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In the best interests of children? The paradox of intensive parenting and children's health

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ABSTRACT

The family environment and parental guidance are generally considered to be key drivers of children's health behaviours. Parents, mostly mothers, have become a focal point of policies aimed at preventing children's health and well-being problems (e.g. childhood obesity). The underlying intensive parenting ideology places significant pressure on parents (notably mothers), requiring them to spend a great deal of time, energy and money on their children's health and well-being. Yet, the relationship between intensive parenting and children's health might be paradoxical. While a clear positive relationship exists between parental childrearing styles and children's *physical* health, the limited evidence in relation to *psychological* health suggests intensive parenting may negatively affect children's wellbeing. Using data from the UK Millennium Cohort Study (MCS) we provide key insights into the relationship between parenting styles and children's physical and psychological well-being. We analytically distinguish three types of parenting styles (intensive parenting, neglectful parenting, and 'intermediate' parenting), and compare children's self-reported health, well-being and self-esteem by parenting style. The findings show that parenting styles may differentially affect children's physical and psychological health in nuanced ways. Public health and social policy implications of the role of parenting in children's health and wellbeing are discussed. The conceptualisation of parenting styles and the relationship with children's health, however, requires further exploration, which we discuss in the conclusion.

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Introduction

Children's health and well-being is a focal point of social and scientific concern, particularly given health problems such as rising child obesity rates (Ludwig, 2018; Skinner et al., 2018) and psychological problems arising from issues such as increased divorce-rates (e.g. Amato, 2001) and online and offline bullying (e.g. Reijntjes et al., 2010). Professionals working with children (e.g. child development professionals, public health experts, paediatricians, and child psychologists) increasingly emphasize the importance of parents' childrearing practices as a salient determinant of children's health and well-being. Parental support, modelling and guidance are expected to provide children with autonomy and enable healthy behaviours in children (Apouey & Geoffard, 2013; Bauer et al., 2011; Case et al., 2002; Currie & Stabile, 2003; Xu et al., 2015).

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 Supplemental data of this article can be accessed [here](#).

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The emphasis on parents' behaviour as a key driver of children's health is also reflected in contemporary western parenting styles, dominated by so-called 'intensive parenting' (Hays, 1996). With intensive parenting, parents invest significant amounts of time, money and energy in raising their children. The 'proper' approach in intensive parenting is defined as 'child centred, expert guided, emotionally absorbing, labour intensive and financially expensive' (Faircloth, 2014, p. 27; Hays, 1996). Based on the limited empirical evidence on the relationship between intensive parenting and children's health and well-being, however, it is not clear that intensive parenting is always beneficial to children's health. While intensive parenting appears to improve some of children's physical health outcomes (e.g. gross motor skills; see Schiffrin et al., 2015), some empirical research suggests the effects of intensive parenting are limited (Schiffrin et al., 2015) or may even have negative effects on children's psychological well-being later in life, for example on college students' locus of control (Kwon et al., 2016) or depression levels (Schiffrin et al., 2014). Using data from the UK Millennium Cohort Study (MCS) we aim to unpack this complex relationship, focusing on the relationship between intensive parenting and children's *physical health* and *psychological well-being* for the period 2003–2016. We investigate the relationship between intensive parenting and children's physical and psychological health outcomes, comparing outcomes of children across different parenting categories (intensive, intermediate and neglectful).

Parental practices in relation to children's health and well-being

Child development and childrearing is increasingly geared towards the optimization of children's development (Furedi, 2008; Kanieski, 2010; Knaak, 2010), for example by encouraging so-called protective factors to prevent possible disorders and disease (Bell et al., 2009; Jackson & Scott, 1999). Such a focus is, for instance, visible in the developmental area of attachment. Originally identified as a possible disorder for the child in cases of insecure or anxious attachment (Ainsworth, 1979; Bowlby, 1977), secure attachment is now perceived as a protective factor in the healthy psychological development of children. Thus, parenting practices such as breastfeeding are now viewed as a means of attachment parenting that emphasize and combine physical health concerns with early investments in child well-being and development (Kanieski, 2010; Lee, 2008).

