Children and Young People Financial Capability Deep Dive: Vulnerability

Exploring relationships using
CYP Financial Capability Survey data

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Contents

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Executive summary

Introduction

The experiences children and young people have growing up, and what they learn about money during that time, have a profound effect on their chances of having good financial capability later in life. All children and young people need support to learn how to manage money well, but some children, because of particular characteristics, or contexts in which they live, may face additional challenges related to financial capability, and benefit from more targeted support.

This study uses the Money Advice Service's Children and Young People Financial Capability Survey to examine the links between children's individual characteristics, skills, and environmental factors affecting them, and their financial capability. In doing so, it identifies many factors that are linked to poorer financial capability on average – ie, where children who have those factors are likely to do less well than their peers – and so may be considered 'vulnerabilities'.

This is important because it helps us understand more about which children and young people are likely to be most in need of financial capability support, and the areas of financial capability they may benefit most from support on. This will help inform targeting and tailoring of provision.

Description of the Children and Young People's Financial Capability Survey

The **Children and Young People's Financial Capability Survey** ('the CYP FinCap Survey') was conducted in 2016, and aimed to better understand the current financial capability of children and young people in the UK and the drivers of this. It surveyed 4,958 children aged 4–17, and a parent or carer for each child. For this analysis, the data are weighted to achieve a **representative picture** of the UK population of children and young people. The analysis in this report focuses only on children in the survey aged 7–17.

What do we mean by financial capability?

The Financial Capability Strategy for the UK defines 'financial capability' as encompassing the **financial skills, knowledge, motivation and attitudes** required to make good financial decisions and to achieve good financial wellbeing. The foundations for these are developed and can be observed in childhood and adolescence. In this study, we consider a broad range of financial capability indicators for children and young people that capture different aspects of financial capability.

What do we mean by vulnerability?

There is no single definition of vulnerability. Throughout this report and other Money Advice Service research on children and young people, we have defined vulnerable children and young people are those who are at increased risk of poor financial capability, and/or at risk of disproportionately negative impacts of poor money decisions.

This definition was developed by the Money Advice Service through discussion with the CYP Financial Capability Steering Group and other stakeholders, building from an understanding of wider definitions of vulnerability that tend to focus on individuals who are at greater risk of poor outcomes or whose outcomes are likely to be disproportionately worse should they occur.[1] It is also consistent with thinking about adult vulnerability, including work by the FCA in 2015 noting that vulnerability can come in a range of guises, and can be temporary or permanent in nature.[2]

The analysis for this report aims to deepen our understanding of the nature of vulnerability by considering a range of factors the Money Advice Service hypothesised may be linked to poorer financial capability:

- **individual characteristics** – things about a child which are very unlikely to change such as ethnicity;
- **individual skills and behaviour** – things about a child which may change, such as their cognitive skills or behaviour; and,
- **environmental factors** – the wider environment of the child such as family structure and economic circumstances.

We recognise that vulnerability is a complex concept and how vulnerable or otherwise a child is will depend not only on factors affecting them individually but the wider context in which they live, the strengths and support around them, and how these evolve over time. These nuances are described in more detail in the parallel literature review report and Needs Analysis.

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[1] See for example Children's Commissioner (2017). *Defining child vulnerability: Definitions, frameworks and groups*. Available at: https://www.childrenscommissioner.gov.uk/wp-content/uploads/2017/07/CCO-TP2-Defining-Vulnerability-Cordis-Bright-2.pdf

[2] FCA (2015). *Occasional Paper No.8: Consumer Vulnerability*. Available at: https://www.fca.org.uk/publication/occasional-papers/occasional-paper-8-exec-summary.pdf

Key findings

The analysis identifies many characteristics, skills, and environmental factors that are associated, sometimes strongly, with poorer financial capability.

Individual Characteristics

- Among children aged 7–17, having a **long-standing illness** is negatively linked to financial capability.
- **Having a parent from an ethnic minority background** is negatively linked with most financial capability indicators, but there is a positive link with the child spending money less often, and with being more likely to accept they may not get things they want, or that they may get less than friends.
- The strongest links between individual characteristics and financial capability are found for children older than 12.

Individual Skills and Behaviours

- Behavioural and social-emotional characteristics are negatively linked with financial capability. The link strengthens with age.
  - These characteristics are strongly linked to **Mindset** (for children of all ages) and **Ability** (for younger children) indicators.
  - **Poor behaviour** is particularly strongly negatively associated with financial capability.
  - **Poor perseverance** showed many links to financial capability, though some of these links are weaker than those found for poor behaviour.
  - **Poor self-efficacy** and **low self-esteem** are associated with fewer financial capability indicators though the links are still largely negative.
- Cognitive vulnerabilities are also negatively linked with financial capability. Again the link strengthens with age.
  - **Performing below expectation in maths or English** according to the child's latest school report shows a particularly strong negative link with financial capability, particularly around ability, mindset, and connection.
  - There are also some strong negative links between scoring **below grade C in GCSE maths or English** and financial capability for older children, especially around financial knowledge, and aspects of mindset and behaviour.

Environmental Factors

- Environmental factors tend to be **negatively linked** to financial capability. Overall, the links tend to be strongest when a child is aged 12–15.
  - We found relatively few links between aspects of **family structure** and financial capability, particularly vulnerabilities such as being a looked-after child, or a young carer, though there are limitations in how representative our survey was of those groups.
  - The strongest links between aspects of family structure and financial capability were found between having a **parent with sole caring responsibility**, and to a lesser extent, **having a young parent**, and elements of ability and connection.
  - **Economic circumstances** tend to be **negatively linked** to financial capability, in some cases strongly. Again the areas of strongest links tend to be ability, and some aspects of connection.
  - The strongest negative relationships exist between **living in social housing** or **living in an income deprived area** and financial capability. Living in an **over-indebted home** is strongly and negatively linked to preferring not to borrow and a small number of other measures.
  - Some of the Money Advice Service **financial resilience segmentation** categories, particularly growing up in struggling, squeezed, or overburdened homes are also negatively linked to financial capability.

Financial Education

- Financial education in schools is **positively** linked to financial capability. The strongest links exist for children who remember getting financial education as part of personal, social, health and economic (PSHE) education.
- For children with vulnerabilities, those who recall financial education in school display slightly better financial capability than those who do not. The strength of this positive effect is similar to that for all children, suggesting that receiving financial education in school is not sufficient to bridge the gap between children with a vulnerability and those without one.

Conclusions

- Overall the findings confirm negative links between characteristics we hypothesised may be vulnerabilities, and financial capability, though with some notable exceptions where few links were found, or where some positive links exist among wider negative links.
- These findings contribute to our understanding of the needs of children and young people, both in terms of which groups may benefit from extra support, and what that support might best focus on.
- The findings from this work will be used alongside other research findings to inform the Money Advice Service's Needs Analysis report, to be published alongside this analysis in spring 2018. This report will set out everything the Money Advice Service knows to date about what children and young people need to develop financial capability, how well they are doing, which groups may benefit from additional support, and what the nature of those unique needs may be.
- The needs analysis will also make recommendations as to which factors we have examined may be useful for targeting the commissioning and provision of financial capability support, and which may not be so suitable for this, but could be used to tailor content for different children and young people once being delivered. It will be the first in a series of reports that will inform our CYP Commissioning Plan, to be published in late autumn 2018.
- The Money Advice Service will also continue to explore in more detail the questions that could not be addressed by this research – such as the effects of multiple vulnerabilities interacting, how strengths and protective factors play a role, how vulnerability evolves over time, and understanding more about characteristics not captured in our survey, or captured only in small numbers that do not necessarily represent the wider population of children with those characteristics.

Chapter 1: Introduction

1.1 What are the objectives of this study?

In 2016, the Money Advice Service (MAS) carried out its Children and Young People's Financial Capability Survey ('the CYP FinCap Survey') to better understand current levels of financial capability among children and young people and to identify the drivers of financial capability. In this study, we use the survey data to explore the relationship between **vulnerability** and **financial capability**.

The Money Advice Service believes that what people see, learn, and experience during childhood and adolescence can have a profound effect on how they manage their money as adults. However, many children and young people will not get the chance to develop necessary skills, knowledge, attitudes and mindsets, and do not grow up in environments that enable them to grow up and manage money well later on.

The Money Advice Service's work to date with those in the financial education sector and agencies working with children and young people has suggested that some children have specific needs because of their particular individual characteristics, or the environments in which they live, and may benefit from more targeted support. For example, some facing many complex challenges may reach financial independence earlier than the majority, often with less family support to rely on.

However, 'vulnerability' in the context of children and young people's financial capability has never been widely explored or defined. In late 2016, the Money Advice Service began a programme of research to address this, seeking to understand which groups are **most vulnerable to poor financial capability**, and/or at risk of **disproportionately negative impacts** of poor money decisions, and what support might help address this.

This report is part of this wider piece of work, and aims to contribute to this by exploring the link between a wide range of potential vulnerabilities (including their individual characteristics, skills and environment) and financial capability.

1.2 Structure of the report

The structure of the report is as follows:

- The remainder of this chapter provides key information on background and methodology, describing the CYP FinCap Survey, defining key variables (financial capability indicators, vulnerability measures and financial education measures) and outlining the potential limitations of the study.
- Chapters 2–4 present the results of the analysis for the three main groups of potential vulnerabilities: those related to children and young people's **characteristics**; to their **skills and behaviour**; and to their **home environments and family structures**. These chapters begin with a summary of the key findings and a brief description of the analysis. The findings are then presented graphically, supported by discussion in the text.
- Chapter 5 examines whether those that report that they have had financial education taught in school have higher levels of financial capability.
- Chapter 6 draws together the results from the previous chapters and outlines the main conclusions and next steps.

1.3 The Children and Young People's Financial Capability Survey

The Children and Young People's Financial Capability Survey ('the CYP FinCap Survey') is a nationally representative study of children aged 4 to 17. A total of 4,958 children, and a parent, guardian or carer for each child, were interviewed. Initial results on the financial capability of children and young people in the UK were published in March 2017.[3]

The CYP FinCap Survey consists of two questionnaires; one for children aged 7–17 and their parents, and one for children aged 4–6 and their parents. Both questionnaires have a common core of questions asked of the parents. These questions relate to, among other things, child characteristics, household characteristics, and parental financial capabilities and attitudes.

[3] Money Advice Service (2017). *Financial Capability of Children, Young People and Their Parents in the UK 2016. Initial results from the 2016 UK Children and Young People's Financial Capability Survey.* Available at: www.moneyadviceservice.org.uk/en/corporate_categories/research

The questionnaires differ significantly across ages for questions asked of the children. The questions asked of children aged 4–6 are almost completely different from those asked of children aged 7–17, as 4- to 6-year-olds are expected to have a lower level of general comprehension. Within the older age-group, not all questions are asked of all children, either to keep the length of the questionnaire reasonable (ie, shorter for younger children) or because questions are unlikely to be relevant for younger children (eg, questions related to GCSE results). More detail on the CYP FinCap Survey can be found in the technical report.[4]

For the purpose of this report we have concentrated the analysis on children aged 7–17 as the questionnaires between the ages are too different to allow meaningful comparison. For the same reason the data for 4- to 6-year-olds is not included in the financial capability composites we outline in section 1.4.1.

