Maternal satisfaction with joint and sole child physical placement arrangements following separation in Wisconsin and Finland

Quentin H. Riser¹ | Mari Haapanen² | Judith Bartfeld¹ | Lawrence M. Berger¹ | Mia Hakovirta² | Daniel Meyer¹ Anneli Miettinen³

¹Institute for Research on Poverty and Sandra Rosenbaum School of Social Work, University of Wisconsin-Madison, Madison, Wisconsin, USA

²Department of Social Research, INVEST Research Flagship Center, University of Turku, Turku, Finland

³The Social Insurance Institution of Finland, Helsinki, Finland

Correspondence

Quentin H. Riser, Institute for Research on Poverty, University of Wisconsin-Madison, 3412 Sewell Building, Madison, WI 53706, USA. Email: qriser@wisc.edu

Funding information

Academy of Finland, Grant/Award Number: 338282; Academy of Finland Flagship Programme, Grant/Award Number: 320162; Child Support Research Agreement; Institute for Research on Poverty

Abstract

Families (and sometimes courts) make important decisions regarding child physical custody arrangements post-separation, and shared parenting arrangements are increasingly common in most developed countries. Shared arrangements may be differentially associated with parental satisfaction, and these associations may vary across countries. Using data from surveys of separated mothers in Wisconsin and Finland, the present study explores this possibility and is guided by three aims: (a) to identify child and family characteristics associated with sole and shared child placements 6 or more years after separation; (b) to estimate associations of children's post-separation placements with maternal satisfaction with placements and expense sharing; (c) to examine whether the relationship between post-separation placement and maternal satisfaction varies by mothers' earnings and the quality of parents' relationships. We find that Finnish mothers with shared placement are more satisfied with their placement than are their counterparts with sole placement, while we find the inverse is true for Wisconsin mothers. Moreover, parental satisfaction with shared placement, overall and relative to sole placement, varies greatly depending on the quality of a mother's relationship with the other parent; and differences in relationship quality in Wisconsin and Finland may help explain the difference in satisfaction with shared placement in the two locations. In both Finland and Wisconsin, we find mothers with shared placement are more satisfied

FAMILY PROCESS

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made. © 2022 The Authors. *Family Process* published by Wiley Periodicals LLC on behalf of Family Process Institute.

with the way expenses are shared between parents than are mothers with sole placement. Associations between placement and satisfaction are robust to extensive controls for child and maternal characteristics.

KEYWORDS

Finland, joint physical custody/shared placement, maternal satisfaction, separation, shared care, United States

INTRODUCTION

In western countries, the landscape of post-separation living arrangements has changed over time: shifting from the vast majority of families experiencing sole care (physical custody), typically with the mother, to a substantial share of parents selecting or being adjudicated to shared placements in which children spend substantial, though not necessarily equal, amounts of time in the physical custody of each parent (Meyer et al., 2022; Steinbach et al., 2020). The growing prevalence of shared care – referred to also as shared residence, shared placement, or joint physical custody – raises questions about maternal satisfaction with this increasingly common arrangement. The division of childrearing responsibilities between parents differs in sole and shared placement arrangements, and the extent to which parents share child-related expenses, via who bears the direct costs of goods and services for the child and whether and how much child support is paid, can also vary as children spend more or less time with each parent. Despite increasing interest in post-separation residential arrangements, existing evidence is ambiguous regarding the relationship between placement arrangements and maternal satisfaction (Bauserman, 2012; Cashmore et al., 2010; Steinbach, 2019). Furthermore, no past work of which the authors are aware has explored mothers' relative satisfaction with how expenses are shared between parents in the context of sole or shared child placements.

Most existing work on whether shared and sole placement result in different outcomes for children and parents has been conducted within a single country, rather than comparatively across countries (see however Flaquer, 2021; Garriga et al., 2021). We add to this literature by examining maternal satisfaction in sole and shared placements in two countries: the United States (using the state of Wisconsin as an example) and Finland. We pay particular attention to the potential role of the varying policy contexts. In the United States, family law is a state rather than federal responsibility. States have considerable latitude to establish their own child placement and child support policies, though all states use child support guidelines that are linked to one or both parents' income and most adjust the expected child support payment when children have shared versus sole placement; specific thresholds for what is considered to be shared placement vary from state to state (Brito & Brown, 2007). We focus on Wisconsin because high-quality data on separated parents in the state are available as part of a long-standing research initiative.

Finland and Wisconsin represent different archetypes of welfare states and family policy models (Korpi, 2000). They also differ in child custody and child support policies. Finland has only recently implemented shared placement legislation (Tolonen et al., 2019), whereas shared placement has been the legally presumptive, and the most common, arrangement in Wisconsin for at least the past decade (Meyer et al., 2017). Shared placement is much more strongly linked to differences (relative to sole placement) in expectations for child support in Wisconsin as compared to Finland. These key differences motivate our comparative analysis.

The central objective of this study is to investigate whether placement type is associated with longer-term maternal satisfaction with the placement arrangement and associated expense sharing in Wisconsin and Finland. Three aims guide this work: (a) to identify child and maternal characteristics associated with sole and shared child placement arrangements 6–10 years after separation; (b) to estimate associations of children's post-separation placements with maternal satisfaction with the placement arrangement and with expense sharing; and (c) to examine whether and how maternal satisfaction with placement and with expense sharing differ by maternal earnings and by parents' current relationship quality. For each of these aims, we explore whether findings are similar or different in the two locations. Throughout, our focus is on the predictors and outcomes of shared placement in the longer-term – specifically 6 or more years after separation; we do not examine the circumstances at the time of separation nor the placement arrangement initially implemented. We consider equal and unequal (symmetric and asymmetric) shared-care arrangements; we describe shared care consistent with the Wisconsin threshold of at least 25% time with each parent and we assess sensitivity to the threshold used. Below, we provide an overview of post-separation trends and the relevant policy context in Wisconsin and Finland; the existing literature on parental satisfaction with placement outcomes; and the ways in which the two distinct policy contexts could be relevant to the outcomes in question.

Changes in children's placement arrangements in the United States and Finland

When parents do not live together, arrangements need to be made about who will make decisions for the child (legal custody), with whom the child will live (physical custody or physical placement), and how financial costs of children will be distributed between parents. In this paper, we focus on physical placement arrangements, since nearly all separating and divorcing couples in the United States and Finland now have joint legal custody (Chen, 2015; Custody and Maintenance of the Child and Determination of Parenthood, 2020).

The legal context for decisions about placement differs across countries and has changed over time, with shared placement in some cases as the presumptive arrangement. For example, Wisconsin's statutes read in part "[a] child is entitled to periods of physical placement [custody] with both parents unless, after a hearing, the court finds that physical placement with a parent would endanger the child's physical, mental or emotional health." (Wisconsin § 767.24(4) (b)). In Wisconsin regulations, shared placement is defined as a child spending 25%-50% of their time with each parent.¹ The details of time arrangements are often negotiated by parents, though the court has discretion to assign a different arrangement if it believes it to be in the best interest of the child and consistent with legislation. Similarly, in Finland, the Act presumes it is in the best interest of children to maintain contact with both biological parents and that shared placement offers an opportunity for fathers to participate in child rearing after separation (Hakovirta & Eydal, 2020). Legislative reforms in Finland in 2019 brought changes in the Act, and the possibility of shared placement was legally acknowledged for the first time (Tolonen et al., 2019). The government proposal connected to the Act states shared placement should primarily be understood as the child living at least 40% of the time with the other parent (Miettinen et al., 2020). However, unlike in Wisconsin, shared placement is not the presumption in Finland and parents can make decisions regarding a child's living arrangements that they believe is in the best interest of the child. As such, shared placement in Finland may be more concentrated among couples who mutually support the arrangement, compared to Wisconsin where the presumption of shared placement may supersede concerns from one or the other parent.