From this preventive view, parents play a crucial role in preventing health problems and encouraging healthy behaviour among children. At the same time, parents are increasingly seen as 'risk managers', who rationally deliberate the advantages and disadvantages of various parenting styles, and are implicitly expected to make correct or 'healthy' choices (Jackson & Scott, 1999; Lee et al., 2014) whilst seeking expert advice in making these choices (Faircloth, 2014; Hopman & Knijn, 2017; Macvarish, 2016; Ramaekers & Suissa, 2012). Together, this emphasis on parent's crucial role in children's health sets a normative framework for 'good' parenting. Parents are expected to parent intensively, thereby improving the health outcomes of their children.

Intensive parenting – or more colloquial terminology such as hovering, helicopter or snowplough parenting (Gopnik, 2016; Lemoyne & Buchanan, 2011; Ungar, 2009) – is predominantly formed around five 'beliefs'. Parenting is best done by mothers; it is time intensive (to meet all the child's needs); should be guided by expert knowledge; is expensive (i.e. to organize all kinds of stimulating activities); and finally, that children are inherently good, precious and innocent (Faircloth, 2014; Hays, 1996; Liss et al., 2013). Thus, intensive parenting requires parents to invest significant time, money and energy in the belief that "'good'" parenting leads to "good" children' (Liss et al., 2013, p. 621), and thus better outcomes for children.

The emphasis on intensive parenting has developed within a health discourse in which the family environment is seen as the single strongest influence on children's development, including their health and well-being, until at least the age of 12, at which age peers take on a larger role (Arnett, 2010; Larson et al., 1996). Parenting behaviours, such as parental modelling, as well as parental monitoring, support and encouragement, are strongly associated with children's health behaviours

(Bauer et al., 2011; Pearson et al., 2008). For example, parents' body mass index (BMI) is highly correlated with children's BMI (Davison & Birch, 2001). Similarly, though findings are somewhat mixed, parental behaviour has been found to be positively related to children's and young adult's drinking behaviour (Rossow et al., 2016), to alcohol and marijuana use (Bailey et al., 2016), and to screen time and physical activity (Xu et al., 2015). Moreover, pro-active parental monitoring was found to be associated with healthy sexual behaviour and lower substance abuse in (early) adolescence (Borawski et al., 2003; DiClemente et al., 2001), and parental support was found to be associated with higher levels of physical activity and fruit and vegetable intake (Schoeppe & Trost, 2015). Theory and evidence suggest a clear positive link between (intensive) parenting and children's *physical* health.

The relationship between intensive parenting and children's *psychological* health is less clear, however. The conceptualization of children in the intensive parenting ideology as precious and innocent implicitly reflects a perception of children as being vulnerable and as lacking agency. The 'concerted cultivation' (Lareau, 2003) inherent to the intensive parenting strategies means that children raised from an intensive parenting perspective can experience a relative loss of freedom and autonomy (Wall, 2010). Such development would contradict general developmental psychological theories (e.g., Erikson, 1963, 1974; Marcia, 1980), which emphasize the importance of developing autonomy and self-confidence in children for achieving healthy psychological well-being.

The limited empirical evidence suggests that the focus on and embeddedness in children's lives as a result of intensive parenting beliefs may initially result in positive effects on children's psychological health but that this relationship eventually turns negative. As children age (e.g. adolescence and beyond), and hence more autonomy is expected, intensive parenting may lead children to feel less competent, feel more anxious and more depressed (Kwon et al., 2016; Schiffrin et al., 2014). Adolescents of highly-involved parents show higher levels of internalizing problems such as anxiety and depression, and lower autonomy (Schiffrin et al., 2015). At college age, young people who experienced intensive parenting show higher levels of anxiety and lower levels of coping skills (Schiffrin et al., 2015), higher levels of depression (Schiffrin et al., 2014), and lower internal locus of control (Kwon et al., 2016). Further, there is no evidence to suggest that *only* intensive parenting ensures healthy outcomes for children. Some studies suggest unsupervised and risky behaviours are equally important for children's development, precisely because of the positive effects on developing autonomy (Bristow, 2014; Shirani et al., 2012), which runs counter to an intensive parenting ideology. In sum, intensive parenting is difficult and costly, is likely not the only means of positively influencing children's development, and may negatively impact psychological development as children age. We aim to address these concerns by assessing the association between parenting styles and young people's physical *and* psychological health outcomes, differentiating levels of intensity of parenting, and distinguishing by the age of the child at which the intensive parenting takes place.

