

REGULAR ARTICLE

Preschool children living in joint physical custody arrangements show less psychological symptoms than those living mostly or only with one parent

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Keywords

Children, Divorce, Joint physical custody, Parental separation, Psychological problems

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Received

13 December 2016; revised 10 May 2017; accepted 26 July 2017.

DOI:10.1111/apa.14004

ABSTRACT

Aim: Joint physical custody (JPC), where children spend about equal time in both parent's homes after parental separation, is increasing. The suitability of this practice for preschool children, with a need for predictability and continuity, has been questioned.

Methods: In this cross-sectional study, we used data on 3656 Swedish children aged three to five years living in intact families, JPC, mostly with one parent or single care. Linear regression analyses were conducted with the Strengths and Difficulties Questionnaire, completed by parents and preschool teachers, as the outcome measure.

Results: Children in JPC showed less psychological problems than those living mostly (adjusted B 1.81; 95% CI [0.66 to 2.95]) or only with one parent (adjusted B 1.94; 95% CI [0.75 to 3.13]), in parental reports. In preschool teacher reports, the adjusted Betas were 1.27, 95% CI [0.14 to 2.40] and 1.41, 95% CI [0.24 to 2.58], respectively. In parental reports, children in JPC and those in intact families had similar outcomes, while teachers reported lower unadjusted symptom scores for children in intact families.

Conclusion: Joint physical custody arrangements were not associated with more psychological symptoms in children aged 3–5, but longitudinal studies are needed to account for potential pre-separation differences.

BACKGROUND

Shared parenting, or joint physical custody (JPC), refers to a practice where children with noncohabiting parents live alternatively and about equally with both parents, for example, one week with one parent and the next week with the other parent (1). This practice is increasing among divorcing and separating parents throughout the Western world, for example in Australia, Belgium and the USA (2).

International comparisons have shown that the practice of JPC is particularly common in Sweden, followed by Norway and Denmark (3–5), with data showing that around 10% of all Swedish school children live in JPC arrangements (3–6). The numbers are lower for preschool children, who are up to six years of age in Sweden, mostly because a higher percentage of parents are still married or cohabiting. Yet the large majority of preschool children with separated or divorced parents live with both parents, either in an equal (27%) or unequal (60%) arrangement (3). This tendency to share parenting when parents split up and live apart may be the result of the long-term policy commitment to involve fathers in Nordic family policies (3). In Sweden, for example, fathers are encouraged to take parental leave in early parenthood, and three of the 13 publicly financed months of leave are devoted to each

parent, and they can decide how to share the other seven between them (7).

It is well known that the health and well-being of children are at risk when parents split up (8). The higher risks of emotional problems and social maladjustment for children with separated parents, compared to those with cohabiting parents, may be related to children's loss of social, economic and human capital after a divorce (9). Also, pre-separation characteristics, such as lower parental relationship satisfaction and higher conflict levels, may

Key notes

- The suitability of joint physical custody, where children spend about equal amounts of time in the parent's respective homes after a separation, has been questioned for preschool children.
- We studied psychological symptoms in 3656 Swedish children aged three to five years in different living arrangements.
- Children living in JPC experienced similar levels of psychological symptoms to those in intact families and less psychological problems than those living mostly or only with one parent.

contribute to explaining the lower well-being in these children (9).

However, a growing body of research has shown that children's well-being after divorce is related to how children live and keep in contact with their parents after the separation (10). Living alternately with both parents after a family separation increases the likelihood of children receiving support from their fathers, which in turn has a positive impact on children's well-being (10). As in a review by Nielsen (11), many studies have, in fact, shown that school-aged children and adolescents living in JPC settings fare better with regard to a number of outcomes compared with those in single care arrangements. These include a review. However, there are also studies that have reported no differences between children in JPC and single care settings (12). Socioeconomic factors, levels of conflict between parents, the quality of parent-child relationships and children's personalities are important factors that contribute to, but cannot fully explain, the relation between different living arrangements and children's well-being (11,12).

