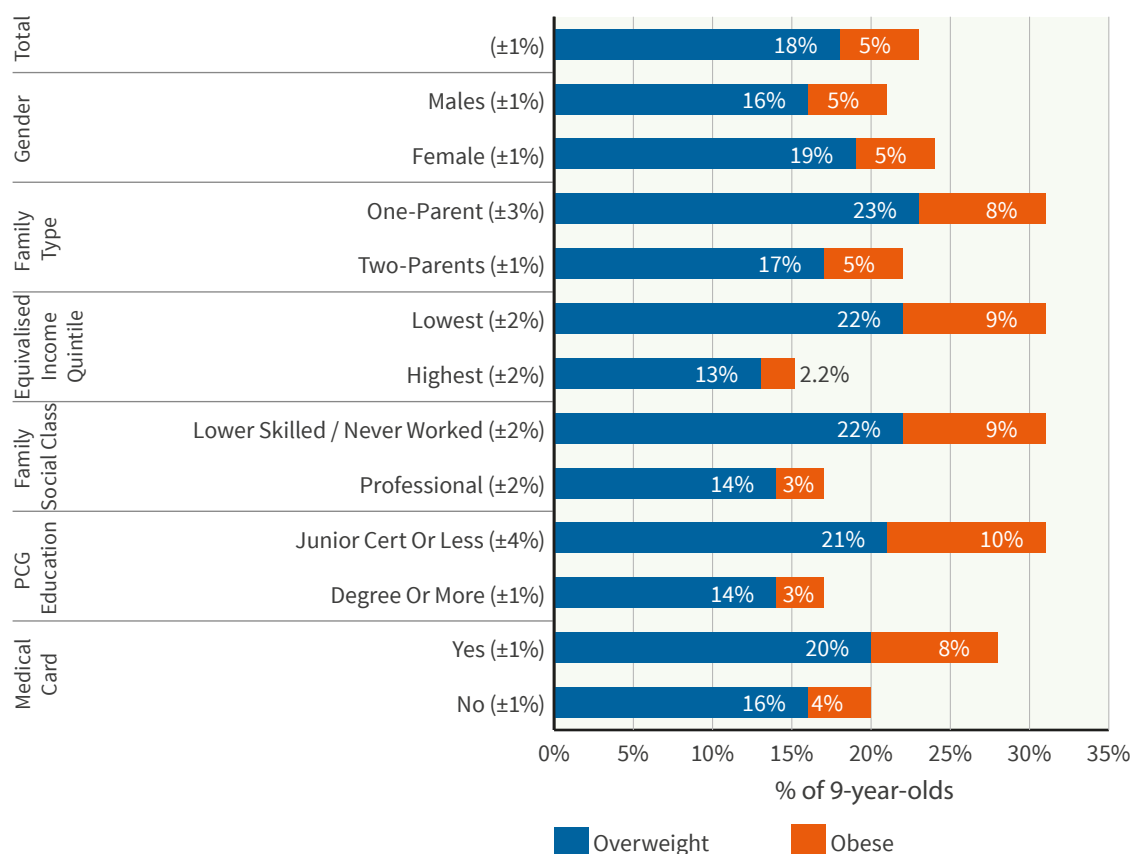
²⁸ The International Obesity Task Force (IOTF) BMI cut-offs for children were used in this instance (Cole & Lobstein, 2012). These cut-offs are both gender- and age-specific.

²⁹ The standard international adult BMI cut-off guidelines, as recommended by the World Health Organization (WHO) and the Centre for Disease Control and Prevention (CDC), were applied to both parents.

3.4.1 BMI STATUS AT 9 YEARS

By applying the child BMI cut-off guidelines at age 9, 77 per cent of all study children were classified as non-overweight (including underweight), 18 per cent were overweight and 5 per cent were obese (Figure 3.16). Significant differences were observed according to gender; more girls than boys were overweight (19% vs 16%), although levels of obesity were similar for both genders (5%). This gender difference is reflective of the findings from previous waves of the study for this cohort (*Growing Up in Ireland* Study Team, 2013) and Cohort '98 (Layte & McCrory, 2011), and in much of the international literature; levels of overweight and obesity tend to be higher for girls than for boys throughout childhood and adolescence.

Figure 3.16: Levels of overweight and obesity at age 9 years, according to key socio-demographic variables



Note: Figures in parentheses show the margin of error.

More notable differences were observed when looking at other socio-demographic factors, particularly in terms of family structure, family income, social class, parental educational attainment and Medical Card cover (Figure 3.16). Combined levels of child overweight and obesity were significantly higher in one-parent families than in two-parent families (31% vs 22%) and in the lowest income versus the highest income households (31% vs 15%). Similar significant trends were observed when comparing Study Children according to social class and parental education, and when comparing those children who were and were not covered by a Medical Card. It is well established that socio-economic factors are amongst the key mediators of obesity; for example, both dietary choices and physical activity opportunities are heavily influenced by socio-economic status (Bhurosy & Jeewon, 2014).

3.4.2 PARENTAL PERCEPTION OF CHILD'S BMI STATUS

Parents play an extremely influential role in their child's weight-related health behaviour, in terms of their dietary habits and their physical activity levels. As such, parents' perception of their child's BMI status may be important, as if the parents are not aware their child is overweight/obese, they are less likely to encourage them to modify their behaviour with a view to improving their BMI status (Carnell, Edwards, Croker, Boniface & Wardle, 2005). Arguably, parental perceptions of child overweight/obesity are skewed by the high prevalence of overweight and obesity amongst children/adolescents nowadays (Lampard, Byrne, Zubrick, & Davis, 2008). According to data from *Growing Up in Ireland's* Cohort '98 at 9 years of age, just 54 per cent of parents of overweight children and 20 per cent of parents of obese children rated their child as the correct BMI status (Layte & McCrory, 2011).

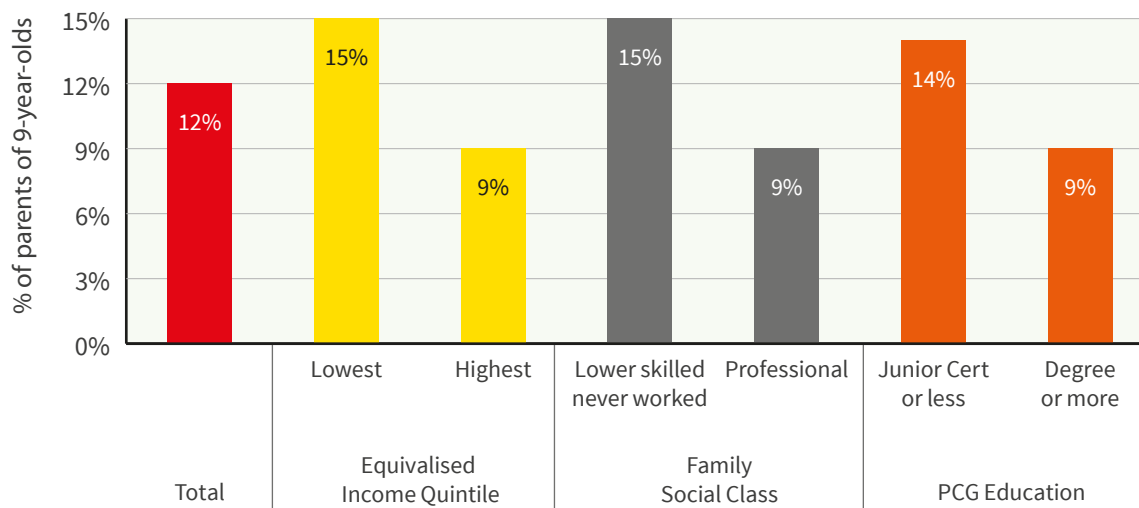
As at previous waves of the study, Primary Caregivers were asked their opinion on their child’s weight status at 9 years of age: did they think that their child was *underweight*, *normal weight*, *somewhat overweight* or *very overweight*? The vast majority described their child as non-overweight (88%; includes *underweight* and *normal weight*), with just 12 per cent describing their child as overweight (either *somewhat overweight* or *very overweight*; Table 3.2). Looking at these results in the context of the children’s actual BMI status, almost all (99%) of those children who were actually non-overweight were described as such by their parents. However, only 34 per cent of all children who were actually recorded as being overweight were described as such by their parents; meaning 66 per cent of overweight children were described as non-overweight by their parents. Misperceptions were also evident for obese children, although parents of those in this category were more likely to recognise at least some weight issue (18% reported as either non-overweight vs 82% as either somewhat or very overweight).

Table 3.2: Primary Caregivers’ perception of their child’s probable BMI status, according to child’s recorded BMI status

		According to the Child’s Recorded BMI Status:			
		Total	Non-overweight	Overweight	Obese
Total		100%	77%	18%	5%
Parent’s Perception of Child’s BMI Status:	Non-overweight (underweight or normal weight)	88%	99%	66%	18%
	Overweight (somewhat or very)	12%	1%	34%	82%

In total, 12 per cent of parents misperceived their children as being a normal, healthy weight, when they were in fact either overweight or even obese. Looking at this group of parents in more detail, some socio-demographic trends can be observed. Fifteen per cent of parents in the lowest income families were in this group (that did not recognise their overweight/obese child as being an unhealthy weight), compared to just 9 per cent of parents from the highest income families; very similar trends were observed when comparing parents in the lowest versus highest categories with regard to both social class (15% vs 9%) and parental educational attainment (14% vs 9%).

Figure 3.17: Percentage of parents who incorrectly described their children as non-overweight when they were actually overweight or obese, according to key socio-demographic variables



Note: Margin of errors are, at most, ±1%.

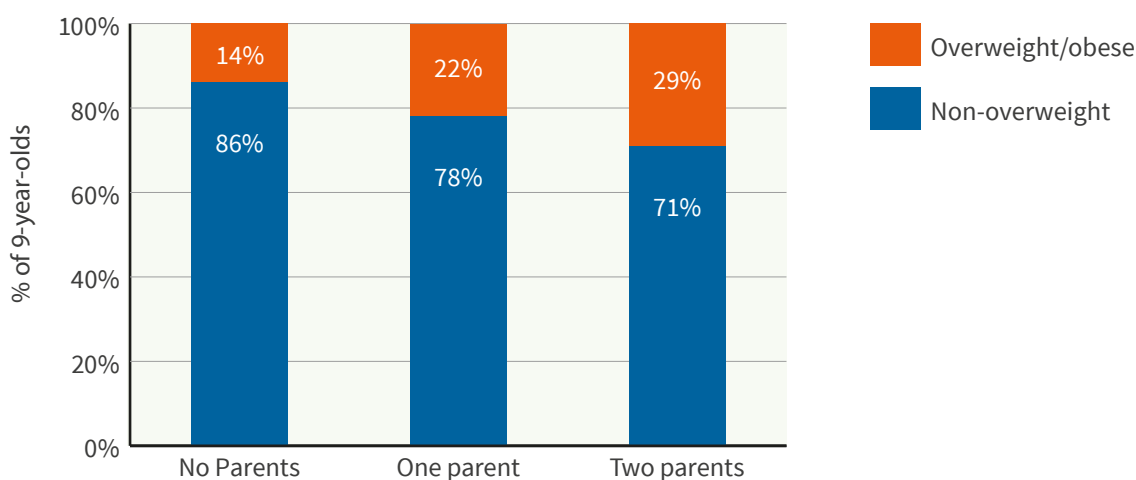
3.4.3 PARENTAL OVERWEIGHT AND OBESITY

As previously stated, parents exert crucial influences on their child’s weight and BMI status (Tzou & Chu, 2012). Beyond genetic predisposition to overweight and obesity, parents are ultimately responsible for their child’s dietary habits (Hodges, 2003) and energy expenditure (Zecevic, Tremblay, Lovsin & Michel, 2010), given they tend to dictate what food the family buys and eats at meal-time, how their child travels to school (via active transport or otherwise) and what activities they do after school and at weekends. Previous data from *Growing Up in Ireland* Cohort '98 indicated that parents with high BMI were more likely to have 9-year-olds who were overweight or obese (Layte & McCrory, 2011).

Focusing on the relationships between parental BMI and child BMI for 9-year-olds in the current wave of the study, the first thing to note is the high percentage of parents classified as overweight or obese. One-third (33%) of Primary Caregivers were classified as overweight and a further 23 per cent were obese; whereas 51 per cent of Secondary Caregivers were overweight and 24 per cent were obese, based on BMI cut-off guidelines³⁰. Twenty-four per cent of children had no overweight/obese parents, 50 per cent had one overweight/obese parent and a further 27 per cent had two overweight/obese parents³¹. A strong association was observed between parental overweight/obesity and child BMI status (Figure 3.18).

Amongst children for whom neither parent was overweight or obese (24% of all children), levels of non-overweight and overweight/obesity were 86 per cent and 14 per cent, respectively. For children with one overweight/obese parent (50% of all children), levels of non-overweight and overweight/obesity were 78 per cent and 22 per cent, respectively. However, for children who had two overweight or obese parents (43% of all children), respective levels of non-overweight and overweight/obesity were 71 per cent and 29 per cent. These findings support the theory that the benefits of healthy habits established by parents are realised by both parent and child (Andrews, Silk & Eneli, 2010) but this relationship is not perfect as other factors influence children’s weight status.

Figure 3.18: BMI status amongst 9-year-olds according to how many overweight or obese parents they have



Note: Analysis included children from both one- and two-parent families, so the ‘one overweight/obese parent’ category may include children whose sole (resident) parent is overweight/obese. Margins of error are, at most, ±2%.

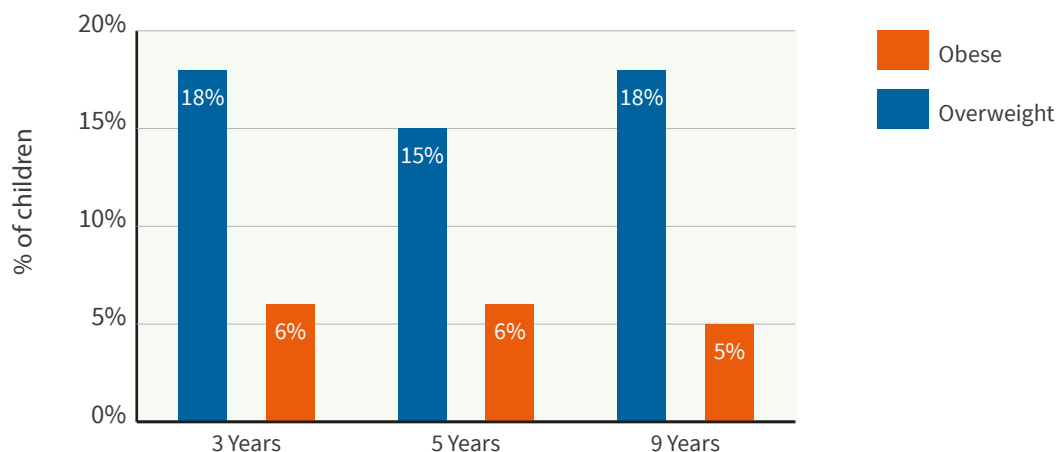
3.4.4 LONGITUDINAL TRENDS IN BMI STATUS

Given children’s BMI status is an age-specific measurement, it is possible to compare levels of overweight and obesity over time, in this instance looking at BMI status across recent waves of the study at ages 3, 5 and 9 years. When first measured at age 3, overall levels of overweight and obesity were 18 per cent and 6 per cent, respectively. Despite an initial improvement from age 3 to 5, levels of overweight and obesity rose again from 5 to 9 years; levels of overweight and obesity were 21 per cent (15% and 6%, respectively) at age 5, and 23 per cent at age 9 (18% and 5%, respectively; Figure 3.19). Previous large-scale studies such as the Health Behaviour in School-aged Children study have also reported inconsistent trends in obesity in terms of age (World Health Organization, 2017).

³⁰ Higher rates of overweight/obesity among adult males than females are also found in the Healthy Ireland survey for all age-groups except those aged 15-24 (Government of Ireland, 2019).

³¹ These figures include children from two-parent and one-parent families. For one-parent families, the measure is based on PCG BMI alone.

Figure 3.19: Levels of overweight and obesity at ages 3, 5 and 9 years



Note: Margin of errors are, at most, ±1%.

Tracing individual BMI statuses over time provides further insight into trends in overweight and obesity as study children get older. Of those children who were non-overweight at age 3, the vast majority (85%) were still non-overweight at age 9; 13 per cent were now overweight and 2 per cent were obese (Table 3.3). Of those children who were overweight at age 3, just 29 per cent were still overweight at age 9. Sixty-two per cent were now non-overweight, while the remaining 9 per cent were obese. One-third of those children who were obese at age 3 were obese again at age 9, 27 per cent were now non-overweight and 40 per cent were overweight. These figures show a good deal of movement into and out of the overweight/obese category between the ages of 3 and 9 years.

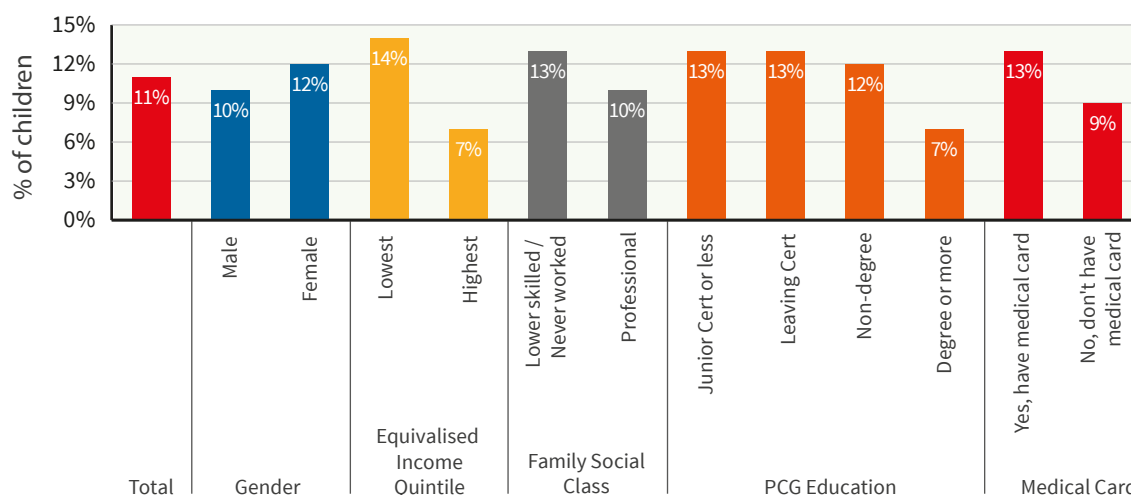
Table 3.3: Changes in Study Child’s BMI status between ages 3 and 9 years

		Child BMI Status at 9 years				
		(BMI status at age 3 years)	Non-Overweight	Overweight	Obese	Total
BMI Status at 3 years	Non-Overweight	(64%)	85%	13%	2%	100%
	Overweight	(18%)	62%	29%	9%	100%
	Obese	(6%)	27%	40%	33%	100%
Total at age 9			77%	17%	5%	100%

Note: The figures highlighted in yellow show those who entered the category overweight/obese. The figures highlighted in turquoise show those who exited the category overweight/obese.

In total, 11 per cent of all children were overweight/obese at both 3 years of age and 9 years of age. Looking in more detail at this subgroup of children, some differences can be observed according to key socio-demographic variables. Slightly more girls than boys (12% vs 10%) were likely to be overweight/obese at ages 3 and 9, although not significantly so; this difference stands to reason given the increased prevalence of overweight/obesity amongst girls in general. The prevalence of persistent overweight/obesity was also higher amongst those from the lowest versus the highest income families (14% vs 7%) and amongst those parents who had lower versus higher educational attainment (13% vs 7%). These differences reflect the prevalence of socio-economic inequalities in child health, specifically with regard to child overweight/obesity in this instance.

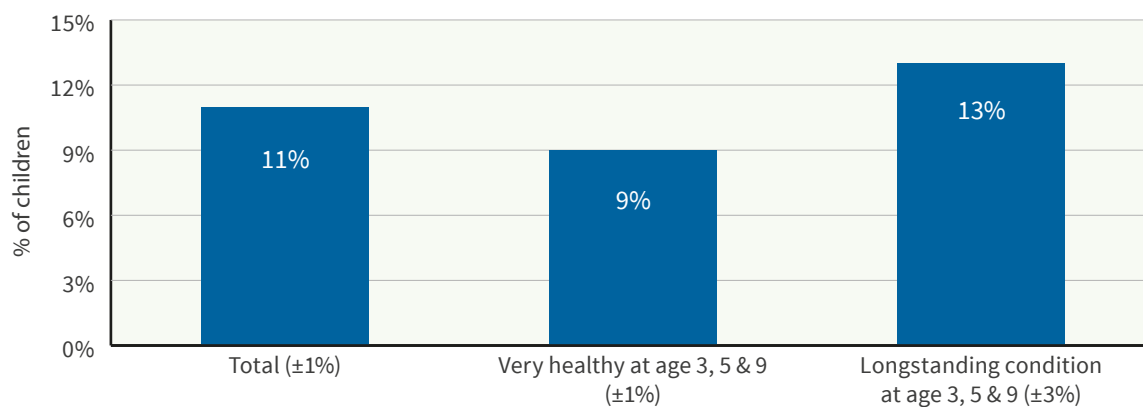
Figure 3.20: Percentage of children who were overweight or obese at age 3 and also at age 9 years, according to key socio-demographic variables



Note: Margin of errors are, at most, ±2%.

Figure 3.21 presents all those children who were overweight/obese at both 3 and 9 years of age, according to other key health parameters. Just 9 per cent of all children who were reportedly very healthy at 3, 5 and 9 years were also overweight/obese at 3 and 9 years. Prevalence of consistent overweight/obesity was higher for those who had a long-standing illness, condition or disease at ages 3, 5 and 9 years (13%) compared to those who were consistently *very healthy* at all three waves (9%). Further research could usefully unpack the extent to which long-standing illnesses are a driver of overweight/obesity or reflect poorer health among those who are overweight/obese.

Figure 3.21: Percentage of children who were overweight or obese at both age 3 and 9 years, distinguishing those who were very healthy at all waves and those with a long-standing illness at all waves



Note: Margins of error are shown in parentheses after the group label.

3.5 DIETARY HABITS

Good eating and dietary habits are essential to leading a healthy lifestyle. This includes eating enough healthy foods like fruit, vegetables, grains and healthy fats, while limiting the consumption of unhealthy fats, sugar and processed foods. Diet, along with physical activity, is the key modifiable variable in controlling one’s weight, and reducing the risk of becoming overweight or obese. This is true even in childhood, whilst sustained poor eating habits can contribute to a wide range of negative health outcomes (including heart disease, type 2 diabetes and hypertension) later in life (Srinath Reddy & Katan, 2004; Victora et al., 2008; Alimujiang et al., 2018).

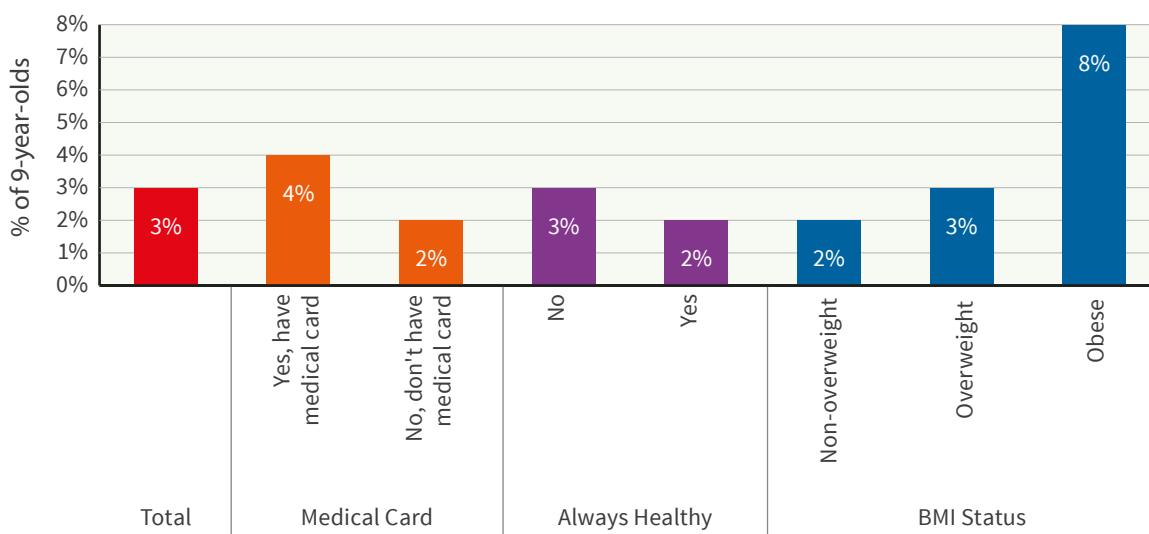
As part of the interview, Primary Caregivers were asked if their child usually ate something (breakfast) before going to school; numerous studies suggest that eating breakfast is associated with reduced risk of overweight and improved cognitive function related to memory, test grades and school attendance (Rampersaud, Pereira, Girard, Adams & Metz, 2005; Ingwersen, Defeyter,

Kennedy, Wesnes & Scholey, 2007; Hoyland, Dye & Lawton, 2009). A study of Irish adults indicated that the vast majority eats breakfast regularly and this represented a significant contribution to their micronutrient intake (Uzhova, Mullally, Peñalvo & Gibney, 2018).

3.5.1 EATING BREAKFAST

In total, the vast majority of children (97%) did usually eat something before going to school. However, 9-year-olds from one-parent families were more likely to skip breakfast than those from two-parent families (5% vs 2%). Key differences were also observed according to health-related parameters; those who had a Medical Card were more likely to skip breakfast than those who did not have a Medical Card (4% vs 2%)³² as were those 9-year-olds classified as obese (8%), compared to those who were both overweight (3%) and non-overweight (2%).

Figure 3.22: Percentage of those who do not usually have something to eat before going to school, according to key socio-demographic variables



Note: Margin of errors are, at most, ±1% except for Obese, which is ±3%.

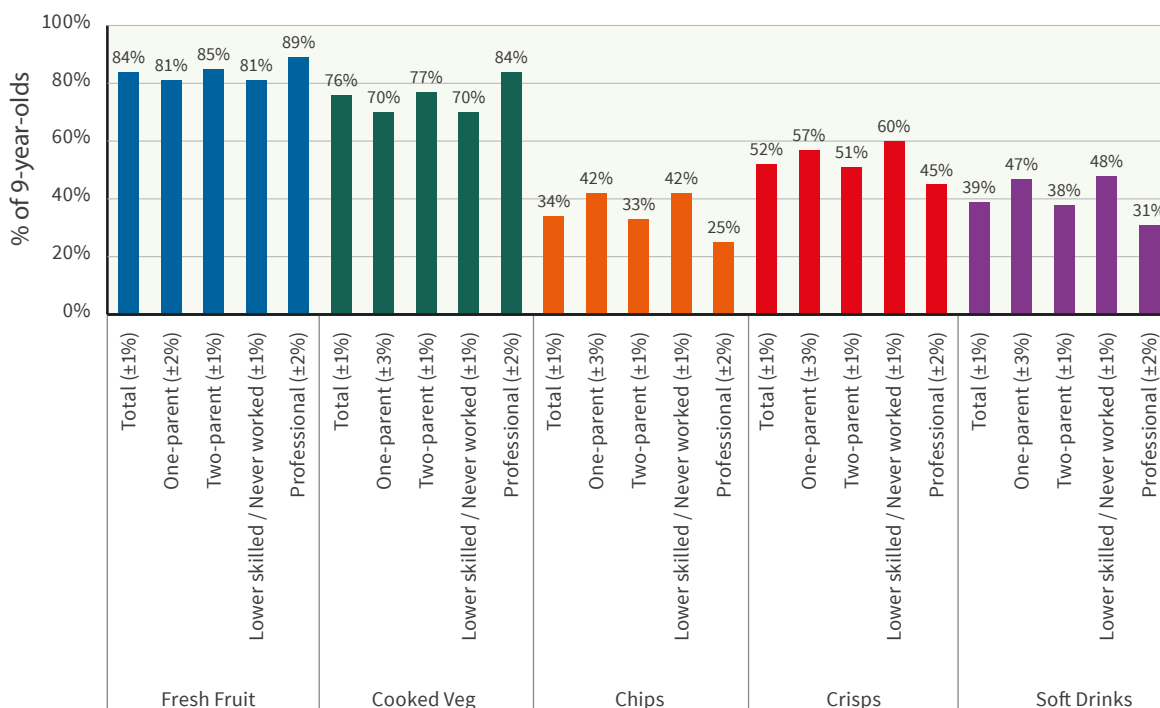
3.5.2 FOOD FREQUENCY (24-HOUR RECALL)

The dietary intake of 9-year-olds was also assessed via parental recall of the Study Child’s food consumption in the preceding 24-hour period. A 20-item food recall questionnaire was used to provide an insight into the dietary habits of 9-year-olds living in Ireland. Primary Caregivers were asked if their child had consumed each food item *once*, *twice*, *more than twice*, or *not at all* in the last 24 hours. Some food items were considered healthy (fresh fruit, vegetables) and others unhealthy (chips, crisps, soft drinks). Overall, 9-year-olds were more likely to have consumed (either *once*, *twice* or *more than twice*) healthy foods than unhealthy foods; 84 per cent had consumed fresh fruit in the last 24 hours and 76 per cent had consumed cooked vegetables, whereas 34 per cent had consumed chips, 52 per cent had consumed crisps and 39 per cent had had a soft drink.

Again, some differences were observed according to socio-demographic factors, predominantly in terms of family structure and family social class. Children from one-parent families were significantly less likely than those from two-parent families to consume (either *once*, *twice* or *more than twice*) fruit (81% vs 85%) and cooked vegetables (70% vs 77%), but more likely to consume chips (42% vs 33%), crisps (57% vs 51%) and soft drinks (47% vs 38%) in the last 24 hours. Similar trends were observed with regard to social class; those from lower-skilled/never worked families were significantly less likely to consume fruit (81% vs 89%) and vegetables (70% vs 84%), but more likely to consume unhealthy foods like chips (42% vs 25%), crisps (60% vs 45%) and soft drinks (48% vs 31%). Although there were significant differences by household structure and social class, it should be noted that a sizeable minority of children from two-parent or professional families had eaten ‘unhealthy’ foods in the previous 24 hours.

³² This pattern reflects the lower rates of eating breakfast among the lowest income quintile (5% compared with 2% for the other quintiles).

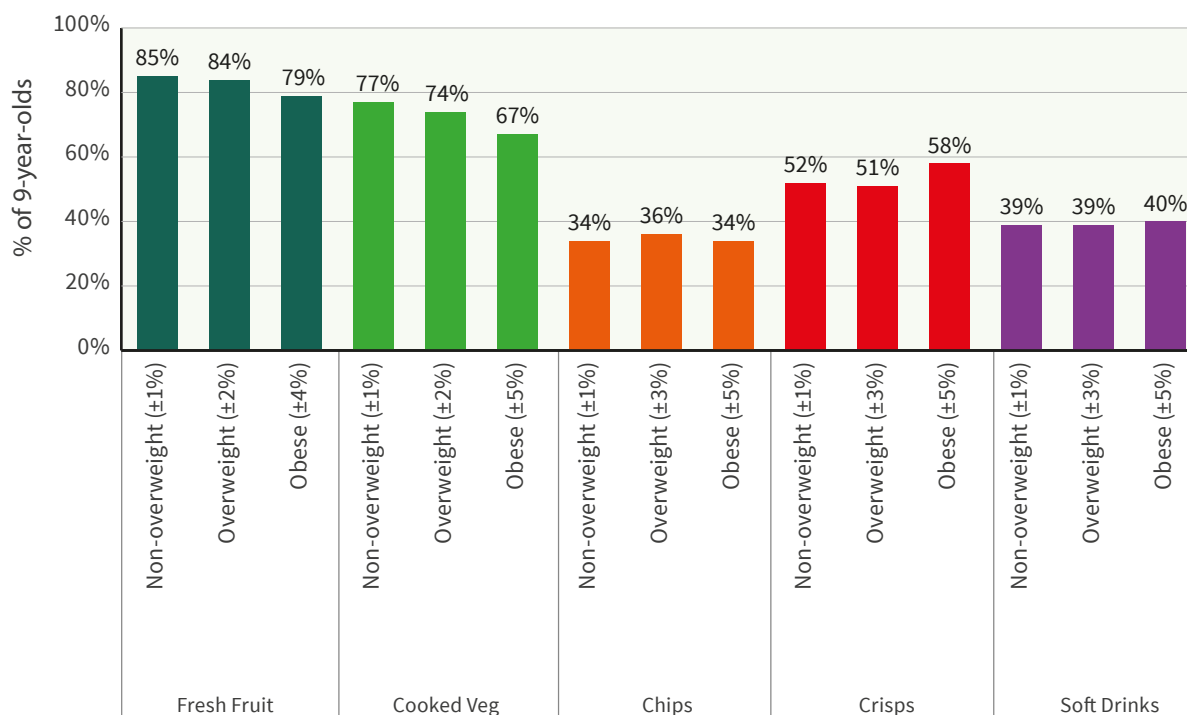
Figure 3.23: Consumption of healthy and unhealthy foods (either once, twice or more than twice), according to key socio-demographic variables



Note: Margins of error are shown in parentheses after the group label.

Food consumption was also associated with BMI status, with children classified as non-overweight more inclined to display healthy eating habits than their overweight and obese counterparts. Non-overweight children were more likely than obese children to consume fruit (85% vs 67%) and vegetables (77% vs 67%) but less likely to consume crisps (52% vs 58%). However, there were no significant differences in the consumption of chips and soft drinks by BMI status. Further research could usefully examine the extent to which the greater consumption of healthy or unhealthy foods is a response to (previous) weight status.

Figure 3.24: Consumption of healthy and unhealthy foods (either once, twice or more than twice), according to BMI status



Note: Margins of error are shown in parentheses after the group label.

3.6 SUMMARY

This chapter explored the physical health of the **Growing Up in Ireland** Cohort '08, focusing on their general health, long-standing conditions, health service utilisation, overweight and obesity, and dietary habits. The vast majority of 9-year-olds exhibited good general health; either *very healthy, no problems* or *healthy, but with a few minor problems*. General health was associated with socio-economic status; those children from the highest income families were more likely to be very healthy than their low-income peers.

Nearly one-quarter (24%) of all 9-year-olds had a long-standing illness, condition or disease, the prevalence increasing from 16 per cent at 3 years and 19 per cent at 5 years. Boys (28%) were significantly more likely than girls (19%) to have a long-standing issue, and asthma was the most common of all conditions, experienced by 9 per cent of all 9-year-olds.

More than one-third (34%) of 9-year-olds' families had full Medical Card cover, while 5 per cent had a GP visit card only. This combined cover of 39 per cent represents a reduction from 5 years of age when 46 per cent of all families received part or full Medical Card cover. Children from one-parent families were significantly more likely than children from two-parent families to have visited a GP more than once in the last 12 months (38% vs 27%); as were those children who had a Medical Card compared to those who did not (38% vs 23%). A total of 17 per cent of parents said that their child was unable to avail of healthcare when they needed it at some stage in the last 12 months; the main reasons being that they were waiting to see if the problem got better, their child was on a waiting list or the necessary care was not available or accessible.

In total, 18 per cent of 9-year-olds were overweight and 5 per cent were obese. For individual children, there was a good deal of change in weight status between the ages of 3 and 9 years. Parents played an important role in terms of child overweight and obesity. Firstly, their perceptions of their child's weight status were often inaccurate, with 66 per cent of overweight and 18 per cent of obese 9-year-olds perceived as non-overweight by their parents. Secondly, parental and child BMI status were closely related (because of shared diet/activity levels and/or genetic factors); combined levels of overweight and obesity were 9 per cent for children with no overweight/obese parents but 29 per cent for children with two overweight or obese parents.

Socio-demographic differences were evident in dietary habits; those from the lower-skilled/never worked class were less likely to have consumed fruit and vegetables, but significantly more likely to consume chips, crisps and soft drinks than those from professional families.

In general, the vast majority of 9-year-olds had good overall health. However, a minority of young people displayed some worrying health trends, be it in terms of long-standing illness, a heavy reliance on healthcare services, obesity, poor diet or potentially a combination of these issues. Of further concern is the tendency for some negative health outcomes (such as poor health and obesity) to persist over time, initially presenting when participants were 3 years of age and persisting through subsequent waves of the study. It is also important to note that a socio-demographic gradient can be observed in terms of most of the negative health outcomes; children from lower income families, from lower social classes, and from families with lower parental education were repeatedly found to have increased risk of poor health outcomes and greater consumption of unhealthy foods.

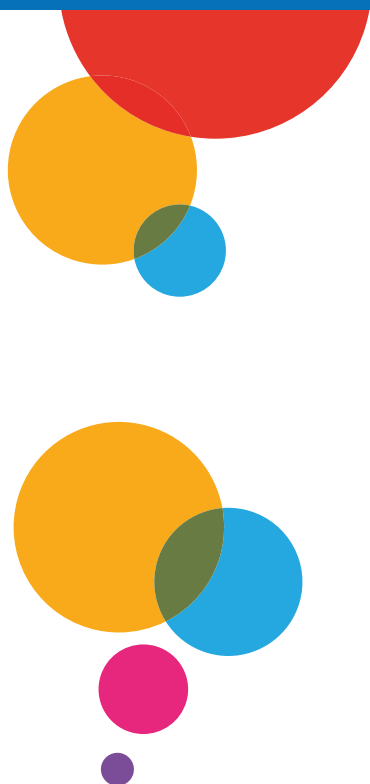
It should be noted that the topics discussed here are not exhaustive – extensive data were also collected regarding oral health and antibiotic use, and physical activity habits are discussed in the chapter on play (see Section 6.4). It is also worth noting that the analyses presented here are primarily bivariate, simply exploring the relationship between two variables. However, most health topics are complex multi-factorial issues (e.g. obesity), concurrently influenced by a wide range of factors. With this in mind, researchers are encouraged to explore these (and other possible) topics in more detail, exploring the interactions between multiple variables and how they affect key health parameters as children grow and develop.





Chapter 4

EDUCATION AND COGNITIVE DEVELOPMENT



4.1 INTRODUCTION

The school is an important feature of children's lives, fostering their learning as well as social interaction with peers and teachers. At 9 years of age, children in Ireland are in the middle years of primary education; they have settled into primary school and are not yet preparing for the transition to second-level education. In contrast to second-level education, there is no 'high stakes' assessment conducted at the end of primary education in Ireland although students take three sets of standardised tests during their primary schooling to monitor their development. While educational achievement at primary level has no formal consequences for later outcomes, the skills and capacities developed by children provide a crucial foundation for their engagement with school subjects at a later stage (Smyth, 2017). This chapter draws on information collected from the 9-year-old child, their Primary Caregiver and their teacher to look at key aspects of children's experience at this phase: their engagement with school; the degree of parental contact and involvement with the child's school; and the factors associated with the child's cognitive development.

Previous international research has shown the long-term effect of primary school experiences on later educational outcomes, even taking account of the secondary school attended (Goldstein & Sammons, 1997; Sammons et al., 2014; Vanwynsberghe, Vanlaar, Van Damme & De Fraine, 2017). Thus, primary school experiences are key in shaping subsequent educational trajectories. The quality of relationships with teachers emerges as a significant factor in enhancing children's engagement in, and achievement at, primary school (Roorda, Koomen, Spilt & Oort, 2011). However, differences in school engagement and performance are already evident at this early stage, with more positive attitudes found among girls and those from more advantaged families (Connolly, Sullivan & Jerrim, 2014; Siraj & Mayo, 2014). Analyses of *Growing Up in Ireland* Cohort '98 at 9 years of age showed that, although children were broadly positive about their school, teacher and school subjects, boys and children with special educational needs displayed more negative attitudes than other groups (Williams et al., 2009). This chapter analyses whether school engagement varies across different groups within Cohort '08 and presents new findings on children's perceptions of, and interaction with, their teacher.