Our research centres on three questions: 1) To what extent can we differentiate distinct intensive parenting categories; 2) To what extent do differences in these parenting categories relate to children's physical and psychological health outcomes; and 3) Do these relationships change across time? Given an absence of evidence on variation in the 'intensity' of intensive parenting, we explore the possibility of differentiating among parenting styles, assuming it is possible to distinguish an intensive parenting style that differs substantively from other forms of parenting styles (H1). Based on the literature, we expect that intensive parenting at any stage will positively affect children's physical health in adolescence (H2). We further expect that intensive parenting at later stages in children's lives will negatively affect children's psychological health (H3). Combining these approaches, if hypothesis one holds, then we expect that intensive parenting leads to comparatively better physical health outcomes than other parenting styles (H4) but comparatively worse psychological health outcomes (H5) for adolescents.

Materials and methods

Study design and sample

The UK Millennium Cohort Study is a longitudinal study of more than 18,000 children born in the UK in 2000–2001 (University of London; Institute of Education; Centre for Longitudinal Studies, 2017). The study follows children and their families from birth through adulthood, offering rich data on children and parental outcomes and the relationships between parents and children. The study relies on a stratified clustered random sample design, with oversampling for disadvantaged (in all 4 countries of the UK) and ethnically diverse (in England) populations. Surveys are administered every two to four years, and currently, six waves of data are available.

For our analyses, data from wave 2 (child's age 3 years), wave 3 (child's age 5 years), wave 4 (child's age 7 years), and wave 6 (child's age 14 years; the most recent data available) were used. Data from waves 2 to 4 were used to assess parents' parenting styles; data from wave 6 was used to assess children's health outcomes. Data from wave 1 (child's age 9 months) was not used because parental activities could all be classified as 'intensive parenting', due to the dependency of babies on parents. For the first three waves, we used data from the primary caregiver only to limit variation due to divorce and re-marriage. Regarding the child's data, we focused solely on the child selected for the study (i.e. cohort member); older and/or younger siblings were not included in the analyses.

Sample sizes varied across waves as no missing data were imputed. The parent sample was 15,590 (wave 2), 15,246 (wave 3), and 13,857 (wave 4). The children's sample sizes are considerably smaller, in particular given missing data on self-reported health and well-being measures. Our analytic sample size fluctuates between 10,424 and 10,836. Further details regarding gender, ethnicity and educational level can be found in Table 1. The mean age of parents (wave 2) was 44.6 (SD = 6.43).

Table 1. Descriptive statistics, measured at wave 2.

		N	%
Gender parent	Male	235	1.2
	Female	18,744	98.8
Gender child	Male	5946	50.1
	Female	5926	49.9
Ethnicity parent	White	15,708	84
	Minority ethnic	2990	16
	Black or Black British	510	3
	Indian	548	3
	Mixed	155	1
	Other Ethnic Group Pakistani and Bangladeshi	357 1420	2 8
Education parent	Low	2487	15.4
	Middle	4506	33.6
	High	8210	51

	<i>Intensive</i>	<i>Intermediate</i>	<i>Neglectful</i>	<i>p</i>
<i>Total N (%)</i>	8576	5481	4922	
<i>Gender</i>				.004
Male	91 (1.1)	61 (1.1)	83 (1.7)	
Female	8485 (98.9)	5420 (98.9)	4839 (98.3)	
<i>Ethnicity</i>				<.001
White	7370 (87.3)	4546 (84.1)	3792 (78.1)	
Minority ethnic	1206 (12.7)	935 (15.9)	1130 (21.9)	
<i>Education</i>				<.001
High	3993 (53.0)	2322 (50.1)	1895 (48.1)	
Middle	2381 (31.6)	1585 (34.2)	1440 (36.6)	
Low	1157 (15.4)	727(15.7)	603 (15.3)	

Independent variable

Intensive parenting was measured by asking parents about their frequency of a variety of parenting activity items at each wave, corresponding to children's stage of development.

