



Shared Physical Custody and Children's Experience of Stress

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Abstract:

This paper studies shared physical custody in Sweden. We ask whether children in 50/50 shared physical custody settings are more likely to report high levels of stress compared to children living with a single parent or with a parent and a stepparent full time or most of the time. The analysis uses logistic regression analysis and is based on the Swedish Surveys of Living Conditions (ULF). Children living in a 50/50 shared physical custody setting reported significantly lower levels of stress than the children living full time with one parent after their separation.

Keywords: shared physical custody, joint custody, family structure, stepfamily, child wellbeing

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1 Introduction

The emergent complexity of family forms in the past decades has got a lot of attention within the social sciences and while the evidence for a negative association of divorce and other family structure transitions is considerable the literature on shared physical custody of children is much more limited, especially based on randomly selected nationally representative samples. The reason is likely the fact that it still is relatively rare in most countries. This paper studies children in Sweden, a country that is often considered a fore-runner in development of new family life patterns that are soon followed by other industrialized countries. Shared residence for children is still a relatively new phenomenon in Sweden, but has quickly become increasingly common. The phenomenon has however not yet been widely analyzed. This study analyses children's likelihood of experiencing stress in shared physical custody settings with shared and alternating residence after parental union dissolution.

One should not confuse shared *physical* custody and shared residence with shared *legal* custody. Whereas shared legal custody only gives both parents the legal right to decisions about the child's upbringing, school choices, religion etc. 50/50 shared residence means that the child actually *lives* equal, or near equal, time with both parents, alternating between separate households. This makes it possible for both parents to engage in active parenting and gives children the possibility to have ongoing contact with both parents after separation. But living in two different households and alternating not just between two geographical locations but also potentially between two different "parental regimes" with different rules and customs may create instability and increase children's ill-being like the feeling of stress. In this paper I ask whether children in shared physical custody settings are more likely to report high levels of stress compared to children living in another type of residential setting.

2 Shared physical custody and child well-being

The negative association between family structure changes or living in post-divorce family settings and a wide variety of child outcomes is a well established finding in the family studies literature (among many see for example Amato, 2001; McLanahan & Sandefur, 1994; Sweeney, 2010; Thomson et al., 1994). Shared physical custody as a more recent phenomenon is far less studied and the findings has not yet been as widely theorized as in case of child outcomes of divorce, single parent- or stepfamily life.

In the Swedish legislation promoting shared legal and residential custody the policies are motivated by the best interest of the child and its need to maintain a close contact with both parents after a union dissolution and (Proposition 1997/98:7; Proposition 2005/06:99). Shared physical custody and shared residence can however theoretically predict both positive as well as negative associations with child well-being.

Economic theory argues that not having access to the child weakens a parent's incentives to invest in it explaining the financial strain in post-separation sole custody families (Weiss & Willis 1985). One way in shared residential custody can ameliorate harmful effects of family dissolution is by limiting loss of parental resources, both social and financial, something that has been shown to mediate some of the adverse outcomes (see for example McLanahan, 1999; Thomson et al. 1994; Sweeney, 2007). By sharing custody and care of the child it can benefit from a steady contact with both parents. A steady everyday-like contact can also strengthen the parent-child bond and facilitate the kind of authoritative parenting style that Amato and Gilbreth (1999), in a meta-analysis of nonresident fathers' role in children's well-being, found to be positive for child development (Gilmore, 2006). A stronger parent-child bond could also provide a stronger safety net for the child consisting of not just the parent in question but also his or her social networks. Shared residence can also reduce the work load for a single parent, offer greater flexibility for work, increase cooperation between parents and reduce conflicts and potential custody disputes (see Emery, 1999). Each parent may also become more competent in their parenting roles by having the full responsibility half of the time. Having continuous contact with both parents may decrease children's experience of stress created by worrying for the absent parent or feeling responsibility to take care of a parent (Maccoby & Mnookin 1992).

On the other hand joint physical custody can also be argued to decrease children's emotional well-being. Children may become stressed from a lack of stability due to constant changes of households (see Bauserman 2002). Besides changing physical location a child may also need to constantly adapt to large differences in parenting regimes creating emotional instability (Maccoby & Mnookin 1992).

