

GROWING UP IN SCOTLAND: FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING



**Smarter
Scotland**
Scottish
Government

GROWING UP IN SCOTLAND: FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Authors: Alison Parkes, Julie Riddell, Daniel Wight and Katie Buston
MRC/CSO Social and Public Health Sciences Unit, University of Glasgow

Date: March 2017

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

ACKNOWLEDGEMENTS

The authors are supported by research grants from the Medical Research Council (MC_UU_12017/11, MC_UU_12017/14) and the Chief Scientist Office (SPHSU11).

CONTENTS

EXECUTIVE SUMMARY	3
1 INTRODUCTION	6
1.1 Background	6
1.2 Growing Up in Scotland (GUS)	7
1.3 Research questions	8
1.3.1 What is the distribution of poor, good and excellent father-child relationships?	8
1.3.2 What predicts poor father-child relationships?	8
1.3.3 What are the implications of father-child relationships for other aspects of child wellbeing?	9
2 METHODS	10
2.1 Sample selection	10
2.2 Measuring father- and mother-child relationships	10
2.3 Statistical methods	13
2.4 Characteristics of the analysis sample	13
3 DISTRIBUTION OF POOR, GOOD AND EXCELLENT FATHER-CHILD RELATIONSHIPS	15
3.1 Introduction	15
3.2 Key findings	15
3.3 Distribution of poor, good and excellent father-child relationships	15
3.4 Comparison of father-child relationships for biological fathers and father figures	16
3.5 Distribution of father-child and mother-child relationships	18
4 CURRENT PREDICTORS OF POOR FATHER-CHILD RELATIONSHIPS	21
4.1 Introduction	21
4.2 Key findings from the multivariable model	21
4.3 Child characteristics	21
4.4 Socio-demographic factors	21
4.5 Family adversity	26
4.6 Multivariable model of current predictors of poor father-child relationship	27

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

5	EARLY PREDICTORS OF POOR FATHER-CHILD RELATIONSHIPS	28
5.1	Introduction	28
5.2	Key findings from multivariable models	28
5.3	Potential influences on the father-child relationship from infancy and toddlerhood	29
5.3.1	Early child characteristics	29
5.3.2	Family characteristics and circumstances	29
5.3.3	Fathers' mental health, partner relationship, work-life balance and parenting	33
5.3.4	Multivariable model of early childhood factors associated with father-child relationship quality	36
5.4	Potential influences on the father-child relationship from later years	37
5.4.1	Adverse family events	37
5.4.2	Child physical health and socio-emotional adjustment	38
5.4.3	Family climate	38
5.4.4	Positive parenting	40
5.4.5	Multivariable model of early and later influences on father-child relationship	40
6	HOW ARE FATHER-CHILD RELATIONSHIPS ASSOCIATED WITH OTHER ASPECTS OF CHILDREN'S SOCIO-EMOTIONAL WELLBEING?	42
6.1	Key findings from multivariable models	42
6.2	Measuring socio-emotional wellbeing at age 10	42
6.2.1	High total difficulties score	42
6.2.2	Poor school adjustment	42
6.2.3	Low Life Satisfaction	42
6.2.4	Disliking school	43
6.2.5	Poor teacher relations	43
6.2.6	Peer victimisation	43
6.3	How is the father-child relationship associated with other aspects of child socio-emotional wellbeing?	43
6.4	Multivariable models of associations between father-child relationship and other aspects of child socio-emotional wellbeing	45
7	DISCUSSION AND RECOMMENDATIONS	46
8	REFERENCES	53
9	APPENDIX	59

EXECUTIVE SUMMARY

This Growing Up in Scotland (GUS) study of father-child relationships aims to promote greater understanding of the role of fathers, and factors that strengthen father-child relationships. This should contribute to more effective representation for fathers in family policies and services, a declared aim of the Scottish Government's national parenting strategy (Scottish Government, 2012). The study was commissioned by the Scottish Government in collaboration with Fathers Network Scotland as part of the Year of the Dad 2016.¹

The study considers several important issues for policy makers and practitioners involved with family influences on children's socio-emotional wellbeing. It examines the distribution of poor, good or excellent father-child relationships; what predicts poor father-child relationships; and how positive father-child relationships are linked with other aspects of children's socio-emotional wellbeing. Mother-child relationships are also considered, in order to view the totality of parental support for the child, and see where the child's relationship with one or both parents may need strengthening.

The study draws on information from over 2,500 couple families in the first GUS birth cohort, a nationally representative sample. Most of these were families containing both biological parents although 10% were families containing the child's mother and a male partner who was not the child's father. In 2014/15, children in the study sample (average age 10, in Primary 6) were asked a series of questions about their trust in, and communication with², their resident father or father figure resident in the biological mother's house. These questions measured the extent to which fathers were emotionally supportive of the child. Children's responses were used to categorise father-child relationships according to whether fathers' supportiveness was poor, good or excellent. Similar information was collected about mothers' supportiveness.

Distribution of poor, good and excellent father-child relationships

Most ten-year olds in couple families are very positive about levels of supportiveness from resident fathers, with 84% of father-child relationships being classified as "good" or "excellent" in terms of the level of supportiveness reported by the child. However, a substantial minority (16%) perceive poor relationships characterised by low supportiveness.

The vast majority of children (95%) have an excellent or good relationship with at least one parent. A third (33%) of children have an excellent relationship with one parent, and 18% have an excellent relationship with both their parents. Fathers' supportiveness shows a strong positive association with mothers' supportiveness. Most children with an excellent father-child relationship also had an excellent relationship with the mother. In all, only 5% of children have a poor relationship with both parents. Among the 15% of children who have a poor relationship with just one parent, this is more likely to be with the father (11%) than with the mother (3%).

Boys report slightly lower supportiveness from fathers than do girls. This gender difference is reflected in other aspects of children's wellbeing: boys also perceive lower supportiveness

¹ For more information, see <http://www.yearofthedad.org/about>

² Children were invited to indicate agreement with nine statements, for example "My Dad cares about me", "If my Dad knows something is bothering me, he asks me about it". Responses were on a 4-point scale from (1) "never true" to (4) "always true". For full details, see section 2.2.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

from mothers, have higher levels of behavioural and emotional problems, and are more likely to experience difficulties adjusting to life at school.

Children with a father figure report lower supportiveness than those with a resident biological father. Roughly a third (35%) of children in families without both biological parents have a poor relationship with a father figure, compared with 14% of children with a poor father-child relationship in families containing both biological parents.

Risk factors for poor father-child relationships

In order to find ways of helping the minority of families with poor father-child relationships, we focused on risk factors for low levels of perceived father-child emotional support.

There were two main aims of this analysis. The first was to identify which families might be most at risk, and therefore benefit most from any targeted support for fathers. Since father-child relationships may be affected by a broad spectrum of contextual factors, the analysis considered factors relating to the child, mother and family as a whole, as well as factors relating more specifically to the father. These included *child physical and mental health, parental socio-economic status, employment and working hours, home location* and experience of *multiple adverse family events* (family illness, death, or separation, parental conflict, drug use and mental health; and family experience of or involvement in crime).

The second aim was to investigate potentially modifiable aspects of family life that might be targeted by future policies and interventions to strengthen father-child relationships. These aspects included *father involvement in play and care* when children were younger, whether parents have a mutually *supportive partner relationship, home organisation* (the extent to which the home atmosphere is calm and ordered, rather than noisy and chaotic), *family ethos* (the extent to which family relations and activities are mutually supportive and co-ordinated), and *positive parenting* (the extent to which parents are involved in the child's activities and use praise and other positive reinforcement of the child's behaviour).

The analysis revealed that factors associated with a poor father-child relationship measured at age 10 (i.e. "current" factors) include: a male child; unmarried parents; low family socio-economic status; recent adverse family events; and the presence of a father figure rather than the biological father.

Early childhood predictors (measured when the child was aged 10 months and/or 2 years) of a poor father-child relationship at age 10 among families containing both biological parents include: a male child; low family socio-economic status; an unsupportive relationship between the child's parents; the father working as a small employer or being self-employed; and living in a remote part of Scotland. Additional risk factors for poor father-child relationships identified during the pre-school and school-age years include: adverse family events; weak home organisation; a less supportive family ethos and low levels of positive parenting.

Risk factors predicting poor father-child and poor mother-child relations were compared. Some early risk factors (male child, low family socio-economic status, adverse family events, father's occupation and unsupportive relationship between the resident parents) and a later risk factor (low levels of positive parenting) predict that the child will have a poor relationship with both parents. However, living in a remote location, an unsupportive partner relationship and weak home organisation and/or family ethos were more strongly associated with poor father-child relationships.

Associations between fathers' supportiveness and other aspects of children's socio-emotional wellbeing

The last part of the study explored whether fathers' emotional supportiveness is associated with other aspects of ten-year olds' socio-emotional wellbeing. It examined two measures of overall wellbeing (high total levels of behavioural and emotional problems, and low life satisfaction), as well as wellbeing outside the home. Here, measures of wellbeing mainly concern school (poor school adjustment, disliking school, having a poor relationship with the school teacher), although one measure (victimisation by other children) extends to the peer environment outside school.

Father-child relationship quality is found to be independently associated with all aspects of wellbeing listed above. This was the case, even after allowing for mother-child relationship quality and family circumstances such as socio-economic status and adverse family events. Associations between parental supportiveness and child wellbeing are similar in strength for father- and mother-child relationships, and are equally important for boys and girls.

Overall conclusions and recommendations

These results highlight the importance of father-child relationships in heterosexual couple families. They indicate that fathers' supportiveness is closely associated with several other aspects of ten year-old children's socio-emotional wellbeing that extend outside family life to include enjoyment of school, and relations with teachers and peers. The extent to which these associations have a causal basis, and the direction of any causation, are uncertain. Further longitudinal research is required to establish whether father-child relationships influence child wellbeing over time. Nonetheless, these findings suggest that strengthening the quality of fathering in specific couple families may improve children's socio-emotional wellbeing. Families with risk factors for poor father-child relationships, including socio-economic disadvantage, family adversity, and the presence of a non-biological father figure, could potentially benefit from additional support.

The research has also identified potentially modifiable aspects of family life that could be the focus of policies and intervention work. The quality of father-child relationships seems to depend on the quality of family interactions more generally, suggesting that fathering is embedded in the whole family system. This points to the potential value of measures that boost family cohesion, support couple relationships and strengthen co-parenting. In families with a non-biological resident father figure, the finding that a relatively high proportion of children perceive poor levels of supportiveness suggests that men who find themselves in the position of being a father figure may have particular difficulties in defining their role, both within the family and in relation to the child's non-resident biological father. Researchers and policy makers who focus on biological fathers have often overlooked father figures. Further study of non-biological father figures' needs is required in order to further our understanding of how best to support them.

INTRODUCTION

1.1 Background

Parent-child relationships form a cornerstone of children's development (Bronfenbrenner & Morris, 1998; Collins & Russell, 1991). Child development theorists originally focused on the central role of mother-child attachment, with father-child relationships viewed as secondary (Videon, 2005). Yet recent decades have produced a shift in societal attitudes and expectations surrounding the role of fathers (Gregory & Milner, 2011). Many fathers today expect to have an active and close emotional involvement in nurturing a child. In part, change has been fuelled by the marked rise in female employment, coupled with greater male job insecurity. This has reduced the extent to which families rely on fathers as the sole breadwinner, and has promoted shared responsibility for day-to-day care of the child. Nonetheless, the extent to which practices have caught up with societal expectations of more equal parenting is contested, and research suggests that fathers still generally work longer hours than mothers, are less likely to take up parental leave, and spend less time than mothers with their children (Devreux, 2007; Doucet, 2013; Hook & Wolfe, 2012; McMunn, Martin, Kelly & Sacker, 2015). Research has also suggested some differences in the types of interaction that fathers and mothers perform, with fathers specialising in play, especially physical play, and mothers in care-giving (Lamb, 2010). However, other work acknowledges the wide range of both parents' activities at home and suggests that, despite some differences in time spent on direct interaction and their focus, overall parents living together often have similar, closely overlapping roles in raising their child (Lamb, 2010; McMunn et al., 2015).

Even with greater equalisation of parental roles, there remain many questions about the particular contribution that fathers make to children's socio-emotional wellbeing, and the factors that may help or hinder the development of positive father-child relationships. As our society now contains a wide variety of family forms, such questions are pertinent in relation to all men who find themselves in a position of fathering a child, whether or not they are the biological fathers. Much research on children's socio-emotional development has overlooked fathers. A greater understanding of the role of fathers, and factors strengthening father-child relationships should contribute towards more effective representation for fathers in family policies and services, a declared aim of the Scottish Government's parenting strategy (Scottish Government, 2012).

Several aspects of fathering are likely to matter for children's development, and contribute to what makes a "good father" (Lamb, 2010). Much early research on fathering used a theoretical conceptualisation of father involvement in terms of *engagement* (direct interaction with the child, for example, in play or routine care), *accessibility* (the father being available when needed), and *responsibility* (provision of resources) (Lamb, Pleck, Charnov & Levine, 1987). Engagement continues to be a focus of empirical research, which finds benefits of fathers' participation in play and care-giving activities for young children's socio-emotional development (Flouri, Midouhas & Narayanan, 2016; Kroll, Carson, Redshaw & Quigley, 2016; McMunn et al., 2015; Sarkadi, Kristiansson, Oberklaid & Bremberg, 2008). However, a recent revised conceptualisation of father involvement emphasises the need for fathers to

show *positive* engagement (warmth and responsiveness, together with control), in addition to providing indirect care and monitoring of children (Pleck, 2010). This revision draws on more general parenting research, demonstrating benefits of parents adopting an authoritative parenting style that combines warmth/responsiveness and control (Baumrind, 1967; Maccoby & Martin, 1983). Fathers' warmth/responsiveness, exercise of control and frequent direct involvement in play or routine care are all likely to be inter-related to some extent, especially among families with young children. Nonetheless, the revised conceptualisation of father involvement stresses the likely importance of the *quality* of parental interactions with the child, rather than the frequency or type of activities undertaken together. Warm, sensitive interactions between parent and child are key to the development of secure parent-child attachment in early childhood (Ainsworth, Blehar, Waters & Wall, 1978), including secure father-child attachment (Brown, Mangelsdorf & Neff, 2012). As the child grows older, the need for parental proximity to maintain attachment becomes less important than parental availability, but parental warmth and sensitivity are still needed (Kerns, Brumariu & Seibert, 2011).

Middle childhood (roughly defined as from ages 6-12) is a comparatively understudied period of children's development, but the quality of parent-child attachment during this time is likely to be an important foundation for adolescent development of problems such as poor mental health and delinquency (Bosmans & Kerns, 2015). This study focuses on the quality of father-child relationships, using ten-year olds' perceptions of how often fathers are emotionally supportive (caring, receptive and responsive). It draws on information from families in the first birth cohort of the Growing Up in Scotland Study with two parents/carers resident in the household. Most of these were families containing both biological parents although a minority (10%) were families containing the child's mother and a male partner who was not the child's biological father.

To conclude this brief Introduction, we provide a description of the Growing Up in Scotland Study, and outline the main research questions.

1.2 Growing Up in Scotland (GUS)

Growing Up in Scotland³ (GUS) is a longitudinal research study funded by the Scottish Government tracking the lives of thousands of children and their families in Scotland from the early years, through childhood and beyond. The main aim of the study is to provide new information to support policy-making in Scotland but it is also intended to provide a resource for practitioners, academics, the voluntary sector and parents. To date, GUS has collected information about three 'cohorts' of children: a child cohort and two birth cohorts - altogether, information has been collected on about 14,000 children.

This study uses data from the first GUS birth cohort, a nationally representative sample of families with children born between June 2004 and May 2005. Details of the sampling framework are provided elsewhere (Bradshaw, Tipping, Marryat & Corbett, 2007). Baseline data were gathered from 5,217 families during 2005-6, when children were 10 months old, and these families were followed up annually for five years (to age 6), and then at age 8 (sweep 7) and when in Primary 6/age 10 (sweep 8). The main carer (usually the child's mother) was interviewed at home at all sweeps. Partners were interviewed at home at sweep

³ www.growingupinScotland.org.uk

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

2 (child aged 2), providing the main direct source of information from fathers (Bradshaw et al., 2008).

At ages 8 and 10, children in the study were invited to complete audio computer-assisted self-completion questionnaires. This report draws on information supplied by children at age 10 on the extent to which they had supportive relationships with each resident parent. All reported on their biological mother, and on either the biological father (most children) or a non-biological father figure living in the household. Child-reported information was confined to *resident* fathers.

Children's responses were used to categorise father-child relationships as poor, good or excellent according to levels of trust in, and communication with, fathers (emotional "supportiveness"). It is important to emphasise that the terms "poor", "good" or "excellent" *relationships* are used throughout the report as shorthand terms for "poor", "good" or "excellent" emotional *supportiveness*, as viewed by children. GUS did not collect information from fathers on supportiveness. In addition, although fathers' supportiveness is likely to be an important aspect of father-child relationships, fathers will relate to their child in other ways that are not considered here.

1.3 Research questions

This report addresses three main sets of research questions. These concern the distribution of poor, good or excellent father-child relationships, the predictors of poor father-child relationships, and the implications of father-child relationships for other aspects of children's socio-emotional wellbeing. Comparison with the mother also allows us to highlight unique aspects of father-child relationships. In examining predictors of poor father-child relationships, we explore whether there are particular factors that are important for father-child relationships, in addition to factors that may more generally support the child's relationship with either parent. We are also able to investigate whether fathers may make an independent contribution to children's socio-emotional wellbeing, after allowing for the mother-child relationship.

1.3.1 What is the distribution of poor, good and excellent father-child relationships?

We examine the distribution of poor, good and excellent relationships (levels of perceived supportiveness) for all children in the study sample, as well as separately for boys and girls.

We compare the quality of father-child relationships in families with a resident biological father with their quality in families with a non-biological resident father figure, in order to see whether non-biological father figures are felt by children to be just as supportive as biological fathers.

We look at how father-child and mother-child relationship quality are associated, in order to see whether children perceiving a supportive relationship with one parent usually feel supported by the other parent as well. We also compare the distributions of father-child and mother-child relationships in the GUS sample. This allows us to look at the totality of parental support for the child, and see where the child's relationship with one or both parents may need strengthening.

1.3.2 What predicts poor father-child relationships?

Two sections of the report explore which circumstances may lead to poor father-child relationships (low levels of perceived fathers' supportiveness). The first of these sections investigates the family's current circumstances (measured when children were aged 10 years), for all couple families including those with a non-biological residential father figure. The next section investigates earlier circumstances, for families with a resident biological father throughout the life of the GUS study. In both sections, we consider whether father-child relationships and mother-child relationships are subject to similar influences. This allows us to see whether there are particular factors that are important for father-child relationships, and whether there are other factors that may more generally support the child's relationship with both parents.

1.3.3 What are the implications of father-child relationships for other aspects of child wellbeing?

Here, we examine the extent to which the quality of father-child relationships (as defined by children's perceptions of supportiveness) goes hand-in-hand with other aspects of children's socio-emotional wellbeing.

We investigate associations with measures of overall child wellbeing (parental reports of behavioural and emotional difficulties, and the child's own reports of life satisfaction), and with parent- and child-reported measures of wellbeing in important specific domains (school and peer group). In this section, we also compare the effects of father-child and mother-child relationships.

This section contains information on how the analysis sample was selected, the measures of supportive father-child and mother-child relationships used in the report, and statistical methods used. It concludes with an outline of sample characteristics.

2.1 Sample selection

The data used were taken from sweep 8 of the first GUS birth cohort, conducted in 2014/15 when children had a median age of 10 years and were in the Primary 6 year group at school. Interviews were conducted with 3151 families (60% of the 5217 families interviewed in the first sweep of data collection).

Children who were not living in couple families were excluded (n=539), together with cases where the children were not living with the biological mother (a further 16 cases). Three further cases were removed where the mother's partner was female. The final analysis sample contained 2593 families (82% of families surveyed at child age 10), all with children living in families headed by two resident parents, one being the biological mother and the other her male partner. In most cases this partner was the child's biological father (n=2411), with a minority of children (n=182) having a non-biological resident father figure. **Note: unless otherwise specified, "father" throughout this report refers collectively to biological fathers and resident non-biological father figures.**

2.2 Measuring father- and mother-child relationships

At age 10, children supplied information on each parent's supportiveness, using an audio computer-assisted self-completion questionnaire conducted in the child's home. Supportiveness was measured using nine items from the trust and communication subscales of the People in My Life (PIML) scale, a self-report measure of child attachment designed and validated for use in middle childhood (6-12 years) (Ridenour, Greenberg & Cook, 2006) The validation process used a sample of 10-12 year olds to establish that the overall PIML attachment scale was correlated as expected with other measures of children's behavioural and emotional adjustment, as reported by parents, teachers and children themselves. It gives us confidence that items used for this report are appropriate for the GUS ten year-olds.

Children answered items about either a resident biological father or a resident non-biological father figure. The main carer's report of people resident in the household was used as a proxy to determine whether the child was referring to their biological father or a father figure. In most cases, the mother completed the main carer report. (Note that where there is a father figure, we do not have information on how the same child related to the non-resident biological father.)

Children were invited to indicate their agreement with the following statements: "My Dad listens to what I have to say", "My Dad cares about me", "I can count on my Dad to help

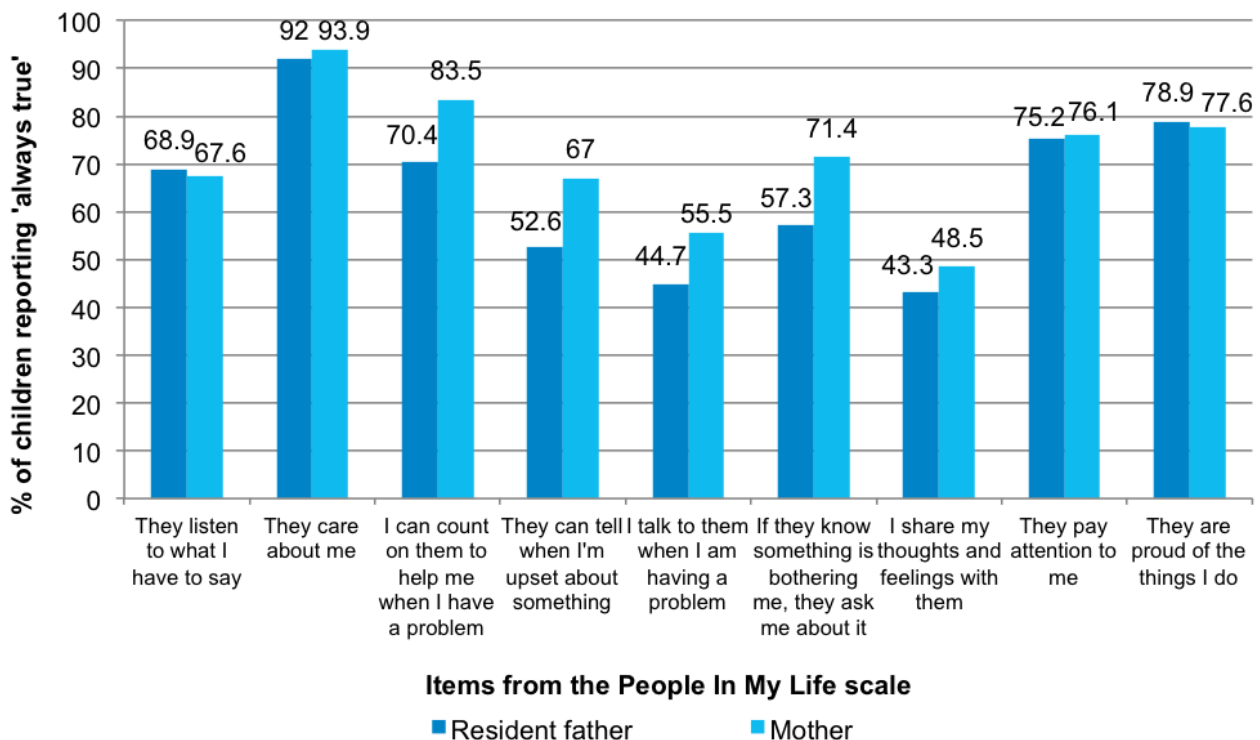
me when I have a problem”, “My Dad can tell when I’m upset about something”, “I talk to my Dad when I am having a problem”, “If my Dad knows something is bothering me, he asks me about it”, “I share my thoughts and feelings with my Dad”, “My Dad pays attention to me”, and “My Dad is proud of the things I do”. Responses were on a 4-point scale: 1 “never true”, 2 “sometimes true”, 3 “often true”, 4 “always true”.

