Understanding the Relationship between Parental Work Schedules and Obesity in Children

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Abstract: Using a nationally representative data set of Canadian children, ages two to eleven, we examine differences in the likelihood of childhood overweight and the likelihood of childhood obesity in two-parent families between parents who work standard schedules and parents who work non-standard schedules. We find that children from families where the mother works a non-standard schedule and the father works a standard schedule have 42% higher odds of being overweight and 71% higher odds of being obese than children whose parents both work standard schedules**.** Children whose parents both work non-standard schedules have 40% higher odds of being obese. We estimate propensity score matching models and fixed effect models to control for unobserved heterogeneity. The propensity scores models finds smaller effects than the logit models. The fixed-effect models find no detrimental effect of non-standard schedules and when both parents work non-standard schedules there is lower likelihood obesity.

Keywords: Contingent work; Non-standard work; Childhood Obesity; BMI

1. Introduction

The increasing rate of obesity in children (for example, in Canada, the percentage of children age 6 to 11 years estimated to be at risk of being overweight in 2004 was 25.8% (Sheilds, 2005)) has motivates a search for the causal roots of this epidemic. Maternal employment has been indentified as a possible culprit. The increase in childhood obesity occurred over the same period as a dramatic increase in the labour force participation of mothers. Several studies examine whether a relationship exists between these two trends and find that maternal employment is correlated with a higher likelihood of childhood obesity. These studies use data from various countries (Anderson, Butcher & Levine, 2003 for the US; Phipps, Burton, & Lethbridge, 2006 for Canada; von Hinke Kessler Scholder, 2008 for the UK) and use various methodologies to determine whether a causal effect exists.

Questions remain, however, about the channels through which maternal employment affects child obesity. Most of these studies examine the effect of the quantity of work, measured in hours per week or weeks per year, on the likelihood of childhood obesity. This limited focus on one aspect of the relationship with the labour market misses potentially important effects caused by the scheduling of work time. As it seems unlikely that labour force participation by females will decrease, it is important to find the causal pathways in order to develop policy to counteract the effect of maternal employment on childhood obesity.

This paper focuses on the distribution of work time and examines whether the type of work schedule affects child obesity. The next section provides a general discussion of why work schedules are expected to have an impact on childhood obesity and then a brief overview of the literature is presented. The data used in the analysis is then described. The results are presented in the fifth section. The results begin with a simple logit analysis to determine if a relationship exits in the data. Then results are presented from propensity score matching models and fixed-effects models to attempt to account for selection and provide better estimates of the effect of work schedules on childhood obesity. The final section discusses the results and concluded the paper.

2. Theory

A standard model of household production posits that families allocate time and resources to produce household goods, such as child outcomes (Becker and Tomes (1986)). A change in parental labour supply has an effect on both the quantity of available time and resources. By working more, parents have less time to concentrate on children and children may be then more likely to become obese. Conversely, household income increases as parents work allowing more resources, such as nutritious food and activities, to be purchased, which may decrease childhood obesity. A priori, the predicted effect of parental employment is ambiguous.

The standard model does not allow the effect of parental employment to vary with the particular schedule worked. Why might the effect be expected to vary by the parent's work schedule?

First, non-standard work schedules may decease the parental time available to produce child outcomes as parents would be working when children are not in school and most likely to be influenced by parental involvement. For example, when parents work non-standard schedules, services and resources may not be available during their leisure time that assist in providing nutritious meals or recreational opportunities for their children.

Second, non-standard work schedules may influence a parent's ability to produce child outcomes. Studies have found an effect of non-standard work schedules on employees by increasing stress (Joshi and Bogen, 2007), causing marital instability (Presser, 2000), and decreasing health status by increasing smoking rates and body mass (Kivimaki, Kuisma, Virtanen & Elovainio, 2001). These effects on parental well-being may have an effect on child outcomes. Increased stress levels may decrease the ability of parents to provide guidance to children. Marital instability may cause stress for children leading to overeating and higher body mass. Parents' poor health may lead to higher body mass for children if behaviours that lead to parental poor health also affect, or are adopted by, children.