It goes without saying that parental relationships that have ended in a divorce or separation are likely to be conflicted and that these parents might not always get along very well. One of the main objections to shared physical custody has been the risk of increased stress created by children getting caught up in high conflict parental relationships (see Bauserman 2002). Others have argued that shared custody is preferable even when the parents have a conflicted relationship because a secure contact with both parents ameliorates the

negative effect of a parental conflict (Fabricius & Luecken 2007; Bender 1994). Economic theory predicts, on one hand, that a higher investment in a child, in this case caring for it half of the time, increases the risk of parental conflicts because each parent has an incentive to control their investment. On the other hand not having contact with the child may reduce investment and increase conflict due to feelings of injustice from the point of view of the custodial parent (Hanson et al. 1994).

Any association between shared physical custody and child well-being could also be spuriously produced by selection of parents with certain pre-existing characteristics that are associated with well-being of the child. The shared physical custody parents could for example have higher socioeconomic status and more resources as it has been shown that these socioeconomic groups are more likely to be early adopters of new family behaviors (see for example Blossfeld et al., 1995; Härkönen & Dronkers, 2006; Lesthaeghe, 2010). They may also have more cooperative personalities, lower inter-parental conflict levels and be more child-oriented in general. Children of these parents are more likely to do well in general and the parents are more likely to opt for a shared custody arrangement after splitting up.

2.1 Review of empirical literature

Shared physical custody research is still a nascent field and the literature is rather limited. Many studies rely on small non-random samples that are not nationally representative and a considerable share of the child outcome studies are based on children of high conflict parents and court cases. For a research field with such a limited amount of publications there are surprisingly many research reviews on shared physical custody and children's well-being (Bauserman, 2002; Buchanan & Jahromi, 2008; Fehlberg et al., 2011; Gilmore, 2006; Harris-Short, 2010; Nielsen, 2011; Nielsen 2013a; Nielsen 2013b; Nielsen 2014a; Nielsen 2014c; Smyth & Moloney, 2008; Smyth, 2009; Strous, 2011; Trinder, 2010; Warshak, 2014) which likely reflects a growing interest from policy makers and legal professionals due to changes, or planned changes, in custody legislation.

The previous research has in general presented positive associations between shared physical custody and child well-being but the literature varies greatly in quality and methodology. Some rely on clinical or court based non-random samples whereas others use nationally representative samples of parents or children. There are also differences in whose reports are used for measuring the well-being of the child with some using parent's reports and others information directly from the child. Another factor making comparisons between studies harder are different definitions of shared physical custody, with definitions like living

at least 25 percent, 33 percent, 35 percent or 50 percent with each parent. However the literature does tend to point in the direction of the absolute amount of time with a parent being less important than the quality of the relationship (see for example Gilmore, 2006) or that to have at least some share of living with both parents (Vanassche et al. 2013). Another issue is the choice of reference category. Some studies compare children with shared physical custody to those living full time with one parent (usually the mother) whereas some compare these two groups to children living with two non-separated biological parents and other studies do not have a comparison group altogether. Although theoretical guidance for choosing comparison group can vary, one could argue that in most cases the relevant comparison for children in shared physical custody would be other children of separated parents living in only one household, the counterfactual for living with shared custody being living with one parent rather than not having separated parents at all.

The findings pointing to mixed or adverse outcomes of shared physical custody tend to be from non-random samples (Neoh & Mellor, 2010; Smart et al. , 2001) and from studies of children from high conflict parents (McIntosh, Burns et al., 2010; McIntosh, Smyth et al. 2010). A study based on the Fragile Families project with an over-representation of impoverished and never-married parents in large American cities showed some negative associations between children's attachment and over-night visits to the father, although the overall pattern was inconclusive (Tornello et al 2013). A Belgian study with representative data from the region of Flanders did however show shared physical custody to be negatively associated with children's wellbeing not only when parents' relationship was conflicted but also when the child had a bad relationship with one of the parents (Vanassche et al. 2013).

The longitudinal Stanford Custody Project showed that children who lived in shared custody were better off after four years than those who lived in a sole custody setting (Maccoby & Mnookin 1992). A positive association has been found for both small children (Lee 2002) as well as college students who come from shared custody families (Fabricius & Luecken 2007).

Recent reviews of the research on shared physical custody by Nielsen (2011; 2013a; 2013b) presents a rather positive picture of the findings with the vast majority pointing to a positive association with different measures of child well-being. A widely cited meta-analysis by Bauserman (2002) showed that children in joint physical custody were better adjusted than those in sole custody settings, on all categories of adjustment except academic, and presented no difference in behavioral adjustment compared to children in original two-parent families.