1.4 What do we mean by financial capability?

The Financial Capability Strategy for the UK defines the term 'financial capability' as the **financial skills, knowledge, motivation and attitudes** required to make good financial decisions and to achieve good financial wellbeing.[5] The Money Advice Service recognises that adult financial capability is linked to skills, knowledge, mindset, attitudes and behaviours developed and observed in childhood and adolescence. Additionally, there is evidence that financial capability **begins to develop early in childhood**. For instance, attitudes towards money can be set by the age of seven.[6] Therefore, it is worthwhile to look at the financial capability not only of adults but also of children and young people.

1.4.1 Which aspects of financial capability are considered in this report?

Table 1 below shows all the financial capability indicators included in this study.

The indicators are grouped according to the Money Advice Service's four CYP financial capability composite measures which are aligned with the CYP Outcomes Framework.[7] The composite measures represent different aspects of financial capability:

- level of **Ability** – children's financial knowledge and skills;
- **Mindset** – children's values and attitudes towards money;
- level of financial **Connection** – children's engagement with money and access to financial products/services; and,
- financial **Behaviours** – children's actions with money.

These measures were constructed through an iterative process and were refined to include the questions that were most strongly connected to each other.[8] These composites are therefore not exhaustive and there are other outcomes that are important to consider in the context of vulnerability. These indicators are grouped under 'other aspects of financial capability' in this analysis.

Table 1 also shows for which age-groups the financial capability indicators have been measured. Note that for each indicator, a child is considered 'capable' or not. For example, a child either chooses the correct coins when paying (indicating financial capability according to that indicator); or they do not choose the correct coins (indicating an absence of financial capability according to that indicator).

[4] Money Advice Service (2017). *Financial Capability of Children, Young People and their Parents in the UK 2016: Technical Report.* Available at: https://www.moneyadviceservice.org.uk/en/corporate/research

[5] Money Advice Service (2015). *The Financial Capability Strategy for the UK.* Available at: www.fincap.org.uk/uk_strategy

[6] Money Advice Service (2013). *Habit Formation and Learning in Young Children.* Available at: www.moneyadviceservice.org.uk/en/corporate/habit-formation-and-learning-in-young-children

[7] The CYP Outcomes Framework was produced by the Money Advice Service and is designed to help organisations plan and evaluate their work, by listing outcomes in different areas of financial capability (that we would hope to see) for children and young people at different ages between 3 and 18.

[8] These composites were created based on the data from all children and young people in the CYP Survey and were not created specifically for the potentially vulnerable groups discussed in this report.

Table 1: Financial capabilities indicators and grouping

GROUP	FINANCIAL CAPABILITY INDICATOR: A CAPABLE CHILD…	AVAILABLE AT AGES
Ability	Chooses correct coins when paying	7–17
	Waits for and/or checks change	7–17
	Displays good financial knowledge [as indicated through the knowledge index][9]	7–17
	Can read bank statement	12–17
	Understands interest rates	12–17
	Can read a payslip	14–17
	Answered question about currency correctly [correctly combines currency]	7–11
Mindset	Is able to recognise difference between needs and wants	7–17
	Is not bothered by parents not giving what she/he sees in shops [accepts not getting things]	7–17
	Is not bothered by friends having things he/she does not have [accepts getting less than friends]	7–17
	Is able to explain choices made when spending	7–17
	Understand that money has value	7–17
	Understand that you have to make choices when spending money	7–17
	Understands that adverts try to sell things	7–17
	Would save more of £10 windfall	7–17
	Compares prices	11–17
	Agrees thinking about money does not make them anxious	11–17
	Agrees they feel confident managing money	12–17
	Says they prefer not to borrow	12–17
	Would save more of £100 windfall	12–17
	Does not ask for things after been told he/she can't have them [doesn't ask for things repeatedly]	7–17

[9] The knowledge index is a composite measure derived from variables reflecting the child's ability to correctly answer questions testing financial knowledge. Examples of questions include "What would be the consequence if you weren't able to pay your council tax?" (for children aged 14 to 17). Good knowledge is defined as a child scoring "high" or "intermediate" on the knowledge index.

GROUP	FINANCIAL CAPABILITY INDICATOR: A CAPABLE CHILD…	AVAILABLE AT AGES
Connection	**Talks about money with appropriate people**	7–17
	Does things with his/her bank account [child question]	8–17
	Knows the type of bank account	8–17
	Uses internet banking and/or mobile banking	8–17
	Has a bank account	7–17
	Pays for things in shops	7–17
	Pays for things online	7–17
	Gets money	7–17
	Pays for non-school clothes and shoes	11–17
	Pays for snacks or sweets	11–17
	Pays for presents for other people	11–17
	Pays for going out with friends	11–17
	Earns regular money	7–17
Behaviour	Sticks to agreements when paying online	7–17
	Is able to save up for short time for something he/she wants	7–17
	Saves up more frequently [eg, weekly, monthly]	8–17
	Spends money he/she gets less often	8-17
	Plans how to pay for things	14-17
	Appropriately keeps track of spending	14-17
	Saves up more often when he/she gets money	8-17
	Can pay an unexpected bill	15-17
	Is able to manage day-to-day money or allowance	7-17
	Has money in appropriate financial products [ie, has a bank account or money in financial products][10]	7-17
	Does something with his/her bank account [parent question][11]	7-17

*Financial capability indicators that have been answered by children are presented in **bold** text, while financial capability indicators that have been answered by the responding parent on behalf of their child are in normal text. Financial capability indicators that have been used in the construction of the composite indicator for the respective group are in black text, while financial capability indicators that have not been used in the construction of the composite indicator for the respective category are in grey text.*

[10] These could include savings and current accounts, a Child Trust Fund, credit union account, NS&I Savings, Premium Bonds or a junior ISA.
[11] For children aged 8–17, both the parent and the child were asked whether the child uses his/her bank account.

1.5 What do we mean by vulnerability?

There is no single definition of vulnerability. Throughout this report and other Money Advice Service research on children and young people, we have defined vulnerable children and young people are those who are at increased risk of poor financial capability, and/or at risk of disproportionately negative impacts of poor money decisions.

This definition was developed by the Money Advice Service through discussion with the CYP Financial Capability Steering Group and other stakeholders, building from an understanding of wider definitions of vulnerability that tend to focus on individuals who are at greater risk of poor outcomes and/or who are likely to be affected disproportionately by certain events should they occur.[12]

It is also consistent with thinking about adult vulnerability, including work by the FCA in 2015 noting that vulnerability can come in a range of guises, and can be temporary or permanent in nature,[13] and their most recent definition of vulnerable consumers as those who “can readily be identified as significantly less able to engage with the market, and/or people who would suffer disproportionately if things go wrong.**”**[14]

Wider research, set out in our parallel report *Vulnerable children and young people and financial capability: Literature Review,* has shown that children who may be considered vulnerable to poor outcomes more broadly, such as care leavers, young carers, or children who are not in education, employment or training, may also be vulnerable to poor financial capability and/or financial outcomes.

However, our research[15] has also shown that other factors may make children at increased risk of poor financial capability, such as not having experience of receiving and using money, or growing up in homes where parents do not role model financial capability.

The analysis for this report aims to deepen our understanding of the nature of vulnerability by considering a range of factors we hypothesised may be linked to financial capability:

- **individual characteristics**: things about a child which are very unlikely to change such as ethnicity;
- **individual skills and behaviour**: things about a child which may change, such as their cognitive skills or behaviour; and,
- **environmental factors**: the wider environment of the child such as family structure and economic circumstances.

It sits alongside wider research examining the relationship between the role of parents and the financial capability of their children.[16]

We recognise that vulnerability is a complex concept and how vulnerable or otherwise a child is will depend not only on factors affecting them individually but the wider context in which they live, the strengths and support around them, and how these evolve over time.

We have not been able in this research to examine the relationships between vulnerabilities, the effect of experiencing multiple vulnerabilities at once, or the potential interactive effects of strengths and protective factors. If a child struggles with behaviour but has parents who role model good financial capability, will one have a greater effect than the other? The answer is likely to depend on the extent of the strengths and needs and a myriad of other family and social factors influencing the child’s development. A child’s path will likely depend on how long different vulnerabilities endure and the wider context in which they are growing up.

These nuances are described in more detail in our parallel literature review and Needs Analysis.

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[12] See for example Children’s Commissioner (2017) *op cit*.
[13] FCA (2015) *op cit*.
[14] FCA (2017). *FCA Mission: Our Future Approach to Consumers*. Available at: https://www.fca.org.uk/publication/corporate/our-future-approach-consumers.pdf
[15] Money Advice Service (2017). *Financial Capability of Children, Young People and Their Parents in the UK 2016. Initial results from the 2016 UK Children and Young People’s Financial Capability Survey.* Available at: www.moneyadviceservice.org.uk/en/corporate_categories/research
[16] Money Advice Service (April 2018). CYP Fin Cap Deep Dive – Parenting. Available at: https://www.moneyadviceservice.org.uk/en/corporate/research

1.5.1 Which vulnerabilities are considered in this report?

Table 2 below presents all potential vulnerabilities considered in this study.

The selection of these potential vulnerabilities was guided by research on CYP vulnerabilities in domains other than financial capability, discussions with practitioners working with children and young people in both the financial capability and the wider children's and youth services space, and previous reports examining financial capability and vulnerability (such as the 2013 report from the APPG on Financial Education[17]). Note that some vulnerabilities identified by other research and feedback could not be included in the analysis, because they were not captured in the CYP FinCap Survey or the sample size interviewed was too small – eg, the child/family has English as second language; the child has special educational needs or disabilities; the young person is NEET (not in education, employment or training); the young person is a parent; and 16-/17-year-olds who have left home.

In addition, for the purposes of this analysis, a child is considered to be potentially vulnerable or not. For example, we consider a child to either display poor behaviour or not. We are aware that for many of the indicators considered in this report the reality is unlikely to be this simple; however this was necessary to allow us to be able to compare differences between the two groups. The definitions used in this analysis are outlined in the technical report.

Similarly, it is important to note that while we are referring to a number of different characteristics and contexts as potential vulnerabilities, we are not implying that all children with this characteristic will do worse on financial capability, nor that children without this characteristic will definitely do better. We also recognise that in reality whether a child is vulnerable or not depends on a complex mix of conditions, characteristics and relationships, protective factors, and strengths of the child, their family, and the environment in which they live. This analysis is intended to tell us more about which factors may be associated with a greater risk of poor financial capability, but will never be the complete picture.

