



Q-Step

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Relationships between children and their fathers and how they are associated with their education across Scotland.

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Abstract

The purpose of this research report is to find out more about the relationships between young people in Scotland and their parents, more specifically looking at the difference in the effects of father-child relationships (taking into account mother-children relationships). The research was carried out to find out whether father involvement in 14 year olds lives has an effect on how they develop, in particular their academic self-concept and the attitudes they develop towards education. As well as the relationships between children and their fathers, household income was also taken into account to compare the differences between those from well off backgrounds and those from areas of poverty and how the relationships between children and parents in these areas differed. The study analysed data from the Scottish sub sample of the Millennium Cohort Study, a representative longitudinal survey of children and their families. Overall young people who are closer to their father (and mother) will have a better Academic self-concept (a composite measure that takes into account the young person's perception of how good he/she is in Maths, Science and English). Furthermore, 14-year-olds who are closer to their father (and mother) also have a better attitude towards education.

A) Introduction

Parent-child relationships are vital for children's development in life (Brofenbrenner and Morris, 1998). After all parents are one of the main influences children have as they are growing up. This means that the nature of the parent-child relationship greatly affects the way a child grows up and matures. Traditionally theorists and researchers focused on the implications of mother-child relationships for child and adolescent development, a trend that reflected a longstanding gender division of the roles within the family. But as time progresses this focus has been altered and there is now a change in attitudes towards fathers' contribution to child development and also a different expectation in the roles they fulfil (Gregory and Milner 2011). In recent years it has been evident that families aren't so reliant solely on fathers to gain the main income for the family, because mothers are starting to join the labour market in larger numbers, and share responsibility for the household's economy just as much as fathers. At the same time, the responsibility of caring for the children has become much more shared between the mother and father instead of the mother having the more prominent role in childcare in general (Dotti Sani and Treas, 2016). Despite the change in attitudes for equality amongst mothers and fathers regarding their parental roles there are still many who question whether things have actually changed all that much. Figures reveal that fathers do generally still work longer hours than mothers and do in fact spend less time with their children than mothers do (Devreux, 2007).

Nowadays there are many different ways to define what a father is. A father could indeed be the child's biological father. However, there are different ways someone could be a child's father, whether it be in a social way or even a legal way. A child may have an adopted or a foster father or even a step dad who may play just as large a part in their lives as a biological father would (Speight, Poole, O'Brien, Connolly and Aldrich, 2013). In this report the main focus will be on all father figures not just biological fathers.

Fathers or of course father figures are key to the emotional well-being of children as they are growing up into adulthood. Studies show that if a child's father is affectionate, supportive and involved in bringing up the child he can greatly contribute to the child's social development as well as academic achievement and good self-esteem too (Kim and Kim, 2017: Kroll et al., 2016). With father-child relationships patterns of interaction between the father and child are projected forward into many of the relationships children have in their lives. As well as the relationships children form as they grow up, father figures also affect the way children behave and react to different situations, it can be seen that children who have engaged and involved fathers tend to have less behavioural problems and are somewhat protected from drug and alcohol abuse that they may become exposed to. On the other hand, however, fathers who are either absent or have a negative influence on children may lead to the children being more likely to drop out of school earlier, show more behavioural issues as well as substance misuse (Gross, 2014).

In Scotland, little is known about whether adolescent development is influenced by young people's relationships with their fathers. Research is yet to find out if positive involvement of fathers in the lives of their children is associated with better educational outcomes in Scotland.

Therefore, the research questions of this report are:

- 1) How close are young people in Scotland to their fathers (and mothers)?
- 2) Is closeness to fathers among young people in Scotland associated with socio-economic status?
- 3) Is closeness to fathers associated with better educational outcomes among young people in Scotland?

The hypotheses of the research are as following:

- Young people who are closer to their fathers (and mothers) will have a better Academic Self-Concept (How good the young person believes themselves to be at maths, science and English).
- Young people who are closer to their fathers (and mothers) will have a better attitude towards education.
- Young people who live in households with higher income will have a better Academic Self- Concept and a better attitude towards education.

B) Methodology

The data used was taken from The Millennium Cohort Study Wave 6. The Millennium Cohort Study is a research project that follows the lives of around 19,000 children through their childhood and into their adult lives. The Millennium Cohort Study is a longitudinal study which has been carried out since 2000 by the Centre for Longitudinal Studies. The participants were selected from a stratified sample of electoral wards, disproportionately arranged to ensure sufficient representation of all four UK countries, deprived areas and areas with high concentrations of ethnic minorities. Wave 6 of the study was conducted in 2015 when the cohort members (CMs) were 14 years old. Interviews were conducted with 1281 families in Scotland (24% of the 5217 of the families interviewed in the first wave of the study). The dataset was accessed via the UKDS.

The analysis was carried out using SPSS and Microsoft Excel. SPSS was used to calculate frequencies and produce frequency tables to display desired results. SPSS was also used to carry out cross tabulations to compare and discover trends between different variables. SPSS was also used to create regression models to represent statistical significance or of course insignificance between different variables to show whether different variables affect the academic self-concept and attitudes towards education. To ensure the information was clear enough SPSS was used to recode variables to collapse variables into fewer categories. Once the information was displayed in tables on SPSS the figures were taken into excel to produce graphs, such as bar charts, including stacked bar charts to present the findings as clearly as possible.