Dependent variables

Children's health outcomes, including physical health and psychological health (i.e., wellbeing) are derived from data collected in wave 6, using self-reported data from the child interview. To measure health outcomes, we made a distinction between physical health and (psychological) well-being. Children's self-reported health measures are considered valid and reliable as early as five to six years of age, albeit that self-reports are preferably obtained from children when they are aged 8–11. (Jokovic et al., 2002; Varni et al., 2007). The self-reports of children in our sample were all recorded when children were aged 14.

Physical health outcomes. This was measured with one item, referring to children's self-reported perceived general level of health (Ware & Gandek, 1998), measured on a 5-point scale (5 = poor health; 1 = excellent health). Scores have been reversed so that higher scores equate to better health. Although a Likert scale is not strictly continuous, it is generally treated as such, particularly in psychological studies (see, e.g. Bowling, 2005; Franzini et al., 2005; Schmitz, 2011).

Psychological well-being. Two measures of psychological wellbeing were included: 1) the Rosenberg Self Esteem Scale (Rosenberg, 1979), and, 2) a scale based on the well-being grid (Patalay & Fitzsimons, 2016) developed for the British Household Panel Study (BHPS) to measure well-being in a child-appropriate manner. Data regarding both measures were taken from wave 6 and are self-reported by the child respondent. The Rosenberg Self Esteem Scale includes five items, such as 'On the whole, I am satisfied with myself' and 'I feel I have a number of good qualities', which were measured on a 4-point scale (1 – strongly disagree, 4 – strongly agree). The BHPS child-appropriate wellbeing measure includes six items on how happy children are with school, family, friends, schoolwork, appearance and life as a whole. Responses were given on a 7-point scale, with answers ranging from completely happy (1) to not at all happy (7). Scores were reversed so that higher scores equate to better wellbeing.

Control variables

We control the analyses comparing mean health outcomes across parenting styles for a limited number of key socio-demographic characteristics: parent's gender (male = reference category), parent's ethnicity (white = reference category; and minority ethnic (mixed, Indian, Pakistani and Bangladeshi, Black or Black British, other ethnic group)), parent's age, parent's educational level,¹ and the child respondent's gender (male = reference category).

Data analyses

Our analyses proceeded in two stages. First, we created a measure of intensive parenting across different waves using principal component analysis and latent class analysis. As parenting activities change as children develop, intensive parenting was operationalized by the activities undertaken by the parent (main respondent) to encourage and support their child (cohort member). As it is not appropriate to assess the same parenting activities across time, we used principal component analysis (per wave) to determine whether different parenting activities that were assessed at different points in time loaded onto a larger, latent factor. For instance, while parents were asked in wave 2 how often they helped their child to learn the alphabet, this activity is not relevant in later waves when children are older and have learned the alphabet. Yet, at later points in time, parents still undertake activities to help and support the learning of their children. A broader, latent, factor may then be 'help with learning', which

encompasses different parenting activities at different ages of the child. The exact activities assessed in each wave are presented in Table A (supplemental material).

Principle component analysis and latent class analysis were used for each wave, as such analyses make it possible to investigate underlying classes of, in this case, parenting styles. We distinguished parenting categories based on parents' scores on the parenting activity variables. In a second step, we used these parenting categories to assess differences in children's physical and psychological health outcomes across parenting styles, using analyses of variance (ANOVA). Extending these analyses, we also conducted analyses of covariance (ANCOVA) to investigate to what extent differences found are due to key socio-demographic characteristics (including gender of parent and child, parent's ethnicity, parent's educational level, and parent's age). Pair-wise comparisons between the three parenting categories were computed, using Tukey's HSD test to adjust for multiple comparisons. All statistical analyses were conducted using R version 3.5.

Results

Three parenting styles were distinguished based on the frequency of parenting activities using principal component analysis (PCA) and latent class analysis (LCA). The principle component analyses indicated that in each wave the activity variables formed a single component (see Table A; supplementary material); several activities were removed that did not load on the component. Based on the PCA and LCA, three levels of parenting could be distinguished. Parents who generally reported not frequently engaging in the activities were assigned into the 'neglectful parenting' category, parents who moderately engaged in the activities were assigned to the 'intermediate parenting' category, and parents who frequently engaged in the activities were assigned to the 'intensive parenting' category. The percentages of parents who fell in each of the parenting categories per wave are shown in Table 2 below. It should be noted that not all activities were sensitive to these different categories (for example, as can be seen in Figure 1 (supplemental material), scores on the 'reading' variable in Wave 2 did not vary between the categories). Additional analyses using factor analysis and the intensity of parenting activities (in wave 2, for children's outcomes in wave 6) produced similar results. While these findings suggest hypothesis 1 (differentiating among parenting styles) is confirmed, the goodness of fit measurements for this categorization suggest we should be cautious in our interpretation. However, given the exploratory nature of our analyses and the robustness of the findings when using PCA and LCA, we continued with the comparison of means using these three categories to compare children's physical and psychological health outcomes across parenting styles.