A large body of research internationally points to the importance of the home learning environment and parental support for their child's school learning as key factors in enhancing cognitive and socio-emotional development. Middle-class parents are more likely to engage in 'concerted cultivation' (Lareau, 2011), proactively providing more stimulating educational and cultural activities for their children, such as reading to them in the early years and paying for drama and music lessons when they are older. Measures of the home learning environment (HLE) have generally involved a composite scale of different activities, such as reading to the child, counting with them etc. Using *Growing Up in Scotland* data, HLE was found to have a strong relationship with measures of vocabulary at 3 years of age (Melhuish, 2010). Similar effects of HLE on literacy and numeracy as well as social and behavioural development have been documented on school entry and in the early years of primary education (Van Steensel, 2006; Sylva et al., 2010). The effect of early HLE has even been found to persist into secondary education (Sammons et al., 2014). Indeed, some studies have suggested that what parents do through the HLE is much more important than parental cultural and economic resources (though this perspective has been contested by some, such as Sullivan, Ketende & Joshi 2013, who have suggested this focus may shift attention away from the role of structural inequalities).

Much of the research has focused on the influence of the early home learning environment. However, studies point to the ongoing effect of the cultural environment provided in the home during middle childhood, with more advantaged groups of parents paying for their children to engage in the kinds of cultural activities (such as music and drama classes) which enhance their within-school academic development (Bodovski & Farkas, 2008; Kraykamp & Van Eijck, 2008). During the school years, parental involvement, through formal channels such as parent-teacher meetings and more informal means such as helping with homework, has been found to enhance children's educational development (Desforges & Abouchar, 2003). This chapter looks at parental involvement in their child's education through formal interaction with the school and informal support within the home.

4.2 SCHOOL ENGAGEMENT AMONG 9-YEAR-OLDS

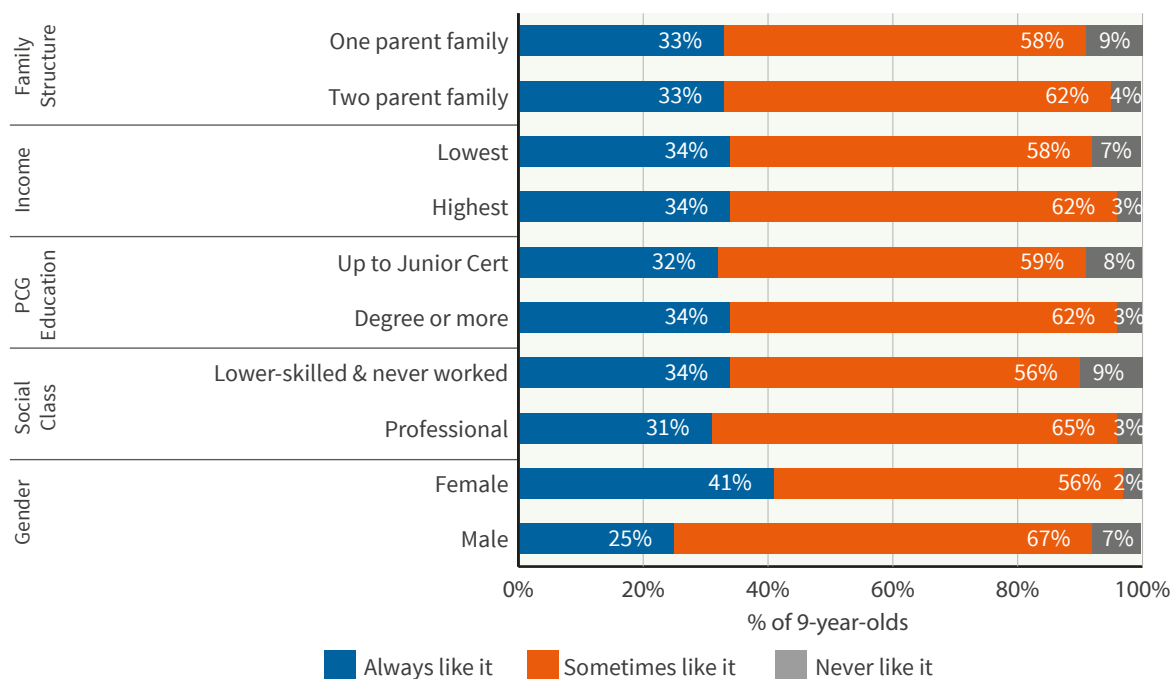
Increasingly, researchers have recognised that school engagement is multidimensional in nature, encompassing children's attitudes to school in general, how they view their school subjects and their perceptions of their teachers (Fredericks, Blumenfeld & Paris, 2004; Hascher & Hadjar, 2018). *Growing Up in Ireland* contains information on all three aspects of school engagement; this section looks at how school engagement varied across different groups of 9-year-old children and whether attitudes at age 9 reflected school experiences and skill development at an earlier age.

4.2.1 ATTITUDES TO SCHOOL AND SUBJECTS

4.2.1.1 Liking school

When asked what they ‘think about school’, a third of 9-year-olds *always* liked it, 62 per cent *sometimes* liked it and 5 per cent described themselves as *never* liking it. Figure 4.1 shows that attitudes to school varied significantly by gender, with girls much more likely to *always* like school than boys (41% compared with 25%).

Figure 4.1: Attitudes to school (as reported by 9-year-olds) by gender, social class, Primary Caregiver’s education, household income and family structure



Note: Margins of error are, at most, $\pm 2\%$ for gender, professional social class and highest income group; $\pm 1\%$ for degree-level education and two-parent families; $\pm 3\%$ for lower-skilled/never worked social class and one-parent families; $\pm 4\%$ for junior cycle education.

The proportion of children who *always* liked school did not vary markedly by different dimensions of family background. Around a third of 9-year-olds from less advantaged backgrounds, like other children, always liked school, but children from this background were more likely to fall into the small group of children who never liked school. Thus, 9 per cent of those from lower-skilled and never worked backgrounds *never* liked school compared with less than 4 per cent of those from professional families. A similar pattern of difference was found by the educational level of the Primary Caregiver, household equivalised income and family structure, with *never* liking school being more prevalent among those whose Primary Caregivers had lower levels of education, whose families had lower income and who were in a one-parent family.

Very similar patterns were found when children were asked about whether they ‘look forward to going to school’, with 30 per cent *always* looking forward to school, 61 per cent *sometimes* looking forward to it and 9 per cent *never* doing so. As with liking school, girls were much more likely than boys to *always* look forward to school (37% compared with 22%).

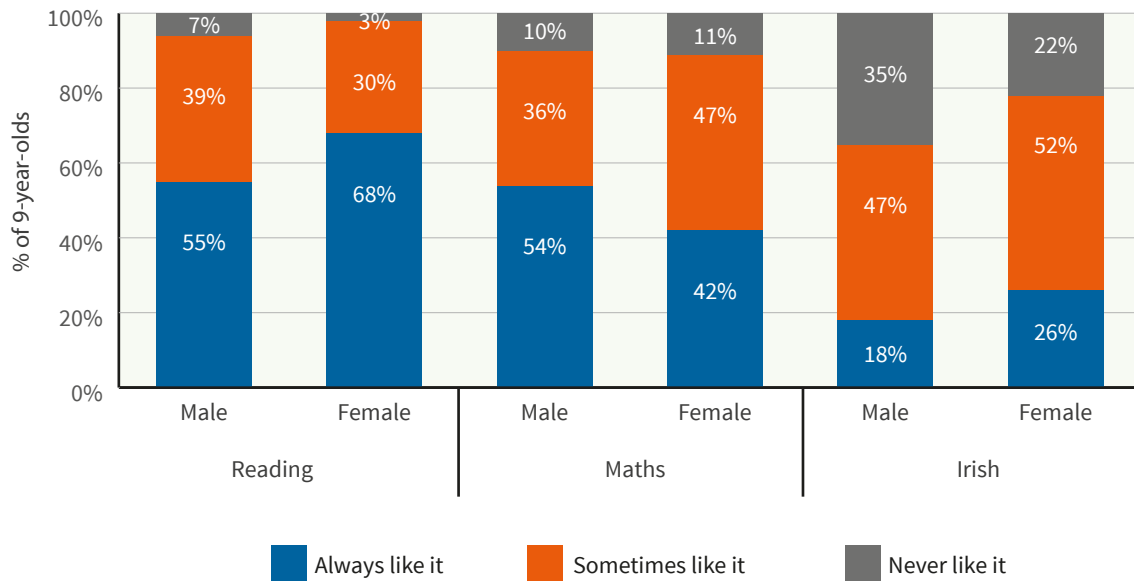
4.2.1.2 Attitudes to school subjects

As well as being asked about school in general, the 9-year-olds were asked about whether they liked three of their school subjects – Reading, Maths and Irish. Children’s attitudes to Reading were more positive than their attitudes to Maths or Irish, with 61 per cent *always* liking it compared to 48 per cent for Maths and 22 per cent for Irish. Over a quarter (28%) of 9-year-olds *never* liked Irish, a much higher figure than for Maths (11%) or Reading (5%). Attitudes to school subjects varied markedly by gender, with girls having more positive attitudes to Reading (68% compared with 55%) and Irish (26% compared with 18%) and boys having more positive attitudes to Maths (54% compared with 42%) (Figure 4.2).

There was some variation by family background, especially for Reading. Almost three-quarters (65%) of the children whose Primary Caregivers had degree or higher qualifications *always* liked Reading compared with 54 per cent of those whose Primary Caregivers had Junior Certificate education or less. For Maths and Irish, those whose Primary Caregivers had lower

levels of education were more likely to report never liking the subject. Thus, 17 per cent of those whose Primary Caregiver had Junior Certificate education (or less) *never* liked Maths and 37 per cent *never* liked Irish compared with 7 per cent and 23 per cent respectively where their Primary Caregiver had a degree.

Figure 4.2: Attitudes to Reading, Irish and Maths (as reported by 9-year-olds) by gender

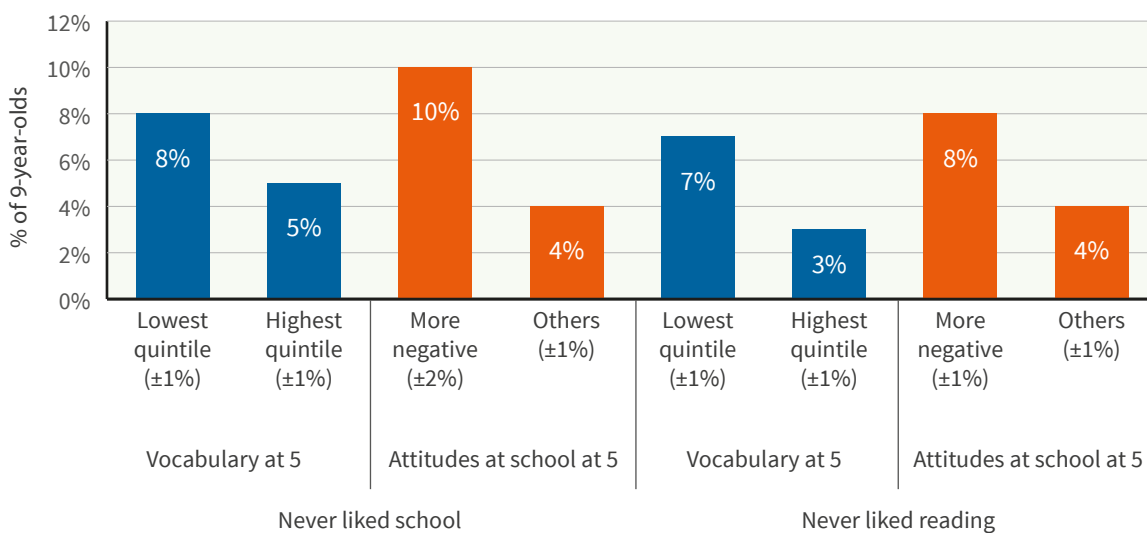


Note: Margins of error are, at most, ±2%.

4.2.1.3 Longitudinal trends in attitudes to school

Engagement in school and school subjects was found to be associated with children’s experience around school entry, though some change between the two time points was also evident. At age 5, children had taken the British Ability Scale vocabulary test, their Primary Caregivers were asked about how they had settled into primary school and their teachers had assessed them on a range of skills, including attitudes and dispositions towards school. The vast majority (82%) of those who had been described as occasionally or frequently ‘complaining about school’ or as being ‘upset or reluctant to go to school’ at age 5 *sometimes* or *always* liked school at age 9. However, they were more likely to report *never* liking school than those who had never complained or been upset about school (10% compared with 4%).

Figure 4.3: Proportion who never ‘liked school’ and Reading at 9 years of age by BAS vocabulary test scores and teacher-reported dispositions to school at 5



Note: Margins of error are shown in parentheses after the group label.

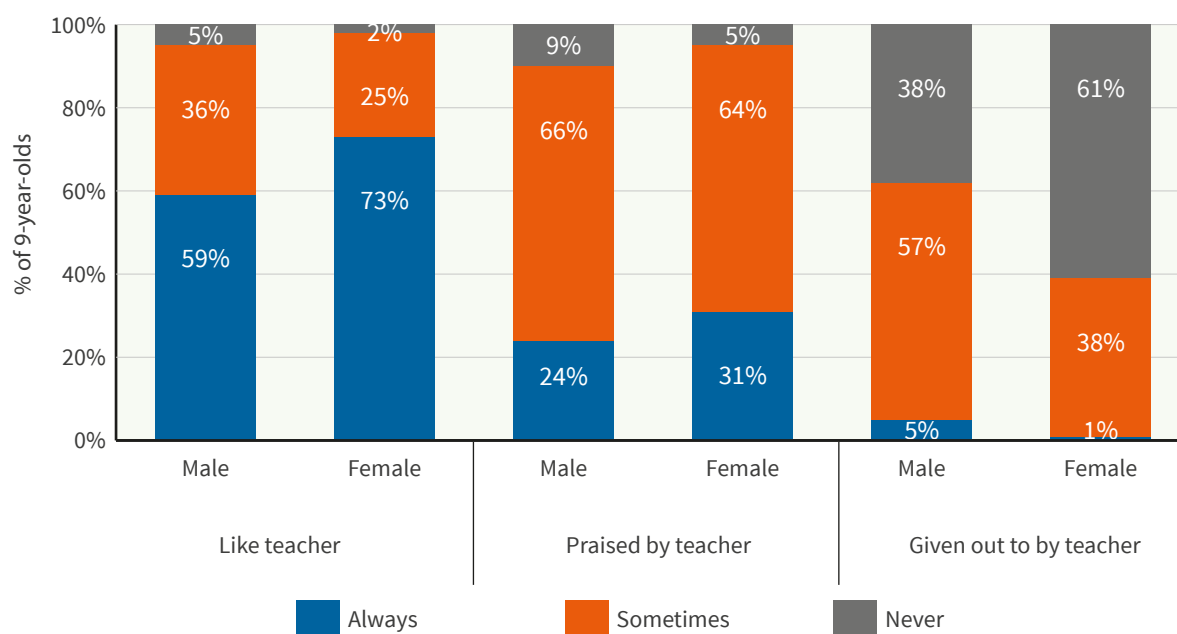
Those who had been the in lowest vocabulary test score quintile (fifth) and those in the lowest group on teacher-assessed dispositions to school at the age of 5 were more likely to fall into the group of children who *never* liked school or Reading at age 9 (Figure 4.3). As with school in general and Reading, having lower vocabulary scores or being less engaged with school at 5 were associated with a greater likelihood of *never* liking Maths or Irish at 9 (not shown here). Nonetheless, the vast majority of even those with poorer skills and dispositions around school entry *sometimes* or *always* liked school and Reading four years later. Further research could usefully examine the factors which helped children adjust to, and engage with, school.

4.2.2 ATTITUDES TO, AND INTERACTION WITH, TEACHERS

Nine-year-old children’s attitudes to their teachers were found to be more positive than to school in general; two-thirds *always* liked their teacher, 31 per cent *sometimes* liked them and only 3 per cent *never* liked them. The survey of Cohort '08 9-year-olds collected new information on the nature of children’s interaction with their teacher, including how often they received praise or reprimands, whether their teacher talked to them about issues other than school and whether they felt that their teacher treated everyone the same. In terms of the quality of interaction, the most frequent pattern was for children to report being *sometimes* ‘praised’ by their teachers (65%) while 9-year-olds were equally likely to report being *sometimes* (48%) or *never* (49%) ‘given out to’ (that is, reprimanded). Over half (58%) of 9-year-olds reported that their teacher *always* treated ‘everyone the same’ and a similar proportion (57%) said their teacher *sometimes* talked to them about something other than school.

Girls were much more positive about their teachers than boys (with 73% *always* liking them compared with 59%) (Figure 4.4). Girls were slightly more likely than boys to report receiving frequent praise (31% compared with 24%) and much more likely to never be reprimanded (61% compared with 38%). Girls were also more likely to see their teacher as fair (64% compared with 54%).

Figure 4.4: Attitudes to, and interaction with, their teacher by gender (liking them, being praised and being given out to)

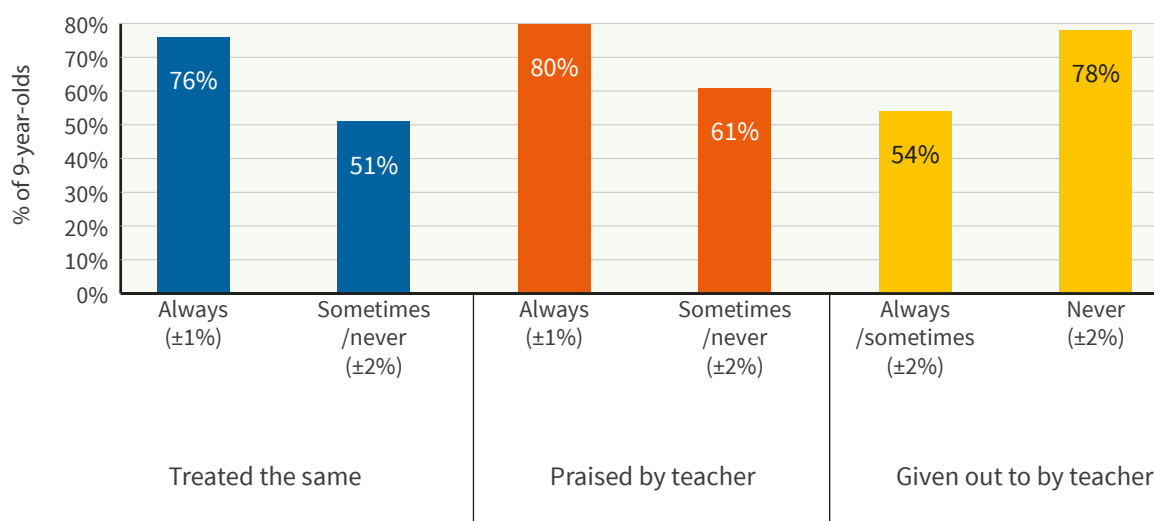


Note: Margins of error are, at most, ±2%.

Children across all types of family circumstances generally liked their teachers, with little variation in terms of family structure or background. Interestingly, 9-year-olds from more disadvantaged groups reported more frequent teacher praise than other groups, which may reflect a conscious effort by teachers to encourage children at risk of disengagement and/or smaller class sizes in DEIS schools³³. For example, 36 per cent of those from lower-skilled and never worked families reported always receiving praise compared with 25 per cent of those from professional families. The pattern for being given out to was less clear-cut, though those from the lowest income families reported slightly more frequent reprimands than those from middle to higher income groups (56% *always* or *sometimes* compared with 49-50%).

33 The Delivering Equality of Opportunity in Schools (DEIS) programme provides additional resources and supports for schools serving communities with a concentration of socio-economic disadvantage. At primary level, there are three categories of school in this programme: Urban Band 1 (the most disadvantaged), Urban Band 2 and Rural DEIS schools.

Figure 4.5: Attitudes to their teacher by perceptions of interaction with the teacher (% always liking them by frequency of feeling they ‘treated everyone the same’, ‘being praised’ and ‘being given out to/reprimanded’)



Note: Margins of error are shown in parentheses after the group label.

Attitudes to their teacher were generally positive but were significantly related to children’s perceptions of how they were treated by their teacher (Figure 4.5). Nine-year-olds were more likely to report always liking their teacher if they saw them as fair (that is, they ‘treat everyone the same’) (76% compared with 51%), received frequent praise from them (80% vs 61%) and were reprimanded less often (78% vs 54%). They were also more positive about their teachers if they fostered communication with them by talking to them about non-school issues (75% vs 65%).

Liking their teacher did not vary systematically by experiences of the transition to primary school, that is, by earlier vocabulary development or dispositions to school (at the age of 5). However, *Growing Up in Ireland* had collected information on the relationship between the teacher and child from the perspective of the teacher at this stage, with two sub-scales reflecting the degree of closeness and conflict. Children whose teachers reported a conflictual relationship with them at the age of 5 were more likely to be frequently reprimanded by their teachers four years later (67% for the top quintile compared with 47% for the lowest quintile).

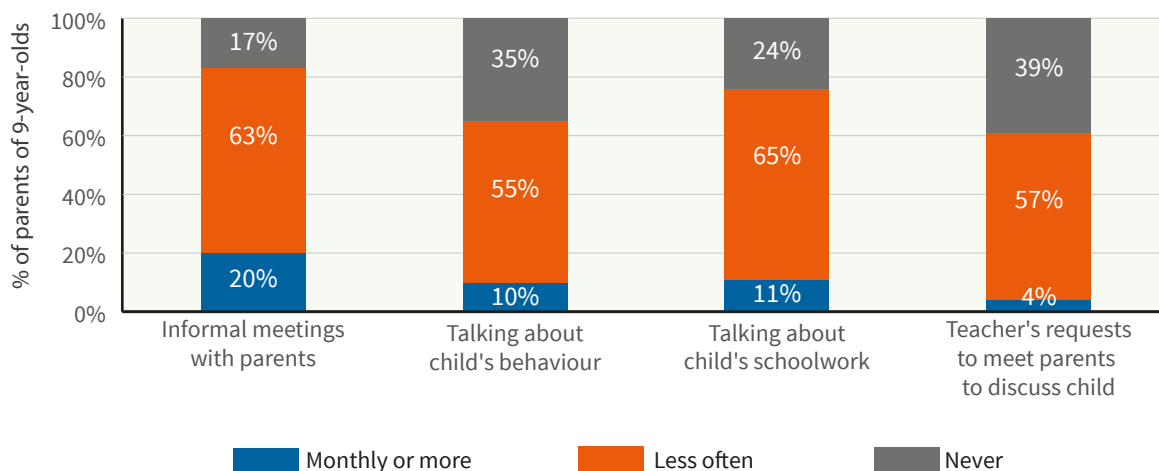
4.3 PARENTAL INVOLVEMENT IN THEIR CHILDREN’S EDUCATION

A review of international research (Desforges & Abouchar, 2003) indicates that some aspects of parental involvement, particularly supporting a child’s learning at home and discussing school, are positively related to a child’s engagement with school, and directly and indirectly related to their academic achievement. Other forms of involvement, such as very frequent meetings with teachers, may be reactive in nature and linked to the school contacting parents about misbehaviour; therefore, these forms of involvement tend to be related to lower levels of achievement (see, for example, McNeal, 2014). *Growing Up in Ireland* collected information on a number of different aspects of parental involvement in their child’s education, including attendance at formal meetings with teachers, helping with homework and making a financial contribution to the school. Information was also collected on aspects of the home learning environment, with information on the child’s reading habits reported in Section 4.4. The extent to which parents read to their children and/or listen to them read is discussed in Chapter 6 in the context of other family activities.

4.3.1 ATTENDANCE AT PARENT-TEACHER MEETINGS AND CONTACT WITH TEACHERS

Primary Caregivers reported very high levels of attendance (98%) at formal parent-teacher meetings, with attendance common across all social groups. Teachers reported similarly high (97%) levels of attendance at parent-teacher meetings on the part of the parent/guardian of the Study Child. However, in contrast to parental reports, there was some slight variation by family characteristics in teacher reports. Thus, attendance was reported by teachers as being 90 per cent where Primary Caregivers had a Junior Certificate or less compared with 99 per cent where they had a degree or higher qualification.

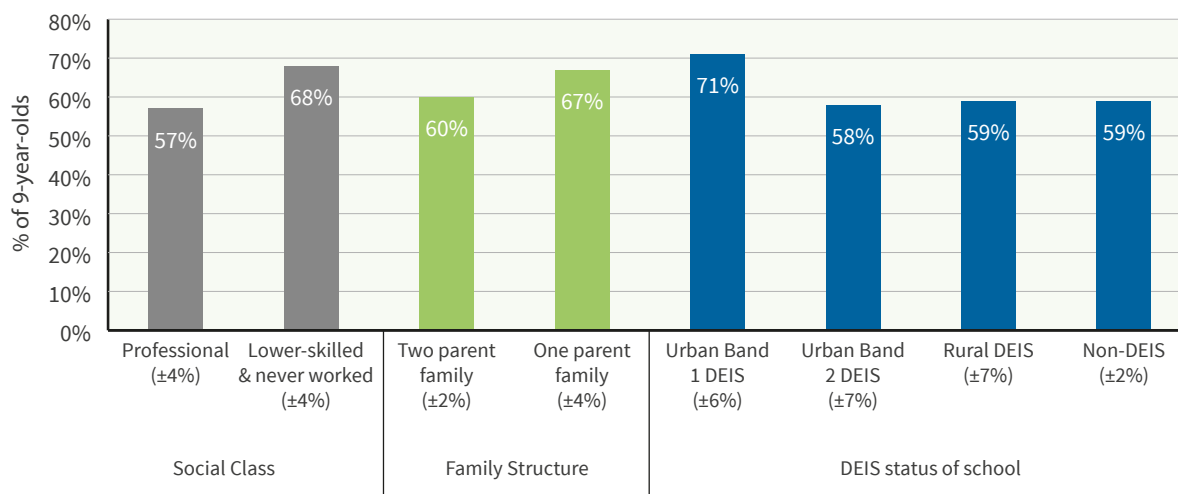
Figure 4.6: Frequency of informal meeting with parents, parents talking to teachers about their child’s behaviour, parents talking to teachers about their child’s schoolwork and teachers asking the parents to come in to discuss the child



Note: Margins of error are, at most, $\pm 1\%$.

As well as being asked about attendance at formal meetings, teachers reported on the extent that they met ‘informally with the child’s mother/father’. Teachers indicated relatively infrequent informal meetings with parents; a fifth indicated meeting them at least *monthly*, 63 per cent reported such meetings were *less often* and such meetings *never* happened in 17 per cent of cases (Figure 4.6). The frequency of these informal meetings did not vary markedly by family characteristics.

Figure 4.7: Proportion of 9-year-olds whose teacher ever asked their parents to come in to discuss their child by social class, family structure and DEIS status of the school



Note: Margins of error are shown in parentheses after the group label.

In addition, teachers were asked about two other forms of contact with parents, the child’s parents talking to the teacher about the child’s behaviour or schoolwork, where the wording implied but did not definitely establish that the contact was parent-initiated, and the teacher asking the parent(s) to come into the school to talk about the child (which was teacher-initiated). The child’s parents talking to the teacher ‘about the child’s behaviour’ or ‘about the child’s schoolwork’ happened more rarely than informal meetings; a tenth discussed these issues at least *monthly* while 24 per cent never discussed schoolwork, and a higher proportion (35%) *never* discussed the child’s behaviour. Frequent requests from the teacher for parents to come in were rare (4% at least *monthly*), happening *less often* in 57 per cent of cases and *never* for 39 per cent of children.

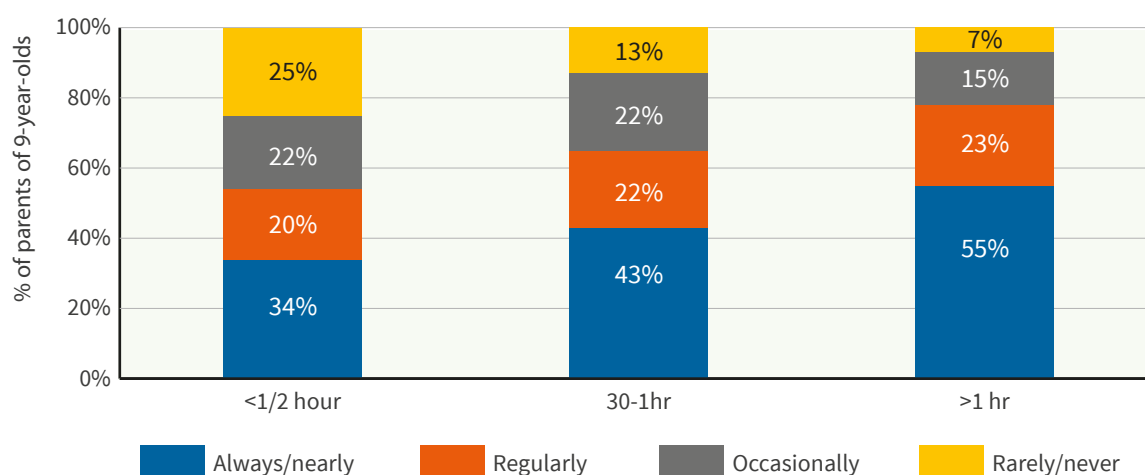
The nature of teacher-parent interaction differed somewhat for boys and girls; for girls, 38 per cent of parents *never* ‘talked about their child’s behaviour’ with the teacher compared with 32 per cent for boys. Variation by family background was modest. However, teachers in schools serving the most disadvantaged communities, DEIS Urban Band 1 schools, were more likely to have some engagement with parents about children’s behaviour (29% *never* compared with 35-37% in the other

school types). Gender differences were more apparent in relation to parents being asked in to discuss their child; it *never* happened for girls in 43 per cent of cases compared with 36 per cent for boys. It was somewhat more likely to occur for children living in one-parent families (67% compared with 60%) and for the lower-skilled and never worked group compared to the professional group (68% compared with 57%) (Figure 4.7). It was also more common in Urban Band 1 DEIS schools compared with other school types (71% as opposed to 58-59%).

4.3.2 HELP WITH HOMEWORK

The vast majority (95%) of 9-year-olds were given homework every day (Monday to Thursday). Among those who received homework, a third of children were reported by their Primary Caregivers as typically spending half an hour or less on it, 47 per cent spent more than half an hour but less than an hour, while a fifth spent one hour or more. Primary Caregivers were asked how often they or their spouse/partner ‘provided help with homework’. Forty-two per cent said that they *always/nearly always* helped with homework, 21 per cent helped *regularly*, 21 per cent helped *now and again* while 16 per cent *rarely* or *never* helped. The frequency of helping with homework did not vary markedly by family characteristics but the Primary Caregivers of sons were slightly more likely to help with homework than the Primary Caregivers of daughters (with 45% as opposed to 39% *always/nearly always* helping).

Figure 4.8: Frequency of parents helping with homework by length of time spent on homework



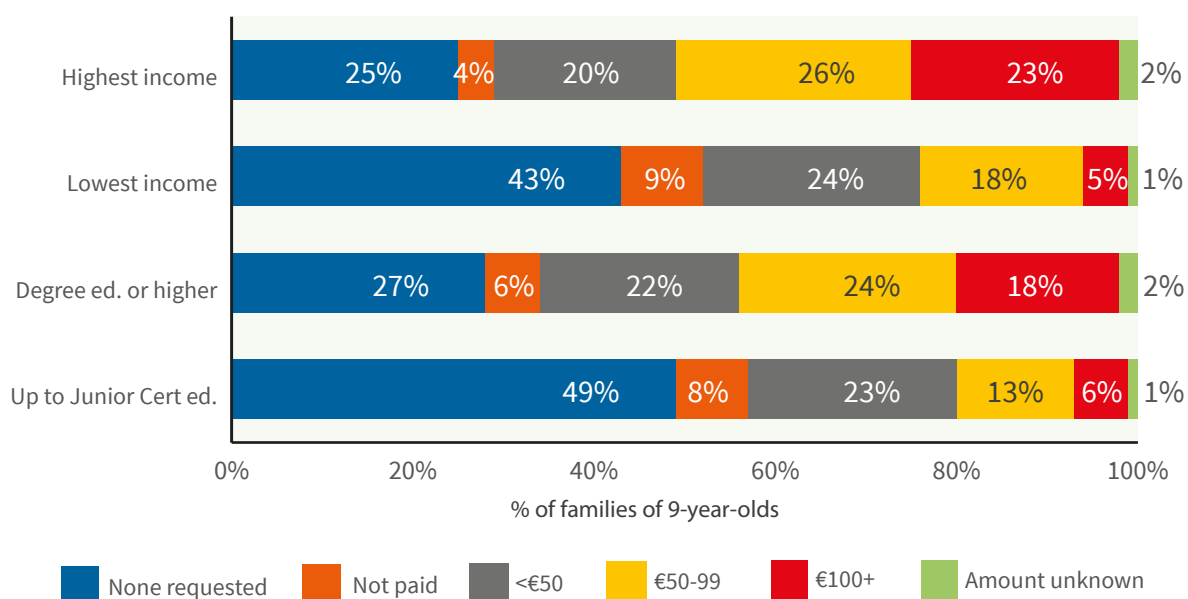
Note: Margins of error are, at most, $\pm 2\%$

There was a clear association between the frequency of parents helping with homework and the amount of time spent on homework, with parents much more likely to help where children were spending an hour or more a night on homework (Figure 4.8). Thus, over half (55%) of parents whose child spent more than an hour on homework *always or nearly always* helped compared with 34 per cent of those where the child spent half an hour or less. Further analysis indicated that children who felt they were doing *poorly* in their schoolwork spent more time on homework than those who felt they were doing *average/ok* or *well* (31% spending an hour or more compared with 23% and 18% respectively). This suggests that spending more time on homework may have reflected children struggling with their schoolwork and needing more help from family members as a result.

4.3.3 VOLUNTARY FINANCIAL CONTRIBUTION TO THE SCHOOL

In the survey, Primary Caregivers were asked whether their child’s school had asked for a voluntary financial contribution, whether they had paid it and the amount involved (calculated per child). Just over a third (35%) of 9-year-olds attended schools where no contribution was requested. In 58 per cent of cases there was a request for a contribution which families had paid, and the remaining 7 per cent had been asked but did not pay. The annual amounts involved (per child) were evenly spread between amounts under €50 and payments between €50 and €99. However, over a tenth (11%) of families paid more than €100 per child.

Figure 4.9: School voluntary financial contribution by Primary Caregiver’s education, household income and family structure



Note: Margins of error are, at most, ±4% for ‘up to Junior Cert.’; ±2% for ‘Degree’ and ‘Highest’ income category; ±3% for ‘lowest’ income category.

Children from families with lower levels of education and income were more likely to attend schools where they were not asked for a financial contribution. Thus, 43 per cent of the lowest income group were not asked for a contribution compared with 25 per cent of the highest income group (Figure 4.9). These patterns largely reflected the profile of families whose children attended DEIS schools. Over half (59%) of families in the most deprived schools (Urban Band 1 DEIS) were not asked for a contribution compared with half of those in Urban Band 2 DEIS schools, 44 per cent in rural DEIS schools and 30 per cent in non-DEIS schools.

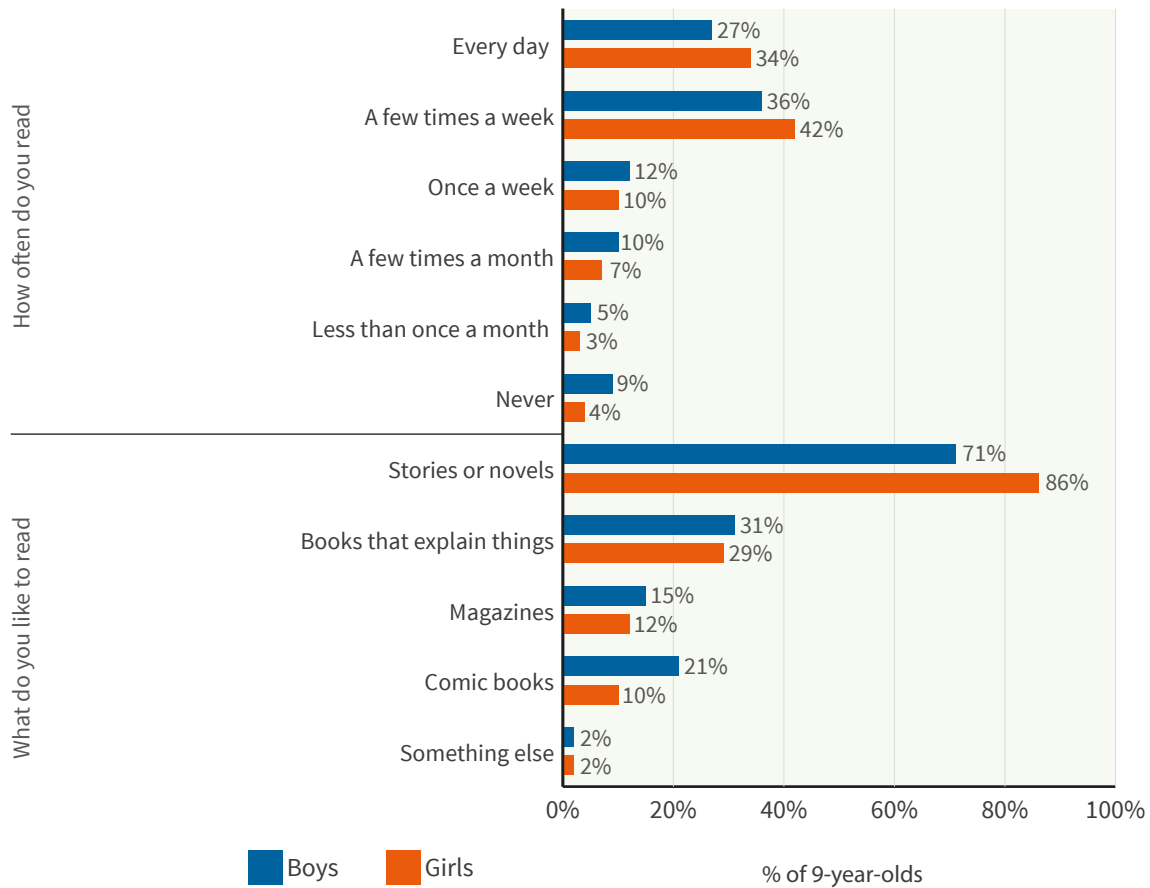
Where a contribution was requested, families with lower levels of education and income were less likely to pay it; 9 per cent of the lowest income group did not pay the contribution while this was the case for 4 per cent of the highest income group. One-parent families were also less likely to have paid where there was a request (11% compared with 6% of two-parent families, not illustrated). Families with higher levels of income or education were more likely to be asked to make larger contributions; 23 per cent of the highest income group paid €100 or more per child while this was the case for only 5 per cent of the lowest income group. However, it is worth noting that 23 per cent of low-income families were contributing over €50 per child per year.

4.4 READING FOR PLEASURE

4.4.1 GENDER DIFFERENCES IN READING FOR PLEASURE

Significant gender differences were found in the frequency with which 9-year-olds reported reading for pleasure and the type of reading material they liked, in keeping with international research (Becker & McElvany, 2018). Over a third (34%) of girls reported reading ‘for fun’ every day compared to 27 per cent of boys; at the other end of the spectrum, 14 per cent of boys read less than once a month or never compared with 7 per cent of girls (Figure 4.10). Girls were more likely to report favouring short stories or novels (86% compared with 71% of boys) while boys were more likely to prefer comic books (21% compared with 10%).