Variables used

- Gender: 1= Male 2=Female;
- Household income: 0= Above the 60% median income 1= Below the 60% median income
- How close the Cohort Member is to father: 1= Not very close/ fairly close
2= Very close 3= Extremely close
- How close the CM is to mother: 1= Not very close/ fairly close
2= Very close 3= Extremely close;
- How often CM argues with father: 1= Hardly ever or never 2=Less than once a week 3= More than once a week or most days
- How often the CM argues with mother: 1= Hardly ever or never 2=Less than once a week 3= More than once a week or most days;
- Academic Self-Concept (How good the CM is at maths+ How good the CM is at English+ How good the CM is at science);
- Attitude towards education (How often the CM feels unhappy in school+ How often the CM finds school interesting+ How often the CM feels school is a waste of time+ How often the CM gets tired at school+ How often the CM finds it difficult to keep their mind on school).

C) Findings

Section 1- Closeness to father and mother

From chart 1 it can be seen that overall, cohort members (CMs) are more likely to be extremely close with their mother than they are with their father. By gender female cohort members are more likely to be extremely close with their mother than male CMs. Male CMs are more likely to be extremely close to their fathers than female CMs are.

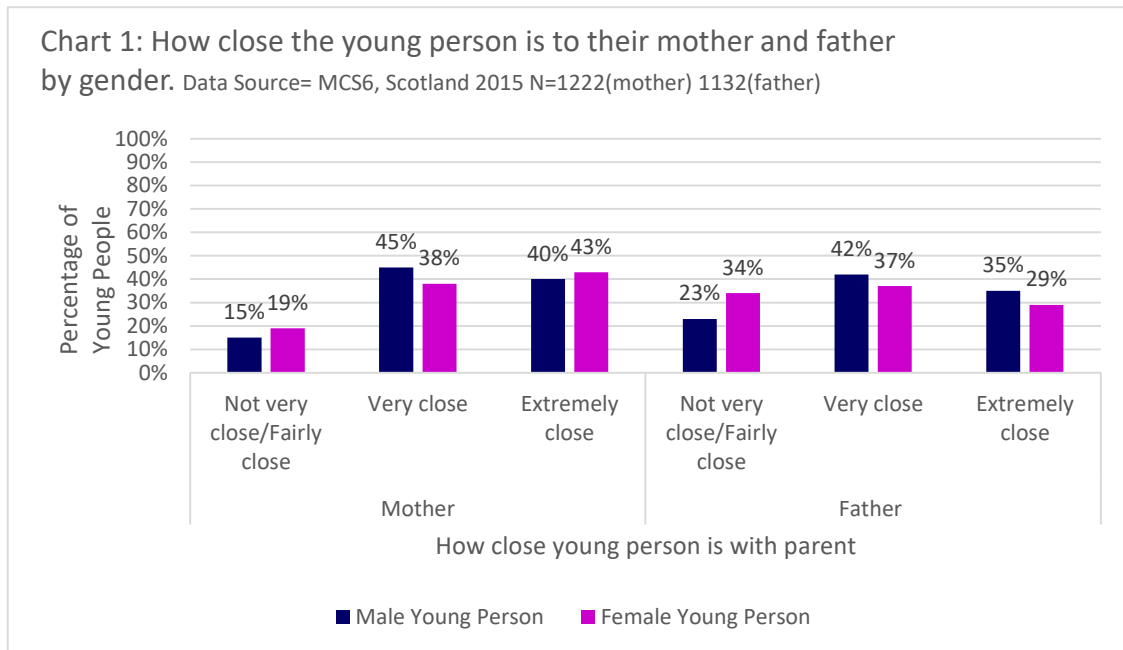
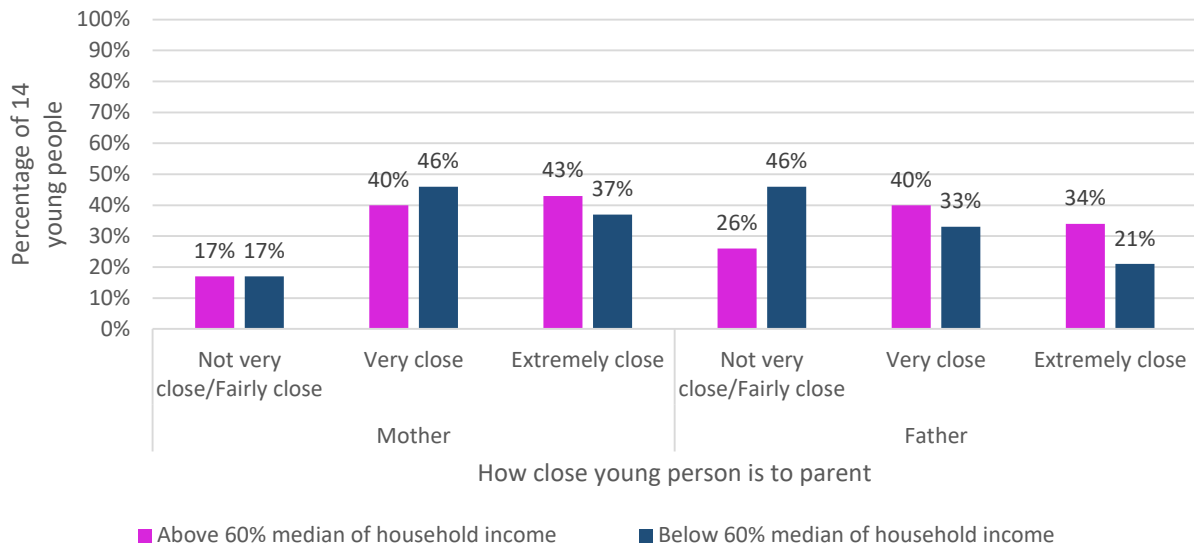


Chart 2 shows that cohort members from households with an income above 60% of the median household income are more likely to be extremely close with both their mother and father than CMs from households with an income below the 60% of median household income. CMs from households below the 60% of median household income are almost 3 times as likely to be not very close or fairly close to their father than they are with their mother which suggests that fathers in households in less affluent areas are not as engaged in children's lives as mothers are.

