



Family Structure and Child Behavior in the United Kingdom

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Accepted: 24 October 2021 / Published online: 19 November 2021

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Abstract

Child behavior problems are associated with an array of negative outcomes that can continue into adulthood. Because much of the social development and adjustment for children in early to middle childhood takes place in the home, families are of special interest in understanding child behavioral problems. Past research suggests an association between more stable family structures and healthier child behavioral outcomes. However, much of the research assessing behavioral outcomes has overlooked more complex family structure types and trajectories or has not considered how finer measures of family structure may clarify the connection between family structure and child behavior. Using the Millennium Cohort Study (MCS), a longitudinal study of children in the United Kingdom, we examine the relationships between various types of family structure stability and instability on child internalizing and externalizing behavior problems. Our results suggest that internalizing behavioral problems differ only slightly across all eight family structure trajectories and are instead explained by differences in other family characteristics such as stress and parental selectivity. Conversely, we find that family structure and trajectories of family structure change are associated with child externalizing problems, independent of other family characteristics. Despite the increase in frequency and normalization of non-traditional family structures in the UK, such as cohabitation, single parent and stepparent families, we find that children in stable married families experience fewer externalizing behavior problems compared to children in other family structures.

Keywords Family structure · Child behavior · Internalizing · Externalizing · UK

Highlights

- Examines the association between eight family structure trajectories and child behavior problems in the UK.
- Family structure differences are related to externalizing behavior problems.
- Family structures that are less stable are associated with more child behavior problems.
- Family resources, stressors, and parental depression, not family structures per se, are related to internalizing behavior problems.

Child behavioral problems are associated with an array of negative outcomes, including poor cognitive development and poor academic performance (Basten et al., 2016; Turney & McLanahan, 2015). Additionally, early childhood

problems are related to lower adult educational attainment (Owens, 2016), work incapacity in adulthood (Narusyte et al., 2017), and even long-term mortality risk (Jokela et al., 2009). Much of the academic literature regarding child behavioral problems distinguishes between internalizing behavior problems (feeling worried, unhappy, etc.) and externalizing behavior problems (fighting, temper tantrums, etc.). Internalizing problems are more often associated with internal issues such as depression, while externalizing problems are more often associated with outward issues such as physical aggression (McCarty et al., 2005).

Families are of special interest in understanding internalizing and externalizing problems because of the social development that takes place in the home (Dufur et al., 2008). Within the context of families, there have been many

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proposed antecedents of child internalizing and externalizing behavior problems. Astone and McLanahan (1991) find that family structure is an important factor in whether problematic behaviors develop. Moreover, Lee and McLanahan (2015) found that family structure has both direct and indirect effects on child behavior. Children in families with less stable structures, such as single-parent households, tend to struggle more academically (Astone & McLanahan, 1991). Reczek and colleagues (2016) also find that children in cohabiting family structures have worse health outcomes than children in married family structures. Furthermore, children in two-biological-parent married families tend to have fewer behavioral issues than children in other family structures (Lee & McLanahan, 2015).

Researchers suggest that the families children grow up in are related to a wide variety of child outcomes (cf. Brown's 2010 review). Compared to living in families with two biological parents who are married to each other, being raised in single-parent, stepparent, or cohabiting families is associated with lower academic achievement, including lower high school GPA (Breivik & Olweus, 2006) and lower test scores across ages (Dufur et al., 2013; Dufur, et al., 2010). There are similar patterns for children's health outcomes. Children who live in homes with their biological parents who are married to each other enjoy better physical health than do their counterparts in single-parent or stepparent families (Bramlett & Blumberg, 2007; Wen, 2008). The same seems to be true for children's mental and emotional health; for example, Carballo et al., (2013) find relationships between living in non-traditional family structures and health problems such as attention deficit hyperactivity disorder and eating disorders. Some research suggests links between family structure and behavior problems in younger children or delinquency in adolescents (McLanahan & Sandefur, 1994; Hoffmann, 2002), with evidence of long-term effects (Ryan & Classens, 2013).

These family structure associations can be identified in contexts where the biological parent is removed by marital or relationship dissolution (Kim, 2011), by death (Amato & Anthony, 2014), by immigration (Creighton et al., 2009), by overseas military deployment (Gorman et al., 2010;), or by incarceration (Wildeman et al., 2013). These associations are also present for children parented by a mother who was never in a co-residential relationship with a partner—where a parent was not “removed,” but was never present (Thomson & McLanahan, 2012). Youth who live with neither biological parent also do less well compared to children who had access to biological parents (Sun & Li, 2011). Thus, a robust body of literature suggests having access to both biological parents, preferably in a marital relationship, can be an important factor in promoting desirable child outcomes (cf. McLanahan & Sandefur, 1994; Amato, 2005; Ginther & Pollak, 2005).

Some research, however, suggests that the associations between family structure and child outcomes are more nuanced and complicated than merely the number of biological parents available to a child. For example, Mitchell and colleagues (2015) found not only that boys were more affected by parental exit than girls were, but that boys with a particular genetic profile were also most affected by family dissolutions associated with paternal exit. Dufur and colleagues (2010) found that once financial and educational resources are taken into account, children in single-mother and single-father families have similar educational and behavioral outcomes to each other. And significant debate continues on the degree to which a child's age at family transition is associated with negative child outcomes, with some work suggesting experiencing family dissolution at young ages is most detrimental (cf. Kalmijn, 2015) and other work arguing that family transition nearly contemporaneous to measurement of child outcomes is most influential (Dufur, 2016). In addition, other researchers argue that the effects of family structure are limited and may be due largely to family characteristics related to but distinct from family structure, such as the stress that accompanies family change, lack of social resources, lower parental education, and inconsistent parental employment (Fomby & Cherlin, 2007; Wu, Schimmele and Hou, 2015). These features of parental selectivity are often referred to as the selection hypothesis, which explains how parental attributes or antecedent behaviors may affect the family structures they form or the stability of these structures (Fomby & Cherlin, 2007; Hadfield et al., 2018). Family instability and its accompanying stress have been shown to affect various child outcomes such as development (Fomby & Cherlin, 2007), health (Reczek et al., 2016), and high school completion (Astone & McLanahan, 1991; Wu et al., 2015). Huang et al. (2017) also suggest that socioeconomic resources available in homes—factors such as income, parental occupation, and occupational benefits—mediate differences in the impact of family structure on child behavior problems. This may also be a matter of how parental characteristics or selection are related to family formation and parenting in ways that affect the outcomes of children (Carlson, 2006).

A recent innovation in family structure research that sheds additional light on these patterns is work that looks at family structure change more as a trajectory than a static structure in which children reside. As such, these approaches can take into account time, change, and more finely measured categories of family churn (cf. Turney & Halpern-Meehin, 2020). Panico et al. (2019) looked at 5-year-olds in the United Kingdom using such an approach. Considering obesity, respiratory health, and risk of accidental injury, they found some evidence supporting previous research treating family structure as static categories, with children in

stably married families always doing best and children in stably single families doing worst. However, they also found evidence that considering instability as a monolithic mechanism is problematic, showing that it was children in families that experienced what might be considered “positive” instability, such as single parents or cohabitators marrying, who had slightly worse outcomes. In addition, they found little evidence that any family structure or trajectory was related to child health outcomes outside of accidental injury once they controlled for a host of demographic and resource variables, pointing to research suggesting it is less family structure and more resources and processes associated with those structures that matter for children. Johnston et al. (2020a) similarly found that children who experienced most types of family dissolution and reconstitution entered their own marriages more quickly than youth from stably married, biological-parented families, and that timing of transition, such as into stepparent families, had little effect beyond the transition itself.