Table 2: Potential vulnerability measures and grouping

GROUP	VULNERABILITY	AVAILABLE AT AGES
Individual characteristics	Ethnicity of parent is black or ethnic minority;[18]	7–17
	Child has long-standing illness	7–17
Behavioural and social-emotional characteristics	*Child displays poor behaviour*	7–17
	Child has poor perseverance	7–17
	Child has low self-esteem	7–17
	Child has poor self-efficacy	7–17
Cognitive vulnerabilities	Performance in Maths is below expectation (parent's recall of last school report)	7–17
	Performance in English is below expectation (parent's recall of last school report)	7–17
	Child does not have a GCSE grade C or better in Maths	16–17
	Child does not have a GCSE grade C or better in English	16–17

[17] APPG on Financial Education for Young People (2013). Financial Education for Vulnerable Young People

[18] It should be noted that the survey asked about the ethnicity of the parent who filled out the questionnaire and did not ask the ethnicity of the child nor the ethnicity of any other adult involved in parenting responsibility.

GROUP	VULNERABILITY	AVAILABLE AT AGES
Family structure	Parent has sole caring responsibility over the child	7–17
	Parent has joint caring responsibility with parent not in the household	7–17
	Child is looked after[19]	7–17
	Child has caring responsibilities in the household	7–17
	Child has young parents	7–17
	Child lives in multi-generational household	7–17
Economic circumstances	Child lives in income deprived area	7–17
	Child lives in social housing	7–17
	Main income earner is unemployed	7–17
	Over-indebted (according to the Money Advice Service definition)[20]	7–17
	Family income is low	7–17
Money Advice Service financial resilience segmentation	Segment: Struggling (vs. squeezed or cushioned)	7–17
	Segment: Squeezed (vs. cushioned)	7–17
	Sub-segment: Over-burdened	7–17
	Sub-segment: Struggling younger adults or struggling working families	7–17
	Sub-segment: Struggling working families	7–17
	Sub-segment: Squeezed younger families and couples	7–17
	Sub-segment: Older squeezed	7–17

*Potential vulnerability indicators that have been answered by children are presented in **bold** text, while indicators that have been answered by the responding parent on behalf of their child are in normal text. Indicators that use a combination of parent and child answered questions are in italic text.*

1.6 What do we mean by financial education?

This report looks specifically at the role of financial education in schools rather than financial education in the broader sense. Financial education in schools is any part of the school curriculum in which a child learns to manage money. It is a mandatory part of the primary-school curriculum and secondary-school curriculum in Scotland, Wales and Northern Ireland, and a mandatory part of the secondary-school curriculum in England. The evidence on the effectiveness of financial education in improving a child's financial capability is mixed, and this report aims to add to this evidence base.

In this study, we look at the relationship between financial education in school and a child's financial capability from two angles. Firstly, we look at whether recalling receiving financial education in school is positively associated with children's financial capability. Secondly, we look at whether financial education also has a positive association when looking specifically at vulnerable children and whether it may therefore have a protective effect, mitigating the impacts of their vulnerability on their financial capability. We then look at whether it has a larger association for children who have vulnerabilities compared to those who do not, in order to examine whether it could be used to bridge the gap in financial capability between these two groups.

[19] Although some looked-after children and young people are included in the survey, it should be noted the survey will not have reached those in residential care or those young people living independently with Local Authority support.

[20] Families are classified as over-indebted if they have missed payments for credit commitments or bills 3 months in the last 6 and/or feel that debt is a heavy burden on them.

The context in which financial education is given may also matter. Financial education embedded in a maths lesson may have a different impact on children to financial education given as part of a business and finance lesson. Therefore, not only do we look at whether a child has had any financial education, but also at the context in which it has been provided.

1.6.1 Which financial education indicators are considered in this report?

Children were asked as part of the CYP Survey whether they have learnt how to manage their money in school or college. It is worth noting that the measures used for this analysis are self-reported by children in the survey; teachers may have a different perspective and, as financial education is often integrated within other subjects, the children may not always have been aware that they were learning about managing money specifically. Therefore, the measures analysed represent children's recall of financial education rather than necessarily receipt.

Table 3 shows the financial education indicators considered in this study.

Table 3: Financial education, ages 7–17

FINANCIAL EDUCATION INDICATOR	AVAILABLE AT AGES
Child has had any financial education	7–17
Child has had financial education in maths lesson	12–17
Child has had financial education in personal, social, health and economic (PSHE) lesson	12–17
Child has had financial education in citizenship lesson	12–17
Child has had financial education in business and finance lesson	12–17

1.7 Methodology

There are two parts to this analysis presented in this report:

1. We compare the financial capability outcomes of children aged 7–17 with each vulnerability to those without. Any significant differences[21] in a financial capability outcome between those with a vulnerability and those without indicate which financial capability outcomes are linked to which types of vulnerability, in what direction,[22] and how big the differences are. As the links between a potential vulnerability and financial capability may differ substantially between children of different ages, we have also broken up the age-group into three smaller groups: 7–11, 12–15, and 16 and 17. To avoid repetition, these results are not presented in every case but interesting findings are noted.
2. However, we are aware that these links may be explained by differences in other associated factors rather than just the vulnerability. For example, children in single-parent families are less likely to have a bank account. However, these families are also likely to have lower incomes (31% of single-parent families are classified as low income versus 12% for other families), and it may be this income difference driving why they are less likely to have a bank account. To test this, the second part of this analysis uses a technique called logistic regression. This allows us to see whether significant differences remain between groups of children that are similar in other respects (for example in households with similar incomes). If significant differences remain, this suggests a particular vulnerability is a key factor explaining differing levels of financial capability.

[21] Tested using a Chi-square test at the 99% confidence level. This means our result could only be generated by pure random chance at most once for every 100 samples we could have drawn. A high confidence level is chosen because of the large number of tests being carried out and because of the complex survey design used.

[22] Direction and the size of the differences are investigated with correlation analysis taking into account the nature of our measures.

1.8 Limitations of the study

As in any study, there are limitations associated with the analysis and with the underlying survey.

- Although the survey is weighted to be nationally representative of children aged 4–17 in terms of age, gender, ethnicity, region or country of residence and level of income deprivation and rural versus urban areas, it is not necessarily representative in terms of each type of potential vulnerability. For example, the survey could not reach those in residential care or those young people living independently with local authority support. Other potential vulnerabilities have a relatively low occurrence within the survey (and in the population it represents), for example children living in a multi-generation household. The small numbers of children in these categories make it difficult to robustly identify the link between these potential vulnerabilities and financial capability simply due to lack of data. Although the analysis does uncover links between potential vulnerabilities and financial capabilities, further research would be needed to ensure that the conclusions drawn are true for overall populations of children and young people within these smaller groups.
- There is only limited previous research in this area to inform the selection of potential vulnerabilities.To mitigate the risk that we have omitted important vulnerabilities, in a further analysis we explore whether any other factors, captured by the survey but not typically associated with vulnerability, are associated with lower levels of financial capability.[23]
- This analysis explores each vulnerability separately, though it is likely children experience multiple vulnerabilities. We explore this to some extent in the regression analyses (for example, income is accounted for in the regression analysis). However, the options for exploring combinations of vulnerabilities would be numerous and are an interesting topic for future research.
- This study cannot establish whether potential vulnerabilities cause poorer financial capability, only whether there is an association between the two. Regression analysis provides a useful step towards establishing causality, but despite the wide range of information collected by the survey, it is still possible that there are some underlying factors linked to both potential vulnerability and financial capability, which are not captured by the survey or simply unobservable. This is a potential issue in every study of this sort.

[23] Money Advice Service (April 2018). *Measuring Financial capability of Children and Young People. What drives financial behaviours?* Available at: https://www.moneyadviceservice.org.uk/en/corporate/research

Chapter 2: Individual characteristics

SUMMARY OF RESULTS:

- Among children aged 7–17, having a **long-standing illness** is linked to poorer financial capability.
- The findings related to having a **parent from an ethnic minority background** are mixed. While having a parent from an ethnic minority background is negatively linked with most financial capability indicators, it is positively linked with others, including spending money less often, and being more likely to accept that they may not get things they want, or that they may get less than friends.
- The strongest links between individual characteristics and financial capability are found for older children (12 and above).

In this chapter, we explore the links between potential vulnerabilities in terms of a child's individual characteristics and financial capability. We define individual characteristics of a child as things that are either impossible or unlikely to change over time. These individual characteristics are:

- whether the parent of the child is black or from another ethnic minority[24]; and,
- whether the child has a long-standing illness.

2.1 Long-standing illness and parent's ethnicity

2.1.1 Overall results

Figure 1 overleaf shows links between individual characteristics and some financial capability indicators.

Most of the links are negative, implying that children with these individual characteristics tend to display **poorer financial capability**. There are however **notable exceptions, indicating positive associations** with some aspects of financial capability. This is addressed in more detail below.

Which individual characteristics are most linked to financial capability?

We see links between both individual characteristics (having a **long-standing illness** and having a **parent from an ethnic minority background**) and poorer performance in certain aspects of financial capability. Many of the links are weak in terms of the strength of association.

In contrast, the relationships between children with a parent from an ethnic minority, and acceptance that the child may not get things and frequency of spending money are positive, indicating that these children perform better on certain indicators of financial capability.

[24] It should be noted that the survey asked about the ethnicity of the parent who filled out the questionnaire and did not ask the ethnicity of the child or the ethnicity of any other adult involved in parenting responsibility.

Figure 1: Links between characteristic vulnerabilities and financial capability

Ages 7-17	Ethnic minority	Long standing illness
Ability		
Chooses correct coins		Strong negative link
Waits for or checks change		Strong negative link
Knowledge index	Weak negative link	
Can read bank statement	Weak negative link	
Understand interest rates	Weak negative link	
Can read payslip	Weak negative link	
Correctly combines currency		Weak negative link
Mindset		
Is not anxious about money		Strong negative link
Confident managing money		
Prefers not to borrow		
Saves more of £10		
Saves more of £100		
Accepts not getting things	Weak positive link	
Accepts getting less than friends	Weak positive link	Weak negative link
Compares prices		Weak negative link
Understanding: money has value		Strong negative link
Understanding: money and choices		Strong negative link
Understanding: adverts sell things	Weak negative link	Strong negative link
Can explain choices		
Understands difference needs/wants	Weak negative link	
Doesn't ask for things repeatedly		Weak negative link

Ages 7-17	Ethnic minority	Long standing illness
Connection		
Bank account: knows type		
Bank account: uses (child)		
Uses mobile/internet banking		
Talks about money		
Bank account: has one	Strong negative link	
Pays for things in shops	Strong negative link	
Pays for things online	Weak negative link	
Gets money		
Pays for: clothes	Strong negative link	Weak negative link
Pays for: snacks	Strong negative link	Weak negative link
Pays for: presents	Weak negative link	
Pays for: going out	Weak negative link	
Earns regular money		
Behaviour		
Saves up frequently		
Spends money less often	Strong positive link	
Plans spending		Weak negative link
Sticks to online paying agreements	Strong negative link	
Tracks spending	Weak negative link	
Can save for short time		
Saves up when receives money		
Can pay unexpected bill		
Can manage money/allowance		Weak negative link
Has money in financial products	Strong negative link	
Bank account: uses (parent proxy)		

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Strength and direction of relationship

Strong negative link	●
Weak negative link	●
No link	
Weak positive link	●
Strong positive link	●

Note that not all financial capability indicators are available for all ages.

