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Joint Physical Custody and Adolescents' Life Satisfaction in 37 North American and European Countries

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Joint physical custody, a parental care arrangement in which a child lives with each parent about equally after separation or divorce, is an increasingly common phenomenon in many Western countries. Although attention from family scholars, practitioners, and law professionals is growing, there are hardly any numbers on the prevalence of joint physical custody (JPC). Moreover, studies using large-scale representative data on the effects of JPC for children's well-being are still rare. The data for this study come from Health Behaviour in School-Aged Children (HBSC), a representative cross-national survey of adolescents in 37 European and North American countries that was conducted in 2002, 2006, and 2010 and included information on students at the ages of 11, 13, and 15 years (N = 92,886). First, results revealed that symmetrical JPC after family dissolution is still very rare in the majority of countries (5% or less), but reaches 10–20% in some countries. Second, adolescents' life satisfaction in nonintact families is higher in symmetric JPC arrangements than in asymmetric care arrangements. However, after controlling for children and family characteristics, the differences disappear. Thus, it is not the symmetric JPC arrangement that induces adolescents' higher life satisfaction, but rather the children and family characteristics that are associated with the choice of such a custody arrangement by separated or divorced parents.

Keywords: Adolescents; Europe; Health Behaviour in School-Aged Children; Joint Physical Custody; Life Satisfaction; North America

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In the context of the high separation and divorce rates in Europe and North America (Cherlin, 2017; Härkönen, 2014), children's well-being after family dissolution is one of the most central concerns. Empirical studies generally indicate that children from nonintact families tend to score worse than children who live with both biological parents on measures of a range of behavioral, emotional, social, and cognitive outcomes (see for an overview Amato, 2010; Härkönen, Bernardi, & Boertien, 2017). Accordingly, their overall well-being and subjective life satisfaction are lower, too (Bjarnason et al., 2012; Levin,

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Dallago, & Currie, 2012). However, sometimes the effect sizes were small in magnitude, and furthermore, results revealed that there is a substantial degree of variability in children's outcomes (Amato & Anthony, 2014; Hadfield, Amos, Ungar, Gosselin, & Ganong, 2018).

Accordingly, focusing exclusively on differences in the well-being of children living in intact vs. nonintact families neglects potentially important differentials within the group of children in nonintact families. Rather than focusing on the general impact of family dissolution, we therefore compare children from nonintact families living in different custody arrangements to examine possible (dis-)advantages within this group of children (see for the same argument: Powell, Hamilton, Manago, & Cheng, 2016, and the same approach: Bakker & Mulder 2013; McIntosh, Smyth, & Kelaher, 2013). Hence, the research question would not be why children from nonintact families fare worse than children from intact nuclear families, but *what the conditions are that help children adapt after family dissolution*.

One of the factors that has been identified as being most important for child well-being after family dissolution is the involvement of the father. It is a worldwide phenomenon that in the majority of families, children stay with their mothers after parental break up and suffer from less contact or even no contact and involvement with their fathers (e.g., Holt, 2016; Kalmijn, 2015; Köppen, Kreyenfeld, & Trappe, 2018). However, it has been shown that the involvement of fathers after family dissolution has positive effects on children's well-being in many respects (e.g., Adamsons & Johnson, 2013; Beckmeyer, Stafford Markham, & Troilo, 2019; Kalmijn, 2016; Poortman, 2018). Thus, it can be expected that there is an association between children's well-being and the physical custody arrangement in nonintact families that formalizes the time that children spend with their parents.

Physical custody arrangements after family dissolution can be differentiated into *sole physical custody (SPC)* (child lives either all or most of the time with one parent) and *joint physical custody (JPC)* (child lives with each parent about equally). Although sole physical custody is still the standard, joint physical custody is increasingly common in many Western societies (Smyth, 2017). Which custody arrangement parents choose after separation or divorce and what impact the physical custody arrangement has on children's well-being are largely determined by the social and cultural factors of a specific country. Furthermore, differences in legal systems may significantly affect the custody options that are typically approved by the courts. Given the great attention to JPC by family scholars, practitioners, and law professionals, it is surprising that numbers on the prevalence of JPC for most countries are still missing. This might be due to the fact that representative data on custody arrangements across households are still very rare (Steinbach, 2019).

Thus, the *first aim* of the present study is to estimate the proportion of symmetrical JPC in 37 European and North American countries covered by the Health Behaviour in School-aged Children (HBSC) study. HBSC is a representative cross-national survey of adolescents aged 11, 13, and 15 years that was conducted in 2002, 2006, and 2010 ($N = 92,886$; Currie et al., 2012). The *second aim* is to answer the question of whether (and if so, why) adolescents' life satisfaction differs between symmetric JPC arrangements and asymmetric physical custody arrangements. In doing this, we are filling a research lacuna by using large-scale representative data from European and North American countries and comparing adolescents' life satisfaction living in nonintact families with different custody arrangements with each other instead of comparing them with children living in two-parent nuclear families.