Children were also invited to indicate agreement with a similar set of statements about their mother.

Figure 2-A shows the percentages of children giving the most positive response (“always true”) to each statement, in relation to fathers and mothers. For most items, the majority of children gave the most positive response, although children’s reports for fathers were less positive than for mothers. The vast majority (over 90%) felt that their Dad and Mum “care about me”. For both parents, the two items with the least positive responses related to the ability of the child to confide in a parent (“I talk to Dad/Mum when I am having a problem”, and “I share my thoughts and feelings with my Dad/Mum”). Less than half of children thought these were “always true” in relation to their father.

A factor analysis of scores demonstrated that the questionnaire items for children’s relationship with fathers all related to the same underlying concept, since items all loaded on to one factor. In other words, it confirmed that it was appropriate to combine responses to these questions to produce a scale or aggregate measure of father-child relationship. The same was true of the items for mothers. Average scores were calculated for each set of questions. Scores had excellent internal reliability (Cronbach alpha for the father-child relationship was 0.90, and for the mother-child relationship was 0.84). The high values of Cronbach alpha (>0.7) show that children responded in a very consistent way across all nine items.

Figure 2-A Children’s views on parental support, measured using items from the People In My Life scale



Note: Base sample n=2593 (unweighted).

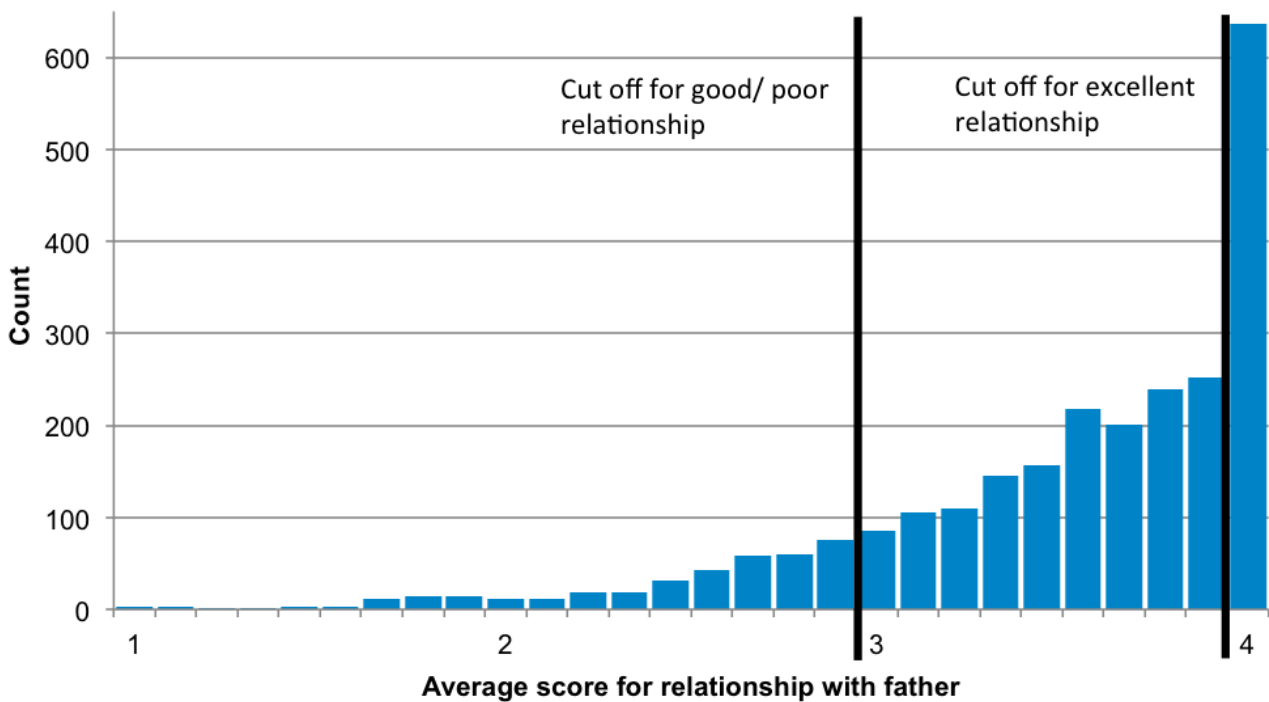
GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

The distribution of average scores for father-child relationships was negatively skewed (see Figure 2-B). In other words, most children had high scores, with a sizeable number having the maximum score of 4. However, there was a “tail” of children giving less positive responses on average (i.e. scoring 1 or 2). For the purposes of this study, these average scores were then recoded to form three groups, using the cut-off points shown in Figure 2-B:

- Poor relationship: average scores from 1 to less than 3 (i.e. on average, children gave one of the two less positive responses to the items, with the father “never” or “sometimes” supportive)
- Good relationship: scores of 3 or more but less than 4
- Excellent relationship: the maximum score of 4 (children “always” felt supported by the parent, across all items).

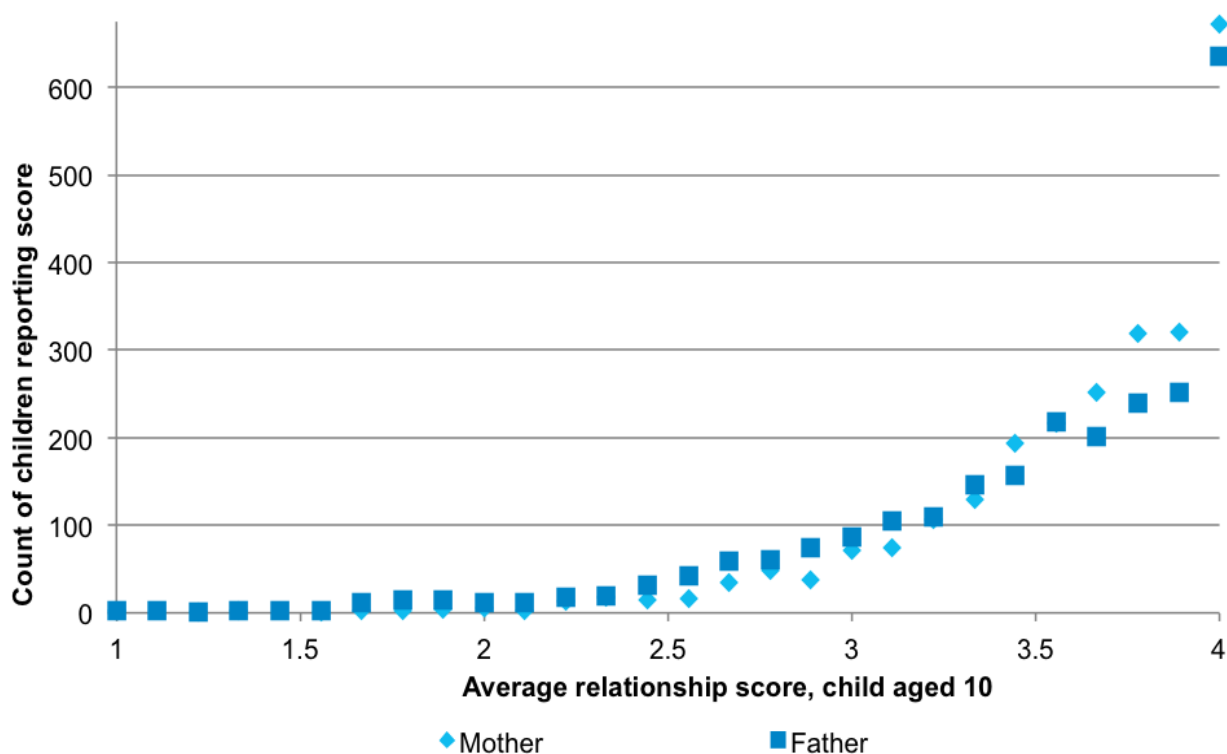
Figure 2-B Distribution of average father-child supportive relationship score, and cut-off points applied



Note: Base sample n=2593 (unweighted).

This process was repeated for items relating to the mother/ mother figure. Figure 2-C shows the distribution of average scores for the father-and mother-child relationship on the same graph. Mother-child relationship scores also have a strong negative skew, although the “tail” of low values is not as pronounced as for father-child relationships.

Figure 2-C Distribution of father- and mother-child average relationship scores among couple families



Note: Base sample n=2593 (unweighted).

2.3 Statistical methods

All analyses took account of the stratified, clustered sample design and used survey weights. Use of weights helps to compensate for the effects of differential survey attrition from the first sweep of data collection at child aged 10 months, which is more pronounced for disadvantaged groups.

Predictors of poor father-child relationships were first explored using bivariate associations (i.e. simple associations between pairs of measures). Multivariable models were then used to predict the likelihood of a poor father-child relationship for any one risk factor, after controlling for other factors in the model. The analysis of associations between father-child relationships and other aspects of child socio-emotional wellbeing took a similar approach. It first explored bivariate associations between father-child relationship quality and each measure of low wellbeing. Multivariable models were then used to predict the likelihood of each poor wellbeing outcome being associated with either poor or excellent father-child relationships, using good father-child relationship as the reference group. Further explanation of these models is provided in the Technical Annex to this report.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

2.4 Characteristics of the analysis sample

Most children in the analysis sample of couple families (90%) lived with both biological parents, with the remaining 10% living with their biological mother and her male partner (father figure to the child). Note that these percentages, and those described elsewhere in the report are all weighted to compensate for survey attrition, see section 2.3 above.

The average age of children was 10 years and 2 months. The sample contained approximately equal numbers of boys and girls. In 3% of families, at least one parent was from an ethnic minority group. Families with a non-biological father figure contained a higher proportion of younger parents: when children were aged 10, 18% of mothers in families with a father figure were under 30, compared to only 3% of families with a resident biological father. Families with a non-biological father figure were also more likely to be disadvantaged: for example, 42% were in the lowest quintile of household income (<£13,450 p.a., equivalised to take account of household size and composition), compared to 15% of couple families with a biological father. Further details are provided in an Appendix (Table 9-1).

DISTRIBUTION OF POOR, GOOD AND EXCELLENT FATHER-CHILD RELATIONSHIPS

3.1 Introduction

This section considers the overall distribution of poor, good and excellent father-child relationships, based on ten year-old children's perceptions of fathers' supportiveness. Boys and girls are examined separately, to see whether fathers' supportiveness varies according to child gender. In addition, father-child relationships for families with a resident biological father are compared to those in families with a non-biological father figure.

The section also investigates the extent to which fathers' supportiveness goes hand-in-hand with mothers' supportiveness. It compares the distribution of father-child and mother-child relationships across the sample. This allows us to look at the totality of parental support for the child, and to see where the child's relationship with one or both parents may need strengthening.

3.2 Key findings

- Most ten year-olds are very positive about their father's supportiveness, with 84% of father-child relationships being classified as "good" or "excellent" in terms of children's perceptions of fathers' supportiveness
- Girls perceive more supportiveness from fathers than boys, although differences were small
- Children with a father figure report lower supportiveness than those with a resident biological father
- The quality of father-child relationships is strongly associated with the quality of mother-child relationships
- Children are just as likely to report excellent relationships with their father as with their mother, but poor father-child relationships are more common (16%) than poor mother-child relationships (8%)

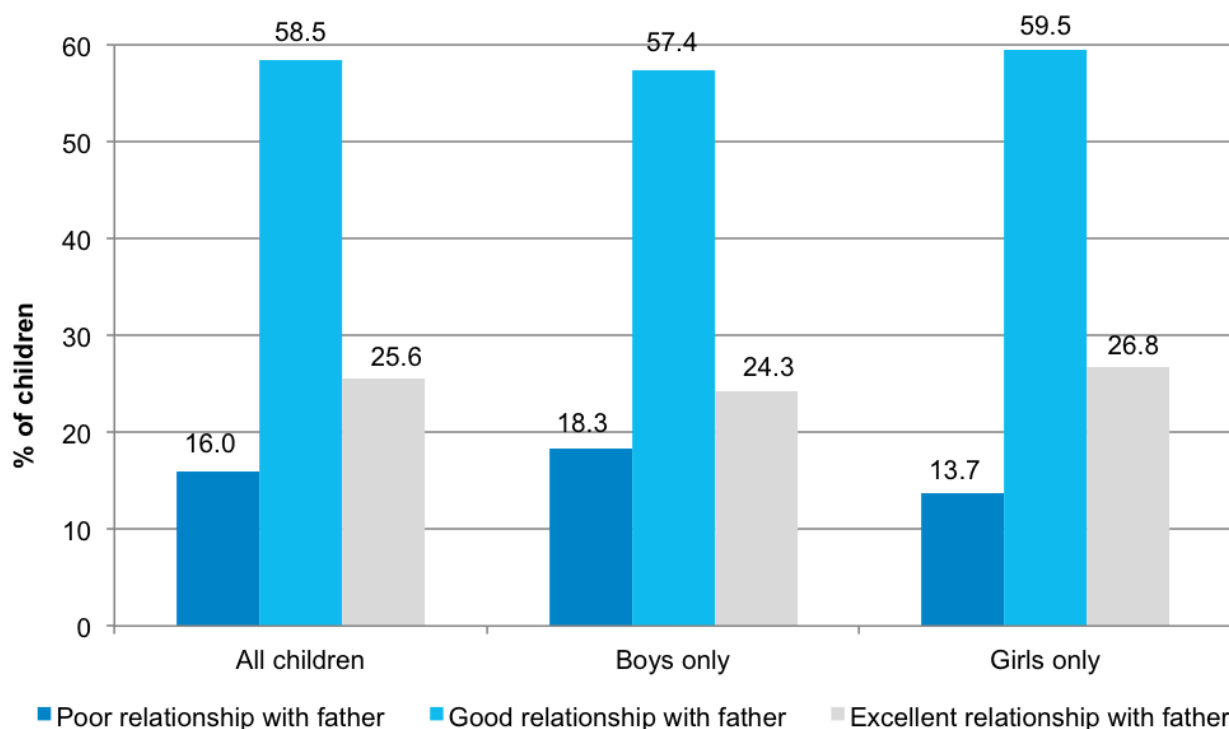
3.3 Distribution of poor, good and excellent father-child relationships

Most ten year-olds in the study sample report high levels of supportiveness from fathers. Overall, 59% of father-child relationships are classified as "good" and 25% as "excellent", leaving 16% that are "poor" in terms of supportiveness. Girls are slightly more positive about their relationship with their father than boys. Among girls, 27% have an excellent relationship with their father, and 14% a poor relationship. The corresponding figures for boys are 24% (excellent) and 18% (poor). This gender difference is statistically significant ($p < 0.05$), see Figure 3-A. However, this gender difference is not confined to father-child relationships. As we see later in the report, a similar gender difference was found for mother-child relationships, with boys more likely than girls to have a poor relationship with their mother (sections 4.6 and 5.3.4).

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

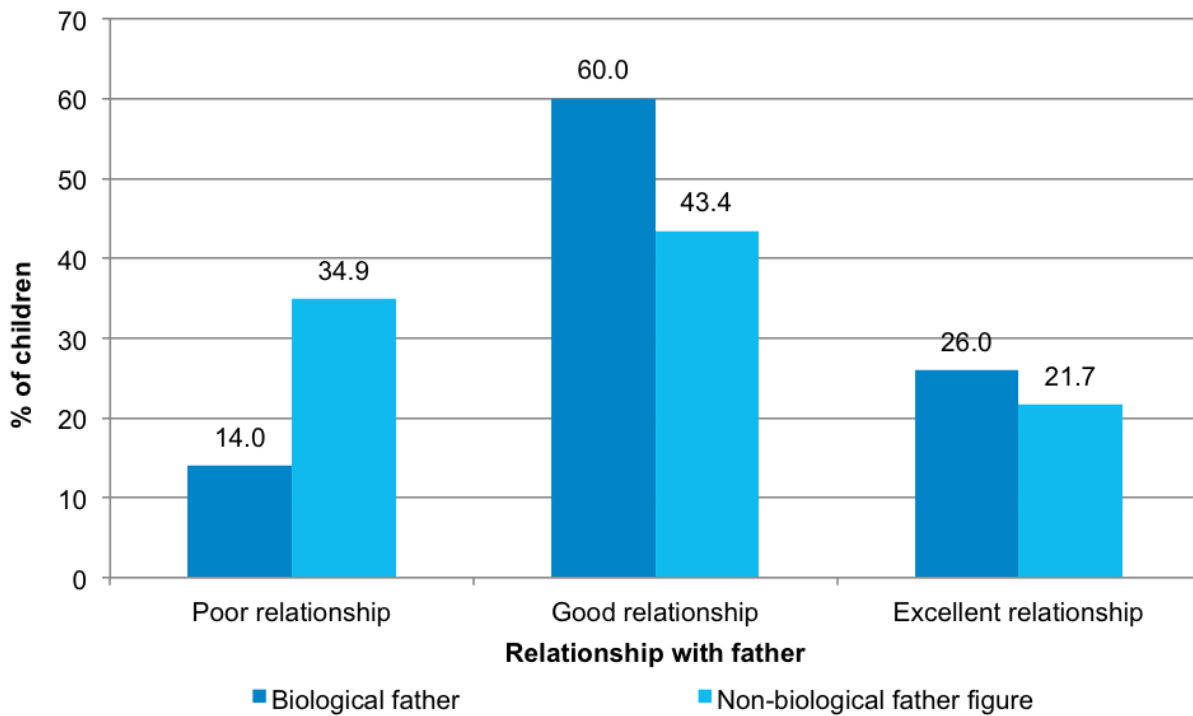
Figure 3-A Distribution of poor, good and excellent father-child relationships for all children and by child gender



Note: base sample n=2593 (unweighted).

3.4 Comparison of father-child relationships for biological fathers and father figures

Children are more likely to have a poor relationship with a father figure (35%) than with a biological father (14%), see Figure 3-B. However, the proportions of children having an excellent relationship in the two types of family are more similar (26% for biological father, 22% for father figure).

Figure 3-B Father-child relationships according to family type

Note: base samples were families with biological father, n=2411; families with non-biological father n=182 (unweighted).

A similar effect of having a father figure is found for boys and girls. Among boys, 40% of those with a father figure have a poor relationship compared to 16% of those with a biological father. Among girls, 30% have a poor relationship with a father figure compared to 12% of those with a biological father.

In order to investigate whether non-biological resident father figures' supportiveness increases with more time spent in the family, we subdivided families according to whether the father figure had been living in the family prior to the age 10 interview ("established" father figure, n=110) or whether he was recorded as a new household member at this time ("recent" father figure, n=72). We do not have information on when the "recent" father figure entered the household during the two-year period from the age 8 to age 10 interview, and so "recent" could in practice denote up to two years' residence.

Children with established father figures are less likely to have a poor relationship (31%) and more likely to have an excellent relationship (24%) compared to those with recent father figures (where 42% had a poor relationship, and 18% had an excellent relationship). However, even for established father figures, supportiveness appears lower than for children with a resident biological father.

In addition to time spent living with the family, marriage to the child's mother might be another indicator of the extent to which father figures are embedded in family life. Too few "recent" father figures (as defined above) were married to the mother to allow us to examine the effects of marriage for this group. Among established father figures (i.e. they had lived in the family for more than two years), around half were married to the mother. Children are less likely to have a poor relationship if their established father figure is married to the mother (25% did so, compared to 39% when the established father figure is not married to the

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

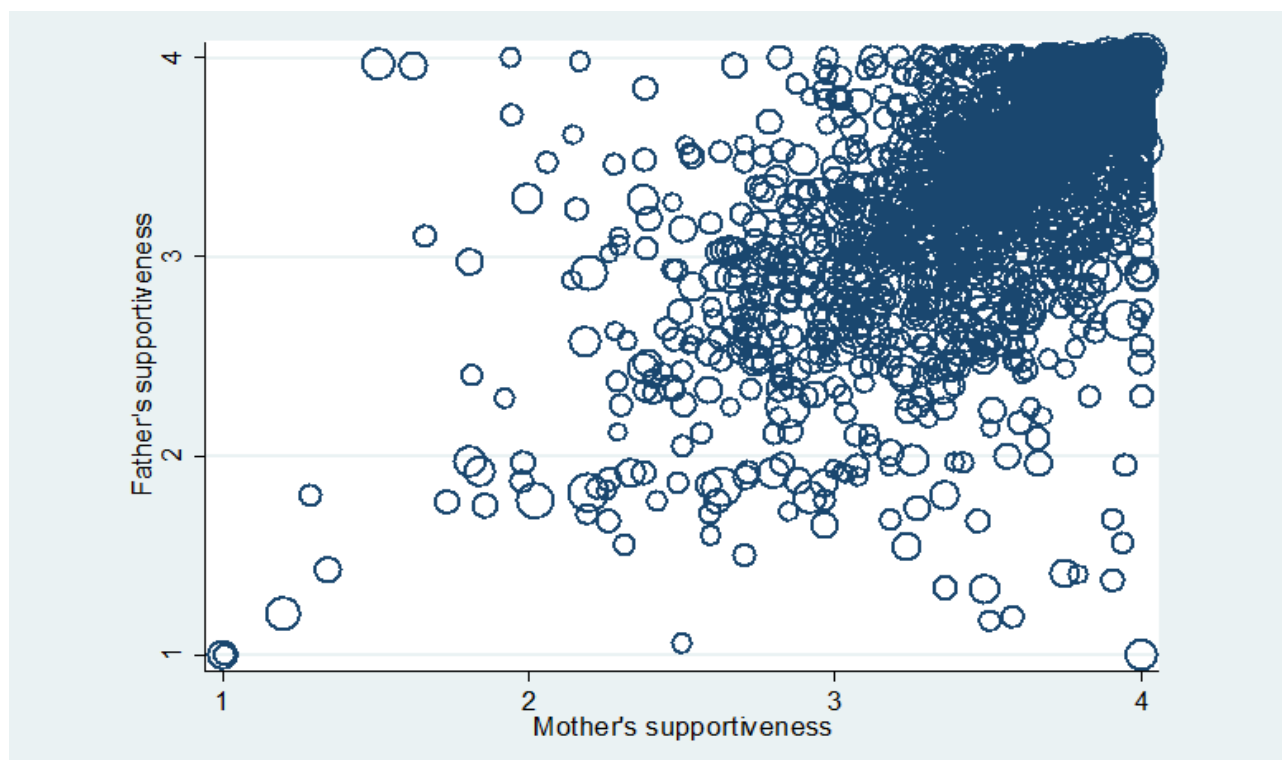
mother). Further, children with a married established father figure are more likely to have an excellent relationship (30%, compared to 16% with an unmarried established father figure). Parental marital status is considered in more detail in section 4.4.