Advising against a legal presumption for shared physical custody Gilmore (2006) concludes in his review that although parental contact after divorce is beneficial for child development the benefits are rather small and it can in cases of high parental conflict have adverse effects.

Most of the research in the field has hitherto been conducted in Anglophone countries. But in a large sample multilevel analysis of children's life satisfaction in 36 countries Bjarnason and colleagues (2012) showed that children in shared physical custody settings reported higher levels of life satisfaction than those in other non-intact families but that this was an effect of higher family affluence. They also showed that the relative difference between children of different family structures were similar in all countries, supporting previous comparative findings (Breivik & Olweus, 2006b), but that children in the Nordic countries had higher levels of well-being compared to children in the same family type in countries with a less generous welfare state model. In a similar multi-level analysis of school aged children in 36 countries Bjarnason and Arnarsson (2011) showed that children in shared physical custody had equal or better communication with their parents, which have been supported in a later study (Carlslund et al., 2012), and that even though the child spends less time in a certain household the quality as well as quantity of time together with parents is higher in shared physical custody.

Some studies comparing children of shared physical custody with those in original two-parent families, in the Nordic countries, have shown that these children are in most parts equally well off (Breivik & Olweus, 2006; Jablonska & Lindberg, 2007) whereas others find that children in post divorce family types are more at risk for negative outcomes but with children in shared custody being better off than those in sole custody (Bergström et al. 2013; Bergström et al. 2014). Others do not find a difference between shared and sole physical custody (Carlslund et al., 2012). Other continental European studies have shown slightly positive effects of joint physical custody for children (Haugen 2010; Spruijt & Duindam, 2010; Vanassche et al. 2013).

Few studies have dealt explicitly with children's experience of stress but Melli and Brown (2008) showed that children of divorce in Wisconsin had fewer stress related illnesses as well as less depression and other health problems in shared physical custody compared to sole mother custody. In a longitudinal study of post-divorce custody arrangements children in shared physical custody were better off academically, emotionally and psychologically and experienced less stressed by feeling they needed to care for their mother. Children in both

residential settings were more likely to feel stressed and depressed when there were large differences in parenting style (Buchanan & Maccoby, 1996).

Most of the studies hitherto are cross-sectional and rarely have measures on pre-divorce characteristics so it is difficult to say whether there is a positive selection of parents with certain traits into shared custody arrangements. The cross-sectional evidence does however show somewhat higher education and income among those with shared custody (Juby et al., 2005; Kitteröd & Lyngstad, 2012; Melli & Brown, 2008) as well as lower levels of conflict and more inter-parental cooperation (Bauserman, 2002; Öberg & Öberg, 2004) although some studies have not found an overrepresentation of high conflict parents in shared custody families (Vanassche et al. 2013). Sodermans and colleagues (2013) have shown that an earlier over representation of parents with low conflict levels has disappeared over time as shared physical custody has become more prevalent.

Although presenting some differences in parental characteristics between the two types of custody arrangements both Nielsen (2011; 2013a; 2013b) and Melli and Brown (2008) conclude that the parents with shared physical custody of children do not differ greatly from those with sole custody. It is however important to take into account both socioeconomic factors as well as parental cooperation and conflict when studying the well-being of children in different custody arrangements and to keep this in mind when reading studies based on child data without parental reports on these issues.

3 The Swedish context

This paper focuses on children in Sweden, a country that is often considered a forerunner in family demographic behaviors like cohabitation, divorce, childbearing across partnerships and family reconstitution (van de Kaa, 2001). Sweden has a wide acceptance for different family forms (Trost, 1996) as well as a relatively high share of children living with their father after separation. Among the first countries in the world Sweden introduced no-fault divorce legislation in 1915 and unilateral no-fault divorce in 1974 (Sandström, 2012). Today it is among the countries with the highest degree of change when it comes to family structure dynamics, closely following the United States. Andersson (2002) shows that in 16 Western- and Central European countries as well as the USA, the proportion of children having experienced a parental separation by age 15 range between 50 percent in the US and 9 percent in Italy. In Sweden 34 percent of the children had experienced a separation making it one of the countries with the highest proportion of parental union dissolutions.

