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Ragni Hege Kitterød and Jan Lyngstad

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Abstract:

Shared residence for children has increased considerably in recent years among parents living apart in Norway, while mother sole custody is less common than before and father sole custody is still practiced by a minority. A similar pattern is observed in many other countries as well. In Norway, 25 percent of the parents with separate homes now practice shared residence for their children, compared to only 10 percent in 2004. Such an arrangement is most common among highly educated parents, those who have been married or cohabiting for a long rather than a short time, when the parents shared childcare tasks equally between themselves when they lived together, and when neither parent has problems with household finances. Father sole custody is practiced by only 10 percent of the parents living apart. Such an arrangement is particularly common when the mother has health limitations or financial problems, when the father has no financial problems and when the parents divided childcare activities equally between themselves before they split up.

Keywords: Contemporary families, father sole custody, mother sole custody, parents living apart, shared residence.

JEL classification: J11, J12, J13, J18

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Sammendrag

Foreldre som bor hver for seg, har langt oftere enn før delt bosted for barna. I 2012 oppgav 25 prosent av foreldrene at barna hadde delt bosted, mot bare 10 prosent i 2004. Andelen barn som bor fast hos mor gikk ned fra 82 prosent i 2004 til 66 prosent i 2012, mens det i begge årene var kun 8 prosent som bodde fast hos far. Mødre rapporterer noe sjeldnere enn fedre at barna har delt bosted eller bor fast hos far, men uansett om vi tar utgangspunkt i mødrenes eller fedrenes svar, ser vi en klar økning i bruken av delt bosted og en nedgang i andelen barn som bor fast hos mor.

Nesten alle foreldre som har delt bosted for barnet, bor forholdsvis nær hverandre. Når barnet bor fast hos enten mor eller far, rapporterer omtrent en av tre at det er minst $\frac{1}{2}$ times reisetid mellom foreldrenes boliger. Foreldre med delt bosted ser ut til å ha et noe lavere konfliktnivå enn foreldre der barnet bor fast hos mor, men uansett barnets bosted rapporterer flertallet av foreldrene at de har få konflikter. Både når barnet har delt bosted og når det bor fast hos mor, er hele 95 prosent av mødrene veldig eller ganske fornøyde med bostedsordningen. Når barnet bor fast hos far, gjelder dette 65 prosent, mens 35 prosent er fornøyde i liten grad eller ikke i det hele tatt. 95 prosent av fedrene er veldig eller ganske fornøyde med ordningen når barnet har delt bosted eller bor hos far. Når barnet bor hos mor, gjelder dette sju av ti, mens tre av ti er fornøyde i liten grad eller ikke i det hele tatt.

Multivariate analyser basert på *mødres svar* viser at tilbøyeligheten til å ha delt bosted er særlig stor når mor har lang utdanning, når foreldrene har vært gift eller samboende i mange år, når foreldrene delte barneomsorgen likt mens de bodde sammen, når det er forholdsvis kort tid siden foreldrene skilte lag, og når barnet er i alderen 5-9 år. Følgende faktorer øker sjansen for at barnet bor fast hos far i stedet for hos mor: det at mor ofte har økonomiske problemer, at hun har nedsatt helse, at hun var gift med barnets far i stedet for samboende, at barnet er gutt, og at foreldrene deltok like mye i barnsomsorgen mens de bodde sammen.

Analyser basert på *fedres svar* viser at tilbøyeligheten til å ha delt bosted for barnet er særlig stor når far er under 35 år, når han har lang utdanning, når han ikke har økonomiske problemer, når han har bodd lenge sammen med barnets mor, når foreldrene delte barneomsorgen likt før de skilte lag, når det er forholdsvis kort tid siden foreldrene flyttet fra hverandre, når barnet er gutt, og når far er født i Norge eller et annet vestlig land. Følgende faktorer øker sjansen for at barnet bor fast hos far i stedet for hos mor: Det at far ikke har økonomiske problemer, at han var gift med barnets mor i stedet for samboende, at foreldrene delte omsorgsarbeidet likt mens de bodde sammen, og at far er født i Norge eller et annet vestlig land.

1. Introduction

In Norway, as in many other Western countries, shared residence for children has become more common among parents living apart in recent years, while mother sole custody has decreased proportionally and father sole custody is still practiced by a minority (Fehlberg et al. 2011, Lyngstad et al. 2014, Singer 2008, Sodermans et al. 2013). More equal parenting roles among parents with separate homes has been a political aim in many countries, and since married and cohabiting fathers are now increasingly involved in housework and childcare, many fathers may want to be actively involved with their children when parents split up. Mothers too, may now be more positive to shared parenting. They tend to have more trust in the father's caring skills than previously and may appreciate the opportunity to focus on paid work and their own leisure activities when the children stay with the father (Bakker and Karsten 2013).

In many countries, there is a growing literature on the factors associated with various residential arrangements for children, and in particular, the steep rise in shared residence has spurred research on the characteristics of parents who opt for such an arrangement. Shared residence has usually been practiced primarily by a select group of parents with a high socioeconomic standing and few conflicts, but with growing prevalence, parents with shared residence may have become more heterogeneous than previously (Fehlberg et al. 2011, Sodermans et al. 2013). In particular, researchers ask whether also parents with less socioeconomic resources and more conflicts now opt for shared residence (ibid). Father sole custody has usually been practiced by a less homogeneous group of parents than shared residence (Cancian and Meyer 1998, Juby et al. 2005, Kitterød and Lyngstad 2012). For instance, father sole custody has been more likely when the mother's income is low, and when the child is a boy or a teenager. However, this too may have changed in new cohorts of parents. More involved fathering practices when parents live together may imply that more parents now regard father sole custody as a viable option when they split up if this is most convenient for practical reasons, for instance, if the father lives closest to the child's school.

In Norway, about one fourth of all children below 18 years of age live with one of their parents only (Statistics Norway 2014). Hence, knowledge of the prevalence of various residential arrangements and the characteristics of parents who opt for them is important in order to understand current family practices. The present paper examines the factors associated with shared residence and father sole custody in Norway based on a survey from 2012. We include a wide range of factors that have been shown to be important in previous studies in Norway and other countries, and present both bivariate cross-tabulations and multivariate analyses. Similar analyses have previously been undertaken with

data from 1996, 2002 and 2004 (Jensen and Clausen 1997, Kitterød 2004 and 2005, Kitterød and Lyngstad 2012). However, the considerable increase in shared residence for children in recent years, as well as more symmetrical parenting roles among married and cohabiting parents, calls for an update.

Moreover, the 2012 survey provides information on possible determinants of shared residence and father sole custody that were lacking in the previous Norwegian surveys. These include the parents' health, the way they shared childcare tasks between them before they split up and whether or not they have problems with their daily expenditures. In the present paper, we incorporate these factors in the analyses, in addition to most of the factors that have been included in previous analyses, such as the parents' educational attainment, the number, age and sex of their common children, and their civil status prior to the breakup and at the time of the survey as well as the amount of time since they split up (Kitterød 2005, Kitterød and Lyngstad 2012). We assume that parents are more likely to opt for shared residence or father sole custody if both partners were equally involved in childcare tasks when they lived together, compared to when the mother did most childcare. As for the parents' health, we assume sole mother custody to be less likely if the mother has health restrictions and more likely if the father has no health restrictions, while the opposite pattern may apply to father sole custody. Moreover, financial problems for the father may deter shared residence and father sole custody, while financial problems for the mother may promote father sole custody. By including these new factors in the analyses, we may gain a better understanding of determinants of various residential arrangements for children when parents have separate homes.

The paper is organised as follows: Section 2 presents the Norwegian policy context, previous research is presented in section 3, and data and definitions are discussed in section 4. Results are presented in section 5, followed by a summary and discussion in section 6.

2. The Norwegian policy context

The symmetrical family-model where women and men share paid and unpaid work equally between them has been a central political aim in Norway in recent decades, as in other social-democratic countries (Brandth and Kvande 2013). Family policy measures such as generous parental leave rights and a high coverage of affordable high-quality public childcare have eased the combination of employment and children for mothers. Fathers, too, are now expected to balance paid work and childcare. In 1993, a four weeks father's quota was implemented in the parental leave in order to stimulate fathers' family involvement, and the quota is now extended to 14 weeks. Time use surveys

show that fathers' housework and childcare time has risen significantly in recent decades (Kitterød and Rønsen 2013). Combined with an increase in mothers' paid employment, this has brought about more equal parenting roles in Norway (Kitterød 2013), although in a significant proportion of couples, men still work more for pay than mothers and do less family work (Kitterød and Lappegård 2010).

Fathers are expected to continue their involvement with their children when the parents split up, and it has been increasingly emphasized in the Norwegian policy context that parents living apart are equally responsible for practical care and economic provision for children. Since 2002, parents with separate homes have been obliged to share the children's travelling expenses between them in order for fathers' contact costs to be reduced, and more recently, it has been decided that the travelling costs are to be divided proportionally between the parents according to their income (Ot.prp No 69, 2007-2008). In 2003, a new formula for regulating child maintenance was introduced, allowing the stipulated cost of contact to be deducted from the child maintenance payment (St.meld. No. 19, 2006-2007). In 2010 the definition of the non-resident parent's "ordinary right of access" was extended in the Children Act, so that it now entails visitation one afternoon per week with an overnight stay, every second weekend, three weeks during the summer holidays and every second autumn-, Christmas-, winter-, and Easter holiday (Ot.prp No 104, 2008-2009). From 2010 both parents are also obliged to notify the other parent at least six weeks in advance if they plan to move to another place (ibid).

Although parents living apart are urged to collaborate in the children's upbringing, policies concerning shared residence may be economically disadvantageous, particularly for mothers (St.meld. No. 29, 2002-2003). There is an extensive income package for single parents in Norway, with the aim of securing the economic well-being of their children. The parent with whom the child lives permanently (most often the mother) is entitled to social benefits, such as a transitional benefit for a certain number of years and support for child care costs and for the parent's own education, as long as she/he does not live with a new partner. Moreover, the resident parent is entitled to additional children's allowances and a certain tax deduction. When parents opt for shared residence, neither of them qualifies for transitional benefits or support for childcare costs or for their own education. However, the additional children's allowances may be divided between the parents and each of them may have a tax deduction every second year. In spite of cultural expectations of shared parenting practices for parents living apart, parents, and especially mothers, may be opposed to such an arrangement if they are economically disadvantaged compared with being a single parent. However, shared residence may be economically beneficial compared with being a non-resident parent (St.meld. No. 29, 2002-2003). From 2010, courts have the power to rule that the child shall live permanently with both parents when

special reasons so indicate (The Children Act, section 36). However, most parents with shared residence decide on this arrangement voluntarily.

In Norway, The Children Act distinguishes between *joint parental responsibility* and *shared residence*.¹ The parent with whom the child lives permanently must have parental responsibility, which is the right and obligation to make decisions for the child in personal matters, such as the child's upbringing, where the child is to live, which kind of school she/he should attend, etc. Parents living apart now usually have joint parental responsibility in Norway; and joint parental responsibility is a prerequisite for shared residence arrangements. In Norway, shared residence implies that the child lives with each parent for about half of the time, and also gives both parents an equal say concerning the child's daily life.² The parent with whom the child lives permanently, or half of the time, has greater power to decide on matters regarding the overall well-being of the child than what is warranted by parental responsibility alone, such as, for instance, the use of external childcare arrangements.