Physical health

The results regarding children's general physical health partly confirmed our hypothesis that intensive parenting would lead to better physical health outcomes (see Table 3 below and Appendix 1 (supplemental material)). However, our results also show variation over time and across parenting styles. Intensive parenting at wave 2 (child age 3) predicted children's physical health at wave 6 (age 14), $F(2; 10,581) = 3.52, p = .030$, with children for whom the parent fell into the intensive parenting category reporting better physical health than children for whom the parent fell into the

Table 2. Latent class analysis on the intensive parenting construct per wave.

		Child age 3	Child age 5	Child age 7
Percentage of parents assigned to each class	<i>Neglectful parenting</i>	27.4%	15.4%	23.0%
	<i>Intermediate parenting</i>	30.0%	44.1%	53.1%
	<i>Intensive parenting</i>	42.5%	39.9%	23.9%

Table 3. Effects of intensive parenting category on children's health outcomes at Wave 6 (age 14).

		Physical health	Self-esteem	Well-being
Wave 2 (child age 3)	<i>ANCOVA results</i>	$F(2; 10,581) = 3.52,$ $p = .030$	$F(2; 10,424) = 1.93,$ $p = .145$	$F(2; 10,450) < 1,$ $p = .457$
	Neglectful parenting	3.44 ^a	3.13 ^a	5.48 ^a
	Intermediate parenting	3.48 ^{ab}	3.12 ^a	5.50 ^a
	Intensive parenting	3.50 ^b	3.10 ^a	5.51 ^a
Wave 3 (child age 5)	<i>ANCOVA results</i>	$F(2; 10,833) = 16.61,$ $p < .001$	$F(2; 10,671) = 3.72,$ $p = .024$	$F(2; 10,702) = 8.23,$ $p < .001$
	Neglectful parenting	3.37 ^a	3.11 ^{ab}	5.42 ^a
	Intermediate parenting	3.47 ^b	3.10 ^a	5.49 ^a
	Intensive parenting	3.53 ^c	3.13 ^b	5.52 ^b
Wave 4 (child age 7)	<i>ANCOVA results</i>	$F(2; 10,573) = 15.74,$ $p < .001$	$F(2; 10,421) = 2.95,$ $p = .053$	$F(2; 10,450) = 6.12,$ $p = .002$
	Neglectful parenting	3.38 ^a	3.09 ^a	5.43 ^a
	Intermediate parenting	3.50 ^b	3.12 ^a	5.52 ^b
	Intensive parenting	3.51 ^b	3.13 ^a	5.54 ^b

Note: values with different superscripts within the same wave and column differ significantly from each other at $p < .05$. Exact p -values for the pairwise comparisons are provided in Appendix 1 (supplemental material).

neglectful parenting category. There were no significant differences between either the intensive or the neglectful parenting categories and the intermediate parenting category. However, after controlling for gender, education and ethnicity, the influence of parenting style on the physical health of children was no longer significant (results not reported here).

Intensive parenting at wave 3 (age 5) also predicted children's physical health at wave 6, $F(2; 10,833) = 16.61, p < .001$, with children for whom the parent fell into the intensive parenting category reporting better physical health than children for whom the parent fell into either the intermediate or neglectful parenting category. The physical health of children for whom the parent fell into the intermediate parenting category was also better than that of children for whom the parent fell into the neglectful parenting category. These effects remained significant between all parenting styles, after controlling for parents' gender, education, and ethnicity (results not reported here).

Intensive parenting at wave 4 (age 7) also predicted physical health in wave 6, $F(2; 10,573) = 15.74, p < .001$. Children for whom the parent fell into the neglectful parenting category reported lower physical health than children for whom the parent fell into the intermediate or intensive parenting categories, while physical health of children for whom the parent fell into the latter two categories did not differ significantly. The effect of parenting style on physical health remained significant between neglectful and intensive or intermediate parenting styles, after controlling for parents' gender, education, and ethnicity (results not reported here).