Figure 4.10: Frequency of reading for fun (as reported by the 9-year-old) and what they liked to read by gender



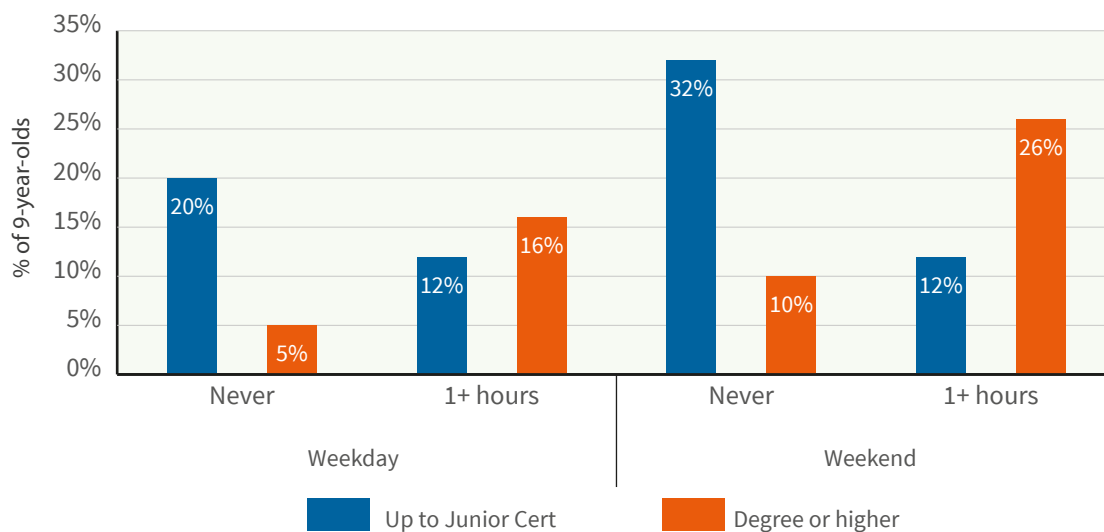
Note: Margins of error are, at most, ±3% for 'How often do you read' and ±2% for 'What do you like to read'.

Similar gender differences were evident in Primary Caregivers' reports on their children's reading. Boys were more likely than girls to never read on a weekday (13% compared to 7%), with this gender gap widening at the weekend (23% compared to 13%). Girls were more likely than boys to read for an hour or more a day (16% compared to 11% during the week and 24% compared to 16% at the weekend).

4.4.2 SOCIO-DEMOGRAPHIC DIFFERENCES IN READING

Greater differentiation in reading patterns at weekends compared to weekdays was also found in relation to family background characteristics such as Primary Caregiver's education. The proportion reading for an hour or more was similar at weekdays and weekends among those whose Primary Caregiver had up to Junior Certificate education (Figure 4.11). However, the proportion of children from more highly educated families (degree or higher) reading for an hour or more increased from 16 per cent to 26 per cent, thus widening the gap in reading time by social background. A very significant proportion – just under a third (32%) – of those whose Primary Caregivers had lower levels of education never read for pleasure at the weekend.

Figure 4.11: Proportion of 9-year-olds never reading and reading for one hour or more every day (weekdays and weekends) by Primary Caregiver's education

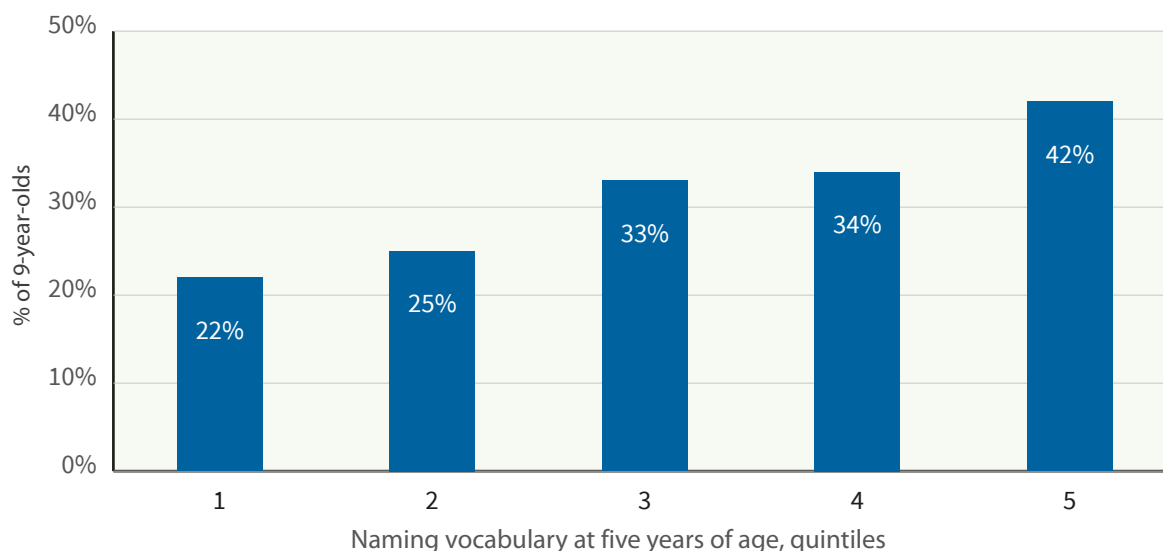


Note: Margins of error were, at most, $\pm 5\%$ for 'Up to Junior Cert' and $\pm 2\%$ for 'Degree or higher'.

4.4.3 LONGITUDINAL TRENDS IN READING

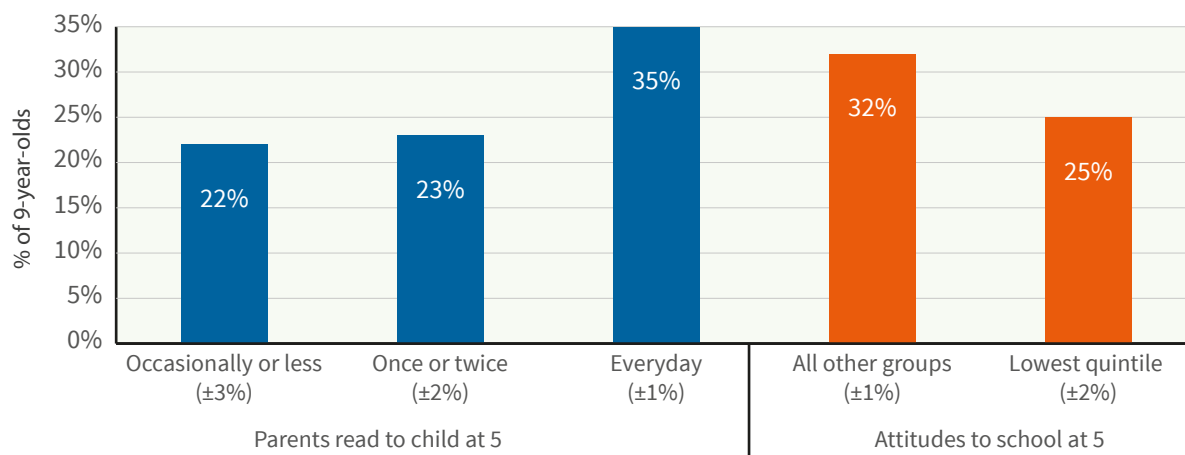
Children who had better vocabulary skills at the age of 5 were more likely to 'read for fun' every day at age 9 than those with lower levels of skill (see Figure 4.12). Thus, 42 per cent of those in the top fifth on the vocabulary test at age 5 said they read every day at 9 years of age compared with just 22 per cent of those who had been in the lowest fifth on the test. Similarly, children who were reported by teachers as less positively engaged in school at the age of 5 were less likely to read frequently when they were 9 years old (25% compared with 32%) (Figure 4.13).

Figure 4.12: Proportion of 9-year-olds who reported reading every day by their naming vocabulary at 5 (in quintiles)



Note: Margins of error were, at most, $\pm 3\%$

Figure 4.13: Proportion of 9-year-olds reading every day by attitudes to school at 5 years and frequency of their parents reading to them at 5



Note: Margins of error are shown in parentheses after the group label.

Children whose parents reported reading to them *every day* when they were 5 were more likely to say they read *every day* themselves at the age of 9 (35% compared with 23% of those whose parents read to them *one or two times a week*) (Figure 4.13). However, there was no clear relationship between the frequency of current parental reading to children (or listening to children read) and the frequency with which children reported reading for pleasure. Primary Caregivers did report that their children spent more time reading at weekends where they *never* listened to their children read (31% spending more than an hour compared with 18% where Primary Caregivers listened to their child reading every day). These relationships were associations rather than indicating causation but parental reading with children at the age of 9 did appear to be in response to less independent reading among children.

Nine-year-olds whose families visited the library with them were more likely to read *every day* (39% compared with 25%). This cannot be taken as a causal relationship as families may be more likely to visit the library where their children are keen readers.

4.5 COGNITIVE DEVELOPMENT

4.5.1 DESCRIPTION OF THE TESTS OF READING AND SELECTIVE ATTENTION

Two sets of cognitive tests were administered to the 9-year-olds. The Drumcondra Reading Test was developed for Irish school children and is linked to the national curriculum. Each child took the test that corresponded to their class level in school in the previous year (e.g. second or third class). For the purposes of *Growing Up in Ireland*, only the Vocabulary part of the test was administered. This involved forty multiple-choice questions which asked the child to select the word which had the closest meaning to a given word.

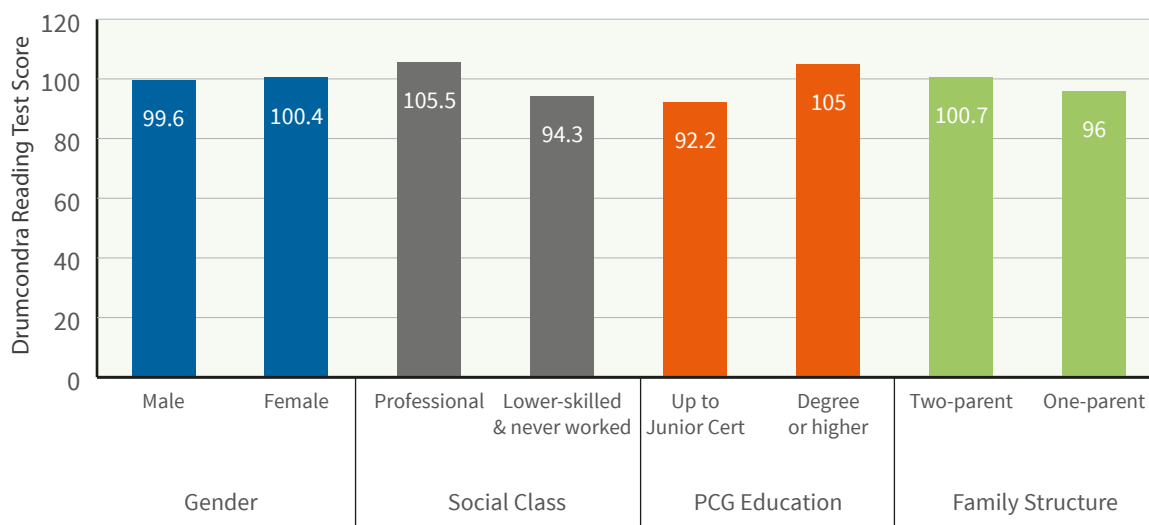
Secondly, the children were asked to complete a task, referred to as the ‘map mission’, which was a measure of selective attention. Executive function is an umbrella term used for the cognitive processes underlying goal-directed responses to new situations (Hughes & Graham, 2002). One dimension of this executive function is selective attention which reflects how children can focus to process information (Manly et al., 2001). The test required children to search for small symbols or ‘targets’ on an A3 sized map, isolating these from other information such as road numbers and topographical indicators. There were 80 symbols to be found and circled on the map, but the child was given only one minute to find them.

4.5.2 TRENDS IN COGNITIVE TEST SCORES AT 9 YEARS

4.5.2.1 Reading scores

For the purposes of analysis, the reading test scores were transformed to have a mean of 100 and a standard deviation of 15. Girls had only very slightly higher reading test scores than boys while scores among children from two-parent families were somewhat higher than those from one-parent families (Figure 4.14). Significant social gradients were evident by socio-economic background, with a gap of over two-thirds of a standard deviation between the highest and lowest social class and educational groups.

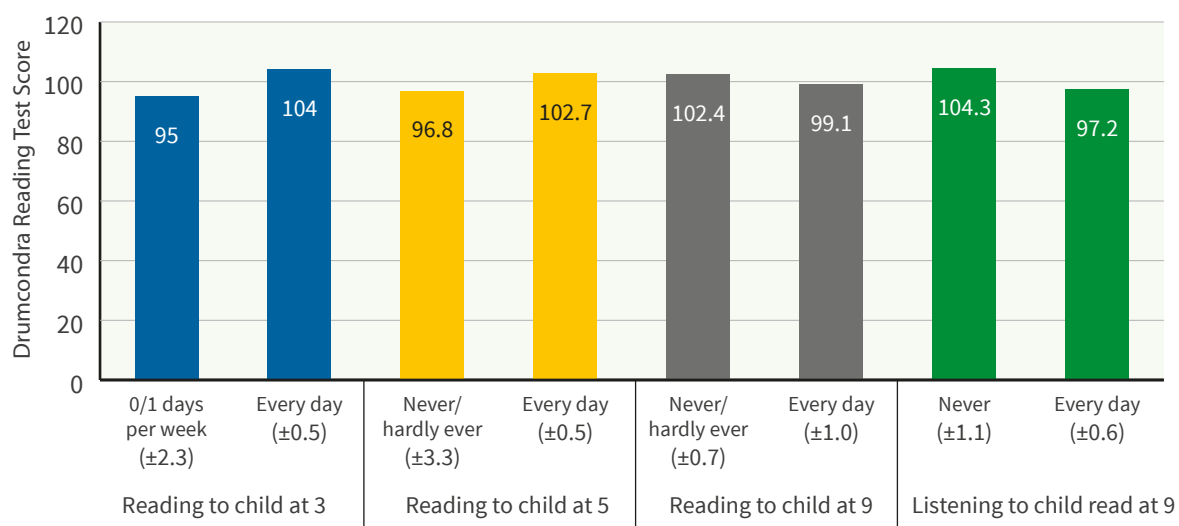
Figure 4.14: Mean score on the Drumcondra reading (vocabulary) test by gender, household social class, Primary Caregiver’s educational level and family structure



Note: Margins of error were, at most, ±1.

Reading scores at 9 were related to the early home learning environment, with children who were read to frequently at 3 and 5 achieving significantly higher scores (Figure 4.15). Thus, for example, children who were read to by their parents on one or less days per week at 3 had a score of 95 at 9 years compared with 104 where children were read to every day. A similar variation was found in terms of frequency of reading to the child at age 5 (96.8 for never/hardly never compared with 102.7 for every day). In contrast, the evidence suggests that reading to the child and listening to the child read at age 9 reflected parental responsiveness to children’s need for support as reading scores were somewhat lower among those who experienced these activities frequently.

Figure 4.15: Mean score on the Drumcondra reading (vocabulary) test by parents reading to the child at ages 3, 5 and 9 and listening to the child read at age 9

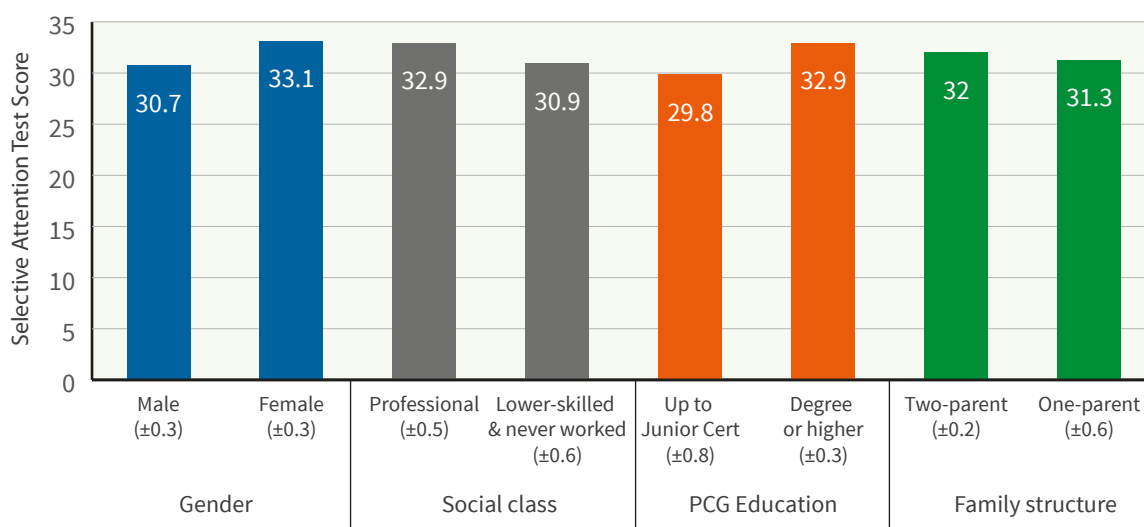


Note: Margins of error are shown in parentheses after the group label.

4.5.2.2 Selective attention test scores

The patterns for the selective attention test were broadly similar to those for reading, with higher scores among girls and children from two-parent or more advantaged families (Figure 4.16). It is worth noting, however, that the scale of such differences was less than was the case for reading vocabulary. The gap between the highest and lowest educational groups was, for example, less than a third of a standard deviation compared to a two-thirds of a standard deviation difference for reading test scores. Furthermore, the two measures were not significantly correlated, indicating that they captured different skills and competencies.

Figure 4.16: Mean score (out of a maximum of 80) on the selective attention test by gender, household social class, Primary Caregiver’s educational level and family structure



Note: Margins of error are shown in parentheses after the group label.

4.5.3 LONGITUDINAL TRENDS IN COGNITIVE ABILITY

4.5.3.1 Relationships with tests at earlier ages

The longitudinal nature of the study allows for the analysis of the development of children’s vocabulary over time, with children having completed the British Ability Scale vocabulary test when they were 3 and 5 years of age. Vocabulary test scores at age 9 were significantly related to earlier vocabulary scores but the strength of this relationship was moderate (Table 4.1). Thus, while early vocabulary development was associated with later reading ability, a significant number of children with lower initial test scores improved their skills over time. Earlier vocabulary test scores were significantly related to later scores on the selective attention test, but the relationship was weak.

Table 4.1: Pearson’s correlation between British Ability Scale (BAS) vocabulary test at 3 and 5, Drumcondra reading (vocabulary) test at 9 and selective attention test at 9

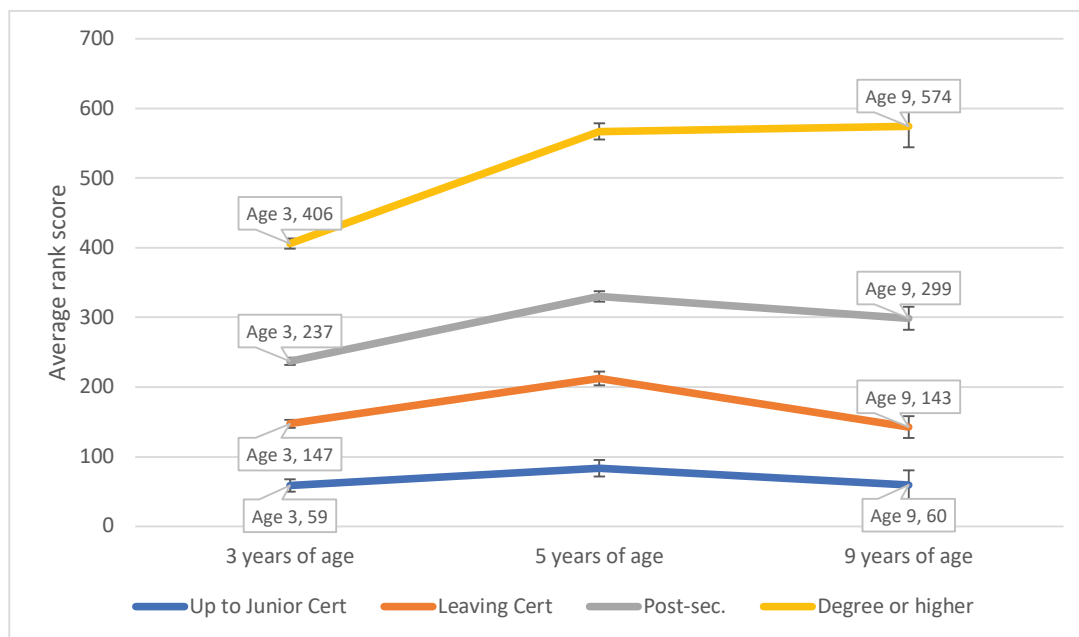
	Vocabulary (3)	Vocabulary (5)	Reading vocabulary (9)	Selective attention (9)
Naming vocabulary (3)		.508***	.345***	.040**
Naming vocabulary (5)			.395***	.050***
Drumcondra reading vocabulary (9)				.020

Note: *** p<.001, ** p<.01.

4.5.3.2 Differences in longitudinal trajectories for socio-demographic groups

Previous research has shown that one of the strongest factors influencing trajectories in cognitive skills is family socio-economic background (Feinstein, 2003; Siraj and Mayo, 2014). Following the approach used by Feinstein (2003), the average test score rank was calculated for each of the three time points, confining the analysis to those children who took part in all three tests. Figure 4.17 shows these ranks by the educational level of the Primary Caregiver. There was an increase in the average differences between educational groups between the ages of 3 and 5 with a further increase between 5 and 9 years of age. The largest gap was between children whose Primary Caregiver had a degree (or higher qualification) and all other educational groups. Additional analyses (not shown here) show the same fanning out of average between-group differences by social class between 3 and 9 years of age, with the gap between children from professional and lower-skilled and never worked families increasing over time.

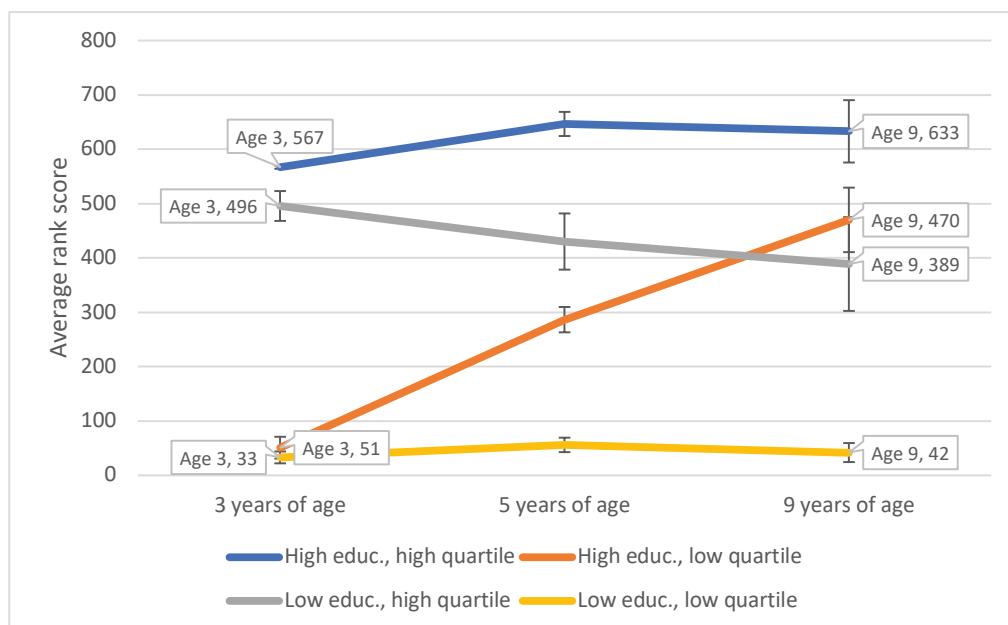
Figure 4.17: Average rank score on British Ability Scale (BAS) vocabulary test at 3 and 5 and the Drumcondra reading (vocabulary) test at 9 by the educational level of the Primary Caregiver



Note: Error bars are used to indicate the lower and upper bounds of the 95% confidence interval.

Figure 4.17 shows the average rank scores, but it is also possible to look at whether children with higher or lower initial scores had different trajectories depending on their family background. Again, following the approach used by Feinstein (2003), Figure 4.18 shows the trajectories of those who were in the highest and lowest vocabulary quartiles at 3 depending on whether their Primary Caregiver had a Junior Certificate or degree qualification.

Figure 4.18: Average rank score on British Ability Scale (BAS) vocabulary test at 3 and 5, and the Drumcondra reading (vocabulary) test at 9, by the educational level of the Primary Caregiver (degree vs up to Junior Certificate) and top and bottom vocabulary quartile



Note: Error bars are used to indicate the lower and upper bounds of the 95% confidence interval.

Clear differences were evident by family background (Primary Caregiver education) in the subsequent vocabulary development among children who started with similar test scores at the age of 3. By the age of 9, the children of graduate Primary Caregivers who were in the lowest quartile at 3 had surpassed the average scores of those in the highest quartile whose Primary Caregivers had a Junior Certificate. Thus, while early vocabulary development was significantly related to later reading achievement, the relationship was strongly moderated by family background, in keeping with the findings of Feinstein (2003) using British data.

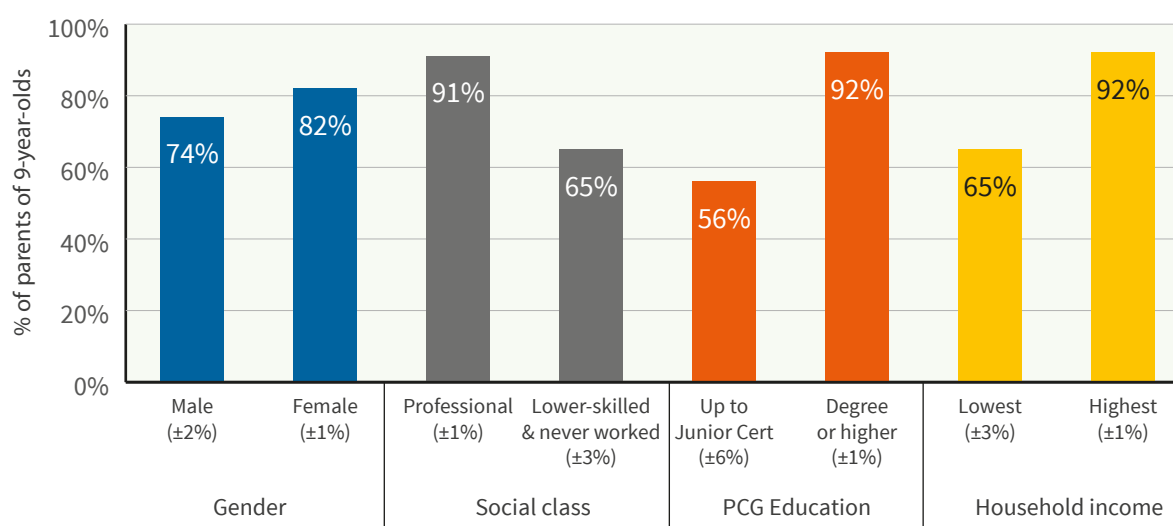
4.6 EDUCATIONAL EXPECTATIONS

4.6.1 SOCIO-DEMOGRAPHIC TRENDS IN EXPECTATIONS

Primary Caregivers were asked how far they expected their child to go within the education system. Expectations were very high for 9-year-olds, with almost four-fifths (78%) expecting their child to obtain a *degree or postgraduate/higher degree*. Almost a third (31%) of the whole group expected their child to receive a *postgraduate/higher degree*. Only 7 per cent of parents felt their child would finish their education at *Leaving Certificate or equivalent* or earlier. A very small number (4%) reported that they *don't know* what educational level their child would reach.

Parents held higher expectations for girls than for boys, with 82 per cent compared with 74 per cent expecting them to go on to higher education. There was a marked social gradient in expectations, with higher expectations among professional/managerial, highly educated and higher income families (Figure 4.19). Among these latter groups, higher education expectations were over 90 per cent. Despite this social gap, it is worth noting that higher education was the expected outcome across the majority of all social groups, suggesting that higher education has become a cultural norm.

Figure 4.19: Proportion of Primary Caregivers expecting their children to go on to higher education (degree or postgraduate/higher degree) by child gender, household social class, Primary Caregiver educational level and household equivalised income

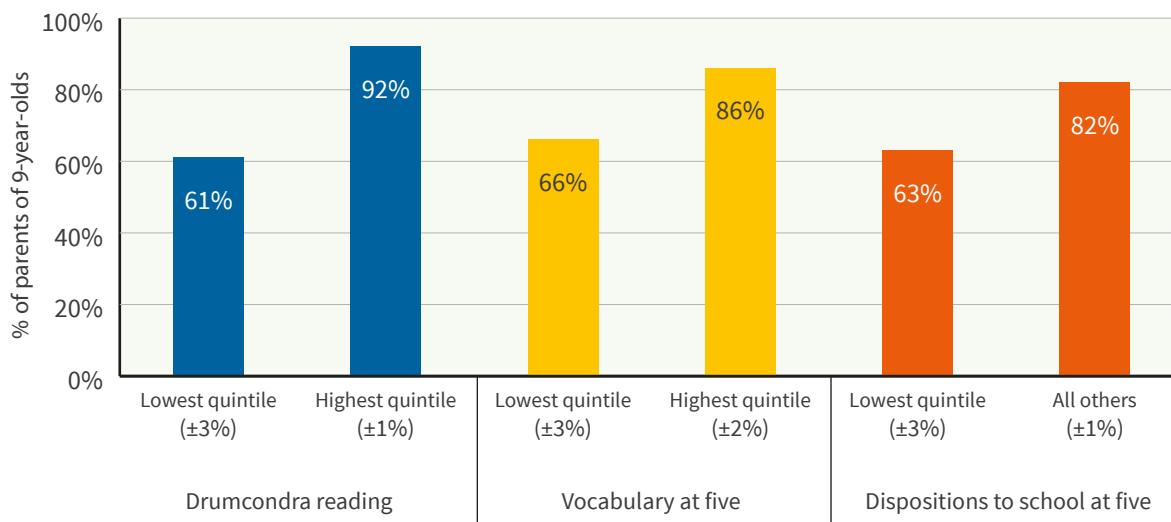


Note: Margins of error are shown in parentheses after the group label.

4.6.2 TRENDS IN EXPECTATIONS COMPARED TO ACTUAL TEST RESULTS

Primary Caregivers held higher expectations for children who had higher Drumcondra reading scores at 9, with a very significant difference in expectations in relation to those in the highest and lowest quintiles. Expectations were also lower where children had lower vocabulary scores and more negative (teacher-reported) dispositions towards school at age 5 (Figure 4.20).

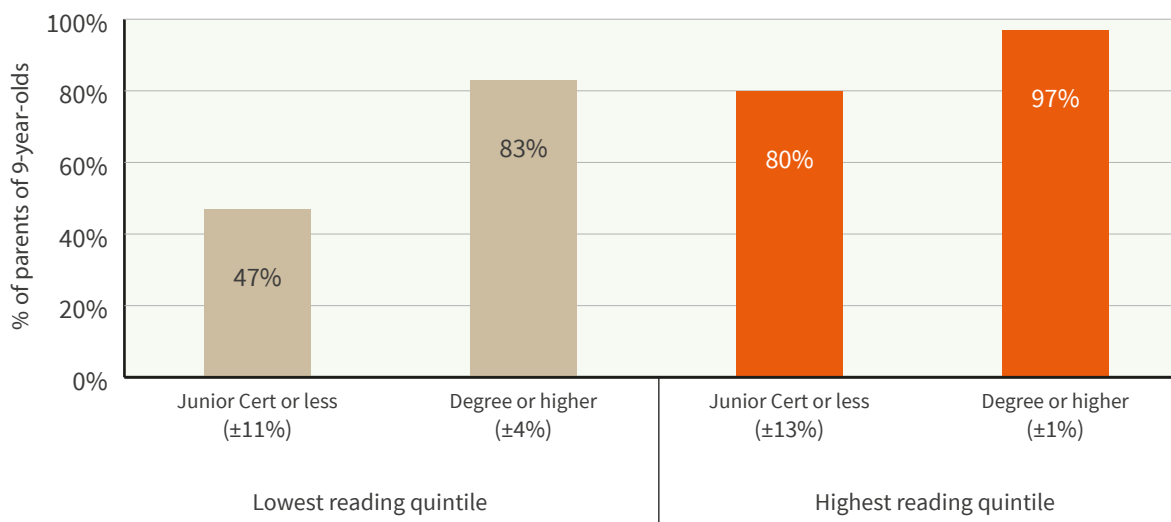
Figure 4.20: Proportion of Primary Caregivers expecting their children to go on to higher education (degree or postgraduate/higher degree) by child’s Drumcondra reading test scores at 9, vocabulary test scores at 5 and (teacher-rated) attitudes/dispositions to school at 5



Note: Margins of error are shown in parentheses after the group label.

The social gradient in expectations was only partly explained by higher reading scores among the more advantaged groups. In fact, the social gradient was greatest for children who had the lowest test scores, suggesting that in families with lower levels of education parental expectations were more responsive to how the child was faring academically (Figure 4.21). It is also worth noting that expectations were as high for children from highly educated families in the lowest quintile than for those with the highest reading scores but whose Primary Caregivers had Junior Certificate education or less.

Figure 4.21: Proportion of Primary Caregivers expecting their children to go on to higher education (degree or postgraduate/higher degree) by child’s Drumcondra reading test scores (quintiles) at 9 and Primary Caregiver education



Note: Margins of error are shown in parentheses after the group label.

4.7 SUMMARY

This chapter has examined the school experiences and cognitive development of 9-year-old children. They were found to be generally positive about their teachers, especially when they experienced more praise and fewer reprimands from them, positive about Reading as a school subject and at least sometimes positive about school in general. Parents were found to be very involved in their children’s education, with almost all attending parent-teacher meetings and most helping with homework on a regular basis. However, important differences were evident in the experiences and outcomes of different groups of children.

Firstly, significant gender differences were evident. Girls were more positive about their teachers, school and language-based school subjects (Reading and Irish) and they experienced more positive interaction with teachers than boys. Boys were more likely to be reprimanded by teachers at least occasionally than girls and their behaviour was more likely to be the subject of discussion between their teacher and their parents. These gender differences at 9 years of age are likely to have implications for longer-term differences in school engagement and relationships with teachers. A gender gap was also evident in out-of-school learning, with boys spending less time reading for pleasure than girls. Gender differences in educational experiences were not mirrored in measures of cognitive development at this stage³⁴ but may potentially be drivers of the significant differences found in how far Primary Caregivers expected their sons and daughters to go in the educational system.

Secondly, family background was strongly associated with measures of cognitive development at 9 and, to some extent, engagement with certain school subjects. Whether assessed in terms of educational level, social class or household (equivalised) income, a significant gap in reading achievement was found, on average, between the most and least advantaged groups. Although socio-economic differentiation in vocabulary development was evident on school entry, the analyses indicate a widening of the social gradient over the subsequent four years. Indeed, children from highly educated families who had low vocabulary scores at 3 achieved higher scores than initially high-scoring children from less educated families. Analyses of the home and school factors influencing these differing trajectories would form a useful basis for further research.

Socio-economic differences were evident too in how far Primary Caregivers expected their children to go in the educational system. The vast majority of children from professional, highly educated or higher income families were expected to achieve a degree (or higher qualification), even when their reading test scores at 9 were relatively low. However, the findings indicate that higher education appears to have become the dominant aspiration across all social groups. Future research could examine the extent to which these expectations are realised for different groups of children.

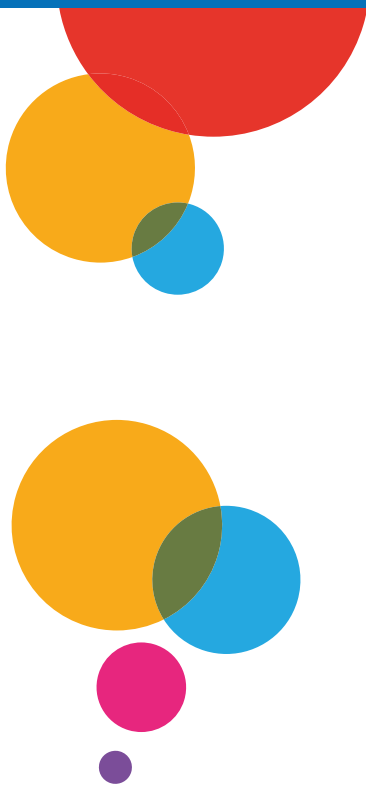
This chapter has focused on the experiences of different groups of children. As part of this wave of data collection, detailed information was gathered on the school context of the 9-year-olds. Future research could usefully examine the extent to which children's engagement with school and school subjects are shaped by the characteristics and processes of the school they attend.

³⁴ This pattern may in part reflect the multiple-choice nature of the reading test. Previous research has shown that males outperform females on multiple-choice tests rather than essay-type answers or more detailed comprehension exercises tests (Bolger & Kellaghan, 1990; Martin & O'Rourke, 1984).



Chapter 5

SOCIO-EMOTIONAL DEVELOPMENT, WELL-BEING AND RELATIONSHIPS



5.1 INTRODUCTION

This chapter provides an overview of how 9-year-olds from Cohort '08 of *Growing Up in Ireland* are performing on a range of social, emotional well-being and behavioural development indicators.

By middle childhood, many children are capable of controlling their emotions in most situations, and this is a period during which important social skills that support healthy relationships with others continue to be refined (Carr, 2011). At this stage, children's understanding of different social roles and the rules of interaction such as turn-taking and cooperation becomes more advanced, as well as their capacity for interpreting the emotional cues of others. Relationships with family – particularly with parents – continue to be important for children at 9 years of age (Oswalt, 2010).

Growing Up in Ireland explores emotional and behavioural development at this stage by using the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997). This widely used measure is employed to assess socio-emotional well-being among 9-year-olds as well as looking at how levels of such difficulties had changed since early childhood.

The Study Children's development of *self-concept*, that is, how children view themselves, is explored using the Piers-Harris Self-Concept scale (Piers & Herzberg, 2002). Middle childhood is an important time for the child's emerging self-concept (Erikson, 1959). Their self-esteem at this stage may significantly impact on their later well-being, potentially setting the stage for persistent positive or negative feelings about the self that last into the child's teens and even adulthood (Malone, Liu, Vaillant, Rentz & Waldinger, 2016). Recording the development of self-concept is an important feature of the study at this age, as it is the first time the Study Child voices opinions on themselves and how they compare to their peers within the *Growing Up in Ireland* study.

The quality of family relationships was explored from the perspective of both parents using a scale developed for the Longitudinal Study of Australian Children (LSAC) (Zubrick, Lucas, Westrupp & Nicholson, 2014). This is supplemented with information on parental stress and the amount of conflict in the parental relationship to which the child may be exposed. Information on family activities is explored from two perspectives: firstly, those undertaken with the Primary Caregiver that are commonly related to the quality of the home learning environment; and, secondly, the wider context of activities that the 9-year-old undertakes with family members is also explored.

Relationships with peers become more complex and central to the lives of children at this age; children begin to forge closer relationships with peers of their own sex around this age which often results in changes in the size and composition of a child's friendship network (CDC, 2016). There may be a conflict between children's growing sense of independence and opportunities for playing outdoors unsupervised in the community (Greene et al., 2010). The exploration of the child's social network is expanded outwards to look towards their friends and the amount of time the Study Child spends with them from both parent and child perspectives.

Children may also spend a lot of time with their extended family, and their grandparents, in particular, may be key figures in children's lives at this stage (Harris, Doyle & Greene, 2011). This chapter also explores the Study Child's wider social network by asking the Study Child if they have people in their life that they can talk to about problems.