Sweden is also the country with the highest share of children living in joint physical custody arrangements (Bjarnason & Arnarsson, 2011). The development has been quite rapid with about 1 % of children of divorce, separation or non-union birth sharing residence equally between two parental households in the mid 1980's to over one fourth twenty years later (Lundström, 2009). Children have frequent contact with the other parent even when they do not share residence equally with about 85% of all children who do not have 50/50 shared residence visiting the non-resident parent at least once per month (Statistics Sweden, 2011). Studies based on Swedish administrative registers have shown that the average geographical distance between children and non-coresident parents has decreased during the past 20 years which has been interpreted as an effect of the increased commonality of shared physical custody (Raneke, 2011; Stjernström & Strömgren, 2012).

The Swedish child custody laws are a result of policy makers' ambition to make family life more gender equal and have developed in this direction since the 1970's along with other family policies like individual taxation of married couples or gender neutral parental leave for example (Schiratzki, 2008). The laws and policies have aimed at enforcing fathers' caring obligations both within unions, regardless of marital status, as well as after a union dissolution (Bergman & Hobson, 2002).

In 1977 shared legal custody after union dissolution, for both previously cohabiting and married parents, could be granted by court if it was in the best interest of the child and both parents agreed on it. In 1982 shared legal custody could be agreed upon by the parents without court decision. In 1992 a presumption for shared legal custody was introduced making it the default option after a parental separation and in 1998 the courts could grant shared legal-, as well as physical, custody even in cases where one of the parents was against it. In 2006 this was modified somewhat, putting more emphasis on the parents' ability to cooperate as well as the child's own will before ruling for shared physical custody and shared residence for children. This year it also became possible for separated parents to divide the non-means tested monthly child allowance if the child shares residence roughly equally between both households (Schiratzki, 2008). The vast majority of Swedish post-separation custody arrangements are agreed upon by parents without any involvement of the courts. Custody is disputed in around 10% of the cases but most of the parents come to an agreement after mediation by social services, a lawyer, a court appointed mediator or a judge, and in less than 2 percent of the divorces or separations involving children the final custody arrangement is decided by a judge (Schiratzki, 2008).

In a qualitative study of separated and divorced families in Sweden (Öberg & Öberg, 2004) most parents motivated the decision to have shared physical custody with it being the most natural, reasonable and equal alternative. These parents regarded each other as good parents and saw no reason to deprive one of them from everyday life with the children. They thought that parents need their children as well as children need both their parents and that none of the two parents is more important to the child than the other. Furthermore they thought that shared physical custody was a way for both parents to continue the parental ambitions they originally had when they had children.

4 Data

The data for this study are from the Surveys of Living Conditions (ULF) from 2001, 2002 and 2003, the first years when the survey was accompanied by a child supplement. The cross-sectional surveys consist of a nationally representative sample of the Swedish population aged 18 to 84 and child supplements with data collected from children aged 10-18 living in the household of the main respondent. The total response rate was 75% (Statistics Sweden, 2005). The data collection was done through in-home interviews and carried out by trained professional interviewers from Statistics Sweden. The children were interviewed on a wide range of topics on living conditions and wellbeing simultaneously with the parent's interview after informed consent had been obtained from both legal guardians. While the parent was interviewed the children completed a self administered questionnaire while listening to the interview questions on headphones. The questionnaire had only the response options but not the questions and the child was asked to put it in an envelope, seal it and hand it to the interviewer immediately after having finished it, thus providing confidentiality to the child. 82% of the children residing with the adult respondent agreed to participate in the interview with the response rate being somewhat higher among younger adolescents and among those whose parent, and not stepparent, was the respondent in the adult interview. In this paper children's reports are used on issues that can be assumed are better known by children themselves than their parents, such as questions regarding their experience of stress and relationships with parents. Parents' reports are used for questions that children might not have accurate information about such as parents' conflict level. Information on the child's living arrangements is also from the parents' reports. Furthermore information from administrative registers were added and linked to the respondents. For this study information from registers are used for respondent's income.

Although child-based surveys have become more common, surveys using a combination of child and adult reports are still quite rare (Jonsson & Östberg, 2010). Comparisons of child and parent reports have shown that parents overestimate the emotional wellbeing of their children (Jonsson & Östberg, 2010; Waters et al., 2003) and that children misreport parental characteristics like educational attainment (Engzell & Jonsson, 2013) as well as a difference in the reporting of household socioeconomic characteristics, like the number of books in the home (Jerrim & Mickelwright, 2012) thus making the use of parent-child data important.