3.5 Distribution of father-child and mother-child relationships

The quality of children’s relationship with the father tends to go hand-in-hand with their relationship with the mother. This was examined using a measure of correlation. Scores for this measure range from where 0 (no correlation) to 1 (perfect correlation). Average relationship supportiveness scores for each parent show a strong positive correlation (Pearson correlation coefficient, $r=0.68$, $p<0.001$). This correlation is still strong among families with a father figure ($r=0.57$, $p<0.001$). Among children from all couple families, most (70%) children who have an excellent relationship with their mother also have an excellent relationship with their father. Similarly, two-thirds of children (66%) who have a poor relationship with the mother also have a poor relationship with their father.

The strong association between the quality of the child’s relationship with each parent is also illustrated by Figure 3-C, which plots average supportiveness in father-child relationships according to average supportiveness in mother-child relationships. This Figure does, however, also show that there were some children who had a good or excellent relationship with one parent (scoring 3 or more on the supportiveness scale), but a poor relationship with the other parent (scoring under 3 on supportiveness).

Figure 3-C Association between average scores for child’s relationship with father and mother

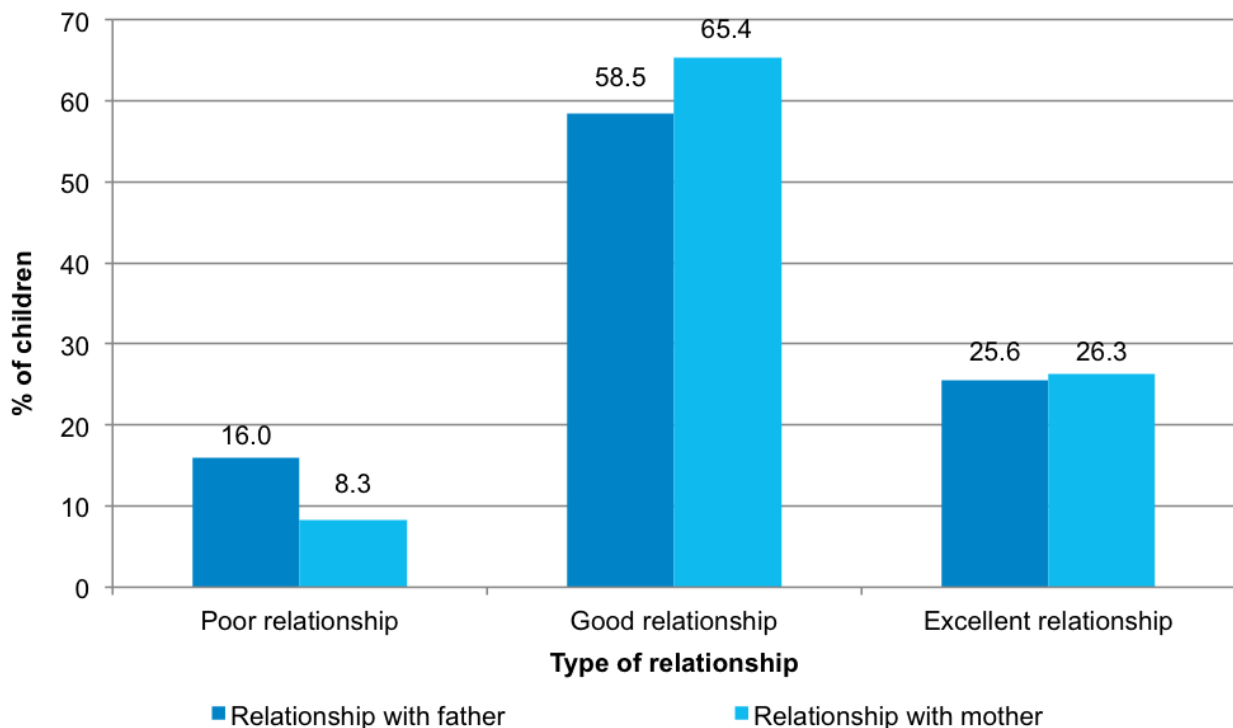


Note: Base sample $n=2593$ (unweighted). Circle size reflects survey weighting, with larger circles reflecting a higher survey weight.

Average relationship supportiveness scores are slightly lower for father-child relationships than for mother-child relationships⁴. Children are just as likely to have an excellent relationship with their father as with their mother (26% for both parents). However, there are twice as many children with a poor relationship with their father (16%) as there are children with a poor relationship with their mother (8%). See Figure 3-D.

Similar differences are observed for boys and girls⁵. Among boys, 10% have a poor relationship with their mother, compared to 18% with their father. Among girls, 7% have a poor relationship with their mother, compared to 14% with their father.

Figure 3-D Comparison of father- and mother-child relationships



Note: base sample n=2593 (unweighted).

The quality of children’s relationship with their mother does not differ according to whether a family contained both biological parents or contained a non-biological father figure. The gap between children’s perceptions of mothers’ and fathers’ supportiveness is therefore wider for families with a non-biological father than for families with both biological parents. Among families with a non-biological father, 8% of children have a poor relationship with the mother, compared to 35% with the non-biological resident father figure (Figure 3-E).

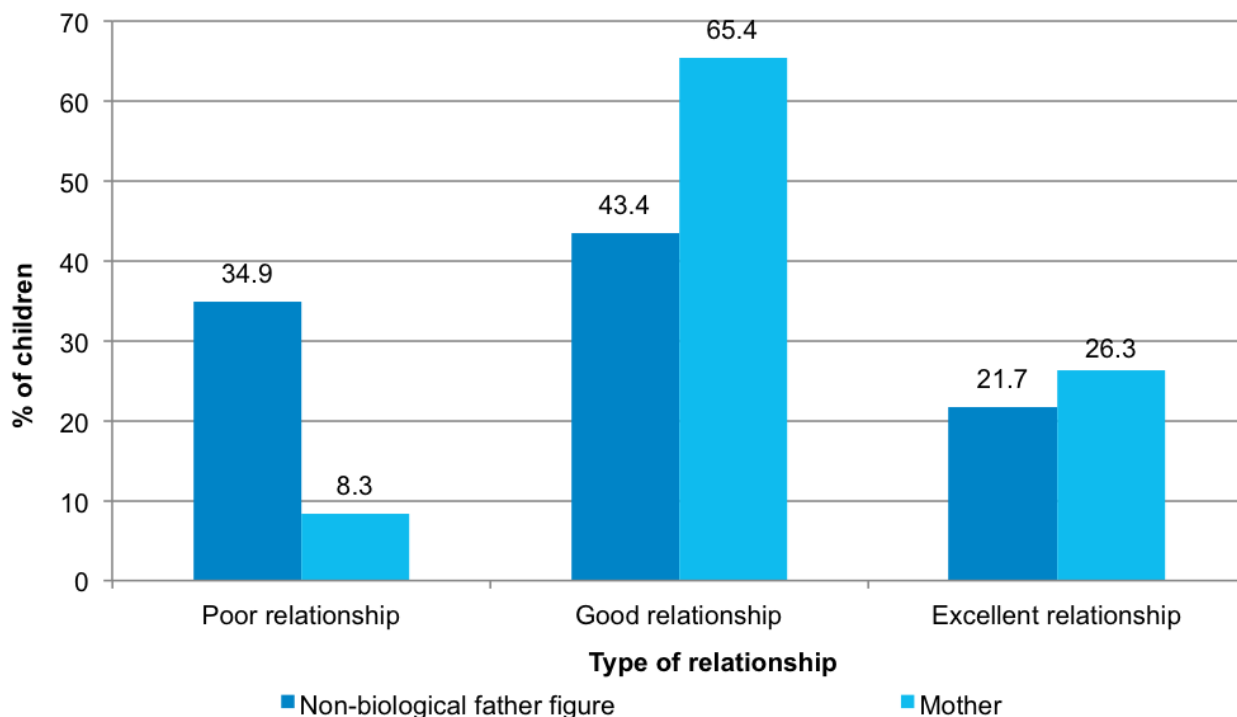
⁴ Average scores are: father-child relationships 3.49 (95% confidence interval 3.46 to 3.51) and mother-child relationships 3.60 (95% confidence interval 3.58 to 3.62).

⁵ For girls, average scores are: father-child relationships 3.53 (95% confidence interval 3.50-3.56) and mother-child relationship 3.66 (95% confidence interval 3.64-3.68). For boys, average scores are: father-child relationships 3.44 (95% confidence interval 3.40-3.49) and mother-child relationships 3.55 (95% confidence interval 3.51-3.58).

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Figure 3-E Comparison of father-and mother-child relationships in families with a non-biological resident father figure



Note: base sample of families with non-biological residential father figure n=182 (unweighted).

We categorised children in couple families according to their relationship with both parents. A third of children (33%) have an excellent relationship with at least one parent, and 18% have an excellent relationship with both their parents. The great majority of children in the sample (95%) have a good or excellent relationship with at least one parent. Although this means that only 5% have a poor relationship with both parents, an additional 15% have a poor relationship with one parent. This is more likely to be a poor relationship with the father (11%) than a poor relationship with the mother (3%).

CURRENT PREDICTORS OF POOR FATHER-CHILD RELATIONSHIPS

4.1 Introduction

As outlined in the previous section, a substantial minority (16%) of ten year-old children in GUS couple families perceive low levels of supportiveness from fathers, and are categorised as having a “poor” father-child relationship. This section examines which current family circumstances, measured when children were ten years old, are associated with a poor father-child relationship. Rather than focusing solely on characteristics of the father or father figure, we consider a wide range of characteristics of the child, both parents and the household since these may all impinge on the father-child relationship. We first consider simple (bivariate) associations between each factor and father-child relationships. As many aspects of family disadvantage tend to co-occur, we then use a multivariable model to establish key current (age 10) predictors of poor father-child relationships (section 4.6).

4.2 Key findings from the multivariable model

- Male child gender, lower family socio-economic status, unmarried parents, recent experience of adverse family events and living with a non-biological father figure are all current risk factors independently associated with poor father-child relationships
- Some risk factors for poor father-child relationships (male child gender, lower family socio-economic status) are also risk factors for poor mother-child relationships
- Some risk factors (unmarried parents, non-biological father figure, adverse family events) are important for father-child, but not mother-child relationships
- Risk factors for poor father-child relationships are similar for boys and girls

4.3 Child characteristics

As shown in section 3.2, boys are more likely to have a poor father-child relationship than girls. However, the child’s physical health (according to body mass index measures and parent reported general health) was not associated with fathers’ supportiveness.

4.4 Socio-demographic factors

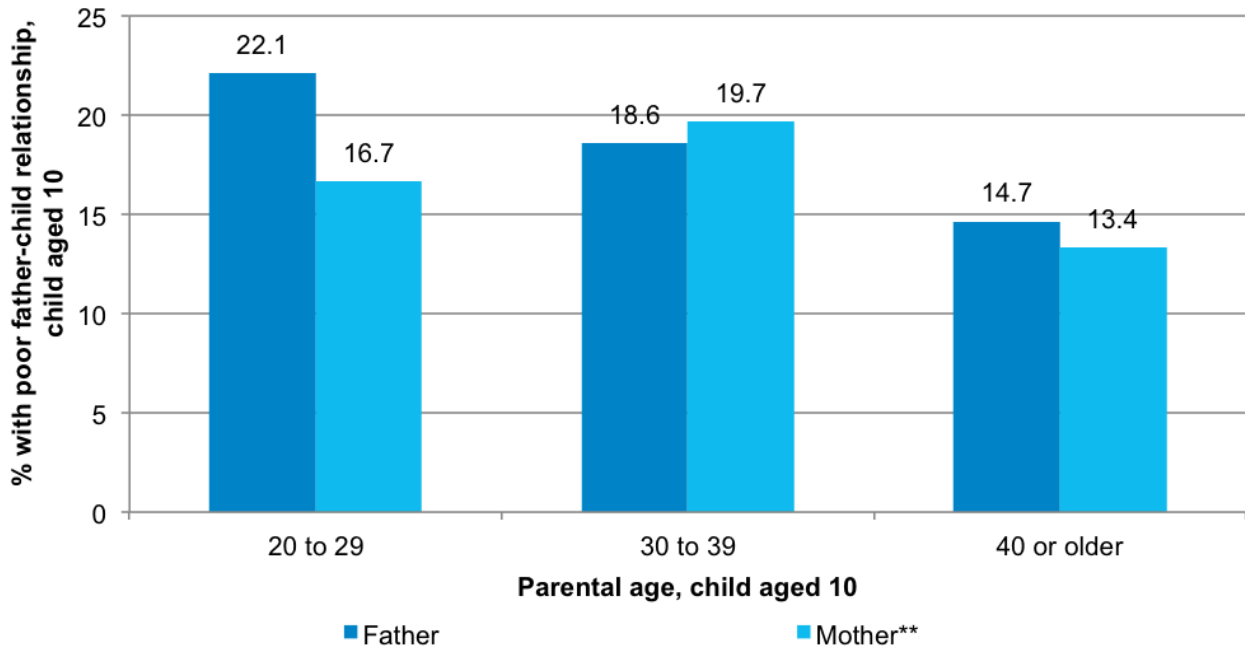
A number of current family characteristics are not associated with father-child relationship quality (parent’s ethnicity, household employment, number of children in the household, area deprivation, and urban-rural location).

There is a significant association between mother’s age and father-child relationship quality, in that children with younger mothers (under 40 years at the child aged 10 interview and therefore under 29 at the time of the child’s birth) are more likely to have a poor father-child relationship (Figure 4-A). Whilst there also seems to be a trend for the proportion of children perceiving poor father-child relationships decreasing as the father’s age increases, this is not statistically significant.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

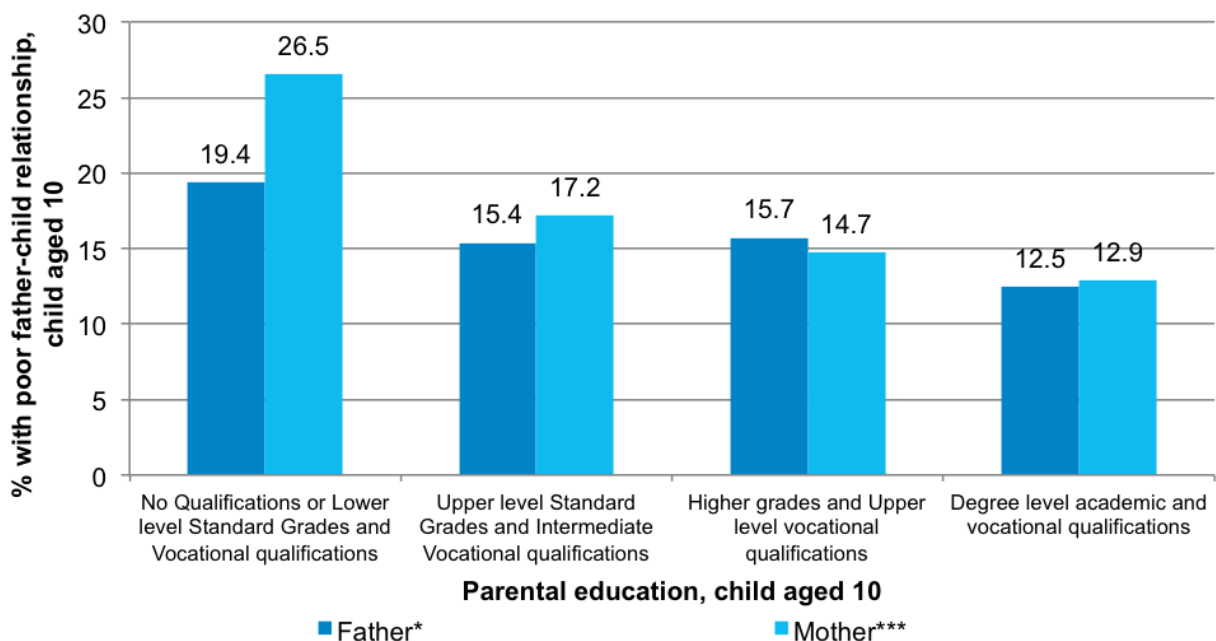
Figure 4-A Association between parental age and poor father-child relationship



Note: Base sample n=2593 (unweighted). Asterisks indicate statistically significant association between mothers' age and poor father-child relationship, ** $p < 0.01$.

As we can see from Figure 4-B, the proportion of children with a poor father-child relationship decreases as the level of parental educational qualifications increases. Father's and mother's educational level both show the same trend. When parental education level is merged, taking the highest education level within the couple, the association with poor father-child relationship remains significant ($p < 0.001$).

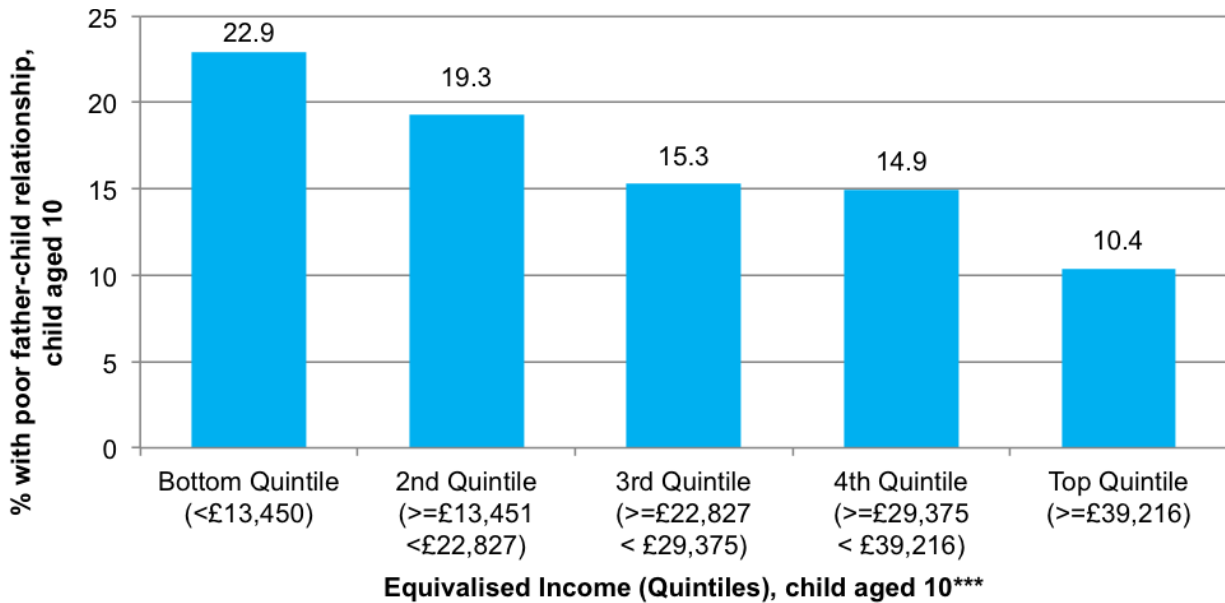
Figure 4-B Associations between parental education level and father-child relationship quality



Note: Base sample of all couples with male partner in household n=2593 (unweighted). Asterisks indicate statistically significant linear association between educational level and poor father-child relationship, * $p < 0.05$, *** $p < 0.001$.

Figure 4-C shows a similar trend for household income, with fewer children having a poor father-child relationship at higher levels of household income.

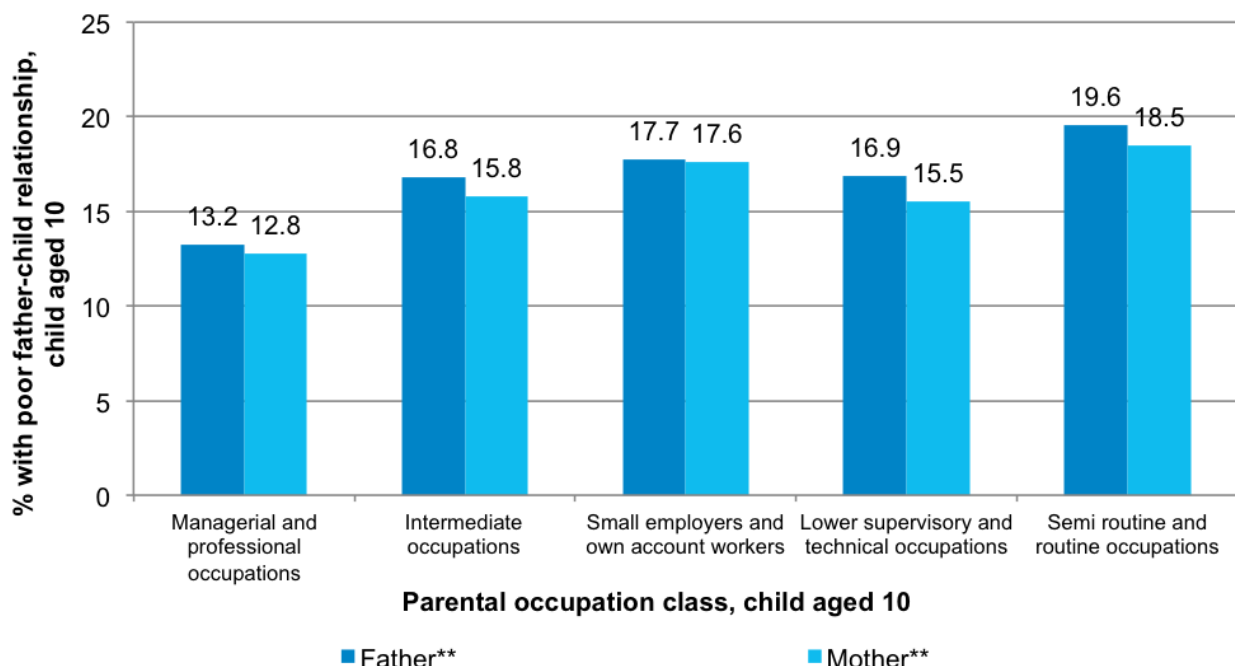
Figure 4-C Associations between household income and father-child relationship



Note: Base sample of all couples with male partner in household n=2593 (unweighted). Household income was equivalised to take account of household size and composition. Asterisks indicate a statistically significant linear association between income and poor father-child relationship, *** $p < 0.001$

Fathers' and mothers' occupational class both show a similar trend (see Figure 4-D for fathers' occupational class). Children of parents in professional/managerial occupations are *least* likely to perceive a poor relationship with their father, and children of parents in routine occupations *most* likely to do so.