Chart 2: How close young people are to their mother and father by household income. Data Source= MCS6, Scotland 2015. N=1220(mother) 1130(father)



From chart 3 it can be seen that overall CMs are more likely to argue with their mother more than once a week or most days than they are their father. Female CMs are more likely to argue more than once a week or most days with both their mother and father than male CMs.

Chart 3: How often young person argues with their mother and father by gender of young person. Data source= MCS6, Scotland 2015. N=1221(mother) 1129(father)

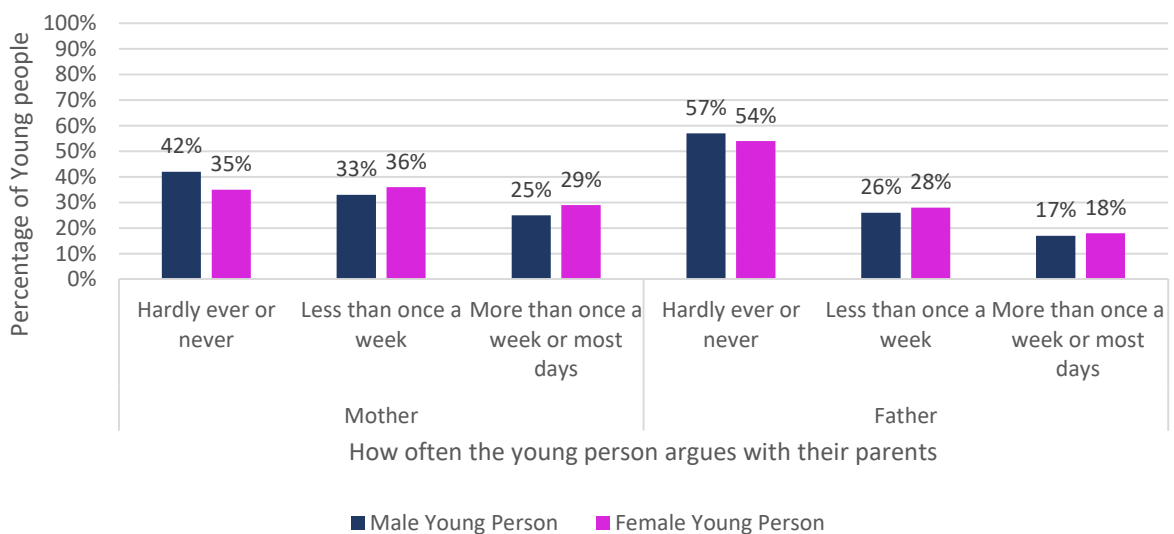
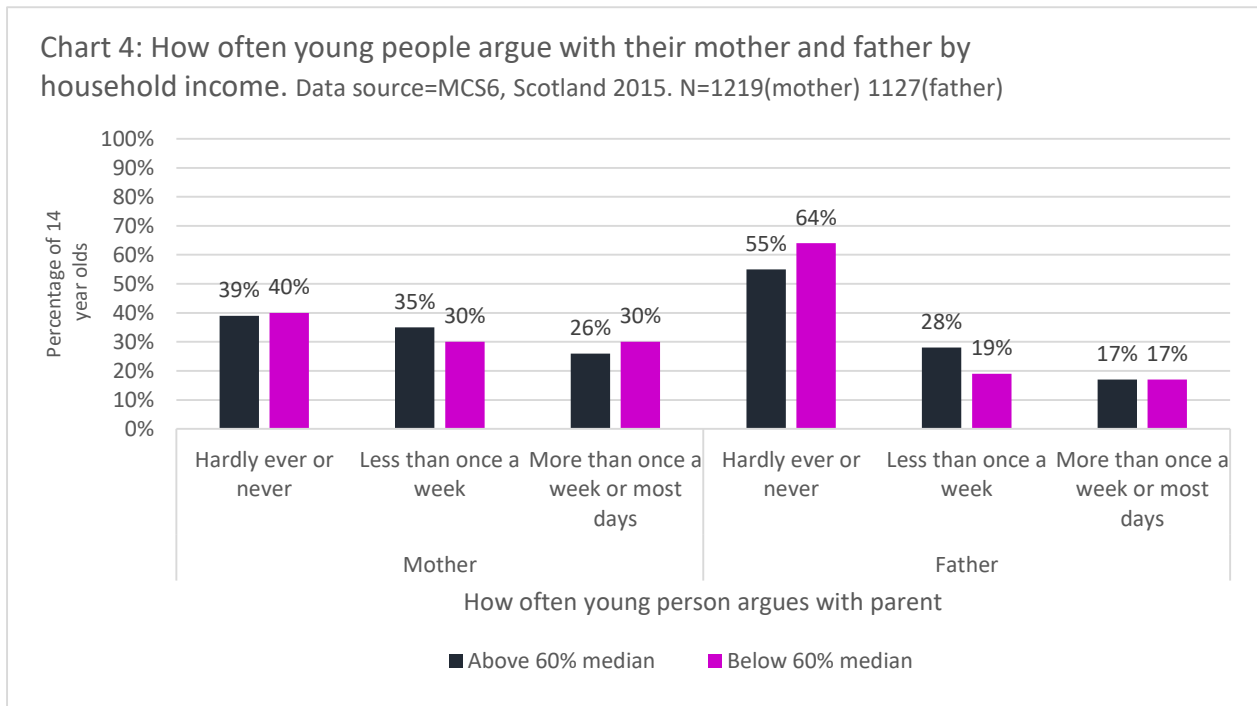