BACKGROUND

As mentioned above, children's well-being is one of the most central concerns when it comes to research about family dissolution (see for an overview Amato, 2010; Härkönen

et al., 2017). This is because a parent's separation or divorce can have long-term negative effects on children (Bernardi & Radl, 2014) and even for subsequent generations, such as grandchildren (Amato & Cheadle, 2005). Previous research showed that, in general, children with separated or divorced parents scored worse on a wide range of outcomes, such as physical and psychological well-being or educational achievement (e.g., Amato, 2010; Härkönen et al., 2017).

Theoretical explanations draw, on the one hand, on the *selection hypothesis* (Amato, 2000; Hadfield et al., 2018), which assumes that the negative effects of family dissolution on children are caused by the personal traits of their parents that led to the break up. Furthermore, these personal traits are also likely to be transmitted from parents to children. On the other hand, many studies refer to the *instability hypothesis* (Amato, 2000; Hadfield et al., 2018), which explains the adjustment problems that children have of higher stress and lower resources that are caused by parental separation or divorce. However, the divorce-stress-adjustment perspective also includes protective factors (e.g., definition and meaning of divorce or demographic characteristics) that can buffer the stressors caused by the separation or divorce process (Amato, 2000).

One of the main stressors for both parents and children identified in empirical studies was sole physical parenting (Bernardi, Mortelmans, & Larenza, 2018). In all countries, children live mainly with their mothers after family dissolution, with fathers having some visitation rights. This leaves mothers usually overstrained with being primarily responsible for childcare, household chores, and employment (Bernardi et al., 2018). Fathers, on the other hand, can suffer from being excluded from their children's lives (Waldvogel & Ehlert, 2016). Accordingly, research findings showed repeatedly that children's well-being was significantly reduced in single-parent families due to fewer economic, social, and emotional resources (e.g., Brown, Manning, & Stykes, 2015; Harkness & Salgado, 2018). In contrast, numerous empirical studies revealed that paternal involvement after a parental break up had a positive effect on child outcomes (Adamsons & Johnson, 2013; Lamb, 2010). However, it seems that this is only true if the father was involved in the child's life before the separation or divorce (Poortman, 2018; Westphal, Poortman, & Van der Lippe, 2014). Additionally, high postdivorce interparental conflicts can result in detrimental effects for children in nonintact families (Kalmijn, 2016; Stokkebekk, Iversen, Hollekim, & Ness, 2019) because high conflict and low parenting quality are linked (Elam, Sandler, Wolchik, & Tein, 2016, 2019). However, the level of conflict is not the only factor that should be considered in that context; children's exposure to conflict and particularly children's exposure to the resolution of interparental conflict is also relevant for children's well-being (e.g., Harold & Sellers, 2018). Hostile, disengaged, and uncooperative forms of interparental conflict strongly predict children's insecurity and externalizing problems (Warmuth, Cummings, & Davies, 2019).

A new physical custody arrangement after family dissolution that is characterized by much more paternal involvement than the current standard in most countries is called JPC. This term refers to a child's residential placement after a parental separation or divorce and is used when children spend an important proportion of their time in both of their parents' homes, within a range between 30% and 70% (Steinbach, 2019). More specifically, physical custody arrangements can be divided into five categories: *sole physical custody mother* (71–100% in the mother's home); *asymmetric JPC: main residence mother* (51–70% in the mother's home); *symmetric JPC* (50% in the mother's and 50% in the father's home); *asymmetric JPC: main residence father* (51–70% in the father's home); and *sole physical custody father* (71–100% in the father's home). Generally, joint *physical custody* (shared parenting time) corresponds with *legal custody* (shared decision-making), but it is not a prerequisite.

The prevalence of JPC is difficult to compare between countries because of completely different databases and the use of greatly varying thresholds used to define it (70–30%, 60–40%, 50–50%; Steinbach, 2019). However, it seems that in some countries it is much more widespread than in others. However, JPC families (symmetric and asymmetric) make up about 40% of all separated or divorced families in Belgium (Vanassche, Sodermans, Declerck, & Matthijs, 2017) and Sweden (Bergström et al., 2015), and these care arrangements are less prevalent in other countries like Australia (16%) (Smyth & Chisholm, 2017), or Spain (15%; Solsona & Spijker, 2016). After all, we have numbers only for countries where the phenomenon is known and thus gets some attention. For most countries, we do not know any numbers.

This disparity of our knowledge regarding the prevalence of JPC arrangements in different countries is reflected in the results on the effects of JPC for parents' and children's well-being. Most existing studies were based on data from countries where JPC is quite common. Thus, a question was raised as to whether the results of these studies were applicable to other countries as well. In short, the majority of studies comparing children living in JPC arrangements with children living in nuclear families or SPC arrangements revealed neutral to positive effects for their well-being (see for an overview Steinbach, 2019). However, these results should be regarded with caution before they can be generalized. First, they were, as mentioned, limited to a few countries (e.g., Belgium and Sweden). Second, and this is a more serious concern, JPC is an arrangement chosen by a positively selective group of parents that has been the data basis of the studies. JPC parents were usually better off with respect to their socio-economic characteristics, had lower levels of conflict, and lived on average closer to each other than SPC parents (Steinbach, 2019). This also held true for countries where JPC was more widespread.