Despite the intense debate on the suitability of JPC for children of preschool age, research on this age group is scarce (13–15). Theoretically, the concerns about this practice derive from attachment theory. According to this theory, young children need stability and predictability in their relationships with carers since their first attachment relationships are still developing (16). In particular, the assumed risks of separation from the mother, who is often regarded as the primary attachment figure, have fuelled the debate (13–15). However, in contrast to the research on older children, only a handful of studies have investigated the situation with regard to JPC for infants and preschool children. Moreover, due to the scarcity of children in equal JPC in existing studies, overnight stays with the second parent, rather than equal JPC, have been the focus of investigations. Also, the quality of some of these studies has been questioned, and the interpretations of the results have been intensely debated (13–15). However, these studies have had a number of limitations, including the predominant use of maternal reports of children's health and well-being (17,18) and the use of nonvalidated outcomes, such as illness in wheezing to indicate stress in children (17). Another study had limited generalisability because half of the fathers and 10% of the mothers were in prison during the children's first five years (18).

We only found three studies with validated outcome measures for children who were three to five years of age (17–19), and these were conducted in the US and Australia. Pruett et al. (19) collected data on psychological problems from both parents of children aged two to six years, and these were measured with the Child Behaviour Checklist (20). Their study comprised 58 children who stayed overnight with one parent more than once a week, 41 children with just one overnight stay per week and 33 children with no overnight stays. They found that overnight stays by the girls were associated with advantages in social functioning and less psychological problems in terms of internalising

problems and aggression when compared to girls with no overnight stays. McIntosh et al. (17) found lower persistence among the two- to three-year-olds who spent 35% or more time with their second parent, mostly the father. However, when the same study looked at 1215 children aged four to five years old in different contact arrangements, they found no differences in psychological problems according to the Strengths and Difficulties Questionnaire and after controlling for socioeconomic family factors (21). Tornello et al. (18) found higher proportions of insecure attachment among infants with overnight stays but no relation between psychological problems at the age of three years and custody arrangements in families with a strained social and economic situation, using the Child Behaviour Checklist (20). However, less problems were reported among five-year-old children who had JPC arrangements at the age of three compared to those who only lived with one parent at three years of age.

In conclusion, existing studies on preschool children in equal JPC are scarce (17–19). As a consequence of the lack of unequivocal empirical evidence, policies and recommendations regarding preschool children's living arrangements have relied mainly on clinical observations and interpretations of developmental psychology and, in particular, attachment theory (16).

The aim of this study was to compare psychological symptoms, reported by parents and preschool teachers, between groups of children aged three to five years of age. These were based on four patterns of living arrangements: intact families, JPC, living mostly with one parent and living exclusively with one parent.

METHODS

Data source

Data were obtained from the Swedish population-based Children and Parents in Focus study, which aimed to evaluate parenting programmes offered to parents of preschool children in Uppsala. Details of this study have previously been published (22). As part of the yearly health check-up at Swedish child health centres, the legal guardians of all children aged three to five, most frequently the mother and father, were invited to fill out one questionnaire each regarding the child's behaviours and symptoms as well as questions on sociodemographic background. In addition, another questionnaire was sent to the parents to give to their child's preschool teacher. For this study, we used data from children with complete data on variables of interest from at least one parent and also from the preschool teacher. If there was information available from both parents, a parent questionnaire was chosen at random. The analytical sample comprised 3656 children aged three to five years old. All participants gave their informed consent prior to their inclusion in the study. The study was approved by the Regional Ethical Review Board in Uppsala (dn 2012/437), and thus, all procedures contributing to this work complied with the original Declaration of Helsinki and its later amendments.

Variables

The parents were asked to report on the child's residence or living arrangements, by checking one of the seven options: with both parents, alternating between parents about equally, alternating between parents but mostly with me, alternating between parents and mostly with the other parent, only with me, only with the other parent or another option that they were asked to describe. For the purpose of this study, we used four groups: original family (living with both parents), JPC (alternating between parents, about equally), mostly with one (alternating between parents, mostly with me/alternating between parents, mostly with the other parent) and only with one (only with me/only with the other parent). We excluded eight children who were not living with either parent as they were living with grandparents or were in foster care.