Chart 4 displays the fact that CMs from households below the 60% median of household incomes are 4% more likely than those CMs above the 60% median to argue more than once a week or every day with their mothers. CMs from households below the 60% median are more likely to hardly ever or never argue with their father than those from households above the 60% median. Household income has no effect on the percentage of CMs who argue with their father more than once a week or most days.



Section 2- Closeness to father and mother and Academic Self-concept

Chart 5 shows that the percentage of those who strongly agree/ agree with being good at maths increases as the CMs closeness to both their mother and father increases. CMs who are extremely close with their father are 2% more likely to strongly agree/ agree with being good at maths than those who are extremely close with their mother. Alluding to the fact that fathers

being extremely close to CMs is more valuable to the CMs ability at maths than mothers being extremely close to the CMs.

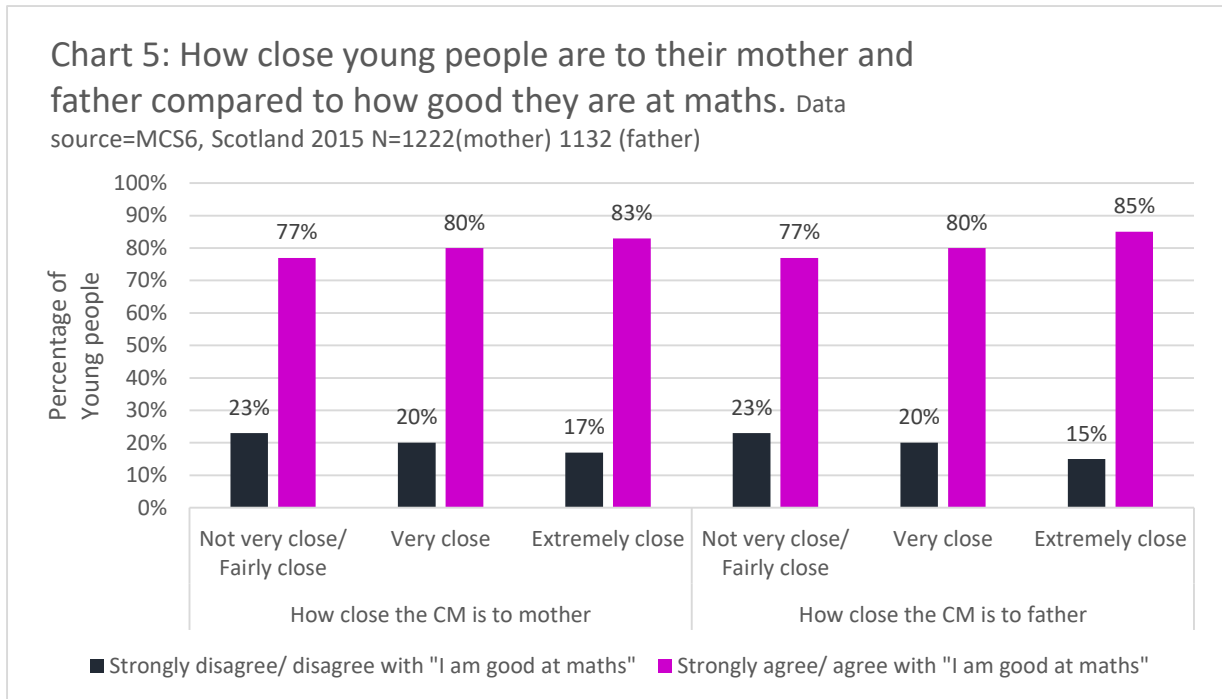


Chart 6 shows the percentage of those who strongly agree/ agree with being good at English increases as the CMs closeness to both their mother and father increases. CMs who are extremely close with their father are 3% more likely to strongly agree/ agree with being good at English than those who are extremely close with their mother. Highlighting the idea that fathers being extremely close to CMs is more valuable to the CMs ability at English than mothers being extremely close to the CMs.