Shared placements have increased over time. Research based on court records of divorces in Wisconsin has highlighted substantial shifts in placements from 1989, when mothers received sole placements about 75% of the time, to 20 years later, when shared placements surpassed mother sole

¹In contrast, sole parent placements are defined by a child spending more than 75% of their time under the supervision (physical custody) of one of their parents. The specific threshold defining shared placement differs across states, and almost all state child support guidelines differ for shared as compared to sole placement arrangements (Brito & Brown, 2007). These thresholds range from a low of 14% of time (52 days/ overnights per year) in Indiana to 45% of time (164 days/overnights) in North Dakota.

placements, accounting for over half of cases (Meyer et al., 2017). There have also been large increases in the prevalence of shared placement upon divorce across the United States from 1985 through 2014, though rates in Wisconsin appear higher than the country as a whole (Meyer et al., 2022). From Finland, there is limited information available over time, but the official statistics on contracts show an increase of shared placement agreements between separated parents, from 8% to 20% between 2009 and 2019 (Custody and Maintenance of the Child and Determination of Parenthood, 2020). The most recent survey shows that the proportion of children with a shared placement (living at least 40% of the time with each parent) was 30% in 2019 (Miettinen et al., 2020). The prevalence of shared placement across countries is, however, difficult to compare since it is defined with varying thresholds (Steinbach, 2019).

Family policy and placement arrangements

The two locations compared in this study represent different welfare state and family policy models. Drawing upon the influential schema by Korpi (2000) and Korpi et al. (2013), Finland represents a dual earner-dual carer model of family policy; a distinctive feature is the promotion of gender equality in paid work and the provision of universal benefits and services for children and families. In contrast, the United States has a market-oriented model, typically characterized by low levels of governmental support for families, minimal parental leave, and reliance on the market for childcare provision. Cross-national differences in gendered expectations of parents and family policy generosity could be associated with different placement outcomes.

Post-separation division of responsibility for the cost of children, including child support policy, is also relevant. The United States and Finland differ considerably in this regard, with baseline orders in the United States being much higher and placement-related declines in child support amounts being much larger. For example, analyses of the amount of child support expected, assuming both parents have gender-specific median incomes and share time equally, suggest that the average amount expected across 5 states in the United States (including Wisconsin) declines from \$474 to \$78/month in the context of sole versus shared placement. The amount expected also declines in Finland, but to a much lesser extent: from \$212 to \$147/month (Hakovirta et al., 2021); and Finnish child support guidelines indicate a maximum reduction of 64 euro/month in the event of shared placement (Hakovirta & Eydal, 2020). Of course, the amount expected may not be paid. Nonpayment in the United States can result in a variety of enforcement actions, including incarceration. In Finland, when payments are not forthcoming, enforcement actions can occur, but an important difference is that the state steps in to guarantee at least part of the child support order (Hakovirta & Eydal, 2020). In short, many policy factors may affect whether parents are satisfied with their placement arrangement and expense sharing, including differences in child support discretion, expected child support amounts across different placement arrangements, consequences of nonpayment, and the extent to which families with children are supported by the government.

Placement arrangements, well-being, and parental satisfaction

A growing research literature has examined associations of post-divorce placement arrangements with the socioemotional and economic wellbeing of parents and children, typically by comparing shared placements to sole (most frequently mother) placements (see recent reviews by Baude et al., 2016; Bauserman, 2012; Nielsen, 2018; Steinbach, 2019; Steinbach et al., 2020). This literature generally suggests that shared placement is positively associated with a range of wellbeing measures for both parents and children, though underlying differences between families with different arrangements make it challenging to assess causality. These differences include that families with shared

placements are more socially and economically advantaged (e.g., in terms of earnings and education), and exhibit lower levels of parental conflict, on average, than families with sole placements (see Steinbach, 2019).

Regarding satisfaction with the placement itself, scant research to date provides evidence that separated parents tend to be more satisfied with shared than sole placements. Cashmore et al. (2010) find that Australian mothers with shared placements held favorable views concerning their arrangements. Notably, they also find that satisfaction with shared placement declines in the context of greater levels of conflict between parents, suggesting that satisfaction with placement arrangements may vary with circumstances in predictable ways. Research from the Netherlands offers a possible link between shared placement arrangements and increased satisfaction. van der Heijden et al. (2016), for example, find that mothers with sole placements experience higher levels of time pressure than mothers with shared placements and that greater time-share with the father in shared placement arrangements substantially reduces such time pressure. Furthermore, shared placements allow for increased labor force participation among mothers and, thus, greater levels of economic independence.

Researchers looking broadly at the literature on placement and satisfaction have reached varying conclusions, particularly with respect to the United States. For example, in a meta-analysis that includes nine pre-2010 studies from the United States and Canada that employed parental satisfaction with custody as an outcome, Bauserman (2012) concludes mothers with sole custody (legal custody and shared placements were not differentiated) express greater satisfaction than do mothers with shared custody. In contrast, a literature review citing more recent studies from Australia, Sweden, and the United States concludes that parents with shared placements generally express greater placement satisfaction than do those with sole placements (Steinbach, 2019).

There is limited empirical research exploring maternal satisfaction with expense sharing. Depending on whether differences in child support orders across placement types are offset by differences in actual spending on children, parents may be more or less satisfied with expense sharing under one or the other arrangement. Melli and Brown (1994) argue that childrearing expenses when parents do not co-reside fall into two categories: those related to time with a given parent, such as food and recreation, and those that are independent of time with either parent, such as providing a bedroom for a child. Because the latter are duplicated across homes, total expenditures are likely higher for shared-care parents. The limited evidence on actual spending and time with children suggests that spending (unrelated to child support payments) is linked to time a child is in one's care (see Fabricius & Braver, 2003). In short, relative to sole mother placements, shared care is likely to result in greater total expenditures on children, lesser child support transfers from fathers to mothers (though differing more under some child support regimes than others, as described above), and lesser direct spending on children by mothers. And, the savings in direct spending associated with shared placement may be less for lower-income mothers for whom fixed costs such as housing are a larger share of total expenditures (Henman, 2005). The implications of these patterns for maternal satisfaction with expense sharing in each placement type are, a priori, unclear and an important area of study.

METHOD

The present study draws from surveys of divorced and separated parents fielded in Wisconsin and Finland. These surveys were designed to facilitate comparative analysis. While the Finnish sample frame included a broader set of parents than Wisconsin, a subsample was used for this study to align with Wisconsin. Both gathered a wide range of information including demographic and social characteristics, housing, employment, economic well-being, earnings, placement of a focal child and satisfaction with expense sharing and placement arrangements.

Survey overviews

Wisconsin survey participants were drawn from two cohorts of the Wisconsin Court Record Data, which includes data from the court records of a sample of parents filing for divorce in 21 Wisconsin counties, including Milwaukee County, the largest county in the state. The cohorts included parents filing for divorce during 2009–2010 and 2013; the sample frame was limited to parents with a child age 6 or under at the time of the divorce petition, such that the youngest child would still be under 18 during the survey period. It was further limited to mothers with either mother-sole placement or shared placement in the final divorce order.² As such, it was designed to facilitate comparisons between mothers with shared and sole placements. Participants were administered the Wisconsin Parents Survey approximately 6–10 years after divorces were finalized. Data were collected between February–October 2020, initially via in-person interviews and subsequently by phone due to the onset of the Covid-19 pandemic.

Finnish participants were administered a web-based survey in November–December 2019. The target population of the survey was parents with minor children who were not living together with the child's other parent. Participants with at least one child born in 2002, 2005, 2007, 2009, 2011, 2013, 2015, or 2017 were drawn from a register-based dataset compiled in August 2019 by the Social Insurance Institution of Finland (Kela), which comprised all parents with minor children who were not living together with the child's other parent.³ The Finnish sample frame thus included divorced and separated parents, as well as parents who had never lived with the child's other parent. Data from Finland targeted separate samples of resident and non-resident parents,⁴ without an attempt to match former couples. For the present study, the data collected from both resident and non-resident parents were combined for analysis, with further sample constraints as described below to better-align Finland data with Wisconsin data.

Wisconsin response rates among shared placement mothers and sole placement mothers were 56% and 54%, respectively. Finnish response rates among residential and non-residential parents were 32% and 20%, respectively. In data sources, weights were applied to adjust for non-response bias, adjusting for sex, age, number of own children, and earnings;⁵ in addition, weights correct for different sampling probabilities across counties in Wisconsin.