Fathers have traditionally gained legal rights to their children through marriage in Norway, and even if cohabiting fathers have had the opportunity to apply to the authorities for joint parental responsibility, Jensen and Clausen (2003) argue that until recently, cohabiting fathers faced more obstacles than married fathers if they wanted shared residence or father sole custody for their children following partnership dissolution. However, application procedures for joint parental responsibility were simplified in 1998, and new rules applying to children born after January 1. 2006 state that parents living together when paternity is established, shall have joint parental responsibility for common children. Hence, cohabiting fathers now face few legal obstacles if they want shared residence for their children following the dissolution of a consensual union. This is important in a country like Norway, where more than 40 per cent of children are now born to cohabiting parents.

For a long time only formally married parents were obliged to see a mediator in order to agree on child-care arrangements when they split up, but from 2007, these rules also apply to cohabiting parents

¹ These arrangements are usually called joint judicial and joint physical custody in the American literature in the field.

² If the parents have more than one common child when they break up, they may decide to split the children between them. Both are then regarded as single parents in the legal sense, even though they may actually practise shared residence for their children. This may be more economically advantageous for the parents than to register the children as having shared residence (St.meld. No. 29, 2002-2003). However, if the parents do not have shared residence in the legal sense for a child, the parent who is considered a single parent may make certain decisions concerning the child's daily life without the other parent's consent.

with common children (The Children Act, § 51)³. Some of the respondents in the survey used in the present paper split up prior to 2007, however.

3. Previous research

Until the early 2000s, shared custody was practiced by a rather small and select group of parents in most countries (Smyth et al. 2004). Since the definition of shared residence varies across studies, as do the determinants included in the analyses, results are not easily comparable. However, important factors in many studies include the parents' socioeconomic resources, their current and former family obligations, their health, and also more practical considerations such as the distance between their homes and the father's work flexibility (for instance, Cooksey and Craig 1998, Kitterød and Lyngstad 2012, Manning et al. 2003, Skevik 2006). Although the conclusions vary somewhat across studies, researches have usually found that parents with a shared residence arrangement tend to be highly educated, have a high socioeconomic standing, live near each other, and have few conflicts and a cooperative parenting style. Parents also usually have flexible working hours and fathers have been actively involved in the children prior to the separation (Fehlberg et al. 2011, Smyth et al. 2004). In an analysis of residential arrangements for children among parents living apart in Norway in 2004, Kitterød and Lyngstad (2012) found that shared residence was particularly likely when the father had a reasonable income, the mother was highly educated and the mother was currently married. The father's education had no effect, however, and the same was true for the mother's income. However, Skjørten et al. (2007) found that in Norway, shared-residence mothers who had not re-partnered often had a fairly low income, which they related to the fact that unlike parents with sole custody, those with shared residence are not entitled to transitional benefits and support for childcare or their own education (see section 2).

As shared residence has become more common in many countries in recent years, researchers ask whether such an arrangement is increasingly practiced by new groups of parents with less socioeconomic resources and more conflicts. In an analysis of Flemish families, Sodermans et al. (2013) demonstrate that shared-residence families have become more heterogeneous in recent years, and that shared parenting is increasingly practiced by couples with a high conflict level. They relate this to legal changes that may promote shared parenting when parents split up and to a normative climate that encourages symmetrical parenting roles both when parents live together and when they have separate homes.

³ <http://www.bufetat.no/familievernkontor/mekling/>

The factors that promote father sole custody have been shown to differ from those that promote shared residence, and father sole custody has usually been practised by a more heterogeneous group of parents. For instance, in a study of Canadian parents living apart, Juby et al. (2005) found that sole father custody was more likely for older children, if the mother was living with a new partner, if the mother had depressive symptoms and if the father had a reasonable income. In their study of parents living apart in Norway in 2004, Kitterød and Lyngstad (2012) found that father sole custody was most likely when the mother's income was low and the father's high, the child was a boy rather than a girl and at least ten years old rather than below ten years, the father was still single at the time of the survey and there were other children in the mother's household.

4. Data, definitions and method

Our empirical analysis is based on the survey *Contact arrangements and residential arrangements 2012*, conducted by Statistics Norway on commission from the Ministry of Children, Equality and Social Inclusion. This is a representative survey with added register information on the parents' income and education and some other factors.

Analysis sample

The sample was drawn from the population of parents who were registered living together with a child below 18 years of age, but not together with the child's other biological parent (Høstmark 2013). A representative sample of 2,250 parents was drawn from this population, and the child's other parent was added. Hence, the sample consisted of two parts: (1) persons who were registered as living with the child, but not with the other parent (so-called "resident parents"), and (2) persons registered as residing neither with their child nor with the other parent (so-called "non-resident parents"). In some cases the other parent could not be identified in the register, or he/she lived abroad. These were removed from the sample, so that in these cases only the "resident parent" was included. In most cases, however, both the "resident" and the "non-resident" parent of a child were included. In most cases, the mother was the "resident parent", but some children were also registered living with their father. Hence, the sample comprises four groups of parents: (1) "Resident mothers", (2) "Non-resident mothers", (3) "Resident fathers", and (4) "Non-resident fathers".

In Norway, children can be registered at one address only, so that if parents have shared residence for the child, they have to choose where the child is to be registered. Moreover, parents may change their custody arrangements without necessarily changing the child's registered address. For instance, if a child initially lives permanently with the mother, but then, for some reason or another, starts to spend

more time at the father's than at the mother's dwelling, the parents may not report the change of address to the authorities, at least not immediately. This may for instance be the case if the child attends a high school that is situated closer to the father's than to the mother's home.

Data were collected by telephone interviews from November 2012 to February 2013. About 80 percent of the interviews were undertaken in 2012, however. "Non-resident parents" reported on their own involvement with the parents' common children, and "resident parents" reported on the "non-resident parents'" involvement. Although involvement with all the parents' common children was captured, more questions were asked for the youngest child than for older children. In the present paper we analyse the questions that apply to the youngest child only.

Out of a gross sample of 4,354 parents, 2,604 parents were interviewed. The overall response rate was 60 percent; 61 and 59 percent from the "resident" and the "non-resident parents", respectively. A weight was calculated to correct for the over-representation of certain groups in the sample, and for the disproportionate non-response rates in certain groups. The survey is documented in Høstmark (2013). In a significant number of cases, only one of the parents participated in the interview. There were 823 complete couples of "resident" and "non-resident parents" in the net sample.

In this paper, we include all parents, irrespective of whether the former partner participated or not. We undertake separate analyses based on the mothers' and the fathers' answers. In both cases, the parents registered living with the child ("resident parents") as well as those who were not registered living with the child ("non-resident parents"), are included. Since the response rate was somewhat higher for "resident" than for "non-resident parents", and children are more often registered at the mother's than at the father's residence, there are some more observations for mothers than for fathers in the analysis sample. Respondents for whom the ex-partner could not be identified in the register, or lived abroad, were excluded from the analyses sample. This applied to only 38 respondents, however, 34 mothers and four fathers.⁴

Initially (tables 1 and 2), we show the child's residential arrangement for all parents, both those who have been married to or cohabiting with the child's other parent, and those who have never lived together. In the larger part of the paper, however, we look only at parents who have been married to or cohabiting with the child's other parent. They constitute the larger part of the sample; 85 percent of the

⁴ Appendix table A2.1. provides some information for the full sample, however. Respondents for whom the ex-partner could not be identified are included.

mothers and 86 percent of the fathers. Two of our independent variables, namely the duration of the parents' relationship and the division of childcare tasks before they split up, apply only to those who have lived together. Tables with results for all mothers and all fathers (both those who have lived together and those who have not lived together) are shown in Appendix 2, but will not be commented upon.

Dependent variable: the child's residence

Our dependent variable, "The child's residence", is based on the following question: "We would like to know who (name of child) lives permanently with now, that is, who has the day-to-day care for the child now. Is it you, the other parent, both or others?" The question was followed by an explanation of the juridical meaning of "live permanently with" and "day-to-day care of the child", which the interviewer was supposed to read for the respondent upon request (see below). Both parents were asked this question, and based on their answers we constructed the variable "child's residence", with four categories: (1) mother sole custody (2) father sole custody (3) shared residence and (4) other.

There is some divergence between the mothers' and the fathers' reporting on the child's residence. Fathers more often than mothers report shared residence or father sole custody, and more seldom mother sole custody. This is a common pattern in studies in this field, in Norway as well as internationally (Kitterød and Lyngstad 2014, Seltzer and Brandreth 1994). Parents who do not live permanently with the child ("non-resident parents") tend to depict themselves as more actively involved with the children than the parents who live permanently with the child ("resident parents") depict them. Since mothers more often than fathers live permanently with the child, on the average, they report less shared residence and less contact between non-resident parents and children than the fathers themselves report.

In the present paper, we undertake separate analyses based on the mothers' and the fathers' reporting. Hence, we get somewhat different pictures of the prevalence of different residential arrangements for children in the two sets of analyses.

As we have explained in section 2, there is a juridical definition of shared residence in Norway in that both parents have an equal say concerning the child's daily life. The parent with whom the child lives permanently, or half of the time, has greater power to decide on matters regarding the overall well-being of the child than what is warranted by parental responsibility alone. In the text following the question on the child's residence in the questionnaire, it was explained that the parent who lives

permanently with the child, and thereby is responsible for the daily care of the child, has the right to decide the child's place of living and whether the child shall attend a kindergarten or not. It was also mentioned that the parent with whom the child lives permanently, must have parental responsibility, and that the other parent had the right to give a statement before the child moves to another place, and that if the child has shared residence, both parents have an equal say regarding the child's childcare arrangement, place of living etc. (Høstmark 2013). However, some parents may report that they have shared residence for the child even though they do not have a formal agreement in accordance with the juridical definition in Norway. For instance, parents who spend about half of the time with the child may look upon this as shared residence irrespective of the juridical definition.

At the international level, definitions of shared residence vary widely, as do the terms used to describe such arrangements (Fehlberg et al. 2011). For instance, both "joint physical custody", "dual residence" and "alternating residence" have been used to describe shared living arrangements for children, and researchers often define shared residence as an arrangement where the child spends at least one third of the time with each parent. Different definitions make it difficult to compare the prevalence of shared residence arrangements across countries and surveys. A broader definition implies higher prevalence, and the prevalence will also be higher if visitation frequency is counted on the basis of the number of days rather than nights (ibid). In Appendix 1, the shared-residence measure that we utilize in the present paper is compared by an alternative measure of shared residence, for the sake of illustration.⁵ In addition to the survey question on the child's residence, we have constructed a measure based on the parents' reporting of the number of contact days between "non-resident parents" and children. One may, of course, also construct more alternative measures, for instance, based on the number of overnight stays with each parent in stead of the number of contact days. Definitions based on the number of days are most common, however (ibid).

Since children can only be registered at one residential address in Norway, the prevalence of shared residence can not be studied in administrative registers. Children may be registered at the same address as the mother, but still have shared residence. The parents may even report that the father has sole custody for the child if the child lives mainly with the father after having moved from the mother to the father, but the parents have not yet reported the change of address to the authorities. In the same way, the children may be registered living with the father, but still have shared residence or mother sole custody.