Third, organized childcare is generally only available on weekdays during day times hours and the type of care used may influence child outcomes. A non-standard work

schedule may be beneficial for the child if the parents are able to arrange their schedules so that at least one parent is at home with the child. If parents are more conscientious than other child-care givers about issues that affect the child's weight then this arrangement may lead to lower rates of obesity.

3. Literature Review

Studies looking at the effect of maternal employment on child cognitive and behavioural outcomes find mixed results (even limiting reviewed papers to those with some attempt to control for unobserved heterogeneity. (See Deri Armstrong, Finnie, and Stewart (2009) for overview) while those looking at obesity consistently find that maternal employment is related to a higher likelihood of child obesity. Most research has examined the effect of maternal employment – more variation and more recent changes than paternal employment. The few studies that have looked at paternal employment on child outcomes have found no effect (Phipps et al. 2006 and Ruhm 2004).]

Research on the relationship between parental work schedules and child outcomes is limited. The few studies that exist tend to examine the effect of parental work schedules on child behaviour and none of these studies attempt to control for unobserved heterogeneity. The results from these studies are mixed but indicate that non-standard work schedules have a negative correlation with children's behavioural outcomes for young children (Strazdins, Korda, Lim, Broom, & D'Souza (2004), Stazdins, Clements, Korda, Broom, & D'Souza (2006), Han (2005), Joshi and Bogen (2007)), but for older

children, particularly adolescents, no correlation is found (Dunifon, Bajracharya, and Kalil (2005), Han (2006), Hsueh and Yoshikawa (2007), Han and Waldfogel (2007), Dockery, Li, and Kendall (2009)[1]). Studies are based on data from Canada, US and Australia.

Only one other paper, that we are aware of, has examined the relationship between maternal work schedules and child's BMI. Miller and Han (2007) use the National Longitudinal Survey of Youth – Child Supplement (NLSY-CS) and find a curvilinear relationship between the number of years a mother worked a non-standard schedule and a child's BMI or likelihood of being overweight. They find that working a non-standard schedule for less than 6 years or more than 9 years is related to a higher BMI and likelihood of being overweight. This paper does not account for potential unobserved heterogeneity between those work non-standard schedules and those who work standard schedules.

The studies looking at young children also analyze potential pathways through which the effect of non-standard work schedules may be transmitted. Stazdins, Clements, Korda, Broom, and D'Souza (2006) find that the effect of non-standard work schedules is transmitted through family environment (parent depressive symptoms, family functioning, and parenting style). Han (2005) examines maternal depression, maternal sensitivity, the home environment, and type and quality of child care as mediating variables. Joshi and Bogen (2007) find that parental stress is a mediating factor. Han (2004) finds that centre care becomes more frequent as children age and that when

[1] No correlation is found in these studies except perhaps for some lone mother families.

mothers have non-standard work schedules more child care is provided by parents and relatives.

4. Data

The National Longitudinal Survey of Children and Youth (NLSCY) is a survey of Canadian children from birth to early adulthood on their development and well-being. Data collection began in 1994 with an initial target population of 22,831 Canadian children 0-11 years of age and has followed these children every two years. Approximately 2% of the Canadian population (aged 15 or over) including residents of the Territories, Indian reserves Crown lands, inmates of institutions, and full-time members of the Canadian Armed Forces are excluded from the sample. Attrition from the longitudinal sample in total is 21.1% from cycle 1 to cycle 4 (Statistics Canada, 2003). Hoddinott, Lethbridge and Phipps (2002) demonstrate that attrition appears not to be a source of serious bias at least for the variables studied over their reference period of interest. Further, Statistics Canada adjusts the final cross-sectional weights provided with the data for attrition in all cycles up to cycle 4. In addition to the longitudinal component of the survey, the NLSCY interviews extra children in each cycle up to Cycle 4 to create a representative cross-section of Canadian children.