The other child variables that we used were the child's gender (girl or boy) and age (three, four or five). The other family variables used in the study were the responding parent's gender (female, male), age (continuous), educational level (less than high school, high school or university), country of birth (Sweden or other) and relationship status (married/cohabiting, single or other).

The survey included the Swedish version of the Strengths and Difficulties Questionnaire (SDQ) (21,23), which is designed to be completed by parents or teachers. The SDQ is a widely used screening tool for child emotional and behavioural problems. The four symptom subscales measure emotional symptoms, conduct problems, hyperactivity/inattention and peer relationship problems. Each item is scored on a three-point scale from zero to two. The main outcome measure in this study was the total sum of the scores from the four symptom subscales

(the SDQ Total Difficulties), with a range from zero to 40. One score was calculated for parental reports and one for teacher reports.

Statistical analyses

Sociodemographic characteristics are presented as means and standard deviations or as numbers and percentages. Mean values and standard deviations were calculated for the total scores for the teacher and parental reports of the SDQ, respectively. Pearson correlations were computed to examine the relations between parental and teacher reports of the SDQ for each of the four custody groups. Multiple linear regressions were used to analyse the relations between the child's living arrangement, namely intact family, JPC, mostly with one parent and only with one parent, and the teacher and parent total SDQ scores, respectively. The analyses were carried out in two steps. The first model was only adjusted for the child's gender, child's age and parent's gender, and the second model was also adjusted for the parental characteristics, including education, country of birth and age as a continuous variable.

RESULTS

Background characteristics

Of the 3656 children, 136 (3.7%) were living in a JPC arrangement, 3369 (92.1%) in intact families, 79 (2.2%) mostly with one parent and 72 children (2.0%) only with one parent. As shown in Table 1, parents with JPC were more likely to be born in Sweden than parents in families where the children lived mostly with one parent or only with one parent after the separation. Boys and girls were

Table 1 Sociodemographic characteristics of children and parents in different living arrangements (n = 3656)

Sociodemographic variables	Children's living arrangements							
	Intact family		Joint physical custody		Mostly with one parent		Only with one parent	
	n	%	n	%	n	%	n	%
Child gender								
Girl	1639	48.6	62	45.6	30	38.0	37	51.4
Boy	1730	51.4	74	54.4	49	62.0	35	48.6
Child age								
3	1007	29.9	28	20.6	25	31.6	15	20.8
4	1043	31.0	48	35.3	18	22.8	29	40.3
5	1319	39.2	60	44.1	36	45.6	28	38.9
Parent gender								
Female (mother)	1817	53.9	80	58.8	57	72.2	68	94.4
Male (father)	1552	46.1	56	41.2	22	27.8	4	5.6
Parental highest level of education								
Less than high school	76	2.3	4	2.9	6	7.6	7	9.7
High school	998	29.6	65	47.8	39	49.4	30	41.7
University	2295	68.1	67	49.3	34	43.0	35	48.6
Parent country of birth								
Sweden	2973	88.2	124	91.2	68	86.1	61	84.7
Other	396	11.8	12	8.8	11	13.9	11	15.3
Parent age (mean, SD)	37.2	5.4	35.9	5.7	36.2	6.9	35.9	6.5

more evenly distributed in intact families than in separated families.

Psychological symptoms in relation to background characteristics

The preschool teachers consistently rated children's psychological problems as less severe than the parents (Table 2). According to both parents and teachers, boys were rated as having more psychological problems than girls, as were younger children, the children of younger parents and of parents with lower educational levels, children with single parents and those with parents born outside Sweden. Correlations between parental and teacher reports, based on the SDQ Total Difficulties and divided by each custody group, were as follows: intact family 0.32 ($p < 0.001$), JPC 0.27 ($p = 0.002$), mostly with one parent 0.47 ($p < 0.001$) and only with one parent 0.34 ($p = 0.002$). These correlations were not significantly different, except for the correlations between JPC (0.27) and mostly with one parent (0.47; $z = 1.65$; one-tailed $p = 0.049$).