Finally, in this chapter, the Study Child's experiences of bullying are also examined from both Primary Caregiver and child perspectives. Peer rejection and bullying have clear negative implications for child well-being and school performance. Previous research from *Growing Up in Ireland* (Williams et al., 2009), and related studies like Health Behaviour in School-Aged Children (HBSC) (Department of Health and Children, 2014) revealed high rates of bullying and victimisation for Irish children. Of particular interest in this section is any mismatch between parent and child report of bullying, as where bullying is not reported its impact is less likely to be addressed. Such a situation may, for instance, be reflected as problems in other areas such as school avoidance, emotional difficulties and withdrawal from classroom activities (Buhs, Ladd & Herald, 2006).

5.2 CHILDREN'S EMOTIONAL AND BEHAVIOURAL STRENGTHS AND DIFFICULTIES – PARENT AND TEACHER REPORT

The child's socio-emotional and behavioural development is multidimensional, and the type and intensity of any difficulty experienced varies between individuals. In addition, children may engage in positive social behaviour even when there are challenges in other aspects of their behaviour.

5.2.1 ABOUT THE SDQ

To help collect data on the range of behaviours that come under this broad development area, *Growing Up in Ireland* employed a widely-used scale to assess child socio-emotional and behavioural well-being: the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997). It is a screening tool rather than a diagnostic tool that asks about behaviour over the previous six months within five different dimensions or sub-scales, as follows:

- Emotional Symptoms (e.g. 'Child has many fears, is easily scared')
- Hyperactivity/Inattention (e.g. 'Child is constantly fidgeting or squirming')
- Conduct Problems (e.g. 'Child often fights with other children or bullies them')
- Peer Relationship Problems (e.g. 'Child is rather solitary, tends to play alone')
- Prosocial (positive) Behaviour (e.g. 'Child is considerate of other people's feelings').

Previous research has shown persistent differences in SDQ ratings by gender, which are often attributed to differences in how boys and girls react when facing difficulties; with boys tending towards more overt challenging behaviours than girls whereas girls may respond with more internalising behaviours such as being upset (Smeets et al., 2017). Strong socio-demographic trends have also been reported for differences in SDQ scores along the dimensions of income, social class and parental education. These findings are theorised to result from a lack of family resources, be they economic or physical, which results in strain or coping problems expressed at the child level (Watson, Maître, Whelan & Williams, 2014).

Primary Caregivers and the Study Child's teacher³⁵ responded to a set of 30 SDQ items. Scores on each sub-scale can range from 0 to 10. Higher scores on the *prosocial behaviour* sub-scale reflect strengths, and higher scores on the other four sub-scales reflect difficulties. The *total difficulties* score is the sum of scores on the four sub-scales that capture socio-emotional and behavioural difficulties (*emotional symptoms*, *conduct problems*, *hyperactivity* and *peer problems*) and so has a range of 0-40 (Goodman, 1997). As well as using average scores, Goodman (2001) had also focused on those in the highest decile as representing those 'at risk' of greatest difficulties, an approach that is also adopted in the remainder of the section. Further detailed information on the psychometric properties of the SDQ scale can be found in the design report for Cohort '08 at 9 years of age (McNamara, O'Mahony & Murray, 2020). This questionnaire has been used in most prior waves of *Growing Up in Ireland* and will provide useful longitudinal information on socio-emotional development. Future research could also potentially explore any cross-cohort differences in socio-emotional well-being between Cohort '98 (formerly the Child Cohort) and Cohort '08 at age 9 (and younger ages).

5.2.2 TRENDS IN PARENT AND TEACHER RATINGS, AND GENDER DIFFERENCES

Table 5.1 shows the Primary Caregiver and teacher ratings on each of the SDQ sub-scales and on the Total Difficulties scale. Across the four 'difficulties' sub-scales, and the overall *total difficulties* score, both parents and teachers generally gave scores that reflected low perceived levels of difficulty. The lowest (i.e. most favourable) difficulty scores were in relation to *conduct problems* with a mean of just 1.2 and 0.7 (out of ten) from Primary Caregivers and teachers respectively. Both also reported low levels of peer problems (1.1 and 1). In contrast, both raters tended to give high scores for children's level of *prosocial behaviour*, with both Primary Caregivers and teacher ratings exceeding eight out of a possible ten (higher scores in the *prosocial* sub-scale are favourable scores).

Parents tended to report a higher mean average of total difficulties than teachers (7.7 for Primary Caregivers vs 5.9 for teachers). While this difference was statistically significant, the size of the difference (1.8 points on average) can be considered small to moderate as it is less than half of a standard deviation. On average, differences between parent and teacher ratings on sub-scales tended to be quite small, on the order of a half to one point. Having ratings from both teachers and parents, albeit some months apart for some children, allows for a comparison of their perceptions of individuals using (in this case) a simple correlation. Also in Table 5.1, there was a moderately strong overall correlation between individual parent and teacher ratings of each Study Child (see column headed 'Correspondence with parent score') at each SDQ sub-scale, ranging from $r = .28$ (*prosocial*) to $r = .47$ (*hyperactivity/inattention*).

³⁵ The Study Child's teacher completed their ratings some months after the parents due to the differing phases of recruitment between households and schools. Additional distance between teacher and parent ratings is to be expected in this situation.

Table 5.1: Primary Caregiver and Teacher report of mean SDQ scores

Primary Caregiver rating			Teacher rating	
Sub-scale	Sample item	Overall Mean (SD)	Overall Mean (SD)	Correspondence (correlation) with parent score
Emotional	Often complains of headaches, stomach aches or sickness.	2.1 (2.1)	1.6 (2.1)	.30**
Conduct	Often has temper tantrums or hot tempers.	1.2 (1.4)	0.7 (1.4)	.30**
Hyperactivity	Restless, overactive. Cannot stay still for long	3.3 (2.6)	2.7 (2.7)	.47**
Peer problems	Rather solitary, tends to prefer to be alone.	1.1 (1.6)	1.0 (1.6)	.37**
Prosocial	Considerate of other people's feelings.	9.0 (1.5)	8.2 (2.1)	.28**
Total difficulties		7.7 (5.7)	5.9 (5.8)	.46**

Note: ** correlation is significant at the $p < .001$ level.

Table 5.2: Primary Caregiver and Teacher report of mean SDQ scores by gender

Sub-scale	Sample item	Primary Caregiver rating		Teacher rating	
		Boys Mean (SD)	Girls Mean (SD)	Boys Mean (SD)	Girls Mean (SD)
Emotional	Often complains of headaches, stomach aches or sickness.	2.1 (2.1)	2.1 (2.1)	1.6 (2.1)	1.6 (2.0)
Conduct	Often has temper tantrums or hot tempers.	1.3 (1.5)	1.1 (1.3)	0.9 (1.6)	0.5 (1.2)
Hyperactivity	Restless, overactive, cannot stay still for long	3.8 (2.8)	2.7 (2.3)	3.4 (2.9)	2.0 (2.3)
Peer problems	Rather solitary, tends to prefer to be alone.	1.2 (1.7)	1.0 (1.4)	1.1 (1.6)	0.9 (1.5)
Prosocial	Considerate of other people's feelings.	8.7 (1.7)	9.2 (1.3)	7.9 (2.2)	8.7 (1.7)
Total difficulties		8.4 (6.1)	6.9 (5.1)	6.9 (6.1)	4.9 (5.2)

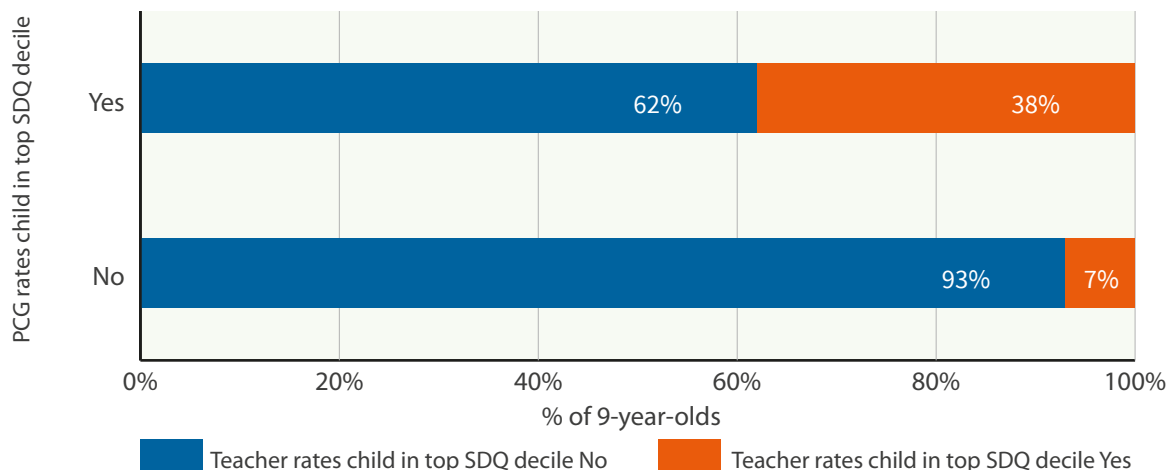
Table 5.2 shows gender differences on this measure of socio-emotional development. Both Primary Caregivers and teachers rated boys as having more difficulties with *conduct problems* and *hyperactivity/inattention*, with girls displaying more *prosocial behaviours*. Both sets of informants also rated boys as having more *peer relationship difficulties* than girls. These findings were similar to those found with 9-year-olds in Cohort '98 (Williams et al., 2009), with the exception of emotional symptoms where girls had higher levels in the older cohort but there were no gender differences for Cohort '08.

Although SDQ scores form a continuum, following Goodman (1997) it is possible to categorise or group the scores. Here, following the strategy of the scale developers, the top decile on the *Total Difficulties* scale is regarded as 'at risk' of heightened difficulties. This threshold is to facilitate comparisons between groups rather than to diagnose a socio-emotional or behavioural disorder (Goodman, 2001). To facilitate discussion in the remainder of this report, 9-year-olds in the top 10 per cent or 'top decile' of the *total difficulties* score – and also on other similar scales in this chapter – will be referred to as being in an 'at risk group' or having heightened difficulties when compared to those outside this 'top decile'.³⁶

Comparing parent and teacher ratings of children in the top SDQ decile in Figure 5.1 shows that children whose Primary Caregiver ratings placed them in the 'at risk' decile were much more likely to be also – but not necessarily – placed in the 'at risk' decile by teachers. Close to 40 per cent of children who were 'at risk' on the basis of their parental scores were also 'at risk' according to their teacher's scores. In contrast, only 7 per cent of the much larger group of children whose parental scores were too low to put them in the 'at risk' decile were reported as being in the 'at risk' group by their teachers.

³⁶ Varying pattern score distributions meant it was not always possible to identify a value which would distinguish exactly 10 per cent of Growing Up in Ireland children as being 'at risk'. In this case, the threshold on the scale that came as close as possible to identifying the most problematic 10 per cent was adopted.

Figure 5.1: Cross-tabulation of Primary Caregiver (PCG) and Teacher SDQ Total Difficulties at the top decile



Note: Figure 5.1 is limited to cases where there was an SDQ score from both Primary Caregiver and Teacher. The margins of error are $\pm 1\%$ for 'No' and $\pm 4\%$ for 'Yes' on PCG rates child in top SDQ decile.

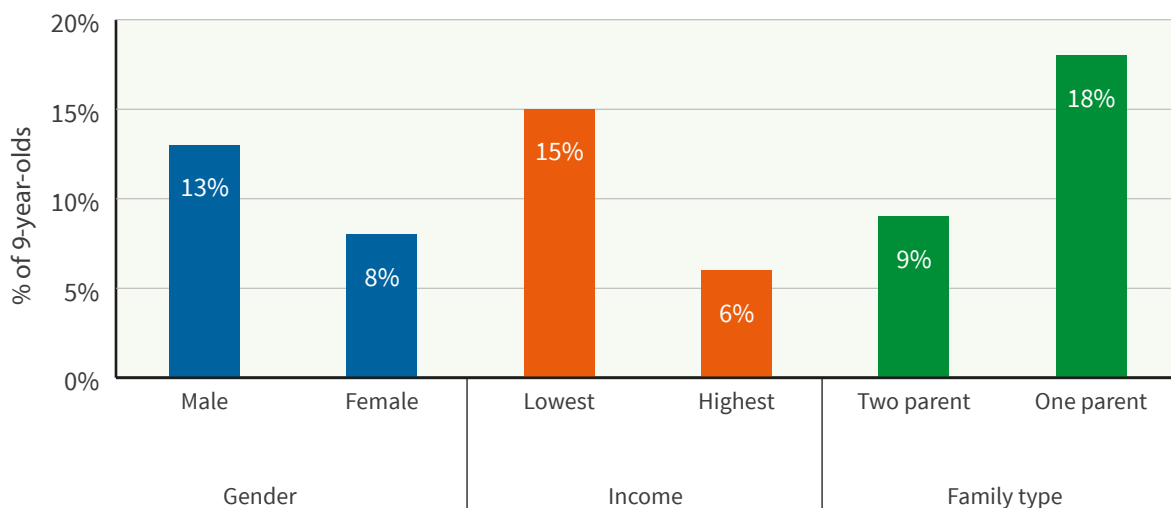
Some disparity between parent and teacher ratings are not a surprising outcome as a teacher will have many more examples of child behaviour to compare a given Study Child to than a typical parent. Furthermore, children's behaviour may respond to, and be shaped by, the setting, leading to them displaying different behaviour patterns at home and school. Previous research has noted similar differences in mother and teacher ratings on the SDQ, where parents report more problematic symptoms than teachers (Papageorgiou, Kalyva, Dafoulis & Vostanis, 2008).

5.2.3 SOCIO-DEMOGRAPHIC TRENDS IN PARENTAL SDQ SCORES

The following paragraphs examine further socio-demographic trends in relation to scores on the parent-completed SDQ. Figure 5.2 illustrates the proportion of 9-year-olds in the top decile of the SDQ total difficulties score according to Study Child gender, family income and structure (i.e. one- or two-parent families).

Following on from the mean differences seen in Table 5.2, a larger proportion of males (13%) were in the top decile than females (8%). Clear socio-demographic trends were seen when the proportion 'at risk' on the SDQ was explored by family income broken into five equally sized categories (income quintiles). Children in families at the lowest end of the income distribution were more likely to have scores in the 'at risk' category than those in the highest income group (15% compared to 6%). Similarly, Figure 5.2 shows that one-parent families reported a larger proportion of children in the 'at risk' SDQ decile than Primary Caregivers in two-parent families (18% and 9% respectively).

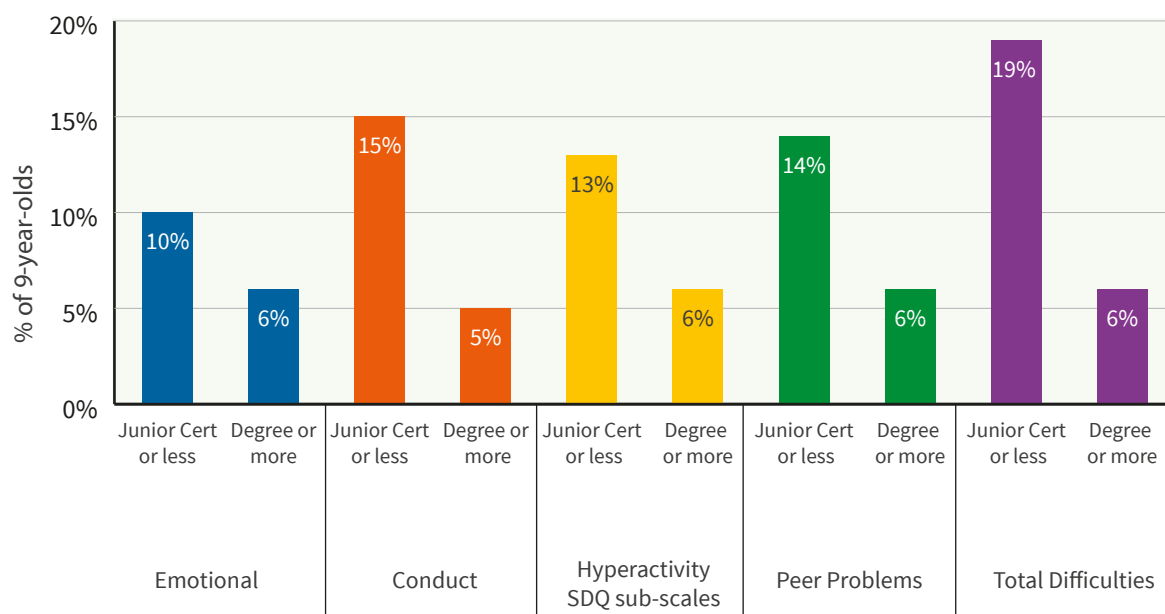
Figure 5.2: Primary Caregiver report of child being in the top decile of the 'total difficulties score' of the SDQ by Study Child gender, family income and family composition



Note: Margins of error are, at most, $\pm 2\%$

Socio-demographic trends were also evident on the individual sub-scales (i.e. *conduct problems* etc). Figure 5.3 contrasts the percentage of children rated in the ‘at risk’ decile of each SDQ sub-scale according to whether their Primary Caregiver had a ‘low’ level of education (*Junior Certificate or less*), or ‘high’ education (*Degree level or more*) at the other end of the distribution. Across each of the SDQ sub-scales, more 9-year-olds were in the ‘at risk’ decile according to parental ratings if that Primary Caregiver had a lower level of education. The disparity at the level of individual sub-scales is mirrored in the total difficulties score where 19 per cent of children in the low Primary Caregiver education group were in the ‘at risk’ decile compared to just 6 per cent in the high Primary Caregiver education group. It is interesting to note that a similar gradient was observed in relation to SDQ scores and parental education among the older Cohort ’98 when they had been 9 years old (Williams et al., 2009). When this trend was explored by income levels, it was also seen to operate across all SDQ sub-scales, with the proportion of children in an ‘at risk’ category rising sharply at the lowest two income quintiles.

Figure 5.3: Primary Caregiver report of child in top ‘at risk’ SDQ decile of each SDQ sub-scale by Primary Caregiver education



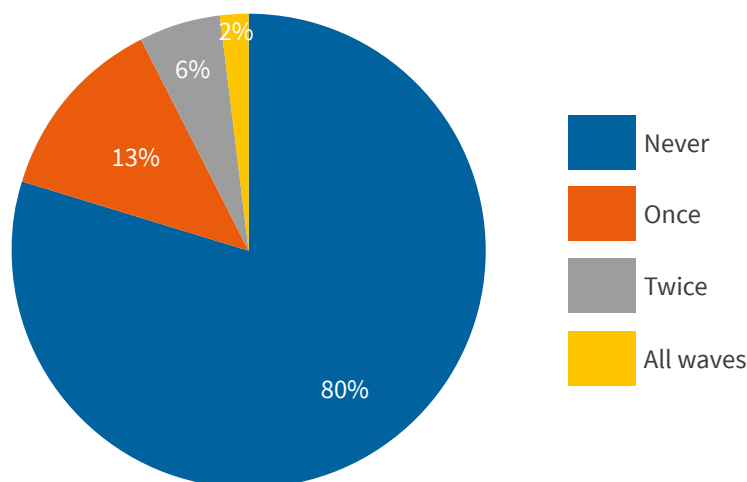
Note: Margins of error are, at most, $\pm 3\%$ for ‘Junior Cert or less’ and $\pm 1\%$ for ‘Degree or more’

Exploring SDQ scores longitudinally gives insight into the persistence and development of behavioural problems since early childhood. Figure 5.4 shows the percentage of children who have ever been rated by their Primary Caregiver in the top decile of the SDQ Total Difficulties scale. It can be seen that 20 per cent³⁷ of children had been reported as being in the ‘at-risk’ group at least once between the ages of 3 and 9 years. (The SDQ was completed at Wave 2 (3 years of age)³⁸, Wave 3 (5 years of age), and Wave 5 (9 years of age) reflecting the developmental stage of the child).

³⁷ It should be noted that the figures given in Figure 5.4 total to more than 20 per cent because of rounding.

³⁸ The Primary Caregiver completed the 7/8-year-old survey on a postal basis. Only data collected via computer assisted personal interview (CAPI) with a trained interviewer are considered in this analysis.

Figure 5.4: Percentage of children ever rated in top SDQ decile by Primary Caregiver at 3 years, 5 years and 9 years



Note: Analysis in Figure 5.4 is restricted to cases where the Primary Caregiver is the same at all waves. Figures have been rounded to whole percentages. Margins of error are, at most, $\pm 1\%$.

The largest proportion of this 20 per cent ‘ever at risk’ group were only in the top decile of the SDQ Total Difficulties scale once out of three waves (13%); the remainder were either twice (6%) or at all three waves (2%). Persistent high levels of reported difficulties from early childhood therefore appear confined to a relatively small group of children. This finding is comparable to longitudinal findings from the Cohort '98, where almost half of children reported as ‘at risk’ at 9 years of age were no longer in this category at 13 years of age (Williams et al., 2018). Further research could usefully examine the factors, including relationships and other supports, associated with a reduction in difficulties over time.

5.3 SELF-CONCEPT (PIERS-HARRIS SCALE)

5.3.1 INTRODUCTION AND DESCRIPTION OF THE PIERS-HARRIS MEASURE

Children absorb information about themselves from their early life onwards. Their experiences and their relationships with their social world contribute to the formation of beliefs about personal features such as physical attributes, abilities, personality, values, goals and roles (Piers & Herzberg, 2002). The Piers-Harris scale asks the Study Children for their own views on themselves and on how they compare to their peers on a wide range of attributes. This scale represents some of the first pieces of socio-emotional information that the Study Children give about themselves in the *Growing Up in Ireland* study and is potentially an important insight into how the child sees themselves, rather than how others see them.

Personal beliefs and life experiences accumulate to create a relatively stable ‘self-concept’ (Rochat, 2009). While a positive self-concept in middle childhood is, in most cases, associated with desirable traits such as responsibility, independence and emotional security, a negative self-concept can show links with fear, apathy, anxiety, and insecurity (Carr, 2009). Recent research using longitudinal data from an Indian cohort of the cross-national Young Lives Study (Woldehanna et al., 2018) has shown that among marginalised children, those with a positive self-concept are considerably more likely to remain in education (Ryberg, 2018).

In adulthood, a positive self-concept has been linked to greater physical activity levels (Christmas, Majed & Kneffel, 2019), improved life satisfaction (Parker, Martin & Marsh, 2008) and enhanced recovery from illness (Markowitz, 2001). Developing and nurturing a positive self-concept is thus of significance to the happiness and success of children of all ages and the adults they will become in the future.

An abbreviated version of the Piers-Harris II scale was used in *Growing Up in Ireland* to provide a quantitative assessment of the 9-year-old’s self-reported self-concept. The scale was shortened at the request of the study’s external reviewers and with permission from the test publishers. For a more in-depth discussion of this process, see the Wave 5 pilot report for Cohort '08 (Murray et al., 2020).

As well as providing a ‘total score’ for self-concept, the shortened version of the questionnaire also targets the same six domains as the original Piers-Harris scale. These are as follows:

- *Behavioural Adjustment* – a sub-scale of nine items on problematic behaviours;
- *Intellectual and School Status* – a sub-scale of eight items reflecting the Study Child’s assessment of his/her abilities with respect to intellectual and academic tasks; general satisfaction with school and perceptions of future achievements;
- *Physical Appearance and Attributes* – a sub-scale of seven items about perceptions of physical appearance and other attributes such as leadership and ability to express ideas;
- *Freedom from Anxiety* – a sub-scale of eight items exploring a variety of feelings including fear, unhappiness, nervousness, shyness and feeling left out of things;
- *Popularity* – a sub-scale of six items exploring the Study Child’s evaluation of his or her social functioning;
- *Happiness and Satisfaction* – a sub-scale of six items reflecting feelings of happiness and satisfaction with life.

Based on norming thresholds adjusted by the Study Team for the shortened questionnaire, each of the sub-scales (including the total score) provides a raw score that is broken into six groups: *very low*, *low*, *low average*, *average*, *high average* and *high*.

5.3.2 DESCRIPTIVE STATISTICS FOR THE PIERS-HARRIS SCALE

Results from the 9-year-old data from Cohort '08 are presented in Table 5.3. Scale and sub-scale totals are listed first, followed by graphs that show the percentages of children in the lowest and highest categories of Piers-Harris scores across classificatory variables. For each of the sub-scales and the total score, higher scores mean a more positive self-concept. Because of differing numbers of items in each scale (see above), the maximum values vary (see the Range column in Table 5.3).

Self-reported scores from the 9-year-old boys and girls were notably close to one another on this scale, with only fractions of a point separating them on any sub-scale. Girls reported a slightly higher average mean *self-concept* score overall (girls 27.2 vs boys 26.8) and boys reported slightly more *freedom from anxiety* (girls 6.5 vs boys 6.7). These differences were statistically significant but effectively trivial in size. The small differences were also consistent with an overall pattern of results seen in Cohort '98 at 9 years of age where a longer version of the Piers-Harris scale was used (Williams et al., 2009).

Table 5.3: Mean Piers-Harris sub-scale scores by gender

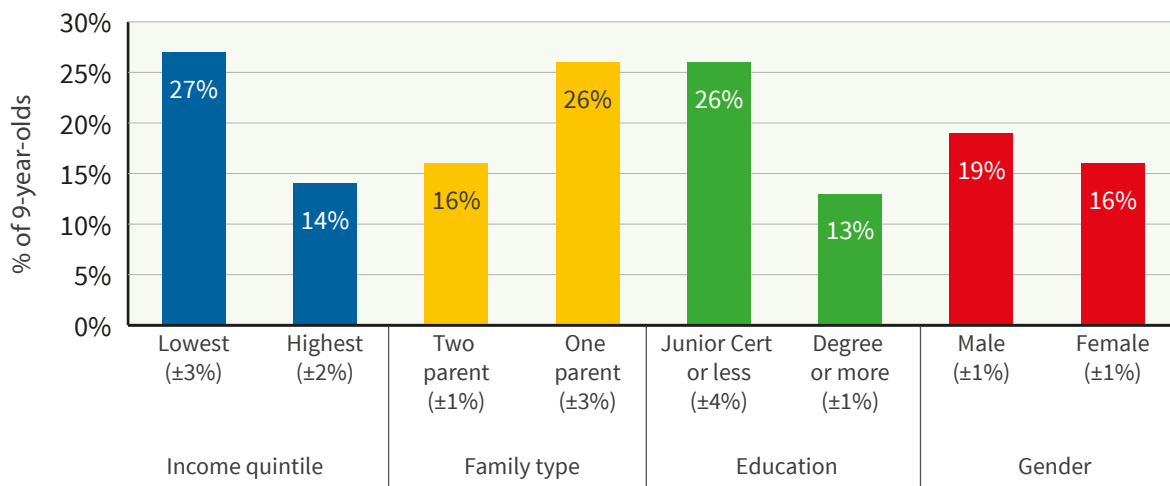
	Range	Boys		Girls		Overall	
		Mean	SD	Mean	SD	Mean	SD
Piers-Harris ‘total score’	0-44	26.8	4.3	27.2	4.1	27.0	4.2
Behavioural Adjustment	0-9	8.2	1.3	8.4	1.1	8.3	1.2
Intellectual & School Status	0-8	6.9	1.4	7.1	1.3	7.0	1.4
Physical Appearance & Attributes	0-7	6.0	1.4	6.2	1.3	6.1	1.4
Freedom from Anxiety	0-8	6.7	1.6	6.5	1.7	6.6	1.6
Popularity	0-6	5.1	1.3	5.1	1.3	5.1	1.3
Happiness & Satisfaction	0-6	5.4	1.0	5.5	1.0	5.4	1.0

The overall numbers of children presenting with the lowest possible Piers-Harris scores were quite small. Accordingly, in the remainder of this section the lowest two categories of *very low* and *low* (equating to a ‘total score’ less than 24) are combined in order to illustrate children who have a markedly lower *self-concept* than their peers and may be at risk of poorer outcomes in a range of domains (Piers & Herzberg, 2002). This group with very low or low self-concept amounted to 17 per cent of the sample.

5.3.3 SOCIO-DEMOGRAPHIC TRENDS FOR THE PIERS-HARRIS SCALE

Figure 5.5 compares the percentage of 9-year-olds with very low or low self-concept on a range of key indicators such as income, family structure, education and child gender. When the composition of those in the lowest Piers-Harris categories was explored, boys (19%) were marginally over-represented in the lower Piers-Harris categories compared to girls (16%).

Figure 5.5: Percentage of 9-year-olds in lowest two 'total score' categories of the Piers-Harris Scale by income quintile, family structure, Primary Caregiver education and child gender



Note: Margins of error are shown in parentheses after the group label.

However, larger differences were seen by household income, parental education and family type, with those from families with lower levels of income or education and those in one-parent families more likely to fall into the group with poor self-concept. For example, the lowest education group was over-represented in the low Piers-Harris category at a ratio of two to one when compared to the highly educated group (26% vs 13%). These patterns are particularly noteworthy, given the links between self-concept and later outcomes discussed above (see, for example, Parker et al., 2008).

The longitudinal link between self-concept and observable behaviours was explored by assessing the relationship between the number of times a child was reported in the top 'at risk' decile of the Strengths and Difficulties Questionnaire (SDQ) at Waves 2, 3 and 5 (3 years, 5 years and 9 years of age respectively) and the percentage of children in the lower two Piers-Harris total score categories. Over 40 per cent of the small group (2%) who were in the SDQ 'at risk' group at three time points had a low self-concept score compared to just 14 per cent of the much larger group (80%) who were never 'at risk' on the SDQ measure.

5.4 PARENTS' RELATIONSHIP WITH THE CHILD

5.4.1 PARENTAL REPORT OF THEIR RELATIONSHIP WITH THEIR CHILD (PIANTA SCALES)

The parent-child relationship is an important element in the mental health of children and the quality of this relationship during later childhood and adolescence has been highlighted as an important correlate of child adjustment (Davies et al., 2002; O'Connor & Scott, 2007; Wilson & Gottman, 2002; Oliver & Pike, 2018; Zemp, Johnson & Bodenmann, 2018). For example, the probability that children who enjoy positive relationships with their parents will engage in aggressive behaviours, bullying others, committing property offences, or affiliating with deviant peers, is much lower than those who do not have positive relationships with their parents (Rubin & Burgess, 2002). They are also more likely to be involved in their schoolwork, have higher self-esteem, are less likely to be victimised by others, are less likely to experience hyperactivity/attention problems, and tend to experience fewer serious injuries than those with less positive relationships with their parents. In contrast, distress associated with parent-child conflict during adolescence can often lead to maladjustment, including conduct problems and emotional problems (Yeh, 2011).

The Pianta scale (Pianta, 1992) measures closeness and conflict in the parent-child relationship and the 15-item version of the scale was completed by both Primary Caregiver and Secondary Caregiver (where the Secondary Caregiver was resident).

- The *closeness* with caregiver sub-scale includes items on how the parent gets on with the Study Child and their feelings of effectiveness as a parent such as 'I share an affectionate, warm relationship with my child'.
- The *conflict* with caregiver sub-scale includes items on the parent's perception of difficulties in their relationship with the Study Child; for example, 'Dealing with my child drains my energy'.

Unlike other scales such as the Short Mood and Feelings Questionnaire (Angold et al., 1995), or the Strengths and Difficulties Questionnaire (Goodman, 2001), there are no published norms for the parent-child version of the Pianta scale and there are no recommended cut-off points or thresholds to define high or low conflict or closeness scores.

In the current report, scores in the ‘worst’ decile (lowest 10% of scores for *closeness*, highest 10% of scores for *conflict*) were used as an aid to the description of the data in order to make meaningful comparisons across groups. The Pianta scale has been used at every *Growing Up in Ireland* wave since 3 years of age and in general, parents report high *closeness*, low *conflict* relationships with their children. These results will be discussed in detail below.

5.4.1.1 Descriptive statistics for the Pianta scale

Table 5.4 shows that for both parents, the mean scores tended to be high for *closeness* (33.4 for the Primary Caregiver and 32.4 for the Secondary Caregiver out of a possible 35) and low for *conflict* (with mean scores sitting at around 14 and 15 out of a possible 40 for both parents). These findings indicate that the scores on this scale were quite skewed, with most parents reporting relationships which were generally low in *conflict* and high in *closeness* – as noted in previous waves of this cohort³⁹. Although low, the values for conflict were more variable than those for *closeness*.

Table 5.4: Descriptive statistics for Pianta scale

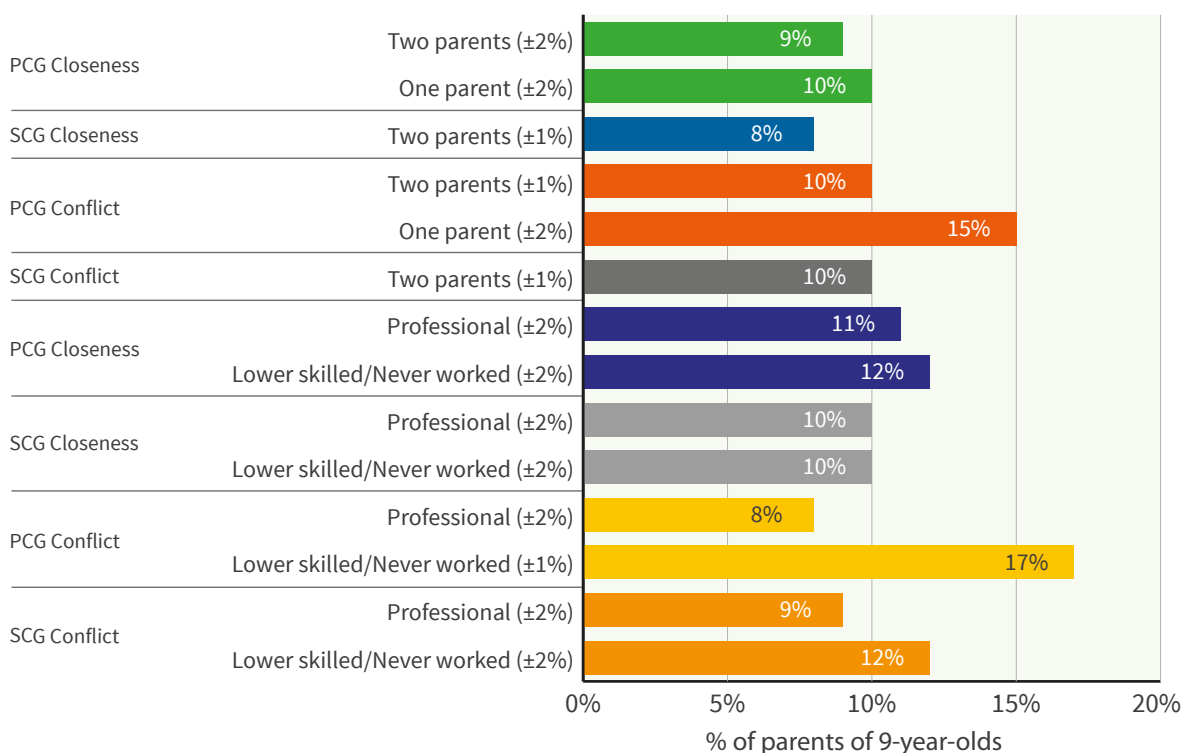
Descriptive Statistics	Possible Range	Mean	Std. Deviation	Proportion at ‘best’ score	Cut-off for ‘Worst’ Decile	Proportion in ‘worst’ decile
Primary Caregiver						
Closeness	7-35	33.4	2.35	44.8%	30	9.3%
Conflict	8-40	15.1	6.08	13.3%	24	10.9%
Secondary Caregiver						
Closeness	8-35	32.4	2.81	25.6%	28	8.4%
Conflict	8-36	14.5	5.59	15.0%	23	10.0%

5.4.1.2 Socio-demographic trends for the Pianta scale

Figure 5.7 presents the percentages of Primary Caregivers and Secondary Caregivers who report their relationship with the Study Child in the ‘worst decile’ of the Pianta *closeness* and *conflict* scores by family structure (one- or two-parent family) and by family social class (based on the highest employment category of the PCG or SCG) – in the context of scores of both scales being generally positive overall. Family type refers to one-parent or two-parent families. For social class, the chart contrasts the highest group, ‘professional workers’, with the lowest group, ‘lower skilled or never worked’.

³⁹ The skew in scores places cut-offs for where a ‘worst decile’ begins at different places for Primary Caregivers and Secondary Caregivers. The actual differences in means are minimal between Primary Caregiver and Secondary Caregiver for scores on closeness of relationship or level of conflict between either caregiver and the Study Child.

Figure 5.6: Percentages of Primary Caregivers and Secondary Caregivers reporting levels of Pianta closeness and conflict scores in the 'worst' decile by family structure and social class

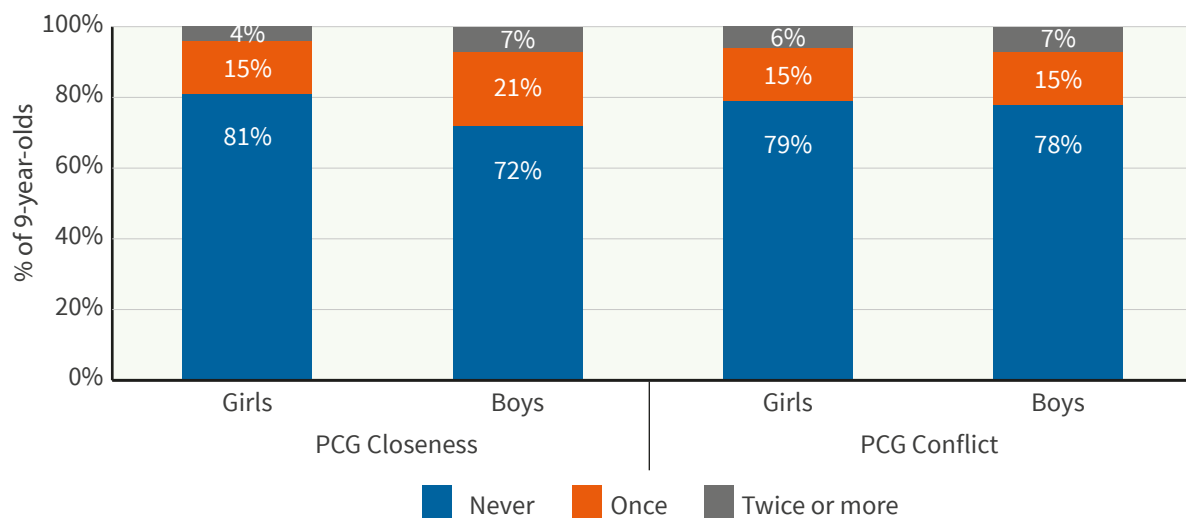


Note: As Secondary Caregivers were only interviewed as the resident spouse or partner of the Primary Caregiver, there were only Secondary Caregiver statistics for two-parent families. Margins of error are shown in parentheses after the group label.

Overall Figure 5.6 shows that there was no significant difference in the percentage reporting the lowest levels of closeness for either caregiver by family structure or by family social class. However, there were significant differences in the percentage reporting the highest levels of conflict with their child. A greater percentage of single parents (15%) reported high conflict scores than did Primary Caregivers or Secondary Caregivers from two-parent families (10%). Similarly, parents from lower skilled/never worked families were more likely than those from professional families to report high conflict levels. This pattern applied to both Primary Caregivers (17% compared to 8%) and Secondary Caregivers (12% vs 9%). These patterns are similar to those found with the Pianta scale in the Cohort '98 report at 9 years of age (Williams et al., 2009). Recent research on the first two waves of Cohort '08 (Infant Cohort) suggests that financial strain may play a role in increasing family stress and conflict (Nixon, Layte & Thornton, 2019).