Nevertheless, children seemed to benefit from paternal involvement in a positive family environment with no escalating conflicts, but with a joint strategy for parenting (Emery, 2016; Kalmijn, 2016). Additionally, the parents also benefitted from JPC arrangements: Mothers in particular were more satisfied with their situation, felt less time pressure, and had more time for both leisure time activities and labor force participation (Bakker & Karsten, 2013; Botterman, Sodermans, & Matthijs, 2015; Cashmore et al., 2010; Van der Heijden, Poortman, & Van der Lippe, 2016). Another study revealed that parents practicing JPC were also better off regarding their physical and emotional health than parents practicing SPC (Melli & Brown, 2008). However, no direct association between parents' custody arrangements and their subjective well-being was found, while communicating with their children indirectly influenced *mothers' and fathers' subjective well-being* (Sodermans, Botterman, Havermans, & Matthijs, 2015).

Moreover, the quality of the parent-child communication had an impact on *adolescents' life satisfaction*: Adolescents with problems talking to their mothers or their fathers reported less life satisfaction (Bjarnason et al., 2012; Levin et al., 2012). And although adolescents from nonintact families had in general greater difficulties talking to both their mothers and fathers than children from intact families, "children living in joint physical custody ha[d] equal or less problems communicating with their parents than their counterparts in intact families and less such problems than children in other types of nonintact families" (Bjarnason & Arnarsson, 2011, p. 885). Furthermore, previous studies on the association between family structure and adolescents' life satisfaction or happiness revealed that adolescents from nuclear families reported significantly higher levels of life satisfaction and happiness than adolescents from separated or divorced families did (Bjarnason et al., 2012; Levin et al., 2012; Robson, 2010; Walper, Thönnissen, & Alt, 2015). Again, adolescents living in JPC arrangements after family dissolution felt better than adolescents living in SPC arrangements (Bjarnason et al., 2012; Levin et al., 2012). Major

moderating variables for this association were SES and quality of communication with parents (Bjarnason et al., 2012; Levin et al., 2012).

METHOD

Sample

Analyses are based on the cross-national and cross-sectional Health Behaviour in School-aged Children (HBSC) study (<http://www.hbsc.org/>). The HBSC study was conducted by an international multidisciplinary network of research teams in cooperation with the World Health Organization (WHO) Regional Office of Europe, and the data were collected through school-based surveys using the same research protocol in all participating countries and regions. Student selection (11-, 13-, and 15-year-olds) took place with a clustered sampling design in which the initial sampling unit was the school class (with some adaptation in sampling because of different school systems across countries). The HBSC data included more than 40 countries and regions across Europe and North America and were conducted in 2001/02, 2005/6, 2009/10, and 2013/14. Because of the cross-sectional design of the study, students participated only in one round of data collection.

As the question regarding cross-household custody arrangements after family dissolution was expunged from the study in 2013/14, we had to restrict our sample to the first three rounds (2002, 2006, and 2010) of the study. After pooling the data over these three waves, and combining the data gathered in the Flemish and the French parts of Belgium (Belgium), as well as Scotland, England, and Wales (UK), we ended up with 581,838 cases in 39 European and North American countries: Armenia, Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Germany, Greece, Greenland, Hungary, Finland, France, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, UK, Ukraine, and USA.

However, we had to exclude Lithuania and Malta, because Lithuania did not contain one single case of joint physical custody ($N = 16,615$) and Malta ($N = 3,384$) did not include adolescents' life satisfaction in the questionnaire. Therefore, the number of cases decreased to 561,839. In the next step, we deleted all cases with missing or nonuseful information on household structure ($n = 28,260$), students living in nuclear families ($n = 434,479$), students who did not fall into the sampling age range ($n = 1,650$), and cases with missing data on the dependent variable "life satisfaction" ($n = 4,572$). The final analytic sample consisted of 92,886 cases because all other missing values on any other included variable were replaced by multiple imputation by country (child's health = 2,155 [2.3%], family affluence = 2,073 [2.2%], communication with mother = 4,603 [4.9%], and communication with father = 6,326 [6.8%]). To control for the country-clustered structure of the data, we ran *hierarchical linear models* (Gelman & Hill, 2006).

Dependent Variable

Adolescents' life satisfaction as a global judgment of life and well-being was measured by an adapted version of Cantril's ladder (Cantril, 1965) with the following question: "Here is a picture of a ladder. The top of the ladder '10' is the best possible life for you and the bottom '0' is the worst possible life for you. In general, where on the ladder do you feel you stand at the moment?" The response categories ranged between 0 = "worst possible life" and 10 = "best possible life" (for reliability and validity for use with adolescents in the HBSC study see Leven & Currie, 2014).