The original sample consisted of 4084 children of whom 73% lived with two biological, or adoptive, parents, 9% with a single mother, 4% with a single father, 10% with a mother and a stepparent and 3% with a father and a stepparent. Less than 1% lived in another type of family setting, like foster parents or with a sibling or grandparent. This study focuses on the subsample of children who lived with a single parent or in a stepfamily. After dropping all children in the other family types the sample consists of 1081 children. Further only those children whose both parents were alive were kept dropping another 28 cases. To be able to measure inter-parental conflict level based on a survey question on how well the two divorced or separated parents agree on matters regarding the child, respondents who are not the parent of the child, i.e. stepparents were dropped, leaving us with 825 children. Finally 11 children are dropped due to lack of information on residential arrangements and 3 children are dropped because of missing data on the dependent variable leaving us with a final sample of 807 children.

4.1 Modeling and method

The dependent variable; children's experience of stress, is based on the child's own report on the question how often he/she has felt stressed during the last six months with five response options ranging from daily to rarely or never. After an initial multinomial regression of this five-category variable and the independent variable showing that only the two categories with the highest frequency of stress were correlated with residential setting (see Findings) the variable was dichotomized to a dummy for the child's experience of stress with children reporting stress more than once per week categorized as a high stress group with the value one and all others with the value zero.

The independent measure is a three-category variable for residential setting with a category for children who are reported (by the parent) to live full time in one household, not full but most of the time in one household and those with 50/50 shared residence living equal, or near equal, time in both parental households.

The child's socioeconomic background is controlled for by a variable for the parent's income after taxes based on information linked to the surveys from administrative registers. This is a three-category variable with one category for those in the bottom quartile of the income distribution, one for the top quartile and one for the two middle quartiles for each survey year. Models with different definitions of income like pre-tax income, household income and different categorizations like quartiles, quintiles, continuous and logged were estimated without changing the overall results or the correlation between income and the dependent variable. Models with measures for parent's occupational class as well as highest educational attainment were also estimated as well as all combinations of these variables and parental income. Goodness of fit testing showed however that the model with income provided a better fit than models with either of the other two dimensions of socioeconomic status and combining income with either education or occupation did not significantly improve the model fit nor did it change the overall results.

The model also controls for the age and sex of the child and the parent, parents' immigrant status, the number of children in the household, whether the child lives in a stepfamily setting and whether the child lives in the Stockholm metropolitan area, the other metropolitan areas in Sweden or outside of them. A categorical variable for parental conflict or inter-parental relationship, based on a question on how well, on a 5-category scale, the parent's agree or get along on matters regarding the focal child, is constructed. Those reporting to get along quite well or very well are combined into one category, quite badly or badly into one category and neither well or badly into one category. A dichotomous measure for parent-child conflict was constructed with children reporting getting along "quite badly" or "very badly" with either their mother or their father coded as one. All three of the original relationship measures are skewed towards the positive end with 56 percent of parents reporting getting along well or quite well with each other and 88 percent and of the children saying they get along well or quite well with their mother and 76 percent with their father. Alternative models with parental and parent-child relationship measured as categorical variables with values ranging from very positive to very negative were also estimated without changing the overall results or improving model goodness of fit.

I use logistic regression to estimate the child's likelihood of being in the high stress group, meaning experiencing stress daily or several times per week and estimate average marginal effects to determine the effect size of the correlations. Because the sampling for the surveys was done on parental level the probability to be in the sample for a child in a two-parent family is twice as high as for a child living with a single parent. Weights are therefore

used to adjust for this. In order to control for clustering, i.e. more than one child from the same family in the sample, I have used robust standard errors by using Stata's cluster-command.

6 Findings

Of the children in the sample 60% live full time with one parent, 11% live most of the time with one parent and 29% share residence equally between two parental households. Of the children with equally shared residence 74% commute weekly between two households, 13% commute fortnightly, 4% every other day, and the rest have some other unspecified arrangement.

The dependent variable was based on a survey question about how often the child felt stressed with the response options: 1. Daily, 2. Several times per week, 3. Once per week, 4. A few times per month and 5. Rarely or never. The mean was 3.55 and the standard deviation 1.16. An initial bivariate multinomial regression analysis on this variable showed a statistically significant negative correlation ($p < 0.05$) between living in a 50/50 shared physical custody setting and experiencing stress daily (coeff. -1.43) and feeling stressed several times per week (coeff. -0.54) compared to those living full time with one parent, with the base outcome being feeling stressed rarely or never. The other outcome categories were not significantly different from the base category. Children living some of the time with both parents but not sharing equally did not show any statistically significant difference to those living full time with one parent.