Sample

Consistent with the narrower sample frame of the Wisconsin survey, our analytic sample was drawn to support a comparison in Wisconsin and Finland between mothers with shared versus sole placement. To construct the analytic sample, the parents in the Wisconsin and Finnish data were included if they were classified as sole placement mothers or shared placement mothers using survey measures that reflect the focal child's actual placement arrangement at the time of the survey. In this study, sole placement is defined as the focal child spending more than 75% of their overnights with their

²Fathers with shared placement were also surveyed, but not fathers with sole placement or the fathers connected to mothers with sole placement. As a result, we focus here on mothers.

³Further, the sample was restricted to those parents whose native tongue was Finnish, Swedish, or Sami, and who were living in Finland in 2019, and to those for whom a valid e-mail address could be obtained from Kela's administrative registers.

⁴The resident parent status denotes that the focal child has their legal address with the resident parent. Non-resident parent status denotes that the focal child has their legal address with the focal child's other parent. In Finland, the division of time a child lives with either one of the parents (i.e., placement) is a separate question from the legal address (i.e., residence status), and resident and non-resident parent samples can include any type of placement arrangements for the focal child. As such, the legal address of the child has no bearing on the sole or shared placement designation.

⁵Weights were constructed using standard procedures (see Valliant & Dever, 2018). The probability of non-response was modeled as a function of sex, age, number of own children, and earnings using a logistic regression model. Predicted values were calculated, and these values were divided into quintiles. Unweighted, average propensities were estimated within quintile classes. The inverse of propensity scores were used as the non-response weight.

mother. Shared placement is defined as the focal child spending at least 25% of the overnights with each parent. Thus, shared placement includes both equal and unequal shared arrangements. This definition aligns with the definition of shared placement reflected in Wisconsin child support policy; we use the Wisconsin definition because of the major impact of placement type on presumptive child support orders, as compared to Finland where guidelines-based support changes much more modestly (Hakovirta et al., 2021). We also conduct sensitivity analyses with a 40% threshold, which is understood to denote shared placement in Finland (Miettinen et al., 2020).

For both survey samples, the number of monthly overnight stays was used to construct our measure of shared placement.⁶ Mothers with sole placements in Wisconsin, on average, reported caring for their children 93.1% of the time (median = 100.0%), as compared to 55.1% (median = 51.6%) for mothers with shared placement. This was quite similar in Finland, where the analogous times were 93.7% (median 96.7%) for mothers with sole placement and 54.6% (median = 50.0%) for mothers with shared placement.

The final Wisconsin study sample consisted of 207 mothers with sole placement and 187 mothers with shared placement. Finnish survey participants were restricted to those who had dissolved a co-residential relationship (marriage or cohabitation) 6 or more years prior to the survey to match participants in the Wisconsin survey. Parents who had never lived together were excluded from the analysis. The final Finland study sample consisted of 621 mothers with sole placement and 246 mothers with shared placement.⁷ For both samples, placement is defined based on parents' reports of actual practice at the time of the survey, as distinct from current legal arrangements or legally established arrangements at the time of the separation.⁸

Measures

Satisfaction with placement arrangement

Respondents indicated their satisfaction with the focal child's living arrangement using a 5-point scale that ranged from 1 (*not at all satisfied*) to 5 (*extremely satisfied*) in Wisconsin and a 10-point scale that ranged from 1 (extremely *unsatisfied*) to 10 (*extremely satisfied*) in Finland. A binary satisfaction variable was constructed by assigning 1 to extremely satisfied or very satisfied and 0 to the other response categories for the Wisconsin measure. For the Finnish measure, scales were dichotomized such that values 1 through 7 were assigned to 0 indicating dissatisfaction and values 8 through 10 were assigned to 1 indicating satisfaction.⁹ Importantly, this measures satisfaction many years after the separation and is not intended to characterize how parents felt about the placement when arrangements were initially sorted out many years earlier.

⁶For fewer than 10% of the Wisconsin respondents, data limitations prevented use of the overnight count and instead we used a survey question that asked parents where their child lived in the past year (with the respondent, with the other parent, part-time with each parent, or something else).

⁷We omitted cases with missing information on study variables (n = 48).

⁸Recent work in Wisconsin found that roughly one-quarter of mothers with a legally established shared placement at the time of divorce had de facto sole placement arrangements at the time of the survey, while 14% of mothers with legally established sole placement at the time of the survey had de facto shared placement arrangements at the time of the survey (Bartfeld et al., 2021). Information about how legal or de facto placement may have changed since the separation are not available for Finland.

 $^{^{9}}$ On the original placement satisfaction measures, the overall distribution of responses in Wisconsin was 5.9% not at all satisfied, 4.6% a little satisfied, 20.3% somewhat satisfied, 38.8% very satisfied, and 30.4% extremely satisfied. In Finland, the distribution of the original 10-point scale placement satisfaction variable was (1 = extremely unsatisfied) 3.8%, 1.2%, 2.1%, 3.1%, 3.0%, 3.2%, 8.5%, 17.3%, 19.6%, and (10 = extremely satisfied) 38.3%. The rationale for collapsing these measures was both empirical and conceptual. Empirically, collapsing the categorical measures of satisfaction in the Wisconsin sample supported model convergence. Conceptually the binary measures allowed us to examine satisfaction among respondents who were unambiguously satisfied. Results are robust to the specific breakpoints used.

Satisfaction with expense sharing

Respondents were asked about their satisfaction with the parental financial contributions to the child and expense sharing with the other parent. Respondents indicated their level of satisfaction using a 5-point scale that ranged from 1 (*not at all satisfied*) to 5 (*extremely satisfied*) in the Wisconsin and a 10-point scale that ranged from 1 (extremely *unsatisfied*) to 10 (*extremely satisfied*) in Finland.¹⁰ Binary expense sharing satisfaction variables (for Wisconsin and Finland) were constructed in the same way as indicators of satisfaction with placement arrangements.

Placement arrangement

As described above, respondents were classified into sole placement and shared placement by using a measure of monthly overnight stays, using the 25% shared-care threshold for our main analyses. In Wisconsin, over half (56.4%) of families classified as having shared care were sharing care about equally (45%–55% time), and 70.7% had arrangements involving at least 40% of time with each parent; in Finland, the analogous numbers were 59.4% and 72.7%.

Child and family demographics

Previous studies have shown that a variety of child and family characteristics are associated with both placement arrangement (Cancian et al., 2014) and satisfaction therewith (Sodermans et al., 2013). As such, we include the following variables as predictors of placement and as control variables in the satisfaction models:

Child and respondent age

Mean-centered measures of the child and respondent's age at the time of the survey.

Sex

Binary indicators of the child's and respondent's sex (equal to 1 for males).

Respondent's education

A categorical variable generated using the International Standard Classification of Education as a guide, which is commonly used to codify educational attainment in cross-national comparative studies. In Finland, a parent's education was classified as low (comprehensive school), medium (high school diploma; Vocational training; post-secondary education), and high (applied science diploma; upper-level applied science diploma; BA; Master; Licentiate; Doctorate). In the Wisconsin, parent's education was classified as low (no high school diploma or GED), medium (grade 12/high school diploma; GED/HSED; some college or technical school, but no degree; two-year college or associate degree), and high (four-year college or bachelor's degree; master's degree; professional degree; doctorate).

Respondent's employment status

A categorical variable for the responding parent's employment status measured at the time of the survey (full-time; part-time; not employed; or other).

¹⁰For the original expense sharing measure, 21.5% of Wisconsin respondents endorsed not at all satisfied, 10.9% a little satisfied, 25.3% somewhat satisfied, 27.8% very satisfied, and 14.9% extremely satisfied. In Finland, the distribution of the original satisfaction on cost sharing 10-point scale variable was: (1 = extremely unsatisfied) 15.4%, 5.4%, 8.7%, 7.0%, 8.9%, 7.1%, 9.6%, 11.7%, 12.9%, and (10 = extremely satisfied) 13.3%.

Respondent's earnings

Mean-centered continuous measure of respondent annual earnings. The Wisconsin survey used annual earnings (before taxes) from the year prior to the administration of the survey. The Finnish survey used monthly earnings (before taxes) at the time of the survey. Finnish respondent's earnings were multiplied to correspond to yearly earnings. Earnings amounts were converted to purchasing power parities (PPP) U.S. dollars (OECD PPP conversion factor for 2019: 0.863 Euros = 1 U.S. dollar). Because mothers with higher or lower earnings may experience shared placement differently, we also estimate models that allow for interactions between earnings and satisfaction.