⁵ In the contract between Statistics Norway and The Ministry of Children, Equality and Social Inclusion, who supports the project, it is stated that an alternative definition of shared residence should be explored.

Independent variables

We use a wide range of independent variables in order to study the child's residence among different groups of parents. Some of them are included in tables with bivariate cross-tabulations only, while others are included in the multivariate analyses as well. Some of the variables are based on survey questions, while others are based on added register data. As is the case for our dependent variable (the child's residence), fathers and mothers may also report differently on the survey questions used to construct the independent variables, for instance on the level of conflicts between the parents. Hence, possible differences in the correlates of different residential arrangement (such as shared residence and father sole custody) in the analyses based on the fathers' answers and those based on the mothers' answers, may be due to different reporting on the independent variables. Moreover, some independent variables differ between the parents. In the analyses based on the mothers' reporting, we include information on the mother's age, education, health etc. In those based on the fathers' reporting the corresponding information applies to the fathers.

The following independent variables are used:

- *Respondent's age*. Based on register data and runs from 19 to 70 years in the analysis sample. We distinguish between the age groups (1) 19-34 years, (2) 35-39 years, (3) 40-44 years, and (4) 45 years or more.
- *Respondent's educational attainment*. Based on register data. Level of education was defined as the highest level completed at the time of the survey, measured as the accumulated standard number of years it takes to attain a certain level. We distinguish between (1) primary school, (2) high school, (3) university 1-4 years, and (4) university 5 years or more, which implies at least a master's degree.
- *Respondent's employment and working hours*. The variable is constructed by combining survey questions on whether the respondent was gainfully employed or not, and the number of weekly working hours for those who were employed. Those who worked for pay for at least one hour during the week preceding the survey, or were temporary absent from paid work that week, were classified as employed.
- *Respondent's self-reported main activity*. Irrespective of employment status, respondents were asked what they considered to be their main activity or status, with the following categories: employed, attending school/study, disabled/early-retirees, retired, home-working, unemployed, retired, other activities.
- *Financial problems last year*. Based on a survey question on how easy or difficult it was for the respondent's household to make ends meet, with the following categories: (1) often, (2) sometimes, (3) rarely, and (4) never. Unfortunately, for some reason or another, some of the respondents were

not asked this question, which is why the missing category is larger on this than on most other questions in the survey.

- *Respondent's self-reported health.* Based on a survey question on whether the respondent would describe his/her health as (1) excellent, (2) very good, (3) good, (4) fairly good or bad.
- *Respondent's place of living, region.* Based on register information on the respondent's municipality. We distinguish between six regions: (1) Oslo and Akershus, (2) Eastern Norway except Oslo and Akershus, (3) Agder and Rogaland, (4) Western Norway, (5) Trøndelag (Middle Norway), and (6) Northern Norway.
- *Respondent's country of birth.* Based on register data with codes for single countries. We distinguish between (1) Norway, (2) the EU/EEA region + USA, Canada, Australia and New Zealand (termed Western countries in the following), and (3) Asia, Africa, Latin America and Europe outside the EU/EEA region (termed non-Western countries in the following). Since interviews were conducted in Norwegian only, the response rate among people with poor language qualifications is probably low and the respondents born abroad in our sample may be the best integrated ones.
- *The parent's civil status at breakup.* Based on surveys questions. Categories: (1) formally married, (2) cohabiting, (3) have not lived together.
- *Duration of the parents' relationship.* Based on survey questions on when the parents moved together and when they split up. If they have not lived together, duration is set to zero. We differentiate between the following categories: (1) 0-4 years, (2) 5-7 years, (3) 8-10 years, and (4) 11 years or more.
- *Time since breakup.* Based on survey questions on when the partners split up. If the parents have never lived together, time since breakup is set to the age of the youngest child.
- *Respondent's current civil status.* Mainly based on register information, but supplemented with survey questions. Three categories: (1) formally married, (2) cohabiting, (3) single.
- *Number of children in relationship.* Register information. We distinguish between (1) one child, (2) two children, and (3) three or more children.
- *Age of focal child.* Register information. The youngest child in the relationship is defined as the focal child. We distinguish between the age groups (1) 0-4 years, (2) 5-9 years, (3) 10-14 years, and (4) 15 years or more.
- *Sex of focal child.* Register information.
- *Division of childcare when the parents lived together.* Based on a survey question on how the respondent and the child's other parent divided childcare activities between themselves when they lived together, with the following categories: respondent did most, divided equally between the

parents, the other parent did most. We recoded the information as follows: (1) The mother did most, (2) shared equally, and (3) the father did most.

- *Conflicts between the parents at present.* Based on a survey question on to what extent the respondent has conflicts with the child's other parent at present, with the following categories: (1) To a great extent, (2) to a certain extent, (3) to a small extent, (4) not at all, and (5) do not know.
- *Travelling time between the parents' homes.* Based on a survey question with the following categories: (1) Walking distance, (2) less than ½ an hour, but not walking distance, (3) ½ - 2 ½ hour, and (4) more than 2 ½ hour.
- *Satisfaction with the child's residential arrangement.* Based on the following survey question: Are you satisfied with the child's present residential arrangement? Would you say that you are satisfied (1) to a great extent, (2) to a certain extent, (3) to a small extent, or (4) not at all?
- *Registered at the child's address.* Register information on whether the respondent is registered living at the same address as the child or not.

Ideally, we would prefer to include more information on both parents in the analyses, and particularly on both partners' education, health, household finances and present civil status. However, such information is only available for those respondents where both partners participated in the survey. Since we include all respondents in the analyses irrespective of whether the partner participated in the survey or not, we lack such partner information for a considerable proportion of respondents. If partner information were to be included, we would need to reduce the survey sample to the 823 couples where both partners answered the survey.⁶

Method

We undertake separate analyses based on the mothers' and the fathers' answers and present descriptive statistics, including tables with bivariate associations between the child's residence and all the independent variables, as well as multivariate analyses with fewer independent variables. We focus mainly on respondents who have lived together with the child's other parent, either as married or cohabiting, but results for all parents, including those who have never lived with the child's other parent, are presented in Appendix 2.

As for the multivariate analyses, we ran separate logistic regressions for the likelihood of having shared residence for the child rather than mother sole custody, and the likelihood of father sole custody rather than mother sole custody. The latter models are defined slightly differently from the

⁶ Such analyses of the child's residential arrangement based on couple data has been undertaken on the basis of the survey from 2004 (Kitterød and Lyngstad 2012), and may also be undertaken on the basis of the 2012-data at a later stage.

first ones. This is done because some categories on the independent variables had no observations with father sole custody. In the analyses based on the mothers' answers, this was the case for respondents born in non-Western countries. We therefore collapsed all mothers born outside Norway into one single category in the regressions estimating the likelihood of father sole custody rather than mother sole custody. Moreover, there were no observations with father sole custody in the missing category on the education-variable, and this is the case for both fathers and mothers. We therefore exclude the missing category on the education-variable in the analyses of father sole custody rather than mother sole custody, whereas we include a category for missing education in the analyses of shared residence rather than mother sole custody.

5. Results

Prevalence of different residential arrangements

In the 2012 survey, 25 percent of the parents reported that the child had shared residence, while the corresponding figures in 2004 and 2002 were 10 percent and 8 percent, respectively. The percentage with mother sole custody declined from 82 percent in 2004 to 66 percent in 2012, while the percentage with father sole custody was 8 percent in both years (table 1). Mothers report somewhat lower levels of shared residence and father sole custody than fathers do, but both parents reported more shared residence and less mother sole custody in 2012 than in the former surveys.⁷ According to the mothers, 71 percent of the children have sole mother custody, 7 percent have sole father custody, and 22 percent have shared residence in 2012. According to the fathers, the corresponding figures are 61 percent, 10 percent and 29 percent, respectively.⁸

As we have explained in section 4, children may be registered at only one address in Norway, and the registered address does not always correspond with the child's residential arrangement when parents live apart. However, the vast majority of mothers who have the same registered address as the child, report that they have sole mother custody, but 16 percent also report shared residence (table 2). In the small group of mothers who do not have the same registered address as the child, only 6 percent report that they have sole mother custody, while 40 percent have shared residence and 53 percent report father sole custody. As for fathers, 55 percent of those who are registered at the same address as the

⁷ Most studies in the field show a discrepancy between the mothers' and the fathers' reporting. This is discussed in more detail in section 4 in the present paper.

⁸ As we explain in section 4, the survey sample includes some parents whose ex-partner is not registered living in Norway. However, in the net sample, there were only 38 observations in this category; 34 mothers and four fathers. As could be expected, shared residence is non-existent in these couples (see Appendix 2, Table A2.1), and therefore, we do not include them in the analyses in the current paper.

child, report having father sole custody, while 42 percent have shared residence. Of those who are not registered at the same address as the child (who constitute the vast majority of the fathers), 73 percent report that the mother has sole custody and 26 percent report shared residence.

Table 1. Children's residence based on the mothers' reporting, the fathers' reporting and the reporting of all parents. 2002, 2004 and 2012. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	Missing	Total	Number of observations
Mothers							
2002	86	6	6	0	1	100	1,226
2004	85	6	9	0	0	100	1,399
2012	71	7	22	0	0	100	1,299
Fathers							
2002	82	9	9	0	0	100	1,080
2004	79	9	11	1	0	100	1,297
2012	61	10	29	1	-	100	1,253
All							
2002	84	7	8	0	1	100	2,306
2004	82	8	10	0	0	100	2,696
2012	66	8	25	0	0	100	2,552

Table 2. Children's residence based on the mothers' and the fathers' reporting, by whether they are registered at the same address as the child or not. 2012. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	Missing	Total	Number of observations	Percentage of respondents in each group
Mothers								
All	71	7	22	0	0	100	1,299	100
Registered at the same address as the child	83	0	16	0	0	100	1,085	84
Not registered at the child's address	6	40	53	-	-	100	214	16
Fathers								
All	61	10	29	1	-	100	1,253	100
Registered at the same address as the child	2	55	42	-	-	100	208	16
Not registered at the child's address	73	1	26	1	-	100	1,045	84

At the international level, the definition of shared residence varies widely. It is therefore difficult to compare the prevalence of this type of custody arrangement across countries and across surveys (Fehlberg et al. 2011). While we use a juridical definition in the present paper, researchers in other countries often define shared residence as an arrangement where children stay with each parent a certain amount of time, for instance, at least 35 percent of the time or 30 per cent of the time (Fehlberg et al. 2011), twelve days per four weeks (Bakker and Karsten 2013) or half of the time (Carlsund et al. 2012). The term used to describe shared residential arrangements also varies. Expressions like "joint

physical custody", "dual residence", "alternating residence", and "shared physical placement" have all been utilized (Fehlberg et al. 2011). In order to get an idea of how different definitions may affect the results, we compare the percentage with shared residence based on an alternative definition with the one used in the current paper in Appendix 1.

