



Original article

The Indivisibility of Parental and Child Mental Health and Why Poverty Matters

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ABSTRACT

Purpose: To ascertain to what extent parental and children's mental health wellbeing are inter-related over time.

Methods: We used a birth cohort study of 5,217 children in Scotland followed up from birth to adolescence. We fitted a Random Intercept Cross-lagged Panel Model for parental mental health and children's conduct problems and emotional symptoms. We included longitudinal patterns of poverty as the main covariate and some demographic control variables.

Results: The effects of parental mental health and child conduct problems and emotional symptoms on one another are roughly equal in early childhood. At younger ages, parents with poorer mental health tend to negatively affect their children's conduct and the conduct problems of a child seem to impact negatively on their parents' mental health. At older ages, it is children's emotional symptoms, but not conduct problems, that tend to have a reciprocal effect on parental mental health. Regarding structural inequalities, the effect of poverty on parents' and children's mental health is categorically the largest and continues to accrue throughout the whole period, intensifying mental health problems for both parents and children over time.

Discussion: Children's and parents' wellbeing is a bidirectional process. This interdependency needs to be acknowledged and addressed in policy. To foster children's wellbeing, we also need to foster parents' wellbeing. Furthermore, all interventions that address mental health and wellbeing in parents and children and that do not also tackle structural inequalities, such as poverty, will have limited success.

IMPLICATIONS AND CONTRIBUTION

This study shows that children's and parents' wellbeing is bidirectional and strongly associated with poverty. To foster children's wellbeing, we also need to foster parents' wellbeing. Furthermore, interventions attempting to improve mental health in parents and children that do not also tackle structural inequalities, such as poverty, will have limited success.

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Child mental health difficulties are common [1], with approximately one in five young people across all ages globally experiencing them [2,3]. This is a major cause for concern [4], as child and adolescent mental health problems have

deleterious effects, not only on social and academic functioning in childhood and adolescence but also on physical health, educational attainment, work force participation, and satisfaction in adulthood [1,2]. What is more concerning is that these negative impacts are becoming stronger in each subsequent generation [1].

There are many factors posited as having strong associations with child and adolescent mental health problems. One of the most studied factors, shown to have one of the strongest relationships with child mental health, is parental mental health.

Conflicts of interest: The authors have no conflicts of interest to declare.

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Parental mental health and child conduct and emotional problems

Parental depression, as measured at the clinical level, is one of the best-established risk factors for young people's mental health problems [5]. Children of depressed parents are three to four times more likely to develop depression than those of nondepressed parents [6].

In a meta-analysis of 193 studies that examined the strength of the association between mothers' depression and children's conduct problems and emotional symptoms, maternal depression was significantly related to higher levels of internalizing and externalizing behaviors and to lower levels of positive affect, although all associations were small in magnitude [7]. More recently, research suggests that maternal depressive symptoms and child externalizing behaviors are particularly strongly associated [8].

In a longitudinal study, maternal mental health had an effect accounting for a third of a standard deviation increase in child conduct problems and emotional symptoms, the largest singular effect size in the models, suggesting that following mothers and children over time is key to fully unlocking the relationship [9]. Additionally, in Goodman et al.'s meta-analysis, the effect sizes between depression in mothers' and children's mental health problems were stronger for studies with a focus on families living in poverty, a population Goodman et al. suggested be studied further [7].

Poverty and socioeconomic disadvantage on parental and/or child mental health

Socioeconomic disadvantage has negative impacts on adolescent mental health and, indeed, was the most important factor in Costello's Great Smoky Mountain studies [10]. Socioeconomically disadvantaged adolescents report higher rates of mental health problems on multiple objective and subjective measures [11]. Yet, it is not just adolescents who are affected. In Treanor's [9] longitudinal study, poverty and financial vulnerability, as measured by debt and ability to cope on current income, were both associated with reduced parental and child mental health, for children as young as five years [9].

Parental employment is also a relevant factor for young people's mental health. Children whose parents lost jobs and hours had increased emotional problems at adolescence, compared to children of parents with stable jobs [12].

In socioeconomic terms, the focus is often on poverty. Yet, family wealth predicts all facets of quality of life in adolescents [13]. For example, compared to adolescents in wealthy households, those from less wealthy families are four times more likely to experience reduced physical wellbeing and twice as likely to have reduced psychological wellbeing [13]. Furthermore, adolescents who worried more about family finances were seven times more likely to report mental health problems [4]. There are two routes through which socioeconomic advantage and disadvantage act on children's mental health: the family investment model and the family stress model. The former comprises parents' capacity to invest money in their child's development and wellbeing, and the latter reduces parents' and children's emotional health via the stress brought on by low income [12]. These can be protective or detrimental to children's mental health and operate not in opposition to each other but in tandem, even when the outcomes are contradictory. Measures of

socioeconomic advantage and disadvantage are included in this paper as explanatory variables.