Respondent's number of children living in household

Mean-centered measure for the number of minor children living in respondent's household.

Respondent's partnership status

A categorical variable for romantic partnership status measured at the time of the survey for the respondent (living with partner, partnered but not living with that partner, not partnered).

Respondent's and other parent's relationship quality

Past work has highlighted differences in conflict and relationship quality between parents with shared as compared to sole placement arrangements, and failure to control for this may confound estimates of how placement impacts parent or child outcomes. We include information about the nature of the current relationship between parents as a predictor of current placement arrangements, and as a control in satisfaction models to better isolate the role of placement itself. In the Wisconsin analysis, we use a categorical variable indicating whether the respondent rated their relationship with the other parent as poor, fair, good, very good, or excellent. In the Finnish analysis, we use respondents' response as to whether they fully disagreed, somewhat disagreed, neither agreed nor disagreed, somewhat agreed, or fully agreed that they and the other parent had a friendly relationship. Because relationship quality and satisfaction are potentially endogenous – the relationship may influence satisfaction with various aspects of placement, while satisfaction with the placement and associated expense sharing may influence how one characterizes the quality of the relationship – we assess sensitivity of main results to the inclusion or exclusion of these variables. Additionally, parents' satisfaction with shared placement may be particularly sensitive to the quality and friendliness of parents' relationships with each other, given the need to coordinate more closely on childrearing decisions when children spend substantial time with each parent; we thus examine whether the relationship between placement and satisfaction is moderated by maternal characterization of relationship quality.

Empirical strategy

All analyses were conducted separately in the Wisconsin and Finnish samples, and the results were compared. We first describe child, maternal, and paternal characteristics of families with each type of post-divorce physical placement. Second, we examine associations of children's post-divorce placements with maternal satisfaction with the placement arrangement and with expense sharing, net of family and relationship characteristics. Finally, we investigate heterogeneity across earning levels and parental relationship quality in the association between placement and maternal satisfaction.

Our primary multivariate analyses involve separate probit models of placement type and both of the dichotomized satisfaction measures, analyzed separately for Wisconsin and Finland. This approach involves modeling current placement arrangements as a function of the various demographic and relationship variables described above, and modeling satisfaction as a function of those same factors in addition to an indicator of shared placement.

As a sensitivity test, we implemented seemingly unrelated bivariate probit regression models (Greene, 2008) to simultaneously examine the factors associated with placement type and the extent to which placement type is associated with satisfaction with the placement and with expense sharing, allowing for correlation between the error terms of the equations. Selection into placement type and satisfaction therewith may be endogenous. If our satisfaction models do not adequately control for variables that impact both placement and satisfaction, standard probit models may yield inconsistent estimates that lead to erroneous conclusions. A Wald test is conducted to assess whether the errors of the jointly estimated equations are correlated; if so, then the seemingly unrelated probit model in more detail in Supporting Information and report its results as one of several sensitivity tests.

RESULTS

Descriptive statistics

Descriptive statistics for Wisconsin and Finland are presented in Table 1. In Wisconsin, the majority of sole placement mothers (82.6%) and shared placement mothers (62.1%) reported being satisfied with their placement arrangement. Likewise, most Finnish mothers with sole placement (71.2%) and mothers with shared placement (79.3%) were satisfied with their placement. These percentages show satisfaction with placement is lower for mothers with shared as compared to sole placement in Wisconsin, while the opposite is true in Finland. Fewer respondents in Wisconsin and Finland report being satisfied with how expenses were shared, placement type notwithstanding. Mothers with shared care in both locations are more satisfied than are those with sole placement. In both Wisconsin and Finland, about one quarter or fewer of mothers with sole placements (26.9% in Wisconsin and 16.3% in Finland) are satisfied with expense sharing, and approximately half of mothers (48.4% in Wisconsin and 55.8% in Finland) with shared placement arrangements are satisfied with expense sharing.

Parents with shared placement in both locations are more advantaged with respect to employment, education, and earnings than are those with sole placement. And, in Wisconsin as well as in Finland, parents with shared placement reported better-quality (Wisconsin) or friendlier (Finland) relationships with the other parent. These patterns, representing characteristics many years after the separation, are consistent with those often found for parents at the time of entering into shared and sole placement. Across placement types, however, we note that parental relationships appear substantially more fraught in Wisconsin as compared to Finland. For instance, almost two-thirds (64.6%) of Wisconsin mothers with sole placement and close to half (44.5%) with shared placement reported poor or fair relationship quality, as compared to 34% (sole placement) and 15.9% (shared placement) in Finland who fully or somewhat disagreed that they had a friendly relationship with the other parent.

Factors associated with placement arrangements

Marginal effects from probit models of placement arrangements are shown in Table 2 (columns 1 and 4). In Wisconsin, among otherwise similar parents, shared placement is more common as mothers' earnings increase; more common as age of focal child increases; and less common among mothers for whom more time has passed since the separation. The probability of shared placement is generally higher among mothers who report a better relationship with the other parent. In Finland, the probability of shared placement likewise is higher when mothers report a friendlier relationship

	escriptive statistics an wisconsin and rimand variables					
	Wisconsin		Finland			
	Sole mother	Shared mother	Sole mother	Shared mother		
Satisfied with placement arrangement	82.6%	62.1%	71.2%	79.3%		
Satisfied with expense sharing	26.9%	48.4%	16.3%	55.8%		
Resp Age	40.4 (5.82)	41.58 (5.32)	41.2 (7.02)	41.9 (6.19)		
Resp Education: Low	2.1%	1.0%	4.2%	3.8%		
Resp Education: Medium	60.8%	52.6%	54.6%	43.0%		
Resp Education: High	37.1%	46.4%	41.2%	53.2%		
Resp Employment: Full-Time	71.2%	82.4%	62.4%	69.0%		
Resp Employment: Part-Time	19.0%	13.7%	12.8%	11.7%		
Resp Employment: Unemployed	9.7%	3.9%	7.0%	6.3%		
Resp Employment: Other	-	-	17.8%	13.1%		
Resp Relationship: Living with partner	25.8%	21.5%	45.8%	50.7%		
Resp Relationship: Partnered but not living with that partner	30.1%	42.7%	18.5%	20.7%		
Resp Relationship: No partner	44.1%	35.7%	35.6%	28.6%		
Resp Total Annual Earnings	45,921.5 (37,783.70)	60,027.5 (43,447.70)	33,589.6 (24,439.15)	39,203.82 (24,516.14)		
Resp Number of Minor children living with	1.6 (0.65)	1.5 (0.65)	2.1 (1.07)	1.4 (1.18)		
Time since divorce	8.3 (1.88)	8.0 (2.15)	9.5 (1.51)	9.0 (1.49)		
Focal child age	11.5 (2.35)	11.9 (2.52)	13.1 (3.23)	12.9 (2.81)		
Focal child male	50.9%	52.3%	44.3%	57.5%		
Relationship Quality: Poor (US)/ Relationship Friendly: Fully Disagree (FIN)	35.7%	17.9%	19.6%	6.7%		
Relationship Quality: Fair/Relationship Friendly: Somewhat disagree (FIN)	28.9%	26.6%	14.4%	9.2%		
Relationship Quality: Good/Relationship Friendly: Neither agree nor disagree (FIN)	20.8%	21.5%	17.8%	9.5%		

TABLE 1 Weighted descriptive statistics all Wisconsin and Finland variables

(Continues)

TABLE 1 (Continued)

	Wisconsin		Finland		
	Sole mother	Shared mother	Sole mother	Shared mother	
Relationship Quality: Very Good/ Relationship Friendly: Somewhat agree (FIN)	9.0%	26.7%	21.5%	25.6%	
Relationship Quality: Excellent/ Relationship Friendly: Fully agree (FIN)	5.7%	7.3%	26.7%	49.0%	
Observations	207	187	621	246	

with the other parent, and lower among mothers for whom more time has passed since the separation. There are no significant differences by earnings or employment, which differs from the Wisconsin findings. Shared placement in Finland also varies by partnership status, number of children in the home, and sex of focal child, none of which emerged as significant predictors in the Wisconsin sample.