Which financial capability indicators are most linked to these individual characteristics?

Individual characteristics are linked to indicators of financial capability across all categories, with the exception of those related to Connection.

The different potential vulnerabilities seem to have links to different elements of financial capability. Having a parent from an ethnic minority is related to scoring differently to other children on the Ability and Behaviour aspects of financial capability, while having a long standing illness seems to be related more strongly to differences in the Mindset elements.

Similarly, having a parent with an ethnic minority background is strongly linked to access to financial products (ie, having a bank account or money in appropriate financial products), but having a long-standing illness is not.

How do these links differ by age?

To investigate further how the links between these vulnerabilities and financial capability evolve with age, we can split the age-group of 7–17 into three smaller groups (7–11, 12–15 and 16–17). These vulnerabilities have the strongest association with financial capability when **children are above the age of 12**. The number of links observed is highest and the links are strongest in these age-groups. However, when making comparisons across different age-groups, is should be noted that the survey does not track the same individuals over time. Instead, it acts as a snapshot for each age-group.

Breaking down the relationships by age-group, we see that the positive relationships between having a parent from an ethnic minority background and certain financial capabilties (the child accepting that they may not get things or that they may get less than friends, and the frequency of spending) are only present for children aged 7–15. No positive links exist for children aged 16 or 17.

Table 4: Number of links observed at each age-group, as percentage of total links investigated

DIRECTION OF LINK	7–11	12–15	16–17
Negative links	15%	21%	22%
Positive links	2%	4%	0%

Results from regression analysis

We tested a range of other variables (including gender, family income, parent’s educational attainment and parent’s occupation) to see whether they might explain the links that appear in this chapter. The links found above remain even once we account for differences in the child’s background. This suggests these links between children from an ethnic minority background and children with a long-term illness and poorer financial capability are not explained simply by differences in financial situation and remain useful predictors of poor financial capability in children.

We also included gender as a potential explanation not only for the links seen in this chapter, but also for the links in the next chapters. This gives us the opportunity to say more about the general relationship between gender and financial capability. We highlight gender because the relationship between gender and financial capability because the literature review on vulnerable children and young people commissioned by the Money Advice Service shows inconclusive and mixed evidence on this.

We find that girls aged 7–17 tend to display better financial capability than boys across approximately half of the financial capability indicators. This is discussed in more detail in the box below.

Links between gender and financial capability

The regression analysis accounts for a number of possible factors that might affect the link between financial capability and potential vulnerability. One of these possible factors is gender. Since the previous literature review commissioned by the Money Advice Service, (*Vulnerable children and young people and financial capability: Literature Review*, Money Advice Service 2018) does not provide a definitive conclusion on the role gender plays for financial capability, the regression analysis provides the opportunity to examine this relationship further.

Regression analysis was undertaken for those combinations of vulnerability and capability indicators that showed the most interesting correlation patterns. Therefore, regression results provide information on the links between gender and the financial capability indicators. Of these 25 financial capability indicators, 11 have a statistically significant link with gender.

In most cases where there is a difference between genders, girls tend to display better financial capability than boys. Most notably, girls understand their economic environment better than boys and have better access to financial products. They are, for instance, more likely to understand that money has value; and they are more likely to use their bank account.

Girls are also more likely to be able to understand the difference between wants and needs; to be able to manage an allowance; and to track their spending.

Boys, on the other hand, are more likely to save a significant amount of a £10 windfall. Furthermore, there is some indication that boys are more confident managing money.

2.1.2 Results by vulnerability

The child's parent is black or from another ethnic minority

Having a parent from an ethnic minority background is negatively associated with several financial capability indicators. Many of these links are relatively weak, but links are particularly strong for:

- whether the child has access to financial products (ie, the child has a bank account or money in financial products); and,
- whether the child pays for things such as snacks and clothes.

Two groups of financial capability indicators stand out because of a positive association. It seems that there is a strong link between having a parent from an ethnic minority background and spending money less often, and a weak link to being more likely to accept that they may not get things they want or that they may get less than friends.

The child has a long-standing illness

Having a long-standing illness is negatively associated with financial capability indicators, the strongest negative links are found for:

- whether a child understands the economic environment (eg, the child understands that money has value); and,
- whether a child correctly handles currency correctly (ie, whether a child chooses correct coins, and waits for or checks change).

Chapter 3: Individual skills and behaviours

SUMMARY OF RESULTS:

- Behavioural and social-emotional characteristics are negatively linked with financial capability.
    - **Poor behaviour** is particularly strongly associated with poorer financial capability.
    - Behavioural and social-emotional characteristics are strongly linked to financial capabilities related to **Mindset** (for children of all ages) and **Ability** (for younger children).
    - The link between potential behavioural and social-emotional characteristics, and financial capability **strengthens with age**.
- Cognitive vulnerabilities are also negatively linked with financial capability.
    - **Performing below expectation in Maths or English** according to the child's latest school report shows a particularly strong link with poorer financial capability.
    - Cognitive vulnerabilities have a strong relationship with financial capabilities indicators related to a child's knowledge and understanding of economic concepts (**Mindset** and **Ability**).
    - The link between cognitive vulnerability and financial capability indicators **strengthens with age**.

In this chapter, we explore whether and which skills and behaviours may make a child more prone to having poorer financial capability. We consider individual skills and behaviours to be characteristics of a child that can change over time. Within these individual skills, a distinction is made between behavioural and social-emotional characteristics, and cognitive vulnerabilities.

Behavioural and social-emotional characteristics we explore are:

- whether a child shows poor behaviour;
- whether a child has poor perseverance;
- whether a child has low self-esteem; and,
- whether a child has low self-efficacy.

Children with **cognitive vulnerabilities** are those with lower levels of cognitive ability, captured in the survey in different ways:

- whether performance is below expectation for the child's age according to the parent's recall of the child's latest school report (performance assessed in both Maths and English); and,
- whether a young person aged 17 has failed to obtain a GCSE grade C or better (performance assessed in both Maths and English).[25]

3.1 Behavioural and social-emotional characteristics

3.1.1 Overall results

Figure 2 overleaf shows the links between behavioural and social-emotional characteristics and financial capability indicators for children aged 7–17. Most links are negative. This indicates that children with these behavioural or social-emotional characteristics display poorer financial capability on average than other children.

[25] At age 17, the respondents would be expected to have sat GCSE exams.

Figure 2: Links between behavioural and social-emotional characteristics and financial capability

Ages 7-17	Poor behaviour	Poor perserverance	Low self esteem	Poor self efficacy
Ability				
Chooses correct coins	Strong negative link	Strong negative link	Weak negative link	
Waits for or checks change	Weak negative link	Strong negative link		
Knowledge index	Strong negative link	Weak negative link		Weak negative link
Can read bank statement	Strong negative link	Weak negative link		Weak negative link
Understand interest rates	Strong negative link	Weak negative link		Strong negative link
Can read payslip	Weak negative link			Weak negative link
Correctly combines currency	Strong negative link	Weak negative link		
Mindset				
Is not anxious about money	Strong negative link		Strong negative link	Strong negative link
Confident managing money	Strong negative link	Strong negative link	Strong negative link	Strong negative link
Prefers not to borrow	Strong negative link	Strong negative link	Strong negative link	Strong negative link
Saves more of £10				
Saves more of £100	Strong negative link			Strong negative link
Accepts not getting things	Strong negative link			
Accepts getting less than friends	Strong negative link		Strong negative link	Weak negative link
Compares prices	Strong negative link	Strong negative link		Strong negative link
Understanding: money has value	Strong negative link	Strong negative link	Weak negative link	Strong negative link
Understanding: money and choices	Strong negative link	Strong negative link	Weak negative link	Weak negative link
Understanding: adverts sell things	Strong negative link	Strong negative link		Weak negative link
Can explain choices	Strong negative link	Strong negative link		
Understands difference needs/wants	Strong negative link	Strong negative link		Weak negative link
Doesn't ask for things repeatedly	Strong negative link	Strong negative link	Strong negative link	Strong negative link

Ages 7-17	Poor behaviour	Poor perserverance	Low self esteem	Poor self efficacy
Connection				
Bank account: knows type		Weak negative link		
Bank account: uses (child)		Strong negative link		
Uses mobile/internet banking		Weak negative link		
Talks about money	Weak negative link	Weak negative link	Weak negative link	Weak negative link
Bank account: has one	Weak negative link	Weak negative link		
Pays for things in shops			Strong positive link	
Pays for things online			Weak positive link	
Gets money				
Pays for: clothes				
Pays for: snacks				
Pays for: presents		Weak negative link		
Pays for: going out		Weak negative link		
Earns regular money		Weak negative link		Weak negative link
Behaviour				
Saves up frequently	Weak negative link	Strong negative link		
Spends money less often				
Plans spending	Strong negative link	Strong negative link	Weak negative link	Weak negative link
Sticks to online paying agreements	Strong negative link			
Tracks spending	Weak negative link	Strong negative link	Weak negative link	
Can save for short time	Strong negative link	Strong negative link	Weak negative link	Weak negative link
Saves up when receives money	Strong negative link	Strong negative link		
Can pay unexpected bill	Strong negative link			
Can manage money/allowance	Strong negative link	Strong negative link		Weak negative link
Has money in financial products	Strong negative link			
Bank account: uses (parent proxy)		Weak negative link		

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Strength and direction of relationship

Strong negative link	●
Weak negative link	●
No link	
Weak positive link	●
Strong positive link	●

Note that not all financial capability indicators are available for all ages.

Which behavioural or social-emotional characteristics are most linked to financial capability?

All behavioural and social-emotional characteristics are linked to multiple financial capability indicators. The characteristic most linked to financial capability differs by age-group.

Poor behaviour is particularly strongly associated with financial capability indicators. This characteristic has the greatest number of links, with the links tending to be strong. **Poor perseverance** is also linked to many financial capability indicators, but its associations tend to be weaker.

Poor behaviour and poor perseverance can be thought of as behavioural characteristics related to a child's self-control or self-regulation. Both these characteristics have stronger links with financial capability than either low self-esteem or poor self-efficacy, which are more related to self-image. This suggests that behavioural characteristics may be more connected to financial capability than social-emotional characteristics are.

Which financial capability indicators are most linked to these characteristics?

Financial capability indicators related to **Mindset** show the most links with behavioural and social-emotional characteristics, in terms of the proportion of potential links tested. The financial capability indicators are particularly strongly associated with poor behaviour and to a lesser degree poor perseverance. Financial capability indicators related to **Ability** and **Behaviour** also show a large incidence of links, but these links tend to be weaker.

How do these links differ by age?