The full cross-sectional sample of the NLSCY consists of 30,307 children ages 0 to 17 in 2000 (cycle 4). We use this cycle because it is the most recent year of the NLSCY that provides a nationally-representative sample. We select only children living with two

parents because we examine the effect of maternal and paternal work schedules, as well as the possible interaction between parental work schedules (4966 children are dropped because they are members of lone parent families). Only children between the ages of 2 to 11 are selected because height and weight are reported by the parents in the survey, while older children report their own measurements and differences between parental- and self-reports may confound the analysis (7,996 more children are dropped based on this selection). To focus on the impact of work schedules, and not the impact of working per se, we select only children from families where both parents have a significant attachment to the labour market. Only children with parents who have either full-time or part-time employment are kept in the sample; however, if their parents have weak time attachment to the labour market, less than approximately 700 hours per year (less than 13.5 hours per week), then these children are dropped. Children with parents in non-wage and non-salary jobs, such as unpaid family work are not included. All of these labour market selections result in 7,306 more children being dropped. Finally, if the child's record had missing information for the child care status variables these records are also dropped (172 dropped). Other missing values, due to item non-response, resulted in another 2,217 observations being dropped. Thus, a final analytic sample of 7,594 children remained.

We conduct the analysis for two distinct sub-groups – children not enrolled in school (usually <6 years of age) and those enrolled in school in 2000. Ages 4 and 5 are distributed across both groups with 43% of 4 year olds and 90% of 5 year olds in our sample enrolled in school. We separate the data in this manner because the effect of

parental non-standard work schedules is likely to be different for these two groups due to differences in child care requirements.

A standard work schedule is defined as working regular daytime hours on weekdays. Any other schedule, such as shift-work (evening, night, or split), on-call, irregular hours, or working on weekends is considered to be a non-standard work schedule. Families are classified into four mutually exclusive categories; both parents work a standard schedule, the father works a standard schedule and the mother works a non-standard schedule, the father works a non-standard schedule and the mother works a standard schedule, and both parents work a non-standard schedule. Roughly 34% of the sample is in the first category, 16% in the second, 26% in the third, and 23% in the fourth as shown in Table 1.

Children are classified as overweight or obese if their Body-Mass Index (BMI) is above age- and gender-specific cut-offs calculated by Cole, Bellizzi, Flegal, & Dietz (2004). Cole et al. produce less arbitrary and more internationally based age and sex specific cut-off points for child overweight and obesity outcomes than have been used in the past. They use six national cross-sectional surveys for children ranging in age from birth to 25 years. Adult cut-off points of 25 kg/m^2 and 30 kg/m^2 for overweight and obese, respectively, are used to benchmark the children's centile curves at age 18. Thus, Cole et al. use these internationally accepted and medically based standards for adults and integrate them with fitted centile curves by passing the centile curves through the adult cut-off points at age 18.

Table 1 presents the percentage of children overweight and obese by each of the four work schedule categories and by the child's school attendance. Regardless of the child's participation in school, families where both parents work standard schedules have the lowest percentage of children either overweight or obese. For children not in school, families where the mother works a non-standard schedule (i.e., the father works a standard schedule and the mother works a non-standard schedule or families where both parents work non-standard schedules) have a significantly higher percentage of children in the overweight and obese categories than families where both parents work a standard schedule.

Table 1 summarizes the independent variables by each of the four work schedule categories and further separates the summary by whether the child is enrolled in school or not. Part-time work, usually less than 30 hours per week, is related to working a non-standard schedule – a significant and substantially higher proportion of mothers work part-time hours in the non-standard work categories than when both parents have a standard schedule. For fathers, the proportion working part-time hours increases substantially when fathers are working non-standard schedules. Household income is highest for families where both parents work standard schedules and lowest for families where both parents work non-standard schedules. There are not substantial differences in average weeks worked across the work schedule categories; however, on average, fathers tend to work more weeks than mothers.

The occupation, industry, and educational level of the parents, province of residence, and geographic level groups are included in all models. The aggregate 1991 Standard Occupational Classification (SOC) codes for the parent's current job are used to classify the occupation into five categories: high-skill, health-related, retail and service, manual-labour, and clerical-administration. Also, a variable is included to identify and distinguish between self-employed and paid employment, where self-employment includes work in the parent's own business, farm or professional practice, and paid-work is work that is mainly for others for wages, salary or commission.

The North American Industrial Classification System (NAICS) code is used to categorize the parent's industry into three categories: public service (comprising Educational Services, Health Care and Social Assistance, and Public Administration), production (comprising Construction, Manufacturing, and Trade), and other (Agriculture; Forestry, Fishing, Mining, Oil and Gas; Utilities; Transportation and Warehousing; Finance, Insurance, Real Estate and Leasing; Professional, Scientific and Technical Services; Management, Administrative and Other Support; Information, Culture and Recreation; Accommodation and Food Services; and Other Services).