Satisfaction with placement arrangements and expense sharing

The marginal effects from the probit models predicting satisfaction with placement arrangements and cost-sharing are also presented in Table 2 (columns 2–3 and 5–6). Consistent with the pattern in the descriptive results, Wisconsin mothers with shared-care arrangements were significantly less likely than those with sole care arrangements to report being satisfied with the placement (23 percentage points; p < 0.01), while Finnish mothers with shared-care arrangements were more likely to be satisfied than their sole care counterparts (7 percentage points, p < 0.05). In Wisconsin, the probability of satisfaction also increased as reported relationship quality increased; in Finland, however, there was no evident pattern of association between parents' relationship and placement satisfaction. The remaining variables in the model show little evidence of a link to placement satisfaction in either location.

Turning to satisfaction with expense sharing, shared (relative to sole) care was significantly associated with a greater probability of satisfaction with expense sharing both in Wisconsin (14 percentage points, p < 0.01) and Finland (24 percentage points, p < 0.01). Furthermore, mothers in both locations report significantly higher satisfaction with expense sharing in conjunction with higher ratings of their relationship with the other parent. The relationship between earnings and expense-sharing satisfaction differs in the two locations: higher earnings are associated with less satisfaction in Wisconsin (p < 0.05), and marginally significantly associated with higher satisfaction in Finland (p < 0.10).¹¹

¹¹Because relationship quality and satisfaction are potentially endogenous, we assess sensitivity of main results to the inclusion or exclusion of these variables. In both locations, excluding relationship quality had no substantive impact on the relationship between placement and either satisfaction measure (not shown). Under the trimmed model, mothers with shared placement in Wisconsin remain less satisfied than those with sole placement (19 percentage points, p < 0.01), while mothers with shared placement in Finland remain more satisfied than those with sole placement (9 percentage points, p < 0.01). Likewise, after excluding relationship quality, mothers with shared placement in Wisconsin and Finland both remain more satisfied with expense sharing than those with sole placement (20 percentage points, p < 0.01; 27 percentage points, p < 0.01).

TABLE 2	Probit models predicting mothers placement type, satisfaction with placement, and satisfaction with expense
sharing	

8						
Variables	Wisconsin			Finland		
	Shared placement	Satisfied with placement	Satisfied with expense sharing	Shared placement	Satisfied with placement	Satisfied with expense sharing
	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects
Shared Placement (compared to sole)	_	-0.228***	0.143***	-	0.0696**	0.244***
	_	(0.0519)	(0.0502)	_	(0.0339)	(0.0337)
Mean-centered resp age	-0.00461	0.00292	-0.0148***	0.00197	-0.00432	-0.00303
	(0.00528)	(0.0048)	(0.0050)	(0.00268)	(0.00280)	(0.00258)
Respondent education (compared to lo	ow)				
Resp Education: Medium	-0.0411	-0.0244	0.358*	-0.0152	-0.0703	0.0118
	(0.198)	(0.1710)	(0.1850)	(0.0716)	(0.0685)	(0.0785)
Resp Education: High	-0.00561	-0.0568	0.445**	0.0388	-0.0652	0.0203
	(0.203)	(0.1750)	(0.1890)	(0.0743)	(0.0715)	(0.0811)
Respondent employment	nt (compared to	o unemployed)				
Resp Employment: Full-Time	0.192*	-0.122	0.193*	-0.0291	0.0758	-0.0462
	(0.109)	(0.1110)	(0.1100)	(0.0590)	(0.0664)	(0.0617)
Resp Employment: Part-Time	0.125	-0.0634	0.16	-0.00212	0.0675	-0.0361
	(0.116)	(0.1170)	(0.1180)	(0.0682)	(0.0739)	(0.0680)
Resp Employment: Other	-	-	-	-0.0161	0.102	-0.0284
	_	_	_	(0.0658)	(0.0700)	(0.0655)
Respondent relationship	p (compared to	Not partnered)				
Resp Relationship: Partnered Living with partner	-0.0348	-0.0341	0.00375	0.0565*	0.119***	0.0529*
	(0.0663)	(0.0590)	(0.0640)	(0.0325)	(0.0369)	(0.0301)
Resp Relationship: Partnered not living with partner	0.0976*	-0.120**	-0.0461	0.0402	0.0952**	0.00999
	(0.0581)	(0.0519)	(0.0519)	(0.0400)	(0.0432)	(0.0362)
Mean-centered Resp Total Annual Earnings	1.46e-06**	7.52E-07	-1.45e-06**	9.53e-07	4.14e-07	1.30e-06*
	(7.39E-07)	(0.0000)	(0.0000)	(7.12e-07)	(7.26e-07)	(6.82e-07)

TABLE 2 (Contin	ued)					
Variables	Wisconsin			Finland		
	Shared placement	Satisfied with placement	Satisfied with expense sharing	Shared placement	Satisfied with placement	Satisfied with expense sharing
	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects
Resp Number of Minor children living with	0.00311	0.0469	0.0389	-0.0766***	-0.0212	-0.0370***
	(0.0374)	(0.0348)	(0.0368)	(0.0145)	(0.0138)	(0.0136)
Mean-centered Time since divorce	-0.0520***	0.0213	-0.00207	-0.0477***	0.0102	-0.0250**
	(0.0157)	(0.0146)	(0.0134)	(0.0105)	(0.0113)	(0.00983)
Mean-centered Focal child age	0.0348**	-0.015	0.0367***	-0.000833	0.00982	0.00638
	(0.0152)	(0.0129)	(0.0133)	(0.00600)	(0.00622)	(0.00554)
Focal child male	-0.0102	0.0365	0.0806*	0.0750***	0.00898	0.00234
	(0.0514)	(0.0433)	(0.0458)	(0.0283)	(0.0292)	(0.0259)
Relationship Quality/Re	elationship Frie	endly (compared t	o Poor/Fully Disa	agree)		
Relationship Quality: Fair/ Relationship Friendly: Somewhat disagree (FIN)	0.132**	0.0128	0.0104	0.0828*	-0.107*	-0.000283
	(0.0674)	(0.0556)	(0.0680)	(0.0434)	(0.0573)	(0.0383)
Relationship Quality: Good/ Relationship Friendly: Neither agree nor disagree (FIN)	0.120*	0.173***	0.197***	0.0583	-0.0504	0.150***
	(0.0698)	(0.0662)	(0.0604)	(0.0428)	(0.0537)	(0.0448)
Relationship Quality: Very Good/Relationship Friendly: Somewhat agree (FIN)	0.382***	0.281***	0.318***	0.190***	-0.0340	0.147***
	(0.0712)	(0.0764)	(0.0668)	(0.0424)	(0.0498)	(0.0382)
Relationship Quality: Excellent/ Relationship Friendly: Fully agree (FIN)	0.13	0.429***	0.522***	0.286***	0.0755*	0.366***
	(0.11)	(0.1590)	(0.0972)	(0.0392)	(0.0444)	(0.0393)
Observations	394	394	394	867	867	867
<i>Note:</i> *** <i>p</i> <0.01, ** <i>p</i> <0.05	, *p < 0.1.					

TABLE 2 (Continued)

 $\textit{Note: } {}^{***}p{<}0.01, \, {}^{**}p{<}0.05, \, {}^{*}p{<}0.1.$

Heterogeneity in satisfaction with placement arrangements and expense sharing by parental relationship quality and respondent earnings

The nature of parents' relationships with their ex-partners may influence how they experience shared parenting in ways that are unique to the arrangement; that is, parents' relationship quality may moderate the association between placement and satisfaction. Specifically, shared care may pose particular challenges when parents have a poor or unfriendly relationship. To explore this, we define three relationship-quality measures (poor/fair, good, and very good/excellent in Wisconsin, and unfriendly, neutral, and friendly in Finland), and we estimate separate placement-satisfaction associations for each (Table 3). Thus, the association between relationship quality for mothers with sole placement is captured by the uninteracted terms, while the differential associations for mothers with shared placement are captured by the interactions. In Wisconsin, the uninteracted relationship-quality coefficients imply there is no association between relationship quality and placement satisfaction for mothers with sole placement. The interactions reveal a strong negative association of shared placement with placement satisfaction for parents with a fair or poor relationship, but no evidence that satisfaction varies by placement in the context of good or excellent relationships. As such, the negative association between shared placement and satisfaction in Wisconsin appears solely attributable to the (sizable) subset of these mothers reporting a less-than-good relationship. The same general pattern holds in Finland; the primary difference is that for Finnish mothers, there is also a strong positive association with placement satisfaction for shared-care mothers with a friendly relationship with the other parent. The overall positive association between shared placement and satisfaction in Finland, then, is solely attributable to the subset of mothers with a friendly relationship; and the strong link between shared care and maternal satisfaction among the large share of shared-care mothers with friendly relationships more than counteracts the negative link between shared care and satisfaction among the much smaller share of shared-care mothers who have the least friendly relationships.