To get a better sense of how the associations between behavioural and emotional characteristics and financial capability indicators evolve over time, we can split the group of 7- to 17-year-olds into smaller age-groups. Table 5 confirms that the links grow more numerous as the child gets older. The largest increase in the number of associations is between the age-groups of 7–11 and 12–15. This suggests that behavioural and social-emotional characteristics may be particularly consequential towards the start of secondary school.

We see an increase in the proportions of links with age across all groups of variables, but particularly for financial capability indicators related to Mindset. Additionally, the development of the links between behavioural and social-emotional characteristics and variables related to the child's understanding of the economic environment is especially striking. All behavioural and social-emotional characteristics are strongly linked to these financial capabilities for children aged 16 and 17.

Table 5: Number of links observed at each age-group, as percentage of total links investigated

DIRECTION OF LINK	7–11	12–15	16–17
Negative links	21%	40%	43%
Positive links	1%	1%	0%

Results from regression analysis

We tested a range of other variables (including gender, family income, parent's educational attainment and parent's occupation) to see whether they might explain the links that appear in this chapter. These links remain once we account for these variables. This implies that, irrespective of background, a child with poorer behaviour will typically have poorer financial capability.

3.1.2 Results by vulnerability

Poor behaviour

Displaying poor behaviour is negatively associated with financial capability indicators. This is particularly strongly associated with:

- financial capability indicators related to Ability;
- financial capability indicators related to Mindset; and,
- whether a child is able to perform basic money-related tasks (eg, the child is able to manage an allowance).

Poor perseverance

Having poor perseverance is negatively linked with financial capability. Links are observed across the following areas of financial capability:

- whether a child understands the economic environment (eg, the child understands that money has value);
- whether a child is able to perform basic money-related tasks (eg, the child is able to manage an allowance); and,
- financial capability indicators related to Behaviour.

Low self-esteem

Low self-esteem has generally fewer and weaker links with financial capability indicators, compared to behaviour and perseverance. The links that do exist tend to be negative but with some notable exceptions explored below.

The strongest negative links between low self-esteem and financial capability indicators seem to exist for the child being confident managing money and not being anxious talking about money.

Contrary to expectations, a positive link is found between low self-esteem and whether the child pays for things (either in shops or online). In other words, having low self-esteem does not seem to be a barrier to paying for things. This positive link persists when we control for other factors (such as gender, family income, parent's educational attainment and parent's occupation) in the regression analysis. The analysis does not allow us to understand the nature or direction of this link, however we can speculate that the positive relationship could be a manifestation of some unobserved characteristic of family environment. For instance, parents may recognise a child's low self-esteem and encourage them to practice with spending money as a boost to self-esteem.

Poor self-efficacy

Poor self-efficacy is also negatively associated with financial capability, although with fewer links than perseverance or behaviour. The strongest relationships are found for financial capability indicators related to Mindset. Within Mindset, particularly strong negative links with poor self-efficacy are found for:

- whether a child is not anxious talking about money;
- whether a child is confident managing money;
- whether a child prefers not to borrow;
- whether the child chooses to save more.

3.2 Cognitive vulnerabilities

3.2.1 Overall results

Figure 3 shows the relationships between cognitive vulnerabilities and financial capability indicators for children of ages 7–17. The links observed are negative, indicating that children with cognitive vulnerabilities display poorer financial capability on average.

Figure 3: Links between cognitive vulnerabilities and financial capability

Ages 7-17	Maths below expectation	No maths GCSE or better	English below expectation	No English GCSE or better
Ability				
Chooses correct coins	●		●	
Waits for or checks change	●		●	
Knowledge index	●	●	●	●
Can read bank statement	●		●	●
Understand interest rates	●	●	●	●
Can read payslip	●			
Correctly combines currency	●		●	
Mindset				
Is not anxious about money	●		○	
Confident managing money	●		●	●
Prefers not to borrow	●		●	
Saves more of £10				
Saves more of £100	○			
Accepts not getting things				
Accepts getting less than friends	○		○	
Compares prices	○	●	○	●
Understanding: money has value	●	●	●	●
Understanding: money and choices	●	●	●	●
Understanding: adverts sell things	●	●	●	●
Can explain choices	○		●	●
Understands difference needs/wants	○		●	●
Doesn't ask for things repeatedly		●		●

Ages 7-17	Maths below expectation	No maths GCSE or better	English below expectation	No English GCSE or better
Connection				
Bank account: knows type		●		
Bank account: uses (child)				
Uses mobile/internet banking				
Talks about money	○		○	●
Bank account: has one	●		●	●
Pays for things in shops	○		●	
Pays for things online	○			
Gets money		●		
Pays for: clothes				
Pays for: snacks				
Pays for: presents				
Pays for: going out				
Earns regular money				
Behaviour				
Saves up frequently	○		○	
Spends money less often				
Plans spending	○		○	
Sticks to online paying agreements			●	
Tracks spending		●	●	●
Can save for short time	○	●	○	●
Saves up when receives money	○		○	
Can pay unexpected bill	●	●	●	
Can manage money/allowance	●	●	●	●
Has money in financial products	●	●	○	●
Bank account: uses (parent proxy)	○		○	

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Strength and direction of relationship

Strong negative link	●
Weak negative link	○
No link	
Weak positive link	○
Strong positive link	●

Note that not all financial capability indicators are available for all ages.

Which cognitive vulnerabilities are most linked to financial capability?

All cognitive vulnerabilities are related to at least one financial capability indicator. **Performing below expectation in Maths or English** according to the child's latest school report is particularly strongly negatively associated with financial capability. It shows a greater number of links with financial capability indicators than GCSE performance.

The results based on the school report are fairly balanced, with both Maths and English strongly associated with financial capability. However, for 17-year-olds, there are slightly more links between having achieved a grade C or better in GCSE English and financial capability than there are for having achieved the same in Maths, although the strength of the links is roughly the same.

Which financial capability indicators are most linked to these cognitive vulnerabilities?

The most strongly linked financial capability indicators are related to **Ability** and **Mindset**. These indicators represent knowledge and understanding of, and familiarity with financial concepts. Indicators capturing a child's **understanding of the economic environment** (such as understanding that adverts try to sell things) in the Mindset group are linked to every type of cognitive vulnerability.

How do these links differ by age?

The links between cognitive vulnerabilities and financial capability indicators at different ages can be further investigated by splitting up the age-group 7–17 into smaller groups. Table 6 confirms that the link between cognitive vulnerabilities and financial capability indicators strengthens as children get older. The number of links between cognitive vulnerabilities and financial capability indicators also increases as children get older. This is particularly the case when comparing children aged 7–11 to children aged 12–15.

Looking at specific groups of financial capability indicators, we see that links between cognitive vulnerabilities and indicators related to Ability and Mindset tend to form around the age of 12–15. However, links between cognitive vulnerabilities and indicators related to Connection and Behaviour and only emerge at ages 16 and 17.

Table 6: Number of links observed at each age-group, as percentage of total links investigated

DIRECTION OF LINK	7–11	12–15	16–17
Negative links	25%	54%	44%
Positive links	0%	0%	0%

Results from regression analysis

Some (but not all) of the links above can be explained by differences in a child's background (including family income, parent's educational attainment and occupation). For example, after background variables are taken into account the negative link between below average English performance and using a back account becomes non-significant.

However, many links still remain once a child's background is accounted for, particularly those related to below average Maths performance. For variables such as family income and school type, the differences in financial capability between those with and without cognitive vulnerabilities remain even when accounting for these variables.

This suggests that there is still value in using cognitive vulnerabilities as predictors of worse financial capability, though for a smaller number of outcomes than other forms of vulnerability.

3.2.2 Results by vulnerability

Child performs below age expectation in Maths/English

Performing below expectation in Maths or English is negatively linked to financial capability indicators. These links are particularly strong in relation to:

- almost all indicators related to Ability;
- whether a child is not anxious talking about money or confident managing money;
- whether a child understands the economic environment (eg, the child understands that money has value);
- whether a child is able to perform basic money-related tasks (eg, the child is able to manage an allowance); and,
- whether a child has access to financial products (ie, the child has a bank account or money in financial products).

There are some differences in the financial capability measures linked to performance in Maths and English. However, in this case, we found no indication that performance in Maths is overall more strongly linked to financial capability than performance in English.

Child does not have a GCSE grade C or better in Maths/English

Among 17-year-olds, failure to achieve a grade C or above in GCSE Maths and English is also negatively linked to financial capability indicators. The strongest links with financial capability are in terms of:

- financial knowledge as measured by the index;
- whether a child understands interest rates;
- whether a child understands the economic environment (eg, the child understands that money has value); and,
- whether a child has access to financial products (ie, the child has a bank account or money in financial products).

For this indicator of cognitive vulnerability, poor performance in English seems to have a slightly stronger association with financial capability than poor performance in Maths. For instance, the proportion of children that can explain their choices or understand the difference between needs and wants does not differ between 17-year-olds with and without a GCSE in Maths, but achievement of a GCSE in English does make a difference.

Chapter 4: Environmental factors

SUMMARY OF RESULTS:

- Environmental factors (particularly **economic circumstances** and the **financial resilience segmentation** used by the Money Advice Service) tend to be **negatively linked** to financial capability.
- Overall, the effect of environmental factors tends to be strongest when a child is aged **12–15**.

In this chapter, we look at the links between a child's financial capability and environmental factors. We make a distinction between three types of environmental factors: family structure, economic circumstances and the financial resilience segmentation used by the Money Advice Service.

Potential **environmental factors related to family and household structure** we explore here are:

- whether the parent has sole caring responsibility over the child;
- whether the parent has joint caring responsibility over the child with another parent not in the same household;
- whether the child is looked after;
- whether the child has caring responsibilities in the household;
- whether the child has young parents; and,
- whether the child lives in a multi-generational household.

The **economic circumstances** we consider are:

- whether the child lives in an income-deprived area;
- whether the child lives in social housing;
- whether the main income earner in the household is unemployed;
- whether the family is over-indebted (according to the definition used by the Money Advice Service)[26]; and,
- whether family income is low.

We also consider the **MAS financial resilience segmentation**.[27] This segmentation groups people according to their level of financial resilience, namely the ability to withstand income shocks based on income and savings levels, financial protection (such as life or health insurance), credit card usage and demographics.[28] As a consequence, it is highly linked with two other types of environmental factors discussed in this chapter; family structure and economic circumstances. It is used by the Money Advice Service to create an understanding of the different needs of different consumers, to improve policy targeting and to facilitate co-operation between different organisations by providing a common language.

In this study, children and young people have been segmented according to their responding parent's segment. The financial resilience segmentation therefore reflects the household in which they are growing up.

The segmentation consists of three broad categories: *struggling* (the most vulnerable group); *squeezed*; and *cushioned* (the most financially resilient group).[29] The two main vulnerabilities we define in terms of the segmentation are:

- whether the child belongs to a *struggling* family; and,
- whether the child belongs to a *struggling* or *squeezed* family.