Parents and teachers rated children who lived mostly or only with one parent as having more psychological problems than those in JPC arrangements, even after controlling for socioeconomic factors (Tables 3 and 4). Children in intact families had the same levels of psychological symptoms as those living in JPC settings, according to the parents. According to the preschool teachers, children living in JPC settings suffered from more psychological symptoms than those in intact families. However, this difference did not remain statistically significant after controlling for parental factors in the second model (Table 4).

DISCUSSION

In this cross-sectional study of 3656 preschool children aged three to five, parental and preschool teacher reports showed that children living in JPC settings suffered from less psychological problems, as measured by the SDQ, than those living mostly or only with one parent, before and after adjusting for sociodemographic variables. Parents reported

Table 2 Mean values, standard deviations and proportion of children in the 90th percentile of the SDQ in relation to sociodemographic variables (n = 3656)

Sociodemographic variables	Parent SDQ			Teacher SDQ		
	Mean	SD	90th percentile	Mean	SD	90th percentile
Living arrangement						
Intact family	5.89	4.22	12	3.55	4.04	9
Joint physical custody	5.98	4.11	12	4.32	4.93	12
Living mostly with one parent	7.97	5.74	16	5.82	5.98	15
Living only with one parent	7.86	5.30	16	5.76	5.46	15
Child gender						
Girl	5.51	3.93	11	3.03	3.60	8
Boy	6.41	4.57	13	4.27	4.58	10
Child age						
3	6.71	4.27	12	4.18	4.16	10
4	6.19	4.32	12	3.94	4.34	9
5	5.25	4.19	11	3.09	3.99	8
Parent gender						
Female (mother)	5.80	4.31	11	3.72	4.30	9
Male (father)	6.19	4.28	12	3.62	4.03	9
Parental highest level of education						
Less than high school	8.84	5.02	16	4.80	4.26	12
High school	6.52	4.65	12	4.15	4.41	10
University	5.61	4.02	11	3.41	4.04	9
Parent country of birth						
Sweden	5.85	4.24	12	3.62	4.16	9
Other	6.92	4.58	14	4.09	4.32	10
Parent age						
20–29	7.70	4.84	15	4.75	5.03	11
30–39	6.04	4.28	12	3.61	4.08	9
40–49	5.47	4.06	11	3.46	4.02	9
≥50	5.05	4.17	11	4.62	5.19	11
Marital status						
Married/cohabiting	5.92	4.23	12	3.59	4.08	9
Single	6.52	4.57	13	4.96	4.91	12
Other	8.26	6.59	17	4.84	6.90	16

similar results for children in intact families and children in JPC, while teachers reported somewhat higher unadjusted levels that were slightly attenuated by adjustment for sociodemographic confounders.

Including assessments from preschool teachers as well as the nuanced categorisation of children's living arrangements and the inclusion of a relatively large group of children living in about equal JPC in this study adds to the previously scarce scientific understanding of psychological symptoms in preschool children in different living arrangements (17–19). Furthermore, the results were in accordance with studies on JPC in school-aged children, where children living in JPC settings reported better health outcomes than those living mostly or only with one parent (6,24,25).

The similarity in the pattern of psychological symptoms in relation to living arrangements among preschool children to that among older children and adolescents is interesting as JPC has been particularly questioned for young children. An important reason for favouring single care residence for young children in the debate has been their assumed need of stability and predictability in their parental relationships (13,14,16). The results of this study indicate that JPC arrangements were *per se* not associated with more psychological symptoms in children. There might be several reasons for this. Possibly, the child's access to two involved parents may instead be more important for children's psychological well-being than the problems associated with moving between homes. Having an involved father has been shown, in numerous studies, to be especially

important for children's mental health and development (10,26). In addition, both parents might experience less parenting stress by being able to better balance work and parenting duties and recuperate, due to being child-free every other week (27). Less stress along with more designated child time could lead to better parenting practices and more engagement in activities with the child, promoting the child's development and well-being.