Child's sex

A consistent feature of studies examining the prevalence of mental health difficulties in children is the presence of sex differences, with girls more likely to experience emotional problems and boys more likely to experience behavioral problems. Girls' emotional problems tend to increase over time [2,3] and last longer than boys' conduct problems [14]. For this reason, we include the sex of the child as a control variable.

Bidirectional relationships

A limitation of the extant literature is that the direction of study has predominantly focused on the effects of parental mental health on children's mental health. A small and growing literature suggests that this relationship may also work in the other direction, that is, that children's mental health affects parental mental health too, especially in low-income families [15]. Choe et al. [16] posit that early behavior problems can elicit negative effects in caregivers and call for greater levels of research to interrogate this relationship. In adolescence, too, parent and child mental health have been reported to be predictive of one another, with socioeconomic disadvantage increasing symptoms in both parents and children [17].

The only existing study to look at the bidirectional relationships between parent and young child is Curci et al. [18]. Their results provide evidence of bidirectional associations between maternal depressive symptoms and child behavior problems across the first four years of life. They highlight the importance of accounting for child-directed effects on maternal mental health across early developmental periods [18]. However, the empirical support for bidirectional associations remains limited [18]. Reasons for this are that there are often long spells between data collection points [16] and the methodology and computing requirements to disentangle bidirectional effects have been hitherto underdeveloped. This paper takes advantage of regular data collection and increasingly sophisticated statistical methods and computational capacities to explore this relationship.

To our knowledge, ours is the first study to examine bidirectional effects between parental and child mental health from birth to adolescence using nine waves of a birth cohort dataset.

Research question

What is the relationship between parental mental health and child conduct problems and emotional symptoms over time?

Methodological advances

Some authors have noted that methodological advances in statistical computing will allow for the study of bidirectional effects between parental and child mental health over time [19]. Paschall and Mastergeorge [20] observed that research on bidirectionality could be strengthened through the adoption of advanced methodologies and strong research designs, such as longitudinal designs. Most recently, structural equation and longitudinal cross-lagged models have been used [15,18]. The strongest analytical approaches, argue Paschall and Mastergeorge [20], use structural equation modeling and latent growth

models using longitudinal data. Eimecke et al. [21] assert that to capture a secular change would require data from at least a seven-year period [21]. We attempt to contribute to the current knowledge by using nine time points over the first 13 years of a child's life, from birth to adolescence.

Methods

Data

The dataset used is the Growing Up in Scotland (GUS) study, a longitudinal birth cohort study with a nationally representative sample of 5,217 children born in 2004/05 in Scotland [22]. This paper covers the period between wave 1 (2005/06, age 10 months) and wave 9 (2017/18, age 12/13). These data are accessible through the U.K. Data Service. The ethical implications of data collection were undertaken by GUS's principal investigators. Below we describe the set of variables used.

Outcome variables

There are three outcome variables: parental mental health, child conduct problems, and child emotional symptoms.

Data for parental mental health come from the 12-Item Short Form Survey (SF-12) [23,24], which was administered at child's ages: 10 months, 1/2, 3/4, 10/11, and 12/13. The longitudinal mental health measures were constructed via a longitudinal structural equation model. The standardized predicted values from this model, where higher values indicate better mental health, were used as outcomes in the subsequent full model presented here. This model ensures longitudinal measurement invariance as well as removing measurement error. More details are provided in the [Supplementary Information](#).

Data for children's conduct problems and emotional symptoms come from the parent-reported Strengths and Difficulties Questionnaire administered in every wave from age 2/3 to 12/13 [25]. We used the total score for both subscales, where higher values indicate poorer conduct and emotional wellbeing, respectively. Evidence of strict longitudinal measurement invariance is provided in Treanor and Troncoso [12,26].

Covariates

Demographic information: child's sex (as registered at birth) and ethnicity and maternal age at birth of the child (banded).

Socioeconomic information: Longitudinal poverty is a derived variable constructed via a latent variable approach, as seen in Treanor and Troncoso [12,26]. The supplement offers additional details of how this covariate is constructed.

Missing data

The model implemented in lavaan [27] was fitted via Full Information Maximum Likelihood, which retains all the available information. The model preserves 5,200 of 5,217 (99.67%) children in GUS birth cohort 1. As expected in a longitudinal study, attrition impacts the sample size over time; wave 9 of GUS achieved 56% of the original sample at wave 1. More information about attrition over time can be found in the [Supplementary Information](#).