Research focusing on trajectories, or taking into account both the family structures children are born into and the family structures they transition into, does not provide clear findings, however. Bzostek and Berger (2017) take a similar approach to family structure and trajectories as Panico and colleagues do but find quite different patterns. Using Fragile Families data looking at nine-year-olds in the United States and examining behavior problems, they found more pronounced associations for children born into non-traditional family structures such as cohabiting families or single-parented families than they did for children who transitioned into non-traditional families structures. Further, trajectories that included transitions across family structures were more strongly associated with behavior problems for children who were born to married parents than for children born into other family structures.

Looking at adolescents in the United States, Johnston et al. (2020b) complicated the issue further. Using a similar trajectory approach that takes into account both family structures children are born into and those they transition into, they found that teens who transitioned from parental care into non-parental care drank alcohol earlier and more often, but that other, more common transitions were not so closely related to increased or younger drinking patterns. While the authors found that timing of transition could be influential, the patterns of timing were inconsistent and varied across family structures. For example, early transitions into stepfamilies had weak associations with adolescent drinking, whereas later transitions into single-parented families had weak associations with adolescent drinking.

Taken together, recent studies using a more trajectory-based approach to family structure underscore both the important nuances such an approach can provide while also showing the complexities across family structures and

transitions. We apply this approach to examining associations between family structure and trajectories to behavior problems among children in the United Kingdom. Using similar data, Panico et al. (2019) found initial evidence for the idea that stability operated differently for predicting physical health outcomes such as body mass and respiratory health for children in stably married versus stably single families, again underscoring the importance of looking across more nuanced definitions of family structure and change. Our study uses the United Kingdom (UK) Millennium Cohort Study (MCS) to look at the relationships of eight different family structures with child behavioral problems, including family structures that tend to be neglected in other research (Steele et al., 2020). By examining the complexity of these eight family structures cross-sectionally, we join recent longitudinal research that has found patterns in how family structure trajectories are associated with child outcomes but does not go to this level of distinction in family structure (cf. Panico et al., 2019; Johnston et al., 2020a; Fomby et al., 2021). We also apply a more nuanced approach to examining family structure instability and stability by not only comparing alternative or non-traditional family forms to traditionally stable family structures, such as stable married families, but also by using these finer grained family structures to compare various alternative family forms to each other. Finally, we include explicit measures of family stress, resources, and selectivity to try to isolate the effects of family structure in relation to other influential family characteristics.

The UK is an informative context in which to study the association of family structure with child behavior for three reasons. First, the UK has what is considered to be an average social safety net which provides benefits to families (OECD, 2020; Jusko, 2015). Social benefits might blunt the impact of varying family structures on child behavior (Fomby & Cherlin, 2007; Heuveline, Yang and Timberlake, 2010). Additionally, cohabiting family types in the UK are more common than in other wealthy nations, as marriage is less commonly tied to childbearing (OECD, 2016). These different family structure patterns may condition the relationship of family structure and child behavior problems, as non-traditional family structures may carry less stigma. Finally, much of the previous work on family structure and child outcomes has been conducted in the US. In this study, we challenge the generalizability of findings from research set in one particular country.

Methods

Participants

Data for this study come from the Millennium Cohort Study (MCS), a longitudinal study of 18,818 children born

between September 2000 and January 2002 across the United Kingdom (England, Wales, Scotland, and Northern Ireland) (University of London, 2007). The MCS contains data for all four UK countries and uses a probability sampling design clustered at the electoral ward level, oversampling disadvantaged families and ethnic minorities to ensure adequate representation of the total population (Kelly et al., 2016; Panico et al., 2010). Participating households were identified using the UK government Department of Work and Pensions Child Benefit system records, selected based on the family's residential location following the child's birth (Kelly et al., 2013). Sweep 1 data collection took place from 2001 to 2002 when cohort members were on average nine months old, with follow-ups conducted when cohort members were on average 3, 5, 7, 11, and 14 years of age. Parents were interviewed at each sweep, reporting on an array of information pertaining to early family context, parenting, child/parental health, and child behavioral/cognitive development. Overall response rates are 96, 81, 79, and 72 percent across the first four sweeps. While we include variables which take into account family structure information from the first four sweeps, this is a cross sectional study which observes outcomes at Sweep 4 when children are 7 years old. At age 7, children have entered school and have expectations to interact within the standard rules and norms of the educational institution instead of just family norms. Children at this age are less influenced by peer behavior than adolescents but offer a preview of later patterns as early childhood internalizing and externalizing behavior patterns are correlated with issues in later childhood (Leve et al., 2005).

Our sample included children whose family structures were identifiable at each sweep, with a focus on children who lived with at least one biological parent. As a result, we excluded children living with foster parents, grandparents, or other relatives as primary caregivers because of the small number of cases. Our dependent variables are scales capturing child internalizing and externalizing behavior problems. Cases that were missing more than 4 of the 10 of the components on the internalizing scale, and more than 6 of the 15 measures of the externalizing scale (between 10–12% of data) were dropped. We also dropped cases where the missing data were below 3%, restricting our ability to use multiple imputation. After these exclusions, our analytic sample is 15,685.

Measures

Behavior problems

We use Sweep 4 parent-reported data to measure child behavior problems. At Sweep 4, parents answered questions regarding their child's behavioral and emotional problems

as part of the Strengths and Difficulties Questionnaire (SDQ). Following Goodman, Lamping, and Ploubidis (2010), we create an internalizing behavior problem scale using a set of 10 questions from the SDQ and an externalizing behavior problem scale using a set of 15 questions from the SDQ.

We measured *internalizing* behavior problems using the following questions; (1) [has] headaches, stomach-aches, sickness, (2) often feels worried, (3) often unhappy, (4) nervous or clingy in new situations, (5) many fears, easily scared, (6) tends to play alone, (7) picked on or bullied by other children, (8) gets on better with adults, (9) generally liked by other children, and (10) has at least one good friend. Answer choices for all questions range from “not true”, “somewhat true,” and “certainly true.” Answer choices were coded from 1 (not true) to 3 (certainly true). Responses to “generally liked by other children” and “has at least one good friend” are reverse coded to reflect negative rather than positive social adjustment, with higher scores indicating more behavioral issues. We use the row means command in Stata 15 to compute an average score of internalizing problems. The range for internalizing problems was 1 to 2.88, with a mean of 1.29, indicating that parents on average tended to view their children's behavior as not being problematic. The alpha reliability coefficient for this scale is acceptable ($\alpha = 0.69$).

We measure *externalizing* behavior problems with a different set of questions: (1) [is] restless, overactive, cannot stay still for long, (2) constantly fidgeting or squirming, (3) easily distracted, concentration wanders, (4) thinks things out before acting, (5) sees tasks through to the end, (6) often has temper tantrums, (7) generally obedient, (8) fights with or bullies other children, (9) steals from home, school, elsewhere, (10) often lies or cheats, (11) considerate of other people's feelings, (12) shares readily with other children, (13) helpful if someone is hurt, upset or feeling ill, (14) kind to younger children, and (15) often volunteers to help others. Similarly, these answer choices were coded from 1 (not true) to 3 (certainly true). Responses to eight measures were reverse coded to reflect negative social adjustment where higher scores reflect greater externalizing behavior problems. Response choices range from “not true,” “somewhat true,” and “certainly true”. Again, we use row means to create an overall score for externalizing problems. The distribution ranged from 1 to 3, with a mean of 1.50, slightly higher than the mean for internalizing problems. The scale reliability is good ($\alpha = 0.82$).