Psychological health: self-esteem

Findings regarding intensive parenting in relation to children's self-esteem are less conclusive and do not provide sufficient proof to accept our hypothesis (see Table 3 above and Appendix 1 (supplemental material)). The intensive parenting style assessed at wave 2 did not predict the child's self-esteem at wave 6, $F(2; 10,424) = 1.93, p = .145$, but the intensive parenting style assessed at wave 3 did predict child self-esteem at wave 6, $F(2; 10,671) = 3.72, p = .024$. Children for whom the parent at wave 3 fell into the intermediate parenting category reported lower self-esteem than children for whom the parent fell into the intensive parenting category, although the differences in means were small. There were no differences in self-esteem between children for whom the parent fell into the intensive parenting category and children for whom the parent fell into the neglectful parenting category. The differences in child self-esteem between intermediate and intensive parenting styles, and between neglectful and intensive parenting, remained significant after controlling for parents' gender, education and ethnicity (results not reported here). Intensive parenting in wave 4 also did not predict self-esteem in wave 6, $F(2; 10,421) = 2.95, p = .053$.

Psychological health: well-being

Our findings here suggest a negative relationship exists between intensive parenting at later stages in children's lives and children's psychological well-being in adolescence, partially confirming hypothesis 3 (see Table 3 above and Appendix 1 (supplemental material)). The intensive parenting style at wave 2 did not predict child well-being at wave 6, $F(2; 10,450) < 1, p = .457$, but the intensive parenting style at waves 3 ($F(2; 10,702) = 8.23, p < .001$) and 4 ($F(2; 10,450) = 6.12, p = .002$) did predict well-being at wave 6. Children for whom the parent at wave 3 fell into the intensive parenting category, reported higher well-being at wave 6 than children for whom the parent fell into either the intermediate or neglectful parenting category. These results remained significant between parenting styles, after controlling for gender, education and ethnicity of parents (results not reported here). The difference in well-being between children with parents who fell into the intermediate and neglectful categories was not significant.

Well-being for children for whom the parent at wave 4 fell into the neglectful parenting category reported lower well-being at wave 6 than children for whom the parent fell into the intermediate or intensive parenting category. These effects remained significant after controlling for gender, education and ethnicity of parents. Well-being of children for whom the parent fell into the intermediate and neglectful categories did not differ from each other.

Conclusion and discussion

Attention for the role parents play in their children's health outcomes has increased in recent years, with an emphasis on the potential beneficial effects of intensive parenting. This has resulted in parents, and mothers in particular, becoming a focal point of policies and interventions aimed at preventing health problems among children (Faircloth, 2014; Hays, 1996). Yet clear evidence linking intensive parenting to positive health outcomes for children remains limited. Overall, research suggests there are positive effects of intensive parenting on children's physical health and possible negative effects on children's psychological health later in life (Kwon et al., 2016; Schiffrin et al., 2015, 2014). To better understand this possible paradoxical relationship between intensive parenting and different child health outcomes, we examined the extent to which parents' differences in the intensity of their parenting activities as children develop may be related to children's health outcomes.

We find that parents differ systematically in the intensity of their parenting activities, and could distinguish three parenting categories; intensive parenting, intermediate parenting and neglectful parenting. Our findings further show that these parenting categories are related to children's physical health outcomes, but findings regarding the effects on psychological well-being (self-esteem and well-being) are less conclusive. *Self-esteem* of children is only affected by intensive parenting at wave 3, when children were 5 years old. Intensive parenting does predict (better) *well-being* for children later in life, but only from wave 3 onwards, once children have reached the age of 5. These results remain largely unchanged when controlling for key socio demographic characteristics (gender of parent and child, parent's ethnicity, parent's educational level, and parent's age).