Analytical strategy: random intercept cross-lagged panel model

This model is an extension of the traditional cross-lagged panel model [28]. It is akin, in principle, to a multilevel model, because there are two parts to this model: within child/parent effects (level 1) and between children/parents effects (level 2).

A cross-lagged panel model is an autoregressive model in which two or more outcomes measured over multiple points in time are correlated to one another at concurrent time points and regressed on one another with lagged versions of themselves. Our model specified all possible lagged and cross-lagged effects between all three outcome variables to avoid potential confounding (for more details, see [Supplementary Information](#)).

Overall goodness of fit was assessed via conventional thresholds [29]: values more than 0.95 for the Tucker-Lewis Index and the Comparative Fit Index; less than 0.06 for the Root Mean Squared Error of Approximation; and less than 0.08 for the Standardized Root Mean Squared Residual. Model fit information is provided in the [Supplementary Information](#).

Results

[Table 1](#) provides the means and standard deviations over time for conduct problems, emotional symptoms, and parental mental health, as per the groups defined by our covariate of interest: longitudinal poverty and our control variables: sex (child), ethnicity (child), and maternal age at birth of the study child. Statistics are weighted by the cross-sectional weights for each wave.

The overall mean for conduct problems is 1.98 at age 3/4 and decreases steadily to 1.32 at age 12/13. This suggests that conduct problems naturally attenuate as the child ages. The variability in conduct problems over the period remains relatively stable, with a standard deviation ranging from 1.44 (age 3/4) to 1.56 (age 7/8), suggesting that the range of conduct problems is similar across the age groups.

The overall mean for emotional symptoms is 1.2 at age 3/4 and increases steadily to 1.96 at age 12/13. This suggests that, in contrast to conduct problems, emotional problems increase as children grow older. Furthermore, unlike for conduct problems, variability in emotional symptoms seems to increase over time with standard deviations ranging from 1.42 (age 3/4) to 2.16 (age 12/13). This suggests that not only do children's emotional problems intensify throughout childhood but they also swing further toward the extremes as children age.

[Table 1](#) shows that conduct problems and emotional symptoms are higher for children living in persistent poverty or escaping poverty compared to those who have never been poor or who are falling into poverty. This shows that length of time living in poverty across childhood matters for child mental wellbeing. It shows that persistent poverty has less, but still substantial, effects on conduct over time but stronger effects on emotional symptoms over time. [Table 1](#) also shows that conduct problems and emotional symptoms are higher for children with younger mothers and that conduct problems, but not emotional problems, are higher for male children.

Parental mental health appears to decrease (worsen) over time. Persistent poverty has a particularly strong association with decreasing parental mental health over time. Other factors associated with poorer parental mental health are escaping poverty, having a male child, being of an ethnic minority, and

Table 1
Descriptive statistics (weighted) for conduct problems, emotional symptoms, and parental mental health over time by children and family characteristic