Independent Variable

We constructed postseparation physical custody arrangements by using three joint questions about the existence of a first and a second home, about who lives there, and about how much time the adolescent spends in the second home. (a) The question about the *first home* was “All families are different (e.g., not everyone lives with both their parents, sometimes people live with just one parent, or they have two homes or live with two families) and we would like to know about yours. Please answer this first question for the home *where you live all or most of the time* and tick the people who live there.” (b) *Second home*: “Do you have another home or another family, such as the case when your parents are separated or divorced? Please tick the people who live there.” The response categories for both questions were 1 = “mother,” 2 = “father,” 3 = “stepmother (or father’s girlfriend),” 4 = “stepfather (or mother’s boyfriend),” 5 = “grandmother,” 6 = “grandfather,” 7 = “I live in a foster home or children’s home,” and 8 = “someone or somewhere else.” (c) Additionally, adolescents were asked how much time they stay in the second home: 1 = “half the time,” 2 = “regularly but less than half the time,” 3 = “sometimes,” and 4 = “hardly ever.” Based on the answers to these questions, we were able to differentiate *physical custody arrangements in nonintact families* in 1 = “asymmetric physical custody family (one home),” 2 = “asymmetric physical custody family (two homes),” and 3 = “symmetric joint physical custody family.” In *asymmetric physical custody families (one home)*, one biological parent (either mother or father) lived in the first home and there was no second home. Thus, all of those arrangements were sole physical custody (SPC) families. In *asymmetric physical custody families (two homes)*, one biological parent (either mother or father) lived in the first home and the other biological parent lived in a second home. The child stayed in the second home “regularly but less than half the time,” “sometimes,” or “hardly ever.” Thus, this category includes both sole physical custody (SPC) and asymmetric joint physical custody (AJPC) families. Even though *symmetric joint physical custody families (JPC)* are also families with two homes, this category was set apart for families where the child spent “half of the time” in either home. Since we were only able to construct symmetric JPC with a fifty-fifty care arrangement (see Figure 1), our results were restricted to a quite conservative estimation. However, the fifty-fifty arrangement is the ideal of JPC, and the 50% threshold was used in most parts of the theoretical discussion as well as in the empirical studies.

Control Variables

We controlled for a set of variables which previous research suggested is associated with subjective life satisfaction and happiness (Bjarnason et al., 2012; Levin et al., 2012; Robson, 2010; Walper et al., 2015). *Child characteristics* considered were *age* (1 = “11 years old,” 2 = “13 years old,” and 3 = “15 years old”), *gender* (0 = “male” vs. 1 = “female”), and self-rated *health* (1 = “poor,” 2 = “fair,” 3 = “good,” or 4 = “excellent”). *Family characteristics* included were *family affluence* assessed by the Family Affluence Scale (FAS; Currie et al., 2008) with the question, “How well off do you think your family is?”, and the response categories were 1 = “not at all well off,” 2 = “not so well off,” 3 = “average,” 4 = “quite well off,” and 5 = “very well off.” To account for family complexity, we constructed a dummy variable to determine the existence of *stepparents* (0 = “no” vs. 1 = “yes”) based on the questions regarding the first and the second home (see above). Finally, to assess *communication with parents*, children were asked to indicate how easy it is for them to talk to their mother and their father, respectively, about things that really bother them, using the following response categories: 1 = “very easy,” 2 = “easy,” 3 = “difficult,” 4 = “very difficult,” and 5 = “don’t have or see this person.” For the analysis, we consolidated the difficult and the easy categories to 1 = “difficult” (ref.), 2 = “easy,”