Continuing the theme of longitudinal analysis, Figure 5.7 explores the number of waves in which a Study Child was reported in the least favourable decile for closeness and conflict on the Pianta scale broken down by gender. For consistency, this analysis has been confined to cases where the Primary Caregiver had not changed from Wave 1 to Wave 5.

Figure 5.7: Number of waves in the least favourable decile for Pianta closeness and conflict sub-scales by gender



Note: This analysis is confined to cases where the Primary Caregiver is the same at all waves. Margins of error are, at most, $\pm 1\%$.

Overall, a lack of *closeness* or high *conflict* with children appears to be transitory for most families; only a small percentage of children, between 4 per cent and 8 per cent, were in these categories for two or more waves. Figure 5.7 reveals that 19 per cent of girls and 28 per cent of boys had been reported at the lowest levels of *closeness* at least once between Waves 2 (3 years of age) and 5 (9 years of age) of *Growing Up in Ireland*. In contrast, the gender difference in the proportion of Primary Caregivers that reported high *conflict* with their child was much narrower, with 23 per cent of boys and 21 per cent of girls ever being in the highest levels (of *conflict*).

5.4.2 PARENTS' STYLE OF INTERACTION WITH THE CHILD

Parenting style measures were asked of the Primary Caregiver in the self-complete section of the *Growing Up in Ireland* study at Wave 5. These were consistent with the parenting style measures used at ages 3 and 5 for this cohort (but different to those used with the older Cohort '98 at 9 years of age). The theoretical basis of the parenting style questions is one of a 'functional frame' for a child's development in which the child is nurtured, protected, helped, and provided with feedback and models of behaviour (Kaye, 1984).

Research from Lugo-Gil and Tamis-LeMonda (2008) shows that optimal socio-emotional outcomes for children are found in cases where the child's early care is characterised as sensitive and responsive to the child's needs.

Further research points to harsh and inconsistent parenting as a major risk factor for behavioural problems in childhood. Research from the 1990s highlights that sensitive and responsive parenting can serve as a protective factor in child development, protecting the child from potential risk factors such as poverty (Pettit & Bates, 1989; Pettit, Bates & Dodge, 1997) and other research suggests that an authoritative style of parenting, combining warmth and responsiveness with high demands on maturity, leads to the best social and behavioural outcomes for children (Darling & Steinberg, 1993).

In *Growing Up in Ireland*, parenting style for this cohort to date was measured across three dimensions: warmth, consistency and hostility. These dimensions of parenting style can be considered as setting the tone for other interactions with the child rather than being goal-directed actions in themselves (Zubrick et al., 2008). The parenting style questions were drawn from the Longitudinal Study of Australian Children (LSAC). They yield scores for each of three important parenting dimensions: *warmth* (six items, including items such as 'Hug or hold this child for no particular reason'), *hostility* (six items, with items such as 'How often do you tell this child that he/she is not as good as others?') and *consistency* (five items, with items such as 'How often does this child get away with things that you feel should have been punished?') that have been shown to influence child outcomes. A fuller exploration of the *warmth*, *hostility* and *consistency* sub-scales can also be found in the design report for this cohort at 9 years of age (McNamara et al., 2020).

Continuity of the measurement of parenting style will allow researchers to track the development of this aspect of the child-parent relationship longitudinally. Although there tends to be considerable continuity in parents' child-rearing orientations,

parents can also modify their behaviours in response to their children’s developing abilities and needs over time (Gralinski-Bakker & Kopp, 1993). With the current wave of data, it will be possible to look at whether parenting styles have changed across the child’s life from ages 3 to 9 years.

5.4.2.1 Descriptive statistics and socio-demographic trends for the parenting style measure

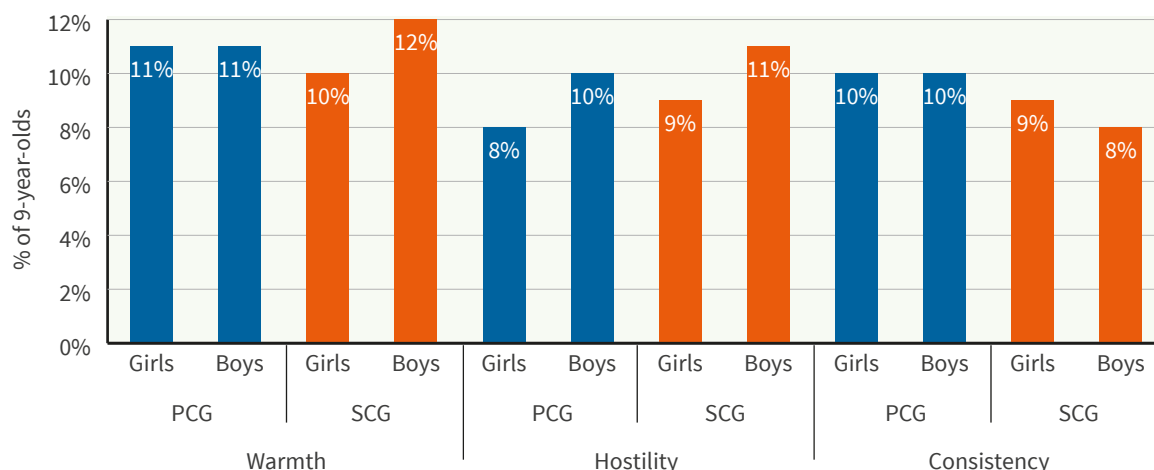
Table 5.5 displays descriptive statistics for the parenting scale for both the Primary and Secondary Caregiver. Scores ran across almost the full range of the scales, with most parents reporting very high *warmth* and *consistency*, and very low levels of *hostility* towards their child. The *warmth* sub-scale was heavily skewed, with 39 per cent of Primary Caregivers and 25 per cent of Secondary Caregivers giving the maximum score. Cut-offs for the ‘worst’ deciles were used to generate approximately equally-sized groups for comparison. It is important to note that due to the very positive scores given by most parents, parenting styles in the least favourable decile are better construed as parents reporting approaches that are less favourable than others rather than poor parenting styles per se.

Table 5.5: Parenting style descriptive statistics

	Minimum	Maximum	Mean	SD	Percentage at ‘best’ score	Cut-off for ‘Worst’ Decile	Percentage in ‘worst’ decile
PCG warmth	1	5	4.5	0.58	39.1%	3.67	10.8%
PCG hostility	1	4.5	2.0	0.62	4.5%	2.83	9.0%
PCG consistency	1.4	5	4.0	0.65	7.4%	3	9.6%
SCG warmth	1	5	4.3	0.72	24.9%	3.17	10.9%
SCG hostility	1	4.3	2.0	0.64	4.6%	2.83	9.7%
SCG consistency	1.2	5	3.9	0.67	3.4%	2.8	8.2%

The mean scores were similar for Primary and Secondary Caregivers across all parenting style measures. Overall, socio-demographic characteristics were not strongly related to parenting style, particularly when compared to other outcomes detailed elsewhere in this report. For Cohort '08 at 5 years of age, the main differentiating characteristic was the child’s gender (Murray et al., 2019). In contrast, Figure 5.8 shows only minor differences in the percentages characterising their approach to parenting boys and girls differently in terms of *warmth* or *consistency*, but there were some small but statistically significant differences evident in the extent to which Primary Caregivers reported a more hostile parenting style with boys compared to girls.

Figure 5.8: Percentage in the least favourable decile of parenting style sub-scales (warmth, hostility and consistency) by gender

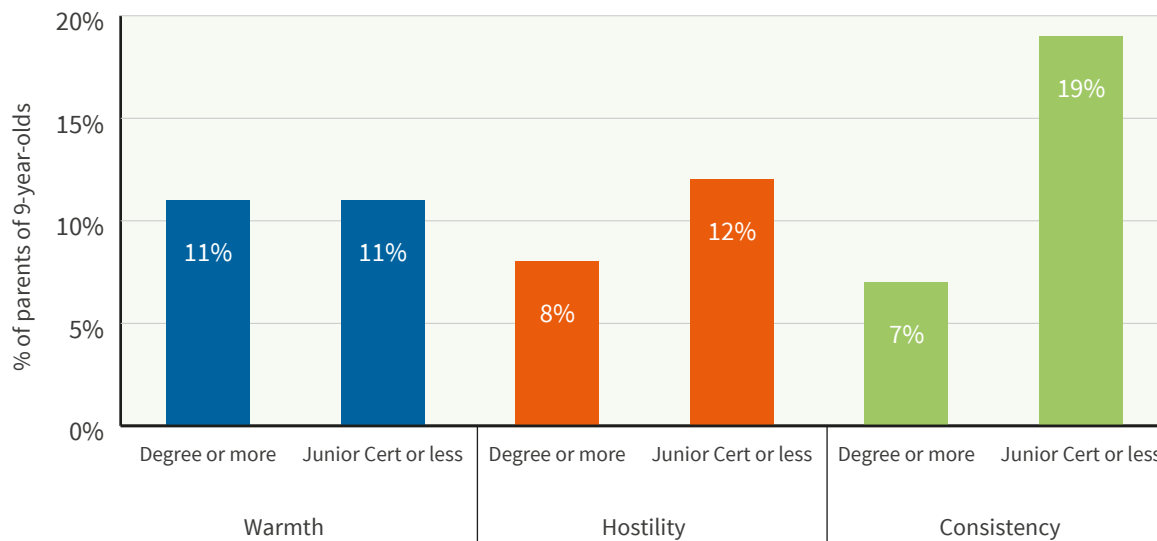


Note: Margins of error are, at most, ±1%.

Figure 5.9 explores the parenting style variables by the educational level of the Primary Caregiver in each family. For analysis purposes, this is taken as a reflection of parental education in the family overall. Again, there were no differences in *warmth* from the Primary Caregiver by educational level. There were, however, differences in ratings of hostility and consistency, with Primary Caregivers from families with lower educational levels tending to report their approach to parenting the Study Child as more hostile and less consistent. Only 7 per cent of Primary Caregivers with degree-level education rated their

parenting style with their child as (comparatively) low in *consistency*, in contrast to 19 per cent of Primary Caregivers with Junior Certificate education or lower. Patterns for the Secondary Caregiver were similar to those for the Primary Caregiver but cannot be depicted here because of the small number of cases in the lowest education group.

Figure 5.9: Percentage in the least favourable decile of parenting style for the Primary Caregiver by highest and lowest education categories for the Primary Caregiver



Note: Margins of error are, at most, ±1% for 'Degree or more' and ±3% for 'Junior Cert or less'!

5.4.3 PARENTAL STRESSORS AND EXPOSURE TO CONFLICT

The following section discusses the *co-parenting relationship – exposure to conflict* sub-scale (Feinberg, Brown & Kan, 2012) as well as the Parental Stress scale (Berry & Jones, 1995). These are stand-alone measures that are discussed together here due to their reflecting complementary issues around familial conflict and stress.

5.4.3.1 Description of measures

5.4.3.1.1 Exposure to conflict (sub-scale of the Co-Parenting Relationship Scale)

Co-parenting refers to how two individuals work together in their parenting roles and the support they provide for one another in raising children for whom they share responsibility (Feinberg, 2003). Research suggests that co-parenting has a stronger influence on parent-child relationships and child outcomes than the inter-parental relationship/marital quality, because it is more proximally related to parenting (McHale, 2007).

Feinberg et al., (2012) developed the Co-parenting Relationship Scale (CRS), which was comprised of seven sub-scales. To reduce respondent burden and avoid potential overlap with the LSAC parenting measures, only the *exposure to conflict* sub-scale was used in **Growing Up in Ireland**. This measure contains five items, including items such as ‘How often in a typical week, when all three of you are together, do you: Argue with your partner about your child, in the child’s presence?’. Because of the nature of the measure, it was only asked of caregivers of children in households with two parents resident. A fuller description of this scale is found in the Cohort ‘08 9-year pilot report (McNamara et al., 2020).

5.4.3.1.2 Parental Stress Scale (parental stressors sub-scale)

The Parental Stress scale (Berry & Jones, 1995) is an 18-item self-report scale which is designed to assess both positive and negative aspects of parenthood. To avoid respondent burden, the current wave of the **Growing Up in Ireland** study uses only the six-item stressors sub-scale of this scale. Items are rated on a five-point Likert-type scale ranging from *strongly disagree* to *strongly agree*.

An example item is: ‘Please rate how much you agree or disagree with each of the following statements in relation to how things are for you and <child> now: The major source of stress in my life is my child’. A ‘total stress’ score is calculated as a

composite of the items (ranging from 6-30) with higher scores indicating higher levels of *parental stress*. A fuller description of this measure is available in McCrory, Williams, Murray, Quail & Thornton (2013). The stressors sub-scale was asked of caregivers in both one-parent and two-parent families.

5.4.3.2 Descriptive statistics for the parental stress and exposure to conflict measures

Table 5.6 shows that the achieved range of scores across both scales covered the full range of scores, though the average reported *exposure to conflict* levels from both Primary Caregivers and Secondary Caregivers were very low. There was evidence of skew in the *exposure to conflict* sub-scale, with almost a quarter of parents reporting the lowest possible levels of *exposure to conflict* for their child. Similar to the previous section, the cut-off for ‘worst’ *exposure to conflict* decile could be considered an indicator of a somewhat more conflicted relationship than usual, rather than an indicator of high overall conflict.

Table 5.6: Descriptive statistics for co-parenting – exposure to conflict sub-scale and parental stressors scale

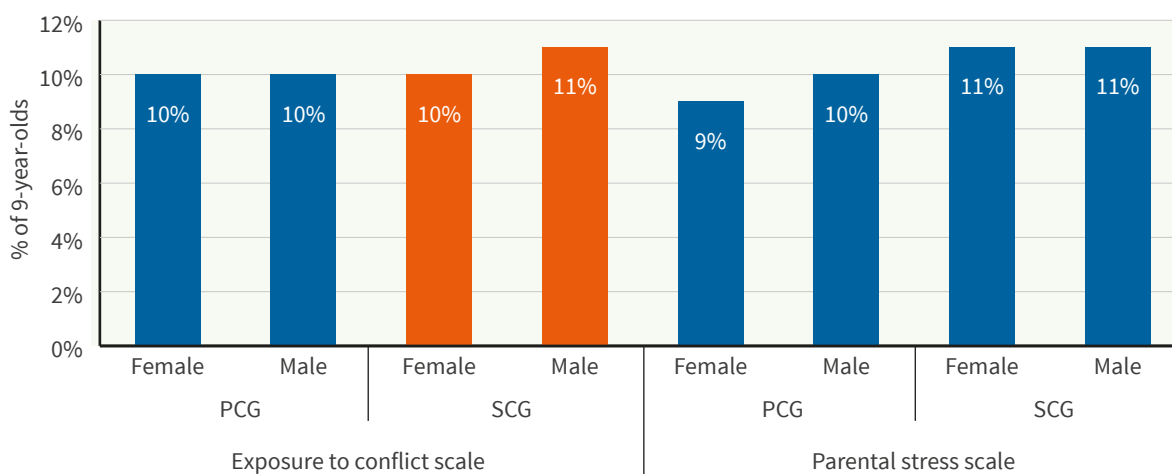
	Minimum	Maximum	Mean	SD	Percentage at ‘best’ score	Cut-off for ‘Worst’ Decile	Percentage in ‘worst’ decile
PCG exposure to conflict	0	6	0.6	0.64	24.6%	1.4	9.7%
SCG exposure to conflict	0	6	0.7	0.64	22.9%	1.5	10.4%
PCG parental stress	6	30	13.4	4.47	5.6%	19	10.5%
SCG parental stress	6	30	13.0	4.34	5.3%	18	11.0%

Parental stress is much more normally distributed, and a ‘worst decile’ can be expected to encompass parents with more severe levels of stress. Only around 5 per cent of caregivers gave a score at the lowest (‘best’) stress levels.

5.4.3.3 Socio-demographic trends for the parental stress and exposure to conflict measures

Figure 5.10 displays the percentage of boys and girls whose parents’ reports placed them in the ‘worst’ decile for *exposure to conflict* and *parental stress* respectively. There were no notable differences in ratings for either scale according to child gender.

Figure 5.10: Percentage of 9-year-olds in the worst decile of exposure to conflict sub-scale and Parental Stress scale by gender

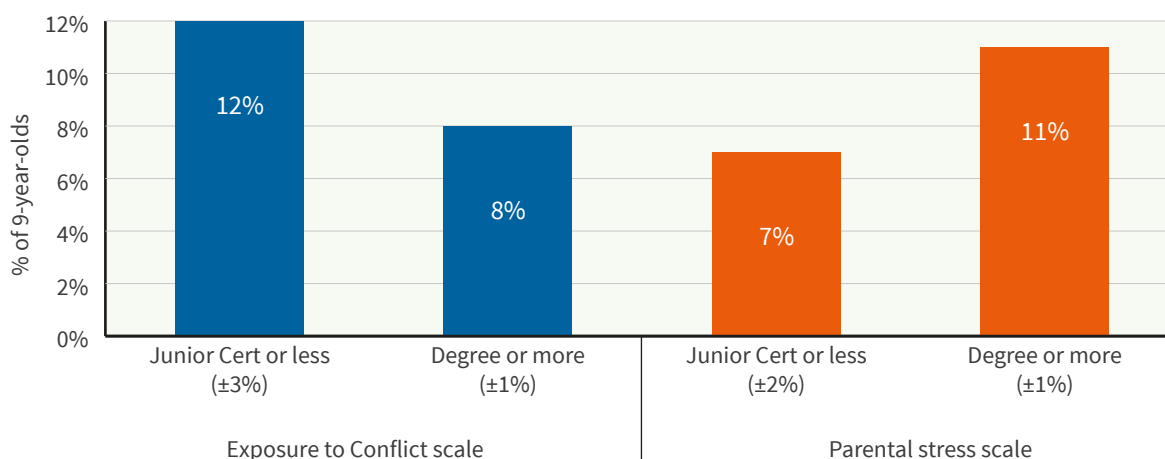


Note: Margins of error are, at most, ±1%

As already noted, the *exposure to conflict* sub-scale was only asked in households where a Secondary Caregiver was present. The Parental Stress scale was asked in both one- and two-parent families and is presented below for Primary Caregivers. Similar to other measures comparing one and two-parent families covered already in this report, the Parental Stress scale demonstrates that a significantly greater percentage of one-parent families (13%) were more likely to fall into the ‘high stress’ group compared to just 9 per cent of two-parent families.

There were few systematic differences in the measures by household income, though Secondary Caregivers in the lowest income households were somewhat more likely to fall into the high *exposure to conflict* group than those in the highest income families (13% vs 9%). As shown in Figure 5.11 Primary Caregiver reports of exposure to conflict were significantly greater for Primary Caregivers with Junior Certificate or lower levels of education than those with a degree or higher level of education. In contrast, levels of *parental stress* were higher for those with degree or higher qualifications (11% vs 7% for the Primary Caregiver). Patterns were similar for Secondary Caregivers but cannot be reported here due to small cell sizes in the lowest educational group.

Figure 5.11: Percentage of 9-year-olds in the worst decile of exposure to conflict sub-scale and Parental Stress scale (Primary Caregiver reports) by Primary Caregiver education



Note: Margins of error are shown in parentheses after the group label.

5.5 CHILD'S RELATIONSHIP WITH PEERS, PARENTS AND SUPPORT NETWORKS

5.5.1 FRIENDSHIPS

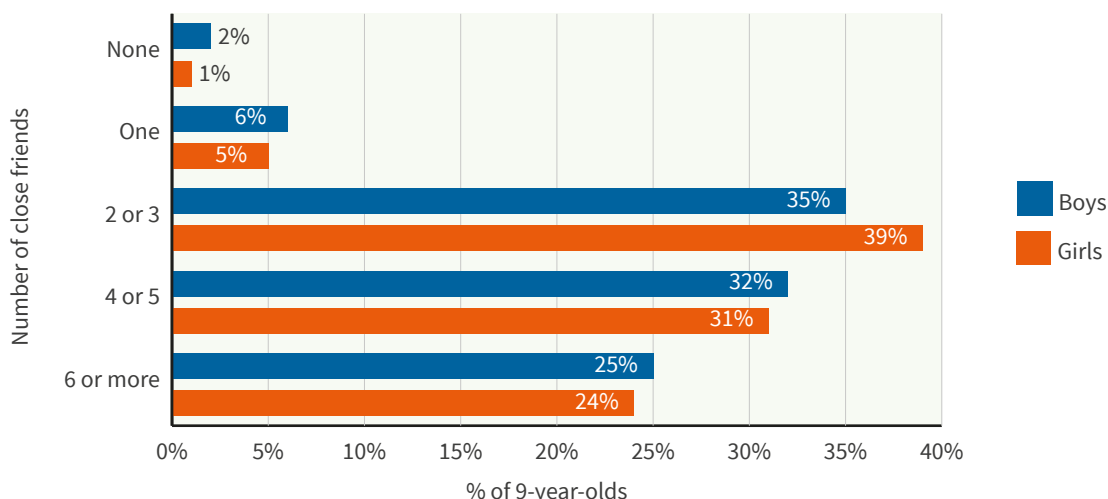
Emotional, cognitive and social development are all influenced by childhood friendships (Newcomb & Bagwell, 1995; Bukowski, Laursen & Hoza 2010; Vitaro, Boivin & Bukowski, 2009). Relationships with peers become more complex and central to the lives of children in middle childhood. Many studies do not differentiate between the number of friendships and overall quality of those friendships which may result in varying levels of peer support across childhood (Hartup, 1996; Bagwell & Bukowski, 2018).

Associations and friendships at this age are strongly based on similarities (homophily) with a tendency for peers to become similar to one another over time (Laursen, 2017). Reflecting this homophilic trend in middle childhood, children begin to forge closer relationships with peers of their own sex which often causes changes in the size and composition of a child's friendship network (CDC, 2016).

At this wave of *Growing Up in Ireland*, exploration of the Study Child's social network is expanded outwards to look towards their friends and the amount of time the Study Child spends with them from both the parent and child perspectives. Both the Study Child's report of the size of their friendship group and their Primary Caregiver's report of the number of close friendships are reported to provide a triangulation of information.

According to their Primary Caregivers, more than 97 per cent of all children had at least one 'close friend', with more than 50 per cent described as having four or more friends (Figure 5.12). There were no systematic differences in the size of the friendship groups for boys and girls.

Figure 5.12: Number of close friends among the 9-year-olds by gender (Primary Caregiver report)

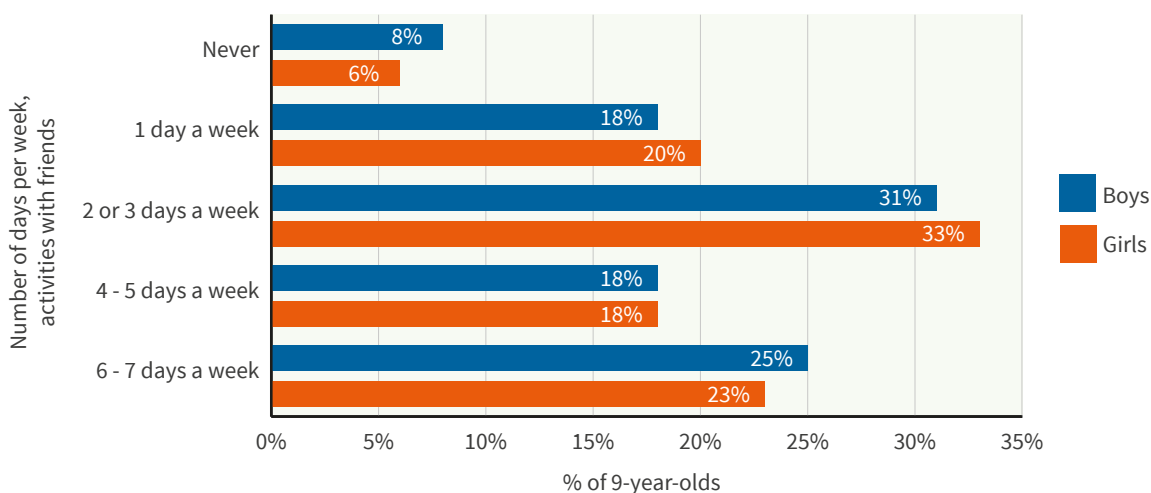


Note: Margins of error were, at most, ±1% for 'Boys' and ±2% for 'Girls'.

Children were also asked to report on their own friendships, though they were not asked about 'close' friends. Children tended to report relatively large friendship groups, with 60 per cent of all children reporting *more than 10* friends. A higher percentage of 9-year-old girls reported having no friends (4%) than did their parents (1%).

There were also no significant gender differences in the frequency that children did things with friends (Figure 5.13). For both boys and girls, the typical (i.e. modal) number of days engaged in activities with friends was 2 – 3 days per week (based on the Primary Caregiver's report): 31 per cent for boys and 33 per cent for girls. It is notable that 7 per cent of Primary Caregivers said their child *never* spent time in activities with friends.

Figure 5.13: Days per week 9-year-olds engaged in activities with friends by gender (Primary Caregiver report)



Note: Margins of error were, at most, ±1%.

5.5.2 EXPERIENCE OF BULLYING

While peer relationships can be a positive feature of childhood, many children also experience verbal, physical or emotional bullying (e.g. Dake, Price & Telljohann, 2003) and increasingly attention has turned to cyberbullying, though this is not highly prevalent at younger age-groups (Tokunaga, 2010). Evidence suggests that boys are more likely to become perpetrators and/or victims in physical, verbal and overall direct forms of bullying, whereas girls are more likely to get involved in indirect forms of bullying, such as exclusion (Tsitsika et al., 2014). There are also strong socio-demographic differences in the risk of being bullied in early childhood. Campbell et al. (2019) indicate that those living in disadvantaged socio-economic circumstances are more vulnerable to bullying than the general population to begin with. The Campbell study also outlined that there is a 'social gradient' of a 20 per cent greater risk of experiencing bullying in the lowest income quintile compared to the highest. An analysis of HBSC data from 2002 to 2010 by Chester et al. (2015) revealed that bullying was present among school children in every country studied. The international average in the early 2000s was 34 per cent, decreasing to 29 per cent by 2010

following a decline in bullying in over a third of countries in the study. Irish trends were stable over this period at about 28 per cent for boys and 25 per cent for girls. The HBSC asked children about bullying in the ‘last few months’ as opposed to ‘in the last year’ in *Growing Up in Ireland* which may explain the higher prevalence of bullying (41%) reported by 9-year-old children of Cohort ’98 (Williams et al., 2009).

Cross-sectional research indicates that there are potentially severe longitudinal effects of victimisation. For example, victimisation in early secondary school through bullying can result in elevated levels of depression, anxiety, suicidal ideation, substance abuse, school avoidance and loneliness, crime and delinquency in the following academic year (Bond, Carlin, Thomas, Rubin & Patton, 2001; Hutzell & Payne, 2012). Findings from longitudinal studies make it clear that there are persistent longitudinal effects from childhood and teen bullying that are still evident in adulthood. Research by Takizawa, Maughan, and Arseneault (2014), using the 1958 cohort of the British National Child Development Study (Power & Elliott, 2006), showed that after controlling for a wide range of background variables, those reporting bullying between the ages of seven and eleven years displayed significantly higher incidences of depression, anxiety disorders and alcohol dependence in their 40s and significantly lower cognitive functioning, socioeconomic status and well-being in their 50s. These observed effects intensified with the frequency of bullying victimisation, with those experiencing high frequency bullying almost doubling their risk of poor psycho-social outcomes across the lifespan.

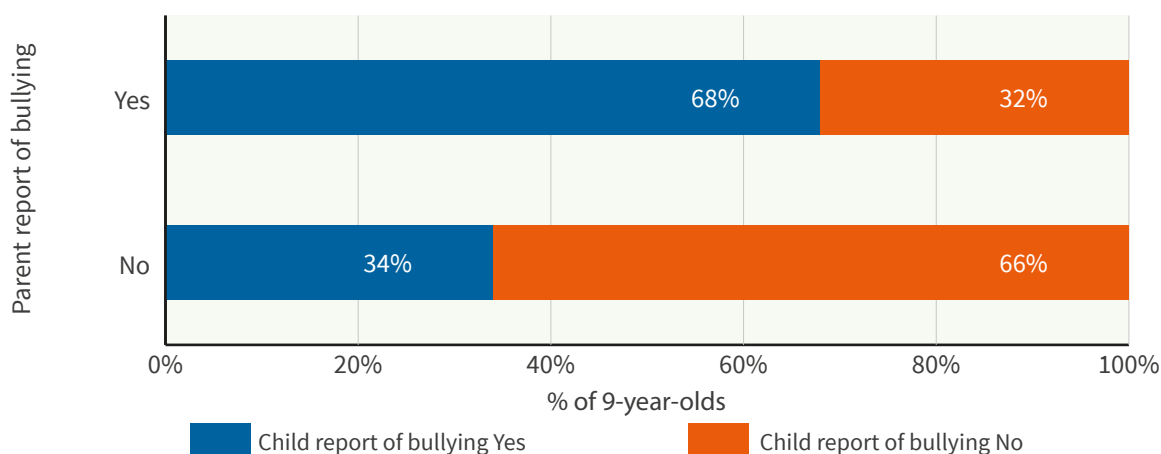
For Cohort ’08, a set of questions asked the Primary Caregiver whether the Study Child had been ‘a victim of bullying in the last year’ and what form the bullying took, with a complementary set of questions about being a victim of bullying in the last year. With the children, the more age-appropriate language of being ‘picked on’ was used instead. Further questions were asked of the Study Child about being a perpetrator of bullying in the last year. Again, this was framed in the more age-appropriate language of ‘picking on others’.

5.5.2.1 Descriptive statistics for parent and child reports on being the victim of bullying

Based on responses from Primary Caregivers, 21 per cent of children had been victims of some form of bullying in the last 12 months. This is just under half of the proportion of victimisation reported by the 9-year-olds themselves, 38 per cent of whom indicated that someone had ‘picked on them’ in the last year. Overall, these figures were similar to those recorded from the Primary Caregiver and child reports in Cohort ’98 at 9 years of age (24% and 41% respectively) (Williams et al., 2009). These figures continue to suggest that a large proportion of parents were unaware of bullying experienced by their child, or that children and adults had different perspectives on this kind of victimisation.

Figure 5.14 explores the correspondence between parent and child reports of bullying. Of the 21 per cent of 9-year-olds whose Primary Caregivers said they had been bullied (around 1,600 children in the sample), just over two-thirds had also self-reported ‘being picked on’ (68%, just under 1,100 children). The remaining 32 per cent of the ‘parent-reported bullying’ children (circa 500 individuals) effectively disagreed and said that they had not been ‘picked on’ in the last year.

Figure 5.14: Correspondence between child reports of being bullied and Primary Caregiver reports of their child being bullied



Note: Percentages are limited to cases where both the parent and child answered this question. Margins of error are, at most, ±2%.

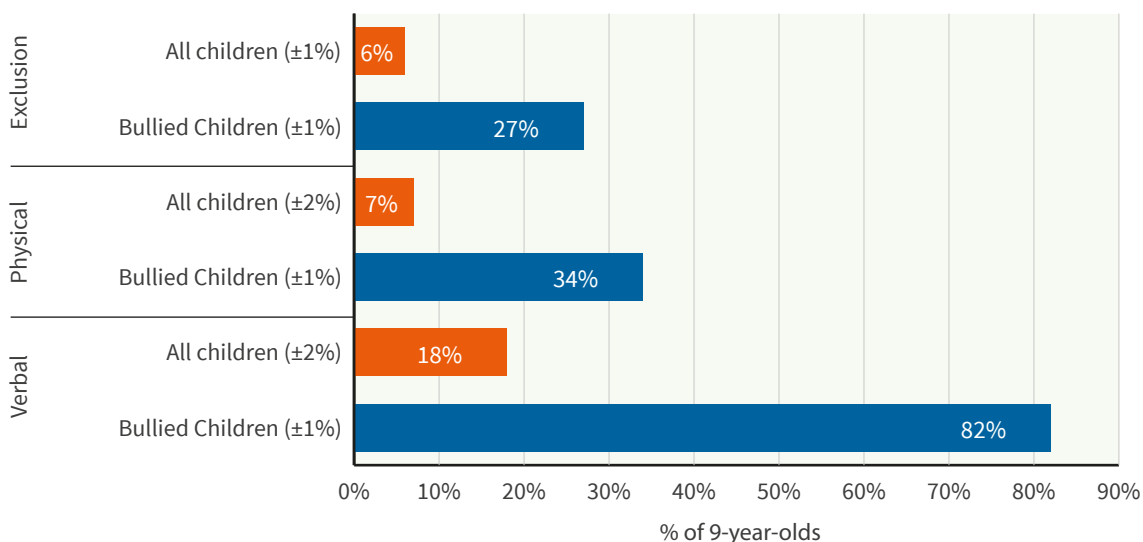
Conversely, over a third of the 9-year-olds whose parents did not report any bullying themselves reported being picked on (roughly 2,000 out of 6,000 children in the sample). This suggests that quite a large number of children who felt victimised were not recognised as such by their Primary Caregivers. Further analysis will be required to explore the reasons for these ‘mismatches’ between parent and child report but the children who reported being picked on where their Primary Caregiver did not report any bullying are of particular concern.

5.5.2.2 Nature of bullying victimisation

Parents and children who reported bullying (or being picked on) were asked about the nature of the bullying. Specifically, they were asked whether the bullying had taken a physical form (*by shoving, pushing, hitting*), verbal form (*by name calling, slugging*), had occurred via electronic means (*by text messaging, emails, online etc.*), written messages/notes, or through exclusion (*leaving me out of games/chats*). These figures are displayed in Figure 5.15 for parent report and in Figure 5.16 for the child report. For both graphs, frequencies are presented for just those children experiencing bullying, and as a percentage of all children.

Both Primary Caregivers and children reported verbal bullying as the most common form of bullying: 82 per cent of bullied children according to parents and 58 per cent according to the child’s self-report. These figures corresponded to 18 per cent and 21 per cent of all children in the sample (parent and child reports respectively).

Figure 5.15: Primary Caregiver report of method of bullying experienced by 9-year-olds as a percentage of those reported as experiencing bullying and as a percentage of all 9-year-olds

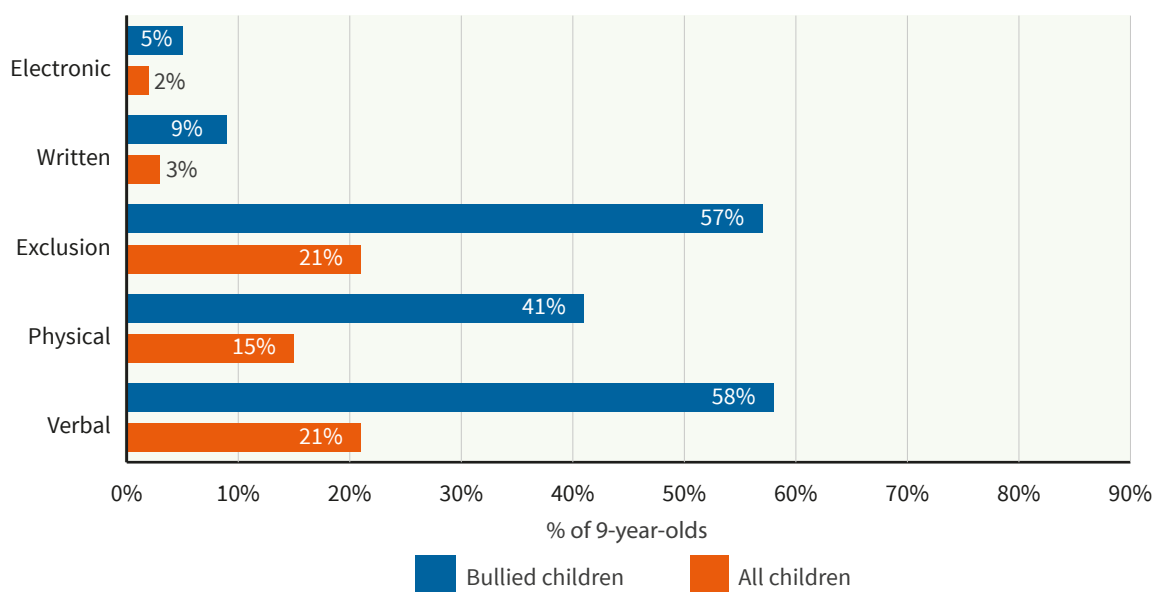


Note: Margins of error are shown in parentheses after the group label.

Physical bullying and exclusion were the next most commonly reported figures by Primary Caregivers, with 34 per cent reporting physical bullying and 27 per cent indicating exclusion among all children identified as being bullied. Small numbers of parents reported electronic, written or other forms of bullying. These were around 2 per cent each of cases where the parent reported bullying, but less than 1 per cent when all children were considered.

The child’s report of these forms of bullying was quite different, however, with the equivalent percentage for exclusion at 57 per cent and 41 per cent for physical bullying – both considerably higher than the parents’ report. Parent and child reports also differed in relation to other types of bullying. Written bullying was reported at more than three times the rate by children as by parents at 9 per cent, and electronic bullying was more than double the rate of that reported by parents at 5 per cent of children who indicated victimisation. These broad trends in the type of bullying experienced and in the mismatches between parent-reported and child-reported bullying mirrored those seen at the same age among Cohort '98 (Williams et al., 2009).

Figure 5.16: Child report of method of bullying experienced by 9-year-olds as a percentage of those reporting experiencing bullying and as a percentage of all 9-year-olds

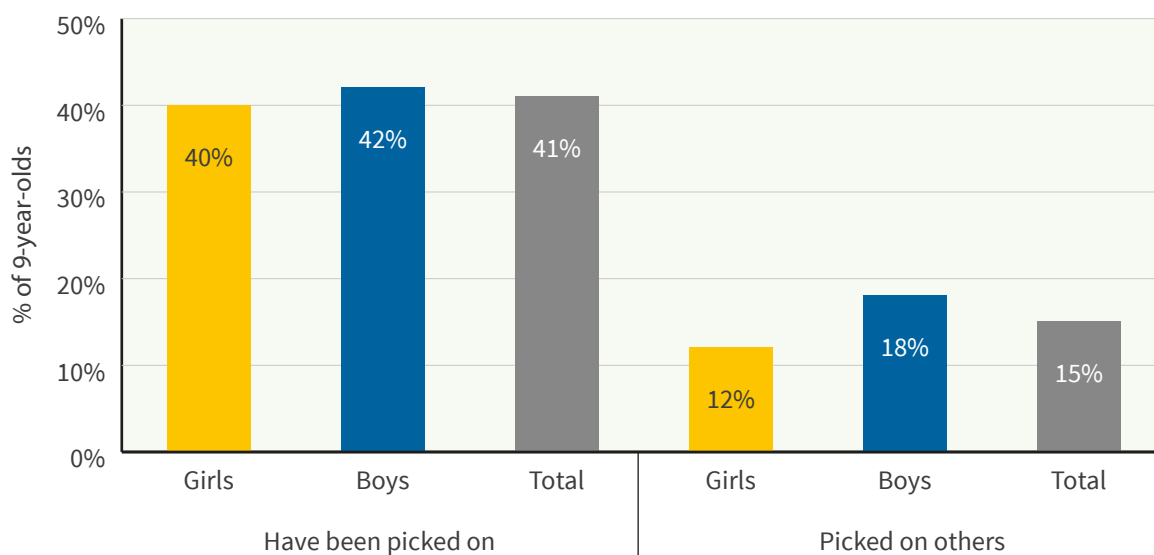


Note: Margins of error were, at most, ±1%

5.5.2.3 Gender differences in bullying experiences

The following analysis focusing on gender differences uses the child’s report of ‘being picked on’ and ‘picking on someone (else)’; i.e. being a victim or the bully (or both). Figure 5.17 shows that there was little difference in the proportion of boys and girls who experienced bullying at 9 years of age, with 40 per cent of girls and 42 per cent of boys having reported bullying of some form.