Variable	Group	Wave 1 (age 10 months)		Wave 3 (age 1/2)		Wave 4 (age 2/3)		Wave 5 (age 3/4)		Wave 6 (age 5/6)		Wave 7 (age 7/8)		Wave 8 (age 10/11)		Wave 9 (age 12/13)		
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Outcome means	Conduct	n/a	n/a	n/a	n/a	1.98	1.44	1.76	1.45	1.6	1.46	1.55	1.56	1.32	1.48	1.32	1.55	
	Emotional	n/a	n/a	n/a	n/a	1.2	1.42	1.27	1.5	1.29	1.59	1.55	1.83	1.72	1.98	1.96	2.16	
	Parent MH	0.12	0.87	0.09	0.89	n/a	n/a	0.12	0.88	n/a	n/a	n/a	n/a	0.07	0.93	0.09	0.91	
Conduct	Long poverty	Persistent nonpoor	n/a	n/a	n/a	n/a	1.7	1.27	1.5	1.31	1.33	1.29	1.21	1.26	1.04	1.24	1.04	1.31
		Escaping poverty	n/a	n/a	n/a	n/a	2.37	1.5	2.06	1.47	1.92	1.52	2.09	1.92	1.56	1.59	1.63	1.57
		Persistent poor	n/a	n/a	n/a	n/a	2.46	1.61	2.23	1.59	2.05	1.63	2.1	1.74	1.79	1.7	1.91	1.87
		Falling into poverty	n/a	n/a	n/a	n/a	1.97	1.42	1.75	1.41	1.62	1.48	1.55	1.67	1.31	1.5	1.39	1.55
	Child's sex	Male	n/a	n/a	n/a	n/a	2.09	1.49	1.89	1.48	1.77	1.52	1.73	1.65	1.46	1.57	1.45	1.64
		Female	n/a	n/a	n/a	n/a	1.87	1.39	1.62	1.39	1.42	1.36	1.35	1.42	1.17	1.36	1.2	1.44
	Child's ethnicity	White	n/a	n/a	n/a	n/a	1.98	1.43	1.76	1.44	1.6	1.46	1.54	1.56	1.31	1.48	1.32	1.54
		All other ethnic groups	n/a	n/a	n/a	n/a	2	1.64	1.87	1.62	1.48	1.39	1.63	1.49	1.45	1.44	1.53	1.72
	Maternal age	Under 20	n/a	n/a	n/a	n/a	2.58	1.7	2.32	1.61	2.02	1.62	2.22	1.74	1.82	1.78	2.22	2.07
		20–29	n/a	n/a	n/a	n/a	2.05	1.46	1.87	1.49	1.69	1.5	1.69	1.65	1.46	1.55	1.47	1.65
		30–39	n/a	n/a	n/a	n/a	1.84	1.36	1.6	1.36	1.47	1.38	1.34	1.4	1.14	1.34	1.14	1.38
		40+	n/a	n/a	n/a	n/a	1.71	1.2	1.59	1.33	1.34	1.37	1.28	1.49	1.15	1.34	1	1.17
Emotional	Long poverty	Persistent non-poor	n/a	n/a	n/a	n/a	0.99	1.21	1.09	1.33	1.08	1.43	1.26	1.6	1.41	1.73	1.62	1.94
		Escaping poverty	n/a	n/a	n/a	n/a	1.57	1.75	1.4	1.61	1.47	1.63	2.07	2.02	1.93	2.19	1.84	2.13
		Persistent poor	n/a	n/a	n/a	n/a	1.55	1.65	1.59	1.77	1.69	1.86	2.02	2.11	2.18	2.23	2.76	2.49
		Falling into poverty	n/a	n/a	n/a	n/a	1.21	1.37	1.31	1.38	1.23	1.45	1.56	1.79	1.89	2.04	2.02	2.07
	Child's sex	Male	n/a	n/a	n/a	n/a	1.23	1.43	1.28	1.55	1.28	1.63	1.62	1.91	1.74	2.04	1.98	2.24
		Female	n/a	n/a	n/a	n/a	1.18	1.41	1.25	1.44	1.29	1.55	1.47	1.74	1.69	1.91	1.94	2.08
	Child's ethnicity	White	n/a	n/a	n/a	n/a	1.19	1.41	1.25	1.48	1.29	1.6	1.54	1.84	1.73	1.99	1.95	2.15
		All other ethnic groups	n/a	n/a	n/a	n/a	1.56	1.58	1.68	1.77	1.23	1.51	1.88	1.75	1.6	1.78	2.18	2.4
	Maternal age	Under 20	n/a	n/a	n/a	n/a	1.63	1.77	1.63	1.74	1.55	1.73	1.92	2.11	2.03	2.18	2.21	2.05
		20–29	n/a	n/a	n/a	n/a	1.29	1.48	1.36	1.6	1.41	1.68	1.78	1.94	1.89	2.05	2.29	2.34
		30–39	n/a	n/a	n/a	n/a	1.07	1.29	1.13	1.35	1.15	1.5	1.32	1.67	1.53	1.86	1.71	2
		40+	n/a	n/a	n/a	n/a	1.03	1.31	1.26	1.37	1.11	1.31	1.3	1.69	1.76	2.08	1.63	1.95
Parental MH	Long poverty	Persistent non-poor	0.26	0.78	0.27	0.78	n/a	n/a	0.31	0.77	n/a	n/a	n/a	n/a	0.30	0.79	0.28	0.79
		Escaping poverty	-0.02	0.92	-0.13	0.91	n/a	n/a	-0.03	0.87	n/a	n/a	n/a	n/a	-0.01	0.90	-0.04	0.98
		Persistent poor	-0.10	0.96	-0.21	1.00	n/a	n/a	-0.19	1.01	n/a	n/a	n/a	n/a	-0.29	1.06	-0.30	1.03
		Falling into poverty	0.06	0.88	0.04	0.85	n/a	n/a	0.07	0.85	n/a	n/a	n/a	n/a	-0.02	0.93	0.02	0.90
	Child's sex	Male	0.09	0.87	0.06	0.89	n/a	n/a	0.10	0.88	n/a	n/a	n/a	n/a	0.03	0.95	0.07	0.91
		Female	0.16	0.86	0.12	0.89	n/a	n/a	0.15	0.88	n/a	n/a	n/a	n/a	0.11	0.92	0.11	0.91
	Child's ethnicity	White	0.13	0.87	0.10	0.89	n/a	n/a	0.13	0.89	n/a	n/a	n/a	n/a	0.08	0.93	0.09	0.91
		All other ethnic groups	0.08	0.88	-0.06	0.85	n/a	n/a	0.04	0.81	n/a	n/a	n/a	n/a	-0.10	0.92	-0.06	0.93
	Maternal age	Under 20	0.05	0.90	-0.05	0.94	n/a	n/a	0.01	0.93	n/a	n/a	n/a	n/a	-0.09	0.95	-0.12	1.02
		20–29	0.12	0.89	0.06	0.90	n/a	n/a	0.09	0.89	n/a	n/a	n/a	n/a	0.02	0.95	0.03	0.92
		30–39	0.14	0.85	0.14	0.87	n/a	n/a	0.18	0.86	n/a	n/a	n/a	n/a	0.15	0.91	0.16	0.88
		40+	0.12	0.80	0.06	0.87	n/a	n/a	0.05	0.87	n/a	n/a	n/a	n/a	-0.07	0.98	0.05	0.91