The majority of missing data with our dependent variables was a result of respondents not answering any of the questions that comprised either our internalizing or externalizing scales. To consider the impact of missingness on components within each of our scales, we examined the patterns of missing on these components and found that

beyond the respondents who had not answered any of the questions, there was no pattern of missing data on any particular items in either scale. To ensure that we did not include measures with too much partial data, we dropped any case where respondents were missing more than 4 of the 10 of the components on the internalizing scale, and we dropped any case missing more than 6 of the 15 measures of the externalizing scale (around 12%).

Family structure

In our study, we use measures of family structure that extend beyond those used in typical family structure research to more thoroughly examine stable and unstable family types. To construct family structure types, we use parent (main and partner) reported responses regarding current marital status and their relationship to the cohort member in addition to an MCS derived variable reporting the relationship between parents/caregivers in the household. Because MCS researchers collected retrospective information pertaining to family structure at the time of the child's birth as part of Sweep 1, our family structure measures capture changes in family structure from birth through Sweep 4.

We created eight family structures across the four sweeps in order to more fully capture the diversity of family types. The first three structures are *stable*, meaning that the child was born into a family structure that did not experience any disruptions. A disruption occurs when a parent/partner enters (i.e., cohabitation or marriage) or exits (i.e., separation, divorce, or death of a parent) at any time after the child's birth. Once a disruption takes place, a child can no longer be in any of the stable family structure categories. "Stable Married" families refer to two biological parents who have been married since before the child's birth. "Stable Cohabiting" families refer to two biological parents living together without marrying since before the child's birth, and "Stable Single" families refer to when a child was born to a single biological parent and the parent has remained single.

The remaining five structures are *unstable* and signal the occurrence of at least one disruption or change to the family structure. "Post-Birth Married" families refer to two biological parents who married after the birth of the child. "Post-Birth Stepfamily" refers to a biological parent who is married to a non-biological parent. "Post-Birth Cohabiting" families refer to two biological parents who live together but are not married and began living together after the birth of the child. "Post-Birth Social Family" refers to a biological parent who is living with a non-biological parent without marrying and began living together after the birth of the child. Finally, "Disrupted Single" families refer to a child who is currently living with a single biological parent

after a disruption or change to their family structure where a previously present parent is no longer in their home.

To account for missing values in the family structure variable (about 25% of cases), we use other sweeps (waves) to fill in missing values. For instance, if data in Sweep 3 family structure are missing but at Sweep 2 and 4 the partner and/or family structure are the same, we assume no change in family structure for Sweep 3. However, if family structure at other sweeps differed or provided no additional information, we dropped those cases from the analysis as we were unable to confidently assign a family structure to those cases.

Control variables

Several control variables are also included within the analysis as part of models that capture the effects of competing explanations for child internalizing and externalizing behavior problems. To capture the more immediate impact of social and economic resources on child behavior issues, we include all control variables from the same time as the child behaviors are measured, Sweep 4. To tap resources, we measure paternal and maternal employment as a categorical variable with the categories "full-time," "part-time," "unemployed," or "no father/mother". We also measure income as an ordinal variable with the categories "£0 to less than £3100", "£3100 to less than £10400", "£10400 to less than £20800", "£20800 to less than £31200", "£31200 to less than £52000", and "£52000 and above".

We include a measure of social benefits provided by the government to examine if social benefits might ameliorate the impact of varying family structures on child behavior (Hampden-Thompson, 2013; Heuveline et al., 2010). To capture the social benefits used by respondents in the UK, we created a measure of social benefits that includes the total number of social benefits received by the main respondent. The most common forms of government assistance were "Income Support", "Child Benefits", "Child Tax Credit", "Working Tax Credit".

To examine family stressors, we created a 5-item family stressor scale using the following questions related to parental stress over the past 30 days; (1) How often main respondent felt worthless (2) How often the main respondent felt everything is an effort, (3) How often the main respondent felt nervous, (4) How often the main respondent felt restless/fidgety, and (5) How often the main respondent felt hopeless. Answer choices range from "All of the time," "Most of the time," "Some of the time," "A little of the time," to "None of the time". The alpha reliability coefficient for this scale is good ($\alpha = 0.86$). We measure parental depression with the question "How frequent is the main respondent depressed", with the options of (1) None of the time, (2) A little of the time, (3) Some of the time,

(4) Most of the time, and (5) All of the time. Main respondent's general health is measured with answer choices being "Excellent," "Very good," "Good," "Fair," or "Poor". These were reverse coded so worse health is reflected by a higher number.

Measures of parental selectivity include parental education, maternal age at birth, parental smoking, parental drinking, and race. We measure parental education as a categorical variable using the highest academic qualification of either parent, with the categories "less than high school," "GCSE/A-level," "some college," "first degree," and "higher degree". We measure maternal age at birth in years, ranging from 13 to 51. To examine the influence of substance use on child behavioral problems we included measures of parental smoking and drinking. With regards to parental smoking, main respondents were asked if they currently use tobacco. Responses are measured dichotomously as "No" or "Yes". Parental drinking captures the frequency with which the main respondent consumed alcohol and was measured categorically with the categories of "Never", "2 times a month or less", "1–4 per week", and "5 or more times a week". Additionally, the child's race is included as a categorical variable with the categories "White", "African", "Asian", or "Other". Finally, as behavioral problems are commonly associated with respondent gender (Lee & McLanahan, 2015), we include gender, with 1=Male and 0=Female. Child age is measured continuously.

Missing data among control variables ranged from less than 1% (maternal age at birth) to 35% (total state benefits). We dropped missing on variables with less than three percent missing (maternal age at birth, and highest education achieved by parents), and used multiple imputation to impute for missing values in all of the other control variables, which for the most part had between 18–22% missing. We performed 20 iterations using Stata/SE version 15. While we used multiple imputation to impute for missing values on the majority of our variables, we did not use multiple imputation on the two dependent variables (Von Hippel, 2007), or on family structure.

Analytic strategy

The MCS data allows us to examine variability in family structure and family structure trajectories in a context (the UK) where families have become increasingly diverse. We report descriptive statistics of the variables in our analysis in Table 1. In Table 2 and Table 3, we first examine the more traditional family structure story, using the most traditional family structure (stable married families) as the reference group as we focus on the impact of family structure on child behavioral problems. We begin with a bivariate model examining how internalizing or externalizing behavioral

problems are associated with children's family structure. We then include blocks of alternative explanations for child outcomes to look at variation in child outcomes beyond family structure. These include resources (Huang et al., 2017), state support (Heuveline et al., 2010), stress (Reczek et al., 2016), and parental selectivity (Carlson, 2006). In Table 4, we then expand the family structure story and use various stable family structures as reference categories to examine the significance of stability in alternative family structures. This allows us to explore comparisons between single parent and cohabitating families based on stability (Cavanagh & Huston, 2006).