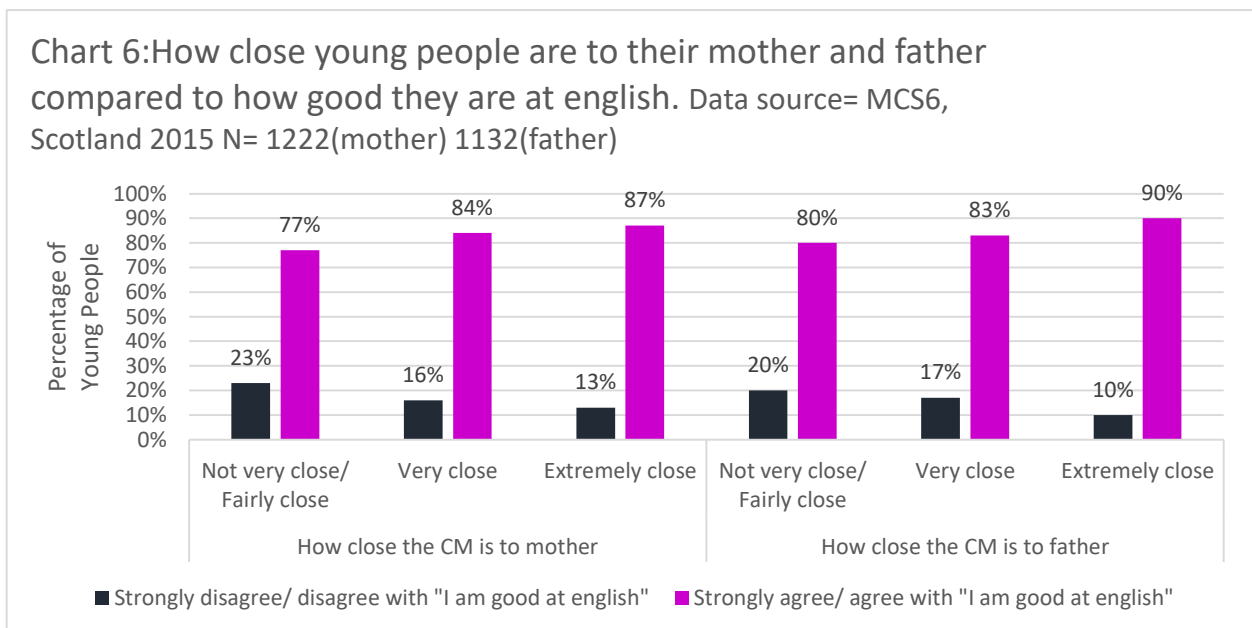
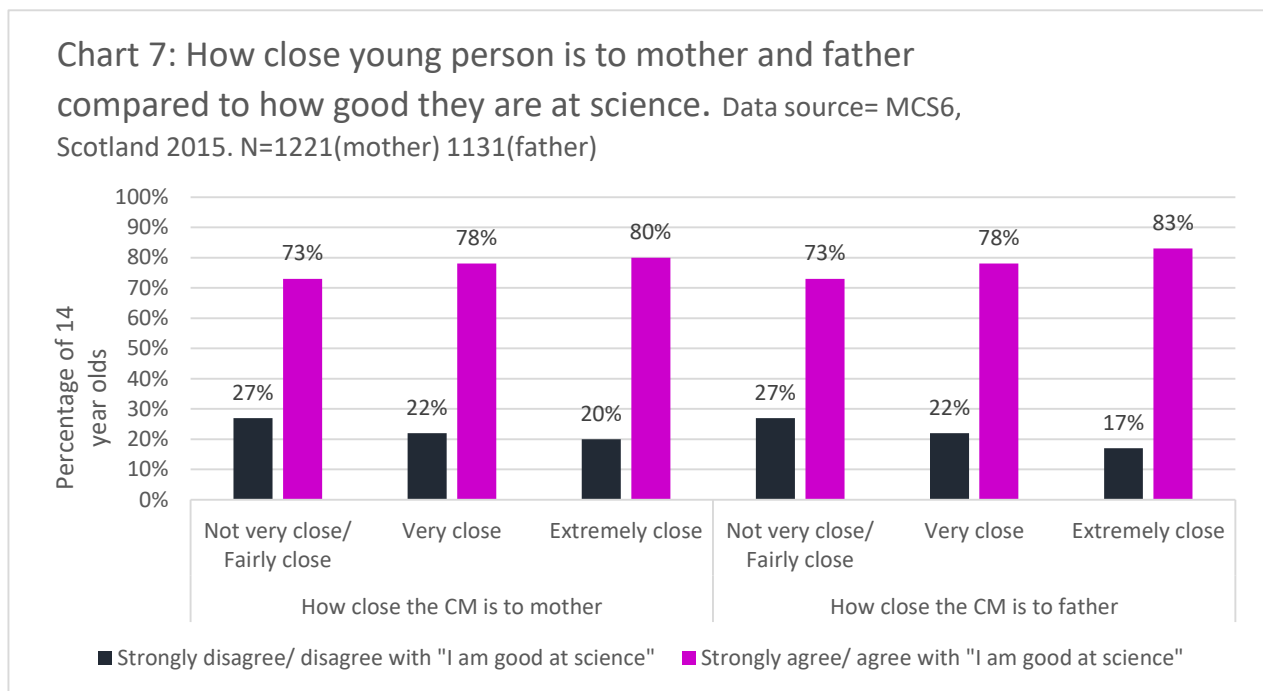


Chart 7 displays that the percentage of CMs who strongly agree/ agree with being good at science gradually increases as the closeness to both the mother and father increases. Again the CMs who are extremely close with their fathers are 3% more likely to strongly agree/ agree with being good at science than those who are extremely close with their mothers, suggesting that the CM being close with their father has a bigger impact on how good they are at science than being close with their mother.