being a younger parent. While the escaping poverty association may seem counterintuitive, those escaping poverty will have been experiencing it for quite some time; therefore, it can be considered another measure of length of time in poverty, just not as long as persistent poverty.

Figure 1 gives a schematic overview of the model fitted but does not provide measures of uncertainty for the estimated coefficients. Figure 2 shows three charts that give the within-child or within-parent standardized effects of lagged conduct problems (square symbols), emotional symptoms (circular symbols), and parental mental health (triangular symbols) on each outcome over time, as measured by child's age. Full details of the model coefficients are provided in the [Supplementary Information](#).

The effects of the prior outcomes on their subsequent outcomes are generally stronger than any cross-lagged effect (i.e., the effect of earlier parental mental health has the strongest effect on later parental mental health compared to either conduct problems or emotional symptoms). This is expected; lagged effects are used as control variables because the cross-lagged effects are of greater interest. For each outcome, the

lagged effects become stronger over time. This might suggest that individual traits become more settled or fixed as people age (especially in the case of children).

Parental mental health includes cross-lagged effects that go up to three waves in the past, in which case effects can appear to be weak as an artefact of the lag in time. Parental mental health does not seem to make an impact initially (ages 3/4–5/6) on emotional symptoms. Then at age 7/8, it seems to affect both conduct and emotional problems, but more strongly conduct problems; this trend is reversed at age 10/11. By age 12/13, parental mental health seems to have an effect only on emotional symptoms. In all cases, the direction of the effect is the same: the lower the parental mental health, the higher the conduct or emotional problems.

In terms of what affects parental mental health, at age 4/5, we only found evidence of conduct problems having an impact on it. Meanwhile at age 10/11, both conduct and emotional problems seem to have a largely similar impact on parental mental health. By the end of the study period, we only find evidence of emotional symptoms having a small (but significant) impact (-0.054).