Four education variables are included: less than high-school graduate, high-school graduate, some post-secondary, and university degree. Three geographic level variables are included: rural areas, small urban (populations < 30,000 and 30,000 to 99,999) and large urban (populations 100,000 or over). Further, each model includes age and gender

of the child; age thresholds of the father and mother less than 30 (reference), 30 to 39, and 40 and greater; the number of children in the family; and the province of residence.

The family functioning score is a 36 point score obtained from answers to twelve questions posed to the person-most-knowledgeable (PMK) of the child, and for this analysis it has been converted into a z-score, thus the units of Table 1 are standard deviations. A higher score indicates more problems with family functioning within the family. The family functioning score is higher in families where any parent works a non-standard schedule than in families where both parents work standard schedules indicating that families with non-standard work schedules have more difficulties and conflict - a result that is consistent with Presser (2000). The health score dichotomizes the scale poor, fair, good, very good, and excellent, and the mean of this variable indicates the percentage of parents self-reporting good, very good or excellent health in response to the following question: In general, would you say your/his/her health is? There is some evidence that parents' health is lower when they work a non-standard schedule, for example, fathers have a lower health score when they work a non-standard schedule compared to fathers from families where both parents work standard schedules. The depression score is based on twelve questions taken from the 20 questions developed by L. S. Radloff. (Radloff, 1977; and Statistics Canada, 2003) and measures depressive symptoms. This 36 point score is transformed into a z-score for use in all analyses and is reported only for the person-most-knowledgeable (the respondent to the survey) which is usually the mother (92% of our sample). For children not in school, the depression score is higher in families where the mother works standard hours and the father has a non-

standard schedule or when both parents work non-standard schedules suggesting that depressive symptoms are more prevalent in these families.

For the child care variables, one trend is that when children are in school it is much more likely that no care is used (38.82% vs. 23.96% for the full sample). As this category includes older children up to the age of 11 who are likely to be able to care for themselves this result is not surprising. Regardless of whether the child is enrolled in school, children from families where both parents work standard schedules are more likely to be cared for by a non-relative not in the home (daycares) than children from the other three work schedule categories and children from families where both parents work non-standard schedules are the least likely to be cared for by a non-relative not in the home (these results are consistent with Han (2004)). A larger percentage of children from families where both parents work non-standard schedules are not in any childcare which may be due to parents co-ordinating their schedules, it may be due to families not being able to afford child care, or it may be evidence that childcare is not available for parents who do not work standard schedules. These results indicate that there are differences in the type of childcare arranged by families across the four work categories although it is not possible to discern whether parents are able to co-ordinate childcare by working different schedules.

5. Analysis

5.A. Logit Models

The two dependent variables used in the analysis are whether the child is above the overweight cut-off and above the obese cut-off. As these are discrete outcomes, we estimate logit models. The omitted category for the parents' work schedule is when both parents work standard work schedules. The standard errors in all models are adjusted using the White-correction for heteroskedasticity. We relax the assumption of independence to account for the clustering of related children within families, thus only children in different families are treated as independent. All analysis is conducted using Stata 9.2 and cross-sectional weights provided by Statistics Canada. These weights account for the non-random sampling design that is implemented to provide adequate representation in the sample from all provinces.

Table 2 presents the estimated odds ratios for the parental labour market variables from the logit models. We observe an effect of parental work schedules on the likelihood of being overweight and the likelihood of being obese, but only for children not yet enrolled in school. Children not yet in school whose mothers work non-standard schedules, but whose fathers work standard schedules have 42% higher odds of being overweight and 71% higher odds of being obese than children whose parents both work standard schedules. Children whose parents both work non-standard schedules had 40% higher odds of being obese. Children whose fathers work non-standard schedules, but whose mothers work a standard schedule did not have a significantly different likelihood from those whose parents both worked standard schedules These results suggest that if there is

an effect of parental work schedules, then it occurs only when the mother is working a non-standard schedule.[2]

The results from these logit models cannot be interpreted as measuring a causal effect as it may be the case that some unobserved variable(s) is(are) influencing the estimated coefficient. To attempt to account for this unobserved heterogeneity, we estimate propensity score matching models and fixed-effect models.