Figure 4-D Associations between parental occupational class and father-child relationship



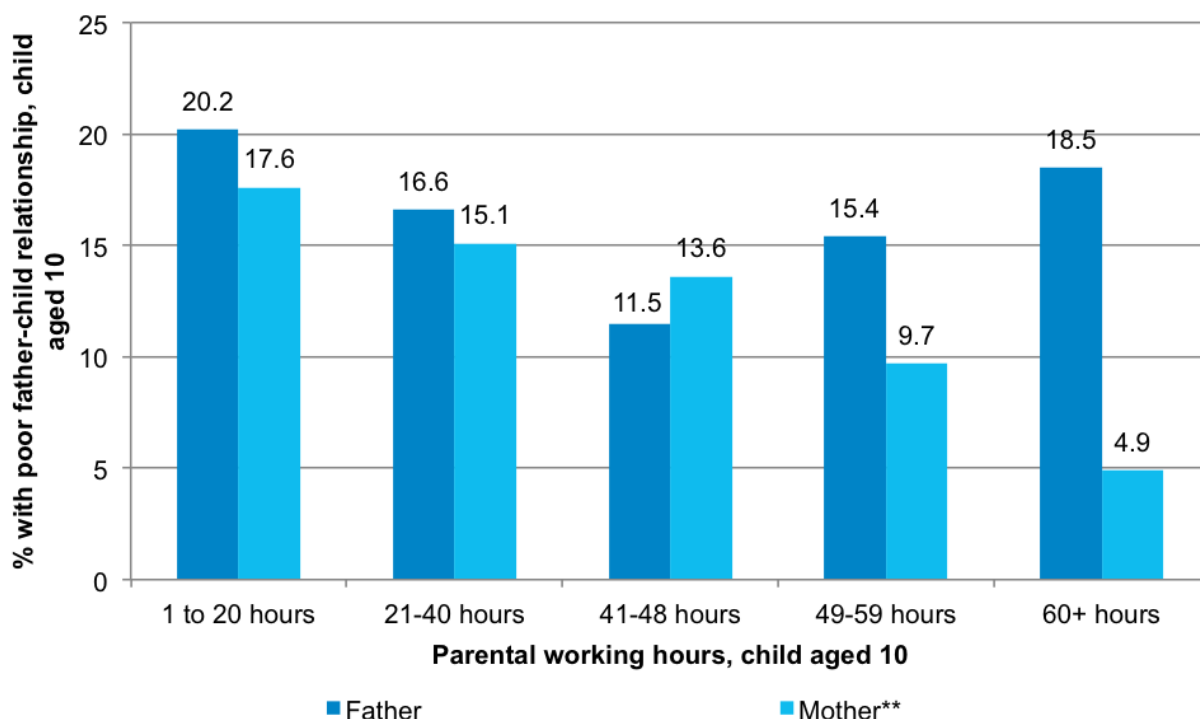
Note: Base sample n=2593 (unweighted). Occupation based on National Statistics Socio-economic Classification (NS-SeC) six-fold classification, excluding "never worked". **denotes significant (linear) association between occupational class and father-child relationship, $p < 0.01$.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

The effect of fathers' longer working hours also appears to reflect higher income levels rather than decreased availability, at least up to a certain point. The EU maximum threshold for working hours is 48 hours per week. Up to this EU threshold, a poor-child relationship appears less likely, the longer fathers work. With working hours longer than this, it appears that more children have a poor father-child relationship (Figure 4-E). Nevertheless, the difference between this group (23% of fathers) and the majority working less than 48 hours is not statistically significant.

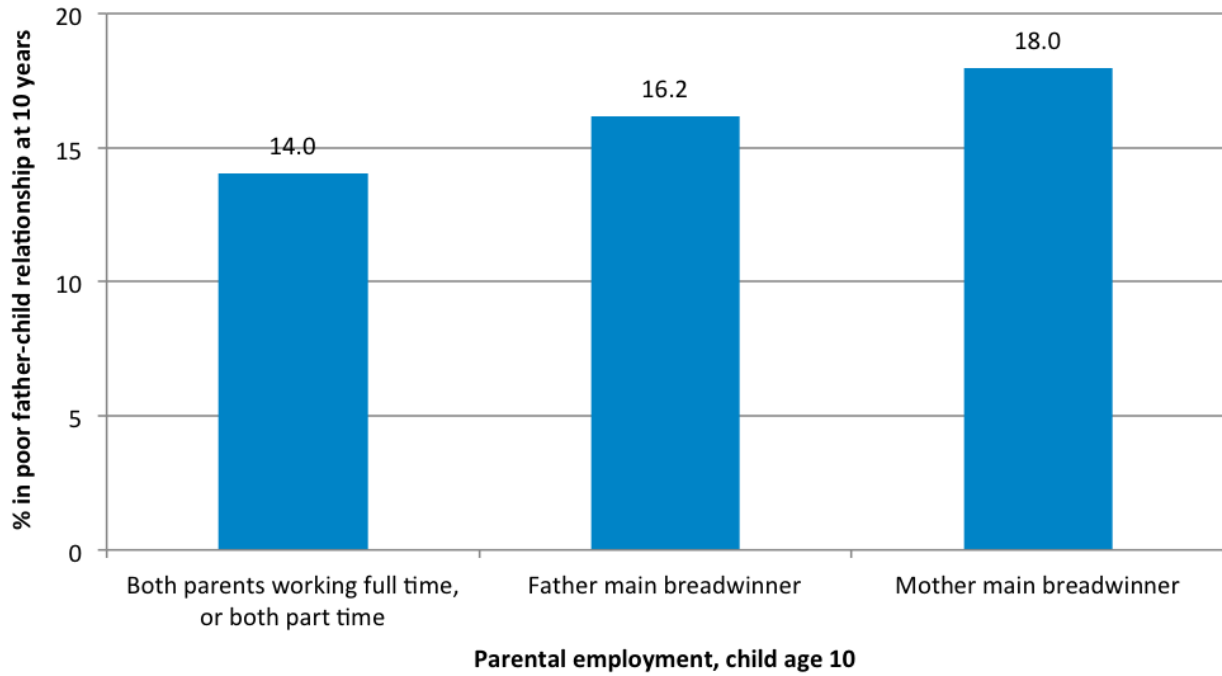
Figure 4-E Associations between parental working hours and father-child relationship



Note: Base sample of all couples with male partner in household n=2593 (unweighted). Asterisks denote statistically significant (linear) association for mother's working hours with father-child relationship, $p < 0.01$.

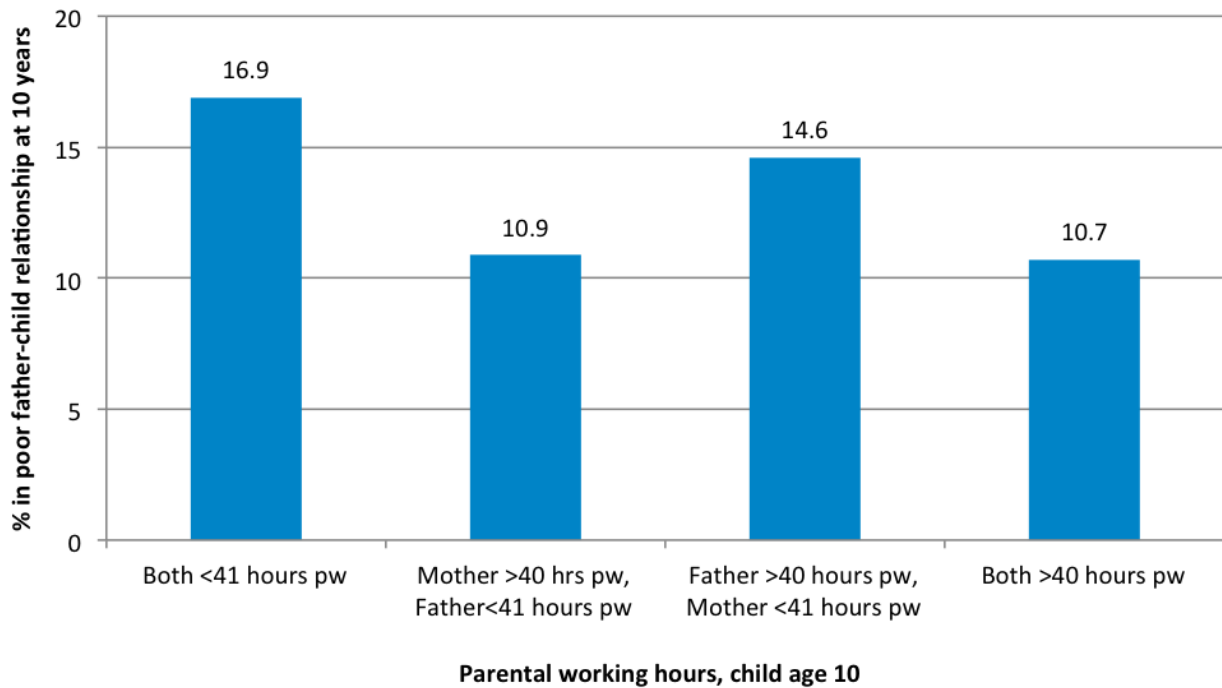
Mothers' working hours show a more uniform trend to be inversely associated with the proportion of children having a poor father-child relationship. In other words, the longer the mother's working hours, the less likelihood there is that the child has a poor relationship with the father. This raises the question of whether fathers tend to spend more time with children when the mother works, and develop a better relationship with them. In order to address this question, we need to examine the overall pattern of employment in the household. We look both at who was the main breadwinner, and at the effect of one or both parents working relatively long hours. We find no difference in the proportion of families with poor father-child relationships according to whether the mother or father is the main breadwinner (Figure 4-F). Furthermore, although relatively few mothers (8%) work more than 40 hours per week, when mothers are employed in this way, father-child relationships do not vary according to whether fathers have shorter hours (Figure 4-G). This suggests that it is not the length of time that fathers spend at home that explains the quality of the father-child relationship. These findings also suggest that the effect seen in Figure 4-E for mothers' hours is likely to reflect the effects of higher income and maternal education on families, rather than a shift in the main carer from the mother to the father.

Figure 4-F Association between household employment pattern and father-child relationship



Note: base sample (unweighted) n=2489 families where at least one parent was working

Figure 4-G Association between parents' joint working hours and father-child relationship



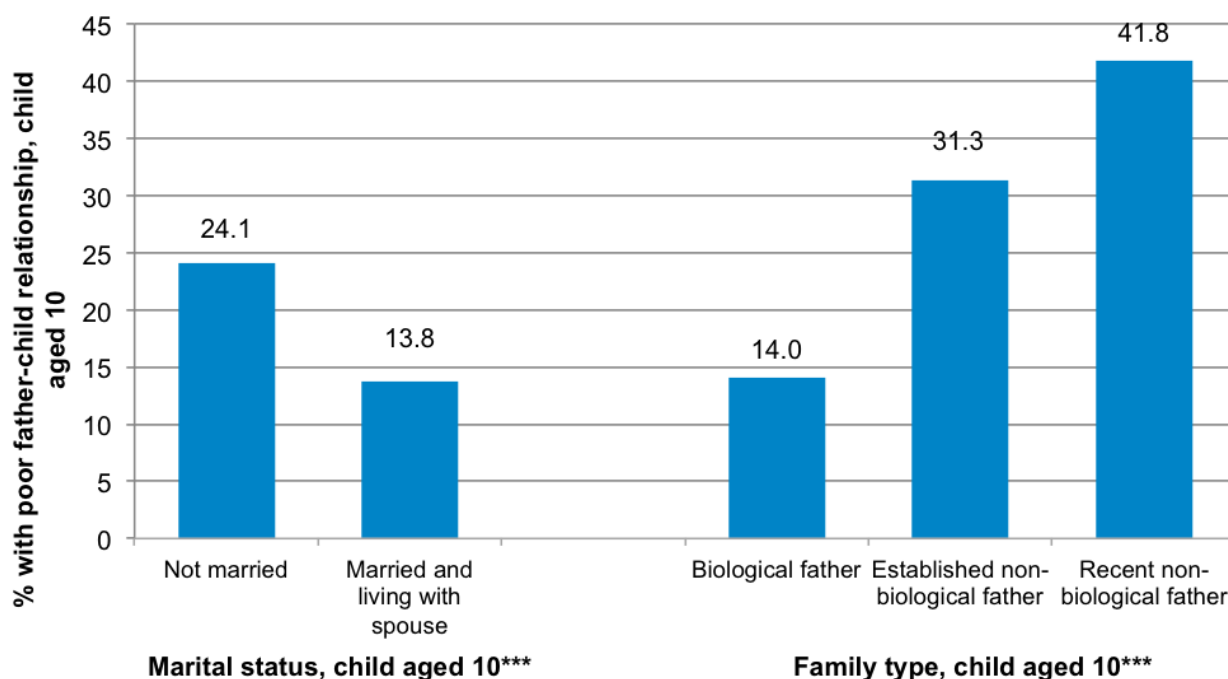
Note: base sample (unweighted) n=2593 families

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Among families where the child's parents are married, 13.8% of children have a poor relationship compared to 24.1% of families with unmarried parents (Figure 4-H). Figure 4-H also reminds us (see 3.3) that if the family contains a father figure, there is more risk of a poor-father child relationship than if the biological father is present. Although this graph suggests that a more recent father figure carries more risk of a poor father-child relationship compared to an established father figure, the difference between established and recent father figures is not statistically significant (see section 3.3 for definitions of "established" and "recent").

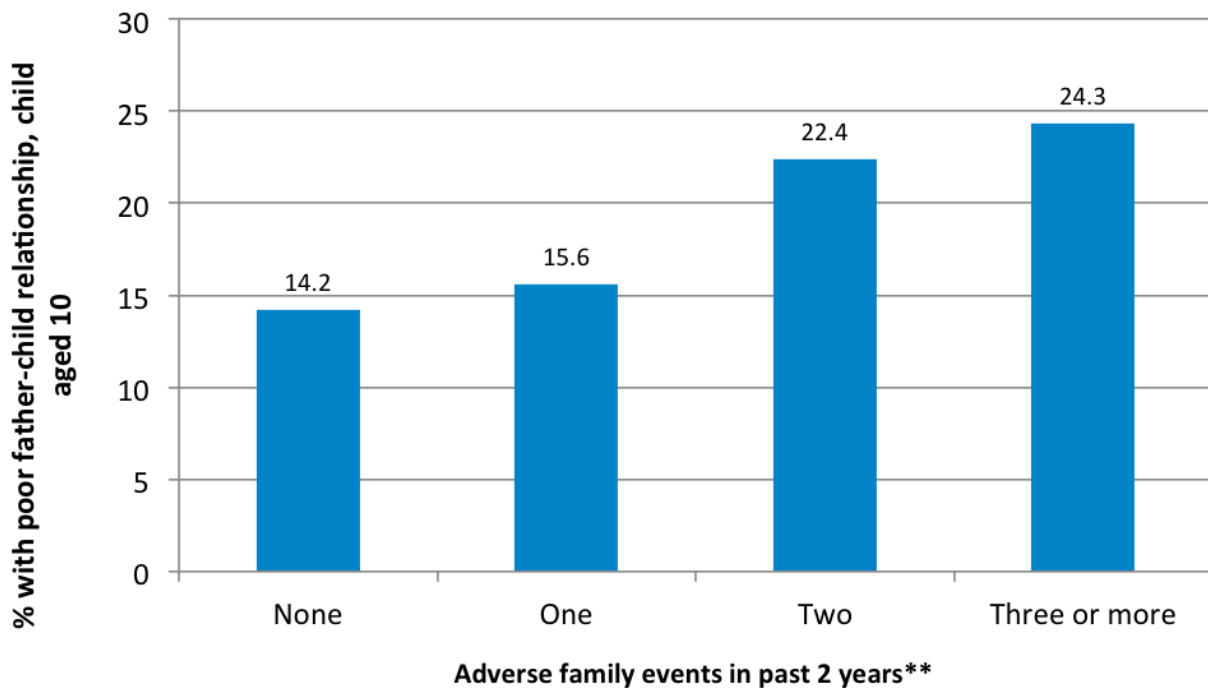
Figure 4-H Association between aspects of parental relationship status and poor father-child relationship



Note: Base sample n=2593 (unweighted). Asterisks denote a statistically significant association for both marital status and family type with father-child relationship, *** $p < 0.001$

4.5 Family adversity

Children experiencing multiple adverse family events such as family illness, accidents and deaths in the recent past (i.e the two-year interval since the previous GUS survey) are more likely to have a poor father-child relationship (Figure 4-I). More detailed investigation failed to find an association between any particular type of event and risk of a poor father-child relationship, with the exception of marriage between parents. This reflects the presence of a non-biological father figure in the family, rather than marriage between two biological parents. Only 1% of families with both biological parents mentioned getting married in the two years prior to the age 10 interview, compared to 16% of families with a non-biological father figure.

Figure 4-I Associations between adverse family events and father-child relationship

Note: Base sample n=2593 (unweighted). Asterisks indicate a significant (linear) association between adverse family events and father-child relationship, ** $p < 0.01$

4.6 Multivariable model of current predictors of poor father-child relationship

A multivariable regression was used to explore current factors that were associated with poor father-child relationship, as identified above. Being a male child, lower parental education, unmarried parents, having a father figure and recent experience of adverse family events all emerged as statistically significant predictors of a poor father-child relationship. Both “recent” and “established” father figures appeared to carry a similar level of risk.

There were no differences in the effect of risk factors according to the child’s gender. In other words, risk factors for poor father-child relationships such as having a non-biological father figure were equally important for boys and girls. There were also no differences in the effect of having a father figure according to whether or not parents were married.

A similar multivariable model was created of poor mother-child relationships. This found that male child gender, low parental education and lower family income were all associated with a poor mother-child relationship. Unlike the model of poor father-child relationship, there were no independent effects of parental marital status, presence of a non-biological father figure or adverse family events on the likelihood of a poor mother-child relationship.

EARLY PREDICTORS OF POOR FATHER-CHILD RELATIONSHIPS

5.1 Introduction

This section investigates which family circumstances in early childhood may affect the development of the ten year-old child's relationship with the resident biological father. The analysis draws on earlier sweeps of GUS BC1 data from sweep 1 (child aged 10 months) to sweep 7 (child aged 8), as well as a "between sweep" web and telephone survey conducted when children were 9 years old. It makes particular use of information from a partner questionnaire administered to fathers residing with the mother and child at sweep 2, when children were aged approximately two years old. This questionnaire is a unique GUS source of resident fathers' own reports of involvement in parenting, relationship with the mother and mental health.

The analysis sample for this section is a subset of the main analysis sample used elsewhere in the report, and consists of 1,967 families where the biological parents and child all lived together from the baseline survey (child aged 10 months) until the child was approximately 10 years old. The father completed a partner questionnaire when the child was aged 2 in 1,648 (84%) of these families.

The analysis is divided into two stages. The first stage is an investigation of influences on father-child relationships from early childhood (infancy and toddlerhood), using information from the 10-month and 2 year interviews. The second stage considers some additional child characteristics, aspects of parenting and the family climate from pre-school and school age years, using information from the age 4, 5 and 8-year interviews, and the age 9 web/telephone survey. All pre-school/school age information was gathered from the child's main carer (in the great majority of cases, this was the child's mother) and (at age 8) from the child directly.

As in the previous section 4.6, multivariable models were used to ascertain key independent predictors of a poor father-child relationship. Two models were constructed. The first considered early childhood factors, and the second added pre-school and school-age factors.

5.2 Key findings from multivariable models

- Early childhood risk factors for a poor father-child relationship are low family socio-economic status, a poor partner relationship, the father working as a small employer or own account worker (i.e. self-employed) and the family living in a remote part of Scotland
- Pre-school and school-age risk factors for a poor father-child relationship are adverse family events, weak family organisation, a less supportive family ethos and low levels of positive parenting
- Poor father-child and mother-child relationships share common early risk factors (low family socio-economic status, poor partner relationship) and later risk factors (adverse family events, low levels of positive parenting)

- Father-child relationships appear to be more affected by aspects of family climate than mother-child relationships

5.3 Potential influences on the father-child relationship from infancy and toddlerhood

This section considers how early child and family characteristics and circumstances, together with fathers' health, relationship with the mother and involvement in parenting, may help shape the quality of the father-child relationship when children are ten years old.

5.3.1 Early child characteristics

Parenting a child with poor health or developmental problems may present significant challenges. Nevertheless, none of the indicators of health or developmental problems in infancy and toddlerhood examined for this report (low birth weight, developmental delay at age 2, limiting long term illness at 10 months or age 2) is associated with the quality of the father-child relationship at age 10.

5.3.2 Family characteristics and circumstances

Several early family characteristics (whether one or both parents from a minority ethnic group, both parents' ages when their child was born, the number of children in the family, adverse family events such as illnesses and deaths) are not associated with later father-child relationships. The lack of an effect of mother's age for this more restricted sample of families with both biological parents contrasts with the simple association found between mother's age and risk of poor father-child relationship for the larger sample of couple families (see section 4.4). This difference may be explained by the fact that families where there is a mother under 29 years are much more likely to contain a non-biological father figure by the time the child is ten years old (39% did so, compared to 10% of the total sample).

Couple marital status had a slight association (borderline probability, $p=0.07$): among fathers who were not married to the child's mother at the 10 month baseline, 17% had a poor father-child relationship at age 10, compared to 14% of married fathers.

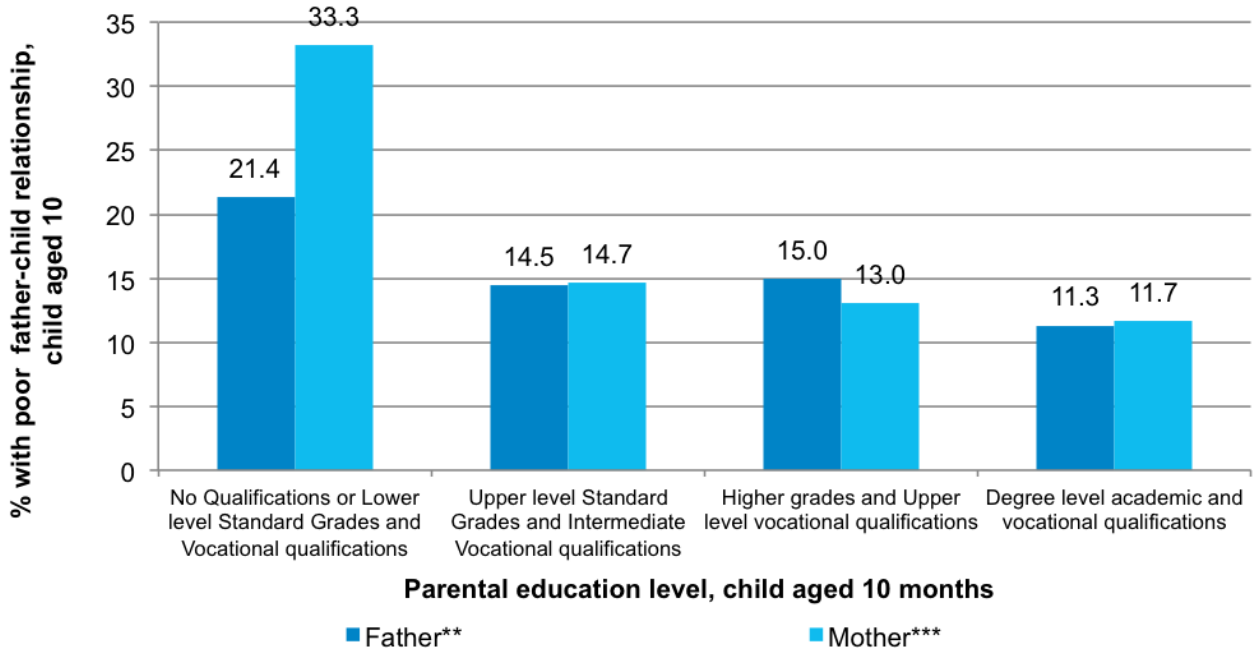
However, various indicators of family socio-economic disadvantage in early childhood are more clearly associated with a greater likelihood that the ten year-old child would have a poor relationship with the father. These indicators include the father's and the mother's level of educational qualifications, household income, and the father's employment status and occupation.