The CMs self-perception of how good they were at maths, english and science were combined into an overall Academic Self- Concept. It can be seen from Table 1 that there is no correlation between gender and academic self- concept as there is no statistical significance. Household income however does have an impact on how the CMs see themselves academically. Those from households above the 60% median of household incomes are more likely to have a higher academic self-concept than those below the 60% median, these statistics have significance as the p value is smaller than 0.01 meaning that there is a correlation between household income and academic self-concept. Closeness to the CMs father also has an effect on the Academic self-concept. Being extremely close to the father improves the academic self-concept compared to being very close to the father and improves it even more so than being not very close/ fairly close to the father. Being very close to the father has statistical significance to having a worse academic self-concept than being extremely close to the father as the p values is less than 0.05. Being not very close/ fairly close to the father has even more evidence to suggest statistical

significance to the academic self-concept as the p value is less than 0.01. Being very close to the mother does not have much significance compared to being extremely close to the mother when it comes to academic self-concept. However, being not very close/ fairly close will have a negative impact on the academic self- concept compared to being extremely close to the mother as there is statistical significance as the p value is below 0.05. Overall being close to the father has more evidence suggesting statistical significance to the Academic self-concept than closeness to the mother, meaning there is a link between how engaged fathers are and the academic outcome of their children.

Table 1: Academic Self-concept and closeness between 14 year olds and their parents across Scotland (Data source: MCS6, N=1121)

	Coeff (Estimate)	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Academic Self Concept (Low compared to Medium)	-1.743***	0.207	-2.148	-1.337
Academic Self Concept (Medium compared to High)	0.486*	0.200	0.094	0.878
<u>Demographic & Socio Economic Factors</u>				
Gender (Ref:Female)				
Male	0.078	0.115	-0.148	0.304
Household Income (Ref:Below 60%)				
Above 60%	0.547**	0.174	0.207	0.888
<u>Parental Factors</u>				
Closeness to father (Ref:Extremely Close)				
Not very close/ Fairly close	-0.557**	0.188	-0.926	-0.188
Very close	-0.336*	0.172	-0.703	-0.029
Closeness to mother (Ref:Extremely Close)				
Not very close/ Fairly close	-0.406*	0.200	-0.799	-0.013
Very close	-0.050	0.159	-0.362	0.263

* p< 0.05 (statistically significant)

** p< 0.01 (statistically significant)

*** p< 0.001 (significantly significant)

Section 3- Closeness to father and mother and attitudes towards education

Chart 8 conveys that those CMs who are extremely close to their father are 19% more likely to never feel unhappy in school than those who aren't very close or fairly close to their father. Those who are extremely close to their father are 14% less likely to feel unhappy all or most of the time compared to those who are not very close or fairly close to their father. These figures suggest that being close to the father has a positive impact on the CMs attitude towards education as being close to the father means that the CMs are less likely to be unhappy in school.