Table 1 shows the frequencies and percentages for each variable category. Of the 807 children 23% report stress more than once per week. Most of these report stress less than daily but more than once per week. Those reporting stress daily make up 3,5% of the sample (not presented in table). Models with a narrower definition of high levels of stress, i.e. child reporting daily experience of stress, was estimated and the results pointed in the same direction and remained statistically significant ($p < .1$). In this sample of children not living with both their parents in the same household 29% have equal, or roughly equal, residence in both households, 11% live some of the time, but not equally, in both households and 60% live full time with one parent.

[Table 1 here]

Table 2 presents cross tabulations of the dependent variable with all other covariates. We can see that belonging to the high stress category is more common in among children

living full-time with one parent. The children living equally in two households have a slightly higher share reporting stress several times per week than their peers sharing residence between both parental households but without having an equal residential setting. Surprisingly we can see a positive income gradient with more children of high earners belonging to the high stress category than children of both low and medium earners. We can also see a clear age gradient for the child's age and a somewhat less pronounced one for parent's age with more of the children in the higher age categories belonging to the high stress group. More girls than boys report experiencing stress several times per week. Children with parents reporting disagreement on matters regarding the child as well as children reporting conflict with the parent are both more common in the high stress group than are those without conflicted relations.

[Table 2 here]

Table 3 presents all variables by type of residential arrangement. We can see that more of the children with shared residence belong to the high income category and fewer to those with the lowest income compared to those who do not share residence equally. The children living some of the time with the other parent are in between. Table 3 also shows that more boys than girls have equally shared residence and that a vast majority of the children of female respondents do not share residence equally. Disagreement on matters regarding the child is more common among those not sharing residence equally as is disagreement between parent and child suggesting that those who choose shared physical custody may be a select group of parents who have parted on more amicable terms. For this reason it is important to control for inter-parental relationship quality when analyzing outcomes of shared physical custody.

[Table 3 here]

The results of the multivariate logistic regression are presented in table 4. Children sharing housing equally have significantly lower risk of belonging to the high stress group with an odds ratio of 0.58 compared to the children who live full time with one parent. As mentioned above, I also estimated a model with a more narrow definition of stress with those reporting stress daily as the outcome (27 cases or 3% of the sample). The results (not presented in table) pointed however in the same direction although the odds ratio was as low as 0.29 ($p < 0.1$). Average marginal effects were also estimated showing a 8,5 percentage points lower predicted probability of belonging to the high stress category for children in 50/50 shared physical custody compared to those living full time with one parent ($p < .05$). We can thus conclude that having equally shared residence is associated with markedly lower

likelihood of stress for the children. The main finding is robust across different model specifications (see different specifications under Modeling and method) and remains after controlling for parental characteristics like income and the level of conflict between parents, as well as child characteristics like age, sex and parental relationship quality. Having some shared residence, but not 50/50 in both households, is not significantly different from living full time with one parent nor sharing equally. This is however a small (87 cases or 11%) and heterogeneous group.

[Table 4 here]

The independent variables present both expected and unexpected patterns. Girls are more likely to report high levels of stress compared to boys and children of parents who report high levels of disagreement on matters regarding the child have a higher risk of being stressed. The parent-child conflict level is however not significantly associated with high stress level. Interaction between both relationship quality variables and the shared physical custody variable was tested without finding any significant interaction effect on the association with experience of stress. The parental income show a surprising positive gradient with the children of high income parents reporting higher levels of stress compared to the children of the parents in the bottom quartile. The difference between the highest- and the middle income category is however not statistically significant. Models with different categorizations and definitions of income, including pre- and post tax income, household income, log income and income quartiles as well as quintiles were estimated without changing the pattern. This finding may be due to lower demands on children from low income families when it comes to school results or extracurricular activities (see for example Lareau, 2003). It may also be that children and adolescents in different parental income groups interpret the question differently. Children in high income families may be more familiar with the term. An interaction between parental income and the independent variable was tested without finding any statistically significant interaction effect.