Results

The proportion of children in each family structure is shown in Table 1. We find that nearly half of the children in our sample live in stable married families (47%). Seven percent of children live in homes with two biological stable cohabiting parents, and nine percent with the same single biological parent since birth. Sixteen percent of children in our sample live with one biological parent who has *become* single since they were born. Eleven percent of children live in a home with two biological parents who married *after* they were born, while fewer than five percent live in homes such as post-birth stepfamilies (3%), post-birth cohabiting families (4%), and post-birth social families (3%).

In Table 2, when we examine family structure and internalizing behavior problems in our bivariate model, we find that children in all family structures are associated with increased internalizing behavior problems when compared to children in stable married families, including children in stable cohabiting ($b = 0.035, p < 0.01$), stable single ($b = 0.139, p < 0.001$), disrupted single ($b = 0.095, p < 0.01$), post-birth married ($b = 0.040, p < 0.001$), post-birth stepfamily ($b = 0.096, p < 0.001$), post-birth cohabiting ($b = 0.107, p < 0.001$), and post-birth social families ($b = 0.083, p < 0.001$).

In Models 2–5, we examine competing explanations for internalizing behavioral problems in children along with family structure. In Model 2, when resources are included in the model, the association of family and internalizing behavioral problems is reduced, and children in stable cohabitating families and post-birth social families are no longer significantly different from children in stable married families. We also find that children with unemployed fathers ($b = 0.046, p < 0.001$) and mothers ($b = 0.073, p < 0.001$) showed evidence of increased internalizing behavior problems. Additionally, children whose families were in higher income categories were associated with fewer internalizing behavioral problems, with children in the highest income category having the largest decrease

Table 1 Variable Descriptions and Descriptive Statistics

Variable	Description	Percentage/Mean(SD)
Dependent variables		
Internalizing	Ten items that include the emotional and peer relationship subscales in the SDQ.	1.29 (0.50)
Externalizing	Fifteen items that include the hyperactivity, conduct problems, and prosocial behavior subscales in the SDQ.	1.50 (0.63)
Independent variables		
Stable married	Two biological parents married from birth to current sweep.	47%
Stable cohabiting	Two biological parents cohabiting from birth to current sweep.	7%
Stable single	Biological parent single from birth to current sweep.	9%
Disrupted single	Biological parent became single after child's birth and is single in current sweep.	16%
Post-birth married	Two biological parents married after child's birth.	11%
Post-birth stepfamily	One biological parent married one non-biological parent after child's birth.	3%
Post-birth cohabiting	Two biological parents that began cohabiting after child's birth.	4%
Post-birth social family	One biological parent cohabiting with a non-biological partner after child's birth.	3%
Paternal work	Created employment status from employment categories and hours worked per week.	Full = 63% Part = 5% Unemployed = 8% No father = 24%
Maternal work	Created employment status from employment categories and hours worked per week.	Full = 14% Part = 46% Unemployed = 39% No mother = 1%
Family income	Total income reported by main respondent and partner when applicable; measured in 6 brackets of 1) £0 to less than £3100, 2) £3100 to less than £10400, 3) £10400 to less than £20800, 4) £20800 to less than £31200, 5) £31200 to less than £52000, and 6) £52000 and above.	Income bracket 1 = 1% Income bracket 2 = 12% Income bracket 3 = 27% Income bracket 4 = 23% Income bracket 5 = 24% Income bracket 6 = 13%
Total social benefits	Number of total social benefits received by the main respondent.	2.26 (3.63)
Family stressors	Family stressor scale using the following questions regarding parental stress in the past 30 days; 1) How often main respondent felt everything is an effort, 2) How often main respondent felt nervous, 3) How often main respondent felt restless/fidgety, 4) How often main respondent feels worthless, 5) How often felt hopeless; ranges from 1 to 5.	1.55 (1.00)
Parental depression	Main respondent answer regarding how often they felt depressed; 1) None of the time, 2) A little of the time, 3) Some of the time, 4) Most of the time, 5) All of the time.	None of the time = 65% A little of the time = 23% Some of the time = 9% Most of the time = 2% All of the time = 1%
Parental health	Main respondent answer regarding their general health; (1) Excellent, (2) Very good, (3) Good, (4) Fair, (5) Poor.	Excellent = 22% Very good = 35% Good = 30% Fair = 10% Poor = 3%

Table 1 (continued)

Variable	Description	Percentage/Mean(SD)
Parental education	Highest academic qualification of either parent at current sweep.	Less than high school = 15% GCSE/A-level = 48% Some College = 13% First Degree = 16% Higher Degree = 8%
Maternal age at birth	Maternal report in years; ranges from 13 to 51 years of age.	28.33 (15.03)
Parental smoking	Whether the main respondent smokes or not.	No = 71% Yes = 29%
Parental drinking	The degree to which the main respondent drinks. (1) Never, (2) 2 times or less a month, (3) 1-4 times per week, (4) 5 or more times a week	Never = 19% 2 times monthly = 36% 1-4 weekly = 38% 5 or more times a week = 7%
Parental competence	Main responder answer regarding their competence as a parent; (1) Not very good at being a parent, (2) Trouble being a parent, (3) An average parent, (4) A better than average parent, (5) A very good parent.	Not very good = 1% Trouble = 3% Average = 34% Above average = 28% Very Good = 34%
Child race	Child's race; ranges from 0 to 1 for each category.	White = 86% African = 3% Asian = 7% Other = 4%
Child gender	Male = 1 Female = 0	Male = 51%
Child age	Child age in years.	7.23 (0.50)
Total <i>N</i>	15,685	

Note: Standard Deviations are in Parentheses

($b = -0.152, p < 0.001$). When we examine social benefits along with family structure (Model 3), we find that differences in the relationship of family structure and child internalizing behavioral problems are affected by state resources but less so than family resources. Increased use of social benefits is associated with increased child internalizing behavioral problems ($b = 0.032, p < 0.001$).

In Model 4, we examine family stressors and find that increased family stressors are associated with increased internalizing behavioral problems ($b = 0.089, p < 0.001$). Additionally, children whose parents reported feeling depressed a little of the time ($b = 0.049, p < 0.001$), some of the time ($b = 0.094, p < 0.001$), most of the time ($b = 0.129, p < 0.001$), and all of the time ($b = 0.167, p < 0.01$) were related to higher internalizing behavioral problems compared to children whose parent did not feel depressed. Having a parent with poor health was also associated with higher internalizing behavior problems ($b = 0.083, p < 0.001$). Including family stressors decreased the association of family structure on internalizing behavioral problems by

nearly 50%. When we examine parental selectivity (Model 5), we find that the children of more educated parents ($b = -0.048, p < 0.001$), the children of mothers who were older at birth ($b = -0.003, p < 0.001$), and the children of parents with higher levels of parental competence ($b = -0.281, p < 0.001$) were less likely to have internalizing behavioral problems, while children whose parents smoke ($b = 0.025, p < 0.001$) and Asian children ($b = 0.092, p < 0.001$) had more internalizing behavioral problems. Like family stressors, parental selectivity substantially decreased the relationship between family structure and child internalizing behavioral problems, as behavioral problems among children in stable cohabitating, post-birth married families, and post-birth social families were no longer significantly different than children in stable married families.