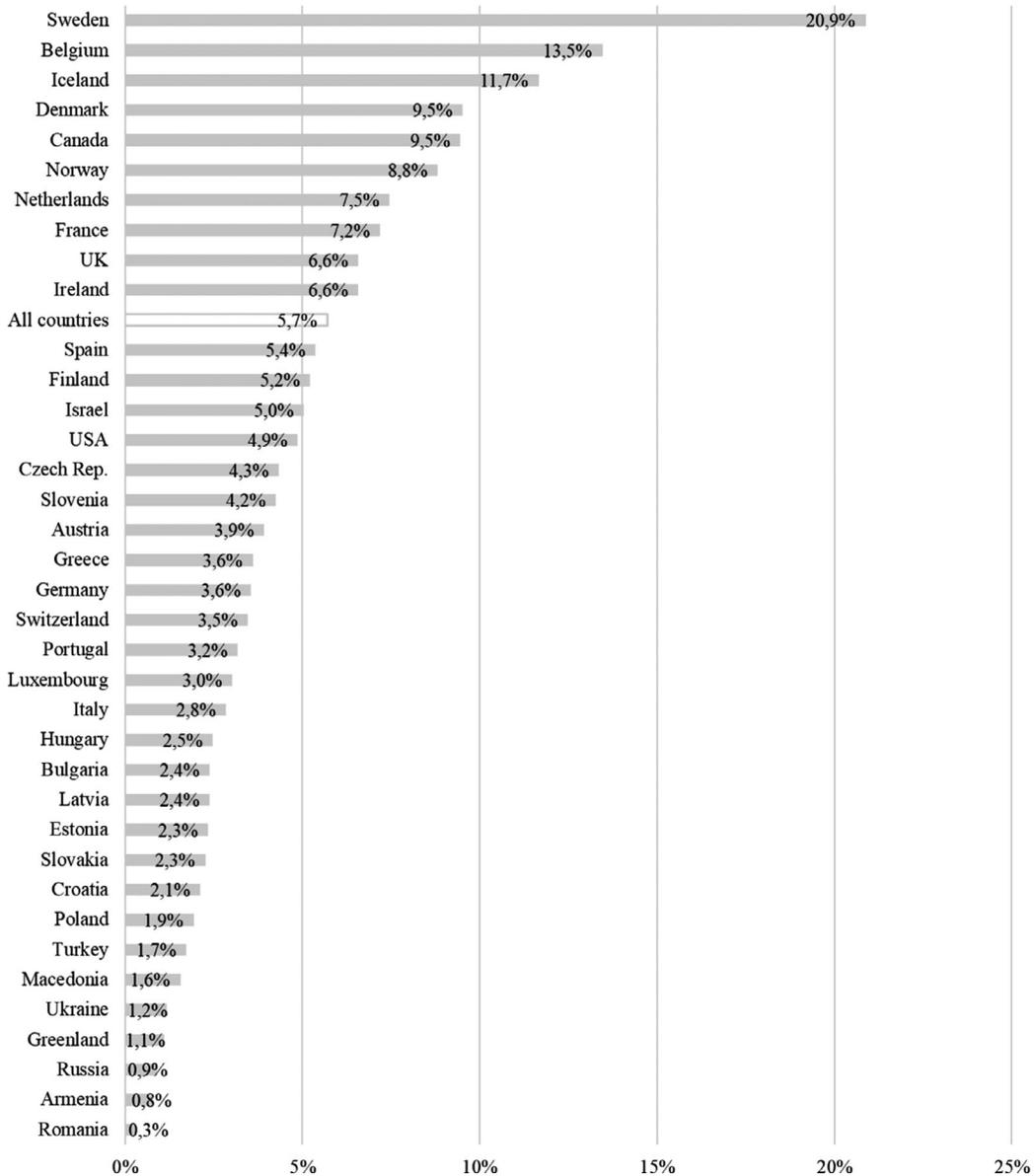


FIGURE 1. Prevalence of Symmetric Joint Physical Custody (JPC) Arrangements on Nonintact Families in 37 European and North American Countries ($N = 92,886$).

Note. Health Behaviour in School-aged Children study (2002, 2006, 2010; HBSC).

3 = “don’t have or see this person” for both mothers and fathers. To account for *country characteristics*, we included the proportion of nonintact families as well as the proportion of symmetric joint physical custody families within a certain country. We constructed two variables, *country-share: nonintact families* and *country-share: joint physical custody*. Based on the collective declining effect hypothesis (Albertini & Garriga, 2011), a higher proportion of separation and divorce should decrease the negative effects for children’s well-being. First, the diffusion of separation and divorce reduces the social stigma associated to it and, thus, decreases the negative effects. Second, family dissolution is less

selective if separation and divorce are more widespread. Third, a declining effect of separation and divorce might also be due to family policies that provide support for the specific needs of these family forms. We assume that the same holds true for the share of joint physical custody families. The descriptive sample statistics are presented in Table S1 and Figure S1.

RESULTS

Prevalence of Symmetric Joint Physical Custody Arrangements on Nonintact Families

The first objective of our study was to calculate the prevalence of symmetric JPC arrangements for 37 European and North American countries. As mentioned above, symmetric JPC, where a child stays half of the time in both parents' homes (see also Figure 1) after family dissolution, will lead to quite conservative estimates because asymmetric JPC arrangements are ignored. However, symmetric JPC is often seen as the sought-after ideal in most parts of the discussion, particularly with regard to child well-being (Nielsen, 2018; Smyth, 2017). Additionally, the numbers do only account for 11, 13, and 15-year-old adolescents.

Results show that there are at least some symmetric JPC families in all included countries, even though the distribution varies widely among them (Figure 1). In Sweden, for example, more than 20% of the children stay about half of the time in a second home after a parental break up, while in Romania it is only 0.3%. Not very surprisingly, there is a division between Northern and Western European countries (e.g., Belgium, Iceland, Denmark, Norway, the Netherlands, and France) as well as North American countries (Canada, USA), with a higher prevalence of symmetric JPC, and Eastern and Southern European countries (e.g., Greece, Italy, Portugal, Poland, Hungary, and Bulgaria), with a lower prevalence of symmetric JPC.

Life Satisfaction by Custody Arrangement

Our second objective was to examine the association between custody arrangements after family dissolution and adolescents' life satisfaction (Table 1). We conducted hierarchical linear regressions with a stepwise inclusion of the independent and control variables. The baseline model only includes the custody arrangements to examine the differences in life satisfaction among adolescents in different care arrangements after family dissolution. The second model adds child characteristics to the equation, followed by the third model that also controls for family characteristics. In the fourth and last model, we finally control for two country-level variables.