Figure 5.17: Being picked on vs picking on others by gender (Child report)

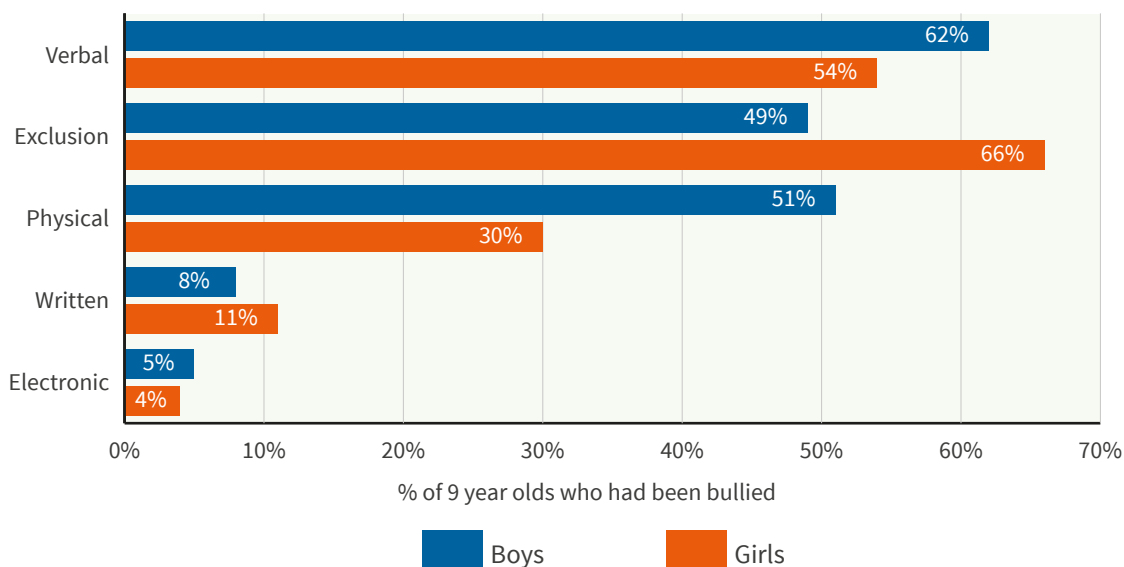


Note: Margins of error were, at most, ±2%

In contrast, Figure 5.17 also shows that a greater percentage of 9-year-old boys said they had picked on someone (18%) than girls (12%).

Expressed as a percentage of the 41 per cent of children who said they were bullied, Figure 5.18 shows that boys tended to experience slightly more verbal and considerably more physical bullying (62% and 51% respectively for boys, 54% and 30% for girls). A greater percentage of girls reported exclusion and written bullying (49% and 8% respectively for boys, 66% and 11% for girls). Both sexes shared a small but equal likelihood of experiencing electronic forms of bullying.

Figure 5.18: Method of being bullied among those who had experienced bullying by child gender (Child report)



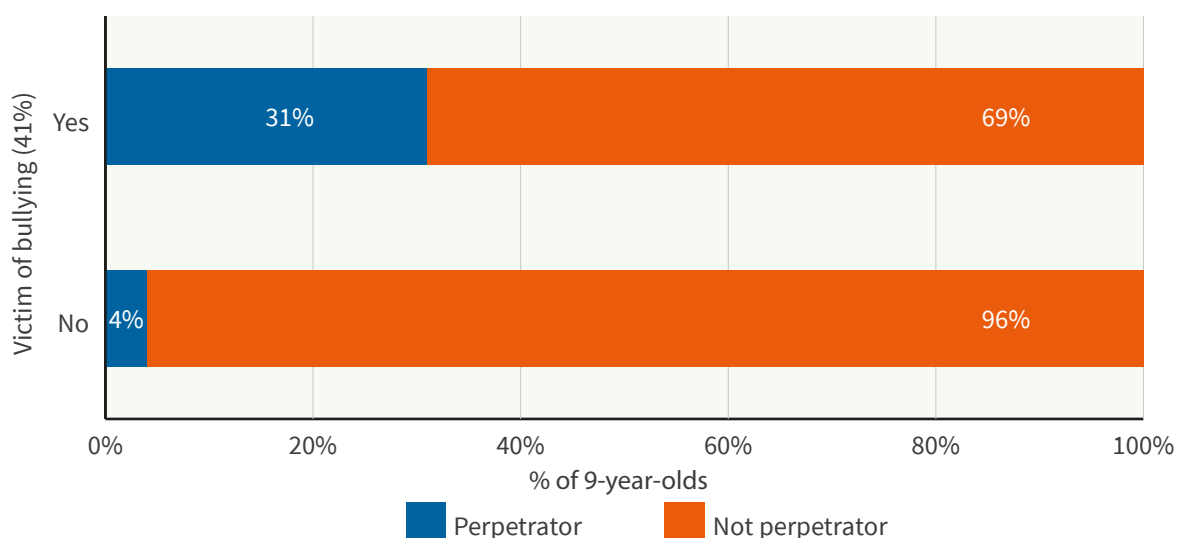
Note: Margins of error were, at most, ±2%

There were also gender differences in the type of bullying behaviour directed at others (not illustrated). Girls who had picked on others were more likely to have engaged in *exclusion* or *written* bullying forms (48% and 11% respectively for girls, 41% and 6% for boys). Boys were more likely to have used *verbal* and *physical* bullying (34% and 26% respectively for girls, and 47% and 38% for boys).

5.5.2.4 Being both bully and victim

This subsection examines the overlap between being a victim and a perpetrator of bullying. Previous research indicates that children in both the victim and bully categories are of particular concern as they exhibit a high risk of behavioural problems and psychosocial difficulties when compared to bully only or victim only groups (Wolke and Lereya, 2015; Wolke, Woods, Bloomfield & Karstadt, 2000). Figure 5.19 shows the proportions of 9-year-old children who reported bullying others by whether they themselves had been bullied. A much larger percentage of children who reported being bullied admitted to bullying other children compared to those who had not experienced being bullied (31% compared with 4%)⁴⁰. Thus, the odds of a child engaging in bullying were almost eight times greater if they reported being bullied themselves compared to those who had not experienced bullying.

Figure 5.19: Perpetration of bullying by victimhood status (Child report)



Note: Margins of error are ±1% for ‘not victims of bullying’ and ±2% for ‘victims of bullying’.

⁴⁰ Percentages in Figure 5.19 come from a cross-tabulation of bullying by victimisation status and are from a ‘within victimisation’ perspective.

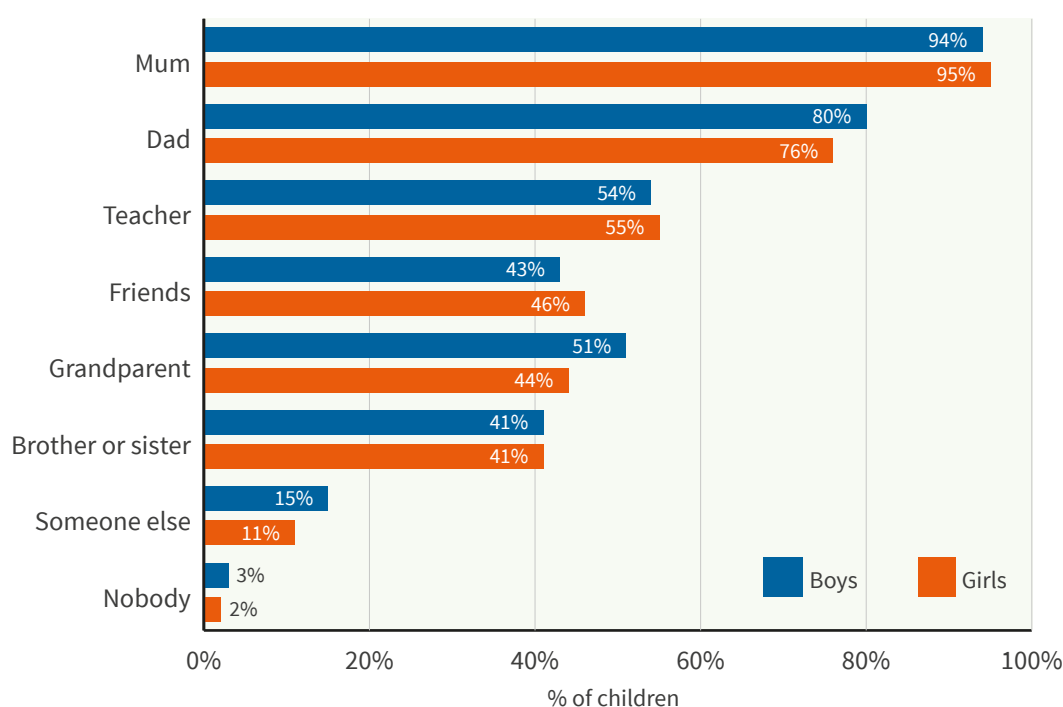
5.5.3 SUPPORT

Previous research, albeit on adolescents, has indicated the protective role played by having ‘one good adult’ in relation to feelings of depression and anxiety (Dooley, Fitzgerald & Giollabhui, 2015). As already noted, the children of Cohort ‘08 completed their own interview for the first time as 9-year-olds. This included a question on who they could talk to about a problem. The answer categories were *Mum*⁴¹, *Dad*, *Teacher*, *Friends*, *Brother or sister*, *Grandmother/Grandfather*, *Someone else*, or *Nobody*.

The Irish Health Behaviour of School-aged Children survey (Walsh, Clerkin & Nic Gabhainn, 2004) found that 78 per cent of children aged 10-17 found it easy to talk to their mother when something was bothering them, and this percentage was higher among girls, younger children and children from lower income groups.

Figure 5.20 presents the child’s report of whom they would talk to, according to the child’s gender. The child could select multiple options from the list, so the percentages do not add to 100 per cent. Nearly all children said they would talk to their mother and a majority would also talk to their father, with a slightly higher percentage of boys feeling able talk to their father (80% vs 76%) or grandmother/grandfather (51% vs 44%) than girls.

Figure 5.20: Someone to talk to about a problem by Study Child gender (Child report)



Note: Margins of error were, at most, $\pm 2\%$

Other individuals whom the child could talk to were teachers (54%), friends (45%), and siblings (41%) but there were no gender differences for these sources of support. A very small number of children (2.5% overall) reported that they would talk to nobody about a problem.

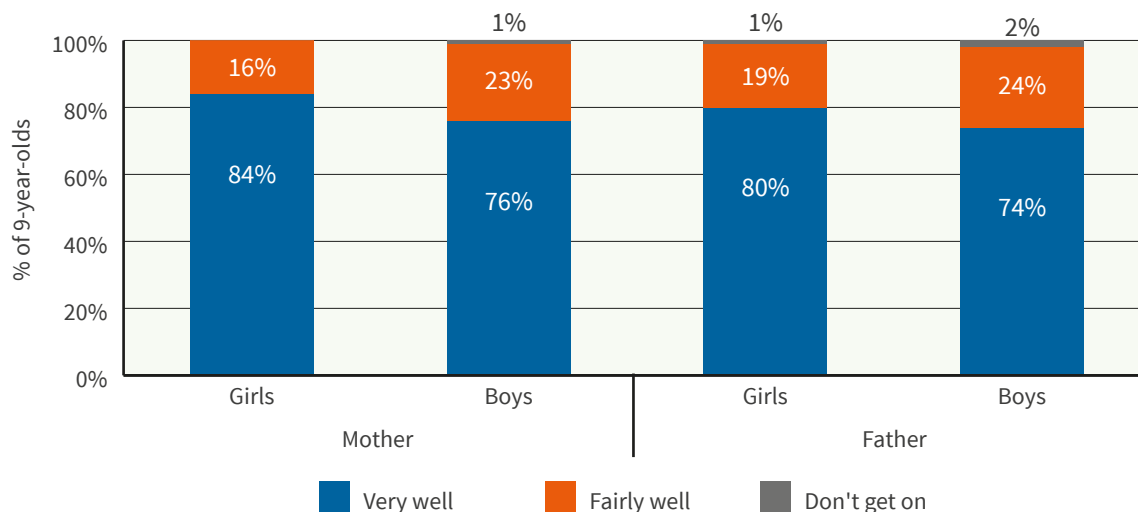
5.5.4 CHILD’S REPORT ON THEIR RELATIONSHIP WITH PARENTS

Supplementing questions about having someone to talk to, two short questions in the self-complete questionnaire asked the child how well they got on with their mother and father.

At 9 years of age, the majority of children in both genders reported that they got on *very well* with their mother and father (80% and 77% respectively) (Figure 5.21). Smaller proportions said they get on *fairly well* with their mother and father (19% and 22% respectively). The number who said they didn’t get on with their parent was too small to reliably report for mothers, and only a little under 2 per cent of children reported not getting on with their father. These figures are consistent with the parents’ report of their relationship with the child (using the Pianta and Parenting Style scales), where high degrees of closeness with, and warmth towards, the Study Child were reported by both mothers and fathers (typically the Primary and Secondary Caregiver respectively, see Table 5.5).

⁴¹ Wider definitions of mother and father ‘figures’ have been used with older participants (Williams, Murray, Thornton, O’Mahony & Neary, 2018), but piloting of these kinds of questions with 9-year-olds met with confusion, so a simpler question was retained for the main study (Murray, Williams, Gallagher, Thornton et al., 2020).

Figure 5.21: How well the 9-year-old gets on with parents by gender (Child report)



Note: The number reporting they 'don't get on' with mother is too small to report. Margins of error are, at most, $\pm 1\%$.

There were some differences between boys and girls in how well they felt they got on with their parents: girls were more likely to get on *very well* with their mother (84% vs 76%) and father (80% vs 74%) than boys (Figure 5.21). Boys were slightly overrepresented among children who said they got on *fairly well* with their mother and father respectively (23% and 24% for boys; 16% and 19% for girls).

5.6 SUMMARY

This chapter provided preliminary descriptive analysis on several aspects of the Study Child's emotional and behavioural development at 9 years of age in *Growing Up in Ireland*. It considered a wide range of both child outcomes and key relationships in the microsystem, namely parents and peers. An important dimension to the current wave was the availability of the child's own voice in describing their feelings and experiences.

Most children were doing well in terms of their socio-emotional development, as measured by the Strengths and Difficulties Questionnaire (SDQ), being low on average on scales relating to difficulty and high on the *prosocial behaviour* scale. On average, boys were reported by both parents and teachers to have more problems with *conduct, hyperactivity/inattention* and *peer problems* and fewer *prosocial* behaviours than girls. Looking at the children classified as being in the 'at risk' category (that is, the highest decile of difficulties scores), significant differences were evident by socio-demographic characteristics, with children in low income or one-parent families and those whose mothers had Junior Certificate or lower qualifications more likely to fall into this group (15% vs 6% for the highest income quintile; 18% vs 9% for two-parent families; 19% vs 6% for degree-level qualifications). From a longitudinal perspective, a fifth of children had fallen into the 'at risk' category for at least one of the waves. However, these difficulties tended to be transitory with only 2 per cent of children being in this group at all three waves between 3 and 9 years of age.

Children's self-ratings on the Piers-Harris Self-Concept scale tended to be positive, though 17 per cent of the sample fell into the very low or low group. Girls reported a slightly higher average mean *self-concept* score overall (girls 27.2 vs boys 26.8), and boys reported slightly more *freedom from anxiety* (girls 6.5 vs boys 6.7) but, while statistically significant, these gender differences were very small. The proportion of children reporting the lowest scores on the Piers-Harris scale varied to a moderate extent by the key socio-demographic variables. Children from lower income, single-parent and lower educated families were over-represented at the lowest end of the *self-concept* scale.

Exploration of the interaction between the Strengths and Difficulties Questionnaire and the Piers-Harris Self-Concept scale demonstrated that children exhibiting the greatest behavioural difficulties in the SDQ tended to be the children who reported the lowest *self-concept* scores on the Piers-Harris scale. At the policy level, interventions aimed at improving home or school behaviours could also consider how these might increase feelings of self-worth. Children's Piers-Harris scores have been found to be responsive to changes in parenting style, for instance, making self-esteem a good potential target to support wider behavioural change (Milevsky, Schlecter, Netter & Keehn, 2007).

Overall, Irish parents reported close relationships that were high in closeness and low in conflict with their 9-year-old children. There were no differences in the level of closeness to their child reported by the Primary or Secondary Caregivers by family type or family social class. However, one-parent households and those that were in the lower skilled/never worked social class group were more likely to report their relationship in the 'worst' category for *conflict* with the Study Child, as measured by the Pianta scale. This was in the context of overall low levels of reported conflict in Cohort '08. From the child perspective, the majority of 9-year-olds reported that they got on *very well* with their mother (80%) and father (77%). Children also reported on support networks, and overwhelmingly indicated that they would seek support from their mother, parents and teachers 'to talk to if they had problems'. Boys reported a slightly higher tendency to talk to their fathers or a grandparent than girls if they had problems.

The findings indicate low levels of parental conflict but more variation in levels of parental stress among the sample. One-parent households tended to report being in the highest category for parental stress more often than two-parent households (13% compared with 9%). There were negligible differences in stress or parental conflict across different social class groups. However, stronger differences were seen based on Primary Caregiver education. Households with Junior Certificate education or less tended to report the highest scores for *exposure to conflict* more often than degree-educated households (12% vs 8%) but the reverse was the case for parental stress (11% for degree-educated households compared with 7% for Junior Certificate or less).

More than 90 per cent of parents said that their 9-year-old had at least two to three 'close friends' with less than 2 per cent of children described as having no friends. Children were asked about 'friends' (rather than 'close friends') and tended to report a larger friendship group, with 60 per cent reporting ten or more friends. Parents said their 9-year-olds typically had regular contact with their close friends, with a quarter reporting that their child saw friends every day. Overall gender differences in number of friends and amount of contact at 9 years of age were quite small using either parent or child report.

Information on being bullied was collected from both the child and the Primary Caregiver. Thirty-eight per cent of 9-year-olds reported they had been 'picked on' in the last year while 15 per cent reported picking on others. Similar percentages of boys and girls reported being bullied but a slightly higher percentage of boys (18%) than girls (12%) reported bullying others. Bullying and victimisation were strongly related, with a 9-year-old almost eight times more likely to engage in bullying behaviour if they had reported being bullied themselves in the last year.

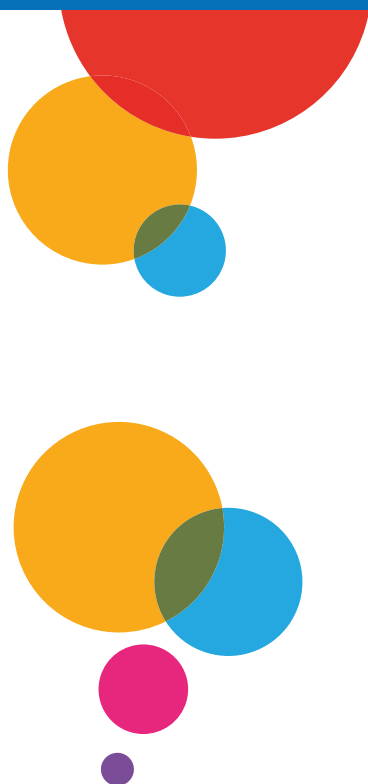
Children tended to report a higher frequency of being bullied than their parents (38% compared with 21%), a finding that has significant implications for support for children who have been bullied and for such bullying being addressed. Parents were most likely to indicate the bullying experienced was physical in nature, while children reported much higher percentages of verbal bullying and exclusion. Boys tended to experience more verbal and physical bullying than girls, the latter being more likely to experience exclusion or written bullying. Overall occurrence of electronic bullying was at about 5 per cent of all cases of bullying which is commensurate with other research in this field at this age (O'Neill, Grehan & Olafsson, 2011).

Although broad trends for bullying were similar between Cohort '08 and Cohort '98 of *Growing Up in Ireland* at 9 years of age, more detailed multivariate analysis of the data could expand on whether the nature and overall frequency of bullying has changed over time in parallel with changes in government policy for schools to combat bullying (Anti-Bullying Working Group, 2013). This policy was enacted as the Bullying Action Plan across primary and second-level schools for the whole period that Cohort '08 has been in education and from around Junior Certificate/Transition year for Cohort '98 (Department of Education and Skills, 2013). The rich *Growing Up in Ireland* data will permit both cross-cohort and longitudinal modelling of both patterns of bullying and victimisation among Irish children as well as the factors associated with them and their consequences for outcomes during childhood and adolescence.



Chapter 6

PLAY AND ACTIVITIES



6.1 INTRODUCTION

The Irish Government's National Children's Strategy emphasises play as a fundamental need of children (Government of Ireland, 2000). As early as 2000, the National Children's Strategy identified a deficit in play and recreational activities through consultations with children and other organisations. The Government's *Ready, Steady, Play* policy set out to, among other objectives, increase awareness of the importance of play, increase the availability of 'public play opportunities', improve the quality and safety of play areas, and increase relevant training for those providing play services (National Children's Office, 2004).

While there tends to be no clear definition of the concept of play in the research literature (Cabrera, Karberg, Malin & Alldoney, 2017), this chapter considers a range of activities under this umbrella heading, including free play, play with friends and family, play with electronic gadgets, physical activity and organised activities.

6.1.1 PLAY AND SKILL DEVELOPMENT

Bergen and Fromberg (2009) define play in middle childhood as 'voluntary and self-organised' (p. 1), emphasising that when children are given activities by adults, the children tend to define this activity as work rather than play (King, 1982 in Bergen & Fromberg, 2009). Bergen and Fromberg assert that play in middle childhood consists of a wide range of activities: pretend play; practice play – play involving repetition of activities, often in order to practice skills; games with structure and rules; construction play – play involving building or art; and rough and tumble play (see also Pellegrini & Smith, 1998). Developing and negotiating rules assumes a prominent part in play in middle childhood and this process is seen as contributing to children's socio-emotional and cognitive development (Bergen & Fromberg, 2009). Play becomes more complex as children age, with periods of play becoming longer, language complexity increasing, ideas becoming more coherent, and physical skills becoming increasingly cultivated (Fromberg, 2002). Children of this age have developed complex motor co-ordination (Field & Temple, 2017) and this enables them to participate in physical games such as 'catch' or sport. By age 9, children are spending more time with their peers; 35 per cent of 9-year-olds in Cohort '98 (Child Cohort) of the *Growing Up in Ireland* study rated 'hanging out with friends' as their favourite thing to do in their free time.

During middle childhood, play is more self-directed, allowing children to hone skills of self-control, collaboration, and negotiation (Reed & Brown, 2000). Participation in construction play allows children to develop spatial awareness skills, which are subsequently beneficial for school subjects such as Mathematics and Physics (Bergen & Fromberg, 2009). Increased participation in rule-based games, common at this stage, allows children to develop self-control, turn-taking, and precision (Athey, 2018). Rough and tumble play is also common at this age and has been found to foster self-control (Reed & Brown, 2000) as well as emotional regulation and empathy (Carson, Burks & Parke, 1993). Creative play can help children develop skills relating to collaboration, teamwork and cooperation, and affiliation with peers (Fromberg, 2002) as well as patience and perseverance (Singer & Singer, 2006) and empathy (Hughes, 2009).

6.1.2 CHANGES IN THE NATURE OF PLAY

The nature and scope of play have the potential to change over time with, for example, advances in technology and societal changes in how much freedom or 'risk' is acceptable for children aged 9 years. The latter phenomenon could be related to the increasing prevalence of media crime reports (Louv, 2008), changes in the physical environment (e.g. less open space, more traffic) (National Children's Office, 2004), increased use of vehicles as means of transportation, and concerns about responsibility or litigation in the event of injury (National Children's Office, 2004). There is some evidence that children nowadays are given less freedom to walk to school or their structured activities alone, reducing their independence (Dowling, 2000; Watchman & Spencer-Cavaliere, 2017) and perceived 'time scarcity' means that families may opt to drive to activities to save time (Strazdins & Loughrey, 2008). In contrast to previous generations, children generally have more toys/accessories and it is increasingly common for children to engage in self-directed play with devices such as tablets, games consoles, or phones, an issue explored in more detail later in the chapter (National Children's Office, 2004).

6.1.3 PLAY AND GENDER

Play, as an activity setting in the microsystem, is a key area in which gender and cultural practices are learned (Blakemore, Berenbaum & Liben, 2013). Parents are seen to encourage a rougher type of play with boys (Mascaro, Rentscher, Hackett, Mehl & Rilling, 2017; McIntyre & Edwards, 2009). Toys parents choose to encourage their children to play with are often gendered (Blakemore et al., 2013; Leaper, 2002), conferring different opportunities to learn different skills depending on the child's gender (Blakemore & Centers, 2005). For example, boys are more likely to be encouraged to engage in construction-type

play, with greater possibilities to develop spatial awareness skills and practise task completion (e.g. building an aeroplane) (Leaper, 2002; Blakemore et al., 2013). In contrast, girls are often encouraged to play house or play with dolls, practising the skills of caretaking, nurture, and cooperation (Leaper, 2002; Blakemore et al., 2013).

For the current cohort of children in **Growing Up in Ireland**, evidence of gender differences in play emerged in earlier waves. For example, at 5 years of age boys were more likely to participate in physical play (44% compared to 32%) (Growing Up in Ireland Study Team, 2013). When they were 7/8 years old, girls tended to prefer crafts, dance, reading, and 'make-believe' while boys were more likely to engage in physical games (Growing Up in Ireland Study Team, 2017b). Section 6.2 looks at children's favourite activities at the age of 9.

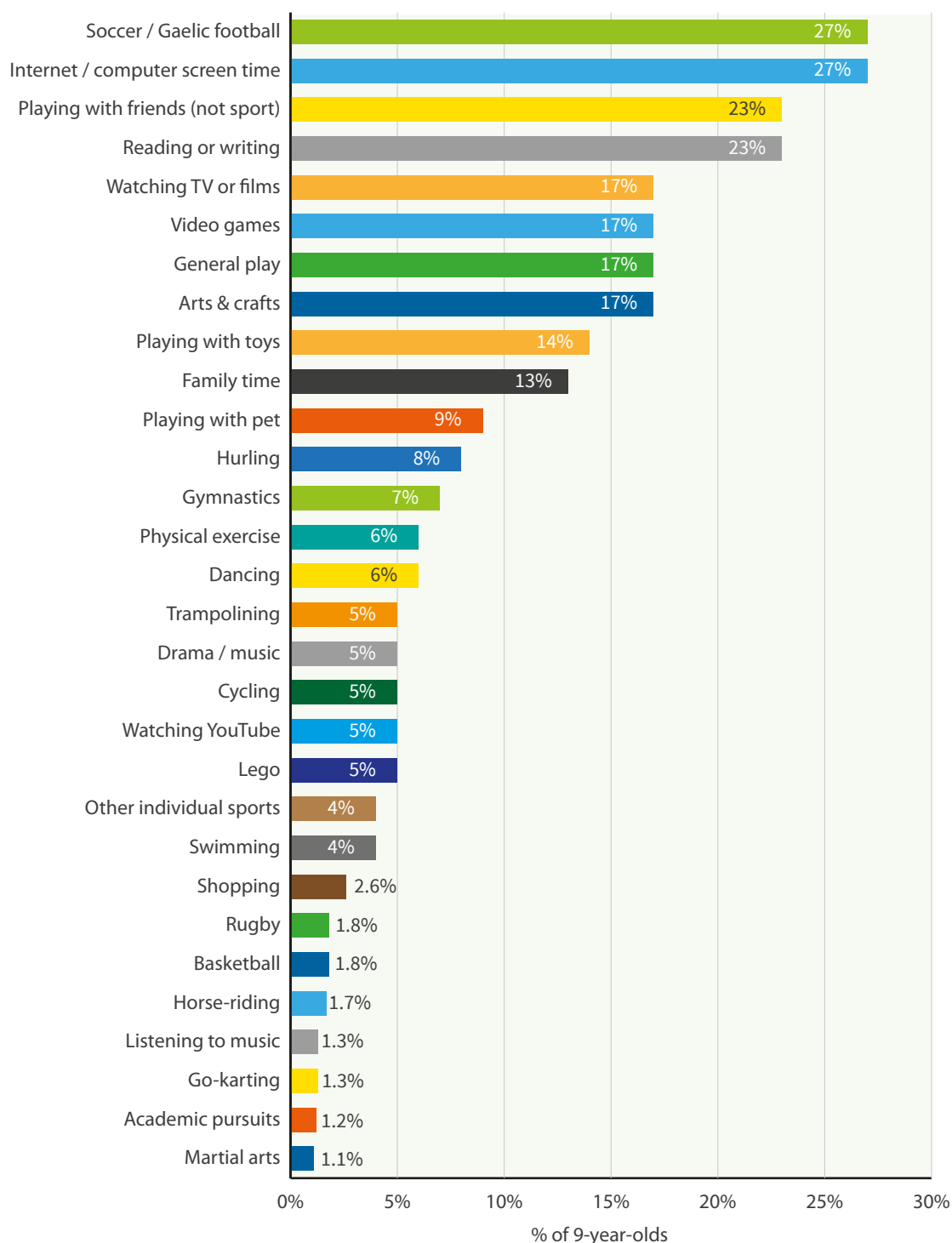
6.2 CHILDREN'S FAVOURITE ACTIVITIES

Now that the children in this **Growing Up in Ireland** cohort were aged 9 years, and being interviewed independently, there was more scope to hear their own views in relation to topics such as their favourite free-time activities. When this cohort were 7/8 years old, their Primary Caregivers reported on their engagement in different play activities: at that time the most popular form of play was *reading for pleasure* followed by *make-believe play* and *play on a computer*. Activities such as *make-believe*, *crafts*, *dance*, and *reading* were more popular for girls whereas physically active games and computer games were favoured by boys (Growing Up in Ireland Study Team, 2017b). For Cohort '98 of **Growing Up in Ireland**, sport was mentioned as a favourite hobby or activity by 65 per cent of the 9-year-olds. There were also gender differences in favourite activity – 74 per cent of boys favoured sport versus 55 per cent of girls, whereas girls more frequently preferred cultural activities (17% vs 2%) (Growing Up in Ireland Study Team, 2009).

Nine-year-olds in Cohort '08 were asked 'Could you tell me three things you like to do most in your free time? (your favourite thing)', with these open-text responses then coded into categories. Figure 6.1 shows the most common responses provided by the 9-year-olds (amalgamating responses to their first, second and third most favourite thing to do in their free time). The most frequently mentioned activities (both 27%) were football (including both soccer and Gaelic football) and using computers/tablets/laptops to play on the internet. These were followed by interacting with friends in a non-sport situation (23%) and reading or writing (23%). Other popular activities included watching TV or films, playing video games, general play and arts/crafts (all 17%).

Focusing specifically on the overall *most favourite thing* mentioned by the study children, football was still the most common answer (15%), followed by playing with friends other than in sport (9%), using a computer/tablet/laptop for the internet, reading or writing, and general play (all 8%).

Figure 6.1: Study Children’s favourite thing to do most in their free time

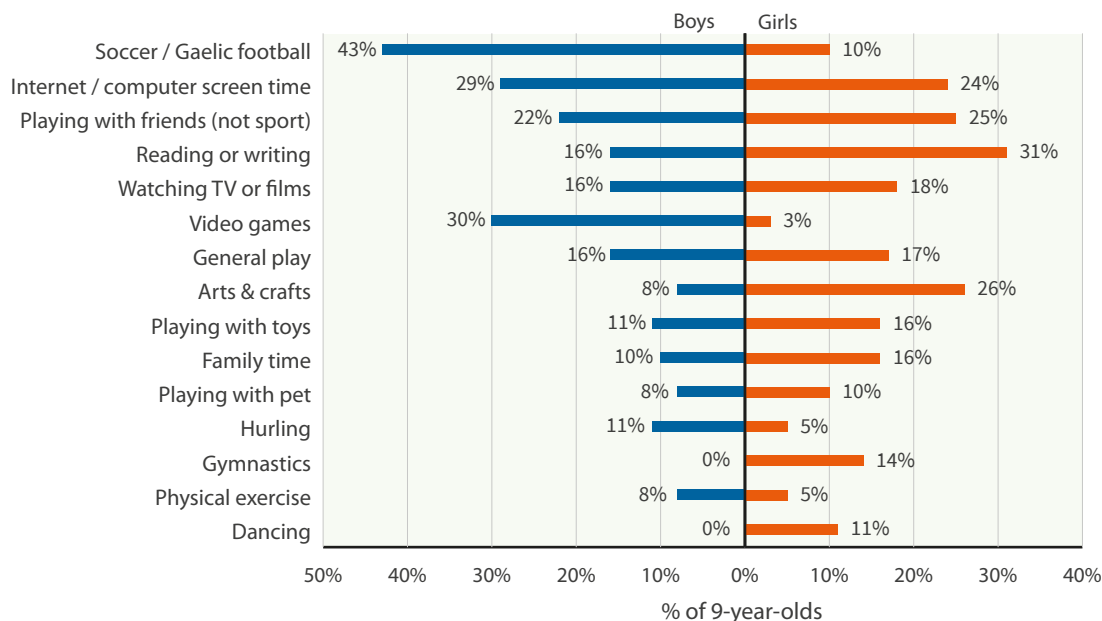


Note: Margins of error are, at most, ±1%.

6.2.1 GENDER DIFFERENCES IN FAVOURITE ACTIVITIES

Girls and boys often differed in their opinions of ‘favourite activities’ (Figure 6.2). The top two favourite activities for boys were football (43%) and video games (30%) which only featured in the top three for 10 per cent and 3 per cent of girls respectively. In contrast, reading and writing was more popular among girls (31% vs 16%), as were arts and crafts (26% vs 8%). Some types of physical activity also showed stark gender patterns: while gymnastics and dance were favourite activities of 14 per cent and 11 per cent of girls respectively, fewer than 1 per cent of boys mentioned them. Despite very marked gender differences in these activities, there were some commonalities such as watching TV or films (16% boys, 18% girls), general play (16% boys, 17% girls) and playing with a pet (8% boys, 10% girls). Boys were slightly more likely to list using computers and the internet among their favourite activities (29% boys, 24% girls).

Figure 6.2: Children’s (selected) favourite activities, according to gender

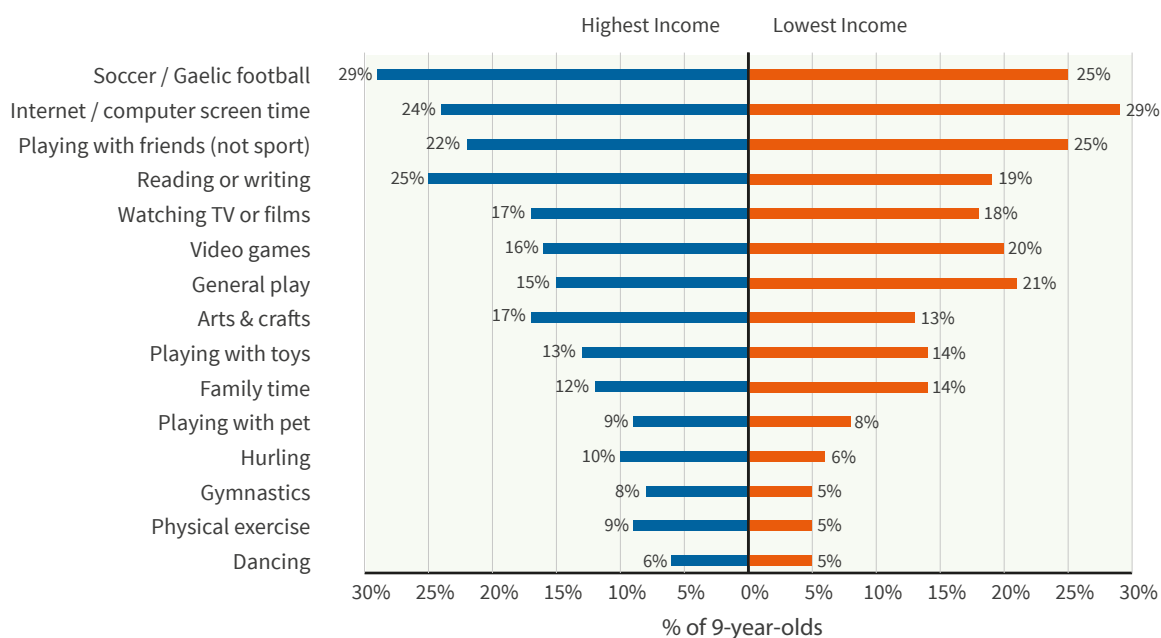


Note: Margins of error are, at most, ±2% for boys and ±1% for girls.

6.2.2 SOCIO-DEMOGRAPHIC DIFFERENCES IN FAVOURITE ACTIVITIES

Children from the highest and lowest income quintiles were surprisingly similar in their favourite activities (Figure 6.3). Where differences were observed, they were most likely to be in relation to reading or writing (25% highest income vs 19% lowest) and general play (15% highest vs 21% lowest income). Proportionally, there were also differences in relation to some of the physical activities such as hurling, gymnastics and physical exercise – although these were less popular overall.

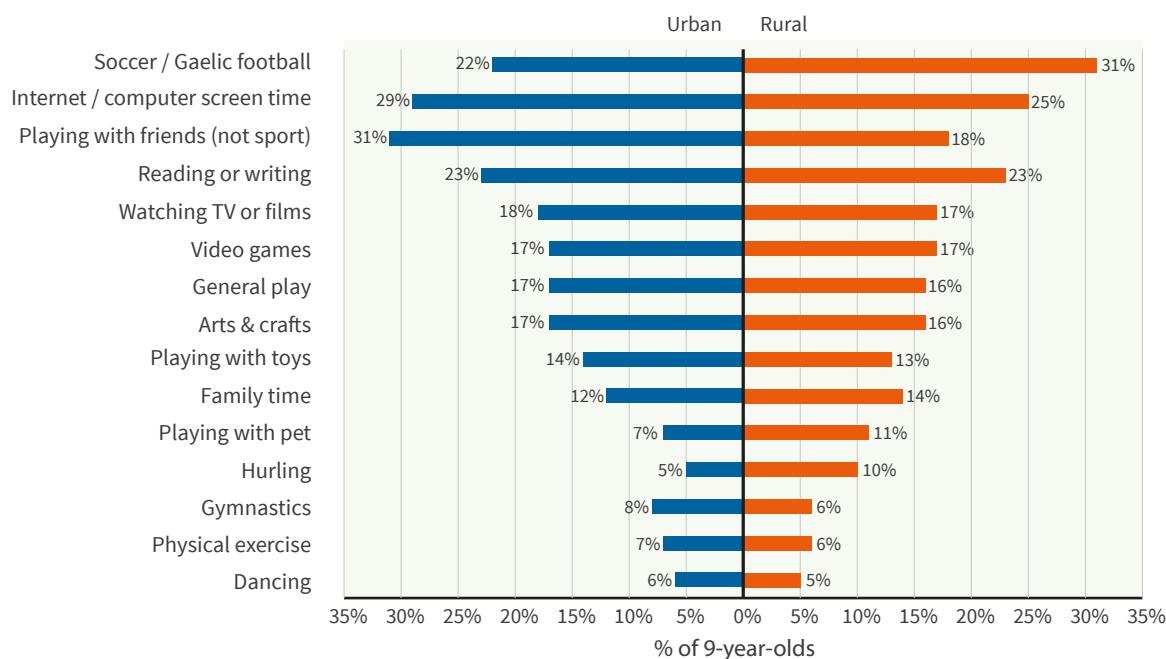
Figure 6.3: Children’s (selected) favourite activities, according to family income



Note: Margins of error are, at most, ±2% for ‘Highest income’ and ±3% for ‘Lowest income’.