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[26] Families are classified as over-indebted if they have missed payments for credit commitments or bills 3 months in the last 6 and/or feel that debt is a heavy burden on them.

[27] Money Advice Service (2016). *Market Segmentation – An Overview*. Available at: https://www.moneyadviceservice.org.uk/en/corporate/research

[28] Individuals are grouped using CACI's existing Fresco segmentation model.

[29] Struggling: They struggle to keep up with bills and payments and to build any form of savings buffer. They are the least financially resilient and the most likely to be over-indebted. **Squeezed:** Working-age consumers with significant financial commitments but relatively little provision for coping with income shocks. **Cushioned:** The most financially resilient group with the highest levels of income and savings and the lowest proportion of over-indebted. They are the most highly engaged with their finances.

We also use a further level of MAS segmentation to assess whether the family can be considered an 'over-burdened family'[30] and to take into account the life stage of the parents: under 35 years old ('younger family'), middle-aged ('working family') or around pre-retirement age ('older family').

Figure 4: Links between vulnerabilities related to family structure and financial capability

Ages 7-17	Sole caring responsibility	Joint caring responsibility	Looked after child	Child has caring responsibility	Young parents	Multi-generation household
Ability						
Chooses correct coins						
Waits for or checks change						
Knowledge index	Strong negative link					
Can read bank statement	Strong negative link			Weak negative link	Strong negative link	
Understand interest rates	Strong negative link				Strong negative link	
Can read payslip	Strong negative link					
Correctly combines currency	Weak negative link					
Mindset						
Is not anxious about money	Weak negative link				Strong negative link	
Confident managing money						
Prefers not to borrow	Strong negative link					
Saves more of £10						
Saves more of £100	Weak negative link				Weak negative link	
Accepts not getting things						
Accepts getting less than friends				Weak positive link		
Compares prices						
Understanding: money has value	Weak negative link					
Understanding: money and choices						
Understanding: adverts sell things	Weak negative link					
Can explain choices			Strong negative link			
Understands difference needs/wants						
Doesn't ask for things repeatedly						

Ages 7-17	Sole caring responsibility	Joint caring responsibility	Looked after child	Child has caring responsibility	Young parents	Multi-generation household
Connection						
Bank account: knows type	Weak positive link		Strong positive link			
Bank account: uses (child)				Weak positive link		
Uses mobile/internet banking						
Talks about money						
Bank account: has one	Strong negative link				Strong negative link	
Pays for things in shops	Strong negative link	Strong positive link				
Pays for things online				Weak positive link		
Gets money						
Pays for: clothes						
Pays for: snacks						
Pays for: presents						
Pays for: going out						
Earns regular money						
Behaviour						
Saves up frequently	Weak positive link					
Spends money less often						
Plans spending						
Sticks to online paying agreements	Weak negative link					
Tracks spending						
Can save for short time						
Saves up when receives money	Weak negative link					
Can pay unexpected bill			Strong negative link			
Can manage money/allowance						
Has money in financial products	Strong negative link	Weak positive link			Strong negative link	
Bank account: uses (parent proxy)	Weak positive link					

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Strength and direction of relationship

Strong negative link	●
Weak negative link	●
No link	
Weak positive link	●
Strong positive link	●

Note that not all financial capability indicators are available for all ages.

[30] Dependent on benefits and likely to be over-indebted, as defined by the Money Advice Service.

4.1 Family structure

4.1.1 Overall results

Figure 4 presents the links between family structure and financial capability indicators.

Generally, we observe only a few relationships between family structure and financial capability indicators. There appears to be a mixture of positive and negative relationships.

Which aspects of family structure are most linked to financial capability?

Although the links between family structure and financial capability indicators are relatively few**, having a parent with sole caring responsibility** stands out as being the most related to financial capability, as Figure 4 shows.

We see that having a parent with sole caring responsibility has the most links and these links tend to be relatively strong. This is associated with better performance in some areas of financial capability, and worse performance in others.

Which financial capability indicators are most linked to family structure?

We found **no strong discernible pattern** showing which financial capability indicators are linked to aspects of family structure. The strongest case can be made for financial indicators related to Ability, which show some strong links to having a parent with sole caring responsibility and to having young parents (see Figure 4).

How do these links differ by age?

In Table 7, we investigate the links further by splitting up the age-group of 7–17 year olds into three smaller groups (7–11, 12–15, and 16 and 17). In these smaller age-groups, the associations become increasingly more negative.

However, when making comparisons across different age-groups, is should be noted that the survey does not track the same individuals over time. Instead, it acts as a snapshot for each age.

Table 7: Number of links observed at each age-group, as percentage of total links investigated

DIRECTION OF LINK	7–11	12–15	16–17
Negative links	3%	8%	13%
Positive links	3%	2%	2%

There is another vulnerability that demonstrates an interesting evolution over time.

Figure 5 shows how links between *having a young parent* and a number of financial capabilities differ by age. Having a young parent (defined as the parent being 20 years or younger at the birth of the child) only seems at best weakly related to financial capability until a child is 15 years old. However, for children aged 16 and 17, having a young parent has a relatively strong and predominantly negative relationship with financial capability.

Figure 5: Links between having a young parent and financial capability at different ages

	7+11	12-15	16-17
Ability			
Knowledge index			🔴
Can read bank statement	*		🔴
Understand interest rates	*	🔴	🔴
Can read payslip	*	*	🔴
Mindset			
Is not anxious about money	*	🔴	🔴
Prefers not to borrow	*		🔴
Saves more of £10			🟢
Saves more of £100	*	🔴	
Compares prices	*		🔴
Connection			
Uses mobile/internet banking		🟢	
Talks about money			🔴
Bank account: has one		🔴	🔴
Pays for things in shops			🔴
Pays for things online			🔴
Earns regular money			🔴
Behaviour			🔴
Saves up frequently			🟢
Plans spending	*	*	🟢
Sticks to online paying agreements			🔴
Saves up when receives money			🟢
Has money in financial products		🔴	

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Strength and direction of relationship

Strong negative link	🔴
Weak negative link	●
No link	
Weak positive link	●
Strong positive link	🟢

**Not available for this age-group*

Results from regression analysis

This majority of the negative and positive links between having a parent with sole caring responsibility and their child's financial capability remain after accounting for differences in the household's circumstances (including family income, parent's occupation and parent's education). The small number of links for the other family structure groups tend to disappear. This suggests children in sole parent households are a particularly vulnerable group for poor financial capability outcomes.

4.1.2 Results by vulnerability

Child's parent has sole caring responsibility over the child

The links between a parent having sole caring responsibility over the child and financial capability indicators are mainly negative. Having a parent with sole caring responsibility is strongly and negatively associated with:

- indicators related to financial Ability; and,
- whether a child has access to financial products (ie, the child has a bank account or money in financial products).

However, having a parent with sole caring responsibility also appears to be positively associated with whether the child *uses* their bank account.

Child has young parents

Having a young parent (defined as 20 years or younger at the birth of the child) has some relatively strong links to:

- banking related Ability indicators (ie, the child can read bank statement, or understands interest rates); and,
- whether a child has access to financial products (ie, the child has a bank account or money in financial products).

Other potential vulnerabilities related to family structure

Other potential vulnerabilities related to family structure are at best weakly related to financial capability indicators. However, we found no consistent pattern in how they relate to financial capability. Living in a multi-generational household is not at all associated with any financial capability indicator, although this is possibly because very few children that completed the survey actually live in multi-generational households.

4.2 Economic circumstances

4.2.1 Overall results

Figure 6 overleaf presents the links between economic circumstances and financial capability indicators. As was the case with family structure, the links between economic circumstances and financial capability are mainly negative for children aged 7–17.

Figure 6: Links between economic vulnerabilities and financial capability

Ages 7-17	Income deprived area	Social housing	Unemployed parent	Over indebted	Low family income
Ability					
Chooses correct coins					
Waits for or checks change					
Knowledge index	Strong negative link	Strong negative link	Strong negative link	Weak negative link	Weak negative link
Can read bank statement	Strong negative link	Strong negative link		Weak negative link	Weak negative link
Understand interest rates	Strong negative link	Strong negative link	Strong negative link	Strong negative link	Strong negative link
Can read payslip	Strong negative link	Strong negative link	Strong negative link		
Correctly combines currency					
Mindset					
Is not anxious about money				Weak negative link	Weak negative link
Confident managing money					
Prefers not to borrow				Strong negative link	
Saves more of £10		Weak negative link			
Saves more of £100	Weak negative link	Weak negative link			
Accepts not getting things	Weak positive link	Weak positive link			
Accepts getting less than friends		Weak positive link	Strong positive link		
Compares prices		Weak negative link			
Understanding: money has value	Weak negative link	Strong negative link		Weak negative link	Weak negative link
Understanding: money and choices	Weak negative link	Weak negative link		Weak negative link	Weak negative link
Understanding: adverts sell things	Weak negative link	Weak negative link			Weak negative link
Can explain choices		Weak negative link			
Understands difference needs/wants	Weak negative link	Weak negative link		Weak negative link	
Doesn't ask for things repeatedly				Weak negative link	

Ages 7-17	Income deprived area	Social housing	Unemployed parent	Over indebted	Low family income
Connection					
Bank account: knows type					
Bank account: uses (child)		Weak negative link			
Uses mobile/internet banking					
Talks about money					Weak negative link
Bank account: has one	Strong negative link	Strong negative link	Weak negative link	Weak negative link	Strong negative link
Pays for things in shops	Weak negative link				
Pays for things online	Weak negative link	Weak negative link			
Gets money		Weak negative link			
Pays for: clothes	Weak negative link	Strong negative link			
Pays for: snacks	Weak negative link	Strong negative link			
Pays for: presents		Weak negative link			
Pays for: going out	Weak negative link				
Earns regular money		Weak negative link			Weak negative link
Behaviour					
Saves up frequently		Weak negative link			Weak negative link
Spends money less often					
Plans spending					
Sticks to online paying agreements		Weak negative link			
Tracks spending	Weak negative link	Weak negative link	Weak negative link		
Can save for short time		Weak negative link			
Saves up when receives money		Weak negative link			
Can pay unexpected bill					
Can manage money/allowance	Weak negative link	Weak negative link		Weak negative link	
Has money in financial products	Strong negative link	Strong negative link	Strong negative link	Strong negative link	Strong negative link
Bank account: uses (parent proxy)	Weak negative link	Strong negative link			Weak negative link

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Strength and direction of relationship

Strong negative link	●
Weak negative link	●
No link	
Weak positive link	●
Strong positive link	●

Note that not all financial capability indicators are available for all ages.

Which economic circumstances are most linked to financial capability?

Living in social housing shows the greatest number of links to financial capability. This also shows the strongest links to financial capability. Living in an income deprived area is also relatively strongly related to financial capability but to a lesser degree.

Which financial capability indicator is most linked to these economic circumstances?