Travelling time, conflicts and satisfaction among parents with various residential arrangements

In table 3 and table 4 parents with various residential arrangements for the child are compared when it comes to the travelling time between the parents' homes, the level of conflicts between the parents, the parents' satisfaction with the child's residential arrangement and whether the parent is registered at the same address as the child or not. The tables are based on the mothers' and the fathers' answers, respectively. Only parents who have lived together with the child's other parent, either as married or cohabiting, are included.⁹

As could be expected, most parents with shared residence live quite close to each other. Fifty-six per cent of the mothers reported being within walking distance of the other parent's home, and 42 percent reported being within less than half an hour of travelling time, but not walking distance. The corresponding figures for the fathers were 51 and 44 percent, respectively. Geographical proximity between the parents' homes was less common when the child lived permanently with either the mother or the father, but also in these groups, the majority of the parents reported that the travelling time was less than half an hour.

Overall, mothers and fathers reported about the same level of conflicts between themselves and the other parent, and according to both parents, there were less severe conflicts when children had shared residence than when one of the parents had sole custody. This pattern is found in most studies in the field in Norway as well as in other countries (Fehlberg et al. 2011, Lyngstad et al. 2014, Sodermans et al. 2013). Since shared residence presupposes extensive collaboration between the parents, parents with fewer conflicts tend to opt for such an arrangement more often than those with greater conflicts. It may also be that shared residence helps to moderate possible conflicts since parents have to cooperate. However, even parents with sole mother or sole father custody rarely report severe conflicts.

⁹ Similar tables based on information from all mothers and all fathers, also those who have never lived with the child's other parent, are provided in Appendix 2 (table A2.2 and table A2.3).

Table 3. Some characteristics of parents with various residential arrangements for the child, based on the reporting of mothers who have been married to or cohabiting with the child's father. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	All
Travelling time between the parents					
Walking distance	23	17	56	:	31
Less than ½ an hour, but not walking distance	47	42	42	:	46
½ - 2 ½ hours	16	20	2	:	13
More than 2 ½ hour	12	20	-	:	10
Unknown	1	1	1	:	1
Conflicts between the parents at present					
To a great extent	14	18	10	:	13
To a certain extent	22	13	17	:	20
To a small extent	30	27	32	:	31
Not at all	31	39	41	:	34
Do not know	2	3	1	:	-
Satisfaction with child's residential arrangement					
To a great extent	79	39	61	:	72
To a certain extent	16	26	28	:	18
To a small extent	2	7	6	:	4
Not at all	2	28	5	:	5
Do not know	0	-	-	:	0
Registered at the same address as the child					
Yes	98	7	61	:	82
No	2	92	39	:	18
Number of respondents	757	81	283	2	1,123

As for satisfaction with the child's residential arrangement, there is more disagreement between the parents' reporting. Mothers convey more satisfaction with mother sole custody than fathers do, while the opposite pattern applies to father sole custody. Moreover, as much as 28 percent of the mothers are not satisfied at all when the child has father sole custody. When it comes to shared residence, the vast majority of mothers as well as fathers reported satisfaction to a great extent or a certain extent. Mothers seem to be less content with a shared residential arrangement than with mother sole custody, but far more content than with father sole custody. Fathers report high levels of contentment with both shared residence and father sole custody, but less contentment with mother sole custody. It is important to remember, however, that there is not always agreement between the children's and the parents' assessment of the custody arrangement. For instance, Lidén (2007) and Haugen (2010) suggest that children with shared residence may find it strenuous with two homes, but still accept it because they believe it is fair that they spend half of their time with each parent.

As we could expect, nearly all mothers with sole custody are registered at the same address as the child, and this is so according to both partners' reporting. Likewise, the vast majority of fathers with sole custody have the same registered address as the child. As for shared residence, 61 percent of the

mothers who report such an arrangement are registered at the same address as the child. Among fathers with shared residence, 75 percent are registered at the same address as the child.

Table 4. Some characteristics of parents with various residential arrangements for the child, based on the reporting of fathers who have been married to or cohabiting with the child's mother. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	All
Travelling time between the parents					
Walking distance	21	27	51	:	31
Less than ½ an hour, but not walking distance	44	39	44	:	43
½ - 2 ½ hours	21	20	3	:	15
More than 2 ½ hour	13	15	1	:	10
Unknown	1	-	1	:	1
Conflicts between the parents at present					
To a great extent	18	12	8	:	14
To a certain extent	17	18	14	:	17
To a small extent	30	36	34	:	32
Not at all	33	30	42	:	35
Do not know	2	4	1	:	2
Satisfaction with child's residential arrangement					
To a great extent	39	85	80	:	56
To a certain extent	30	9	15	:	23
To a small extent	14	2	2	:	9
Not at all	17	3	2	:	11
Do not know	0	1	0	:	0
Registered at the same address as the child					
Yes	99	8	75	:	83
No	1	92	25	:	17
Number of respondents	629	112	350	2	1,093

Determinants of shared residence and father sole custody. Analyses based on the mothers' reporting

Bivariate associations between the child's residential arrangement and each of the independent variables are reported in table 5.¹⁰ The analyses are based on the mothers' reporting. Some of the independent variables, such as for instance "Respondent's employment and working hours" and "Respondent's self-reported main activity", may capture almost the same dimensions, but we include all of them in order to provide a detailed picture. Shared residence turns out to be more common among highly educated than less educated mothers, more common among those with long weekly working hours than those who work shorter hours or are not employed at all, more common among

¹⁰ A similar table based on information from all mothers and all fathers, also those who have never lived with the child's other parent, is provided in Appendix 2 (table A2.4).

those who look upon themselves as gainfully employed than those who characterise themselves mainly as students, disabled, home-workers or non-employed, more common among those who rarely have financial problems than those who often experience such problems, more common among those with good than bad health conditions, more common among those who have lived with the child's other parent for a long time rather than a short time, more common among those who have split up rather recently compared to a long time ago, more common among those with at least three children compared to those with fewer children, more common when the focal child is in the age group 5-9 years than when he/she is younger or older, more common when the parents divided the childcare tasks equally between themselves when they lived together compared to when the mother did most childcare, more common in Oslo and Akershus and some other regions than in Northern Norway, and more common among mothers who were born in Norway or another Western country than among those born in a non-Western country.

Father sole custody is reported by other groups of mothers than is shared residence. According to the bivariate associations in table 5, father sole custody seems to be less common when the mother is less educated rather than highly educated, more common among non-employed mothers, those with financial problems and those with health problems than among those who are employed on a full-time basis, those who rarely experience financial problems and those without health problems. Moreover, father sole custody seems to be more common when the child is at least 15 years old than when he/she is younger.

To gain a better understanding of the factors associated with shared residence and father sole custody, we ran two sets of multivariate logistic regressions, one estimating the odds of shared residence rather than mother sole custody, and one estimating the odds of father sole custody rather than mother sole custody. All estimates are reported as odds ratios (see table 6). This means that the reference group of a categorical variable is set to one, while coefficients above one indicate a positive association, and coefficients below one indicate a negative association. Since some of the independent variables in table 5 partly capture the same dimensions, we exclude some of them from the multivariate analyses. For instance, since the mothers' educational attainment is closely linked to their weekly working hours and their self-reported main activity, we exclude the two latter variables from multivariate analysis. By and large, we include the same factors in the analysis of shared residence and that of father sole custody. However, since some of the independent variables had zero observations with father sole custody in one of the categories, some categories have been collapsed in the latter analysis (see section 4 for more details).

Table 5. Children's residence based on the mothers' reporting. Mothers who have been married to or cohabiting with the child's father. Cross-tabulations with independent variables. 2012. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	Total	Number of observations	Percentage of respondents in each group
All	68	7	25	0	100	1,123	100
Respondent's age							
19-34 years	68	6	25	1	100	177	19
35-39 years	68	7	25	-	100	228	22
40-44 years	67	6	27	-	100	339	28
45 years +	68	9	23	-	100	379	31
Respondent's education							
Primary school	65	10	24	1	100	265	28
Secondary school	68	7	25	-	100	399	33
University, 1-4 years	71	5	24	-	100	375	31
University, 5 years +	54	4	41	-	100	65	5
Unknown	77	6	17	-	100	19	2
Respondent's employment and working hours							
Employed, 1-30 hours per week	75	6	19	-	100	193	17
Employed, 31-40 hours per week	68	5	27	-	100	666	59
Employed, 41 hours + per week	60	5	35	-	100	111	9
Non-employed	64	17	17	2	100	143	14
Missing	:	:	:	:	100	10	1
Respondent's self-reported main activity							
Gainfully employed	68	5	27	-	100	946	83
Student	76	11	13	-	100	56	6
Disability/retirement pension	62	19	18	-	100	50	5
Home-worker	:	:	:	:	100	7	1
Unemployed	49	22	19	10	100	30	3
Unknown	67	14	19	-	100	34	3
Financial problems last year							
Often	67	19	17	1	100	95	9
Sometimes	69	6	25	-	100	157	14
Rarely	67	8	25	-	100	157	14
Never	66	7	27	-	100	590	52
Unknown	77	1	21	1	100	124	11
Respondent's self reported health							
Excellent	67	6	27	-	100	335	29
Very good	63	8	28	0	100	305	27
Good	69	6	25	-	100	277	25
Fairly good	76	6	18	-	100	146	14
Bad	69	19	9	3	100	58	5
Unknown	:	:	:	:	100	2	0
Civil status at breakup							
Married	64	9	27	-	100	525	45
Cohabiting	71	6	23	0	100	598	55
Duration of relationship							
0-4 years	81	6	12	1	100	211	20
5-7 years	73	7	19	-	100	191	18
8-10 years	61	8	31	-	100	201	18
11 years +	62	7	30	0	100	490	42
Unknown	62	10	28	-	100	30	3

Table 5. cont.

	Mother sole custody	Father sole custody	Shared resi- dence	Other	Total	Number of observa- tions	Percentage of respon- dents in each group
Time since breakup							
0-1 years	54	10	35	1	100	125	12
2-4 years	66	5	29	0	100	281	26
5-7 years	64	6	30	-	100	258	23
8-10 years	70	7	22	-	100	234	20
11 years +	82	8	10	-	100	213	18
Unknown	:	:	:	:	100	12	1
Number of children in relationship							
1 child	70	8	22	0	100	693	62
2 children	64	7	28	0	100	383	34
3 children +	56	2	42	-	100	47	4
Age of focal child							
0-4 years	74	5	17	3	100	81	8
5-9 years	61	6	33	-	100	262	25
10-14 years	68	7	25	-	100	456	40
15 years +	71	10	19	-	100	324	27
Sex of focal child							
Boy	66	9	26	-	100	570	51
Girl	69	6	24	1	100	553	49
Division of childcare when parents lived together							
The mother most	72	6	22	0	100	803	72
Shared equally between the parents	59	8	33	-	100	307	27
The father most	:	:	:	:	100	11	1
Unknown	:	:	:	:	100	2	0
Number of previous relationships with children							
One							
Two or more							
Respondent's place of living, region							
Oslo and Akershus	63	6	30	1	100	233	21
Eastern Norway except Oslo and Akershus	69	9	22	0	100	318	28
Agder and Rogaland	69	5	26	-	100	172	15
Western Norway	66	9	25	-	100	175	16
Trøndelag	64	8	27	-	100	97	8
Northern Norway	75	6	19	-	100	128	12
Respondent's current civil status							
Married	71	7	22	-	100	147	13
Cohabiting	68	5	27	-	100	213	19
Single	67	8	25	0	100	763	68
Respondent's country of birth							
Norway	67	7	26	0	100	1,030	91
Western countries	72	-	24	4	100	36	4
Non-Western countries	72	14	13	-	100	57	6

In line with expectation, the multivariate analysis of the determinants of shared residence demonstrates that this arrangement is more likely among highly educated than less educated mothers, more common when the mother had lived with the child's father for a long rather than a short time, more likely when

the parents had shared childcare tasks equally between themselves when they were married/cohabiting than when the mother did most childcare, less likely when the parents broke up several years ago (11 years or more) rather than more recently, less likely when the parents had two children together rather than one, and more likely when the focal child was in the age group 5-9 years rather than when he/she was younger (table 6). However, the mother's health condition and whether her household experienced financial problems last year have no effect in the multivariate analyses. Since these factors may be strongly correlated with the mother's educational attainment, we ran a model in which the mother's education was excluded (results not shown). However, this hardly changed the effects of the mother's health and whether she had financial problems or not.