5.B. Propensity Scores Matching Models

The basic idea of a matching model is to find a "match" for each observation in the "treatment" group from the "control" group and then compute the mean difference of the matched pairs. A propensity score matching model use a propensity score to make the match. The advantages of this approach are that limited functional form assumptions are necessary. It also assumes that outcomes and selection are independent conditional on observed variables. If unobserved characteristics are correlated with the observed characteristics that the propensity score matching model will estimate the effect. The estimator used here is described in Gerfin and Lechner (2002).

A PSMM involves four steps. First, estimate the probability for each observation of being in each of the four categories – both parents standard, only mother non-standard, only father non-standard, both non-standard. This probability is the propensity score. An extensive set of variables that affect selection into group and the outcome are included in

[2] These results are similar to the results from other research on parental work, which finds that the more time spent by mothers working, the more likely children are to have problems, but that the father's quantity of work is not related to the child's outcomes (for example, Phipps et al., 2006 and Ruhm, 2004).

the estimation of the propensity score. All variables listed and described in Table 2 are used in estimating the propensity score

Second, determine the common support. For each sub-group find the minimum and maximum probability for each category. Restrict the sample to observations with a propensity score between maximum minimum and minimum maximum.

Third, choose a match for each observation in the treatment group from the control group. With four categories, there are three possible control groups for each treatment group resulting in twelve asymmetrical comparisons (i.e., when a group is the treatment the observations are treated differently than when they are the control group). Observations from the control group can be used as a match more than once. Several methods for selecting a match from the control group are available. We use two methods – the nearest neighbour method (match with the observation in the control group with the closest propensity score) and a kernel-based matching where the match is a kernel-weighted average of control unit outcomes.

Fourth, calculate the mean of differences between treatment and controls and bootstrap the standard errors.

The full results from the multinomial logit models estimated to calculated the propensity scores are presented in Appendix A. Here, we discuss the variables that have a statistically significant effect on selection. The baseline case in the model is both parents

work standard schedules and the reported coefficients are relative to the likelihood of being in the baseline case.

Not in School.

Children are less likely to have only their mother work a non-standard schedule with higher family income, when the mother works in public service, the father works in retail and services, or they live in Quebec. They are more likely have only their mother work a non-standard schedule with more weeks worked by the mother, when the mother works in the health sector, retail/service, or manual labour, and when they are older.

Children are less likely to have only their father work a non-standard schedule when their mother works in her own business, their father works in construction, manufacturing, or trade, father has university education, or lives in Quebec. They are more likely to have only their father work a non-standard schedule when their father works in his own business, their mother works in a clerical/administrative occupation, their father works in health, retail/service, or manual labour occupations, mother has more than high school education, lives in rural area, or mother reports health as good or better.

Children are less likely to have both parents work non-standard schedules with higher income, mother works in clerical/administrative occupation, mother works in public service, father works in construction, manufacturing or trade, father has more than high school education, lives in Quebec or Manitoba, or child care by relative outside of home. They are more likely to have both parents work non-standard schedules with mother

works part-time, father works in his own business, mother works in a health or retail/service occupation, father works in a health, retail/service or manual labour occupation, lives in small urban area, and child care by relative in home.

In School

Children are less likely to have only their mother work a non-standard schedule with higher family income, mother works in clerical/administrative occupation, mother works in public service, lives in Quebec and father is over 39 years old. They are more likely to have only their mother work non-standard with mother works part-time, mother works in the health sector or retail/service, mother works in construction, manufacturing, and trade industry, father works in public service, lives in PEI, and child care is by relative out of home.

Children are less likely to have only their father work non-standard schedule when mother works in own business, father works in public service or construction, manufacturing, or trade, father has university education, or lives in New Brunswick or Quebec, older child, or child care by non-relative out of home. They are more likely to have only their father work a non-standard schedule when their mother works part-time, father works in his own business, father works in health, retail/service, or manual labour occupation.