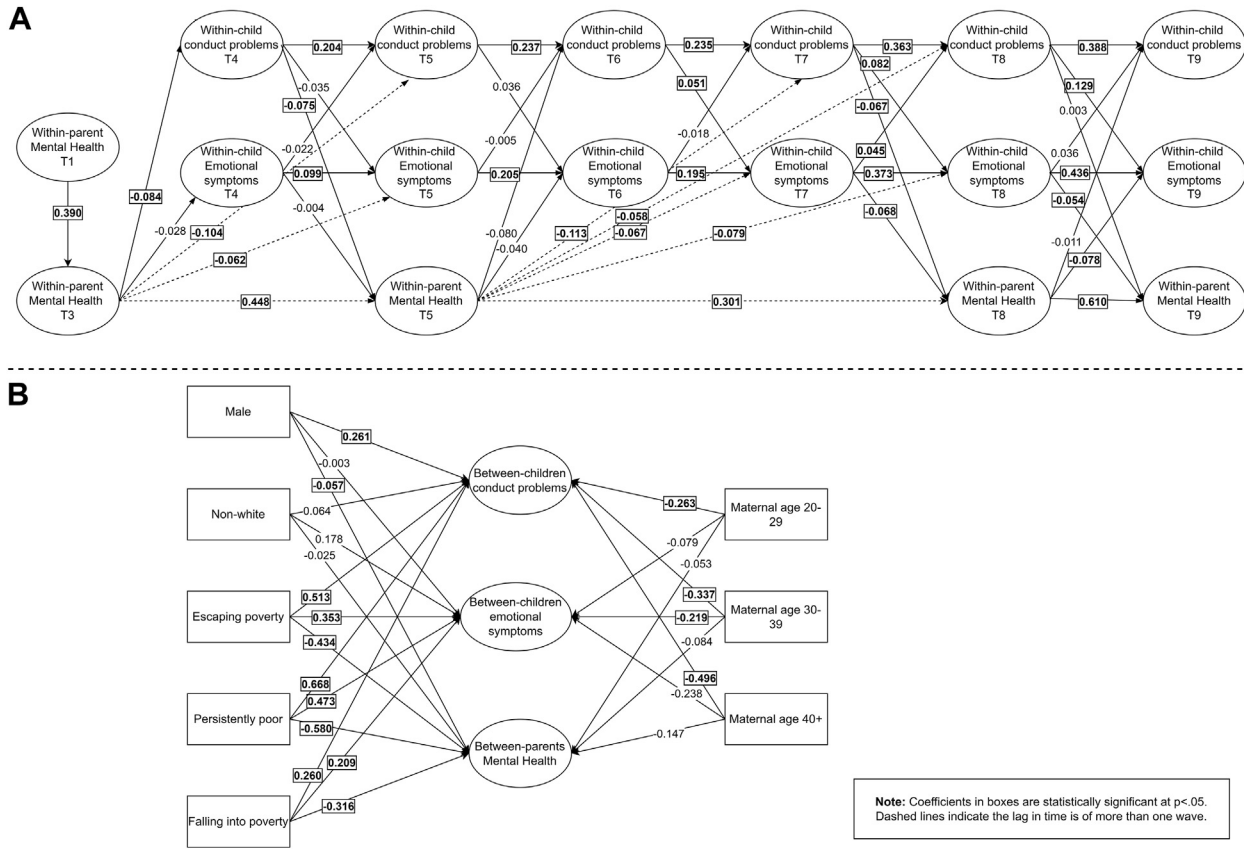


Figure 1. Schematic diagram of within-child/parent (A) and between-child/parent (B) standardized coefficients over time.

Given that effects are standardized, they are comparable across outcomes. At age 12/13, the effect of emotional symptoms on parental mental health (-0.054) is less strong than the effect of parental mental health on emotional symptoms (-0.078).

At age 10/11, the effects of conduct (-0.067) and emotional symptoms (-0.068) on parental mental health seem slightly stronger than the effect of parental mental health on conduct problems (-0.058); however, this may be an artefact of the longer time lag of parental mental health.

At age 4/5, the effect of parental mental health on conduct problems (-0.104) seems stronger than the effect of conduct problems (-0.075) on parental mental health.

All these results confirm that parental and child mental health are bidirectional.

Figure 3 gives the time invariant part of the model. These are ‘stable traits’ that form part of the developmental processes but do not change over time. The main interpretations from the time-invariant part of the model are as follows.

Regarding the child’s sex, males have significantly more conduct problems than females, which is consistent with previous research. There are no significant differences by ethnicity, that is, ethnicity is not a significant predictor of any of the stable traits.

Persistent poverty has the strongest effect across all outcomes, with absolute values for the standardized effects between

nearly half a standard deviation in the case of emotional symptoms and parental mental health up to about two-thirds in the case of conduct problems.

Any experience of poverty has detrimental impacts on parental mental health and child conduct problems and emotional symptoms. Children from the ‘escaping’ and ‘falling into’ poverty also have more conduct problems and emotional symptoms, and their parents lower mental health, than their peers in the persistently nonpoor class.

Maternal age seems to affect child conduct problems and emotional symptoms but there is no evidence of an impact on parental mental health. In general, the older the mother, the lower the conduct problems. Regarding emotional symptoms, only children of mothers aged between 30 and 39 years seem to have significantly lower scores in comparison with children of mothers aged 20 years or less.

Discussion

This paper adds the following knowledge and evidence to the oeuvre.