Since highly educated mothers tend to work longer hours in the labour market than the less educated, we also ran a model in which we added the mother's employment and weekly working hours in order to explore whether the effect of mother's education was attenuated (results not shown). This was hardly the case. Irrespective of the number of weekly working hours, the most highly educated mothers (university five years or more) are more prone to have shared residence than the less educated. As for the mother's weekly working hours, there is a strong positive effect of working long hours in the labour market (41 hours or more), compared to being non-employed or to working only 1-30 hours per week. However, the effect is not statistically significant at conventional levels (only at 11%-level). There are few mothers in the analysis sample with long working hours (see table 5, last column), which makes it hard to reach statistical significance.

In accordance with the cross-tabulations in table 5, the multivariate logistic regression analysis of father sole custody rather than mother sole custody, demonstrates that father sole custody is partly associated with other factors than shared residence (see table 6, last column). Sole father custody is more likely when the mother has financial problems compared to when she has no such problems, and more likely when her health is bad rather than good. Moreover, mothers who were cohabiting with the child's father less often report father sole custody than those who were married to him, and father sole custody is less likely when the focal child is a girl rather than a boy. The latter effect is only marginally significant, however (10%-level). When it comes to the parents' division of childcare tasks before breakup, there are similar patterns for father sole custody and for shared residence. Father sole custody is more common when the parents shared childcare activities equally between themselves before they split up, than when the mother took the main responsibility for such tasks.

Table 6. Logistic regressions of shared residence rather than mother sole custody, and of father sole custody rather than mother sole custody. Results based on the mothers' reporting. Mothers who have been married to or cohabiting with the child's father. Odds ratios

	Shared residence vs mother sole custody (N=1,030)	Father sole custody vs mother sole custody (N=810)
Mother's age (ref: 19-34 years)		
35-39 years	0.67	0.75
40-44 years	0.74	0.60
45 years +	0.64	0.69
Mother's education (ref: primary school)		
Secondary school	1.02	0.66
University, 1-4 years	0.82	0.48
University, 5 years +	1.94*	0.40
Unknown	0.65	-
Financial problems last year (ref: never/ rarely)		
Often	0.67	1.44**
Sometimes	0.98	0.77
Unknown	0.59	0.05**
Mother's self reported health (ref: excellent, very good, good)		
Fairly good	0.62	0.53**
Bad	0.39	2.71**
Civil status at breakup (ref: married)		
Cohabiting	0.93	0.47**
Duration of relationship (ref: 0-4 years)		
5-7 years	1.81	1.56
8-10 years	3.69*	1.56
11 years +	3.11	1.01
Unknown	3.85	0.55
Division of childcare when the parents lived together (ref: the mother most)		
Equal share/the father most	1.90***	2.23**
Time since breakup (ref: 0-4 years)		
5-7 years	0.85*	0.49
8-10 years	0.67	0.65
11 years +	0.30***	0.56
Number of children in relationship (ref: one child)		
Two children	0.84(*)	0.96
Three children +	1.55	0.37
Age of focal child (ref: 0-4 years)		
5-9 years	2.48*	1.71
10-14 years	2.05	3.06
15 years	1.74	3.47
Sex of focal child (ref: boy)		
Girl	0.84	0.61(*)
Mother's current civil status (ref: married)		
Cohabiting	1.04	0.69
Single	0.88	1.24
Mother's country of birth (ref: Norway)		
Western countries	0.88	0.91 ¹
Non-western countries	0.55	

***p≤0.001, **p≤0.01, *p≤0.05, (*)p ≤0.10

¹ Due to a small number of respondents born outside Norway in the group with father sole custody, all mothers born outside Norway are grouped together in the analysis of father sole custody vs mother sole custody.

The association between the mother's education and father sole custody that is seen in the bivariate analysis in table 5 is not significant in the logistics regression. In an additional analysis (not shown) we explored whether the effect of the mother's education was statistically significant if the variables

“Financial problems last year” and “Mother’s self-reported health” were removed from the model, since these variables may be correlated with the mother’s education. However, removing these variables hardly changed the effect of the mother’s education. Even a model with her education as the only independent variable did not produce a statistically significant effect of the mother’s education. The coefficient for having long university education was strong and negative, but there are few observations in this category and also a large standard error.

Determinants of shared residence and father sole custody. Analyses based on the fathers’ reporting

Table 7 shows bivariate associations between the child’s residential arrangement and a wide range of independent variables, based on the fathers’ reporting.¹¹ The results are not directly comparable with those based on the mothers’ reporting (table 5), since some of the independent variables such as education, health, financial problems etc. in table 7 refer to the father’s rather than to the mother’s situation.

According to the fathers, shared residence is more common when the father is highly educated rather than less educated, more common among those who work at least full time in the labour market than those who work less or are not employed at all, more common among those with no financial problems than among those who find it difficult to make ends meet, more common among those with good rather than bad health conditions, more common among those who have been married to or cohabiting with the child’s mother for many years rather than for a shorter period (less than five years), more common among those who split up fairly recently rather than many years ago, more common among those who have at least three children with the child’s mother rather than one or two children, more common among those who shared childcare tasks equally with the child’s mother when they lived together compared to those who were less or more involved in childcare tasks than the mother, more common if the father was single or cohabiting rather than married at the time of the survey, and more common if he was born in Norway or another Western country rather than in a non-Western country.

Father sole custody is a minority practice in most groups, but still seems to be somewhat more common in some groups than others. According to the bivariate associations in table 7, such an arrangement is more common if the father has no financial problems rather than when he finds it difficult to make ends meet, more common when the child is a teenager rather than very young, more common if the father did the larger part of childcare activities when he was married to or cohabiting with the child’s mother rather

¹¹ A similar table based on information from all mothers and all fathers, also those who have never lived with the child’s other parent, is provided in Appendix 2 (table A2.6).

than when he was less involved, and more common if the father was born in Norway or another Western country rather than in a non-Western country.

Table 7. Children's residence based on the father's reporting. Fathers who have been married to or cohabiting with the child's mother. Cross-tabulations with independent variables. 2012. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	Total	Number of observations	Percentage of respondents in each group
All	58	10	31	0	100	1,903	100
Respondent's age							
19-34 years	55	6	39	-	100	119	13
35-39 years	62	13	24	-	100	168	17
40-44 years	56	8	36	0	100	305	27
45 years +	59	12	29	0	100	501	43
Respondent's education							
Primary school	66	9	24	1	100	314	33
Secondary school	55	11	33	-	100	461	40
University, 1-4 years	54	10	37	-	100	217	18
University, 5 years +	43	11	46	-	100	78	6
Unknown	:	:	:	:	100	23	2
Respondent's employment and working hours							
Employed, 1-30 hours per week	70	8	22	-	100	56	5
Employed, 31-40 hours per week	53	12	35	-	100	647	59
Employed, 41 hours + per week	60	8	32	1	100	258	23
Non-employed	78	6	16	-	100	117	11
Missing	:	:	:	:	100	15	1
Respondent's self-reported main activity							
Gainfully employed	56	11	33	0	100	956	87
Student	:	:	:	:	100	18	2
Disability/retirement pension	77	9	14	-	100	62	6
Home-worker	:	:	:	:	100	1	0
Unemployed	100	-	-	-	100	32	3
Unknown	:	:	:	:	100	24	2
Financial problems last year							
Often	81	3	16	-	100	66	6
Sometimes	70	7	23	-	100	124	12
Rarely	57	11	31	1	100	163	15
Never	56	10	34	0	100	709	64
Unknown	20	29	51	-	100	31	3
Respondent's self reported health							
Excellent	55	10	35	-	100	288	25
Very good	54	10	35	0	100	367	34
Good	62	9	29	-	100	247	23
Fairly good	64	9	26	1	100	131	12
Bad	75	15	10	-	100	52	5
Unknown	:	:	:	:	100	8	1
Civil status at breakup							
Married	56	13	31	0	100	496	44
Cohabiting	60	8	32	0	100	597	56

Table 7. cont.

	Mother sole custody	Father sole custody	Shared resi- dence	Other	Total	Number of obser- vations	Percentage of respondents in each group
Duration of relationship							
0-4 years	69	8	23	-	100	209	21
5-7 years	58	10	32	1	100	224	21
8-10 years	58	11	31	-	100	192	17
11 years +	52	11	37	0	100	493	38
Unknown	67	10	23	-	100	29	3
Time since breakup							
0-1 years	45	11	44	-	100	114	11
2-4 years	54	9	37	-	100	293	27
5-7 years	58	9	33	-	100	271	25
8-10 years	63	8	29	1	100	198	18
11 years +	69	14	16	1	100	205	18
Unknown	:	:	:	:	100	12	1
Number of children in relationship							
1 child	66	9	30	0	100	688	64
2 children	55	12	33	-	100	350	32
3 children +	51	6	43	-	100	55	5
Age of focal child							
0-4 years	63	5	33	-	100	74	8
5-9 years	53	9	38	-	100	288	27
10-14 years	59	10	31	-	100	424	38
15 years +	62	13	24	1	100	307	27
Sex of focal child							
Boy	56	10	34	-	100	559	51
Girl	61	10	29	0	100	534	49
Division of childcare when parents lived together							
The mother most	68	7	25	1	100	383	35
Shared equally between the parents	55	9	36	-	100	595	54
The father most	44	28	28	-	100	114	11
Unknown	:	:	:	:	100	1	0
Respondent's place of living, region							
Oslo and Akershus	57	9	34	-	100	221	20
Eastern Norway except Oslo and Akershus	59		31	-	100	296	27
Agder and Rogaland	60	7	33	1	100	186	17
Western Norway	54	13	32	1	100	147	14
Trøndelag	58	8	34	-	100	93	8
Northern Norway	62	14	23	-	100	150	14
Respondent's current civil status							
Married	67	12	21	1	100	200	18
Cohabiting	57	10	32	1	100	221	20
Single	56	10	34	-	100	672	62
Respondent's country of birth							
Norway	57	10	33	0	100	983	90
Western countries	57	11	32	-	100	53	5
Non-Western countries	82	4	14	-	100	57	6

Table 8. Logistic regressions of shared residence rather than mother sole custody, and of father sole custody rather than mother sole custody. Results are based on the fathers' reporting. Fathers who have been married to or cohabiting with the child's mother. Odds ratios