Among families where the father had few or no educational qualifications, 21% of children have a poor relationship compared to 11% of families where the father was educated to degree level (Figure 5-A). The graph shows an even stronger association between mothers' educational level and father-child relationship quality.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

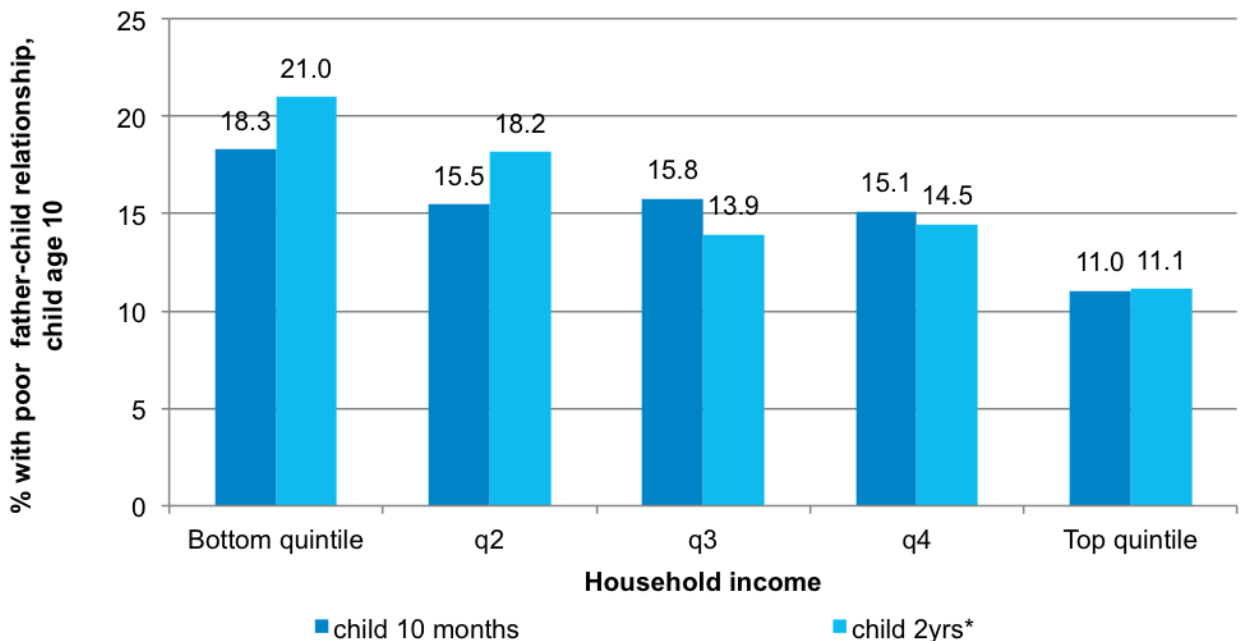
Figure 5-A Associations between parental educational level and father-child relationship quality



Note: Base sample of couples with both biological parents n=1,967 (unweighted). Asterisks indicate statistically significant (linear) associations between educational level and poor father-child relationship, ** $p < 0.01$, *** $p < 0.001$.

Although household income when the child was 10 months old did not show a clear association with later father-child relationship, a stronger trend emerged for income by the time the child was almost two years old (Figure 5-B). There was a two-fold difference across income quintiles at this age, with 21% of those in the lowest quintile having a poor relationship compared to 11% in the top income quintile. This was similar to the difference found across levels of fathers' education.

Figure 5-B Associations between household income and father-child relationship

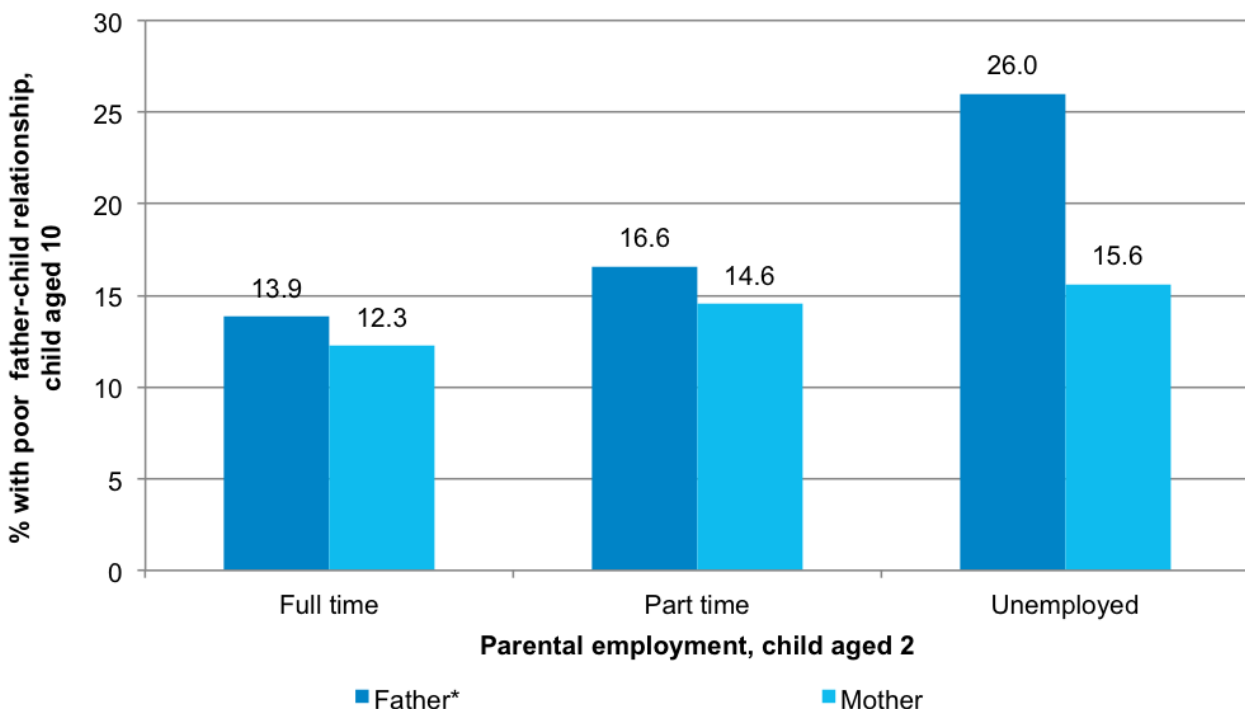


Note: Base sample couples with both biological parents n=1,967 (unweighted). Household income is equivalised to take account of household size and composition. Asterisk indicates statistically significant associations between household income and poor father-child relationship, * $p < 0.05$.

Parental employment status is an indication of socio-economic disadvantage, but might also signal availability for parenting the child. Fathers who were unemployed when their child was aged 2 were twice as likely to have a poor relationship with their ten year-old child compared to fathers working full time (Figure 5-C). There was no clear association between mothers' employment status and the quality of the father-child relationship. Further investigation also suggested no clear patterning of father-child relationships according to whether the father or mother was the main breadwinner, or both parents shared this role at child aged 2.

The finding for fathers' unemployment appears to reflect lower family income, rather than availability, as unemployed fathers were most likely to say they had "plenty of time" to spend with their child⁶. Further examination of working hours among employed fathers, when the child was aged 2, did not suggest a clear association with later father-child relationship quality, even for fathers exceeding the EU maximum threshold of 48 hours per week⁷.

Figure 5-C Associations between parental employment and father-child relationship



Note: Base sample of couples with both biological parents $n=1,967$ (unweighted). Asterisk indicates statistically significant association between father's employment status and relationship with child, $*p<0.05$.

⁶ Fathers were asked what they felt about the amount of time they had to spend with the two-year old child, with responses coded as (1) plenty of time (2) just enough time (3) not enough time and (4) nowhere enough time. Responses were strongly patterned by employment status. Two-thirds (67%) of fathers who were unemployed said they had "plenty of time", compared to 35% of those working part time and only 15% of those working full time.

⁷ Although information on non-standard work schedules was not available at this time point in GUS, information on how often fathers worked evenings, nights and weekends was collected at the age 5 interview (from mothers).

However, there was no association between how often fathers worked non-standard schedules at age 5 and father-child relationship at age 10.

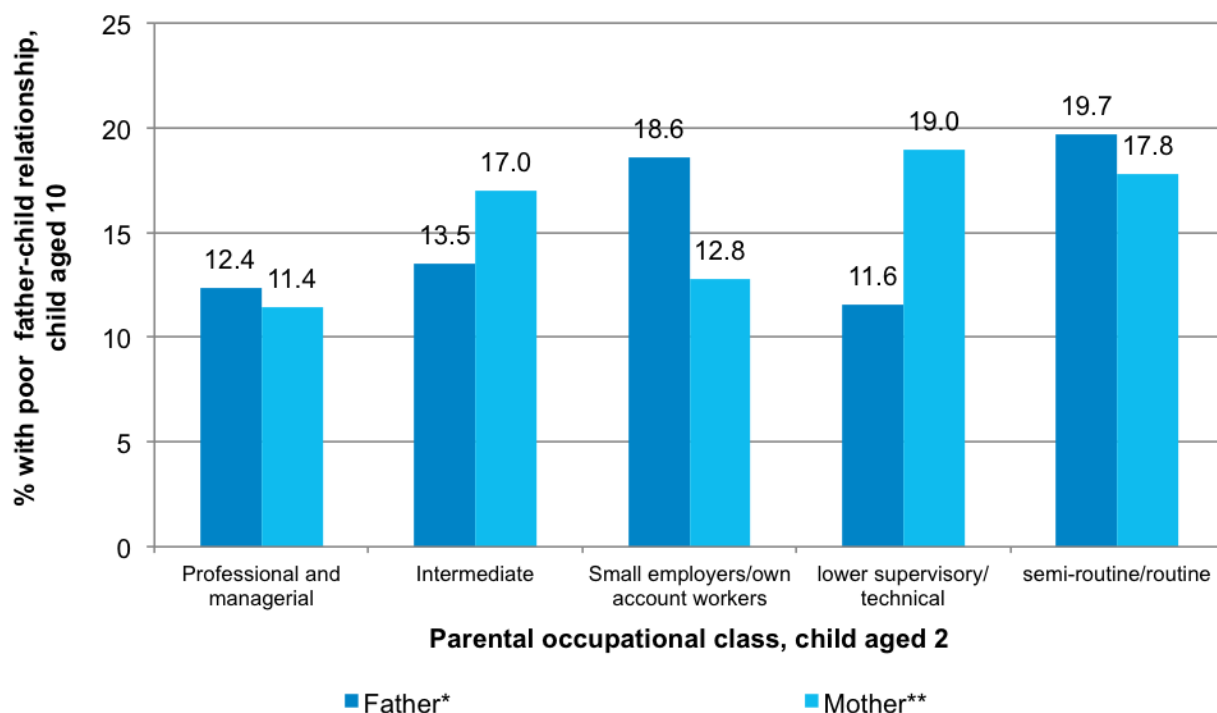
GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

The last potential family-level indicator of socio-economic disadvantage considered here is parental occupational class. In the analysis sample for this section, the largest occupational class was professional/managerial (46% of fathers, and 42% of mothers, when children were 2 years old). Compared with this group, fathers who were small employers/own account workers, or who were in semi routine/routine occupations were significantly more likely to have a poor relationship with the ten year-old child (Figure 5-D). Other occupational classes were not significantly different from the professional/managerial class. The National Statistics Socio-economic Classification (NS-SeC) system used to classify parental occupation here does not represent a completely linear hierarchy. The finding for routine occupations might signal an impact of low income, but an explanation for the effect of being a small employer/own account worker is likely to be more complex and reflect other characteristics of this type of occupation.

Very few mothers were small employers/own account workers when their child was two years old (only 6%, compared to 13% of fathers in this class). For mothers, this occupational class did not differ from professional/managerial workers in respect of father-child relationships. Nevertheless, worse father-child relationships compared with the professional/managerial class were found for the other occupational groups (borderline, $p < 0.1$ difference for lower supervisory/technical, Figure 5-D). This might suggest an effect of lower income.

Figure 5-D Association between parental occupational class and father-child relationship

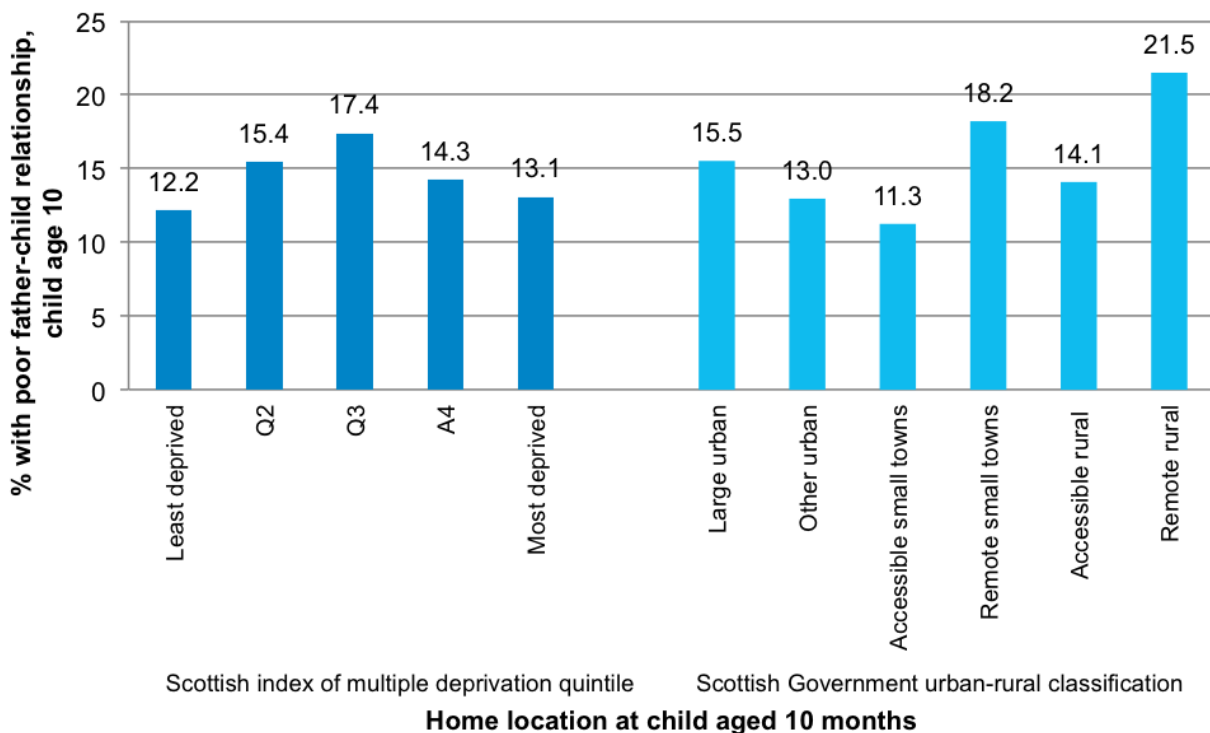


Note: Base sample $n=1967$ (unweighted). Occupation based on National Statistics Socio-economic Classification (NS-SeC) six-fold classification, excluding “never worked”. Asterisks indicate significant (linear) associations between occupational class and father-child relationship where * $p < 0.05$, ** $p < 0.01$.

Lastly, we considered two aspects of home location: neighbourhood deprivation and urban-rural location. Neighbourhood deprivation, measured using the Scottish Index of Multiple Deprivation linked to families’ home postcode when the child was 10 months old did not

show an association with father-child relationship quality (Figure 5-E). There was no clear difference in father-child relationship quality according to whether families lived in an urban or rural location. However, living in a geographically remote part of Scotland (more than 30 minutes' driving time from urban settlements of 10,000 people or more), did appear to increase the risk of a poor father-child relationship, irrespective of whether the family was living in a remote town or rural area. When these two area categories were combined, the risk of a poor relationship was 20%, compared to 14% in other areas (urban or accessible): this difference was statistically significant ($p < 0.05$).

Figure 5-E Associations between home location and father-child relationship quality



Note: Base sample of couples with both biological parents n=1967 (unweighted).

5.3.3 Fathers' mental health, partner relationship, work-life balance and parenting

In this section, we use information gathered directly from fathers when their child was aged 2 years to assess whether fathers' mental health, relationship with the mother, work-life balance and early involvement in parenting may shape their later relationship with the child.

Mental health

Fathers reported on their stress and depression using subscales of the short-form Depression Anxiety and Stress Scales (DASS) (Henry & Crawford, 2005). Fathers were classified as reporting either "high stress" or "depression" if the relevant scores were more than one standard deviation from the mean in the direction of poor mental health. High stress was found in 10% of fathers, and 19% were classified as reporting depression.

However, there is no clear association between either measure of mental health and later father-child relationship quality (Figure 5-F).

GROWING UP IN SCOTLAND

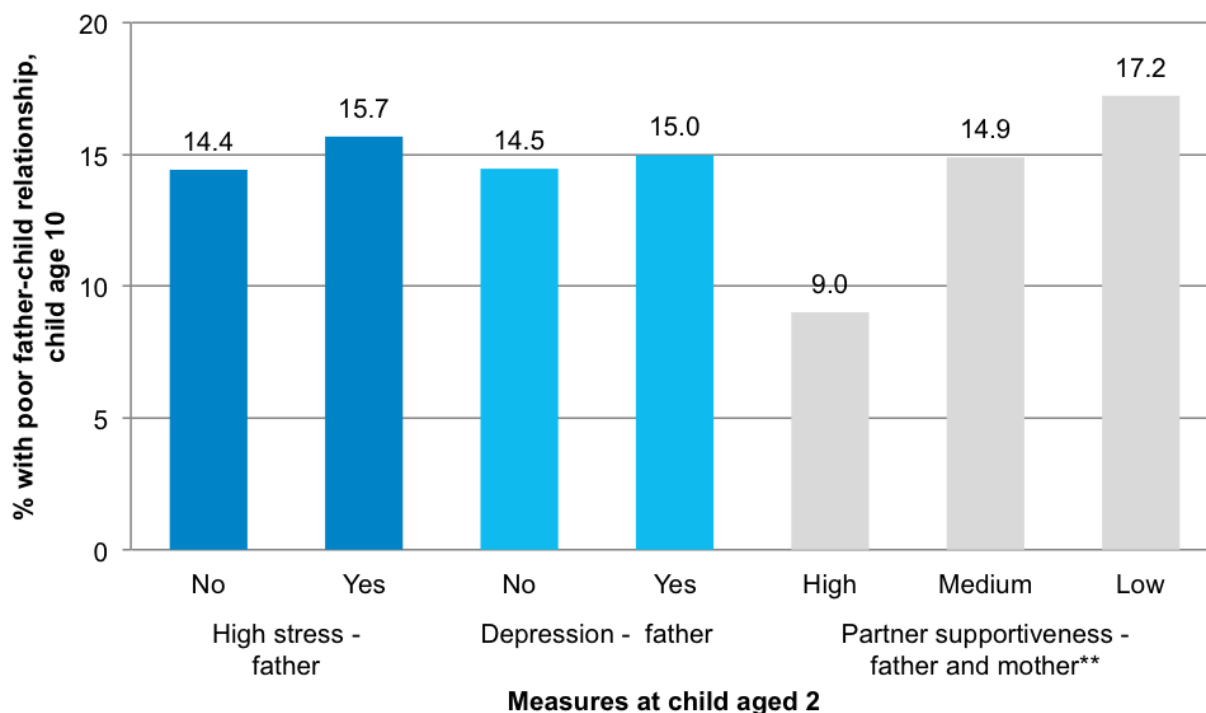
FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Partner relationship

Fathers and mothers both reported on the quality (support) of their relationship with each other using seven items. These were: “My (*partner*) is usually sensitive to and aware of my needs”, “My (*partner*) doesn’t seem to listen to me”, “I sometimes feel lonely even when I am with my (*partner*)”, “I suspect we may be on the brink of separation” (all with a 5-point response scale, from (1) strongly agree to (5) strongly disagree); together with two items about conflict: “How often do you and your partner argue?” and “How often is there anger or hostility between you and your partner?” (both items with a 3-point response scale: (1) more than once a week (2) once a week or less (3) not at all). Items showed good internal reliability (Cronbach alphas for standardised items were fathers 0.72, mothers 0.75), and so were combined to give a mean score for each parent. An average of the mother and father scores was calculated, and banded into tertiles to indicate high, medium and low partner support.

Fathers from families where the parents enjoyed a good relationship with each other (high support) are around half as likely to have a poor father-child relationship as those with a poor quality relationship (low support) – see Figure 5-F.

Figure 5-F Father mental health and partner relationship quality: associations with father-child relationship



Note: Base sample of couples with both biological parents and completed partner questionnaire n=1,648 (unweighted). Asterisks indicate statistically significant association between partner supportiveness and poor father-child relationship, ** $p < 0.01$.

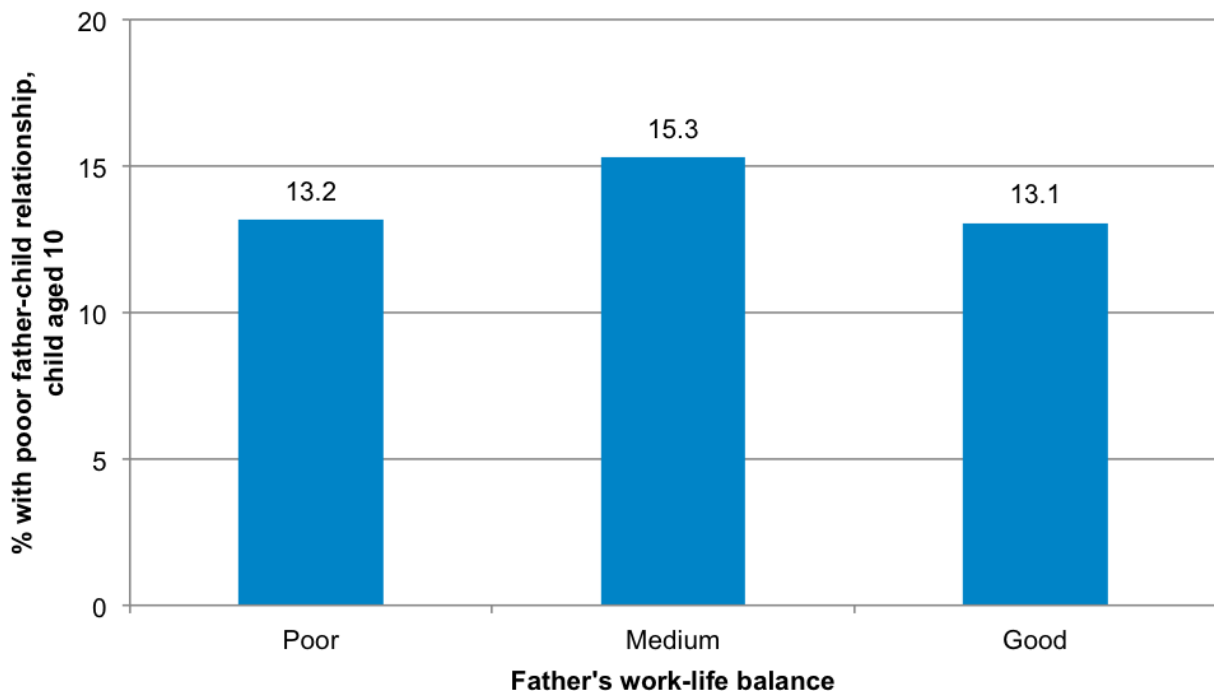
Work-life balance

Most fathers (95%) were in employment when their child was two years old. At this time, working fathers’ views on whether they had a favourable work-life balance, in terms of little impact of work on family life (or vice-versa) were measured using four items. These items all

loaded on to the same underlying factor and showed good internal reliability (standardised Cronbach alpha=0.64). Items concerned views on the amount of time available to spend with their child (coded on a 4-point scale from “nowhere enough time” to “plenty of time”); and agreement with three statements: “Because of my work responsibilities I have missed out on home or family activities that I would like to have taken part”; “Because of my work responsibilities my family time is less enjoyable and more pressured”; “Because of my family responsibilities the time I spend working is less enjoyable and more pressured” (all measured using a 5-point scale from “agree strongly” to “disagree strongly”). Average scores were divided into tertiles indicating poor, medium and good work-life balance.