In the full model, control variables were able to explain the association of most family structures, as only children in stable single families ($b = 0.040, p < 0.05$) were associated with higher internalizing behavior problems than children in stable married families. In this model, we find that children

Table 2 Regression predicting internalizing behavioral problems by family structure, resources, family stressors, and selectivity factors

Internalizing:	Model 1: Family structure	Model 2: Resources	Model 3: social benefits	Model 4: Family stressors	Model 5: Selection	Full model
Stable cohabiting	0.035** (0.010)	0.012 (0.010)	0.020* (0.010)	0.019* (0.009)	0.009 (0.009)	0.002 (0.009)
Stable single	0.139*** (0.011)	0.079*** (0.021)	0.110*** (0.012)	0.087*** (0.011)	0.058*** (0.013)	0.040* (0.020)
Disrupted single	0.095** (0.008)	0.056** (0.020)	0.071*** (0.009)	0.049*** (0.008)	0.044*** (0.009)	0.026 (0.018)
Post-birth married	0.040*** (0.009)	0.025** (0.009)	0.030** (0.009)	0.024** (0.009)	0.016 (0.009)	0.008 (0.009)
Post-birth stepfamily	0.096*** (0.019)	0.061** (0.019)	0.073*** (0.019)	0.058** (0.018)	0.050** (0.019)	0.026 (0.018)
Post-birth cohabiting	0.107*** (0.016)	0.054** (0.016)	0.078*** (0.016)	0.070*** (0.016)	0.052** (0.016)	0.029 (0.016)
Post-birth social family	0.083*** (0.016)	0.031 (0.016)	0.048** (0.016)	0.051*** (0.014)	0.023 (0.016)	0.002 (0.015)
Father part-time		0.010 (0.013)				−0.004 (0.013)
Father unemployed		0.046*** (0.013)				0.006 (0.012)
No father to be employed		−0.021 (0.019)				−0.015 (0.017)
Mother part-time		0.003 (0.007)				0.006 (0.007)
Mother unemployed		0.073*** (0.008)				0.035*** (0.008)
No mother to be employed		−0.047 (0.047)				−0.078 (0.046)
Income £3100 to less than £10400		−0.028 (0.031)				−0.026 (0.027)
Income £10400 to less than £20800		−0.046 (0.029)				−0.020 (0.026)
Income £20800 to less than £31200		−0.082** (0.030)				−0.027 (0.027)
Income £31200 to less than £52000		−0.114*** (0.031)				−0.038 (0.028)
Income £52000 and above		−0.152*** (0.031)				−0.043 (0.029)
Total social benefits			0.032*** (0.003)			0.009** (0.003)
Stressor scale				0.089*** (0.007)		0.078*** (0.007)
Depression- a little				0.049*** (0.007)		0.037*** (0.007)
Depression- Some of the time				0.094***		0.074***

Table 2 (continued)

Internalizing:	Model 1: Family structure	Model 2: Resources	Model 3: social benefits	Model 4: Family stressors	Model 5: Selection	Full model
Depression- Most of the time				(0.014) 0.129***		(0.013) 0.095**
Depression- All of the time				(0.030) 0.167**		(0.030) 0.136**
Health- Very good				(0.047) 0.020***		(0.046) 0.014*
Health- Good				(0.006) 0.050***		(0.006) 0.033***
Health- Fair				(0.007) 0.075***		(0.007) 0.044***
Health- Poor				(0.010) 0.083***		(0.010) 0.045*
Less than HS				(0.021)	0.064***	(0.021) 0.040***
Some college					(0.009) -0.025***	(0.009) -0.014*
First degree					(0.007) -0.033***	(0.006) -0.013
Higher degree					(0.007) -0.048***	(0.007) -0.025**
Mother's age at birth					(0.008) -0.003***	(0.009) -0.003***
Parental smoking					(0.001) 0.025***	(0.000) -0.001
Parental drinking- never					(0.006) 0.055***	(0.006) 0.032**
Parental drinking- 2 times a month or less					(0.012) 0.017	(0.011) 0.014
Parental drinking- 1-4 times per week					(0.010) -0.010	(0.009) -0.003
Trouble being a parent					(0.010) -0.033	(0.009) -0.048
Average parent					(0.054) -0.193***	(0.052) -0.112*
Above average parent					(0.051) -0.250***	(0.049) -0.142**
Very good parent					(0.052) -0.281***	(0.049) -0.165**
Asian					(0.051) 0.092***	(0.049) 0.062***
African					(0.014) 0.015	(0.012) 0.006
Other					(0.015) 0.034*	(0.016) 0.019

Table 2 (continued)

Internalizing:	Model 1: Family structure	Model 2: Resources	Model 3: social benefits	Model 4: Family stressors	Model 5: Selection	Full model
Gender					(0.015)	(0.015)
Age						0.018** (0.005)
Constant	1.243*** (0.005)	1.314*** (0.032)	1.181*** (0.007)	1.066*** (0.010)	1.563*** (0.055)	1.424*** (0.091)
N	15,685	15,685	15,685	15,685	15,685	15,685

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Standard Errors in Parentheses

whose mothers are unemployed ($b = 0.035$, $p < 0.001$), are in families who receive more social benefits ($b = 0.009$, $p < 0.01$), have increased family stress ($b = 0.078$, $p < 0.001$), have parents who are depressed ($b = 0.136$, $p < 0.01$), have parents with poor health ($b = 0.045$, $p < 0.05$), are Asian ($b = 0.062$, $p < 0.001$), and are male ($b = 0.018$, $p < 0.01$) are associated with increased internalizing behavior problems. On the other hand, children whose parents are more highly educated ($b = -0.025$, $p < 0.01$), whose mothers were older at the time of birth ($b = -0.003$, $p < 0.001$), and whose parents had a high level of parental competence ($b = -0.142$, $p < 0.01$) were related to decreased internalizing behavior problems.

In Table 3, we examine family structure and externalizing behavior problems in our bivariate model. We find that children in all family structures are associated with increased externalizing behavior problems when compared to children in stable married families, including children in stable cohabiting ($b = 0.107$, $p < 0.001$), stable single ($b = 0.215$, $p < 0.001$), disrupted single ($b = 0.149$, $p < 0.001$), post-birth married ($b = 0.080$, $p < 0.001$), post-birth step-family ($b = 0.148$, $p < 0.001$), post-birth cohabiting ($b = 0.204$, $p < 0.001$), and post-birth social families ($b = 0.242$, $p < 0.001$).

In Models 2–5, we examine competing explanations for externalizing behavioral problems in children along with family structure. In Model 2, when resources are included in the model, the relationship of family with externalizing behavioral problems is reduced, although child externalizing behavioral problems remain significantly higher in every family structure, compared to children in stable married families. We also find that children with unemployed fathers ($b = 0.058$, $p < 0.001$) and mothers ($b = 0.045$, $p < 0.001$) were linked with increased externalizing behavior problems, while children whose mothers worked part-time ($b = -0.023$, $p < 0.05$) were associated with decreased externalizing behavior problems. Additionally, children whose families were in higher income categories

were associated with fewer externalizing behavioral problems, with children in the highest income category having the largest decrease ($b = -0.207$, $p < 0.001$). When we examine social benefits along with family structure (Model 3), the relationship of family structure with externalizing child behavioral problems is reduced, but not as much as when we included family resources. We also find that increased use of social benefits is associated with increased child externalizing behavioral problems ($b = 0.042$, $p < 0.001$).