	Shared residence vs mother sole custody (N=959)	Father sole custody vs mother sole custody (N=710)
Father's age (ref: 19-34 years)		
35-39 years	0.39*	1.50
40-44 years	0.68	0.82
45 years +	0.46(*)	1.02
Father's education (ref: primary school)		
Secondary school	1.50	1.34
University, 1-4 years	1.82	1.24
University, 5 years +	2.40*	1.41
Unknown	0.88	-
Financial problems last year (ref: never/ rarely)		
Often	0.33***	0.25**
Sometimes	0.55**	0.50*
Unknown	8.27***	12.03***
Father's self reported health (ref: excellent, very good, good)		
Fairly good	1.07	0.99
Bad	0.47	1.28
Civil status at breakup (ref: married)		
Cohabiting	1.06	0.50**
Duration of relationship (ref: 0-4 years)		
5-7 years	1.86(*)	1.30
8-10 years	1.99*	1.16
11 years +	2.28*	0.95
Unknown	0.33(*)	1.09
Division of childcare when the parents lived together (ref: the mother most)		
Equal share/the father most	1.89***	2.07**
Time since breakup (ref: 0-4 years)		
5-7 years	0.75	0.52
8-10 years	0.77	0.50
11 years +	0.46*	0.81
Number of children in relationship (ref: one child)		
Two children	0.83	1.58
Three children +	1.00	0.82
Age of focal child (ref: 0-4 years)		
5-9 years	1.34	1.65
10-14 years	1.26	1.99
15 years	0.95	2.46
Sex of focal child (ref: boy)		
Girl	0.73*	0.80
Father's current civil status (ref: married)		
Cohabiting	1.36	0.99
Single	1.41	0.89
Father's country of birth (ref: Norway)		
Western countries	1.19	1.60(*)
Non-Western countries	0.39*	0.27*

***p≤0.001, **p≤0.01, *p≤0.05, (*)p ≤0.10

The multivariate analysis of the determinants of shared residence rather than mother sole custody (table 8) by and large corroborates the results from the bivariate cross-tabulations in table 7. However, some of the bivariate associations disappear in the multivariate framework. According to our multivariate model, shared residence is less likely in the age groups 35-39 years and 45 years + than among fathers below 35 years of age, more likely among highly than less educated fathers, more likely among those who rarely experience financial problems than those who sometimes or often experience such problems, more likely among those who lived with the child's mother for a long rather than a short time, more likely when the parents had shared childcare tasks equally between themselves when they were married/cohabiting than when the mother did most childcare, less likely if the parents broke up a long time ago compared to more recently, less likely if the child is a girl rather than a boy and less likely if the father was born in a non-Western country rather than in Norway or another Western country. The strong positive effect of the "unknown" category on the variable capturing the respondent's financial problems, suggests that there may be many fathers with plenty of resources in this group. However, they constitute only 3 percent of all the fathers in the analysis sample (see table 7, last column). There is no significant effect of the father's health in the multivariate analysis, although the estimate for "bad health" is strong and negative. However, since very few fathers have bad health (see table 7), the estimate for this category is very imprecise. The association between number of children and shared residence that is observed in the bivariate analysis is not observed in the multivariate model. An additional analysis (not shown) where the number of children is included as the only independent variable, reveals that the association between the number of children and practicing shared residence is not statistically significant. There are few fathers with at least three children in the analysis sample (see table 7), and hence, the estimated effect is imprecise.

As for father sole custody, the multivariate analysis demonstrates that fathers who sometimes or often experience financial problems are less likely to have such an arrangement than those who never or rarely have such problems (table 8, last column). Again, the strong positive estimate for the "unknown" category suggests that the fathers in this group have many socioeconomic resources. There is no association between the father's educational attainment and father sole custody, however, and this is the case also when we exclude the variable on financial problems from the analysis (results not shown). However, fathers who were cohabiting with the child's mother are less prone to have sole custody for the child than those who were formally married to her. Moreover, fathers who shared childcare tasks equally with the child's mother when the parents lived together, or took the main responsibility for such tasks, are more likely to have sole custody than those who did less than half of the childcare. It is important to notice that this is the case even though the father's education is

included in the model. We may therefore rule out the possibility that the strong positive effect of the division of childcare tasks prior to split up reflects that highly educated parents shared childcare tasks more equally than the less educated. Finally, the analysis demonstrates that fathers born in a Western country outside Norway may be more likely to have father sole custody than fathers born in Norway (significant at 10%-level), while those born in a non-Western country are less likely to practice such an arrangement than those born in Norway.

6. Summary and discussion

Like in many other countries, shared residence for children has increased considerably in recent years among parents living apart in Norway, while mother sole custody is less common than previously, and father sole custody is still practiced by a minority. Whereas shared residence has traditionally been practiced by a select group of parents with a high economic standing and few conflicts, some studies from other countries suggest that today's shared-residence parents may be a more heterogeneous group. In the current paper we explore the factors associated with shared residence and father sole custody in present day's Norway based on a survey of parents living apart from 2012. The survey provides information on determinants that have not been included in previous analyses in this field in Norway, such as the parents' state of health, the way they divided childcare tasks between themselves before split-up, and whether they have problems in making ends meet. These factors are incorporated in the analyses in the present paper in addition to factors that have been included in previous analyses based on the 2002- and 2004-surveys on parents living apart. Including these new factors considerably improves our understanding of the characteristics of parents who opt for shared residence or father sole custody. We conduct separate analyses on the basis of the mothers' and the fathers' reporting.

In 2012, 25 percent of parents living apart had shared residence for their child in Norway, compared to 10 percent in 2004. Mother sole custody declined from 82 percent in 2004 to 66 percent in 2012, while the percentage with father sole custody was 8 percent in both years. Mothers report less shared residence and father sole custody than fathers do, but both parents reported more shared residence and less mother sole custody in 2012 than in 2004.

As could be expected, the vast majority of parents with shared residence live quite close to each other. They also have less severe conflicts compared to when either the mother or the father has sole custody, but a significant minority also report that the parents have conflicts to a great extent or to a certain extent. Most shared-residence parents report a high level of satisfaction with the child's residential

arrangement. However, mothers are more content with mother sole custody than fathers and less satisfied with father sole custody.

We ran logistic regressions of shared residence rather than mother sole custody, and of father sole custody rather than mother sole custody. According to the *mothers' reporting*, shared residence is particularly likely when she is highly educated, when she had lived together with the child's father for a long time, when the parents shared childcare activities equally between themselves before they split up, when the parents have split up rather recently, and when the child is in the age group 5-9 years. Father sole custody is most likely when the mother often experiences financial problems, has health limitations, was married to the child's father rather than cohabiting with him, when the parents shared childcare tasks equally between themselves before they broke up, and when the child is a boy rather than a girl.

According to the *fathers' reporting*, shared residence is most likely when the father is below 35 years old, when he is highly educated, when he seldom has financial problems, when he has lived with the child's mother for a long time, when he performed at least half of the childcare tasks before the parents split up, when the parents split up rather recently, when the child is a boy rather than a girl, and when the father was born in Norway or another Western country rather than in a non-Western country. Father sole custody is particularly likely when the father seldom experiences financial problems, when he has been married to the child's mother rather than cohabiting, when he was actively involved in childcare tasks prior the split-up, and when he was born in Norway or another Western country rather than in a non-Western country.

All things considered, it seems safe to conclude that although shared residence is now practiced by far more parents than previously in Norway, such an arrangement is still most common among parents with a high socioeconomic status, those who have lived together for a long rather than a short time, and those who shared childcare tasks equally between themselves before breakup. The positive effect of the parents' education suggests that highly educated parents may be more eager to practice gender-equal parenting than the less educated, and this is so even when the division of childcare prior to split up is controlled for. It is also worth noticing that gender-equal practices prior to split-up strongly impact parents' choice of residential arrangement for children when they separate irrespective of the parents' educational attainment and whether they face financial problems or not. There are also some diverging results in the models based on the fathers' and the mothers' reporting. The child is less likely to have shared residence if she is a girl rather than a boy according to both models, but the

estimated coefficient for the child's sex is statistically significant in the model based on the fathers' reporting only. Differences between the models based on the two parents' reporting may be due to different reporting on the dependent variable as well as on the independent variables. It is also important to keep in mind that the two models are not identical in that some variables, such as education, financial problems, health, present civil status and country of birth apply to the respondent and not to the partner. Moreover, the analysis samples include all mothers and all fathers, irrespective of whether the child's other parent participated in the survey or not.

In an additional analysis based on the mothers' reporting, working long hours in the labour market turns out to have a strong positive effect on the likelihood of practicing shared residence. Although the effect is not statistically significant at conventional levels, it may suggest that shared residence is convenient for mothers who want to spend much time on paid work. This would be consistent with results from a qualitative study of parents living apart in the Netherlands (Bakker and Karsten 2013). However, shared-residence mothers may also work long hours for economical reasons since they are not entitled to some of the benefits that mothers with sole custody may receive in Norway.

As for father sole custody, our analyses suggest that such an arrangement is most common when the mother has health limitations or financial problems and when the father has no problems with the household finances. Juby et al. (2005) report similar results in an analysis of Canadian parents living apart. Hence, father sole custody may be the best solution if the mother is not able to take care of the child at least half of the time. However, the strong positive effect of gender-equal childcare practices prior to split-up indicates that, irrespective of the parents' state of health and economic resources, involved fathering practices when parents live together promote involved fathering, and even sole father custody, following break-up. The association between formal marriage and father sole custody is not easily explainable, but may suggest that married fathers have stronger family commitments than cohabiting fathers. In agreement with prior research, both mothers' and fathers' reporting may indicate that sole father custody is more common for older than for younger children, and the mothers' reporting suggests that such an arrangement may be more likely for boys than for girls. However, the effect of the child's age is not statistically significant in either model, and the effect of the child's sex in the mother's reporting is only marginally significant (10%-level).

The current paper offers detailed analyses of the correlates of shared residence and father sole custody among parents living apart in present day's Norway. However, we have not discussed whether these arrangements are now practiced by other groups of parents than previously. This will be examined in

future analyses based on surveys from 2002 and 2004 in addition to the 2012-survey. In order to explore possible changes in the effects of the different factors, the same set of independent variables need to be included from all surveys. Hence, information on the parents' health, their division of childcare prior to split-up and whether they experience financial problems or not must be omitted, since such information was not captured in the 2002- and 2004-surveys. Preliminary analyses based on the fathers' reporting suggest that shared residence has become more common in most groups of fathers, but that it increased more among previously cohabiting fathers than previously married ones (Kitterød et al. 2014).

Future analyses should also include information on the respondent's income in addition to the measure capturing subjective financial problems that is utilised in the present paper, and more work should be done to disentangle which respondents are assigned to the "unknown"-category on the financial-problems variable. A natural next step would also be to conduct analyses on couples of ex-partners, in order to examine the effect of the partners' relative education, income, state of health etc. Although this would imply a reduced analysis sample compared to the ones utilised in the present paper, previous analysis in Norway as well as other countries suggest that the relationship between the partners' resources in terms of education and income, may affect the type of residential arrangement they agree upon for the children when they have separate homes (for instance Kitterød and Lyngstad 2012, Sodermans et al. 2013).