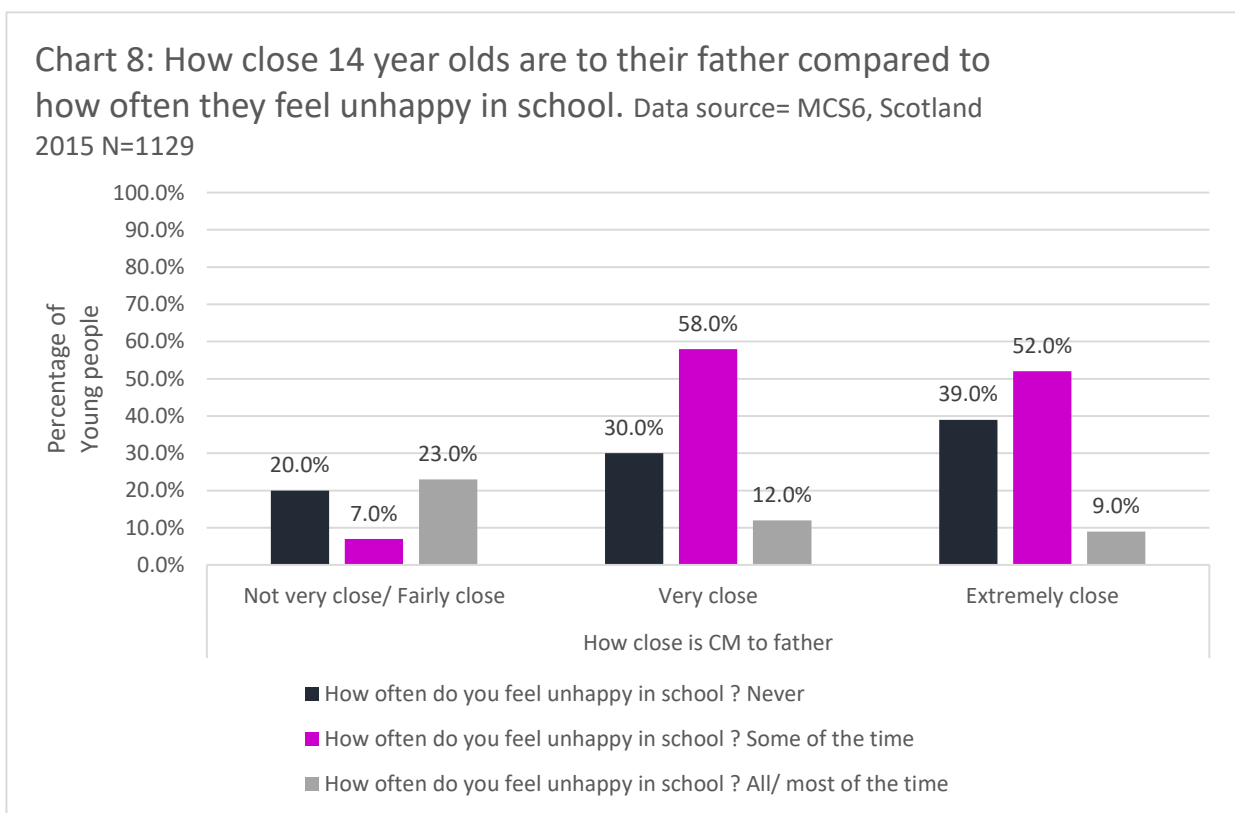


Chart 9 shows CMs who are extremely close to their father are 16% more likely to never feel that school is a waste of time compared to those CMs that are not very close or fairly close to their father. Highlighting that if the CMs are closer to their fathers then they feel school is less of a waste of time and more valuable meaning that it could be helping them academically and mentally because they have a more positive attitude towards school.

Chart 9: How close 14 year olds are to their father compared to how often they feel school is a waste of time. Data source= MCS6, Scotland 2015 N=1130

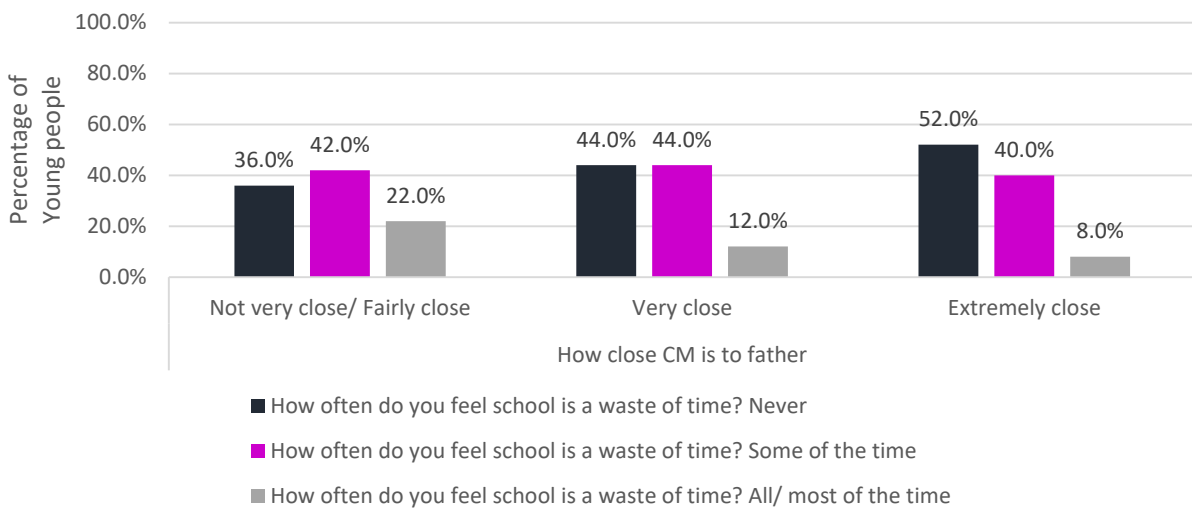
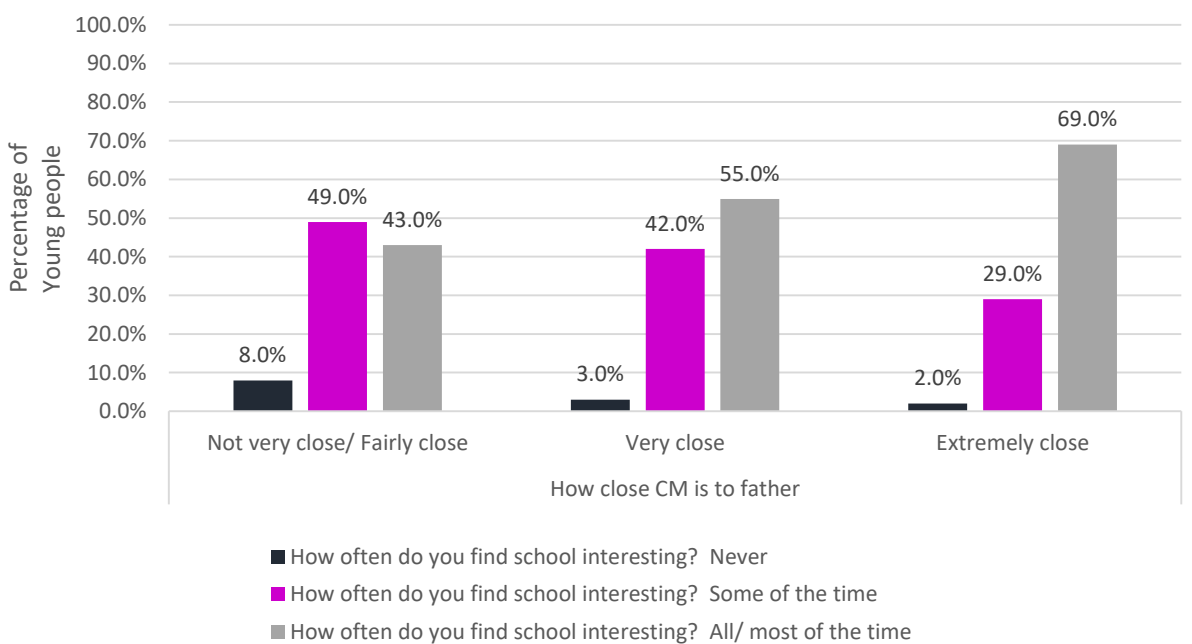


Chart 10 highlights that CMs who are extremely close to their father are 26% more likely to find school interesting all or most of the time than those CMs who are not very close or fairly close to their father.