In Model 4, we examine family stressors along with family structure. Similar to the relationship of family resources and social benefits, including measures of family stress in the model decreases the association of family structure on child externalizing behavioral problems. Increased family stressors are also associated with increased externalizing behavioral problems ($b = 0.076$, $p < 0.001$). Additionally, children whose parents reported feeling depressed a little of the time ($b = 0.067$, $p < 0.001$), some of the time ($b = 0.117$, $p < 0.001$), and most of the time ($b = 0.146$, $p < 0.001$) experienced higher externalizing behavioral problems compared to children whose parent did not feel depressed. Children whose parents had poor health also had higher externalizing behavior problems ($b = 0.098$, $p < 0.001$). When we examine parental selectivity (Model 5), the association of family structure on child externalizing behavioral problems is decreased by more than 50% in each family structure, although children in each family structure still experience more externalizing behavior problems than children in stable married families. We also find that the children of more educated parents ($b = -0.085$, $p < 0.001$), the children of mothers who were older at birth ($b = -0.004$, $p < 0.001$), and the children of parents with higher levels of parental competence ($b = -0.300$, $p < 0.001$) experience fewer externalizing behavioral problems, while children whose parents smoke ($b = 0.081$, $p < 0.001$), and Asian children experience increased externalizing behavioral problems ($b = 0.062$, $p < 0.001$).

Table 3 Regression predicting externalizing behavioral problems by family structure, resources, family stressors, and selectivity factors

Externalizing:	Model 1: Family structure	Model 2: Resources	Model 3: Social benefits	Model 4: Family stressors	Model 5: Selection	Full model
Stable cohabiting	0.107*** (0.014)	0.077*** (0.013)	0.088*** (0.014)	0.089*** (0.014)	0.049*** (0.013)	0.038** (0.013)
Stable single	0.215*** (0.016)	0.146*** (0.028)	0.177*** (0.017)	0.163*** (0.016)	0.082*** (0.016)	0.077** (0.028)
Disrupted single	0.149*** (0.012)	0.101*** (0.026)	0.117*** (0.017)	0.102*** (0.012)	0.054*** (0.011)	0.044 (0.026)
Post-birth married	0.080*** (0.013)	0.059*** (0.012)	0.117*** (0.013)	0.062*** (0.012)	0.031* (0.012)	0.020 (0.012)
Post-birth stepfamily	0.148*** (0.026)	0.104*** (0.026)	0.118*** (0.026)	0.110*** (0.025)	0.064** (0.024)	0.043 (0.023)
Post-birth cohabiting	0.204*** (0.023)	0.137*** (0.023)	0.165*** (0.023)	0.166*** (0.023)	0.098*** (0.022)	0.080*** (0.022)
Post-birth social family	0.242*** (0.030)	0.176*** (0.030)	0.196*** (0.030)	0.208*** (0.029)	0.128*** (0.030)	0.105*** (0.029)
Father part-time		-0.006 (0.016)				-0.008 (0.016)
Father unemployed		0.058*** (0.016)				0.009 (0.018)
No father to be employed		-0.042 (0.026)				-0.033 (0.024)
Mother part-time		-0.023* (0.011)				-0.027** (0.009)
Mother unemployed		0.045*** (0.011)				-0.001 (0.011)
No mother to be employed		0.007 (0.066)				-0.035 (0.053)
Income £3100 to less than £10400		-0.024 (0.053)				-0.022 (0.045)
Income £10400 to less than £20800		-0.062 (0.049)				-0.030 (0.041)
Income £20800 to less than £31200		-0.110* (0.050)				-0.042 (0.041)
Income £31200 to less than £52000		-0.164** (0.050)				-0.066 (0.042)
Income £52000 and above		-0.207*** (0.052)				-0.060 (0.043)
Total received benefits			0.042*** (0.004)			0.013** (0.003)
Stressor scale				0.076*** (0.010)		0.049*** (0.010)
Depression- a little				0.067*** (0.011)		0.049*** (0.010)
Depression- some of the time				0.117***		0.091***

Table 3 (continued)

Externalizing:	Model 1: Family structure	Model 2: Resources	Model 3: Social benefits	Model 4: Family stressors	Model 5: Selection	Full model
				(0.020)		(0.020)
Depression- most of the time				0.146***		0.113**
				(0.037)		(0.036)
Depression- all of the time				0.090		0.059
				(0.054)		(0.053)
Health- very good				0.033**		0.023*
				(0.010)		(0.010)
Health- good				0.073***		0.047***
				(0.012)		(0.011)
Health- fair				0.093***		0.041**
				(0.016)		(0.015)
Health- poor				0.098***		0.045
				(0.028)		(0.026)
Less than HS					0.085***	0.065***
					(0.012)	(0.011)
Some college					−0.029*	−0.017
					(0.011)	(0.011)
First degree					−0.086***	−0.064***
					(0.010)	(0.010)
Higher degree					−0.085***	−0.057***
					(0.014)	(0.014)
Mother's age at birth					−0.004***	−0.003***
					(0.001)	(0.007)
Parental smoking					0.081***	0.051***
					(0.009)	(0.009)
Parental drinking- never					0.043*	0.019
					(0.017)	(0.016)
Parental drinking- 2 times a month or less					0.000	−0.006
					(0.013)	(0.013)
Parental drinking- 1-4 times per week					−0.013	−0.007
					(0.014)	(0.013)
Trouble being a parent					0.044	0.023
					(0.070)	(0.065)
Average parent					−0.139*	−0.077
					(0.066)	(0.062)
Above average parent					−0.223**	−0.148*
					(0.067)	(0.063)
Very good parent					−0.300***	−0.209**
					(0.067)	(0.062)
Asian					0.062***	0.036**
					(0.014)	(0.014)
African					0.002	−0.012
					(0.020)	(0.020)
Other					0.012	0.000

Table 3 (continued)

Externalizing:	Model 1: Family structure	Model 2: Resources	Model 3: Social benefits	Model 4: Family stressors	Model 5: Selection	Full model
Gender					(0.018)	(0.019)
Age						0.145*** (0.007)
Constant	1.426*** (0.007)	1.559*** (0.050)	1.346*** (0.010)	1.251*** (0.015)	1.780*** (0.070)	2.079*** (0.124)
<i>N</i>	15,685	15,685	15,685	15,685	15,685	15,685

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Standard Errors in Parentheses

Table 4 Full model family structure reference category comparison with internalizing and externalizing behavior problems

	Full model internalizing			Full model externalizing		
	Stable cohabit	Stable single	Stable married	Stable cohabit	Stable single	Stable married
Stable married	-0.002 (0.009)	-0.040* (0.020)	-	-0.038** (0.013)	-0.077** (0.028)	-
Stable cohabit	-	-0.039 (0.021)	0.002 (0.009)	-	-0.039 (0.030)	0.038** (0.013)
Stable single	0.039 (0.021)	-	0.040* (0.020)	0.039 (0.030)	-	0.077** (0.028)
Disrupted single	0.025 (0.020)	-0.014 (0.013)	0.026 (0.018)	0.006 (0.029)	-0.033 (0.0188)	0.044 (0.026)
Post-birth married	0.006 (0.012)	-0.033 (0.020)	0.008 (0.009)	-0.018 (0.016)	-0.057* (0.028)	0.020 (0.012)
Post-birth stepfamily	0.024 (0.019)	-0.015 (0.022)	0.026 (0.018)	0.004 (0.026)	-0.035 (0.031)	0.043 (0.023)
Post-birth cohabiting	0.027 (0.017)	-0.011 (0.022)	0.029 (0.016)	0.041 (0.025)	0.002 (0.031)	0.080*** (0.022)
Post-birth social family	0.001 (0.016)	-0.038 (0.022)	0.002 (0.015)	0.066* (0.030)	0.027 (0.037)	0.105*** (0.029)
Constant	1.425*** (0.092)	1.464*** (0.092)	1.424*** (0.091)	2.118*** (0.125)	2.157*** (0.125)	2.079*** (0.124)
<i>N</i>	15,685	15,685	15,685	15,685	15,685	15,685