In the case of expense sharing, satisfaction is generally higher across placement types in both Wisconsin and Finland as relationship quality/friendliness increases, as evidenced by the coefficients of the uninteracted variables; these differences by relationship quality are more pronounced for mothers with shared as compared to sole placement, as evidenced by the interactions. Thus, mothers who report better relationships with the father are more likely to be satisfied with how expenses are shared; unlike for satisfaction with the placement overall, this is not limited to shared placement mothers – though this association appears stronger for mothers with shared placement; and these patterns generally apply in both locations.

The amount of earnings also may influence how mothers experience shared care; the relationship between placement and satisfaction may therefore differ for parents with higher as compared to lower earnings. Heterogeneity by earnings in the relationship between placement type and both satisfaction outcomes was investigated by adding to each model placement × earnings interaction terms (not shown). The interaction is not significant in either of the Wisconsin models. In contrast, for Finland, the interaction between respondent earnings and shared placement type is positive and statistically significant with respect to both satisfaction outcomes; that is, the positive association between placement and satisfaction is larger in the context of higher earnings.¹²

¹²The story is similar when we estimate separate satisfaction models for mothers with earnings above or below the respective medians. In Wisconsin, shared placement is negatively associated with placement satisfaction for both higher and lower earning mothers, and positively associated with expense sharing satisfaction for higher as well as lower earning mothers. In Finland, shared placement is associated with higher satisfaction for mothers with above median income, with no association for mothers with below median income; shared placement is associated with higher expense sharing satisfaction for both earnings groups, though more so for the higher earners.

Satisfied with

expense sharing

Marginal effects

0.166** (0.0567)

0.248*** (0.0408)

0.065 (0.0730)

0.179* (0.0754)

0.251*** (0.0286)

0.168 * * * (0.0439)

BLE 3 Probit models predic	cting mothers' satisfaction	on as a function of pla	acement by relationshi	
ariables	Wisconsin	Finland		
	Satisfied with placement	Satisfied with expense sharing	Satisfied with placement	
	Marginal effects	Marginal effects	Marginal effects	
elationship Quality: Good/ Relationship Friendly: Neither agree nor disagree (FIN)	0.004 (0.0786)	0.069 (0.0736)	-0.054 (0.0513)	
elationship Quality: Very Good and excellent/ Relationship Friendly: Somewhat agree (FIN) and Fully agree (FIN)	0.074 (0.0967)	0.341*** (0.0803)	0.003 (0.0372)	
hared Placement × Relationship Quality: Poor and Fair/ Relationship Friendly: Disagree (FIN) and somewhat disagree (FIN)	-0.338*** (0.0504)	0.046 (0.0661)	-0.186** (0.0702)	
hared Placement × Relationship	-0.017 (0.0935)	0.307*** (0.0896)	0.124 (0.0980)	

0.022(0.1112)

ΤA relationship quality interactions

Quality: Very Good and excellent/Relationship Friendly: Somewhat agree (FIN) and Fully agree (FIN)	()			(
Observations	394	394	867	867	
Note: Models control for Focal child age a	nd sex as well as responde	nt age education emplo	vment_relationship status	total annual earr	ings

0.107(0.0959)

ex as well as respondent age, education, employment, relationship al child age and number of Minor children living with, relationship quality/relationship friendly.

***p<0.01, **p<0.05, *p<0.1.

Quality: Good/Relationship Friendly: Neither agree nor

Shared Placement × Relationship

disagree (FIN)

Sensitivity analysis

Sensitivity analyses were conducted using seemingly unrelated regression models that allow for residual correlation between the placement and satisfaction models, as described earlier. For Finland, both seemingly unrelated probit models produced a significant ρ (p<0.05), suggesting the presence of endogeneity between placement type and respondent satisfaction both with the placement and with expense sharing. In the jointly estimated models that control for this endogeneity, the relationships between placement and both satisfaction outcomes are magnified compared to the original models: compared to mothers with sole placement, mothers with shared placement are 35 percentage points more likely to report satisfaction with placement (p < 0.001), and 69 percentage points more likely to report satisfaction with cost-sharing ($p \le 0.001$). In contrast, when testing for endogeneity between placement and satisfaction in the Wisconsin data, both of the models produced a non-significant ρ (p>0.10), thereby providing no evidence of endogeneity and implying no gain in efficiency from the jointly estimated equations.¹³ Taken together, results suggest that we may be underestimating

Va

Re

Re

Sh

Sh

¹³ Lack of significance of the error correlation notwithstanding, the jointly estimated placement-satisfaction models for Wisconsin continue to yield a negative shared-placement coefficient, albeit with a larger standard error and is no longer significant (marginal effect = 12 percentage points, p > 0.10). The seemingly unrelated probit model for placement and cost-share satisfaction in Wisconsin was not able to converge with variables fully analogous to the original models; all pared-down versions of models (variously excluding variables or combining categories to enable convergence) produced a non-significant ρ (p>0.10), again indicating no gain in efficiency from the jointly estimated equations. These models were highly volatile, with coefficients fluctuating widely with small changes in operationalization of variables; the sample size may be insufficient to fully assess endogeneity and its potential implications.

1545300,0 Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/famp 12827 by University of Turku, Wiley Online Library on [16112022]. See the Terms and Conditions (https://onlinelibrary.wiley.com/dois) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons Liense

the magnitude of the observed relationships between placement and satisfaction in Finland due to unmeasured factors correlated with placement and satisfaction; this does not appear to be the case in Wisconsin, where analyses yield no evidence of endogeneity between placement and satisfaction beyond that explicitly controlled in the model, though the smaller sample size in Wisconsin does limit statistical power relative to Finland.

Finally, additional sensitivity analyses were conducted using a 40% shared placement threshold, to assess sensitivity of our findings to the specific threshold used. Here, we compare satisfaction among mothers meeting the prevailing definition of shared care in Finland (40%-to-60% time) to mothers meeting the sole mother care definition (>60% of time); mothers considered the non-resident parent by this definition (<40% time) are excluded, analogous to the treatment of mothers with less than 25% time in our primary models. For both Wisconsin and Finland, the findings were consistent with the primary model: mothers with shared care in Wisconsin were 21 percentage points less likely to be satisfied with their arrangements than those with sole care (p < 0.01), and 22 percentage points more likely to be satisfied with expense sharing (p < 0.05); mothers with shared care in Finland were ten percentage points more likely (p < 0.01) to be satisfied with placement, and 27 percentage points more likely to be satisfied with expense sharing. These results are not surprising given that over 70% of mothers who meet the Wisconsin shared-care criteria also meet the Finland criteria.

CONCLUSION

This study expands research on placement arrangements and satisfaction by comparing parents' satisfaction with sole and shared-care arrangements and expense sharing in each respective arrangement in Wisconsin and Finland. Shared and sole placement represent distinct approaches to post-separation parenting, with implications for how parents allocate child-related expenses and responsibilities when they live apart. While most existing research concludes that shared parenting is associated with higher placement satisfaction on the part of mothers, important questions remain as to whether and how this varies across families and contexts, as well as whether satisfaction differs for different aspects of placement. The research reported here confirms that these dimensions are of import: we document striking differences in relative satisfaction with shared placement in Finland and the United States (specifically WI); we find that satisfaction with shared placement is strongly linked to the quality of mothers' ongoing relationships with their ex-partners; and we find that relative satisfaction with shared as compared to sole placement differs considerably from satisfaction with how expenses are shared in the context of particular placement arrangements. Our findings support several principal conclusions. First, we find mothers in Finland who have shared placement arrangements are more satisfied with their arrangement than mothers with sole placement, corroborating recent findings from Australia, Sweden, and the United States (Steinbach, 2019). In contrast, we find that Wisconsin mothers with shared placements are less satisfied than their counterparts with sole placements. These differences are striking, suggesting fundamentally different dynamics at play in the two locations. One possible explanation stems from the extent to which shared child physical placements are now the norm following divorce in Wisconsin and, indeed, are legally presumptive there. Shared placement in this context may be more likely to occur regardless of whether mothers would prefer sole placement, and a larger share of mothers may, as a consequence, be less satisfied about their placement arrangement – and this sentiment may persist over the longer term. If shared placements are less likely to be imposed in Finland, this dynamic may not be present. Our findings suggest, therefore, that the policy framework through which parents sort into different placement regimes may have long-term ramifications for satisfaction with the resulting arrangements.