Children are less likely to have both parents work non-standard schedules with higher income, mother works in clerical/administrative occupation, mother works in public

service, lives in New Brunswick or Quebec, or child care by non-relative outside of home. They are more likely to have both parents work non-standard schedules when mother works part-time, father works part-time, father works in own business, mother works in a health, retail/service or manual labour occupation, father works in a health, retail/service or manual labour occupation, lives in rural or small urban area.

Common Support

The common support is defined as propensity scores between 0.0405 and 0.6148 for those not in school and between 0.0308 and 0.5983 for those in school. Table 3 shows the number of observations dropped because they were not on the common support by parental work schedules. For children not in school, overall 24.49% of the sample is lost and for children in school the overall rate is 18.05%.[3]

Average Effects

The estimated average treatment effects on the treated are presented in Table 4. The first four panels in the table present the results when nearest neighbour matching is used and the last four present the results when a kernel matching method is used.

As with the logit models, any significant difference is found only for children not in school. The estimated rate of child overweight when only the father works a non-standard schedule is 15 percentage points lower than the rate when only mother works a non-standard schedule. The estimated rate of childhood obesity when both parents work

[3] Future work will add more variables to the propensity score estimator although earlier addition of variables did not significantly change results from matching model. Future work will also analyze the sample deleted by not being on the common support

standard schedules is 10 percentage points lower than the rate when only mother works a non-standard schedule. The results using the kernel matching method are similar, -9.8% and -8.9%, respectively.

The estimated effect from the logit models is that children with only a mother working a non-standard schedule have 42% higher odds of being overweight. The 15 percent points point are 38% of 39.42% of the children in families with only the father working a nonstandard schedule who are overweight. The logit estimates that a child with only a mother working a non-standard schedule has 71% higher odds of being obese than children whose parents both work standard schedules. The 10 percentage point difference estimated by the PSMM is 36% of the 27.86% of children in families with both parents working non-standard schedules who are obese. The estimated effect is smaller in the PSMM as would be expect if the unobserved variables are correlated with the observed variables. The direction of the effect still indicates that for children not in school having a mother working a non-standard schedule is related to a higher BMI.

5.C. Fixed-Effect models

Another approach is to estimate fixed-effect models that will control for any unobserved differences across the groups that are constant over time. These models use changes in the parents' work schedules over time to estimate the effect on the child's likelihood of being overweight. These models rely on changes in both the dependent and independent variables to identify an effect. It is worth stressing that these models only control for

unobserved heterogeneity that is constant over time. If parents change their work status in response to their child's health, these models will produce biased results.

To estimate the fixed-effect models, information from the two previous cycles of the NLSCY were merged with the sample from the fourth cycle to produce the needed longitudinal information.

Table 5 shows the percent of the sample for whom the parents had the same work schedules over the three cycles, as well as the percent that had the same weight status. Of the full sample, 26% have at least one parent change their work schedule. For the children not in school, 18% change while 31% of children in school have at least one parents change their work schedule. Of the full-sample, 23% move in or out of the overweight category and 16% move in or out of the obesity category. For children not in school, the percentages are 17 and 14, respectively, and 26 and 17 for children in school. There seems to be enough variation to measure an effect.

Table 6 presents the results from the fixed effect models. Both linear regression fixed-effects models and a conditional fixed-effect logit models were estimated. Both functional forms have similar results. For children not in school, having both parents working not standard schedules is related to a lower likelihood of being overweight. These results are counter to the results from the baseline and PSMM. The estimated effect that mother working non-standard schedule is related to a higher likelihood of obesity vanishes. Instead the opposite relationship is observed.

6. **Discussion and Conclusion**

Using a nationally representative data set of Canadian children 2 to 11 years old, we examine the relationship between parental work schedules and the likelihood of children being overweight and obese. We observe a relationship with parental work schedules only for children not yet enrolled in school, generally age 2 to 5. For this group, when mothers work non-standard schedules and fathers work standard schedules there is 38% higher odds of being overweight and 61% higher odds of being obese compared to when both parents both work standard schedules. Also, when parents both work non-standard schedules the odds are 33% higher of being obese. When we estimate a propensity score matching model, we find smaller effects. This result is suggestive that unobserved heterogeneity is present in the logit models and is correlated with the observed characteristics. The fixed-effect models generally find that non-standard schedules do not have a detrimental effect on child's BMI, in fact, if both parents work non-standard schedules then children are less likely to be obese.