The baseline model (Model 1) revealed a lower overall life satisfaction of adolescents living in asymmetric physical custody (with one or two homes) in comparison to adolescents living in symmetric joint physical custody arrangements. After introducing children's characteristics (age, gender, and health) in the second model (Model 2), the coefficients showing lower life satisfaction for adolescents in asymmetric physical custody (with one or two homes) decreased by about half, but stayed significant. However, including family characteristics (family affluence, existence of stepparents, and communication quality with parents) reduced the differences between the custody arrangements considerably (Model 3), so that there were no longer significant differences between adolescents in asymmetric physical custody families—irrespective of whether they have one or two homes—and joint physical custody families. In the full and last model (Model 4), also taking into account country-level indicators (country-share of non-intact and symmetric JPC families) did not change the results further. However, we

TABLE 1

Hierarchical Linear Regression Predicting Adolescents' Life Satisfaction in 37 European and North American Countries

	Model 1	Model 2	Model 3	Model 4
Physical custody arrangement (Ref.: JPC)				
Asymmetric PC (1 home)	-0.24*** (0.03)	-0.12*** (0.03)	0.03 (0.03)	0.03 (0.03)
Asymmetric PC (2 homes)	-0.26*** (0.03)	-0.14*** (0.03)	-0.02 (0.03)	-0.01 (0.03)
Child characteristics				
Child's age (Ref.: 11 years old)				
13 years old		-0.35*** (0.02)	-0.23*** (0.01)	-0.23*** (0.01)
15 years old		-0.53*** (0.02)	-0.33*** (0.02)	-0.33*** (0.02)
Child's gender (Ref.: Male)				
Child's health (1-4)		-0.11*** (0.01)	-0.04** (0.01)	-0.04** (0.01)
Family characteristics				
Family affluence (1-5)				
Stepparents (Ref.: No stepparents)			0.43*** (0.01)	0.43*** (0.01)
Comm. with mother (Ref.: Difficult)			-0.03** (0.01)	-0.03** (0.01)
Easy			0.72*** (0.02)	0.72*** (0.02)
Don't have or see mother			0.32*** (0.03)	0.32*** (0.03)
Comm. with father (Ref.: Difficult)				
Easy			0.36*** (0.02)	0.36*** (0.02)
Don't have or see father			0.19*** (0.02)	0.19*** (0.02)
Country characteristics				
Country-share: nonintact families				
Country-share: symmetric JPC				0.00 (0.01)
Constant	7.48*** (0.05)	4.99*** (0.06)	2.94*** (0.06)	2.86*** (0.11)
<i>N</i>	92,886	92,886	92,886	92,886

Note. Health Behaviour in School-aged Children study (2002, 2006, 2010; HBSC), Standard errors in parentheses.

*** $p < .001$.

** $p < .01$.

* $p < .05$.

only could account for aggregated country effects, which might oversee the impacts of social, legal, and cultural factors on individual families living in a specific context. To sum up the results, the differences in adolescents' overall life satisfaction between custody arrangements seems not to be a matter of physical custody, but to depend on child and family characteristics, most importantly, as well as family affluence and the quality of the parent-child relationship.

DISCUSSION

This investigation was twofold: First, we calculated the prevalence of symmetric joint physical custody arrangements on nonintact families in 37 European and North American countries. Second, we examined the association of postseparation custody arrangements and adolescents' life satisfaction. The analyses were based on the pooled data of three rounds of the HBSC study (2002, 2006, and 2010), a cross-sectional and cross-country survey conducted by an international multidisciplinary network of research teams in cooperation with the World Health Organization (WHO) Regional Office of Europe (Currie et al., 2012).

Results revealed that symmetric JPC arrangements (half of the time in both the mother's and the father's home) after family dissolution are still a rare phenomenon in most of the investigated countries. In two-thirds of the countries, the prevalence of

symmetric JPC was still 5% or less. However, in some countries, the share of symmetric JPC reached 10–20%. For countries that participated in the study, we found a division between Northern and Western European countries as well as North American countries having a higher prevalence of symmetric JPC, and Eastern and Southern European countries having a lower prevalence of symmetric JPC.

Regarding the association of postseparation custody arrangements and adolescents' life satisfaction, the hierarchical linear regression results revealed that adolescents who live in symmetric JPC families reported higher levels of life satisfaction than adolescents from asymmetric care arrangements. After controlling for family characteristics (family affluence, the existence of stepparents, and difficulties regarding the communication with both mother and father), the differences between adolescents' life satisfaction in symmetric JPC and asymmetric care arrangements lost significance. Therefore, we can conclude that it is not the physical custody arrangement as such, that puts children in symmetric JPC families in favor, but the positively self-selected group of parents choosing it. In particular, family affluence and the quality of communication with parents played a major role for children's life satisfaction.