There were also commonalities, rather than substantive differences, between children from rural and urban areas. Where significant differences by region were observed (Figure 6.4), these were in relation to football (22% urban, 31% rural), playing with friends other than sport (31% urban, 18% rural), hurling (5% urban, 10% rural) and playing with a pet (7% urban, 11% rural).

Figure 6.4: Children's (selected) favourite activities, according to region



Note: Margins of error are, at most, $\pm 2\%$ for 'Urban' and $\pm 1\%$ for 'Rural'.

6.3 ORGANISED ACTIVITIES

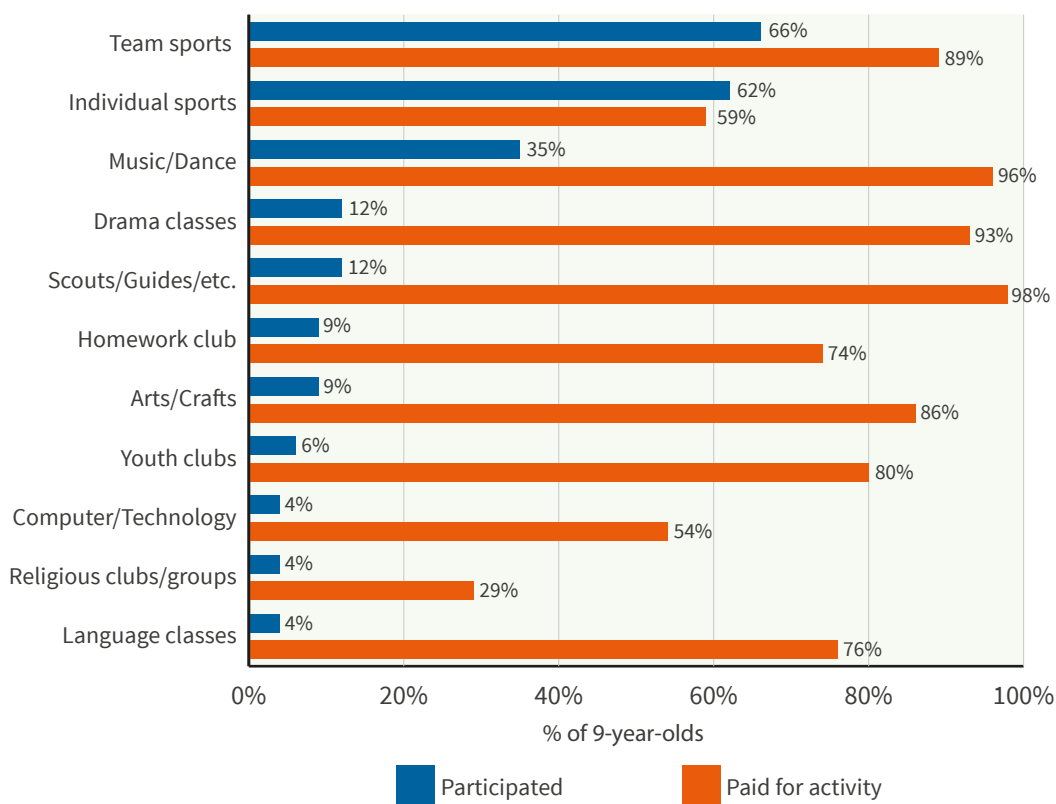
Organised activities differ from self-directed play due to their structured and supervised nature, but nonetheless offer opportunities for socio-emotional and physical development (e.g. Watchman & Spencer-Cavaliere, 2017; Bloom, Grant & Watt, 2005). Common organised activities in Ireland include sports, academic classes such as language classes, theatre and dance, and music lessons. Intergenerational studies demonstrate that children are progressively engaging in less unstructured, free play and spending more of their free time participating in organised, structured, supervised activities with more rules and restrictions imposed on the child (Gaster, 1991; Karsten, 2005). Watchman and Spencer-Cavaliere (2017) found that parents often viewed play as an unnecessary distraction from necessary skill acquisition that could be learned from participation in, for example, academic, cultural, or sport activities, despite the evidence (see Section 6.1.1) of its benefits for child development. Research suggests that higher family income and social class are related to a higher degree of participation in structured activity (Williams et al., 2009; McCoy, Quail & Smyth, 2014) – possibly because many of them have to be paid for – conferring different opportunities on children from different backgrounds. Parents may also be more likely to arrange organised activities for girls (Cheadle & Amato, 2011).

In *Growing Up in Ireland* at 9 years, the Primary Caregiver reported on what types of organised activities the child participated in, and also whether the activity had to be paid for. The remainder of this section presents the current findings.

6.3.1 SOCIO-DEMOGRAPHIC TRENDS IN PARTICIPATION

As shown in Figure 6.5, *team sports*, *individual sports*, and *music or dance* were the most common organised activities for 9-year-olds (66%, 62%, and 35% respectively). Figure 6.5 also shows what proportion of parents had to pay for their child's participation in that activity. It is clear that most activities came at a cost. For example, just over a third of children (35%) engaged in organised *music or dance* activities, with almost all (96%) of the participants being charged for it. There was a greater incidence of free participation for *individual sports*, with 62 per cent of 9-year-olds involved but only 59 per cent of their parents paying for it (in other words, 37% of 9-year-olds participated in paid-for organised individual sports, 25% participated for free, while 38% did not participate).

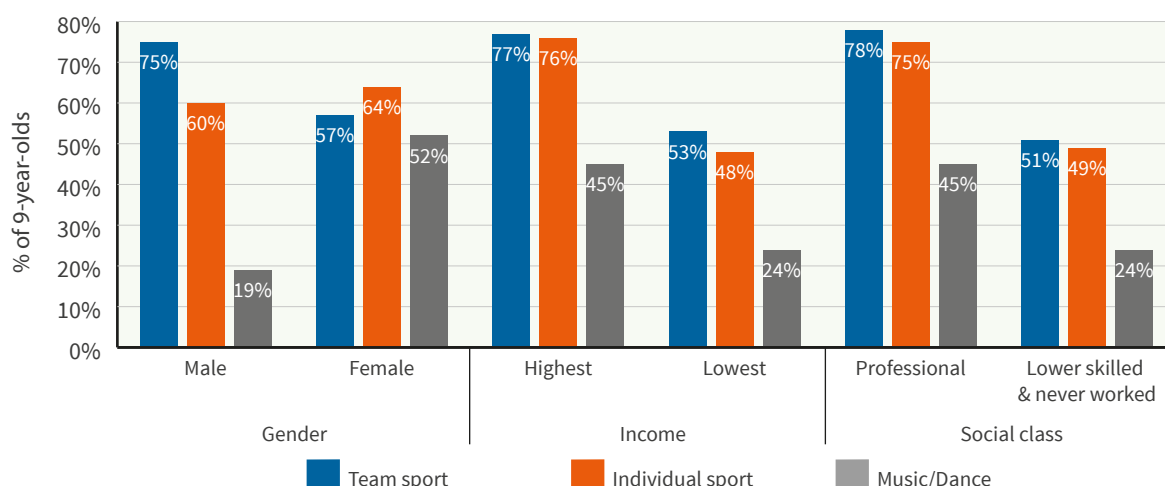
Figure 6.5: Most popular organised activities amongst 9-year-olds and the proportion who paid for that activity of those who took part in the activity



Note: The second bar is expressed as a proportion of the first bar. Thus, 66% of children took part in team sports; of these, 89% had to pay for the activity. Margins of error are, at most, ±3%.

As might be expected by the high proportion of organised activities that were paid for, Figure 6.6 shows that children from higher income or social class families participated in more structured activities than their peers from less advantaged families. Nearly twice as many children from the professional social class group participated in organised music or dance activities than their peers in the lower skilled/never worked group (45% vs 24%). This type of activity was also highly gendered: 52 per cent of girls compared to just 19 per cent of boys (also Figure 6.6). Participation in organised team or individual sports was also more common among children from families who were more advantaged; for example, 77 per cent of the highest income quintile did team sports compared to 53 per cent of their peers in the lowest income quintile. Although there was also a gender difference in team sport participation (75% of boys compared to 57% of girls), there was a much smaller gender difference in relation to individual sport participation.

Figure 6.6: Levels of participation in the most common organised activities, according to key socio-demographic variables



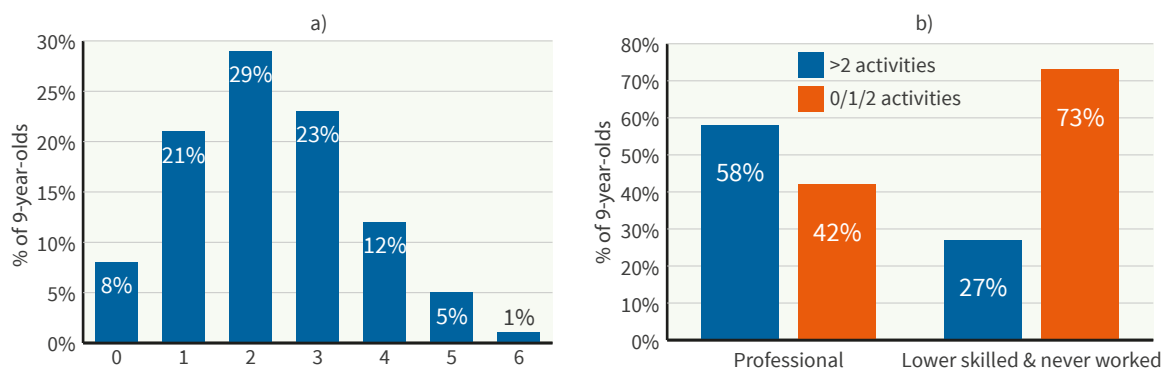
Note: Margins of error are, at most, ±1%.

6.3.2 PARTICIPATION IN MULTIPLE TYPES OF ORGANISED ACTIVITIES

Structured play has been found to promote skills such as turn-taking, teamwork, cooperation, and better educational performance and positive peer affiliation (Ginsburg, 2007; McCoy et al., 2014). However, some researchers suggest that increased participation in structured activities results in less creativity and independent mobility for children (Hjorthol & Fyhri, 2009).

The *Growing Up in Ireland* data can be used to examine how many kinds of structured activity the child is participating in at age 9, although not the overall number of activities (i.e. the child could play in three different team sports but this is still counted as just one type of activity). The average (or modal) number of activity types undertaken by a 9-year-old was two (29%, Figure 6.7a) but 41 per cent did more than two kinds (reflecting more intensive involvement).

Figure 6.7: a) Number of categories of organised activities undertaken by each 9-year-old and b) 9-year-old children who participated in more than two organised activity types according to family social class



Note: Margins of error are, at most, ±1% for both charts.

More intensive involvement in organised activities was more common among children from professional social class families, with 58 per cent participating in more than two kinds of organised activity compared to 27 per cent from lower skilled/never worked family backgrounds (Figure 6.7b).

6.4 PHYSICAL ACTIVITY

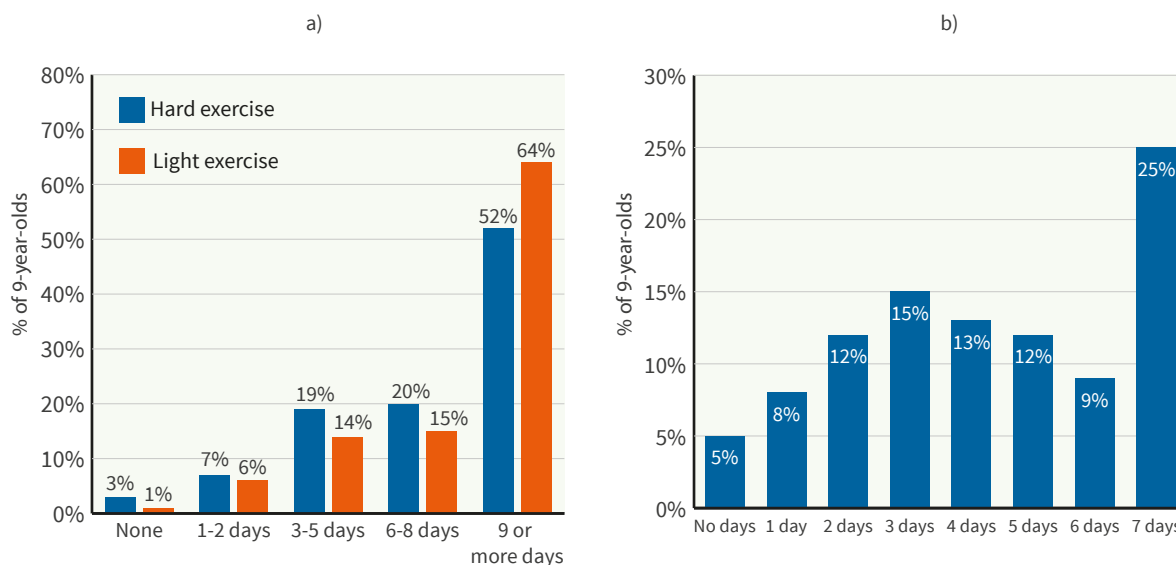
Physical activity is vital to children’s mental and physical health and lack of physical activity puts children at risk of overweight and obesity, poor coordination and muscle strength, poor bone health, a variety of mental illnesses and loneliness (Cooper et al., 2003; Timmons, Naylor, Pffeifer, 2007; Gray, 2011). Attending structured sport training can also improve children’s self-concept, affiliation with peers, teamwork, and coordination skills (Neely & Holt, 2014). However, parents may prefer structured

activities and for some children this can lead to a substitution of free physical activity with structured sport participation (Watchman & Spencer-Cavaliere, 2017). Research suggests that most Irish children do not meet the minimum guidelines for physical activity (Woods, Tannehill, Quinlan, Moyna & Walsh, 2010) and that girls are significantly less likely to achieve the minimum recommended amount of physical activity (Williams, Greene, McNally, Murray & Quail, 2010). Large-scale studies in Ireland have found low percentages of children meeting the WHO guidelines; for example, the all-island Children’s Sport Participation and Physical activity study of 6,600 students found that 17 per cent of primary school children meet the WHO guidelines (of 60 minutes of moderate-to-vigorous physical activity every day) and that boys were more likely to reach target guidelines than were girls (Woods et al., 2018). At a macro level, Witten, Kearns, Carroll, Asiasiga & Tava’e (2013) suggest that a decline in children’s physical activity over time is related to social and cultural norms such as parenting practices, transport practices, perceived risk, lack of sufficient play areas, an increase in dual-earning couples, increased focus on academic success along with the conception that play is not a constructive use of time, increase in time spent using technology, the age at which children are allowed to play independently, and lack of independent mobility.

6.4.1 OVERALL FINDINGS AND SOCIO-DEMOGRAPHIC TRENDS

Information on the child’s physical activity was collected from both Primary Caregivers and children in *Growing Up in Ireland* at age 9 years. While the questions were phrased differently for the child and adult respondents, Figures 6.8a and 6.8b suggest the Primary Caregiver reported a much higher level of physical activity than did the Study Children themselves. The left-hand graph (a) shows that over half of Primary Caregivers said the child was moderately to vigorously active for at least 60 minutes on nine or more days in the past fortnight and nearly two-thirds did this amount of light exercise. In contrast, only a quarter of children (graph b) self-reported being physically active every day in the last week.

Figure 6.8: a) Primary Caregiver’s and b) child’s reports on number of days physically active for at least 60 minutes in the past fortnight and week respectively

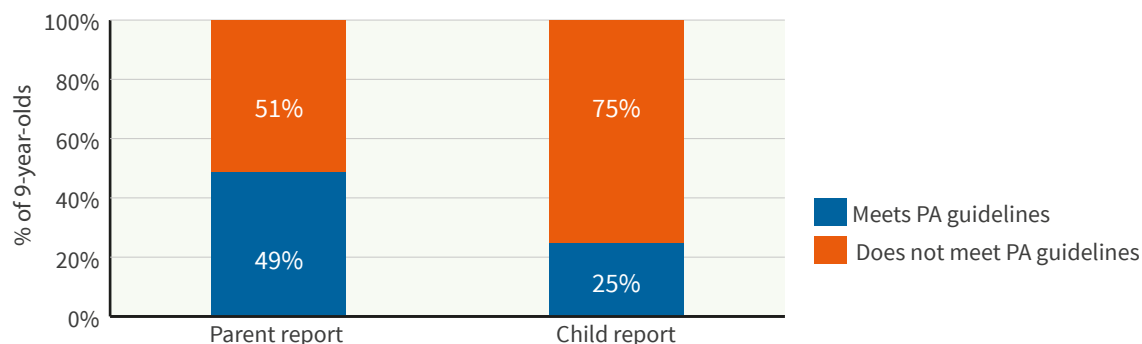


Note: Margins of error are, at most, ±1% for both charts.

Because of differences in the measures collected, the cut-off for meeting WHO guidelines for physical activity⁴² is different for the two sets of reports. For children, those who reported being physically active every day were counted as meeting the threshold. The information from the Primary Caregiver on time spent by the Study Child on vigorous and on light exercise was combined to create a more precise cut-off. According to parental reports, 49 per cent of children met the WHO guidelines for physical activity, but, according to the Study Child’s own report, only 25 per cent did so (Figure 6.9). It is possible that children as young as 9 years old find it difficult to accurately recall all the time spent on physical activity over a week, especially quantifying the amount spent running or jumping around as part of free play rather than on organised or team sports. Alternatively, of course, it may be that parents are over-estimating the time spent in physical activity, especially for periods during schooldays when the child isn’t under their direct supervision. In either scenario, however, at least half of children aged 9 years are not meeting the WHO guidelines for physical activity.

42 The National Guidelines for Physical Activity for Ireland (2016) indicate that all children and young people should be active, at a moderate to vigorous level, for at least 60 minutes every day.

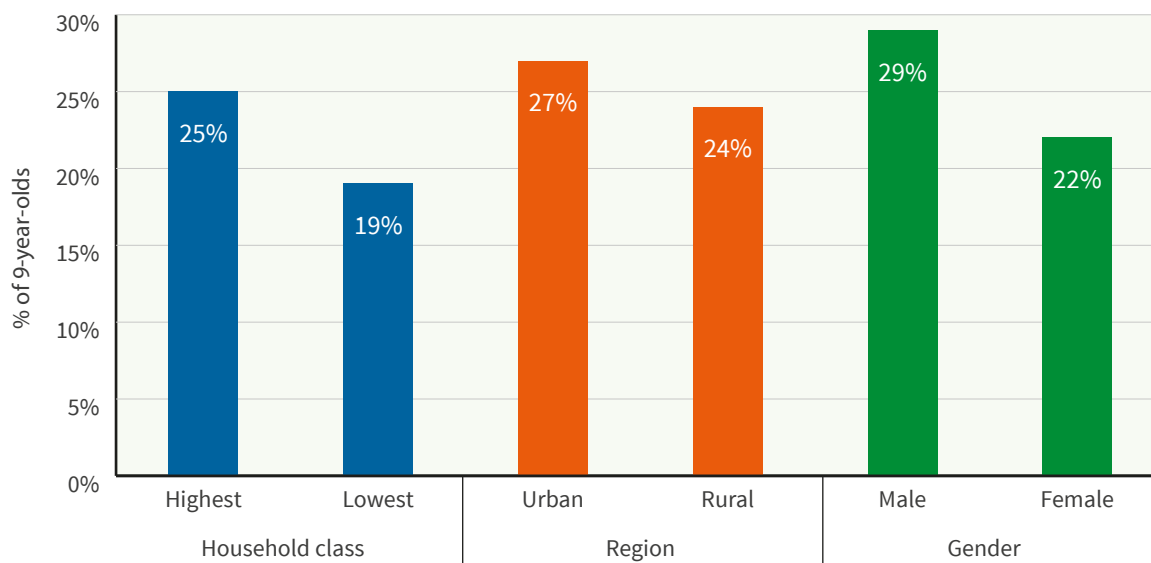
Figure 6.9: Percentage of 9-year-olds meeting the WHO guidelines for physical activity, based on Primary Caregiver and child reports



Note: Margins of error are, at most, ±1%.

In line with previous research, according to their self-reports more boys were reaching the target guidelines than girls (29% vs 22%; Figure 6.10). Children from families in the highest professional social class were also more likely to be sufficiently active (25% vs 19% in the lower skilled/never worked group – also self-report). There was no significant difference between those living in rural and urban areas in the proportion meeting the guidelines (Figure 6.10).

Figure 6.10: Percentage of 9-year-olds who met the recommended physical activity guidelines based on their self-report, according to key socio-demographic variables

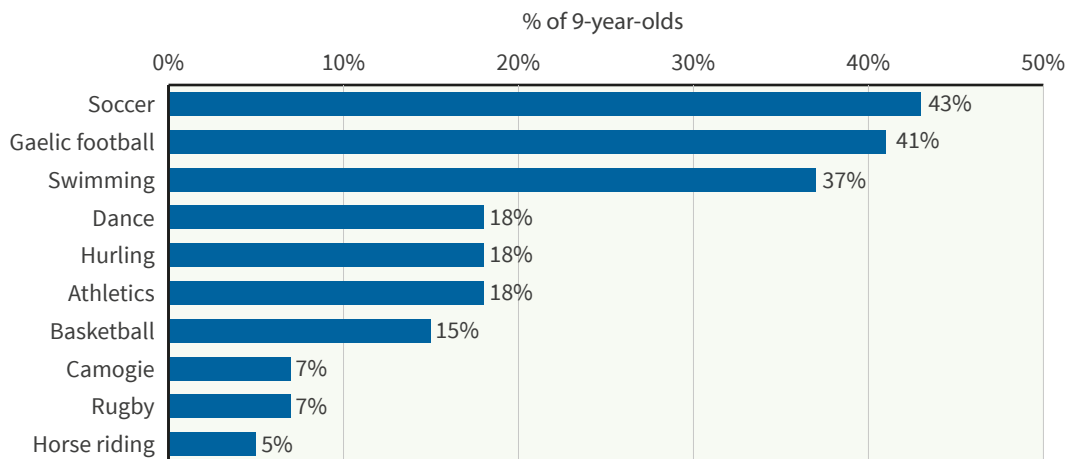


Note: Margins of error are, at most, ±1%.

6.4.2 SPORTS PARTICIPATION

While time spent in physical activity obviously includes sports participation, additional detail collected at this wave of **Growing Up in Ireland** allows for further analysis of the specific type of sport. This allows for a more detailed understanding of the type of sports in which children engaged since many children may take part in a sport but not name it as their favourite activity (see Section 6.2). Children self-reported on how often they played sport and which sports they played (up to a maximum of three). As shown in Figure 6.11, soccer was the most popular sport (43%), closely followed by Gaelic football (41%). These patterns reflect the popularity of football as the most common ‘favourite hobby or activity’ (see Section 6.2). Swimming was the third most popular sport (37%) although it had been much less likely to feature as a favoured free-time activity in the general question. Other popular sports among 9-year-olds were dancing, hurling and athletics/running (18% each).

Figure 6.11: Most commonly played sports amongst 9-year-olds



Note: Margins of error are, at most, ±1%.

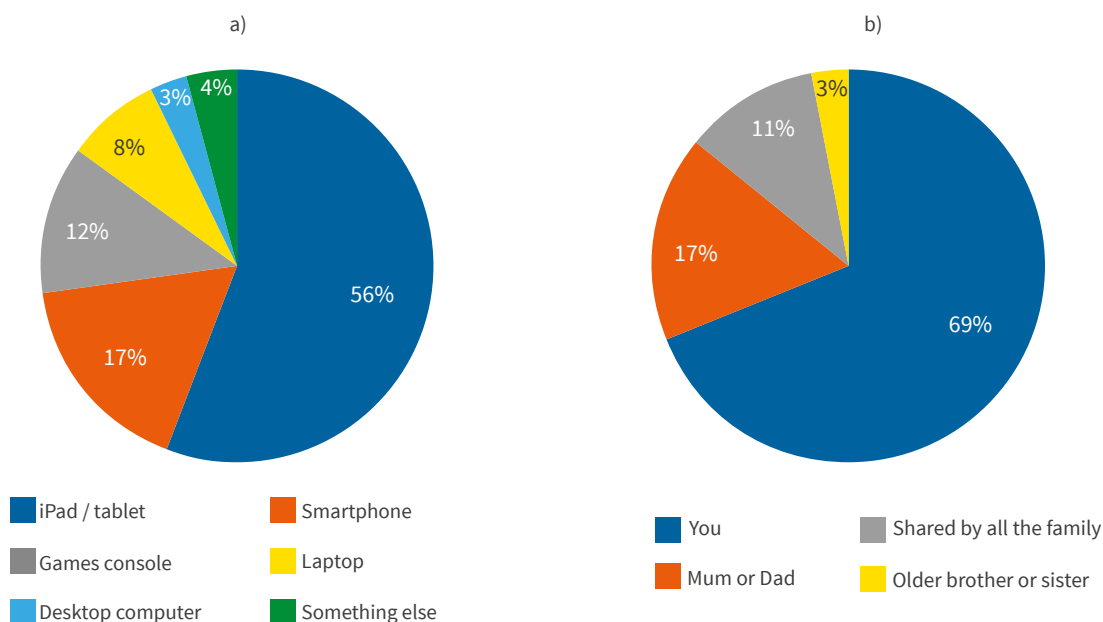
6.5 SCREEN TIME

For many parents, managing children’s access to technology is a source of stress (Witten et al., 2013; Ofcom, 2017). While earlier research had focused on the effects of television-viewing, especially of violent content, on child aggression (see, for example, Eron, 1982), the debate has changed as the majority of British 8- to 11-year-olds are now online (Ofcom, 2017).

6.5.1 INTERNET USE

In line with the British trends, the vast majority (92%) of 9-year-old children in *Growing Up in Ireland* reported that they had access to the internet. Children were further asked what type of device they most commonly used to access the internet (Figure 6.12a) and who owned it (6.12b). By far the most common device used by children was an *iPad or other tablet device* (56%). This was followed by a *smartphone* (17%) and *games console* (12%). Over two-thirds (69%) of children said this gadget belonged to them, compared to 17 per cent whose parents owned the gadget, and 11 per cent who shared the gadget with the rest of their family (Figure 6.12b). These patterns have implications for both time spent (i.e. not having to share a device) and monitoring by parents.

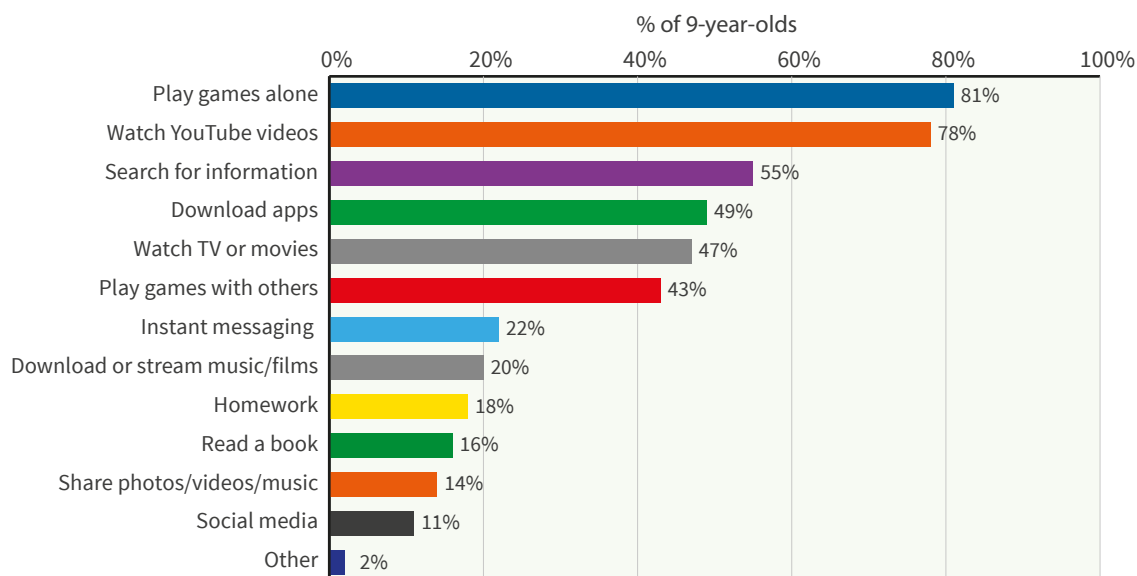
Figure 6.12: a) Device most commonly used by 9-year-olds to access the internet and b) who owned the device



Note: Margins of error are, at most, ±1%.

The 92 per cent of children who had access to the internet were asked what kind of digital activities they had engaged in over the past week. The most popular activity was to *play games on [their] own* (81%), followed by *watch videos on YouTube* (78%) and *search for information* (55%). At age 9, using gadgets for *social media*, *sharing photos/videos/music*, *to read a book* or *homework* were less popular (<20%) (Figure 6.13). This indicates that play and entertainment were the lead motivators for child internet usage at 9 years of age, with searching for information also playing an important role.

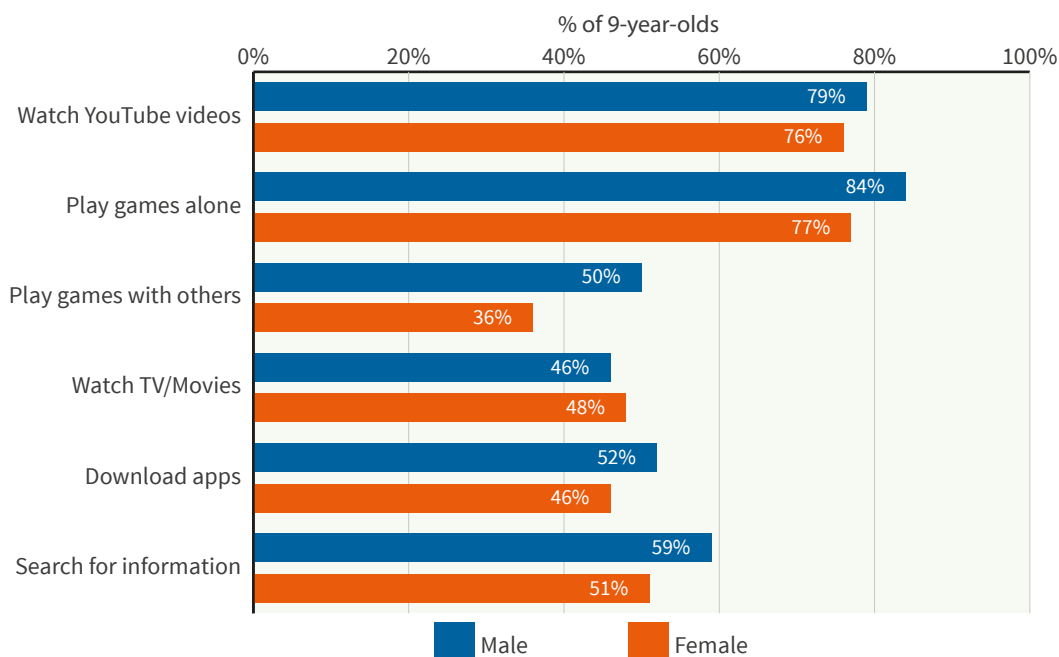
Figure 6.13: Most popular internet-based activities amongst 9-year-olds



Note: These figures are the proportions doing various activities only for those with internet access. Margins of error are, at most, ±1.

While the types of internet activities were relatively similar across genders (Figure 6.14), there were some differences, with boys more likely to *play games on [their] own* (84% vs 77%) or *with other people* (50% vs 36%). Boys were also more likely to report using the internet to *search for information on things that interest [them]* (59% compared to 51% of girls).

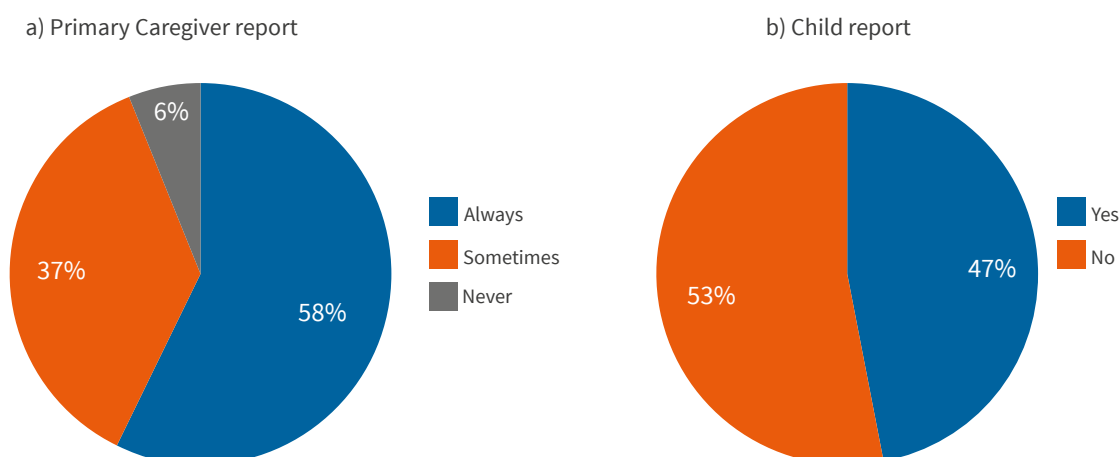
Figure 6.14: Most popular internet-based activities amongst 9-year-olds, according to gender



Note: Margins of error are, at most, ±2%.

The previously mentioned Ofcom report noted that most parents have at least some measures in place in an attempt to safely manage their child’s media usage (Ofcom, 2017). For 9-year-olds in *Growing Up in Ireland*, both parents and children were asked about supervision while online. Figure 6.15a shows that nearly all Primary Caregivers said their child was *sometimes* (37%) or *always* (58%) supervised while accessing the internet.

Figure 6.15: a) Primary Caregiver's and b) Study Child's report on whether or not the child was supervised while accessing the internet



Note: The margins of error are, at most, $\pm 1\%$.

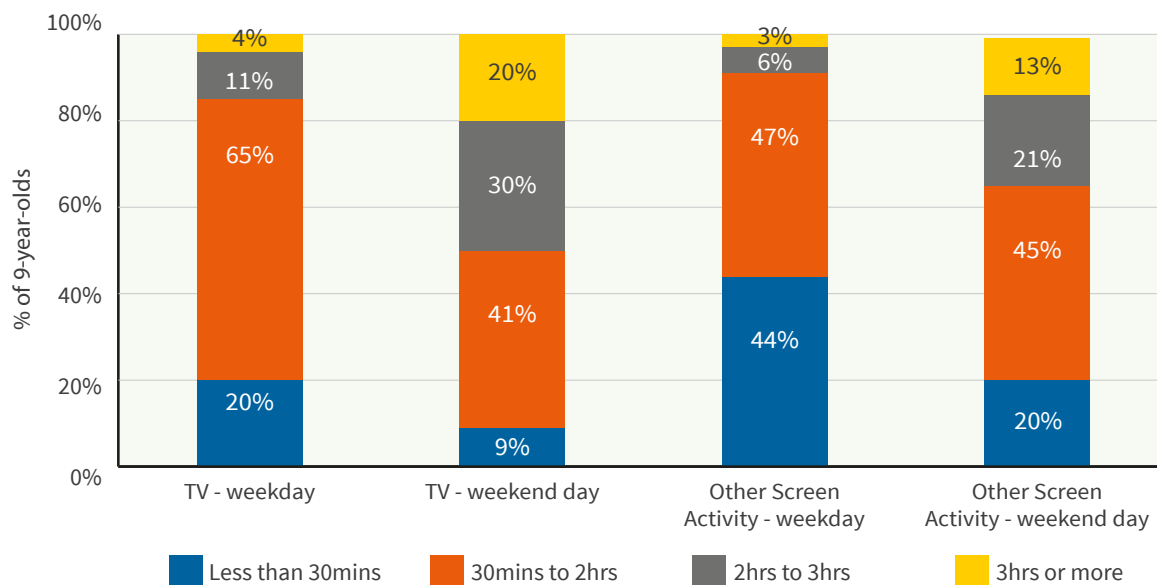
In contrast, over half (53%) of 9-year-olds reported that they were allowed to use the internet without their parents or another adult checking what they were doing (Figure 6.15b). While the child may not always have been aware of parental supervision (especially if that included remote software monitoring), given the amount of time spent on screen-based activities (see following section), it seems likely that many children spent at least some time online unsupervised.

6.5.2 TIME SPENT ON SCREEN-BASED ACTIVITIES

Estimates on the amount of time spent by children on screen-based activities were recorded from the Primary Caregiver. They were asked separately about time spent watching television versus another screen activity, and to estimate separately for a weekday and a weekend day. These estimates are shown in Figure 6.16 and clearly indicate that most children spent a sizeable proportion of their free time on screen-based activities, especially at weekends. Fully 80 per cent of 9-year-olds watched TV for at least 30 minutes on a weekday and this rose to over 90 per cent for weekend days: half of all Study Children typically watched TV for more than two hours on a weekend day. In addition, a sizeable minority – 20 per cent – spent three hours or more watching TV on a weekend day. It should be noted that the category *less than 30 minutes* includes cases where the child was reported as spending no time on this activity.

In terms of other non-TV screen time (such as video games, using the internet), 23 per cent of Study Children did not spend any time on other screen activity during the week, a figure that dropped to 10 per cent for weekend days. Over half of all 9-year-olds (56% – Figure 6.16) spent at *least 30 minutes* on other screen activity during the week and this figure rose to 80 per cent during the weekend. Thirteen per cent of 9-year-olds spent three or more hours on non-TV screen time on a weekend day. Shorter durations of other screen activities were, however, more common than shorter durations of television, at least on weekdays: 44 per cent of 9-year-olds had *less than 30 minutes* on other screens compared to just 20 per cent who had *less than 30 minutes* of television.

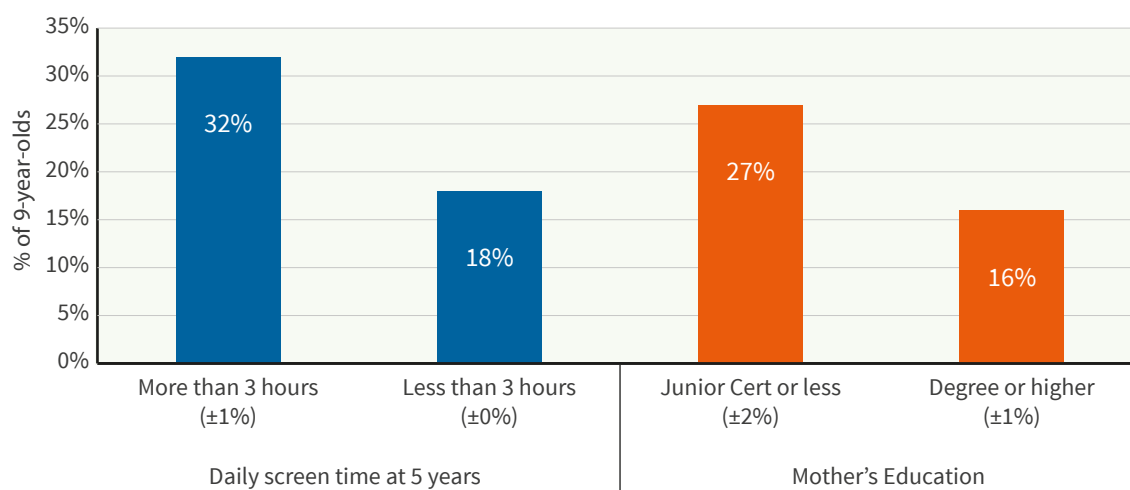
Figure 6.16: Amount of time spent on TV and other screen time during the week and at weekends by 9-year-olds



Note: Margins of error are, at most, ±1%.