Figure 5-G shows that there is no clear association between fathers reporting a poor work-life balance when the child was 2 years old and the likelihood of a poor father-child relationship eight years later.

Figure 5-G Association between father’s work-life balance and father-child relationship



Note: Base sample of couples with both biological parents and completed partner questionnaire n=1,648 (unweighted).

Fathers’ involvement in parenting

Fathers reported on various aspects of parenting the two-year old child: these were involvement in play and routine care, reading to the child, and use of positive and negative discipline methods.

Involvement in play was measured using three items concerning how often the father played with, talked to and cuddled the child. *Involvement in care* was measured using three items concerning how often fathers bathed the child, dressed the child and put the child to bed.

Reading to the child was a single item. Responses were all on a 5-point scale (1) less than once a week (2) once or twice a week (3) a few times a week (4) once a day (5) more

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

than once a day. Items for play and routine care had good reliability (Cronbach alphas respectively 0.72 and 0.65) and were combined by calculating the average across the three measures. Most fathers reported very high involvement in play and care (means both 4.7), but less regular reading to the two year-old child (mean 3.0). The three measures were divided into daily involvement (a score of 4 or higher) or lower involvement (a score of less than 4).

Fathers' use of discipline was measured by asking whether the father had ever used various discipline methods on the cohort child (with a yes/no response). *Use of positive discipline* techniques was scored as any use of time out, or rewards and stickers. *Use of negative discipline* techniques was scored as any use of smacking, a naughty step/room or corner, shouting or raising one's voice, or removal of treats or privileges. Fathers were also asked a question about whether they ignored the child's behaviour. More fathers used a negative technique (68%) compared to a positive technique (28%). It was also common for fathers to report ignoring behaviour (59%).

None of the measures of fathers' parenting at age 2 has a clear association with the father-child relationship when the child was aged 10 (see Table 5-1).

Table 5-1 Associations between fathers' parenting at child aged 2 and father-child relationship at child aged 10

Father's parenting at child age 2	% with poor father-child relationship, child aged 10	
Daily play	No	14.4
	Yes	14.5
Daily care	No	17.9
	Yes	14.1
Daily reading	No	12.2
	Yes	15.5
Use of positive discipline	No	14.4
	Yes	14.6
Use of negative discipline	No	14.3
	Yes	15.1
Ignoring child behaviour	No	13.4
	Yes	15.9

Note: Base sample of couples with both biological parents and completed partner questionnaire n=1,648 (unweighted). No association between father parenting and father-child relationship was statistically significant to $p < 0.05$.

5.3.4 Multivariable model of early childhood factors associated with father-child relationship quality

The various factors examined from early childhood that had a statistically significant association with a poor father-child relationship when considered individually were entered into a multivariable regression model. The following early childhood risk factors for a poor

father-child relationship emerge as statistically significant: a male child, parents with low educational qualifications, living in a remote part of Scotland, the father being a small employer or own account (self-employed) worker, and a less supportive partner relationship. There were no differences in the effect of these risk factors according to the child's gender.

A similar multivariable model of poor mother-child relationships found that significant predictors of poor mother-child relationship are: being a male child, parent with low educational qualifications, low household income and less supportive partner relationship.

Comparing the results of these two models, we see that male child gender and one indicator of family socio-economic disadvantage (low parental education) emerge as risk factors for the child having a poor relationship with either parent. There are also some differences between the two models. Remote location appears important for father-child relationships, but not for mother-child relationships. In addition, the quality of the partner relationship appears more important for father-child than for mother-child relationships.

Further details of these models are provided in the Technical Annex.

5.4 Potential influences on the father-child relationship from later years

This section examines the effect of adverse family events from pre-school age onwards, additional child characteristics related to physical and mental health, and aspects of parenting and family climate.

5.4.1 Adverse family events

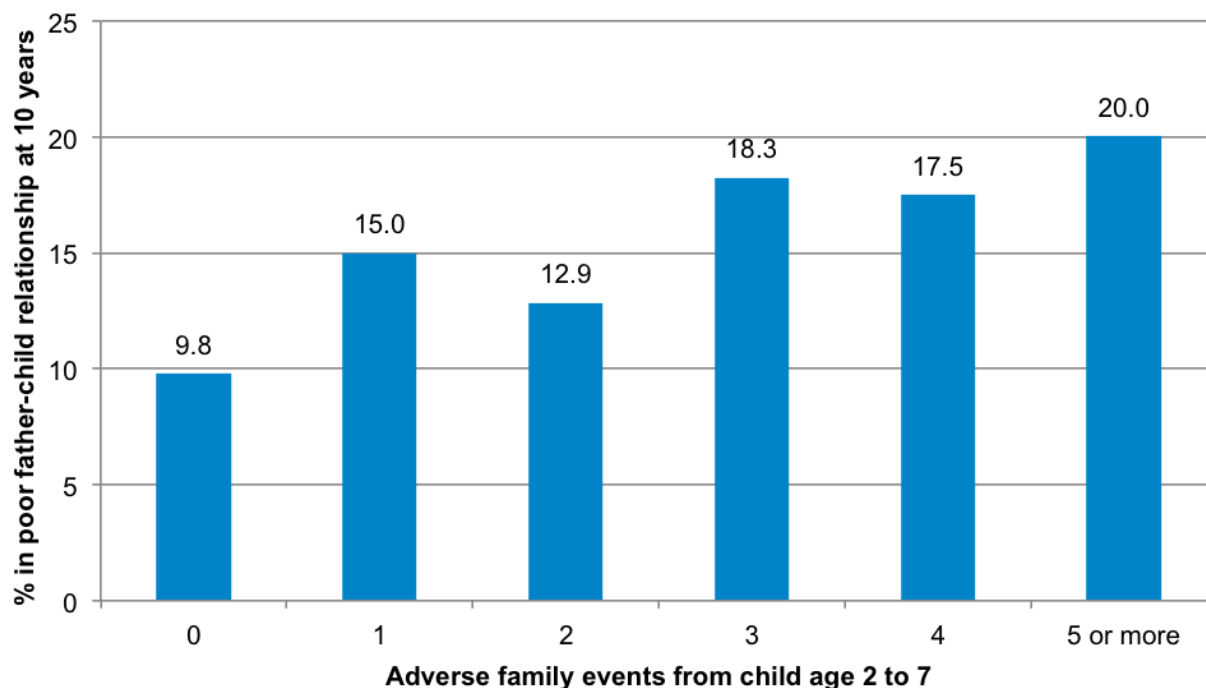
At each sweep of GUS data collection, information was collected from the main carer (usually the child's mother) on whether the child experienced any disturbing family events from a pre-determined list since the previous sweep. These events include accidents, illness and deaths as well as (at ages 6 and 8) separation of close relatives, parental conflict, parental drug or mental health problems, family experience of crime, problems involving the police or imprisonment. A minority (15%) of children did not experience any of the adverse events from ages 3 to 8, over half (56%) experienced one or two events, but only 4% experienced 5 or more events.

A greater number of events is associated with an increased likelihood of a poor father-child relationship when the child was aged 10 (Figure 5-H).

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Figure 5-H Association between adverse family events and father-child relationship



Note: Base sample of couples with both biological parents $n=1,967$ (unweighted). Trend is statistically significant $p<0.05$.

5.4.2 Child physical health and socio-emotional adjustment

Various measures of child physical health (general health, limiting long term illness, being overweight or obese) were considered: however, there is no association between measures of the child's physical health from age 3 onwards and the quality of the father-child relationship at age 10.

Child socio-emotional adjustment was measured from age 4 onwards using the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997; Goodman, 2001), administered to the child's main carer (almost always the mother) using a computer-assisted self-complete section of the age 10 main carer home interview. The total difficulties score is a sum of four 5-item subscales concerning emotional, conduct, hyperactivity/attentional and peer relationship problems. Items ask for agreement with statements concerning the child, with responses on a 3-point scale: (0) not true, (1) somewhat true, (2) certainly true. The total difficulties score ranges from 0 to 40: according to recommended practice, a cut-off score of 15 or more was used to indicate a "high" value corresponding to abnormal or borderline abnormal levels of problems. At age 4, 5.7% of children in the analysis sample were classified as having abnormal or borderline abnormal levels of behavioural and emotional problems. These children were more likely to have a poor relationship with their father at age 10 (25% did so, compared to 14% of other children, $p<0.05$). Similar associations between high levels of behavioural and emotional difficulties at child ages 5, 6 or 8 and increased risk of poor father-child relationship at age 10 were found.

5.4.3 Family climate

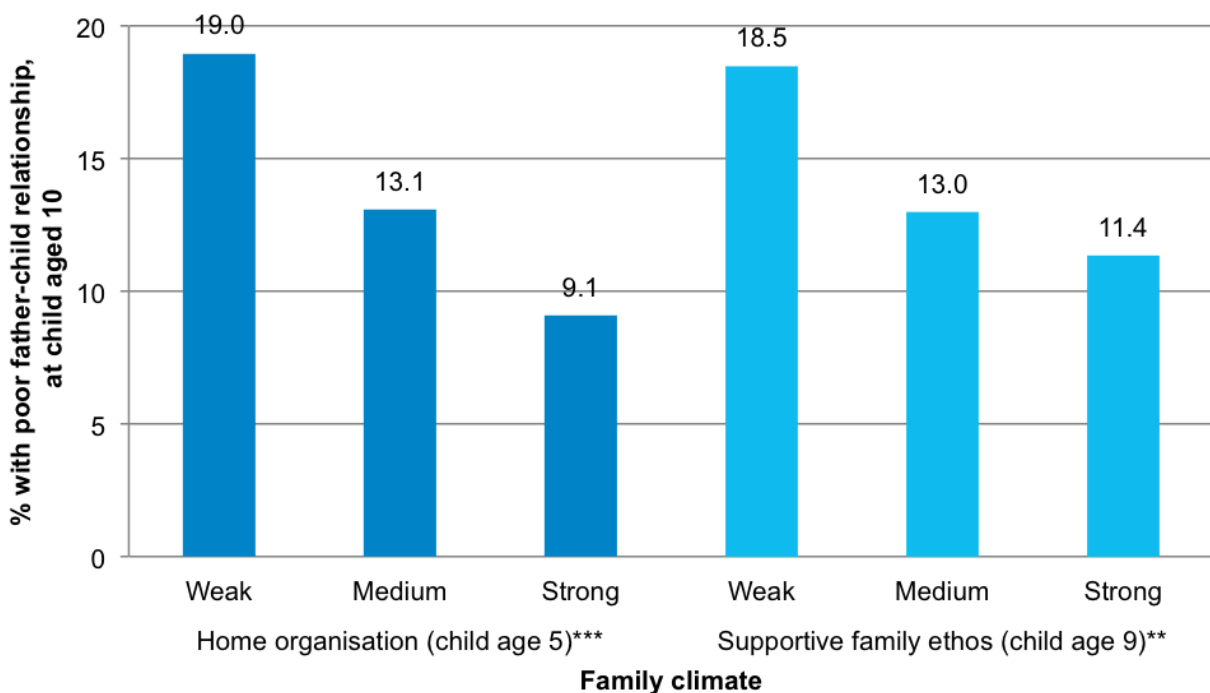
Two measures of family climate were considered: home organisation and supportive family ethos.

Home organisation was a standardised score using 3 items from the confusion, hubbub, and order scale (Matheny, Wachs, Ludwig & Phillips, 1995), Cronbach alpha=0.65. When the child was age 5, parents (in this analysis sample, always the child’s mother) were asked for their agreement with the following statements: “It’s really disorganised in our home”, “You can’t hear yourself think in our home” and “The atmosphere in our home is calm” (item reversed), using a 5-point scale (1=strongly disagree, to 5= strongly agree). Scores were banded into tertiles indicating weak, medium or strong home organisation.

Supportive family ethos was measured using eight items from the cohesion and disengagement subscales of a widely-used scale of family functioning (Bloom, 1985). All items appeared to reflect the same underlying concept, as demonstrated by a factor analysis showing that they all loaded on to a single factor. Items had excellent internal reliability, Cronbach alpha=0.80. Parents (usually the child’s mother) were contacted via a web/telephone survey when the child was aged 9 and asked for agreement with statements using a 5-point scale (1=strongly disagree, to 5= strongly agree). There were four positive statements (“Our family members really help and support one another”, “In our family, we know where all the family members are at all times”, “We really get along well with each other”, “There is a feeling of togetherness in our family”) and four negative statements that were reverse-coded (“It is difficult for me to keep track of what other family members are doing”, “Our family members do not check with each other when making decisions”, “Our family don’t do things together”, “Our family members seem to avoid contact with each other when at home”). Mean scores were calculated and banded into tertiles, indicating weak, medium and strong family supportiveness.

Figure 5-1 shows that families with a strong home organisation or with strong family ethos were both less likely to contain children perceiving a poor relationship with their father, compared to families where these aspects of family climate were relatively weak.

Figure 5-1 Associations between measures of family climate and father-child relationship



Note: Base sample of couples with both biological parents n=1,967 (unweighted). Asterisks show statistically significant associations ** $p < 0.01$, *** $p < 0.001$.

GROWING UP IN SCOTLAND

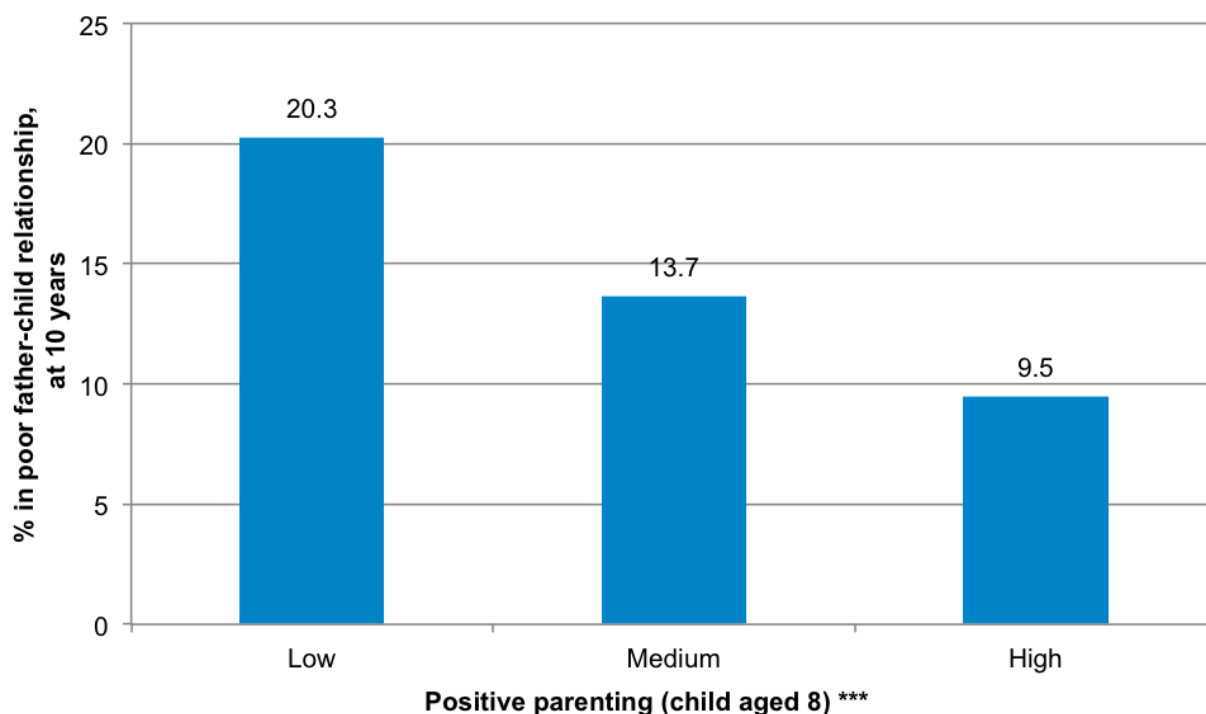
FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

5.4.4 Positive parenting

When children were almost eight years old they were invited to report on positive parenting behaviours by their parents (engagement, monitoring and use of positive reinforcement), using five items from the short form Alabama Scale (Elgar, Waschbusch, Dadds & Sigvaldason, 2007), reliability Cronbach alpha 0.67. These items were: “My parents tell me if I behave well”, “My parents play games or do other fun things with me”, “My parents tell me when I have done something well”, “My parents tell me when I’m doing a good job with something”, “My parents check to make sure I’m doing OK”. Responses were on a 4-point scale: (1) never (2) sometimes (3) often (4) always. Note that the child’s reports were for both parents collectively: children did not provide separate information for fathers and mothers at this time point. The mean positive parenting score was 3.1, suggesting that children in the sample were generally perceiving high levels of positive reinforcement, monitoring and engagement from parents. Mean scores were grouped into tertiles, corresponding to low, medium and high levels of positive parenting.

Children perceiving high levels of positive parenting were less likely to have a poor relationship with their father two years later: only 10% did so, compared to 20% of those with low levels of positive parenting (Figure 5-J).

Figure 5-J Association between positive parenting and father-child relationship



Note: Base sample of couples with both biological parents n=1,967 (unweighted). Asterisks show a statistically significant association, *** $p < 0.001$

5.4.5 Multivariable model of early and later influences on father-child relationship

A multivariable model considered all early and pre-school/school-age factors found to have a statistically significant association with a poor father-child relationship.

In this model, multiple adverse family events, weak home organisation, low levels of positive parenting and weak family supportiveness all predict a poor father-child relationship by age

10. One indicator of family socio-economic disadvantage (low parental education) remain as a significant predictor of poor father-child relationship when the child was aged 10, as in the multivariable model considering only early life factors.

Comparing the results of the model of father-child relationships with a model of mother-child relationships, we find that poor mother-child relationships are not predicted by family climate, although adverse life events and less positive parenting are risk factors.

Further details of these models are provided in the Technical Annex.

HOW ARE FATHER-CHILD RELATIONSHIPS ASSOCIATED WITH OTHER ASPECTS OF CHILDREN'S SOCIO-EMOTIONAL WELLBEING?

This section explores whether the father-child relationship is associated with other aspects of the ten-year old child's socio-emotional wellbeing. These aspects include measures of overall wellbeing, as well as wellbeing in important domains of the child's life outside the home (school and peers).

6.1 Key findings from multivariable models

- Supportive father-child relationships are associated with several other aspects of ten year-olds' socio-emotional wellbeing
- Supportive father-child relationships are equally important for boys and girls
- Father- and mother-child relationships matter equally for children's wellbeing

6.2 Measuring socio-emotional wellbeing at age 10

Six indicators of socio-emotional wellbeing were used: high total difficulties score (abnormal/borderline behavioural and emotional problems), poor school adjustment, low life satisfaction, low emotional engagement with school (disliking school), poor relationship with school teacher and high victimisation by other children. Children's behavioural and emotional problems and poor school adjustment were reported by parents (usually the mother). All other indicators of wellbeing were gathered from children themselves at the age 10 interview using an audio computer-assisted self-completion questionnaire.

6.2.1 High total difficulties score

Behavioural and emotional difficulties were assessed using the Strengths and Difficulties Questionnaire (SDQ) (for details, see section 5.4.2). In the analysis sample, 10% of children were classified as having a high total difficulties score.

6.2.2 Poor school adjustment

Parents were asked whether the child's school had contacted them in the previous two years regarding one or more specific issues, listed on a showcard at the home interview. These were: (1) the behaviour of other pupils towards your child; (2) his/her behaviour at school; (3) his/her attendance at school; (4) his/her attitude towards school/schoolwork. An affirmative response to one or more of issues 1, 2 and 4 was taken to indicate poor school adjustment. In the analysis sample, 12% of child were classified as having poor school adjustment. Among these, just under a third had a high total difficulties score.

6.2.3 Low Life Satisfaction

Life satisfaction was based on the child's responses to six questions previously used on eleven year-olds in the UK Millennium Cohort Study, asking about different parts of their lives, and life overall: "How do you feel about ... your life?, your school work?, the way you look?, your family?, your friends?, the school you go to?". Responses were on a 4-point

scale: (1) very happy (2) quite happy (3) not happy (4) not at all happy. Items loaded on to a single underlying factor, and had good internal reliability, Cronbach alpha=0.69. A sum of responses to all items was banded into tertiles, with scores in the highest tertile defined as "low" life satisfaction.

6.2.4 Disliking school

School emotional engagement, or the extent to which the child liked school, was measured using five items: agreement with four statements, "I hate school" (reversed), "I enjoy learning at school", "I look forward to going to school", "I feel happy at school" (responses (1) never (2) sometimes (3) often (4) always; and responses to a question "How often do you find school interesting?" (originally coded as (1) all of the time (2) most of the time (3) some of the time (4) hardly ever, but reversed). Items loaded on to a single factor, and had good internal reliability with Cronbach alpha=0.80. Mean scores were divided into tertiles and the lowest tertile was defined as "disliking school".

6.2.5 Poor teacher relations

The child's relationship with his or her school teacher was based on agreement with four items: "My teacher treats me fairly", "My teacher helps me when I need help", "My teacher pays attention to what I say", "I get along well with my teacher". Responses were on a four-point scale: (1) never (2) sometimes (3) often (4) always. Items loaded on to one underlying factor and had good internal reliability, Cronbach alpha=0.76. Mean scores were divided into tertiles, and the lowest tertile was defined as "poor" teacher relations.

6.2.6 Peer victimisation

Victimisation was assessed using four items asking "how often do other children pick on you by calling you names or making fun of you in a way that you don't like?, leaving you out of games and chats?, shoving, pushing, hitting or picking a fight with you? sending you an email or text message that you don't like?" Responses were on a 5-point scale: (1) Most days (2) about once a week (3) about once a month (4) every few months (5) never. Items loaded on to one underlying factor and had good internal reliability, Cronbach alpha=0.75. Mean scores were divided into tertiles, and the lowest tertile was defined as "high" peer victimisation.