Notes: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Standard Errors in Parentheses

In the full model, we find that children in stable cohabiting ($b = 0.038$, $p < 0.01$), stable single ($b = 0.077$, $p < 0.01$), post-birth cohabiting ($b = 0.080$, $p < 0.001$), and post-birth social families ($b = 0.105$, $p < 0.001$) experienced significantly higher externalizing behavior problems than children in stable married families. Accordingly, the full host of control variables present within the full model was *not* able to explain away the relationship of most of our family structure categories. In this model, we find that children in families who receive more social benefits ($b = 0.013$, $p < 0.01$), have increased family stress ($b = 0.049$,

$p < 0.001$), have parents who are depressed ($b = 0.113$, $p < 0.01$), whose parents smoke ($b = 0.051$, $p < 0.001$), are Asian ($b = 0.036$, $p < 0.01$), and are male ($b = 0.145$, $p < 0.001$) experience more externalizing behavior problems. On the other hand, children whose mothers worked part-time ($b = -0.027$, $p < 0.01$), whose parents had higher levels of education ($b = -0.057$, $p < 0.001$), whose mothers were older at the time of birth ($b = -0.003$, $p < 0.001$), whose parents had a high level of parental competence ($b = -0.209$, $p < 0.01$), and were older ($b = -0.075$, $p < 0.001$) had fewer externalizing behavior problems.

In Table 4, we use different family structure types as reference categories to compare the full model results of the three stable family structures in our analysis, stable cohabiting, stable single, and stable married families. This allows our study to more thoroughly investigate differences in stable and unstable family types and illuminate these variations in a context where non-traditional family types are more common. When we use stable cohabiting families as the reference category to examine internalizing behavior problems, we find that child internalizing behavior problems in post-birth cohabiting families were not significantly different from those experienced in stable cohabiting families. In fact, none of the child behavioral problems in any of the other family structures were significantly different from stable cohabiting families. When we used stable single families as a reference group, children in disrupted families were not significantly different from children in single stable families. Only children in stable married families ($b = -0.044$, $p < 0.05$) were associated with decreased internalizing problems. After examining alternative family structures as reference groups, our findings suggest that there is very little association between family structure and child internalizing behavior problems.

When we use alternative family structures as reference groups to look at child externalizing behavioral problems, the results are largely the same. In the stable cohabiting model for child externalizing behavior problems, we find that children in stable married families ($b = -0.038$, $p < 0.01$) had significantly fewer externalizing behavior problems while children in post-birth social families experienced significantly more ($b = 0.066$, $p < 0.05$). In the stable single model for externalizing behavior problems, children in both stable married ($b = -0.077$, $p < 0.01$) and post-birth biological married families ($b = -0.057$, $p < 0.05$) had fewer externalizing behavior problems. These findings suggest that for externalizing behavior problems in children, there appear to be fewer differences between alternative family structures than in comparison to children in stable married families.

Sensitivity Analyses

Since child behavioral problems can vary in their severity, we also considered additional specifications by examining child behavior problems that would be seen as more extreme or clinical. While we present internalizing and externalizing behavioral problems as a continuous measure in our tables, we also conducted sensitivity analyses where we examined the same models using the top 20th percentile of child behavioral problem scores (which includes borderline and abnormal behavioral problems) and the top 10th percentile of child behavioral problem scores (which is considered abnormal behavioral problems) (Goodman, 1997; EHCAP, 2014)

as our outcome variables. The results from these specifications (available on request) were very similar to our results with continuous outcomes for internalizing and externalizing behavior problems (He et al., 2012). We also included a different measure of family structure to examine child internalizing and externalizing behavioral problems. In this measure, respondents with missing values in family structure across the four sweeps were dropped from the analysis rather than imputing missing values using other sweeps. The pattern for these results (also available upon request) for internalizing behavior problems were the same for both measures of family structure. With externalizing behavioral problems, the core finding that children in non-traditional family structures were more likely to have externalizing behavioral problems, remained the same.

Discussion

Researchers examining child behavior have frequently investigated the relationship with family characteristics (Dufur et al., 2008; Lee & McLanahan, 2015). However, many of these studies have not used measures of family structure that capture trajectories of change in family structure and don't fully capture how modern family structures may differ in their association (Steele et al., 2020). By using measures of family structure that reflect trajectories distinguishing more clearly between stable and unstable family types and that extend beyond those used in past family structure research, our study is able to isolate the associations of eight different family structures with child internalizing and externalizing behavior problems, as well as examine the relationship of family characteristics beyond family structure. We find that while family structure is associated with internalizing behavior problems, this is largely a product of family characteristics such as resources, the presence of family stressors, parental depression, and parental selectivity measures, such as competency as a parent, and substance use. In contrast, the associations of family structure with children externalizing behavior problems generally persist, independent of these same commonly cited explanations for child behavioral problems.

By using data from the UK, we add to the debate over the importance of family structure compared to family characteristics as key explanations for varying child outcomes (Lamb, 2012; Lee & McLanahan, 2015) in the following ways. First, using data from the UK provides an opportunity to examine family structure in a social context where state support is close to the OECD average (OECD, 2020). Thus, we examine a setting that is more typical in terms of social welfare spending than in the United States, which has much weaker support for children and families with children (Daly & Ferragina, 2018; Waldfogel, 2010) or in

Scandinavian countries, which often have more robust state support for children and families with children (Rosholm et al., 2020). While using state support is associated with more child internalizing and externalizing behavior problems, the use of that support also attenuates the relationships between living in non-traditional family structures and behavior problems, perhaps especially for children in single-parent families. Second, among high-income western nations, the UK is a context with more variability in family structure types, where non-traditional family structure types and trajectories are more common or more normalized than in other social welfare states. These data and this context allow us to examine the relationship of family structure with child behavioral problems in an exploratory fashion. We were able to examine variation within non-traditional family structures like cohabitation or single parented families, which are more common in the UK, and to explore stability arguments across these non-traditional family structures. In general, we found that family structure has very little association with child internalizing behavioral problems. Even when we extended this examination to compare *within* non-traditional family structures, stability and instability was not related to child internalizing behavioral problems. What matters more for child internalizing behavioral problems are things such as parental selectivity, stress, resources and state support. This supports the selection hypothesis, which suggests that background characteristics, parental attributes or antecedents are associated with child behaviors (Fomby & Cherlin, 2007). When these factors are included in our final model, differences in internalizing child behavioral problems were no longer related to family structure. Interestingly, these findings differ from what Reczek and colleagues (2016) found regarding the health outcomes of children in cohabitating families in the US. Unlike children in cohabiting families in the US, when controlling for variation in parental selectivity, stress, resources and state support, the form of parental partnership was not associated with child internalizing behavioral problems.