Second, we find that differences in the quality of mothers' relationships with their ex-partners in Wisconsin and Finland appear to play a central role in moderating the placement-satisfaction nexus. Indeed, the negative association between shared placement and satisfaction with placement found in Wisconsin stems from lower satisfaction among the subset of shared placement mothers reporting a

fair or poor relationship with their ex-partner. The relevance of this pattern is compounded by mothers in Wisconsin reporting relationships that, across placement types, appear considerably more fraught than those in Finland. Thus, while shared placement mothers in Finland also report lower satisfaction than sole placement mothers in the context of unfriendly relationships with the father, the portion of shared placement mothers reporting unfriendly relationships is dramatically lower than in Wisconsin. As such, this dynamic has little effect on overall satisfaction in Finland – but a large effect in Wisconsin.

Third, we find that mothers with shared-care arrangements both in Wisconsin and Finland were more satisfied than mothers with sole placements with respect to expense sharing – though the difference is larger in Finland. The most straightforward explanation for the broad similarity is that the reduction in direct costs incurred by mothers with shared placement is, in both locations, more than sufficient to make up for any associated loss in child support. The greater differential in Finland is consistent with the smaller declines in expected child support compared to Wisconsin in the context of shared versus sole placement (Hakovirta et al., 2021). That is, mothers may be particularly satisfied with the way expenses are shared under shared placement when it is not associated with substantial loss of child support compared to sole placement norms. Additionally, since the welfare state in Finland supports work and care responsibilities, it may provide comparative ease of financial and care obligations in Finland relative to Wisconsin. And the legal freedom Finnish parents are given in decision-making regarding their placements and child support as well as the guaranteed child maintenance scheme may make it possible for Finnish parents to collaborate and share care and child-related expenses more seamlessly than Wisconsin parents, leading to improved satisfaction.

In addition to the research contributions mentioned above, the present study has additional implications for policy and practice. While an exploration of why relationship quality between ex-partners appears so much more precarious in Wisconsin than Finland is outside the purview of this study, our findings do suggest that the prevalence of poor relationships in Wisconsin – whatever their root cause -creates challenges with regard to shared placement, at least insofar as parental satisfaction with that placement is concerned. This is consistent with some existing evidence that shared placement arrangements among parents dealing with high conflict and poor relationships may create challenges for parents and children alike (see Steinbach, 2019 for review of this literature). To the extent that promoting shared care is a policy priority, developing effective strategies to help parents improve the quality and friendliness of their relationships may lead to greater satisfaction on the part of parents who, whether by choice or by court mandates, utilize shared-care arrangements. Furthermore, the strikingly different levels of satisfaction with shared placement among mothers with better or worse relationships with their ex-partners suggests a need for caution on the part of policymakers and courts as they weigh the pros and cons of shared placement presumptions. The presumptions may be of particular import when considering children as a mother's satisfaction with their placement (or lack thereof) could potentially impact parent-child relationships and/or children's developmental outcomes. There is some suggestive empirical support for such links (Berger & Spiess, 2011; Peltz et al., 2018), though relevant studies examine mothers general life satisfaction and child outcomes (Berger & Spiess, 2011) and, indirectly, relationship satisfaction (among married mothers) and parent-child relationships through coparenting conflict/cooperation (Peltz et al., 2018).

Another policy implication stemming from the present study relates to legal definitions of shared care, parental negotiations of care arrangements, and court decision-making and approvals procedures. Across and within countries there are varying definitions for what time allocations are considered shared care. In the present study, shared placement is defined as the focal child spending no less than 25% of their time with each parent. However, we find no substantive differences in the relationship between placement and parental satisfaction, in either Wisconsin or Finland, when we use a narrower definition requiring at least 40% time with each parent. As such, this suggests that, at least with regard to parental satisfaction, the specifics of time allocations within the broad shared placement range may not be critical. There may, of course, be other dimensions that are more closely tied to satisfaction or other outcomes. While outside the scope of the present study, examples include the number of transitions between homes and the consistency of scheduling. These, and other nuances of placement arrangements, could help explain divergent parental well-being outcomes between sole and shared placements and within shared placements.

In contextualizing our findings, it is important to note several study limitations that both qualify our results and suggest fruitful avenues for future research. First, our sample sizes for Wisconsin and Finland are relatively small. As such, our study may lack the statistical power to detect significant differences when they are present (Cohen, 1992). Future work on placements and satisfaction may benefit from leveraging representative data with large sample sizes to enable researchers to draw population-level conclusions with confidence. Furthermore, our two outcome variables were measured each using single item measures, which may result in low content validity, sensitivity, and reliability in our measure of satisfaction. We do note, however, that there are also advantages associated with single item measures such as the reduction of common method variance that may be introduced as respondents endorse several items on, for instance, a composite satisfaction scale (see Hoeppner et al., 2011). Such common method effects may lead to overstated observed associations. Future work may nonetheless benefit from the use of composite measures of satisfaction that may capture the satisfaction constructs more fully. Also, in the present study, we were not able to compare satisfaction among mothers and fathers with shared placement, among mothers and fathers with sole placement, nor among fathers with different kinds of placement. Mothers do, however, represent the vast majority of sole-placement parents, while fathers with sole placement are relatively uncommon in both locations. In addition, we do not consider satisfaction among parents who do not have substantial placement time ("noncustodial" parents) due to the Wisconsin sample frame; future work with the Finnish data would benefit from incorporating data from this group of parents. An additional limitation is that the Wisconsin and Finland measures are not always identical, which could potentially lead to erroneous conclusions. We also note that the present study examines parental satisfaction with placements and expense sharing an average of nine years after the separation event. It is likely the circumstances and negotiations we observe in the present study are different than those occurring closer to the time of separation, and we can say little concerning the dynamics occurring during the earliest years following separation. One final limitation is that the survey in Wisconsin was administered during the start of the Covid-19 pandemic. It is plausible that the pandemic may have influenced the way parents navigated their placement arrangements and/or their satisfaction with those arrangements and associated expense sharing, and it is difficult to be certain how well results generalize to periods outside those impacted by Covid-19.

Taken together, our findings provide new evidence on satisfaction with placement arrangements and expense sharing among mothers with sole mother and shared child physical placements in Finland and Wisconsin. Our work highlights differences – greater satisfaction with placement arrangements for mothers with shared rather than sole placement arrangements in Finland, but less satisfaction with placements for mothers with shared rather than sole placements in Wisconsin; but also similarities – greater satisfaction with expense sharing in the context of shared placement in both locations. We also find the relationship quality of parents is of import in the link between placement and satisfaction. We note also that our analyses control for fairly extensive child and family characteristics; and statistical models that explicitly account for unmeasured differences by placement type find even stronger relationships between placement and satisfaction than the base models in Finland, with no evidence of such unmeasured differences in Wisconsin. This strengthens our confidence that our substantive findings are not driven by differential selection. Future research should further examine how countries' social and policy contexts may be associated with differential outcomes for families with shared and sole placements.

ACKNOWLEDGMENTS

The authors of this article are solely responsible for the content therein. The authors would like to thank the Wisconsin Department of Children and Families for the use of data for this analysis, but

these agencies do not certify the accuracy of the analyses presented. The research reported in this paper was supported by the Child Support Research Agreement between the Wisconsin Department of Children and Families, the Institute for Research on Poverty, the Academy of Finland Flagship Programme (decision number: 320162), and the Academy of Finland project funding (decision number: 338282). The views expressed here are those of the authors alone and not necessarily the sponsoring institutions.