7 Discussion

Like other recent studies of emotional outcomes of shared physical custody this study shows that sharing residence equally after a parental union disruption may not be harmful for children. On the contrary children in 50/50 shared residence have markedly lower likelihood of experiencing high levels of stress confirming positive findings on other aspects of emotional well-being. The results can be interpreted as evidence for a positive effect of

continuing everyday-like parental relationships after a family dissolution and as support for the finding from Amato and Gilbreth's (1999) meta-analysis that engaged authoritative parenting benefits children's development. Having a post-separation residential setting with some, but not equal, residence in two parental households was not significantly different from those living full time with one parent although the statistically non-significant results point in the same direction as for those with equal residence. This could suggest that children in these kinds of residential settings do not have the same type of strong parent-child relationship with both parents as those sharing residence equally. Fabricius and colleagues (2012) have shown that at least 30% of the time in shared custody is necessary for achieving qualitative parenting outcomes. Contrary to these findings previous findings by Vanassche and colleagues (2013) from Belgium suggest that the main difference is between having any shared residence and some rather than sharing equally or not. The group sharing residence, but not equally, is however a small and very heterogeneous group in the Swedish context and the present data does not identify the share of time lived with each parent when it is less than half time but more than full time. It is important for future research to further investigate how varying types of custody arrangements differ when it comes to children's well-being.

The research field is still rather new and under rapid development. It has hitherto been dominated by small sample studies, often based on high conflict cases such as custody cases in courts. It is of course important to identify high-risk groups of children but to draw inference from these to a general population of children in shared physical custody arrangements is about as fruitful as basing analysis on marital happiness on divorce court proceedings. More studies on large population based samples and on different aspects of shared physical custody are needed. Besides other aspects of well-being, also differences in the effects by for example child's gender, age, or time in different custodial and residential settings would be most welcome. It is also important to dig deeper into the causal mechanisms behind any association between child outcomes and shared physical custody and investigate whether different groups of children are affected differently by this. In order to do this it is necessary that questions on residential arrangements are included in data collection in cross-sectional surveys, prospective survey designs and in the form of retrospective residential histories. By doing this we can start to explain how custody arrangements affect children. But from the results of the present analysis as well as other recent studies we can however, at least, start to say that shared physical custody does not seem to be harming children and adolescents who have experienced a parental separation.

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Table 1: Descriptive statistics.

Variable	Frequency	Percentage
Number of respondents	807	100%
Child is stressed several times per week		
Yes	182	23%
No	625	77%
Residential setting		
Full time with one parent	485	60%
Mostly with with one parent	87	11%
50/50 shared residence	235	29%
Income category		
Lowest 25%	210	26%
Mld 50%	462	57%
Highest 25%	135	17%
Age of child		
10-12	296	37%
13-15	290	36%
16-18	221	27%
Age of adult respondent		
≤35	116	14%
36-40	205	25%
41-45	271	34%
≥46	215	27%
Sex of child		
Boy	415	51%
Girls	392	49%
Sex of parent		
Man	222	28%
Woman	585	72%
Immigrant status		
At least one parent born in Sweden	736	91%
Both parent born outside of Sweden	71	9%
Number of children in household		
1	191	24%
2	315	39%
3	219	27%
≥4	82	10%
Place of residence		
Metropolitan Stockholm	125	16%
Other metropolitan areas	98	12%
Rest of Sweden	584	72%
Parental conflict		
Parents get along well	478	59%
Parents get along neither well nor badly	129	16%
Parents get along badly	162	20%
Missing	38	5%
Parent-child conflict		
No	748	93%
Yes	59	7%
Stepfamily		
No	506	63%
Yes	301	37%

Data source: Child-ULF 2001, 2002 & 2003

Table 2: Descriptive statistics. All variables by dependent variable.

Variable	Stressed		Not stressed	
	Frequency	Percentage	Frequency	Percentage
Residential setting				
Full time with one parent	126	26%	359	74%
Mostly with one parent	14	16%	73	84%
50/50 shared residence	42	18%	193	82%
Income category				
Lowest 25%	35	17%	175	83%
Mid 50%	110	24%	352	76%
Highest 25%	37	27%	98	73%
Age of child				
10-12	54	18%	242	82%
13-15	68	23%	222	77%
16-18	60	27%	161	73%
Age of adult respondent				
≤35	24	21%	92	79%
36-40	46	22%	159	78%
41-45	61	23%	210	77%
≥46	51	24%	164	76%
Sex of child				
Boy	71	17%	344	83%
Girl	111	28%	281	72%
Sex of parent				
Man	47	21%	175	79%
Woman	135	23%	450	77%
Immigrant status				
At least one parent born in Sweden	159	22%	577	78%
Both parent born outside of Sweden	23	32%	48	68%
Number of children in household				
1	49	26%	142	74%
2	64	20%	251	80%
3	49	22%	170	78%
≥4	20	24%	62	76%
Place of residence				
Metropolitan Stockholm	35	28%	90	72%
Other Metropolitan areas	19	19%	79	81%
Rest of Sweden	128	22%	458	78%
Parental conflict				
Parents get along well	95	20%	383	80%
Parents get along neither well nor badly	36	28%	93	72%
Parents get along badly	47	29%	115	71%
Missing	4	11%	34	89%
Parent-child conflict				
No	163	22%	585	78%
Yes	19	32%	40	68%
Stepfamily				
No	113	22%	393	78%
Yes	69	23%	232	77%

Data source: Child-ULF 2001, 2002 & 2003

Table 3: Descriptive statistics. All variables by child's residential setting.