Parental mental health and child conduct and emotional symptoms have bidirectional effects; they are indivisible, which have implications for how they are managed and treated. This adds nuance and context to the evidence that poor parental

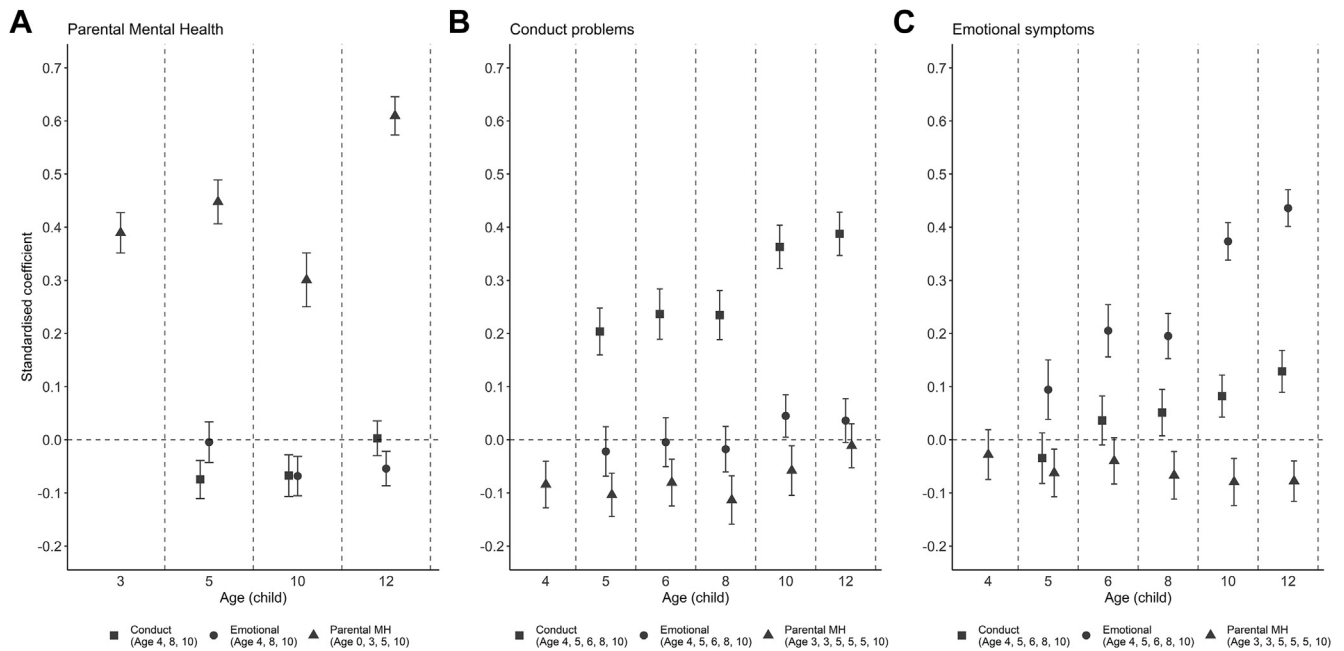


Figure 2. Standardized within-child/parent effects of lagged parental mental health, conduct problems, and emotional symptoms on subsequent parental mental health (A), conduct problems (B), and emotional symptoms (C) over time.

mental health negatively impacts on child mental health in a unidirectional fashion, as set out in earlier work [6,7].

Additionally, the inter-relationship between children’s and parents’ mental health is dynamic over time and changes in nature as the child grows older, which can only be uncovered in a longitudinal study with multiple time points, such as this. In work with fewer time points, the temporal aspects of this

bidirectional relationship are concealed, which has served to reinforce earlier understandings on the direction of effect flowing from parent to child. Furthermore, the impacts of age and stage cannot be uncovered where the children are studied only in early childhood [18] or indeed only in adolescence [17]. Again, this study illuminates the importance of both; for example, the sizes of the bidirectional effects between parental mental health