This result is in line with results of others studies, which revealed that the effects of the custody arrangement on children's and parents' well-being are small compared to effects of economic, social, and emotional resources (Jablonska & Lindberg, 2007; Köppen et al., 2020; Sodermans et al., 2015; Swiss & Le Bourdais, 2009; Vanassche et al., 2013). Additionally, other studies showed that frequency of contact, interparental conflict, and the well-being of children are linked (Elam et al., 2016, 2019; Kalmijn, 2016). This should also hold true for JPC arrangements but there is too little research on it because JPC parents are still a positively selective group with for example high income, high education, and low level of conflict (e.g., Kitterød & Wiik, 2017; Poortman & van Gaalen, 2017). Accordingly, we still need more decent research on the determinants that make JPC a success by increasing children's and parent's well-being. That includes an urgent need of cross-country data because the social, legal, and cultural context of a country matter greatly for the impact of physical custody arrangements on children's well-being.

As with every empirical study, this one also has several limitations that should be mentioned: First, we could only analyze symmetric JPC arrangements, although it would be very fruitful to also include 60–40% or 70–30% thresholds to deepen our understanding of the impact of physical custody arrangements. Furthermore, we could not take into account whether the time the adolescents spend in each household was counted as any time, daytime, or overnights. Second, due to the design of the HBSC study, all measures used here were provided exclusively by the adolescents. Therefore, no information from parents could be used for verification. However, relying on multi-actor data can cause other methodological problems like handling diverging assessments or nonresponse bias of secondary respondents (Kalmijn & Liefbroer, 2011). Third, unfortunately, we had to restrict our analysis to the 2002, 2006, and 2010 rounds of the HBSC data, because the 2013/14 HBSC core-questionnaire did not include the variable about the second home. Thus, more recent numbers were not available. Fourth, the cross-sectional design of the study did not allow us to include adolescents more than once. Thus, we cannot draw conclusions about causality. In addition, changes in life satisfaction or in the custody arrangement were not captured and should be addressed in future research. Fifth, the low number of cases in the included countries made it impossible to examine the association of custody arrangements and adolescents' life satisfaction at the country level. Sixth, for the measurement of the overall life satisfaction we had to rely on only one item (Cantril ladder). Although the validity and reliability of the item have been proven for the HBSC study, it would have been an advantage to measure adolescent life satisfaction with regard to a number of

different life domains (*domain-specific life satisfaction*) or to include other measurements of psychological well-being as well. Seventh, several indicators (e.g., parents' educational level, parents' conflict level, time since separation or divorce) could not be included as control variables, as the HBSC did not provide this kind of information.

Up to now, joint physical custody care arrangements after family dissolution are common only in a few Western countries. It seemed to increase in recent years, but it also leveled off in the forerunners at a certain point. Most of the existing empirical studies revealed that children growing up in JPC arrangements fare better on a number of outcomes. Our study came to the same conclusion. However, as in many other studies, the differences between children in JPC and SPC disappeared after introducing child and family characteristics to the regression model. Therefore, further investigations are necessary before we can draw conclusions about the effects on children when numbers are increasing and JPC is getting more widespread.

To sum up, parents practicing symmetric joint physical custody arrangements after family dissolution are still very rare and have only a substantial prevalence in a very few countries. However, empirical studies show that children growing up in JPC families fare better than children in other postseparation care arrangements. One of the reasons is that parents who choose JPC as a care arrangement after they break up are positively selected. This study could show that family affluence and easy communication with mother and father are most important for adolescents' life satisfaction. Thus, a good economic basis and a high quality of relationship play a major role in the well-being of adolescents.

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SUPPORTING INFORMATION

Additional Supporting Information may be found in the online version of this article:

Table S1. Descriptive Sample Statistics—Percentages or Means (Standard Errors).

Figure S1. Prevalence of Non-Intact Families and Symmetric Joint Physical Custody (JPC) Arrangements on All Families in 37 European and North American Countries ($N = 532,465$).

Table S1. *Descriptive sample statistics – percentages or means (standard errors)*