Ability stands out as the set of capability indicators most strongly related to economic circumstances. This applies particularly to financial capability indicators representing knowledge, the ability to read a bank statement and understanding of interest rates. **Mindset** (particularly those indicators linked to understanding) is also associated with economic circumstances, but these links tend to be weak.

Furthermore, it is interesting to note that acceptance that the child may not be getting things they want or may get less than friends is positively related to economic circumstances. These are the only positive relationships we observe.

We also see that having a bank account and having money in appropriate financial products are both strongly linked to economic circumstances.

How do these links differ by age?

We examine these relationships further by splitting the age 7–17 group into three smaller groups (7–11, 12–15, and 16 and 17) and comparing the results by age-group.

We see that the number of links grows with age. We observe **the largest number of links when children are aged 12–15**, implying that the relationship between economic circumstances and financial capability is strongest around the start of secondary school. The strength of the links, however, does not differ materially over time.

The increase in the proportion of links between economic circumstances and financial capability is most prominent for indicators related to Ability. These links tend to appear only for children aged 12–15. Furthermore, it is worth highlighting the relationship between the child accepting not getting things or getting less than friends, and economic circumstances. In the previous section, we noted that these links are positive but the detailed breakdown by age shows that the positive links exist only for children aged 7–11. There are no links (positive or negative) for children aged 12–17.

Table 8: Number of links observed at each age-group, as percentage of total links investigated

DIRECTION OF LINK	7–11	12–15	16–17
Negative links	14%	30%	21%
Positive links	4%	1%	0%

Results from regression analysis

We tested a range of other variables (including gender, family income, parent's educational attainment and parent's occupation) to see whether they might explain the links that appear in this chapter. As might be expected, the majority of the links found above are explained when these variables are accounted for. This is not surprising given that these economic vulnerabilities also act as proxy measures for low income.

Interestingly, however, a small number of links do remain for living in an income deprived area, social housing and overindebted household, even when controlling for factors including household income, suggesting that living in these circumstances still has some of an impact regardless of your household income. These include the links between living in an income deprived area and access to financial products/services, living in social housing and saving and living in an overindebted household and anxiety with money, understanding it has value and understanding differences between needs and wants.

All the links for household income remain even with the other controls included.

4.2.2 Results by vulnerability

Child lives in an income deprived area/social housing

The trends are similar for these two economic circumstances. The links are predominantly negative. For both, the negative links are particularly numerous and relatively strong for:

- financial capability indicators related to Ability;
- whether a child understands the economic environment (eg, the child understands that money has value);
- whether a child is able to perform basic money-related tasks (eg, the child is able to manage an allowance);
- whether the child pays for things such as presents or going out; and,
- whether the child has access to financial products (ie, the child has a bank account or money in financial products).

The relationship with the child accepting that they may not get things stands out as being positive, indicating that children who live in an income deprived area or in social housing perform better than those who do not in this aspect of financial capability.

Child lives with an unemployed parent

Living with an unemployed parent is mostly negatively linked to financial capability. The negative associations are strongest for:

- financial capability indicators related to Ability; and,
- whether the child has access to financial products (ie, the child has a bank account or money in financial products).

There is a positive relationship with acceptance that the child may not get things they want, which indicates that living with an unemployed parent can be considered a strength rather than a vulnerability for this aspect of financial capability.

Child lives in an over-indebted family

The associations between living in an over-indebted family and financial capability tend to be relatively weak but always negative. The financial capability indicators that seem to be particularly related to living in an over-indebted family are:

- financial capability indicators related to Ability;
- whether a child understands the economic environment (eg, the child understands that money has value);
- whether the child has access to financial products (ie, the child has a bank account or money in financial products).

Child lives in a low income family

The results for children in over-indebted families and low income families show many similarities. The associations are relatively weak but always negative. The financial capability indicators most strongly related to living in a low income family are:

- financial capability indicators related to Ability;
- whether a child understands the economic environment (eg, the child understands that money has value);
- whether the child has access to financial products (ie, the child has a bank account or money in financial products).

4.3 Money Advice Service financial resilience segmentation

4.3.1 Overall results

Figure 7 overleaf shows the links between the Money Advice Service financial resilience segmentation and financial capability.

These links are generally negative, albeit relatively weak. This suggests that children growing up in families that are less financial resilient (ie, that cannot withstand an income shock easily) demonstrate poorer financial capability on average.

Which financial resilience segments are most linked to financial capability?

Three segments/sub-segments stand out as being relatively strongly related to financial capability: growing up in a ***struggling*** family;[31] in a ***squeezed*** family;[32] or in an **overburdened** family. The fact that both the struggling and squeezed segment show up as negatively linked to financial capability suggests that merely not being *cushioned* is sufficient to make a child vulnerable in terms of financial capability.

Which financial capability indicators are most linked to the financial resilience segmentation?

Financial capability indicators related to **Ability** are particularly strongly associated with the financial resilience segmentation. All of them are related to a segment or sub-segment, and many of these links are strong.

Access to financial products (ie, having a bank account or money in appropriate financial products) is also strongly related to growing up in a potentially vulnerable household based on the segmentation.

These results are similar to the links between economic circumstances and financial capability. As the financial resilience segmentation is expected to identify similar variables we have used to identify economic circumstances, this is to be expected.

[31] Relative to living in a squeezed or a cushioned family.
[32] Relative to living in a cushioned family.

Figure 7: Links between Money Advice Service financial resilience segmentation and financial capability

Ages 7-17	Struggling v squeezed/cushioned	Squeezed v cushioned	Over burdened	Struggling young/working families	Struggling working families	Squeezed young families	Older squeezed
Ability							
Chooses correct coins							Weak positive
Waits for or checks change				Weak negative			
Knowledge index	Strong negative	Strong negative	Strong negative	Weak negative	Weak negative		Weak positive
Can read bank statement	Strong negative	Weak negative	Strong negative	Weak negative	Weak negative	Strong negative	Strong positive
Understand interest rates	Strong negative	Strong negative	Strong negative	Weak negative	Weak negative	Strong negative	
Can read payslip	Strong negative		Strong negative				
Correctly combines currency							
Mindset							
Is not anxious about money	Weak negative		Weak negative			Strong negative	
Confident managing money	Weak negative						
Prefers not to borrow						Strong negative	
Saves more of £10	Weak negative						
Saves more of £100	Weak negative		Weak negative				
Accepts not getting things							
Accepts getting less than friends	Weak positive		Weak positive				
Compares prices	Weak negative						
Understanding: money has value	Weak negative		Weak negative				
Understanding: money and choices	Weak negative		Weak negative	Weak negative			
Understanding: adverts sell things	Weak negative		Weak negative				
Can explain choices	Weak negative		Weak negative				
Understands difference needs/wants							
Doesn't ask for things repeatedly		Weak negative					

Ages 7-17	Struggling v squeezed/cushioned	Squeezed v cushioned	Over burdened	Struggling young/working families	Struggling working families	Squeezed young families	Older squeezed
Connection							
Bank account: knows type		Strong negative					
Bank account: uses (child)		Strong negative	Weak negative				
Uses mobile/internet banking							
Talks about money		Weak negative	Weak negative				
Bank account: has one	Strong negative	Strong negative	Strong negative	Weak negative	Weak negative	Weak negative	Strong positive
Pays for things in shops					Weak negative	Strong negative	Strong positive
Pays for things online	Weak negative	Weak negative	Weak negative			Weak negative	
Gets money							
Pays for: clothes	Weak negative		Strong negative				
Pays for: snacks	Weak negative		Strong negative				
Pays for: presents	Weak negative		Weak negative				
Pays for: going out							
Earns regular money	Weak negative	Strong negative	Weak negative				
Behaviour							
Saves up frequently						Strong positive	
Spends money less often						Weak negative	
Plans spending		Weak negative					
Sticks to online paying agreements	Weak negative		Weak negative				
Tracks spending	Weak negative	Strong negative	Weak negative				
Can save for short time	Weak negative		Weak negative	Weak negative	Weak negative		
Saves up when receives money	Weak negative		Weak negative				
Can pay unexpected bill							
Can manage money/allowance	Weak negative	Strong negative	Weak negative				
Has money in financial products	Strong negative		Strong negative	Strong negative	Weak negative		Strong positive
Bank account: uses (parent proxy)	Weak negative	Strong negative	Strong negative				

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Strength and direction of relationship

Strong negative link	●
Weak negative link	●
No link	
Weak positive link	●
Strong positive link	●

Note that not all financial capability indicators are available for all ages.

How do these links differ by age?

To explore this further, we can look at the children aged 7–17 and group into smaller age bands (7–11, 12–15, and 16 and 17).

Table 9 shows that the presence of links is higher amongst older children. There seems to be a **peak when children are aged 12–15**.

Analysis of these smaller age bands also shows that the link between the segmentation and financial capability becomes more negative as the child gets older. Also, here we see the biggest difference for children aged 12–15.

This peak for children aged 12–15 is particularly pronounced for the links between the segmentation and financial capability indicators related to Ability. In contrast the links between the segmentation and financial capability indicators related to Mindset are most prevalent when children are aged 7–11 but disappear at the older ages.

Table 9: Number of links observed at each age-group, as percentage of total links investigated

DIRECTION OF LINK	7–11	12–15	16–17
Negative links	18%	23%	17%
Positive links	4%	1%	1%

Results from regression analysis

We tested a range of other variables (including gender, family income, parent's educational attainment and parent's occupation) to see whether they might explain the links that appear when looking at the financial resilience segmentation.

As might be expected when accounting for a child's background, family income goes some way to explaining the links found above. This is unsurprising given that income is one of the factors considered in the financial resilience segmentation, with low income families more likely being considered struggling or squeezed.

However, family income alone does not fully explain the links we have observed. Even when we control for family income, the differences in access to financial products remain, for those from struggling or squeezed segments. This suggests that the financial resilience of parents does still to an extent filter down to their children, regardless of household income.

4.3.2 Results by vulnerability

Child lives in a struggling family/squeezed family/overburdened family

The trends are similar for these three segments and sub-segments. These are largely negatively related to financial capability. Most links are relatively weak, but the strongest links are found for:

- financial capability indicators related to Ability; and,
- whether the child has access to financial products (ie, the child has a bank account or money in financial products).
- Living in a squeezed family as opposed to a cushioned family also seem to be strongly negatively linked to Connection, whereas living in a struggling family or overburdened family is not.

Child lives in a struggling younger or working family/struggling working family

Living in a *struggling* young or working family, or in a *struggling* working family, is also negatively associated with financial capability. Results are generally weak but most numerous for:

- financial capability indicators related to Ability; and,
- whether the child has access to financial products (ie, the child has a bank account or money in financial products).

Child lives a squeezed young family

Growing up in a *squeezed* young family is negatively linked to financial capability. In particular, this is strongly negatively linked to:

- banking related Ability indicators (ie, the child can read bank statement, or understands interest rates);
- whether the child is not anxious thinking about money;
- whether the child prefers not to borrow; and,
- whether a child pays for things in shops.