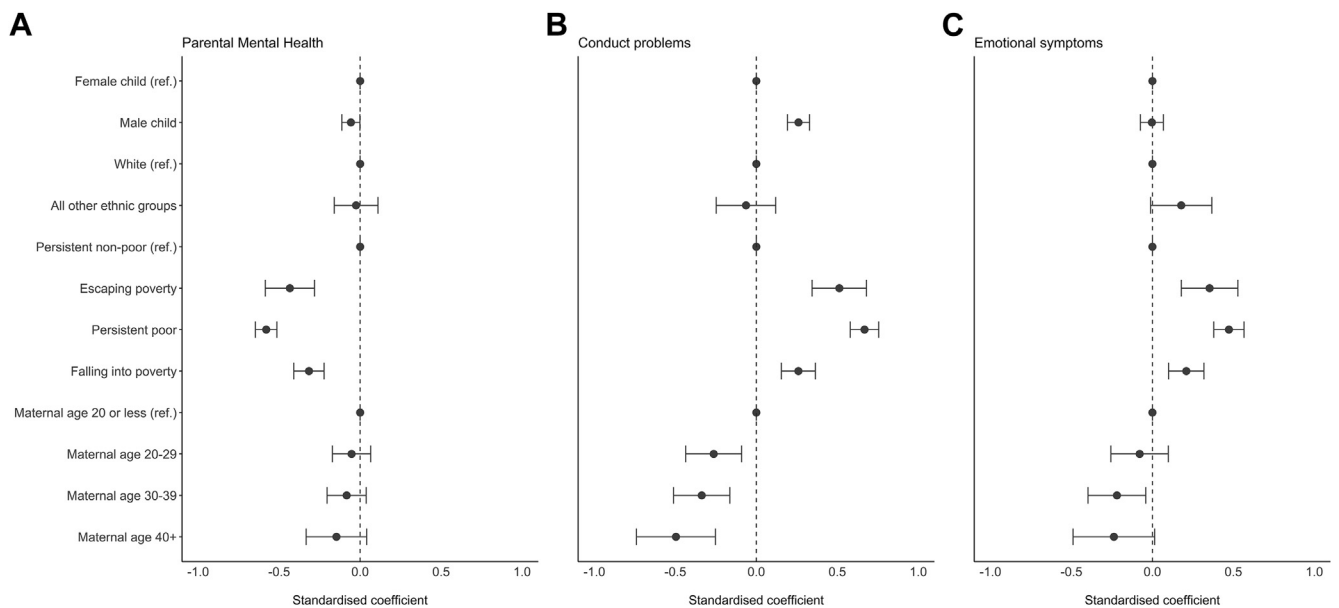


Figure 3. Between-child/parent (time invariant) effects of sex, ethnicity, poverty, and maternal age on parental mental health (A), conduct problems (B), and emotional symptoms (C).

and child conduct problems and emotional symptoms are roughly equal in early childhood and slightly larger at older ages. Furthermore, at younger ages, conduct problems and parental mental health seem to have a reciprocal relationship; parents with poorer mental health tend to negatively affect their children's conduct, and the conduct problems of a child seem to impact negatively on their parents' mental health. At older ages, it is children's emotional symptoms, but not conduct problems, that tend to have a reciprocal effect on parental mental health. This suggests that there might be age and stage effects that elevate either conduct problems or emotional symptoms at different time points.

Children and parents usually exist in the same family milieu and so face the same external stressors caused by structural inequalities: in this case, poverty and, especially, persistent poverty. These have the largest effect sizes, ones that continue to accrue throughout the whole period, reinforcing and intensifying mental health problems for both parents and children over time.

In spite of Costello's seminal Great Smoky Mountain studies of the 1990s, which highlighted the magnitude of poverty as an explanatory variable, poverty continues to be an incidental variable in only a few studies, likely because income data are not always collected. Of those few studies that have managed to capture an aspect of socioeconomic disadvantage, as Goodman et al. note, it has always appeared to be substantively and statistically significant [7]. Goodman et al. concluded that it was of key importance to study poverty in greater depth and that is what this paper has achieved. This paper gives definitive analysis of poverty, and persistent poverty, because our measure uses eight of nine waves of data.

Often, policy and practice on child poverty focus on the child extra-familia, often within school or wider community settings. While effort to mitigate the effects of poverty on children's outcomes in the school and community is valuable and necessary, the findings here strongly suggest that a major key to tackling poor mental health in parents and children is to tackle poverty and to prevent long periods of time spent living in poverty. This is more important for children as any length of time spent living in poverty is a significant portion of their childhood. Unless the poverty of the family is tackled, then the financial pressures in the home that negatively impact on parental mental health will continue to exert negative pressures on children's mental health and wellbeing, as per the family stress model. A whole family approach both to poverty and mental health support is required to provide a holistic response that accounts for the indivisibility of parental and child mental health.

Conclusion

This paper provides important new evidence on the bidirectional relationship between parental mental health and child conduct problems and emotional symptoms. Its time frame, the first 13 years of life across nine waves of data, is the largest period of study we know of in the extant literature.

The main conclusion of this paper is that children's and parents' wellbeing is a bidirectional process. This interdependency needs to be acknowledged and addressed. To foster children's wellbeing, we also need to foster parents' wellbeing. Furthermore, all interventions that address mental health and wellbeing in parents and children, that do not also tackle structural inequalities, such as poverty, will have limited success.

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The data used in this article are publicly accessible via the UK Data Service: <https://beta.ukdataservice.ac.uk/datacatalogue/series/series?id=200020>.

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Supplementary Data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.jadohealth.2023.04.012>.

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