REFERENCES

- Bartfeld, J., Chanda, T., & Berger, L. (2021). Stability of placement arrangements among divorced Wisconsin families with sole mother and shared placement orders. Report to the Wisconsin Department of Children and Families. Madison, WI: Institute for Research on Poverty.
- Baude, A., Pearson, J., & Drapeau, S. (2016). Child adjustment in joint physical custody versus sole custody: A meta-analytic review. *Journal of Divorce & Remarriage*, 57(5), 338–360. https://doi.org/10.1080/10502556.2016.1185203
- Bauserman, R. (2012). A meta-analysis of parental satisfaction, adjustment, and conflict in joint custody and sole custody following divorce. Journal of Divorce & Remarriage, 53(6), 464–488. https://doi.org/10.1080/10502556.2012.682901
- Berger, E. M., & Spiess, C. K. (2011). Maternal life satisfaction and child outcomes: Are they related? *Journal of Economic Psychology*, 32(1), 142–158. https://doi.org/10.1016/j.joep.2010.10.001
- Brito, T. L., & Brown, P. (2007). Characteristics of shared-placement child support formulas used in the fifty states. Report to the Wisconsin Department of Workforce Development Bureau of Child Support. Madison, WI: University of Wisconsin Legal Studies.
- Cancian, M., Meyer, D. R., Brown, P. R., & Cook, S. T. (2014). Who gets custody now? Dramatic changes in children's living arrangements after divorce. *Demography*, 51(4), 1381–1396. https://doi.org/10.1007/s13524-014-0307-8
- Cashmore, J., Parkinson, P., Weston, R., Patulny, R., Redmond, G., Qu, L., Baxter, J., Rajkovic, M., Sitek, I., & Katz, I. (2010). Shared care parenting arrangements since the 2006 family law reforms. Report to the Australian government attorney-general's department Sydney. Social Policy Research Centre, University of New South Wales.
- Chen, Y. (2015). Does a non-resident parent have the right to make decisions for his nonmarital children? Trends in legal custody among paternity cases. *Children and Youth Services Review*, 51, 55–65. https://doi.org/10.1016/j.childyouth.2015.01.025
- Cohen, J. (1992). Statistical power analysis. Current Directions in Psychological Science, 1(3), 98–101.
- Custody and Maintenance of the Child and Determination of Parenthood. (2020). *Statistical report 30/2020*. Official Statistics of Finland. Helsinki: National Institute of Health and Welfare.
- Fabricius, W. V., & Braver, S. L. (2003). Non-child support expenditures on children by nonresidential divorced fathers: Results of a Study. *Family Court Review*, 41(3), 321–336. https://doi.org/10.1111/j.174-1617.2003.tb00894.x
- Flaquer, L. (2021). Shared parenting after separation and divorce in Europe in the context of the second demographic transition. In A.-M. Castern, et al. (Eds.), *The Palgrave handbook of family sociology in Europe* (pp. 377–398). Palgrave.
- Garriga, A., Turunen, J., & Bernardi, L. (2021). The socioeconomic gradient of shared physical custody in two welfare states: Comparison between Spain and Sweden. In L. Bernardi & D. Mortelmans (Eds.), *Shared physical custody: Interdisciplinary insights in child custody arrangements* (pp. 181–206). Springer. https://doi.org/10.1007/978-3-030-68479-2_9 Greene, W. H. (2008). *Econometric analysis* (6th ed.). Prentice Hall.
- Hakovirta, M., & Eydal, G. B. (2020). Shared care and child maintenance policies in Nordic countries. *International Journal of Law Policy and the Family*, 34(1), 43–59. https://doi.org/10.1093/lawfam/ebz016
- Hakovirta, M., Meyer, D. R., & Skinner, C. (2021). Child support in shared care cases: Do child support policies in thirteen countries reflect family policy models? *Social Policy and Society*, 1–18, 542–559. https://doi.org/10.1017/ S1474746421000300
- Henman, P. (2005). Updated costs of children using Australian budget standards. Report to the Ministerial Taskforce on Child Support. Retrieved from: https://www.dss.gov.au/sites/default/files/documents/updated_costs_of_children.pdf
- Hoeppner, B. B., Kelly, J. F., Urbanoski, K. A., & Slaymaker, V. (2011). Comparative utility of a single-item versus multiple-item measure of self-efficacy in predicting relapse among young adults. *Journal of Substance Abuse Treatment*, 41(3), 305–312. https://doi.org/10.1016/j.jsat.2011.04.005
- Korpi, W. (2000). Faces of inequality: Gender, class, and patterns of inequalities in different types of welfare states. Social Politics: International Studies in Gender, State and Society, 7(2), 127–191.
- Korpi, W., Ferrarini, T., & Englund, S. (2013). Women's opportunities under different family policy constellations: gender, class, and inequality tradeoffs in western countries re-examined. *Social Politics: International Studies in Gender, State* and Society, 20(1), 1–40. https://doi.org/10.1093/sp/jxs028
- Melli, M. S., & Brown, P. R. (1994). The economics of shared custody: Developing an equitable formula for dual residence. *Houston Law Review*, 31, 543–584.
- Meyer, D. R., Cancian, M., & Cook, S. T. (2017). The growth in shared custody in the United States: Patterns and implications. *Family Court Review*, 55(4), 500–512.

- Meyer, D. R., Carlson, M. J., & Alam, M. M. U. (2022). Increases in shared custody after divorce in the United States. *Demo-graphic Research*, 46(38), 1137–1162.
- Miettinen, A., Hakovirta, M., Saarikallio-Torp, M., Haapanen, M., Kurki, P., Kalliomaa-Puha, L., Sihvonen, E., Heinonen, H. M., & Kivistö, N. (2020). Lasten vuoroasuminen ja sosiaaliturva: vuoroasumisen nykytila ja merkitys etuus- ja palvelujärjestelmän kannalta. Valtioneuvoston selvitys- ja tutkimustoiminnan julkaisusarja 2020:51.
- Nielsen, L. (2018). Joint versus sole physical custody: Children's outcomes independent of parent-child relationships, income, and conflict in 60 studies. *Journal of Divorce & Remarriage*, 59(4), 247–281. https://doi.org/10.1080/10502556.2018.1 454204
- Peltz, J. S., Rogge, R. D., & Sturge-Apple, M. L. (2018). Transactions within the family: Coparenting mediates associations between parents' relationship satisfaction and the parent–child relationship. *Journal of Family Psychology*, 32(5), 553–564. https://doi.org/10.1037/fam0000413
- Sodermans, A. K., Matthijs, K., & Swicegood, G. (2013). Characteristics of joint physical custody families in Flanders. Demographic Research, 28(29), 821–848. https://doi.org/10.4054/DemRes.2013.28.29
- Steinbach, A. (2019). Children's and parents' well-being in joint physical custody: A literature review. *Family Process*, 58(2), 353–369. https://doi.org/10.1111/famp.12372
- Steinbach, A., Augustijn, L., & Corkadi, G. (2020). Joint physical custody and adolescents' life satisfaction in 37 North American and European countries. *Family Process*, 58(2), 353–369. https://doi.org/10.1111/famp.12536
- Tolonen, H., Koulu, S., & Hakalehto, S. (2019). Best interests of the child in Finnish legislation and doctrine: What has changed and what remains the same? In *Children's Constitutional Rights in the Nordic Countries*. Brill. https://doi.org/10.1163/9789004382817_010

Valliant, R., & Dever, J. A. (2018). Survey weights: A step-by-step guide to calculation. Stata Press.

van der Heijden, F., Poortman, A.-R., & van der Lippe, T. (2016). Children's postdivorce residence arrangements and parental experienced time pressure. *Journal of Marriage and Family*, 78(2), 468–481. https://doi.org/10.1111/jomf.12283

SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Riser Q. H., Haapanen M., Bartfeld J., Berger L. M., Hakovirta M., Meyer D., & Miettinen, A. (2022). Maternal satisfaction with joint and sole child physical placement arrangements following separation in Wisconsin and Finland. *Family Process*, 00, 1–21. https://doi.org/10.1111/famp.12827