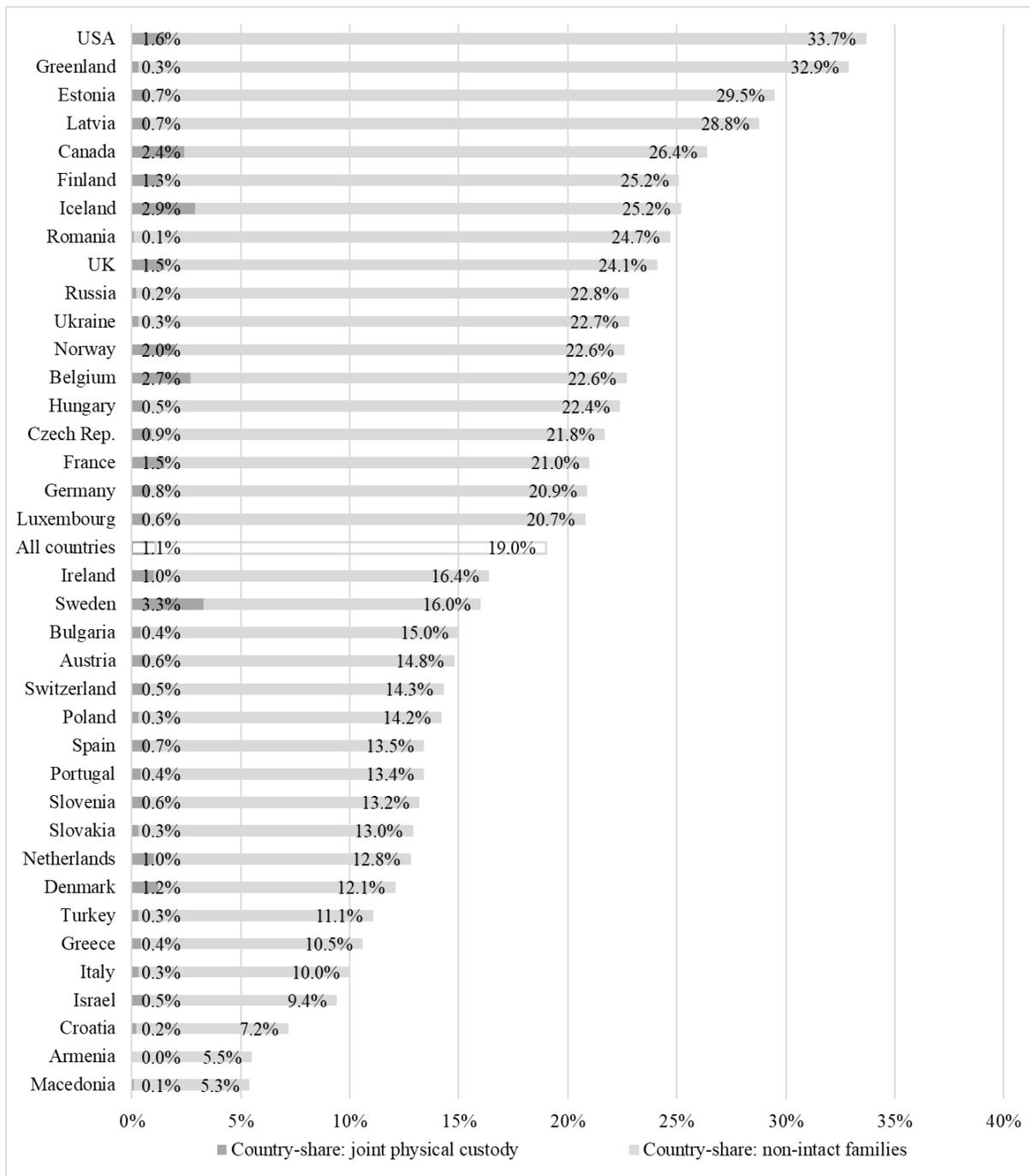
	All	Asymmetric	Asymmetric	Symmetric
	non-intact	physical custody	physical custody	joint physical
	families	(1 home)	(2 homes)	custody
	%	%	%	%
	M (SD)	M (SD)	M (SD)	M (SD)
Adolescent's life satisfaction	7.2 (0.01)	7.2 (0.01)	7.2 (0.01)	7.5 (0.03)
Physical custody arrangement				
Asymmetric PC (1 home)	55.6			
Asymmetric PC (2 homes)	38.7			
Symmetric JPC	5.7			
Child characteristics				
Child's age				
11 years old	29.5	28.9	29.1	38.6
13 years old	35.9	35.7	36.2	35.3
15 years old	34.6	35.4	34.7	26.1
Child's gender				
Male	46.5	47.1	45.5	46.6
Female	53.5	52.9	54.5	53.4
Child's health (1-4)	3.0 (0.00)	3.0 (0.00)	3.1 (0.00)	3.1 (0.01)
Family characteristics				
Family affluence (1-5)	3.5 (0.00)	3.5 (0.00)	3.5 (0.00)	3.7 (0.01)
Stepparents				

Yes	44.3	27.7	65.6	61.9
No	55.7	72.3	34.4	38.1
Communication with mother				
Difficult	19.7	18.8	21.3	17.1
Easy	76.6	74.6	78.7	82.9
Don't have or see mother	3.7	6.6	0.0	0.0
Communication with father				
Difficult	30.3	22.7	41.5	29.5
Easy	44.7	33.0	57.8	70.0
Don't have or see father	25.0	44.3	0.0	0.0
N	92,886	51,672	35,915	5,299

Note: Health Behaviour in School-aged Children study (2002, 2006, 2010) (HBSC)

The distribution of “country-share: non-intact families” and “country-share: JPC” can be found in Figure 2.

Figure S1. Prevalence of non-intact families and symmetric joint physical custody (JPC) arrangements on all families in 37 European and North American countries (N=532,465)



Note: Health Behaviour in School-aged Children study (2002, 2006, 2010) (HBSC)