However, it is also possible that parents who agreed on, and were able to manage, JPC had less conflict or were more involved parents prior to the separation and therefore provided a better environment for their child's mental health development. Our cross-sectional study design had limited possibilities to control for such factors. We adjusted for parental educational level and country of origin, but did not have access to factors such as the parents' conflict level or ability to coparent. On the whole, we believe that the lack of increased psychological symptoms among preschool children living in JPC settings most likely had to do with the compensatory functions of involved parenting, whereas children living mostly with one parent, or only with one parent, may have had less access to this protective factor and may also have been more exposed to predivorce risk factors with higher levels of toxic stress.

Strengths and limitations

One strength of this study was how we categorised postseparation living arrangements. Previous studies have mainly focused on overnight stays or included children

Table 3 Linear regression models of parental reports of the SDQ Total Difficulties by living arrangement and sociodemographic variables (n = 3656)

	Model 1		Model 2	
	B	95% CI	B	95% CI
Living arrangement				
Joint physical custody	Ref		Ref	
Intact family	−0.20	−0.92 to 0.52	0.04	−0.67 to 0.75
Living mostly with one parent	1.92***	0.75 to 3.09	1.81**	0.66 to 2.95
Living only with one parent	2.06***	0.85 to 3.27	1.94***	0.75 to 3.13
Child gender				
Girl	Ref		Ref	
Boy	0.87***	0.60 to 1.14	0.88***	0.61 to 1.15
Child age	−0.73***	−0.90 to −0.56	−0.59***	−0.75 to −0.42
Parent gender				
Female (mother)	Ref		Ref	
Male (father)	0.49***	0.22 to 0.77	0.71***	0.43 to 0.99
Parental highest level of education				
Less than high school			Ref	
High school			−1.91***	−2.78 to −1.03
University			−2.52***	−3.38 to −1.65
Parent country of birth				
Sweden			Ref	
Other			1.05***	0.64 to 1.47
Parent age			−0.10***	−0.13 to −0.08

Model 1 was adjusted for child's age (as a continuous variable), child's gender and the responding parent's gender. Model 2 was also adjusted for the parents' educational level, country of birth and age (as a continuous variable).

p < 0.01; *p < 0.001.

Table 4 Linear regression models of teacher reports of the SDQ Total Difficulties by living arrangement and sociodemographic variables (n = 3656)

	Model 1		Model 2	
	B	95% CI	B	95% CI
Living arrangement				
Joint physical custody	Ref		Ref	
Intact family	-0.81*	-1.51 to -0.11	-0.69	-1.40 to 0.01
Living mostly with one parent	1.36*	0.23 to 2.50	1.27*	0.14 to 2.40
Living only with one parent	1.49*	0.32 to 2.67	1.41*	0.24 to 2.58
Child gender				
Girl	Ref		Ref	
Boy	1.20***	0.93 to 1.46	1.20***	0.93 to 1.46
Child age	-0.56***	-0.72 to -0.40	-0.55***	-0.71 to -0.39
Parent gender				
Female (mother)	Ref		Ref	
Male (father)	0.02	-0.25 to 0.29	-0.05	-0.33 to 0.23
Parental highest level of education				
Less than high school			Ref	
High school			-0.36	-1.22 to 0.51
University			-1.03*	-1.89 to -0.18
Parent country of birth				
Sweden			Ref	
Other			0.45*	0.04 to 0.86
Parent age			0.01	-0.02 to 0.03

* $p < 0.05$; *** $p < 0.001$.

Model 1 was adjusted for child's age (as a continuous variable), child's gender and the responding parent's gender. Model 2 was also adjusted for parents' educational level, country of birth and age (as a continuous variable).

living with one parent for up to 30% of the time (17–19). In this study, JPC was defined as children spending about an equal amount of time living with both parents. Furthermore, the inclusion of the living mostly with one parent category implies that children of parents who chose the JPC category actually spent about 50% of their time in each parent's home. A further, and particular, strength was the parallel parental and teacher reports on the child's behaviour. Many studies on this age group mainly rely on maternal reports and the inclusion of paternal reports, and in particular those of preschool teachers, possibly provided more objective reports on child mental health (17–19). Furthermore, our sample size was relatively large compared to earlier studies on this topic.