It also seems that children growing up in squeezed young families save up money more frequently.

Child lives in an older squeezed family

In contrast with the other segments/sub-segments in this section, growing up in an *older squeezed* family seems to be a slight strength in relation to financial capability. Although there are few links between this and financial capability, all of them are positive. This is particularly the case for access to financial products (ie, the child has a bank account or money in financial products), which shows a strong positive association.

Chapter 5: The impact of financial education in schools

SUMMARY OF RESULTS:

- Financial education in schools is **positively** linked to financial capability although there are only relatively few links.
- For children with vulnerabilities, those who recall financial education in school display slightly better financial capability than those who do not. The strength of this positive effect is similar to that for all children, suggesting that receiving financial education in school is not sufficient to bridge the gap between children with a vulnerability and those without one.

In this chapter, we examine the role of school-based financial education in children's financial capability. In this context financial education is defined as any part of the school curriculum in which a child learns to manage money. The CYP FinCap Survey asks children and young people to recall whether they have been taught about money management in school or college.

We consider the potential relationship between school-based financial education and financial capability from two angles. Firstly, we look at the link between financial education and financial capability. In other words, do children who report that they have received financial education in school demonstrate better financial capability than those who have not?

Secondly, we examine whether financial education in school also has links to financial capability for vulnerable children and whether it can play a protective role for them, offsetting the impact of their vulnerability. Finally, we investigate whether financial education in school has a bigger protective role for those with a potential vulnerability than those without.

We recognise that the context in which school-based financial education is provided may matter. Therefore, we consider the subject in which financial education has been taught in addition to whether a child recalls receiving any financial education. The financial education indicators we use in the analysis are:

- whether a child has had any financial education;
- whether a child has had financial education in maths lessons;
- whether a child has had financial education in personal, social, health and economic (PSHE) lessons;
- whether a child has had financial education in citizenship lessons; and,
- whether a child has had financial education in business and finance lessons.

We observe only whether a child has had any financial education in school for children aged 7 or over, while the more detailed breakdown by subject is only available for children aged 12 or over.

5.1 Relationship between financial education and financial capability

5.1.1 Overall results

Figure 8 below shows the links between financial education and financial capability indicators. Generally, financial education in school has a small but **positive** link with financial capability. There are relatively few links between financial education and financial capability, but for most types of financial education, the links are positive. This suggests that children that recall receiving financial education tend to be more financially capable.

Figure 8: Links between financial education and financial capability

Ages 7-17	Any financial education	Financial education: Maths	Financial education: PSHE	Financial education: Citizenship	Financial education: Business/Finance	Financial education: Other courses
Ability						
Chooses correct coins	Weak positive link					
Waits for or checks change						
Knowledge index			Strong positive link	Weak positive link	Strong positive link	
Can read bank statement			Strong positive link		Weak positive link	
Understand interest rates	Strong positive link		Strong positive link	Strong positive link		Weak negative link
Can read payslip						
Correctly combines currency						
Mindset						
Is not anxious about money						
Confident managing money	Strong positive link	Weak positive link			Strong positive link	Weak negative link
Prefers not to borrow						
Saves more of £10						
Saves more of £100						
Accepts not getting things						
Accepts getting less than friends						
Compares prices						
Understanding: money has value			Strong positive link			Weak negative link
Understanding: money and choices						
Understanding: adverts sell things			Strong positive link			Weak negative link
Can explain choices	Weak positive link		Weak positive link			
Understands difference needs/wants						
Doesn't ask for things repeatedly		Weak negative link				

Ages 7-17	Any financial education	Financial education: Maths	Financial education: PSHE	Financial education: Citizenship	Financial education: Business/Finance	Financial education: Other courses
Connection						
Bank account: knows type		Weak positive link	Strong positive link	Strong positive link		Weak negative link
Bank account: uses (child)						
Uses mobile/internet banking						
Talks about money	Strong positive link	Weak positive link	Strong positive link			Weak negative link
Bank account: has one			Strong positive link	Strong positive link	Strong positive link	Weak negative link
Pays for things in shops						
Pays for things online						
Gets money						
Pays for: clothes						
Pays for: snacks						
Pays for: presents						
Pays for: going out						
Earns regular money	Weak positive link				Strong positive link	Weak negative link
Behaviour						
Saves up frequently	Weak positive link	Weak positive link		Weak positive link	Strong positive link	Weak negative link
Spends money less often						
Plans spending				Weak positive link	Weak positive link	Weak negative link
Sticks to online paying agreements						
Tracks spending			Strong positive link			
Can save for short time					Weak positive link	
Saves up when receives money						
Can pay unexpected bill					Strong positive link	
Can manage money/allowance						
Has money in financial products			Strong positive link			
Bank account: uses (parent proxy)						

Type of financial capability composite measure

Ability
Mindset
Connection
Behaviour
Other non-composite aspect of financial capability

Strength and direction of relationship

Strong negative link	●
Weak negative link	●
No link	
Weak positive link	●
Strong positive link	●

Note that not all financial capability indicators are available for all ages.

Which financial education indicators are most linked to financial capability?

Looking at the number of links, no financial education indicator comes out as being particularly strongly associated with financial capability. All of them are to a certain degree related to financial capability.

Looking at the strength of the links, having had financial education as part of PSHE does stand out. The links between this financial education indicator and financial capability indicators tend to be strong, when they exist.

Which financial capability indicators are most linked to financial education?

Financial capability indicators with relatively strong links to financial education are:

- indicators related to Ability;
- indicators related to banking, particularly whether the child has a bank account and knows the type of the bank account; and,
- whether the child saves up frequently.

Results from regression analysis

The majority of these links remain even when we account for a child's background (including gender, family income, parent's educational attainment, parent's occupation) and the type of school they attend. This suggests that, irrespective of the background of the child, financial education has a small but mostly positive link with financial capability.

How do these links differ by age?

Table 10 shows that the links between having received any financial education in school and financial capability remain fairly consistent for different ages. The number of associations tends to increase somewhat between ages 7–11 and 12–15, but the strength of associations remains similar.

The links are relatively constant between the ages of 12–15 and 16–17. This is the case for all subjects in which financial education is taught. Links between having received any financial education in school and banking-related financial capability indicators seems to be stronger when children are aged 12–15 than when they are 16–17, especially whether the child knows the type of bank account he or she has.

Table 10: Number of links observed at each age-group, as percentage of total links investigated

DIRECTION OF LINK	7–11	12–15	16–17
Negative links	0%	1%	0%
Positive links	3%	11%	10%

5.1.2 Results by financial education indicator

Child has had financial education in PSHE lessons

A child having had financial education in PSHE lessons is positively and relatively strongly linked to a number of financial capability indicators. It is particularly strongly linked to financial capability indicators related to Ability.

Other financial education indicators

For the other financial education indicators, the links between these indicators and financial capability are overwhelmingly positive but there does not seem to be an overarching pattern. Instead, the financial education indicators appear to be linked to a range of different aspects of financial capability.

5.2 The effect of financial education on potentially vulnerable children and young people

The analysis has shown that financial education in school is associated with improved levels of financial capability overall. We also want to examine the role of financial education for children with potential vulnerabilities in isolation. Does financial education have a similarly positive association for these children and guard against the poorer financial capability that they are vulnerable to? And is financial education more effective for children with vulnerabilities than children without?

To answer these questions, we define three groups of potentially vulnerable children:

- children that have any cognitive vulnerability;
- children that have any behavioural or social-emotional vulnerability; and
- children that live in a struggling household according to the financial resilience segmentation used by the Money Advice Service.

It seems that **financial education** does have a **small positive association** with financial capability for potentially vulnerable children and can potentially protect from the negative impact on their financial capability, which may exist as a result of their vulnerability. Among children and young people with vulnerabilities, those that recall having received financial education in school display slightly better financial capability than those that do not. Particularly for children with any behavioural or social-emotional vulnerability, we see that financial education is positively linked to financial capability. The relationships between financial education and financial capability are more modest for the other two groups of potentially vulnerable children.

To investigate whether financial education is *more effective* for children with or without vulnerabilities, we compare the strengths of the relationships between financial education and financial capability for the two groups. The small protective role of financial education for children *with* vulnerabilities is similar in strength to the protective role that financial education has for children *without* vulnerabilities, suggesting that the benefit of school based financial education is roughly equal for both groups.

Chapter 6: Conclusions

This research has found that children who have certain vulnerabilities tend to do worse on many aspects of financial capability than those who do not have these vulnerabilities. The specific aspects of financial capability on which they do worse than their peers vary dependent on what their vulnerabilities are.

Aspects of a child's characteristics, including having a long-standing illness, are associated with poorer financial capability on a range of indicators, especially ability and mindset. Having a parent from an ethnic minority is associated with poorer financial capability scores around some aspects of connection and behaviour but is linked positively to choosing to spend money less often.

Children's overall behaviour is linked strongly to many aspects of financial capability. Social-emotional skills such as perseverance, and self-efficacy are also strongly linked, particularly on mindset. Cognitive skills are also linked strongly to financial capability, particularly ability, mindset, and some elements of behaviour.

Some aspects of children's environment are also linked to worse financial capability scores. Having a parent with sole caring responsibility, or having young parents, showed fewer but still largely negative links with financial capability. Living in a social housing, or living in a home within the MAS struggling, squeezed, or overburdened segments are connected with doing worse on financial capability ability and some elements of connection.

Children who say they received financial education in school tend to do better on financial capability measures, a relationship that exists whether or not the child has a vulnerability. However, the difference in scores between those who received financial education compared with those who didn't is roughly the same size for all children, and for vulnerable children – meaning that children with vulnerabilities still score worse than their peers even when they have received financial education.

This is useful information to help us understand more about who is vulnerable in a financial capability context and what their unique needs are. It can help inform targeting of additional support and/or tailoring of the content of support delivered to wider groups to be suitable for meeting different needs.

This research has enabled us to understand the nature of vulnerability for children and young people in a financial capability context in more depth than ever before. However, this research is based purely on quantitative data and cannot explain why relationships exist. There are limitations in the range of vulnerabilities we have been able to consider, and we have not been able to look at the interaction between vulnerabilities, the effects of multiple vulnerabilities, or the role of strengths and protective factors.

The research in this report alone is therefore insufficient to make targeting recommendations. However, the findings of this work will be brought together with wider research into vulnerability conducted through our literature review, further deep dives into the CYP Fin Cap Survey data looking specifically at the role of parents, analysis of the 1970 British Cohort Study, and previous MAS research, to produce a single overarching needs analysis document. This will be published in spring 2018 and will set out all we know to date about children and young people's financial capability needs, which groups may have additional needs, and the nature of these. It will also summarise the gaps in insight and understanding from research at present.

This Needs Analysis will feed into a Gap Analysis comparing current need to financial education provision and evidence about what is likely to be most effective in meeting needs. This will inform the Money Advice Service's future children and young people commissioning plan, laying out how we believe resource can best be targeted to improve children and young people's financial capability, to be published in autumn 2018.

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