Surprisingly, and contradicting general conceptions of parenting (see e.g., Ainsworth, 1979; Bowlby, 1977; DiClemente et al., 2001), no significant differences in psychological health outcomes for children were found between intensive and neglectful parenting. Moreover, we find little evidence for significant differences between 'intermediate' parenting and intensive parenting. This lack of differences is most likely due to the fact that studies on the effects of parenting for children usually focus on ways in which neglectful parenting activities (or responsibilities) may affect children's health outcomes. For instance, the cited research of DiClemente et al. (2001) found that a lack of parental monitoring was associated with risky sexual behaviour of adolescents. While parental monitoring may improve sexual health outcomes for adolescents, this does not mean that *intensive* variants of monitoring would improve sexual health outcomes more than intermediate forms. Similarly, while undertaking parenting activities aimed at improving children's development

may lead to positive outcomes for children's health, doing these activities *intensively* may not lead to even better health outcomes. The opposite might be true for psychological health, whereby over-parenting can be particularly detrimental later in life if continued into emerging adulthood (Kwon et al., 2016).

Our findings help unpack the complex relationship between intensive parenting and children's health. Yet, a number of limitations should be noted. Data limitations have not allowed us to exploit the longitudinal nature of our data to the fullest extent. Ideally, we would capitalize on the longitudinal character of the data using a latent transition analysis to model the probability of a parent falling into a parenting style category on wave x conditioned on the probability in wave $x-1$. Such an analysis would provide insights into the stability of parenting styles across waves. However, there is a practical problem in examining the relationship between intensive parenting and children's health, as the types of activities classified as 'intensive parenting' are not the same across waves (e.g. what parents do when children are 3 is different than what parents do when children are 7). Additionally, while our findings suggest it is useful and even necessary to distinguish the intensity of parenting styles in relation to children's health, it is not clear that the frequency of parenting activities are best seen as underlying categories. Measuring the psychological intensity of activities may provide a way forward. Distinguishing the intensity of parenting styles is further hampered by the fact that the data were not collected as part of a study on intensive parenting. Therefore, items used for this purpose may not reflect the actual practice of intensive parenting. Children's health outcomes may be further influenced by factors not included here given the focus on intensive parenting, such as household composition (e.g. relationship status of parents, number of siblings) and parent's physical and mental wellbeing. In an attempt to shed more light on this issue, our next step will be to investigate and try to show the close interrelationship between parent's and children's health and wellbeing, particularly in a context of intensive parenting. Lastly, further research as children age will be needed. For one, it may simply be too early to properly measure the effects of intensive parenting on children's psychological health. Negative effects of intensive parenting are found when children are already young adults (Kwon et al., 2016; Schiffrin et al., 2014). As the data for children beyond age 14 were not (yet) available in the MCS, further development of this research will allow for greater differentiation between childhood and adolescent outcomes in relation to intensive parenting.

Despite these limitations, our findings provide important insights into the complex relationship between intensive parenting and children's physical and psychological health, the most important one being the lack of findings showing a substantial positive effect of intensive parenting. This can have several implications for social policy and (public) health practice. The focus on probable risks for children's health may urge parents to become 'intensive parents', but effects on children's health seem negligible. While the pressure of intensive parenting may put more stress on parents, professionals working with parents and children can emphasize the importance of parenting that is 'good enough' (i.e. not neglectful), which may help lessen the pressure on parents. Moreover, health practitioners, child and family social workers and policy makers should be aware that the intensive parenting discourse can have problematic implications. The emphasis on intensive parenting as a kind of 'concerted cultivation' (Lareau, 2003) tends to neglect the many circumstances that may affect children but that are often not under parents' control. Yet, issues like income, housing and marital status affect the context in which parents have to make childrearing decisions. For example, working parents in low-income households may not be in a position to invest the time and money needed to 'intensively' parent. Additionally, as our descriptive statistics show (and in line with the research discussed above), intensive parenting is primarily a 'white, highly-educated, female' form of parenting. Policymakers and practitioners trying to enhance intensive parenting strategies may need to take into account these gendered, ethnic and educational differences in parenting styles. Furthermore, our study has been exploratory in nature, but from a research perspective clearly underscores the complexity of understanding the relationship between (intensive) parenting and children's health outcomes, suggesting nuanced research with attention for children's physical and psychological health, as well as attention for variation in parenting style, is useful for understanding this relationship.

Note

1. Low = secondary education or lower (O-levels; National Vocational Qualifications 1 and 2); medium = A levels; National Vocational Qualifications 3; and high = some form of tertiary education or National Vocational Qualifications 4 and 5.

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