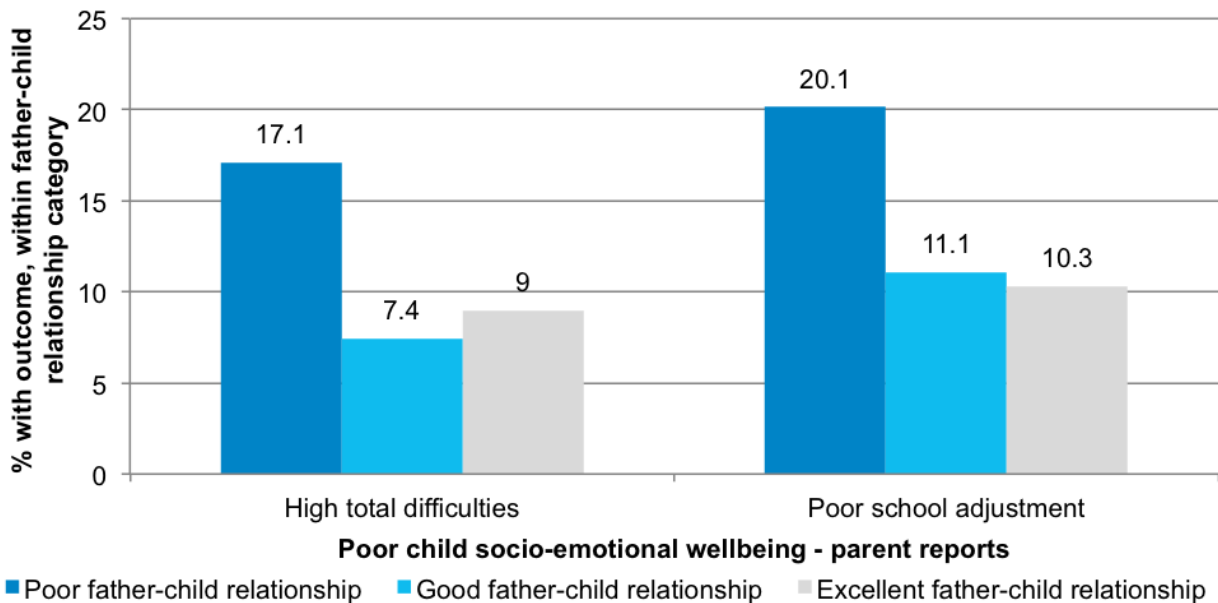
6.3 How is the father-child relationship associated with other aspects of child socio-emotional wellbeing?

The extent to which children perceived the relationship with their father as supportive is associated with all other aspects of wellbeing at the same age. Compared to children with good or excellent father-child relationships, those with poor relationships are most likely to have high levels of behavioural and emotional problems (high total difficulties score), and most likely to have poor school adjustment (see Figure 6-A). With these parent-reported measures of child wellbeing we do not see clear differences according to whether the child's relationship with the father was classed as good or excellent.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Figure 6-A Associations between father-child relationship quality and parent-reported child socio-emotional wellbeing

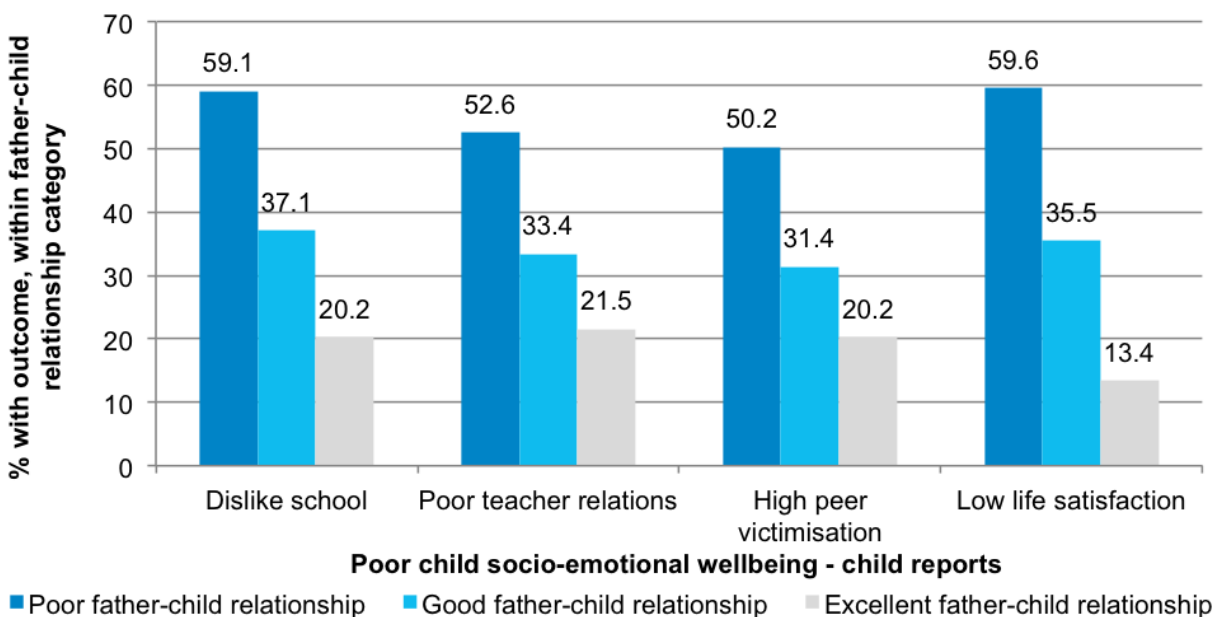


Note: Base sample=2593 (unweighted). Both associations between father-child relationship and outcomes are statistically significant, $p < 0.001$.

Children who had a poor relationship with their father are also the most likely to report disliking school, a poor relationship with their teacher, high levels of victimisation from peers and low life satisfaction (Figure 6-B). For these child-reported measures of socio-emotional wellbeing, children perceiving an excellent relationship with their father are even more positive about other aspects of their lives than those with a good father-child relationship.

All associations between father-child relationship and wellbeing outcomes are similar for boys and girls.

Figure 6-B Associations between father-child relationship quality and parent-reported child socio-emotional wellbeing



Note: Base sample=2593 (unweighted). All associations between father-child relationship and outcomes are statistically significant, $p < 0.001$.

6.4 Multivariable models of associations between father-child relationship and other aspects of child socio-emotional wellbeing

Thus far, simple associations between father-child relationships and wellbeing have been considered. This section considers whether father-child relationships remain associated with wellbeing after allowing for potentially important confounders including child gender, socio-demographic factors, and the quality of the mother-child relationship.

As before, supportiveness in father-child relationships is banded into three groups: poor, good and excellent. We use children with good father-child relationships as a reference group. Multivariable models found that children with poor father-child relationships have lower child wellbeing than the reference group of children over a range of outcomes, after allowing for other factors including family disadvantage. Children with a poor father-child relationship are more likely to have high (abnormal/borderline) levels of behavioural and emotional problems and poor school adjustment, as reported by parents. They are also more likely to report low emotional engagement with school, a poor relationship with their teacher, high peer victimisation and low life satisfaction.

Children who have an excellent father-child relationship are found to have even better outcomes than the reference group with good father-child relationships, for three of the four measures of child-reported wellbeing: school emotional engagement, victimisation and life satisfaction.

The models show that father-child relationships are associated with wellbeing, even after taking account of the mother-child relationship. A poor mother-child relationship is also associated with lower wellbeing, with two exceptions (high levels of emotional and behavioural difficulties, and poor school adjustment). As for the father-child relationship, an excellent mother-child relationship is associated with reduced risk of three out of four child-reported wellbeing outcomes.

Although lower wellbeing is more common among boys than girls, further investigation suggested no differences between boys and girls in the importance of father- and mother-child relationships for their wellbeing.

**DISCUSSION AND
RECOMMENDATIONS**

This Growing Up in Scotland study of father-child relationships considers several important issues relevant for policy makers and practitioners involved with family influences on children's socio-emotional wellbeing, and the role of fathers. The study draws on information from over 2,500 couple families in the first GUS birth cohort, a nationally representative sample. Ten-year olds in these families were asked about several aspects of trust in, and communication with, the resident father or father figure. Children's responses were used to categorise father-child relationships according to poor, good or excellent levels of fathers' supportiveness. The study examines the distribution of poor, good or excellent father-child relationships; risk factors predictive of poor-father-child relationships; and how supportive father-child relationships are linked with other aspects of ten year-olds' socio-emotional wellbeing.

Most ten-year olds in couple families are positive about resident fathers' supportiveness. However, a substantial minority (16%) perceive poor relationships characterised by low supportiveness. Overall, father-child relationships were viewed by children as less supportive than mother-child relationships, which were more uniformly positive. This difference is in keeping with a large national US study of adults' retrospective views of their relationships with their parents in childhood (Mallers, Charles, Neupert & Almeida, 2010). Children's perceptions of their relationship with each parent diverges most at the lower end of the supportiveness scale, where more children perceive low supportiveness from fathers than from mothers. Overall, only 5% of children perceive poor relationships with both parents. An additional 15% perceive poor levels of supportiveness from only one parent, however this is more likely to be with the father (11%) than with the mother (3%). Thus while a small minority of families may benefit from support in strengthening the child's relationship with both parents, father-child relationships may benefit from more targeted measures helping a wider group of families.

Boys report slightly lower supportiveness from fathers than girls. This gender difference is reflected in other aspects of children's wellbeing: boys also perceive lower supportiveness from mothers, have higher levels of behavioural and emotional problems, and report lower wellbeing on other measures used in this study.

Risk factors for poor father-child relationships

The study identifies several family circumstances that are predictive of a poor father-child relationship. These factors are equally important for boys and girls. Two of them, family socio-economic disadvantage and family adversity, appear to have a negative impact on mother-child, as well as father-child relationships.

Our GUS finding for family socio-economic disadvantage (as indicated here by lower parental education) ties in with the negative effect of low family socio-economic status on the quality of both mothers' and fathers' relations with three year-old children in another large birth cohort, the UK Millennium Cohort Study (Malmberg & Flouri, 2011). In addition, research on couple families using the National Child Development Study found lower family socio-economic status predicted lower father involvement when children were aged 7,

11 and 16 years (Flouri & Buchanan, 2003). The effects of socio-economic disadvantage are likely to relate to low parental psychosocial, as well as economic, resources that compromise parenting quality (Belsky, 1984; La Placa & Corlyon, 2016). Focusing on structural societal changes which reduce inequalities is likely to boost such resources in the longer term (Katz, Corlyon, La Placa & Hunter, 2007). Providing additional help for vulnerable parents, including greater access to health visitor support and affordable childcare is high on the Scottish Government agenda (Scottish Government, 2016).

Our study also found that multiple, potentially disturbing, adverse family events predict a poor father-child relationship, even after allowing for their association with family socio-economic disadvantage. An accumulation of adverse events over the pre-school and early school-age years also appears to undermine mother-child relationships. Other research indicates a negative association between adverse life events and children's socio-emotional wellbeing, independent of family socio-economic disadvantage, among young children and older age groups (Flouri & Kallis, 2011; Flouri, Mavroveli & Tzavidis, 2010). However, research using the UK Millennium Cohort Study did not find that the quality of mothers' and fathers' relationships with younger children (aged three) varied according to a score of adverse family events (Malmberg et al., 2011). Our apparently contradictory GUS finding may reflect measurement of events over a longer time period, and their impact on children's feelings, rather than on parenting behaviour – especially as our measures of parent-child relationships (unlike those in the UK Millennium Cohort Study) are child-reported, and involve older children. Adverse family events may compromise children's trust in parents and emotional security, especially with heightened awareness at older ages, and lead to lower perceived parental support. Additional research using the Millennium Cohort Study suggests that supportive parent-child relationships may help to buffer the effects of family adversity on children's socio-emotional outcomes (Flouri, Midouhas, Joshi & Tzavidis, 2015). Further research using future sweeps of data will be required to confirm a similar protective effect in the GUS sample.

Other factors, such as the presence of a father figure rather than the biological father, partner supportiveness and family climate, seem to affect father-child relationships more than mother-child relationships.

A child's relationship with a father figure or stepfather has long been identified as problematic, even after taking account of father figures' typically lower socio-economic status (King, 2006; Marsiglio & Hinojosa, 2010). This may partly reflect the lack of societal norms for men who find themselves in the position of being a father figure, perhaps competing with the biological father's claims on the child. Unfortunately, GUS has not collected information on children's relationships with non-resident fathers at the age 10 interview, although this is planned for the next round of data collection when children are in their first year of secondary school. In our study, the gap in perceived supportiveness from fathers and mothers was widest for families with a father figure. This finding tallies with younger (aged 4 to 7) children's views, in studies where children indicated closeness to family members with pictorial representations (Roe, Bridges, Dunn & O'Connor, 2006;

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Sturgess, Dunn & Davies, 2001). Father figures may become closer to children when they are more “embedded” in family life with clearly-defined responsibilities, perhaps through longer residence, marriage to the child’s mother, or having step- and biological children living together in the same household (Marsiglio et al., 2010). Our findings from multivariable models do not clearly show that residing in the household for more than two years or being married to the child’s mother improves father figures’ relations with children, and we were unable to explore the effects of any children from a previous relationship. However, US research on older age groups found that length of residence, as well as adolescents’ positive socio-emotional adjustment and relationship with the mother, all appeared to make it easier to relate to a resident non-biological father figure (King, Amato & Lindstrom, 2015; King, Thorsen & Amato, 2014). Interestingly, this research did not find that the child’s relationship with the biological father affected relations with the stepfather.

A less supportive partner relationship and aspects of family climate also appear to affect father-child relations, and to a greater extent than mother-child relations. (Note that although having parents who are unmarried is a “current” predictor of a poor father-child relationship, there is no information collected at the GUS age 10 interview on the current quality of the partner relationship. In the “early predictors” model in section 5.3.4, any effect of parents’ marital status became superseded by the quality of their relationship.)

Although we cannot be sure of the direction of causation in our study (it is possible that poor father-child relations contribute to an unsupportive family climate, rather than the reverse), the findings tend to support an ecological-contextual theory of fatherhood (Doherty et al., 1998). This theory suggests that fatherhood is more vulnerable than motherhood to interpersonal and environmental influences. It is based on the wider variation in societal expectations and norms for fathers’, as compared to mothers’, parenting. The less well-defined role for the father may therefore be shaped to a greater extent by negotiations between parents, and by other contextual factors. These may collectively either support fathers’ involvement in parenting or undermine it, leading less committed fathers to withdraw or “opt out”. Conflict between parents may spill over to damage the quality of parenting and co-parenting (the extent to which parents work together to parent a child) (Pedro, Ribeiro & Shelton, 2012; Zimet & Jacob, 2001). Several other studies have pointed to the importance of a supportive partner relationship for involved fathering (Cummings, Merrilees & Ward George, 2010; Planalp & Braungart-Rieker, 2016). Less is known about other contextual influences, although a qualitative study of families with children aged 4-8 years (Pike, Coldwell & Dunn, 2006) had similar findings to our own study: father-child relations were negatively affected by a chaotic family atmosphere as well as by poor partner relationships, while mother-child relations were unaffected. Repeated measurement of couple relationship quality and co-parenting in future sweeps of GUS, as well as parent-child relationships, would help clarify the direction of any causal relationship.

Our study failed to find an effect of early father involvement, as measured by how often fathers engaged in play, reading or caregiving, and fathers’ use of positive or negative discipline strategies. This might be because these measures did not adequately capture the quality of parent-child interaction or do not bear a strong relationship to later father involvement, which might be more salient for the GUS ten year-olds. Elsewhere, research reviews indicate that father involvement is positive for young children’s socio-emotional and cognitive outcomes (Sarkadi et al, 2008; Downer, Campos, McWayne & Gartner, 2008; McWayne, Downer, Campos & Harris, 2013). Nonetheless, there are still gaps in

our understanding. Studies included in these reviews adopt variable measures of father involvement, do not always account for maternal involvement, and do not take account of the possible bidirectionality of associations between father involvement and children's socio-emotional wellbeing over time. Recent UK research on young children attempts to plug some of these research gaps, and supports the idea that more frequent father involvement and fathers' more positive attitudes towards their parental role benefit young children's socio-emotional adjustment (Flouri et al., 2016; Kroll et al., 2016; McMunn et al., 2015; Opondo, Redshaw, Savage-McGlynn & Quigley, 2016). However, effects appear limited, and vary with child age both within and across studies.

We also did not find that father-child relations are negatively affected by reduced potential availability. Working hours may not in themselves, for most men, jeopardise fathering responsibilities. Indeed, many UK fathers acknowledge full time employment as essential to their typical role as the main family breadwinner (Hatten, Vinter, Williams & Mori Social Research Institute, 2002; Kadar-Satat & Koslowski, 2015; O'Brien & Shemilt, 2003). It is more likely to be other aspects of working life that "spill over" and affect parenting quality, although these could be exacerbated by long hours. Fathers who suffer from work overload, nonstandard work schedules or other work place stressors such as lack of control show less sensitive, engaged parenting of infants (Goodman et al., 2008; Goodman et al., 2011). Father's work-family conflict was linked to less warm, and more irritable and inconsistent parenting in Australian families with young children (Cooklin et al., 2016), although high levels of work-family conflict were reported most often by fathers working long hours as the sole breadwinner. Commuting time might also increase fathers' stress levels and have a negative impact on parenting quality. A German study found that fathers who travelled more than 40 km to work every day were more likely to have a child with poor socio-emotional adjustment, even after taking account of both parents' working hours (Li and Pollman-Schult, 2016). Further research is needed to see how these factors affect GUS fathers. We did not find that GUS fathers' work-life balance when children were very young helped to predict their relationship with the ten year-old child. Nonetheless, it seems possible that some negative effects we found for fathers' occupational class and remote home location when children were young might respectively relate to greater spill-over of work into family life for small employer or self-employed fathers, and to fathers' long work-related travel times for some families living in remote parts of Scotland. Even though a recent study suggests small employers/self-employed occupations are least likely to suffer work-related stress, depression and anxiety (Health and Safety Executive, 2015), both the father's occupational group and remote home location could signal a less family friendly workplace environment. While more research is required to uncover the reasons for our findings, the need to boost family-friendly flexible working practices among small employers is highlighted in a recent Scottish Government policy document (Scottish Government, 2016).

Associations with other aspects of children's socio-emotional wellbeing

Our study finds that father supportiveness is positively associated with the child's perceptions of being supported by the mother, and with other aspects of children's socio-emotional wellbeing at the same age. Although fathers' supportiveness is generally at lower levels than mothers', relations with both parents appear equally important for ten year-olds' school adjustment, relations with peers and overall wellbeing. Findings suggest that fathers make an independent contribution to children's wellbeing, even after taking account of mothers' supportiveness and other family circumstances. This is in line with the "Important

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Father” hypothesis, which suggests that fathers do make an important, even if not unique, contribution to children’s development (Pleck, 2010).

Two limitations to this conclusion need to be borne in mind. The first is that some associations between father-child relationships and other aspects of wellbeing may be inflated because the child was reporting on both the predictor and its outcome (“shared method variance”). Where there was a different informant (the child’s parent) for two outcome measures (behavioural and emotional difficulties, poor school adjustment), the finding of an association with father-child relationship quality appears stronger. We plan to triangulate these results using teacher-reported measures of children’s behavioural and emotional difficulties, gathered shortly after the age 10 home interviews. A second limitation is that parental supportiveness and other aspects of wellbeing were all measured at the same time point, so we cannot be sure of the direction of any effect. For example, it is possible that the child who has difficulty adjusting to school or who experiences peer victimisation will tend to feel less supported at home, because it may be difficult for parents to help with matters outwith their immediate sphere of influence. Fathers may also find it less easy to develop a supportive relationship with a “difficult” child.

Longitudinal studies collecting information on fathering and child adjustment at several time points can help to answer the question of how father-child relationships and child socio-emotional adjustment are inter-related. Research on father involvement and child adjustment using three waves of the UK Millennium Cohort Study (ages 3, 5 and 7) found that children’s behavioural problems appeared to reduce fathers’ participation in play and caregiving activities more often than the reverse (lower father participation increasing children’s problems (Flouri et al., 2016). Longitudinal studies on fathers’ supportiveness, rather than participation in activities, are scarce among families with young children. A recent study of anxiety trajectories over a wide age range (Parrigon & Kerns, 2016) found low early attachment to fathers predicted that young children would maintain anxiety levels until adolescence. This did not look at how anxiety may have affected father attachment at young ages, although studies of adolescents have found bidirectional associations between father-child attachment and anxiety or depressive symptoms over time (Branje, Hale, Frijns & Meeus, 2010; van Eijck, Branje, Hale & Meeus, 2012).

Our findings do not point to different roles for fathers and mothers, or to different effects of fathers’ and mothers’ supportiveness for sons’ and daughters’ wellbeing. Research on older children has, however, suggested differential effects according to parental and child gender, although results appear to vary across outcomes. For example, one study points to a greater protective role for fathers than mothers in adolescent depression (Desjardins & Leadbeater, 2011), and others show stronger associations between father-child relationship quality and reduced anxiety or depression for boys (Branje et al., 2010; van Eijck et al., 2012). However, a meta-analysis of associations between adolescent attachment and delinquency found stronger protective effects of mother than father attachment, as well as stronger effects when parent and child were of the same sex (Hoeve et al., 2012).

Future plans

GUS plans to collect further information on parent-child relationships and socio-emotional wellbeing when children are in their first year at secondary school (sweep 9). This should help us answer questions on how fathers and mothers may support children’s socio-emotional development in more detail. It will be important to revisit the question of whether

effects of parenting differ according to whether the parent and child are of the same or different sexes, since gender differences may become more pronounced as children enter the teenage years.

Also planned is qualitative research with GUS fathers in order to explore how parents' own experiences of being parented influence how they go on to parent their own children. This process is referred to as 'intergenerational transmission of parenting'; research evidence suggesting there is significant, though modest, continuity in parenting across generations (Belsky, Conger & Capaldi, 2009). This study should provide better understanding of the complexities which lie behind different aspects of father involvement in relation to particular family circumstances.

Children's relationships with non-resident fathers are a notable omission from this study: other research has pointed to the quality of the child's relationship with the non-resident father as a significant influence on socio-emotional adjustment (Adamsons & Johnson, 2013). However, sweep 9 of GUS will incorporate information on this subject. It is also planned to collect data on fathers' perspectives, to supplement children's views, and to consider other dimensions of parenting such as parental control and encouragement of autonomy.

Concluding remarks

Overall, the results from this report highlight the importance of father-child relationships in couple families, showing that these relationships in middle childhood are closely bound up with several other aspects of children's socio-emotional wellbeing. While the majority of children perceive high levels of supportiveness from resident fathers, a significant minority perceiving low levels of supportiveness also have lower overall wellbeing, regardless of other family circumstances. This lower wellbeing does not simply reflect children's negative perceptions of family life, but extends outside the family to include lower enjoyment of school, and poorer relations with teachers and peers. Future work will seek to strengthen this finding using teacher-reported measures of child wellbeing collected at age 10 (but not available for this study), and by examining father-child relationships at age 10 in relation to children's wellbeing measured in future sweeps of GUS.