Variable	Full time with one parent		Mostly with one parent		50/50 shared residence	
	Freq.	%	Freq.	%	Freq.	%
Child feels stressed several times per week						
Yes	126	69%	14	8%	42	23%
No	359	57%	73	12%	193	31%
Income category						
Lowest 25%	156	74%	25	12%	29	14%
Mid 50%	281	61%	45	10%	136	29%
Highest 25%	48	35%	17	13%	70	52%
Age of child						
10-12	153	52%	38	13%	105	35%
13-15	170	59%	32	11%	88	30%
16-18	162	73%	17	8%	42	19%
Age of adult respondent						
≤35	83	72%	11	9%	22	19%
36-40	121	59%	19	9%	65	32%
41-45	141	52%	33	12%	97	36%
≥46	140	65%	24	11%	51	24%
Sex of child						
Boy	239	58%	45	11%	131	32%
Girl	246	63%	42	11%	104	26%
Sex of parent						
Man	73	33%	25	11%	124	56%
Woman	412	70%	62	11%	111	19%
Immigrant status						
At least one parent born in Sweden	430	59%	83	11%	223	30%
Both parent born outside of Sweden	55	77%	4	6%	12	17%
Number of children in household						
1	132	69%	20	11%	39	20%
2	179	57%	28	9%	108	34%
3	131	60%	17	8%	71	32%
≥4	43	52%	22	27%	17	21%
Place of residence						
Metropolitan Stockholm	54	43%	18	15%	53	42%
Other Metropolitan areas	81	83%	3	3%	14	14%
Rest of Sweden	350	60%	66	11%	168	29%
Parental conflict						
Parents get along well	252	53%	61	13%	165	34%
Parents get along neither well nor badly	88	68%	10	8%	31	24%
Parents get along badly	117	72%	13	8%	32	20%
Missing	28	74%	3	8%	7	18%
Parent-child conflict						
No	437	58%	83	11%	228	31%
Yes	48	81%	4	7%	7	12%
Stepfamily						
No	301	59%	44	9%	161	32%
Yes	184	61%	43	14%	74	25%

Data source: Child-ULF 2001, 2002 & 2003

Table 4. Logistic regression: Likelihood of frequent feeling of stress

Variable	Odds ratio Full model	Robust S.E.
Residential setting		
Full time with one parent	ref.	
Mostly with with one parent	0.59	0.22
50/50 shared residence	0.58 **	0.16
Income category		
Lowest 25%	0.51 **	0.16
Mld 50%	ref.	
Highest 25%	1.40	0.38
Age of child		
10-12	0.75	0.18
13-15	ref.	
16-18	1.26	0.31
Age of parent		
≤35	ref.	
36-40	0.93	0.34
41-45	0.82	0.32
≥46	0.69	0.27
Sex of child		
Boy	ref.	
Girls	1.88 ***	0.35
Sex of parent		
Man	ref.	
Woman	1.17	0.28
Immigrant status		
At least one parent born in Sweden	ref.	
Both parent born outside of Sweden	1.84 *	0.62
Number of children in household		
1	ref.	
2	0.95	0.23
3	1.06	0.30
≥4	1.25	0.65
Place of residence		
Metropolitan Stockholm	ref.	
Other Metropolitan areas	0.67	0.29
Rest of Sweden	0.73	0.24
Parental conflict		
Parents get along well	ref.	
Parents get along neither well nor badly	1.39	0.37
Parents get along badly	1.60 **	0.37
Parent-child conflict		
No	ref.	
Yes	1.49	0.51
Stepfamily		
No	ref.	
Yes	1.17	0.27
Constant	0.31 **	0.16

*** p ≤ 0.01 ** p ≤ 0.05 * p ≤ 0.10

Data source: Child-ULF 2001, 2002 & 2003