Children living with cohabiting parents in the UK also had no significant difference in internalizing behavior problems compared to children living with married parents. That these results are the same for stable married and cohabiting family structures may also be a result of the normalization of cohabitation in the UK as relationship status, compared to the US where cohabitation usually precedes marriage (Di Giulio et al., 2019; Smock, 2000). Examining contemporary longitudinal data from the US may uncover similar patterns over time as rates of cohabitation grow.

When we examine child externalizing behavioral problems, there are significant differences in child behavioral problems based on family structure, but these are most

pronounced when we compare children in non-traditional family structures to children in stable married families. Despite the social change and increased prevalence of non-traditional family structures in the UK, when we compared children in stable single and stable cohabitating families to children in disrupted family structures, their behavioral problems were generally similar. Unlike what Cavanagh and Huston (2006) found using US data, we found no differences between child behavioral problems in single stable and single disrupted homes. What was most surprising was the persistent association of being in a stable married family structure on child externalizing behavior problems. Similar to past research on child physical health in the UK (Panico et al., 2019), being in a family structure with stable married parents was consistently associated with decreased child externalizing behavior problems. Interestingly, we also found that when children were in other forms of married family structures, including post-birth married families and stepfamilies, their externalizing behavior problems were not significantly different from children in stably married family structures. We speculate that this could be a result of children maintaining the maximum amount of parental and financial resources.

Our findings join those from previous research in underscoring or highlighting the importance of treating family structure as something that can change rather than as a static construct. Using this trajectory-based approach allows for examination of a larger, more nuanced set of family contexts and circumstances and a fuller understanding of how these family circumstances are correlated with child outcomes.

At the same time, the development of these nuanced patterns creates somewhat muddy theoretical waters, and our findings do not help adjudicate a theoretical direction to explain these nuanced paths. For example, we found slightly different family trajectories related with behavior problems among children in the UK than Panico et al. (2019) found using an earlier cohort of the same data to examine physical health outcomes. In both UK studies, controls for stress and resources tended to render family trajectory associations non-significant, which is distinct from similar research using US data (cf. Augustine & Kimbro, 2013; Bzostek & Berger, 2017; Johnston et al., 2020a). While these trajectory-based approaches do a fine job of parsing out nuanced differences, then, showing that complex patterns and mechanisms are in fact complex does not push theory forward much.

On the other hand, this less static, trajectory-based approach may have important consequences for application and interventions. Taken together with our findings, this body of research shows that one size does not fit all and that scholars and policymakers interested in helping children and youth who experience family instability would be well

served not only to measure family structure and transitions more finely, but also to understand that the patterns of how such family trajectories might influence desirable outcomes vary across outcomes and, potentially, settings. The way our findings align or contrast with previous research suggests that tailoring an appropriate intervention to support children experiencing family instability will require careful data gathering and modeling of both specific family trajectories and specific outcomes to determine where help would be best targeted. When looking at behavior problems among UK children, as we do here, rather than focusing on marriage itself as the solution, as has been suggested among some conservative groups in the US, interventions might instead be best tailored to parental selectivity or selection hypothesis arguments, as we found a lack of education, increased substance use, and confidence in parenting ability was dramatically related to child behavioral problems. With the increasing diversity in family structure in the UK, interventions that could help parents feel better about their parenting skills, which may be a product of educational opportunities and strategies for maintaining a healthier lifestyle, may be instrumental in helping parents in non-traditional family structures parent more effectively. Finally, by including family structures that are often overlooked in past research, we provide an important glimpse into how these overlooked family structures may be associated with child behaviors in similar and different ways to more commonly examined family structures. This can contribute to more specific family policies related to the unique dynamics of these family structures. While beyond the scope of this specific inquiry, we note that this approach of treating family structure less as static and more as a trajectory can be applied to many family actors and changes beyond parents and parental romantic coupling and decoupling. For example, this trajectory approach can be applied to the presence of grandparents or other adult relatives in the home. While research indicates negative associations between grandparent presence and child mental health, particularly in two-parent families (Masfety et al., 2019), to date scholars have not concentrated on whether children who live in stable family situations with grandparents in the home since the child's birth have different outcomes from children who experience instability when grandparents or other adult relatives move in or out of the home. Similarly, while we know something about the presence of siblings, stepsiblings, and half-siblings in the home, and how such sibship configurations are associated with child outcomes (Sanner et al., 2018), this more trajectory-based approach could be applied to how sibling movement into or out of the home might be framed as a particular kind of instability. A specific example can be found in recent studies on boomeranging, or adult children moving back into the parental home during times of

economic crisis (cf. Berngruber, 2015; Ullrich & Pantuosco, 2020). The family structure as trajectory approach we apply here could be used to study the outcomes of children whose older siblings do not move out of the family home during the emerging adulthood stage—a circumstance which on one hand seems to indicate stability but might actually indicate economic, emotional, or other problems that could introduce strains to families. These findings could be contrasted to those for children whose older siblings move back into the parental home, a circumstance that likely indicates economic or other difficulties but also returns sibling resources to the home. We note that the application of the approach we and other recent work (cf. Augustine & Kimbro, 2013; Bzostek & Berger, 2017; Johnston et al., 2020a; Johnston et al., 2020b; Panico et al., 2019) take to family structure may result in findings similar to those in our work and recent work, showing different patterns depending on outcome, age, or setting, and that these kinds of approaches will need to be used broadly in order to define larger patterns that can be applied to theory-building.

We acknowledge possible limitations in our study. We focus on younger children only because older children are increasingly influenced by peers. This allows our study to measure the nuances of eight different family structures at a time of life when family remains the prime influence in the life of children. At later ages, family structure may be more tightly related to extreme behavior such as delinquency. In addition, children may become more accustomed to living in non-traditional family structures over time and may develop resilience in response to family transitions, leading to attenuated connections between family structure and later adolescent delinquent behavior. Future research looking at older adolescents but using the types of nuanced family structures we employ here could help adjudicate this question. Other limitations include limiting family structures to just eight types. We were unable to examine co-parenting families that live in multiple residences, the role of intergenerational parental support such as grandparents, families headed by fathers and families with two, same-sex parents. Future research should delve deeply into these family structures that are becoming more common. Finally, while we examine how stable and unstable family structures affect child behavioral outcomes, our data is limited and does not have the capability to explain exactly what it is about stability in family structure that is related to child outcomes.

Still, we find important differences both across family trajectories, across outcomes, and from previous work in other settings. As such, our findings support the notions that studying family structures as trajectories can uncover important nuances and that these nuances vary across contexts. Further research could implement our methodology in the other countries to see whether differences in

stable and unstable family types persist when using finer, trajectory-based measures of family structure and in settings beyond the US and UK. For example, in settings like South Korea, where divorce is on the rise and strict norms about public behavior are still in place (Park & Raymo, 2013), work using family trajectories might uncover different patterns than the ones in western countries.

Acknowledgements We would like to thank the Centre for Longitudinal Studies (CLS), UCL Social Research Institute, for the use of these data and to the UK Data Service for making them available. Neither the CLS nor the UK Data Service bear any responsibility for the analysis or interpretation of these data.

Compliance with Ethical Standards

Conflict of Interest The authors declare no competing interests.

Ethical Approval Data gathered for sweeps 1–4 of the Millennial Cohort Study (MCS) received ethical approval from National Health Service (NHS) Research Ethics Committees (REC) in South West, London, and Yorkshire

Informed Consent Informed consent was obtained from all individual participants included in the study.

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