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Appendix 1: Comparing two definitions of shared residence

In the contract between Statistics Norway and The Ministry of Children, Equality and Social Inclusion, who supports the work presented in the current paper, it was stated that an alternative definition of shared residence should be explored, for the sake of illustration. As we have explained in section 5, the definition of shared residence varies across countries and across surveys. In the current paper, we use a juridical definition of shared residence, in accordance with the Norwegian Children Act. In other countries, shared residence is often described as an arrangement where the child spends a certain amount of time with each parent, for instance at least one third of the time or half of the time (Fehlberg et al. 2011). In this appendix we compare the proportions with shared residence in Norway according to the juridical definition used in the present paper, with a definition saying that children have shared residence if they spend at least one third of the time with each parent. We use the parents' reporting on number of contact days between the "non-resident parent" and the child in an ordinary month without any holidays, and we construct a dummy variable telling whether the non-resident parent usually spends at least ten days per month with the child or not. In the survey, parents who were not registered at the same address as the child were asked about their own visitation with the child, while those who had the same address as the child, were asked about the other parent's visitation. In this appendix, we therefore distinguish between mothers and fathers who were registered at the same address as the child, and those who were not registered at the same address as the child, in order not to mix parents who reported on their own and their partner's visitation with the child in the same category. Hence, we look at four groups of parents, rather than two, as elsewhere in the paper where all mothers are grouped together and all fathers are grouped together, irrespective of the whether they are registered at the same address as the child or not.

Table A1.1 shows the percentage with shared residence for the child according to the juridical definition used elsewhere in the paper, in each of the four groups of parents. Table A1.2 shows the percentage of each group who report that they themselves /the other parent spends at last ten days with the child on a monthly basis. As could be expected, the percentage with shared residence is considerably higher according to the latter than to the former definition, and this is true for all groups of parents. For instance, 16 percent of the mothers who had the same registered address as the child, reported that they had shared residence (table A1.1), while 34 percent reported that the father ("the non-residential father") spent at least ten days per month with the child (table A1.2). Looking at fathers who were not registered at the same address as the child, we see that 26 percent reported that

the child had shared residence (table A1.1), while 52 percent reported that they spent at least ten days per month with the child (table A1.2).

Table A1.1. Children's residence when parents live apart, based on the reporting of different groups of parents. Percent.

	Mother sole custody	Father sole custody	Shared residence	Other	Missing	Number of observations
Mothers, registered living with the child	83	0	16	0	0	1,085
Mothers, not registered living with the child	6	41	52	-	-	214
Fathers, not registered living with the child	73	1	26	1	-	1,045
Fathers, registered living with the child	2	55	42	-	-	208

Table A1.2. Number of monthly contact days between children and the non-resident parent, based on the reporting of different groups of parents. Percent

	At least 10 days per month with non-resident parent	Less than 10 days per month with non-resident parent	Missing	Number of observations
Mothers, registered living with the child	34	54	2	1,085
Mothers, not registered living with the child	75	23	3	214
Fathers, not registered living with the child	52	47	2	1,045
Fathers, registered living with the child	59	39	2	208

For each of the four groups of parents, we have also cross-tabulated the two definitions of shared residence. Table A1.3 shows the child's residential arrangement depending on whether the "non-resident parent" spent at least ten days per month with the child or not, and table A1.4 shows whether the "non-resident parent" spent at least ten days with the child per month or not, depending on the child's residential arrangement.

As for mothers who are registered living with the child ("resident mothers"), we see that almost all of those who reported that the father spent less than ten days per month with the child, had mother sole custody (99 percent). Of those who reported that the father spent at least ten days per month with the child, 44 percent said that they had shared residence for the child, while 56 percent said that they had mother sole custody. Hence, according to the mothers' answers, many fathers have extended visitation arrangements with children even though they do not have shared residence according to a juridical definition. As for fathers who are not registered at the same address as the child ("non-resident fathers"), the vast majority (97 percent) of those who saw the child less than ten days per month reported that the mother had sole custody. Of those who saw the child at least ten days per month, 47

percent reported that they had shared residence for the child, and 51 percent that the mother had sole custody. In the small group of mothers who were not registered at the same address as the child ("non-resident mothers") and the small group of fathers who were registered at the same address as the child ("resident fathers"), almost everybody reported that the father had sole custody if the mother spent less than ten days per month with the child. If she spent at least ten days per month with the child, about 70 percent in both groups reported that they had shared residence for the child and about 25 percent reported that the father had sole custody.

Table A1.3. Children's residence when parents live apart, by number of monthly contact days between children and the non-resident parent, based on the reporting of different groups of parents. Percent.

	Mother sole custody	Father sole custody	Shared residence	Other	Missing	Number of observations
Mothers, registered living with the child						
At least 10 days per month with non-resident parent	56	1	44	-	-	378
Less than 10 days per month with non-resident parent	99	-	1	-	-	687
Mothers, not registered living with the child						
At least 10 days per month with non-resident parent	7	26	67	-	-	160
Less than 10 days per month with non-resident parent	-	98	2	-	-	47
Fathers, not registered living with the child						
At least 10 days per month with non-resident parent	51	2	47	0	-	548
Less than 10 days per month with non-resident parent	97	-	2	1	-	481
Fathers, registered living with the child						
At least 10 days per month with non-resident parent	1	27	72	-	-	124
Less than 10 days per month with non-resident parent	1	99	-	-	-	80

Table A1.4 tells very much the same story as table A1.3, but in a different way. For instance, among mothers who were registered at the same address as the child, 76 per cent of those who had sole mother custody reported that the father spent less than ten days with the child, while 23 percent said that he spent at least ten days per month with the child. Of those who had shared residence, 95 percent reported that the father spent at least ten days per month with the child. Among fathers who were not registered at the same address as the child, 93 percent of those with shared custody spent at least ten days per month with the child, while this was the case for only 37 percent of those who reported that the mother had sole custody.

Based on appendix tables A1.3 and A1.4 it seems safe to conclude that when children have shared residence, both parents usually spend at least ten days per month with them. On the other hand, a considerable proportion of "non-resident parents" spend at least ten days per month with the child, but do not have a shared residential arrangement according to a juridical definition. When the "non-resident parent" spends less than ten days per month with the child, very few parents report that the child has shared residence.

Table A1.4. Number of monthly contact days between children and the non-resident parent, by children's residence, based on the reporting of different groups of parents. Percent

	At least 10 days per month with non-resident parent	Less than 10 days per month with non-resident parent	Missing	Number of observations
Mothers, registered living with the child				
Mother sole custody	23	76	1	904
Father sole custody	:	-	:	5
Shared residence	95	3	2	173
Other	:	:	:	2
Mothers, not registered living with the child				
Mother sole custody	:	:	:	13
Father sole custody	47	53	-	86
Shared residence	95	1	4	115
Other	-	-	-	-
Fathers, not registered living with the child				
Mother sole custody	37	62	1	751
Father sole custody	:	:	:	10
Shared residence	94	3	2	278
Other	:	:	:	6
Fathers, registered living with the child				
Mother sole custody	:	:	:	5
Father sole custody	29	70	1	113
Shared residence	100	-	-	90
Other	-	-	-	-

Appendix 2: Additional tables

Table A2.1. Children's residence, based on the mothers' and the fathers' reporting. All parents irrespective of whether the partner lives in Norway or not. 2012. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	Missing	Total	Number of observations	Percentage of respondents in each group
Mothers								
All	72	7	21	0	0	100	1,333	100
Ex-partners lives in Norway	71	7	22	0	0	100	1,299	87
Ex-partner does not live in Norway	97	3	-	-	-	100	34	3
Fathers								
All	61	10	29	1	-	100	1,257	100
Ex-partners lives in Norway	61	10	29	1	-	100	1,253	100
Ex-partner does not live in Norway	:	:	:	:	:	100	4	0

Table A2.2. Some characteristics of parents with various residential arrangements for the child, based on the mothers' reporting. All mothers irrespective of whether they have lived together with the child's fathers or not. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	All
Travelling time between the parents					
Walking distance	21	16	56	:	28
Less than ½ an hour, but not walking distance	47	41	41	..	45
½ - 2 ½ hours	18	23	2	:	15
More than 2 ½ hour	14	20	-	:	11
Unknown	1	1	1	:	1
Conflicts between the parents at present					
To a great extent	15	19	9	:	14
To a certain extent	21	13	17	:	20
To a small extent	29	27	32	:	29
Not at all	32	38	41	:	34
Do not know	3	3	1	:	3
Satisfaction with child's residential arrangement					
To a great extent	79	37	62	:	72
To a certain extent	16	25	27	:	19
To a small extent	2	9	6	:	4
Not at all	2	29	5	:	5
Do not know	1	-	-	:	0
Registered at the same address as the child					
Yes	99	6	61	:	84
No	1	96	39	:	16
Number of respondents	917	91	288	2	1,298

Table A2.3. Some characteristics of parents with various living arrangements for the child, based on the fathers' reporting. All fathers irrespective of whether they have lived together with the child's mother or not. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	All
Travelling time between the parents					
Walking distance	19	26	49	:	28
Less than ½ an hour, but not walking distance	45	37	45	:	44
½ - 2 ½ hours	21	24	4	:	16
More than 2 ½ hour	14	14	1	:	10
Unknown	1	-	1	:	1
Conflicts between the parents at present					
To a great extent	20	14	8	:	16
To a certain extent	17	18	14	:	16
To a small extent	29	35	35	:	31
Not at all	33	28	42	:	35
Do not know	2	5	2	:	2
Satisfaction with child's residential arrangement					
To a great extent	38	84	79	:	54
To a certain extent	29	10	16	:	23
To a small extent	14	3	2	:	10
Not at all	18	2	2	:	13
Do not know	0	1	1	:	1
Registered at the same address as the child					
Yes	1	93	24	:	16
No	99	7	77	:	84
Number of respondents	756	123	368	6	1,253

Table A2.4. Children's residence based on the mothers' reporting. All mothers irrespective of whether they have lived together with the child's father or not. Cross-tabulations with independent variables 2012. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	Total	Number of observations	Percentage of respondents in each group
All	71	7	22	0	100	1,298	100
Respondent's age							
19-34 years	75	6	18	1	100	253	23
35-39 years	71	7	22	-	100	259	21
40-44 years	69	6	25	-	100	376	27
45 years +	70	9	22	-	100	410	29
Respondent's education							
Primary school	70	10	19	1	100	327	30
Secondary school	71	7	22	-	100	446	32
University, 1-4 years	74	5	21	-	100	429	30
University, 5 years +	61	4	36	-	100	75	6
Unknown	80	5	15	-	100	21	2
Respondent's employment and working hours							
Employed, 1-30 hours per week	78	6	16	-	100	233	18
Employed, 31-40 hours per week	70	5	24	-	100	739	56
Employed, 41 hours + per week	63	5	32	-	100	121	9
Non-employed	71	14	14	1	100	190	16
Missing	68	13	19	-	100	15	1
Respondent's self-reported main activity							
Gainfully employed	71	5	24	-	100	1,055	79
Student	84	7	8	-	100	82	7
Disability/retirement pension	66	19	16	-	100	58	5
Home-worker	:	:	:	:	100	13	1
Unemployed	56	23	14	7	100	42	3
Unknown	73	12	15	-	100	48	4
Financial problems last year							
Often	68	17	14	1	100	114	9
Sometimes	74	6	20	-	100	188	15
Rarely	72	7	21	-	100	183	14
Never	69	6	24	-	100	672	51
Unknown	78	1	19	1	100	141	11
Respondent's self reported health							
Excellent	70	5	24	-	100	376	28
Very good	68	7	24	0	100	356	27
Good	72	5	23	-	100	316	24
Fairly good	77	8	15	-	100	176	14
Bad	72	16	9	2	100	70	6
Unknown	44	20	36	-	100	4	0
Civil status at breakup							
Married	64	9	27	-	100	525	39
Cohabiting	71	6	23	0	100	598	46
Single	93	4	3	-	100	153	13
Unknown	85	11	5	-	100	22	2

Table A2.4. cont.