The main limitation of this study was its cross-sectional design. Although we adjusted the analysis for some sociodemographic confounders, it seems probable that substantial residual confounding existed with regard to other familial risk factors. It also seems likely that there was a positive selection of parents into the JPC category, with regard to communication between the separated parents, and a negative selection into the living mostly or only with one parent, with regard to parents who had a range of social problems. Another limitation was the possible selection bias of fathers who choose to complete the outcome measure in the current study. A study by Bastaitis et al. (28) indicated that fathers who were more involved with their children were also more likely to participate in surveys about their children. Fathers of children in JPC settings tend to be more

involved, so it is not surprising that, in the current study, children in JPC settings were more likely to be represented by their fathers compared to children living mostly or only with one parent. We conducted all the analyses controlling for parent's gender, but the extent to which our results were explained by these selection biases can only be evaluated in longitudinal studies with information on the child's and parents' mental health before and after separation. Therefore, further studies with a longitudinal design are much needed to inform policy and advice regarding living arrangements for young children when parents separate.

Despite the comparatively large population-based sample of preschool children in this study, the low rate of JPC at this age somewhat limited the conclusions we could draw. The limited number of children living in JPC arrangements also prevented us from studying the subscales of the SDQ. Both externalising and internalising problems can result from poor child–parent relationships (29,30), and this is why studies with larger populations of children living in JPC settings are needed to better understand the nature of the psychological problems experienced.

CONCLUSION

Preschool children who spent about equal time in both of their parent's respective homes after a separation showed less psychological problems than those living mostly or only with one parent. The design of the current study did not allow us to determine whether this difference was due to

preparation factors, but our results showed that JPC arrangements were not *per se* associated with more psychological symptoms. Longitudinal studies are needed to further inform policy makers and families.

FUNDING

AS received a joint grant from Swedish Research Council for Sustainable Development, Vetenskapsrådet, Swedish Council for Working Life and Social Research and VINNOVA (grant number 259-2012-68), plus financial support from The Gillbergska Foundation. MB and EF received a grant from Länsförsäkringsbolagens forskningsfond and the Swedish Council for Working Life and Social Research (grant number 2014-0843).

CONFLICT OF INTEREST

The authors have no conflict of interests to declare.