Chart 10: How close 14 year olds are to their father compared to how often they find school interesting. Data source= MCS6, Scotland 2015. N=1131



Being extremely close to the father also means that 14% more of CMs find school interesting all or most of time compared to even those who are very close with their father. Alluding to the fact that being closer to the father means that CMs find school interesting more of the time than not being as close to the father. This increased interest in what is being taught at school will increase engagement and therefore the academic output that the CMs may get.

How often you try your best, how often you find school interesting, how often you feel unhappy at school, how often you get tired at school, how often you feel school is a waste of time and how often you find it difficult to keep your mind on work at school were all combined into an overall attitude towards education. The figures in Table 2 show that there is no correlation between gender and attitude towards education as there is no statistical significance.

Household income however does have an impact on the attitude CMs have towards education. Those from households above the 60% median of household incomes are more likely to have a better attitude than those below the 60% median, these statistics have significance as the p value is smaller than 0.01 meaning that there is a correlation between household income and attitude towards education. Closeness to the CMs father also has an effect on attitude towards education. Being extremely close to the father improves the CMs attitude compared to being very close to the father and improves it even more so than being not very close/ fairly close to the father. Being very close to the father has statistical significance to having a worse attitude as the p value is less than 0.05. Being not very close/ fairly close to the father has even more evidence to suggest statistical significance to the attitude towards education as the p value is less than 0.01. Being very close to their mother does not have significance compared to being extremely close to the mother when it comes to attitude towards education. However, being not very close/ fairly close will have a negative impact on the attitude the CMs have compared to being extremely close to the mother as there is statistical significance as the p value is below 0.05. Overall being close to the father has more evidence to suggest statistical significance to the CMs attitude towards education than closeness to the mother, meaning there is a correlation between how involved fathers are and the attitude their children have to education.

Table 2: Attitudes towards education in 14 year olds by closeness to fathers while controlling closeness to mothers and household income, Scotland. (Data source: MCS6, N=1121)

	Coeff (Estimate)	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Attitude towards education (Poor compared to average)	-1.743	0.207	-2.148	-1.337
Attitude towards education (Average compared to good)	0.486	0.200	0.94	0.878
<u>Demographic & Socio-economic factors</u>				
Gender (Ref: Female)				
Male	0.078	0.115	-0.148	0.304
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Not very close/ Fairly close	-0.406*	0.200	-0.799	-0.013
Very close	-0.05	0.159	-0.362	0.263

* p< 0.05 (statistically significant)

** p< 0.01 (statistically significant)

*** p< 0.001 (significantly significant)

D) Conclusions

From the results from section 2 it can be found that overall children who are closer to their parents will have a better Academic self-concept. In particular, those CMs who were closer to their father had a better academic self-concept. Highlighting that it is important to a child's academic development for fathers to be involved in their child's upbringing.

The results from section 3 show that children who are closer to their parents also have a better attitude towards education. Again being close with their father has a larger impact on the attitude they have towards school than being close to their mother. The closer the CM was to

their father the more positive attitude they had towards school. These trends suggest that fathers should be involved in children's lives as much as possible to ensure children's attitude towards their education is positive so they can gain as much from school academically and in various other ways to help them in the future.

From the results in section 2 and 3 it can be found that being closer to the father has a larger impact on children's academic self-concept and the attitude they have towards education.

Results from section 1 convey that children who live in households with a higher income are seen to be closer with both of their parents than those children who are from lower income families. If children are closer to their parents than it has already been seen that they will have a better academic self-concept and a more positive attitude towards education. Regardless of closeness to parents, results sections 2 and 3 portray that coming from a higher income family means that the children will have a higher academic self-concept and a better attitude towards education.

F) Evaluation

Using the Millennium Cohort Study provided several challenges. The dataset is very large and complex. Because it is so complicated it takes a lot of understanding and a lot of breaking down into a form in which it can be analysed which can all be very time consuming. The data needed to be presented in a way that was easily understood and it was not always clear how to break down complicated variables into meaningful categories to be analysed.

Another drawback of using the Millennium Cohort Study is that the results are not definitive. The Cohort Members answer the questions based on their perception of different things. Therefore, it could be said that all children will have different perceptions of different concepts so maybe the results are not fully reliable or able to be completely compared. In the future to minimise these effects on the research, qualitative methods as well as quantitative methods could be used to gain results. For example, interviews with Cohort Members could include finding out how they perceive what the questions mean as well as the way in which they have answered the questions to then go on to compare this with other CMs to see how similar or different they conceptualise various meanings and the degree to which they have answered the questions.

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Millennium Cohort Study
Closer- The home of longitudinal studies
<https://www.closer.ac.uk/study/millennium-cohort-study/>

Centre for Longitudinal Studies
<http://www.cls.ioe.ac.uk/>

Fathers Network Scotland
www.fathersnetwork.org.uk