	Mother sole custody	Father sole custody	Shared residence	Other	Total	Number of observations	Percentage of respondents in each group
Duration of relationship							
0-4 years	86	5	8	0	100	364	30
5-7 years	73	7	19	-	100	191	15
8-10 years	61	8	31	-	100	201	15
11 years +	61	7	30	0	100	490	36
Unknown	71	11	18	-	100	52	4
Time since breakup							
0-1 years	59	9	31	1	100	145	12
2-4 years	70	5	25	0	100	321	25
5-7 years	66	6	28	-	100	278	21
8-10 years	73	7	20	-	100	261	19
11 years +	84	8	8	-	100	280	21
Unknown	:	:	:	:	100	13	1
Number of children in relationship							
1 child	74	7	18	0	100	841	65
2 children	66	7	27	0	100	406	31
3 children +	60	2	38	-	100	51	4
Age of focal child							
0-4 years	82	4	12	2	100	132	12
5-9 years	66	5	29	-	100	303	24
10-14 years	70	7	23	-	100	506	38
15 years +	73	10	17	-	100	357	26
Sex of focal child							
Boy	69	8	22	-	100	656	50
Girl	73	5	21	0	100	642	50
Division of childcare when parents lived together							
The mother most	72	6	21	0	100	817	62
Shared equally between the parents	60	8	32	-	100	314	24
The father most	:	:	:	:	100	12	1
Single (have never lived with the other parent)	93	4	3	-	100	153	13
Unknown	:	:	:	:	100	2	0
Respondent's place of living, region							
Oslo and Akershus	66	7	27	1	100	263	20
Eastern Norway except Oslo and Akershus	71	8	20	0	100	354	27
Agder and Rogaland	75	5	21	-	100	213	17
Western Norway	70	8	21	-	100	207	16
Trøndelag	67	8	24	-	100	106	8
Northern Norway	79	5	17	-	100	155	12
Respondent's current civil status							
Married	76	7	18	-	100	175	13
Cohabiting	69	5	25	-	100	236	19
Single	71	7	21	0	100	887	68
Respondent's country of birth							
Norway	71	7	23	0	100	1,183	90
Western countries	77	-	20	3	100	44	4
Non-Western countries	76	13	11	-	100	71	6

Table A2.5. Logistic regressions of shared residence rather than mother sole custody, and of father sole custody rather than mother sole custody. Results based on the mothers' reporting. All mothers irrespective of whether they have lived together with the child's father or not. Odds ratios

	Shared residence vs mother sole custody (N=1,175)	Father sole custody vs mother sole custody (N=956)
Mother's age (ref: 19-34 years)		
35-39 years	0.73	0.82
40-44 years	0.76	0.56
45 years +	0.72	0.67
Mother's education (ref: primary school)		
Secondary school	1.01	0.60
University, 1-4 years	0.83	0.50
University, 5 years +	1.91*	0.44
Unknown	0.73	-
Financial problems last year (ref: never/rarely)		
Often	0.62	2.09***
Sometimes	0.91	0.83
Unknown	0.67	0.06**
Mother's self reported health (ref: excellent, very good, good)		
Fairly good	0.62	0.81
Bad	0.49	2.02*
Civil status at breakup (ref: married)		
Cohabiting	0.92*	0.44
Single	0.23**	0.38
Duration of relationship (ref: 0-4 years)		
5-7 years	1.74	1.58
8-10 years	3.51*	1.76
11 years +	2.97	1.07
Unknown	3.83	0.58
Time since breakup (ref: 0-4 years)		
5-7 years	0.88*	0.47
8-10 years	0.63	0.62
11 years +	0.29***	0.59
Number of children in relationship (ref: one child)		
Two children	0.87	0.87
Three children +	1.42	0.25
Age of focal child (ref: 0-4 years)		
5-9 years	2.28*	2.14
10-14 years	1.91	3.97*
15 years	1.65	3.97
Sex of focal child (ref: boy)		
Girl	0.88	0.58*
Mother's current civil status (ref: married)		
Cohabiting	1.11	0.88
Single	0.95	1.24
Mother's country of birth (ref: Norway)		
Western countries	0.84	0.77 ¹
Non-Western countries	0.59	

***p≤0.001, **p≤0.01, *p≤0.05

¹ Due to a small number of respondents born outside Norway in the group with father sole custody, all mothers born outside Norway are grouped together in the analysis of father sole custody vs mother sole custody.

Table A2.6. Children's residence based on the fathers' reporting. All fathers irrespective of whether they have lived together with the child's mother or not. Cross-tabulations with independent variables. 2012. Percent

	Mother sole custody	Father sole custody	Shared residence	Other	Total	Number of observations	Percentage of respondents in each group
All					100		1,253
Respondent's age							
19-34 years	62	6	31	2	100	175	17
35-39 years	65	12	23	0	100	193	17
40-44 years	59	7	33	1	100	341	26
45 years +	61	12	27	0	100	544	40
Respondent's education							
Primary school	68	9	22	1	100	374	25
Secondary school	59	11	31	0	100	524	39
University, 1-4 years	55	10	34	0	100	243	18
University, 5 years +	47	11	42	-	100	86	6
Unknown	82	-	18	-	100	26	2
Respondent's employment and working hours							
Employed, 1-30 hours per week	70	8	22	-	100	65	5
Employed, 31-40 hours per week	56	12	32	0	100	729	58
Employed, 41 hours + per week	63	8	29	1	100	293	23
Non-employed	81	5	13	1	100	145	12
Missing	61	10	29	-	100	21	2
Respondent's self-reported main activity							
Gainfully employed	58	10	31	1	100	1,082	85
Student	:	:	:	:	100	24	2
Disability/retirement pension	78	10	12	-	100	71	6
Home-worker	:	:	:	:	100	1	0
Unemployed	90	4	7	-	100	48	4
Unknown	60	-	40	-	100	27	2
Financial problems last year							
Often	83	3	14	-	100	82	7
Sometimes	71	6	23	-	100	133	11
Rarely	61	10	27	2	100	197	16
Never	59	10	30	0	100	806	63
Unknown	51	-	36	12	100	35	3
Respondent's self reported health							
Excellent	58	11	31	0	100	327	25
Very good	59	9	32	1	100	418	33
Good	64	9	27	1	100	286	23
Fairly good	66	10	23	1	100	145	12
Bad	76	13	11	-	100	66	5
Unknown	:	:	:	:	100	11	1
Civil status at breakup							
Married	56	13	31	0	100	496	38
Cohabiting	60	8	32	0	100	597	48
Single	81	6	12	2	100	134	12
Unknown	68	9	13	9	100	26	2

Table A2.6. cont.

	Mother sole custody	Father sole custody	Shared residence	Other	Total	Number of observations	Percentage of respondents in each group
Duration of relationship							
0-4 years	74	7	18	1	100	343	29
5-7 years	58	10	32	1	100	224	18
8-10 years	58	11	31	-	100	192	15
11 years +	52	11	37	0	100	439	33
Unknown	68	10	18	5	100	55	5
Time since breakup							
0-1 years	53	9	36	1	100	139	12
2-4 years	57	9	34	-	100	323	26
5-7 years	60	9	31	1	100	287	23
8-10 years	65	7	28	1	100	221	17
11 years +	69	14	15	1	100	267	21
Unknown	:	:	:	:	100	16	1
Number of children in relationship							
1 child	64	9	26	1	100	832	67
2 children	56	12	32	0	100	364	28
3 children +	52	6	42	-	100	57	4
Age of focal child							
0-4 years	71	4	24	1	100	120	11
5-9 years	57	8	34	0	100	324	27
10-14 years	60	10	29	-	100	474	37
15 years +	63	13	23	1	100	335	25
Sex of focal child							
Boy	59	10	30	0	100	642	51
Girl	63	9	27	1	100	611	49
Division of childcare when parents lived together							
The mother most	68	7	25	1	100	389	31
Shared equally between the parents	55	9	36	0	100	607	48
The father most	45	27	27	1	100	118	9
Single (have never lived with the other parent)	81	6	12	2	100	134	12
Unknown	:	:	:	:	100	5	0
Respondent's place of living, region							
Oslo and Akershus	60	10	31	-	100	254	20
Eastern Norway except Oslo and Akershus	62	9	29	1	100	338	27
Agder and Rogaland	62	7	31	1	100	214	17
Western Norway	58	13	28	2	100	172	14
Trøndelag	61	7	32	-	100	103	8
Northern Norway	65	14	21	1	100	172	14
Respondent's current civil status							
Married	67	11	21	1	100	230	18
Cohabiting	59	10	30	0	100	244	19
Single	60	9	30	1	100	779	63
Respondent's country of birth							
Norway	60	10	30	1	100	1,126	90
Western countries	59	12	29	2	100	59	5
Non-Western countries	85	3	12	-	100	68	6

Table A2.7. Logistic regressions of shared residence rather than mother sole custody, and of father sole custody rather than mother sole custody. Results based on the fathers' reporting. All fathers irrespective of whether they have lived together with the child's mother or not. Odds ratios

	Shared residence vs mother sole custody (N=1,082)	Father sole custody vs mother sole custody (N=825)
Father's age (ref: 19-34 years)		
35-39 years	0.40*	0.97
40-44 years	0.66	0.53 (*)
45 years +	0.45(*)	0.65
Father's education (ref: primary school)		
Secondary school	1.52	1.30
University, 1-4 years	1.88	1.28
University, 5 years +	2.37*	1.44
Unknown	0.76	-
Financial problems last year (ref: never/ rarely)		
Often	0.37***	0.23**
Sometimes	0.57***	0.52*
Unknown	8.62***	22.13***
Father's self reported health (ref: excellent, very good, good)		
Fairly good	0.92	1.08
Bad	0.68	1.27
Civil status at breakup (ref: married)		
Cohabiting	1.07**	0.48
Single	0.41**	0.39
Duration of relationship (ref: 0-4 years)		
5-7 years	1.91(*)	1.34
8-10 years	2.04*	1.20
11 years +	2.32*	1.00
Unknown	0.36(*)	1.19
Time since breakup (ref: 0-4 years)		
5-7 years	0.69	0.49
8-10 years	0.72	0.44(*)
11 years +	0.48*	0.93
Number of children in relationship (ref: one child)		
Two children	0.83	1.65
Three children +	1.04	0.86
Age of focal child (ref: 0-4 years)		
5-9 years	1.46	2.27
10-14 years	1.43	3.28
15 years	1.09	3.80
Sex of focal child (ref: boy)		
Girl	0.75*	0.76
Father's current civil status (ref: married)		
Cohabiting	1.24	1.11
Single	1.29	0.95
Father's country of birth (ref: Norway)		
Non-Western countries	1.19	1.46
Western countries	0.40*	0.29(*)

***p<0.001, **p< 0.01, *p<0.05, (*)p<0.10

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