The report findings are based on information from over 2,500 couple families in a nationally representative cohort of children, and contribute to the limited research base on father-child relationships in middle childhood. They rely on children's perceptions of fathers' supportiveness. Furthermore, they use cross-sectional observational data, rather than being the results of an experiment or trial, and cannot demonstrate that improving father-child relationships will necessarily increase children's socio-emotional wellbeing. Nonetheless, the study lends support to the idea that for some families, improving the quality of fathering may be a suitable target for future interventions directed at improving children's socio-emotional wellbeing.

Various factors appear to compromise the development of supportive father-child relations among couple families, including a high level of family socio-economic disadvantage, adverse family events, an unsupportive partner relationship, a more disruptive or less cohesive family climate, and the presence of a non biological father figure rather than the biological father. These findings may help to identify families most at risk, as well as suggest intervention targets. Especially among families with high levels of socio-economic disadvantage or family adversity, children's relations with both parents might benefit

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

from greater family access to professional parenting support. Yet previous GUS research suggests that disadvantaged groups are likely to perceive many barriers to professional help, including stigma and fear of interference (Mabelis & Marrayat, 2011). More generally, there are multiple barriers to engaging fathers (La Placa & Corlyon, 2014; Lundahl, Tollefson, Risser & Lovejoy, 2008; Panter-Brick et al., 2014; Ramchandani & Iles, 2014). These include fathers perceiving that available services are not relevant to them, and services not, indeed, being ‘father-friendly’ in terms of delivery, for example in their opening hours or simply because fathers are not targeted or even included in recruitment practices. To be effective, professional services need to devise better ways of engaging and retaining disadvantaged families, particularly fathers, in parenting support programmes.

Father-child relationships appear to be more sensitive to the overall family environment than mother-child relationships, emphasising a need to view fathering as embedded in the whole family system. The quality of father-child relationships seems to depend on the quality of family interactions more generally, including the partner relationship. Targets of a family systems approach to support good fathering could therefore include measures to boost a cohesive family ethos and improve marital relations. In addition, advice and support for co-parenting, where couples learn to communicate better, establish trust and work together harmoniously when parenting the child may be particularly helpful.

Compared to children living with a biological father, children are less likely to perceive a non-biological father figure as being supportive. The GUS sample of families with a non-biological father figure is too small to permit a detailed quantitative study of factors promoting more supportive father figure-child relations within families of this type. A qualitative follow-up study might strengthen our understanding of the particular difficulties faced by father figures, both within the family and in relation to the child’s non-resident biological father, and what could help them in their fathering role. Again, a family systems approach might encourage mothers to find ways of facilitating the child’s acceptance of a new father figure.

- Adamsons, K. and S. K. Johnson (2013). "An Updated and Expanded Meta-Analysis of Nonresident Fathering and Child Well-Being." Journal of Family Psychology **27**(4): 589-599.
- Ainsworth, M., M. Blehar, E. Waters and S. Wall (1978). Patterns of Attachment. Hillsdale, NJ, Erlbaum.
- Baumrind, D. (1967). "Child Care Practices Antecedent Three Patterns of Preschool Behavior." Genetic Psychology Monographs **75**(1): 43-88.
- Belsky, J. (1984). "The Determinants of Parenting - A Process Model." Child Development **55**(1): 83-96.
- Belsky, J., R. Conger and D. M. Capaldi (2009). "The Intergenerational Transmission of Parenting: Introduction to the Special Section." Developmental Psychology **45**(5): 1201-1204.
- Bloom, B. L. (1985). "A factor-analysis of self-report measures of family functioning". Family Process **24**(2): 225-239.
- Bosmans, G. and K. A. Kerns (2015). Attachment in Middle Childhood: Progress and Prospects. Attachment in Middle Childhood: Theoretical Advances and New Directions in an Emerging Field. G. Bosmans and K. A. Kerns. **148**: 1-14.
- Bradshaw, P., S. Cunningham-Burley, F. Dobbie, A. MacGregor, L. Marryat, R. Ormston and F. Wasoff (2008). Growing up in Scotland: Sweep 2 : Results from the second year of a study following the lives of Scotland's children. Edinburgh, Scottish Government.
- Bradshaw, P., S. Tipping, L. Marryat and J. Corbett (2007). Growing Up In Scotland Sweep 1 - 2005 User Guide. Edinburgh, Scottish Centre for Social Research.
- Branje, S. J. T., W. W. Hale, T. Frijns and W. H. J. Meeus (2010). "Longitudinal Associations Between Perceived Parent-Child Relationship Quality and Depressive Symptoms in Adolescence." Journal of Abnormal Child Psychology **38**(6): 751-763.
- Bronfenbrenner, U. and P. A. Morris (1998). The ecology of developmental processes. Handbook of child psychology: Volume 1: Theoretical models of human development (5th ed.). W. Damon and R. M. Lerner. Hoboken, NJ, US, John Wiley & Sons Inc: 993-1028.
- Brown, G. L., S. C. Mangelsdorf and C. Neff (2012). "Father Involvement, Paternal Sensitivity, and Father-Child Attachment Security in the First 3 Years." Journal of Family Psychology **26**(3): 421-430.
- Collins, W. A. and G. Russell (1991). "Mother-child and father-child relationships in middle childhood and adolescence - a developmental analysis." Developmental Review **11**(2): 99-136.
- Cooklin, A. R., H. Dinh, L. Strazdins, E. Westrupp, L. S. Leach and J. M. Nicholson (2016). "Change and stability in work-family conflict and mothers' and fathers' mental health: Longitudinal evidence from an Australian cohort." Social Science & Medicine **155**: 24-34.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Cummings, E. M., C. E. Merrilees and M. Ward George (2010). Fathers, marriages and families: revisiting and updating the framework for fathering in context. The role of the father. Fifth edition. M. E. Lamb. Hoboken New Jersey., John Wiley and Sons, Inc.: 154-176.

Desjardins, T. L. and B. J. Leadbeater (2011). "Relational Victimization and Depressive Symptoms in Adolescence: Moderating Effects of Mother, Father, and Peer Emotional Support." Journal of Youth and Adolescence **40**(5): 531-544.

Devreux, A. M. (2007). "'New fatherhood' in practice: Domestic and parental work performed by men in France and in the Netherlands." Journal of Comparative Family Studies **38**(1): 87-103.

Doucet, A. (2013). Gender roles and fathering. Handbook of Father Involvement: Multidisciplinary Perspectives. Second Edition. N. J. Cabrera and C. S. Tamis-LeMonda. New York, NY, Routledge: 151-167.

Downer, J., R. Campos, C. McWayne and T. Gartner (2008). "Father Involvement and Children's Early Learning: A Critical Review of Published Empirical Work from the Past 15 Years." Marriage & Family Review **43**(1-2): 67-108.

Elgar, F., D. Waschbusch, M. Dadds and N. Sigvaldason (2007). "Development and Validation of a Short Form of the Alabama Parenting Questionnaire." Journal of Child and Family Studies **16**(2): 243-259.

Flouri, E. and A. Buchanan (2003). "What predicts fathers' involvement with their children? A prospective study of intact families." British Journal of Developmental Psychology **21**: 81-97.

Flouri, E. and C. Kallis (2011). "Adverse life events and mental health in middle adolescence." Journal of Adolescence **34**(2): 371-377.

Flouri, E., S. Mavroveli and N. Tzavidis (2010). "Modeling risks: effects of area deprivation, family socio-economic disadvantage and adverse life events on young children's psychopathology." Social Psychiatry and Psychiatric Epidemiology **45**(6): 611-619.

Flouri, E., E. Midouhas, H. Joshi and N. Tzavidis (2015). "Emotional and behavioural resilience to multiple risk exposure in early life: the role of parenting." European Child & Adolescent Psychiatry **24**(7): 745-755.

Flouri, E., E. Midouhas and M. K. Narayanan (2016). "The Relationship Between Father Involvement and Child Problem Behaviour in Intact Families: A 7-Year Cross-Lagged Study." Journal of Abnormal Child Psychology **44**(5): 1011-1021.

Goodman, R. (1997). "The Strengths and Difficulties Questionnaire: A Research Note." Journal of Child Psychology & Psychiatry & Allied Disciplines **38**(5): 581-586.

Goodman, R. (2001). "Psychometric Properties of the Strengths and Difficulties Questionnaire." Journal of the American Academy of Child & Adolescent Psychiatry **40**(11): 1337-1345.

Goodman, W. B., A. C. Crouter, S. T. Lanza, M. J. Cox and I. Family Life Project Key (2008). "Paternal work characteristics and father-infant interactions in low-income, rural families." Journal of Marriage and Family **70**(3): 640-653.

- Goodman, W. B., A. C. Crouter, S. T. Lanza, M. J. Cox and L. Vernon-Feagans (2011). "Paternal Work Stress and Latent Profiles of Father-Infant Parenting Quality." Journal of Marriage and Family **73**(3): 588-604.
- Gregory, A. and S. Milner (2011). "What is "New" about Fatherhood?: The Social Construction of Fatherhood in France and the UK." Men and Masculinities **14**(5): 588-606.
- Hatten, W., L. Vinter, R. Williams and Mori Social Research Institute (2002). Dads on Dads: needs and expectations at home and at work. Equal Opportunities Commission Research Discussion Series and Working Paper Series. Manchester, Equal Opportunities Commission.
- Health and Safety Executive (2015). Self-reported workplace injury and work-related ill health in Great Britain by National Statistics Socio-Economic Classification (NS-SEC). <http://www.hse.gov.uk/statistics/adhoc-analysis/ns-sec.pdf>.
- Henry, J. D. and J. R. Crawford (2005). "The short-form version of the Depression Anxiety Stress Scales (DASS-21): Construct validity and normative data in a large non-clinical sample." British Journal of Clinical Psychology **44**(2): 227-239.
- Hoeve, M., G. Stams, C. E. van der Put, J. S. Dubas, P. H. van der Laan and J. R. M. Gerris (2012). "A Meta-analysis of Attachment to Parents and Delinquency." Journal of Abnormal Child Psychology **40**(5): 771-785.
- Hook, J. L. and C. M. Wolfe (2012). "New Fathers? Residential Fathers' Time With Children in Four Countries." Journal of Family Issues **33**(4): 415-450.
- Kadar-Satat, G. and A. Koslowski (2015). Fathers in the early years: How do they balance their work and family life? Research Report. Edinburgh, Scottish Government.
- Katz, I., J. Corlyon, V. La Placa and S. Hunter (2007). The relationship between parenting and poverty. York, Joseph Rowntree Foundation.
- Kerns, K. A., L. E. Brumariu and A. Seibert (2011). "Multi-method assessment of mother-child attachment: Links to parenting and child depressive symptoms in middle childhood." Attachment & Human Development **13**(4): 315-333.
- King, V. (2006). "The antecedents and consequences of adolescents' relationships with stepfathers and nonresident fathers." Journal of Marriage and Family **68**(4): 910-928.
- King, V., P. R. Amato and R. Lindstrom (2015). "Stepfather-Adolescent Relationship Quality During the First Year of Transitioning to a Stepfamily." Journal of Marriage and Family **77**(5): 1179-1189.
- King, V., M. L. Thorsen and P. R. Amato (2014). "Factors associated with positive relationships between stepfathers and adolescent stepchildren." Social Science Research **47**: 16-29.
- Kroll, M. E., C. Carson, M. Redshaw and M. A. Quigley (2016). "Early Father Involvement and Subsequent Child Behaviour at Ages 3, 5 and 7 Years: Prospective Analysis of the UK Millennium Cohort Study." Plos One **11**(9) e0162339.
- La Placa, V. and J. Corlyon (2014). "Barriers to inclusion and successful engagement of parents in mainstream services: evidence and research." Journal of Children's Services **9**(3): 220-234.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

La Placa, V. and J. Corlyon (2016). "Unpacking the Relationship between Parenting and Poverty: Theory, Evidence and Policy." *Social Policy and Society* **15**(1): 11-28.

Lamb, M., J. Pleck, E. Charnov and J. Levine (1987). A biosocial perspective on paternal behavior and involvement. *Parenting across the lifespan: Biosocial dimensions*. J. Lancaster, J. Altmann, A. Rossi and L. Sherrod. Hawthorn, NY, Aldine Publishing Co: 111–142.

Lamb, M. E. (2010). How do fathers influence children's development? Let me count the ways. *The role of the father in child development. Fifth edition*. M. E. Lamb. Hoboken, New Jersey., John Wiley and Sons, Inc.: 1-26.

Lundahl, B. W., D. Tollefson, H. Risser and M. C. Lovejoy (2008). "A meta-analysis of father involvement in parent training." *Research on Social Work Practice* **18**(2): 97-106.

Mabelis, J. and L. Marryat (2011). Growing Up in Scotland: Parental services use and informal networks in the early years. Edinburgh, Scottish Government.

Maccoby, E. E. and J. A. Martin (1983). Socialization in the context of the family: Parent-child interaction. . *Manual of child psychology, Vol. 4: Social development.* . P. H. Mussen and E. M. Hetherington. New York, John Wiley and Sons: 1–101.

Mallers, M. H., S. T. Charles, S. D. Neupert and D. M. Almeida (2010). "Perceptions of childhood relationships with mother and father: daily emotional and stressor experiences in adulthood." *Developmental psychology* **46**(6): 1651-1661.

Malmberg, L. E. and E. Flouri (2011). "The Comparison and Interdependence of Maternal and Paternal Influences on Young Children's Behavior and Resilience." *Journal of Clinical Child and Adolescent Psychology* **40**(3): 434-444.

Marsiglio, W. and R. Hinojosa (2010). Stepfathers' lives: exploring social context and interpersonal complexity. *The Role of the father in child development. Fifth edition*. M. E. Lamb. Hoboken, New Jersey, John Wiley and Sons, Inc.: 270-295.

Matheny, J. A. P., T. D. Wachs, J. L. Ludwig and K. Phillips (1995). "Bringing order out of chaos: Psychometric characteristics of the confusion, hubbub, and order scale." *Journal of Applied Developmental Psychology* **16**(3): 429-444.

McMunn, A., P. Martin, Y. Kelly and A. Sacker (2015). "Fathers' Involvement: Correlates and Consequences for Child Socioemotional Behavior in the United Kingdom." *Journal of Family Issues*.

McWayne, C., J. T. Downer, R. Campos and R. D. Harris (2013). "Father Involvement During Early Childhood and Its Association with Children's Early Learning: A Meta-Analysis." *Early Education and Development* **24**(6): 898-922.

O'Brien, M. and I. Shemilt (2003). Working Fathers: earning and caring. *Equal Opportunities Commission Research Discussion Series and Working Paper Series*. Manchester., Equal Opportunities Commission.

Opondo, C., M. Redshaw, E. Savage-McGlynn and M. A. Quigley (2016). "Father involvement in early child-rearing and behavioural outcomes in their pre-adolescent children: evidence from the ALSPAC UK birth cohort." *BMJ Open* **6**:e012034.

- Panter-Brick, C., A. Burgess, M. Eggerman, F. McAllister, K. Pruett and J. F. Leckman (2014). "Practitioner Review: Engaging fathers - recommendations for a game change in parenting interventions based on a systematic review of the global evidence." Journal of Child Psychology and Psychiatry **55**(11): 1187-1212.
- Parrigon, K. L. S. and K. A. Kerns (2016). "Family Processes in Child Anxiety: the Long-Term Impact of Fathers and Mothers." Journal of Abnormal Child Psychology **44**(7): 1253-1266.
- Pedro, M. F., T. Ribeiro and K. H. Shelton (2012). "Marital Satisfaction and Partners' Parenting Practices: The Mediating Role of Coparenting Behavior." Journal of Family Psychology **26**(4): 509-522.
- Pike, A., J. Coldwell and J. Dunn (2006). Family relationships in middle childhood. Parenting in Practice, National Children's Bureau for Joseph Rowntree Foundation.
- Planalp, E. M. and J. M. Braungart-Rieker (2016). "Determinants of Father Involvement With Young Children: Evidence From the Early Childhood Longitudinal Study-Birth Cohort." Journal of Family Psychology **30**(1): 135-146.
- Pleck, J. H. (2010). Fatherhood and masculinity. The role of the father. Fifth edition. M. E. Lamb. Hoboken, New Jersey, John Wiley and Sons, Inc.: 27-57.
- Pleck, J. H. (2010). Paternal involvement: revised conceptualization and theoretical linkages with child outcomes. The Role of the Father in Child Development. Fifth Edition. M. E. Lamb. Hoboken, New Jersey., John Wiley and Sons, Inc.: 58-93.
- Ramchandani, P. and J. Iles (2014). "Commentary: Getting fathers into parenting programmes - a reflection on Panter-Brick et al. (2014)." Journal of Child Psychology and Psychiatry **55**(11): 1213-1214.
- Ridenour, T., M. Greenberg and E. Cook (2006). "Structure and validity of people in my life: A self-report measure of attachment in late childhood." Journal of Youth and Adolescence **35**(6): 1037-1053.
- Roe, A., L. Bridges, J. Dunn and T. G. O'Connor (2006). "Young children's representations of their families: A longitudinal follow-up study of family drawings by children living in different family settings." International Journal of Behavioral Development **30**(6): 529-536.
- Sarkadi, A., R. Kristiansson, F. Oberklaid and S. Bremberg (2008). "Fathers' involvement and children's developmental outcomes: a systematic review of longitudinal studies." Acta Paediatrica **97**(2): 153-158.
- Scottish Government (2012). National Parenting Strategy: Making a positive difference to children and young people through parenting. Edinburgh, Scottish Government.
- Scottish Government (2016). Fairer Scotland Action Plan. Edinburgh, Scottish Government.
- Sturgess, W., J. Dunn and L. Davies (2001). "Young children's perceptions of their relationships with family members: Links with family setting, friendships, and adjustment." International Journal of Behavioral Development **25**(6): 521-529.
- van Eijck, F., S. J. T. Branje, W. W. Hale and W. H. J. Meeus (2012). "Longitudinal Associations Between Perceived Parent-Adolescent Attachment Relationship Quality and Generalized Anxiety Disorder Symptoms in Adolescence." Journal of Abnormal Child Psychology **40**(6): 871-883.

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Videon, T. M. (2005). "Parent-child relations and children's psychological well-being - Do dads matter'?" Journal of Family Issues **26**(1): 55-78.

Zimet, D. M. and T. Jacob (2001). "Influences of marital conflict on child adjustment: Review of theory and research." Clinical Child and Family Psychology Review **4**(4): 319-335.

This appendix provides further details of families in the complete analysis sample, and for the sample divided into families with both biological parents, and families with a resident non-biological father figure.

Table 9-1 Characteristics of the analysis sample of couple families

Couple family when children were age 10 (%)				
		Family containing both biological parents	Family containing biological mother and non-biological father	All
Child gender	Male	49.7	50.3	49.8
	Female	50.3	49.7	50.2
Mother's age (years)	20-29	3.2	18.1	4.7
	30-39	35.9	64.9	38.9
	40+	60.9	17.0	56.4
Partner's age (years)	20-29	1.0	13.7	2.3
	30-39	27.2	51.6	29.7
	40+	71.8	24.7	68.0
Ethnic minority (one or both parents)	No	96.6	99.3	96.8
	Yes	3.4	0.7	3.2
Mother's education	Lower level Standard grades / none	11.3	18.3	12.1
	Upper level Standard grades	19.6	30.1	20.7
	Highers	32.5	30.7	32.3
	Degree-level	36.5	20.9	34.9

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Couple family when children were age 10 (%)				
		Family containing both biological parents	Family containing biological mother and non-biological father	All
Partner's ¹ education	Lower level Standard grades / none	16.4	24.9	17.1
	Upper level Standard grades	24.1	35.8	25.1
	Highers	28.3	22.8	27.8
	Degree-level	31.3	16.5	30.0
Mother's occupational class	Professional/managerial	39.8	25.7	38.3
	Intermediate occupations	19.9	12.8	19.1
	Small employers/own account workers	8.1	5.0	7.8
	Lower supervisory/technical	4.4	3.8	4.3
	Semi routine/routine	26.3	42.8	28.0
	Never worked	1.6	9.9	2.5
Partner's ¹ occupational class	Professional/managerial	44.3	23.5	42.3
	Intermediate occupations	5.7	9.7	6.1
	Small employers/own account workers	14.1	11.8	13.8
	Lower supervisory/technical	13.4	20.7	14.1
	Semi routine/routine	21.4	31.3	22.4
	Never worked	1.1	3.1	1.3

Couple family when children were age 10 (%)				
		Family containing both biological parents	Family containing biological mother and non-biological father	All
Mother's working hours per week	0-20 hours	35.6	36.1	35.6
	21-40 hours	56.9	54.4	56.7
	41-48 hours	3.4	6.4	3.7
	49-59 hours	2.2	1.1	2.1
	60+ hours	1.8	2.0	1.9
Partner's ¹ working hours per week	0-20 hours	3.8	3.5	3.8
	21-40 hours	56.4	63.0	57.1
	41-48 hours	16.4	12.2	16.0
	49-59 hours	13.2	11.2	13.0
	60+ hours	10.2	10.0	10.1
Number of children in household	One	19.0	18.0	18.9
	Two or three	73.7	67.4	73.1
	Four or more	7.3	14.6	8.0
Household employment	At least one parent/carer in full-time employment	86.6	78.3	85.8
	At least one parent/carer in part-time employment	9.6	13.5	10.0
	No parent/carer working	3.8	8.2	4.2

GROWING UP IN SCOTLAND

FATHER-CHILD RELATIONSHIPS AND CHILD SOCIO-EMOTIONAL WELLBEING

Couple family when children were age 10 (%)				
		Family containing both biological parents	Family containing biological mother and non-biological father	All
Household income quintile	Bottom Quintile (<£13,450)	14.8	42.1	17.5
	Middle three Quintiles (>=£13,451 <£39,216)	63.5	54.5	62.6
	Top Quintile (>=£39,216)	21.7	3.4	19.8
Area deprivation (SIMD ²) quintile	q1 Least deprived	24.8	10.5	23.3
	q2	23.6	13.6	22.6
	q3	20.1	22.1	20.3
	q4	16.0	23.7	16.7
	q5 Most deprived	15.6	30.1	17.1
Urban-rural location ³	Large urban	35.9	36.4	36.0
	Other urban	31.7	34.3	31.9
	Small towns, accessible	10.1	6.6	9.8
	Small towns, remote	2.6	7.2	3.1
	Accessible rural	13.6	11.5	13.4
	Remote rural	6.1	4.0	5.9

Note: Base sample n=2593 all couple families. Families with biological father, n=2411, families with non-biological father figure n=182 (all unweighted). Percentages shown in table are weighted. ¹Biological father or non-biological resident father figure. ²Scottish Index of Multiple Deprivation. ³Scottish Government 6-fold urban-rural classification.



© Crown copyright 2017

OGL

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.scot

Any enquiries regarding this publication should be sent to us at
The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

ISBN: 978-1-78652-853-7 (web only)

Published by The Scottish Government, March 2017

Produced for The Scottish Government by APS Group Scotland, 21 Tennant Street, Edinburgh EH6 5NA
PPDAS263250 (03/17)