When this cohort of children had been 5 and, later, 7/8 years of age, those whose mothers had degree-level education were less likely to report long periods of screen time than those with Junior Certificate education or less (Growing Up in Ireland Study team, 2013; 2017b). Consistent with these findings, Figure 6.17 indicates that 27 per cent of 9-year-olds whose mothers had Junior Certificate education watched greater than three hours of TV on a weekend day, compared to 16 per cent of children of mothers with degree-level education. A significant difference was also observed according to past screen time usage; those children who were considered high screen time users (greater than three hours per day) at age 5 were more likely to watch more than three hours of TV on a weekend day at the age of 9 than those considered lower screen time users (less than three hours per day) at age 5 (32% vs 18%).

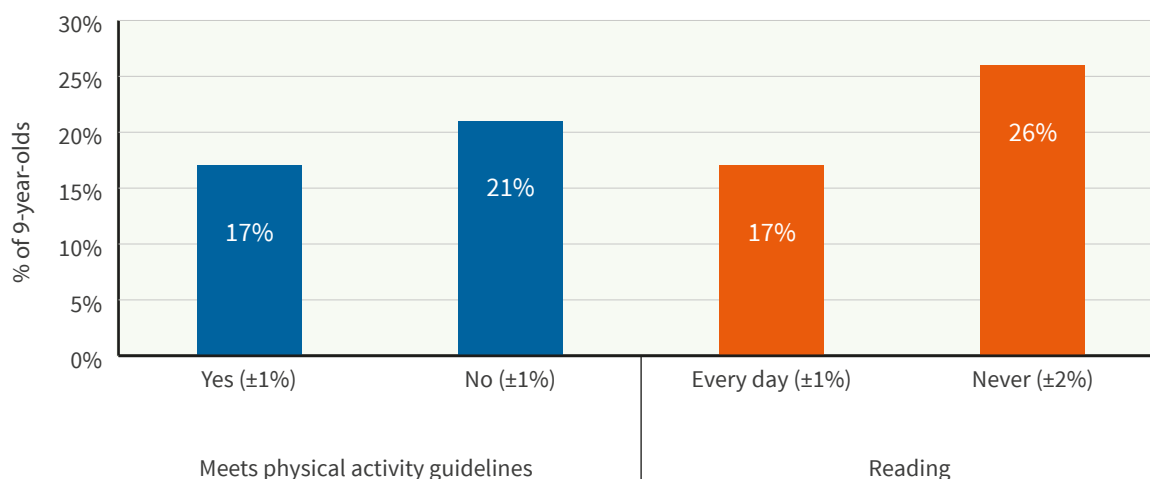
Figure 6.17: Percentage of 9-year-olds who watched more than three hours of TV on a weekend day, according to daily screen time at age 5 and mother’s education



Note: Margins of error are shown in parentheses after the group label.

Increased TV and screen time are associated with decreased physical activity as well as other negative health outcomes (Aggio, Ogunleye, Voss & Sandercock, 2012), such as increased snacking; however, it seems that this negative effect may be no stronger than activities such as reading or board games (Biddle, Gorely, Marshall, Murdey & Cameron, 2004). Significantly more of those 9-year-olds who did not meet the WHO physical activity guidelines also watched more than three hours of TV on a weekend day (21% vs 17% for those who did meet the guidelines; Figure 6.18). However, consistent with the hypothesis that screen time may be more likely to replace other forms of sedentary activity rather than physical activity, Figure 6.18 also shows that children who never ‘read for fun’ were more likely to spend long periods watching television (26%) than those who read every day (17%).

Figure 6.18: Percentage of 9-year-olds who watched more than three hours of TV on a weekend day, according to physical activity and reading frequency



Note: Margins of error are shown in parentheses after the group label.

6.6 ACTIVITIES WITH FAMILY IN AND OUTSIDE THE HOME

6.6.1 JOINT ACTIVITIES WITH PARENTS

This section focuses on activities with parents and family members, especially those who contribute to the home learning environment. Some of these activities take place within the home environment, such as reading to the child, but others involve exploring the wider world through visits to libraries, museums and sporting events. In a review of the factors that promote children’s learning in the home environment, frequency of parent-child interactions in routine learning activities (e.g. shared reading), the quality of parent-child interactions (e.g. parent’s cognitive stimulation and responsiveness), and the provision of age appropriate learning materials were all identified as important factors (Rodriguez et al., 2009). Furthermore, playing active games has been shown to be beneficial to other aspects of children’s behavioural and social development (e.g. turn-taking in games, motor development through physical play). Interactions with family members more generally are a key part of Bronfenbrenner’s ecological model of child development (e.g. Bronfenbrenner, 1979, 1993; Bronfenbrenner & Morris, 2006) as processes within the ‘microsystem’ that further child development.

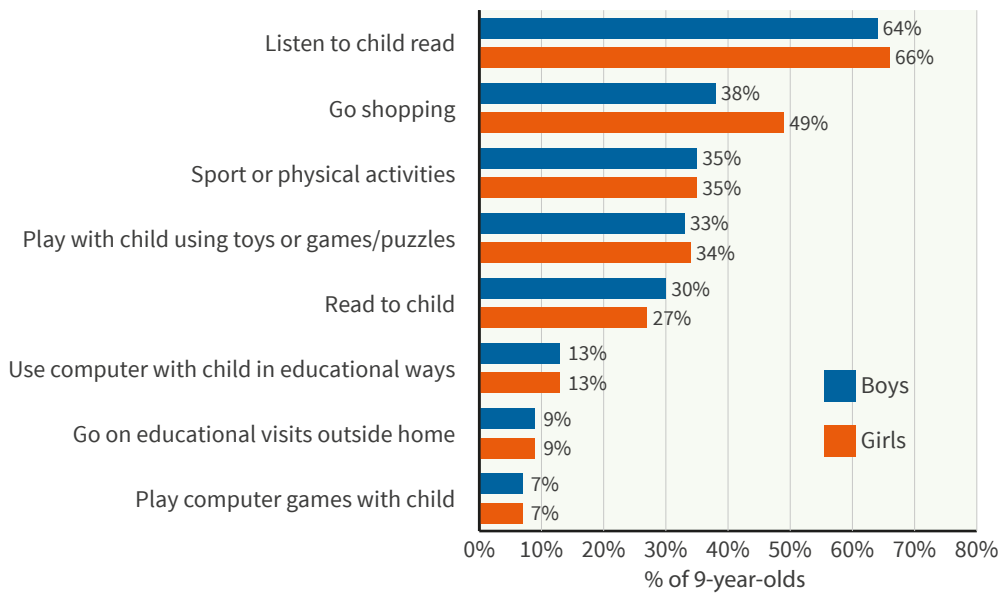
In *Growing Up in Ireland*, details on parental activities with the 9-year-old child were collected from parents. One section of the questionnaire asked about the frequency with which the parent themselves had engaged the child in eight separate activities over the last month, most of which related to fostering the home learning environment. These include: (a) ‘play with [the child] using toys or games/puzzles’ (b) ‘play computer games’ (c) ‘listens to [the child] read’ (d) ‘reads to [the child]’ (e) ‘use computer with [the child] in educational ways’ (f) plays ‘sport or physical activities’ (g) ‘go on educational visits outside the home’, and (h) ‘go shopping’. These questions were asked on a five-point Likert scale of *never*, *hardly ever*, *occasionally*, *one or two times a week*, and *every day*.

Another set of questions – also completed by the Primary Caregiver – asked about a further seven activities that the Study Child might have done with any family member in the past month: (a) ‘gone to a movie’ (b) ‘gone to a sporting event in which the child was not a player’ (c) ‘gone to a concert, play, museum, art gallery, community or school event’ (d) ‘attended a religious service, church, temple, synagogue or mosque’ (e) ‘visited a library’ (f) ‘gone swimming’ (g) ‘gone for a walk, cycle or hike’. These questions were asked on a *yes/no* basis.

6.6.6.1 Trends for activities with the Primary Caregiver

A majority of Primary Caregivers (65%) ‘listened to their child read’ *at least weekly* (i.e. combining answer categories of *one or two times a week* and *every day*), as shown in Figure 6.19. The next most regular activity was going shopping: overall 44 per cent of 9-year-old children went shopping with their Primary Caregiver at least weekly, but there was a sizeable gender difference, 38 per cent of boys in contrast to 49 per cent of girls. Roughly a third (35%) of Primary Caregivers reported engaging in sport or physical activities at least weekly with their 9-year-old, and the same proportion report playing with the child using toys or games/puzzles. Reading to 9-year-olds (29%) was less common than listening to them read and a slightly larger proportion of Primary Caregivers reported reading to 9-year-old boys (30%) than girls (27%).

Figure 6.19: Percentage of 9-year-olds with a Primary Caregiver who engaged in an activity with them at least weekly or greater, by Study Child gender

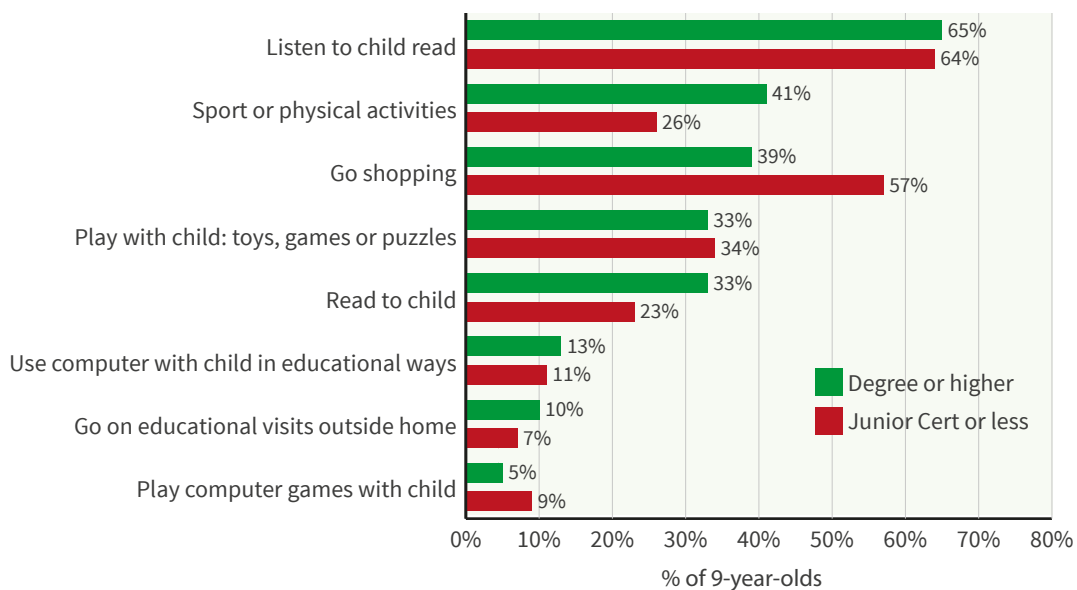


Note: Margins of error are, at most, $\pm 2\%$.

A comparatively small percentage of Primary Caregivers reported using computers at least weekly with their children in either educational ways (13%) or for games (7%). This is in contrast to the apparent popularity of screen-based activities noted earlier in this chapter.

Some, though not all, activities were patterned by Primary Caregiver education (Figure 6.20). Similar proportions of the lowest and highest educated Primary Caregivers reported playing with their child using toys or games/puzzles at least weekly. There were, however, higher frequencies of higher-educated parents engaged in sports or physical activities with the child (41% vs 26% for the highest and lowest levels of parental education respectively). Continuing to read to the 9-year-old on a frequent basis (once or twice a week or more often) was more common in highly educated families (33% where the Primary Caregiver had a degree or higher qualification compared with 23 per cent where the Primary Caregiver had up to Junior Certificate education). Interestingly, however, the frequency of listening to the child read did not vary by mother’s education, with almost two-thirds of both groups listening to their child read at least weekly.

Figure 6.20: Percentage of 9-year-olds with a Primary Caregiver engaging with their child’s activities at least weekly or higher by Primary Caregiver’s education



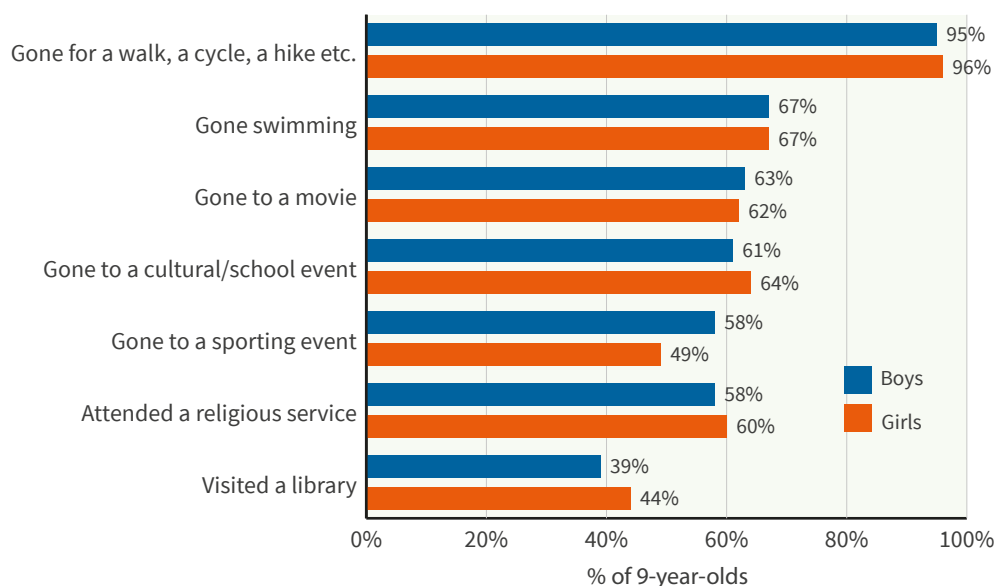
Note: Margins of error are, at most, $\pm 4\%$ for ‘Junior Cert or less’ and $\pm 2\%$ for ‘Degree or higher’.

Using computers for educational purposes with the Study Child did not vary by mother’s education. However, mothers with higher levels of education were slightly more likely to take their child on educational visits (10% vs 7%), but less likely to play computer games with their child (5% vs 9%) than mothers with lower educational levels. The largest difference in Figure 6.20 was the greater frequency for going shopping among lower educated Primary Caregivers and their 9-year-olds (57% at least weekly compared to 39% among higher educated Primary Caregivers). It is unclear whether shopping for essentials or recreational purposes is meant here, but overall, it can be seen that higher educated Primary Caregivers reported more activities likely to support a child’s learning and development.

6.6.6.2 Activities with any family member

Primary Caregivers also provided details more broadly on activities undertaken by the 9-year-old with any family member in the previous month. Figure 6.21 contrasts these activities completed in the last month according to the child’s gender. Generally being active in the form of walking, cycling, hiking etc. was endorsed by 95 per cent of all Primary Caregivers, with similar rates for boys and girls. There was also largely equal participation by gender for activities such as swimming, attending cultural/school events, going to the cinema and attending religious services (ranging from 59% to 67% participation in the last month). There were, however, some observed gender differences, with more boys attending sporting events (58% vs 49%), while boys were less likely to have visited a library than girls (39% vs 44%).

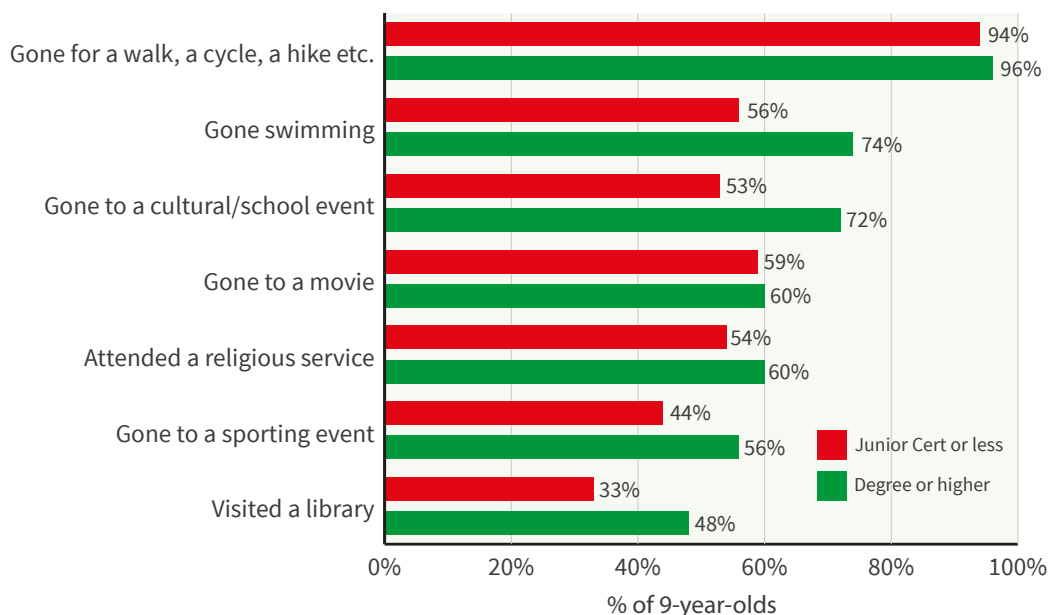
Figure 6.21: Family activities in last month by gender



Note: Margins of error are, at most, ±2% for Boys and Girls.

Similar to Figure 6.20, Figure 6.22 compares family activities with the Study Child in the last month for Primary Caregivers with a degree or higher and those with a Junior Certificate education or lower. Some activities, including walking/cycling/hiking and going to the cinema, had similar frequencies regardless of parental education. However, there were more marked differences in access to sporting and cultural activities reported over the last month which tended to favour children of higher-educated Primary Caregivers.

Figure 6.22: Family activities in last month by Primary Caregiver education



Note: Margins of error are, at most, ±4% for ‘Junior Cert or less’ and ±2% for ‘Degree or higher’.

These differences are reflected in both increased likelihood of access for the 9-year-old to sporting activities like swimming (74% vs 56) and attending a sporting event in which the child was not a player (56% vs 44%). Furthermore, families with a highly educated Primary Caregiver were more likely to report that the 9-year-old attended cultural events such as concerts or plays (72% vs 53%) and were more likely to have attended cultural spaces such as a library in the last month (48% vs 33%). Library use was also more common in urban rather than in rural areas (44% compared to 39%, not shown in this chart).

6.6.2 CHORES

Growing Up in Ireland also collected information, from the children themselves, on how 9-year-olds contributed to task-type activities in the household as well as more fun pursuits. Undertaking chores in the home allows children to practice and learn diverse skills. Children learn competence in tasks necessary for life such as cooking and cleaning, which helps them to be responsible, independent, and self-disciplined (Penha-Lopes, 2006). On the other hand, not doing housework affords children more time to engage in activities which give them a head start in life by giving them opportunities to expand their human capital (Bonke, 2010). It has been noted that the frequency and type of chores become gender stereotyped at a young age (e.g. Bartley, Blanton & Gillard, 2005; Bianchi, Milkie, Sayer & Robinson, 2000), a trend which was also observed in research conducted on data from the older *Growing Up in Ireland* Cohort ‘98 data (O’Reilly & Quayle, 2019).

Table 6.1: Frequency of involvement in different types of chores, according to gender

		Boys	Girls
Hoover / Clean	Often / Occasionally	80%	86%
	Never	20%	14%
Wash the dishes	Often / Occasionally	65%	79%
	Never	35%	21%
Help in the garden	Often / Occasionally	66%	62%
	Never	31%	35%
	Don't have	3%	3%
Cook	Often / Occasionally	53%	71%
	Never	47%	29%
Clean up after or feed pet	Often / Occasionally	54%	59%
	Never	15%	13%
	Don't have	32%	29%
Help with brothers or sisters	Often / Occasionally	56%	55%
	Never	8%	7%
	Don't have	36%	38%
Put out the bin	Often / Occasionally	61%	50%
	Never	39%	50%
Clean the car	Often / Occasionally	51%	49%
	Never	45%	47%
	Don't have	4%	4%
Help elderly or sick family relative	Often / Occasionally	44%	42%
	Never	16%	16%
	Don't have	39%	42%

Note: Margins of error are, at most, $\pm 1.6\%$.

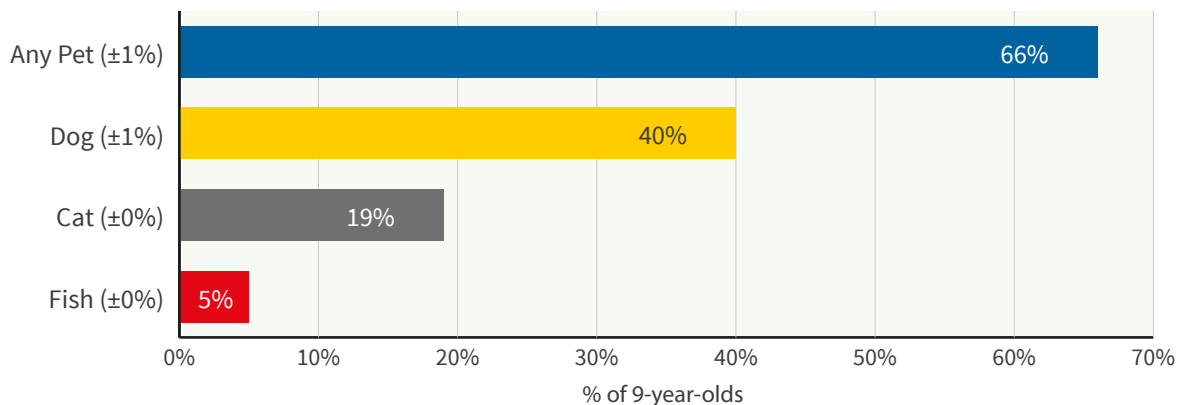
Consistent with these previous findings, Table 6.1 indicates that amongst 9-year-olds in the current study, girls did more of the traditionally female tasks like ‘help with cooking for the family’ (71% *often* or *occasionally/sometimes* vs 53% of boys) and ‘washing the dishes/emptying the dishwasher’ (79% vs 65% of boys). Conversely, 9-year-old boys were more likely to help with ‘putting out the bin/recycling’ (61% *often* or *occasionally/sometimes* vs 50% of girls). Overall, the most common chores were ‘hoovering/cleaning’ (done *often* or *occasionally/sometimes* by 83% of all 9-year-olds), ‘washing the dishes/emptying the dishwasher’ (72%) and ‘helping in the garden’ (64%), while the least common chores (of those listed in the questionnaire), that nonetheless involved sizeable numbers, were ‘cleaning the car’ (50%) and ‘helping an elderly or sick relative’ (43%).

6.6.3 PETS

A common way for children to help out at home was ‘feeding or cleaning up after the family pet’ (57% of children did this *often* or *occasionally/sometimes*). Research suggests that children in middle childhood often see their pets as friends (Melson, 2003) and believe their pet to be capable of communication and moral responsibility (Levinson, 1978). Most studies have focused on dog ownership – perhaps because dogs are the most commonly owned pet (Shannon-Missal, 2015) – and evidence suggests that pet dogs may be especially effective at providing social support given that dogs seek interaction and tend to be loyal (Kerns, Stuart-Parrigon, Coifman, van Dulmen & Koehn, 2018).

Two-thirds of 9-year-olds in **Growing Up in Ireland** Cohort '08 said they had a family pet at the time of the survey (Figure 6.23). The most popular type of pet was a dog (40% of all children), while 19 per cent had a cat, and 5 per cent had a fish. Much lower numbers had rabbits, hamsters, guinea pigs, or rodents (not illustrated). Children could record more than one type of animal as a pet. Future research could usefully look at the relationship between having a pet and child socio-emotional well-being.

Figure 6.23: Most common pets amongst 9-year-olds



Note: Margins of error are shown in parentheses after the group label.

6.7 SUMMARY

Free-time activities are opportunities for learning and discovery, relationship development, and, of course, fun. Sometimes activities are self-directed by the child but others are structured as part of organised classes or requested by parents (e.g. chores).

This particular wave of interviewing was the first time that the children in this Cohort '08 were surveyed in their own right and were able to give their opinions on topics such as their preferred pastimes and sports. The child's own perspective was supplemented in this chapter by information provided by the Primary Caregiver such as the child's attendance at organised extra-curricular activities and those done with parents and family members.

One of the major themes explored with both parents and children was the child's use of screen time. A noteworthy period effect for this cohort (in contrast to Cohort '98) was the growth in availability of portable electronic devices and increased internet access, which enabled new kinds of entertainment activities. Nearly all 9-year-olds in this cohort reported having access to the internet; a tablet (e.g. iPad) was the device typically used to go online and quite a large proportion (two-thirds) said they owned the device used to go online (as opposed to it belonging to a parent). Playing games and watching YouTube-type videos were the most frequent online activities for these children. According to their parents, 9-year-olds typically spent between 30 minutes and two hours watching TV on a weekday (65%), but on a weekend day a full half of children spent two hours or more. Time spent on other screen-based activities also increased notably on weekend days.

In terms of 'offline' play activities, football featured prominently both as a popular sport and one of the child's favourite ways to spend their free time. As the 'favourite' activity, football was cited much more often by boys than girls (43% vs 10%), but it was equally popular among children at either end of the household income spectrum. In contrast, reading or writing was the most favoured activity for 31 per cent of girls but just 16 per cent of boys – and was somewhat more popular in high rather than low income households (25% vs 19%). These gender differences were carried through in reports of time spent on physical activity, with boys more likely to meet WHO guidelines. There were notable differences between the child's report and that of their parents in estimates of the proportion meeting WHO activity guidelines. However, at least half of the 9-year-olds were found not to be sufficiently physically active.

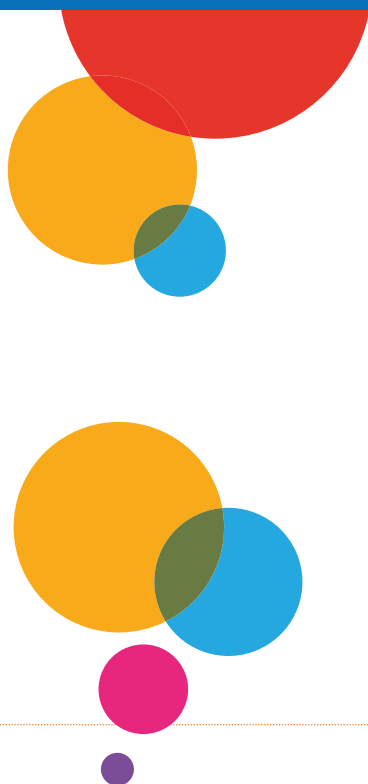
On the positive side, many children did do physical activities of some sort with their parents. Nearly all Primary Caregivers said they had gone for a walk, a cycle or a hike with their 9-year-old in the last month – although some other physical activities, such as swimming, were more socially structured (74% among the highest educated Primary Caregivers compared to just over half of those with Junior Certificate level education or below). Differences between children according to their family's socio-economic status were also observed in relation to their participation in organised extra-curricular activities, possibly because most of these had to be paid for. For example, children from the 'professional' social class group were nearly twice as likely to participate in music or dance activities than their peers in the 'unskilled' group (45% vs 24%). In team sports, nearly three-quarters of 9-year-olds in the highest income quintile participated compared to 53 per cent of their peers in the lowest income quintile.

Overall, this chapter demonstrated the varied nature of children's activities outside school. Screen-based activities occupied a lot of children's free time but did not exclude participation in sports, activities with family or other indoor activities. There were, however, marked inequalities for some categories of activity according to the child's gender or the family's socio-economic circumstances.



Chapter 7

CONCLUSIONS



7.1 INTRODUCTION

This report provides an overview of the experiences and outcomes among 8,032 9-year-olds and their families from Cohort '08 (formerly known as the Infant Cohort) of the *Growing Up in Ireland* study. The study fieldwork was conducted between June 2017 and April 2018. These families were first interviewed when the Study Child was 9 months old and were followed up at 3 and 5 years of age, with an inter-wave postal survey conducted at 7/8 years of age. Responses at 9 years of age represented 72 per cent of the original sample interviewed at Wave 1 (9 months), with the data re-weighted to account for differential non-response.

The report is descriptive in nature, outlining the main patterns found among the Study Children in the main domains of their lives: physical health, education, socio-emotional well-being and relationships as well as play and other day-to-day activities. It outlines how their experiences and outcomes varied according to a number of key characteristics, including their gender, family structure, household income, social class and parental education. These descriptive analyses point to potential areas for future research which could look in much greater detail at the personal, family, and school characteristics that shape children's trajectories. Multivariate analyses could unpack the risk and protective factors that influence change over the life-course, providing a firm basis for the nature and timing of policy interventions. There is also considerable potential to compare 9-year-olds in Cohort '08 with their counterparts in Cohort '98, an exercise that would yield rich insights into the way in which policy and societal changes have shaped the lives of children.

7.2 IMPLICATIONS FOR POLICY

A principal aim of *Growing Up in Ireland* (GUI) is to provide evidence to inform policy formation and design of services for families, children and young people. Thus, at a broad level, *Growing Up in Ireland* data can inform an assessment of progress in relation to the key indicators included in the *Better Outcomes, Brighter Futures (2014-2020)* policy framework. Analyses of *Growing Up in Ireland* data can also provide insights for specific policy areas, including health, education, family policy and social protection, among others. A detailed consideration of the implications of the findings for these specific policy domains is beyond the scope of this report and such a discussion would require more comprehensive multivariate analyses to provide a firm evidence base. Instead, this chapter discusses three main policy-relevant themes emerging from the findings: social inequalities in children's lives; the gendered nature of children's experiences and outcomes; and continuity and change from infancy to middle childhood. In addressing these themes, the chapter uses illustrative examples from the report findings on key policy areas and outlines the potential for further research to inform policy and practice.

7.2.1 SOCIAL INEQUALITIES IN CHILD OUTCOMES

An overarching theme that emerges from the study findings is the extent to which 9-year-old children's experiences and outcomes were associated with the family circumstances in which they lived. These inequalities were evident across different dimensions of family background, including social class, education and household income, and in relation to outcomes across a number of domains.

From a public health perspective, numerous social inequalities are evident. Substantially more 9-year-olds from professional families than from less advantaged families were consistently healthy (across all waves); further research could explore the combination of social determinants informing this and other health inequalities in more detail. The gap in rates of overweight and obesity between children from more advantaged and more disadvantaged backgrounds, with levels being twice as high in the bottom income quintile as in the top income group, is of particular concern, given the consequences for current and later health and well-being (see Patton et al., 2016). The consumption of healthy and unhealthy foodstuffs was also found to be socially differentiated as were levels of involvement in physical activity, with lower proportions of the less advantaged groups meeting recommended standards for hard exercise. Significant social differences were evident in participation in (largely paid for) organised sports. The relationship between diet, physical activity and weight status over children's life-course would merit further research to identify potential levers for supportive policy interventions, looking at the role of family, peers, school and neighbourhood in shaping child behaviours.

Social differences were also evident in relation to children's socio-emotional well-being, with lower income groups more than twice as likely to be considered 'at risk' of socio-emotional difficulties. Similarly, children from lower income or less educated families had more negative views of themselves (as measured by the Piers-Harris Self-Concept scale). Further research could usefully unpack socio-economic differentiation across different dimensions of well-being and self-image and identify the factors (family, school and peer group) influencing this variation.

Although the vast majority of 9-year-olds always or sometimes liked their school and their teachers, disengagement from school subjects such as Maths and Irish was already evident among a sizeable minority of children, particularly those from families with lower levels of education and/or income. Of particular concern was the fact that the gap in children's cognitive test scores by family background increased between the ages of 3 and 9, with initially high-scoring children from disadvantaged contexts losing ground to their lower-scoring but more advantaged peers. Marked differences by family background were found in access to informal learning opportunities outside school, with highly educated families more likely to pay for attendance at cultural classes or clubs (such as music or drama) and bring their children on cultural outings. The frequency of reading for pleasure was also greater in more advantaged families, with the social gap more evident at the weekend than during the week.

The findings therefore identify a group of 9-year-old children at greater risk of poorer outcomes across domains, namely those from families with lower income, lower levels of education and/or working in lower skilled jobs or excluded from the labour market. While these groups are relatively small in size, they represent an important target for policy support. Further research using *Growing Up in Ireland* data can pinpoint the factors underlying this socio-economic differentiation, identifying the risk and protective factors that shape child outcomes in order to target and time policy interventions in the most effective way.

As well as examining family income, education and social class, the report findings highlighted poorer outcomes for children in one-parent compared with two-parent families. For example, the proportion of 9-year-olds from one-parent families 'at risk' of socio-emotional difficulties was twice that found among those from two-parent families. However, the study findings also point to the lower levels of income, education and social class found among one-parent families. Unpacking the effect of family structure over and above that of other family characteristics (such as income) is beyond the scope of this descriptive report but would merit further research in order to provide an evidence base for policy development.

Despite marked social differentiation in a range of child outcomes, it is important to note commonalities in some key domains of children's lives. Across social groups, parents were found to have a close and warm relationship with their children. Little difference was found across different types of families in parental involvement with their child's school or in the extent to which they helped with homework. Similarly, the majority across all social groups held high educational expectations for their children, envisaging them as reaching higher education. In addition, variation was found not only between but also within social groups. Future research could helpfully identify the characteristics of children from disadvantaged backgrounds who 'succeed against the odds'.

7.2.2 THE GENDERED NATURE OF MIDDLE CHILDHOOD

As well as highlighting social differences, the findings indicate the gendered nature of middle childhood. Significant gender differences were evident in the types of day-to-day activities in which girls and boys engaged. Girls were more likely to be involved in structured cultural activities and read for pleasure while boys were more likely to take part in team sports and play computer games. Some of these gender differences have their origins in early childhood patterns of cultural participation and screen time (Smyth, 2016) but, by middle childhood, are also likely to have been influenced by the complex interplay between parental encouragement of certain activities, children's own agency regarding their favourite activities, the activities of peers and broader societal norms. These gendered patterns of involvement are of policy relevance because they are likely to contribute to gender differences in within-school achievement as well as levels of physical well-being and weight status. Indeed, even at the age of 9, attitudes to school subjects were already gendered, with girls being more positive about Reading and Irish and boys more positive about Maths. Furthermore, while only a very small number of 9-year-olds never liked school, boys were more likely to do so. Girls had more positive relationships with their teachers, reporting more praise and receiving significantly less reprimand, patterns that are likely to have longer-term effects on their academic self-concept and achievement (Crosnoe, 2011). Gender stereotyping was also evident in the home, with significant gender differences found in several of the chores undertaken, mirroring adult patterns of domestic labour (Russell, Grotti, McGinnity & Privalko, 2019).

The study findings point to (some groups of) boys experiencing greater difficulties in relation to long-standing health conditions and socio-emotional well-being. Both parents and teachers rated boys as having more difficulties in terms of conduct, hyperactivity/inattention and peer relationships. The extent to which these ratings account for poorer relationships with teachers would merit further investigation since the quality of these relationships is likely to have longer-term implications for well-being.

Many aspects of children's lives were highly gendered but boys and girls engaged in some activities in equal numbers, including using the internet to watch YouTube-type videos and to play games alone. In addition, some girls engaged in more traditionally 'male' activities and vice versa. The *Growing Up in Ireland* study offers considerable potential to examine the implications of engaging in gender-typical or -atypical activities for future outcomes, including relationships with peers.

There has been a growing tendency in social research to focus on intersectionality (e.g. the interaction of gender and other dimensions such as social class) rather than concentrating on overall gender differences (Rouhani, 2014). Thus, in discussing educational disengagement, for example, researchers have increasingly highlighted working-class boys as the risk group rather than regarding all boys as ‘disengaged’ (McMaster & Cook, 2019). The size of the **Growing Up in Ireland** sample provides considerable potential to unpack the interaction of gender and family background in influencing child outcomes as well as identifying the factors which help explain, for example, lower levels of reading among boys and lower levels of physical activity among girls.

7.2.3 CONSISTENCY AND CHANGE IN CHILDREN’S EXPERIENCES

The longitudinal nature of the **Growing Up in Ireland** study provides rich insights into the trajectories taken by children from infancy to middle childhood. The development of the Study Children took place against a backdrop of broader social transformation. In particular, the economic circumstances of their families changed significantly over the nine years of their lives in terms of levels of household income and experience of financial stress, mirroring national patterns of recession and recovery. There is considerable potential to build upon the work of Watson et al. (2014) on the impact of the recession on child socio-emotional well-being to examine the influence of changes in family economic circumstances on a range of outcomes. Changes were evident at family level too, with 16 per cent of children experiencing a shifting definition of ‘family’ with a move from a two-parent to a one-parent structure (or vice versa).

At the level of the individual child, the report has related outcomes at age 9 to those reported at earlier waves of the study, providing insights into the different pathways children experienced. On the positive side, the results indicate that, for some outcomes, experience of difficulties was largely transitory. Thus, those ‘at risk’ of socio-emotional difficulties across all three waves from 3 to 9 years of age were confined to a small group – around 2 per cent of the total sample. In contrast, however, some outcomes such as overweight/obesity showed more continuity across waves, indicating the importance of early intervention in preventing longer-term difficulties. Even so, the data highlight that a larger proportion of children transitioned out of rather than into obesity between ages 3 and 9 – a potential avenue for further research and positive finding for policy-makers.

Similarly, some habits such as reading for pleasure (or being read to) appeared to be established early and persist into middle childhood. Other inequalities, such as in cognitive development, appeared to increase over time. Taking a longitudinal perspective allows for a more nuanced view of the best potential timing for intervention and support and further analyses would help identify these key turning points and protective factors in helping shape more positive outcomes among children.

Information on Cohort ’08 allows for an analysis of pathways and trajectories from infancy to middle childhood, helping to complete the cross-sectional picture of 9-year-olds provided by Wave 1 of Cohort ’98. For the first time, this wave of data will allow for a comparison with the experiences of 9-year-olds a decade previously at a time of significant economic, social and policy change, including the digitalisation of children’s lives. Further research comparing Cohorts ’98 and ’08 will provide a useful way of disentangling broader societal and policy changes and the way they have impacted on 9-year-olds, adding to the evidence base provided by the **Growing Up in Ireland** study.

In conclusion, it is worth noting that many aspects of the lives of 9-year-olds, including their activities, their engagement with learning and their contact with extended family, are likely to have changed in the wake of the COVID-19 pandemic and associated restrictions. At the time of writing, a survey of Cohort ’08, who are now 12 years of age, is being planned. This survey will provide rich insights into the impact of the pandemic and potential variation between groups of children and families in its effects.

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LIST OF ACRONYMS

ASB:	Antisocial behaviour
AUDIT:	Alcohol Use Disorders Identification Test
BMI:	Body Mass Index
BP:	Blood Pressure
CJS:	Criminal Justice System
CSPE:	Civic, Social and Political Education
DEIS:	Delivering Equality of Opportunity in Schools
DES:	Department of Education and Skills
DISC-C:	Diagnostic Interview Schedule for Children
EU:	European Union
GUI:	Growing Up in Ireland
GDP:	Gross Domestic Product
GNP:	Gross National Product
GPAV:	Grade Point Average
HBSC:	Health Behaviour of School-Aged Children
IPPA:	Inventory of Parent and Peer Attachment
JST:	Jobseeker's Transitional Payment
LCA:	Leaving Certificate Applied
LCE:	Leaving Certificate Established
LCVP:	Leaving Certificate Vocational Programme
MVPA:	Moderate to vigorous physical activity
NCD-RisC:	Non-communicable Diseases Risk Factor Collaboration
NDA:	The National Disability Authority
NHLBI:	National Heart, Lung, and Blood Institute
NHS:	National Health Survey
NPI:	Narcissistic Personality Inventory
OFP:	One-Parent Family
PAIRFAM:	Panel Analysis of Intimate Relationships and Family Dynamics
SD:	Standard Deviation
SDQ:	Strengths and Difficulties Questionnaire
SILC:	Survey of Income and Living Conditions
TILDA:	The Irish Longitudinal Study on Ageing
TY:	Transition year
UK:	United Kingdom
UNICEF:	United Nations Children's Fund
USA:	United States of America
WHO:	World Health Organization



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