References

- Melli M, Brown P. Exploring a new family form - The shared time family. *Int J Law Policy Family* 2008; 22: 231–69.
- Cancian M, Meyer DR, Brown PR, Cook ST. Who gets custody now? Dramatic changes in children's living arrangements after divorce. *Demography* 2014; 51: 1381–96.
- Commission of Inquiry. Fortsatt föräldrar - om ansvar, ekonomi och samarbete för barnets skull; 2011:51 [Continuous parenthood: about responsibilities, economy and cooperation for the sake of the child; Report No. 2011:51]. Stockholm: Commission of Inquiry, 2011.
- Kitterod RH, Lyngstad J. Characteristics of parents with shared residence and father sole custody. Evidence from Norway 2012. Discussion Papers No. 780. Statistics Norway, Research Department, 2014.
- Ottosen HM, Ståge S. Deleborn i tal. En analyse af skilsmissebørns samvær baseret på SFI's børneforløbsundersøgelse [Split children in numbers. An analysis of divorce child custody cases based on SFI's child development study]. Copenhagen: The Danish National Centre for Social Research (SFI), 2012.
- Bergström M, Modin B, Fransson E, Rajmil L, Berlin M, Gustafsson PA, et al. Living in two homes-a Swedish national survey of wellbeing in 12 and 15 year olds with joint physical custody. *BMC Public Health* 2013; 13: 868.
- Klinth R. The best of both worlds? Fatherhood and gender equality in Swedish paternity leave campaigns, 1976–2006. *Fathering*. 2008; 6: 20–38.
- Amato PR. The consequences of divorce for adults and children. *J Marriage Fam* 2000; 62: 1269–87.
- Swedish Board of Health and Welfare. Familjerätten och barnet i vårdnadstvister. [Family law and the child in custody disputes]. Stockholm: Swedish Board of Health and Welfare, 2011.
- Bastais K, Mortelmans D. Parenting as mediator between post-divorce family structure and children's well-being. *J Child Fam Stud* 2016; 25: 2178–88.
- Nielsen L. Shared residential custody: review of the research (Part II of II). *Am J Fam Law* 2013; 27: 123–37.
- Vanassche S, Sodermans AK, Matthijs K, Swicegood G. Commuting between two parental households: the association between joint physical custody and adolescent wellbeing following divorce. *J Fam Stud* 2013; 19: 139–58.
- Warshak RA. Social science and parenting plans for young children: a consensus report. *Psychol Public Policy Law* 2014; 20: 46–67.
- Norsk Psykolog Forening. Samvær 0-3. Anbefalinger om samvær for de minste barna etter lov om barn og foreldre [Visitation 0-3. Recommendations regarding parenting visitation for the youngest children under the Act on Children and Parents]. Oslo: The Norwegian Psychological Association, 2014.
- Nielsen L. Wozzles: their role in custody law reform, parenting plans, and family court. *Psychol Public Policy Law* 2014; 20: 164–80.
- Bowlby J. *Attachment and loss. Vol. 1., Attachment*. New York: BasicBooks, 1969.
- McIntosh J, Smyth B, Kelahar M, Wells Y, Long C. Post-separation parenting arrangements and developmental outcomes for infants and children. Canberra: Australian Government Attorney-General's Department, 2010.
- Tornello SL, Emery R, Rowen J, Potter D, Ocker B, Xu YS. Overnight custody arrangements, attachment, and adjustment among very young children. *J Marriage Fam* 2013; 75: 871–85.
- Pruett MK, Ebling R, Insabella G. Critical aspects of parenting plans for young children: interjecting data into the debate about overnights. *Fam Court Rev* 2004; 42: 39–59.
- Achenbach TM. Manual for the Child Behavior Checklist: 4–18 and 1991 profile. Burlington, Vt.: Department of Psychiatry, University of Vermont, 1991.
- Goodman R. Psychometric properties of the Strengths and Difficulties Questionnaire. *J Am Acad Child Adolesc Psychiatry* 2001; 40: 1337–45.
- Salari R, Fabian H, Prinz R, Lucas S, Feldman I, Fairchild A, et al. The Children and Parents in Focus project: a population-based cluster-randomised controlled trial to prevent behavioural and emotional problems in children. *BMC Public Health* 2013; 13: 961.
- Malmberg M, Rydell AM, Smedje H. Validity of the Swedish version of the Strengths and Difficulties Questionnaire (SDQ-swe). *Nord J Psychiat* 2003; 57: 357–63.
- Bergström M, Fransson E, Hjern A, Köhler L, Wallby T. Mental health in Swedish children living in joint physical custody and their parents' life satisfaction: a cross-sectional study. *Scand J Psychol* 2014; 55: 433–9.
- Bergström M, Fransson E, Modin B, Berlin M, Gustafsson PA, Hjern A. Fifty moves a year: is there an association between joint physical custody and psychosomatic problems in children? *JECH* 2015; 69: 769–74.
- Sarkadi A, Kristiansson R, Oberklaid F, Bremberg S. Fathers' involvement and children's developmental outcomes: a systematic review of longitudinal studies. *Acta Paediatr* 2008; 97: 153–8.
- Fransson E, Sarkadi A, Hjern A, Bergström M. Why should they live more with one of us when they are children to us both?: Parents' motives for practicing equal joint physical custody for children aged 0–4. *Child Youth Serv Rev* 2016; 66: 154–60.
- Bastais K, Pasteels I, Ponnet K, Mortelmans D. Adult non-response bias from a child perspective. Using child reports to estimate father's non-response. *Soc Sci Res* 2015; 49: 31–41.
- Brumariu LE, Kerns KA. Parent-child attachment and internalizing symptoms in childhood and adolescence: a review of empirical findings and future directions. *Dev Psychopathol* 2010; 22: 177–203.
- Roskam I, Meunier J-C, Stievenart M. Parent attachment, childrearing behavior, and child attachment: mediated effects predicting preschoolers' externalizing behavior. *J Appl Dev Psychol* 2011; 32: 170–9.