We limit our sample to two-parent families where both parents have a strong attachment to the labour market to focus our analysis on the impact of non-standard schedules rather than the effect of employment. A comparison of working non-standard schedules to not working would show both the impact on child outcomes of working, as well as the impact of non-standard schedules.

It is interesting to note that the detrimental effect is observed only in families where the mother works a non-standard schedule. Other research that examines the effect of parental work on child outcomes has generally focussed on maternal employment, but the few studies that have examine paternal employment find no relationship between paternal employment and child outcomes (Phipps et al., 2006 and Ruhm, 2004), which is similar to our results. We find that fathers working a non-standard schedule do not have a detrimental effect on child weight status as long as the mother is working a standard schedule.

We find an effect only for children who are not enrolled in school (ages 2 to 5) and no effect for children in school who are older (ages 5-11). This result again mirrors the previous research that finds mixed results for other outcomes, but generally finds an effect of parental non-standard work schedules when the sample is of younger children, but finds no effect when older children and adolescents are included in the sample. Future research could focus on explaining the difference across age groups. It could be that children are influenced by their parents at young ages, and that this effect naturally dissipates as children age. The education system may moderate the parental effect--levelling the playing field by reducing the differences across children due to the differences in their parents' work schedules; and therefore, an effect is only observed in children before they begin their formal education.

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Table 1: Descriptive Statistics by Parents' Work Schedules

	Both Parents Standard Schedule	Only Mother Non- Standard		Only Father Non-Standard		Both Parents Non- Standard	
Dependent Variables							
Child Not in School							
Overweight	37.41	45.35	*	39.43		43.81	*
Obese	19.91	29.87	**	23.62		27.67	**
Child In School							
Overweight	27.86	31.53		33.43	*	32.85	
Obese	11.14	13.98		11.45		14.54	
Mediating Variables							
Child Not in School							
Family Functioning Score (SD)	-0.139	0.048	**	0.063	**	0.035	**
Mother's Health	0.973	0.951		0.965		0.947	*
Father's Health	0.984	0.973		0.949	**	0.950	***
Depression Score (SD)	-0.092	-0.032		0.041	*	0.056	**
Child Care:							
Relative in Home	5.30	7.41		7.11		10.20	**
Non-Relative in Home	6.61	5.06		6.87		7.21	
Relative out of Home	10.93	10.02		12.35		11.13	
Non-relative out of Home	58.18	46.49	**	54.35		40.23	***
No care	18.99	31.02		19.32		31.23	
Child In School							
Family Functioning Score (SD)	-0.194	-0.031	**	-0.068	*	0.031	***
Mother's Health	0.956	0.930		0.965		0.943	
Father's Health	0.977	0.946		0.960	*	0.947	**
Depression Score (SD)	-0.090	-0.031		-0.117		-0.049	
Child Care:							
Relative in Home	18.95	19.76		17.09		20.76	
Non-Relative in Home	6.30	5.83		2.63	***	5.00	
Relative out of Home	4.85	7.66	*	4.86		8.11	**
Non-relative out of Home	38.13	28.96	***	33.31		19.98	***
No care	31.77	37.80		42.11		46.15	
Independent Variables							
Mother Works PT	16.03	36.37	***	20.79	**	29.53	***
Father Works PT	0.79	1.38		1.88	**	3.32	***
Household Income ($)	93694	79355	***	84616	**	74406	***
Mother Weeks Worked (Weeks)	49.87	50.12		49.11	**	49.91	
Father Weeks Worked (Weeks)	50.73	50.04		50.21		50.26	*
Child Not in School	21.47	24.16		21.81		20.91	
Child Male	52.29	51.69		48.44		51.76	
% of Sample (n=7594)	34.14	16.45		26.29		23.12	

*, ** and *** indicate percentage is statistically different from the percentage for both parents working standard schedules at 90%, 95%, and 99%, respectively. Units are percentages unless indicated. SD - Standard deviations.

Table 2: Selected variables from baseline multiple logistic regression analysis

	Child Not in School				Child In School			
	Overweight		**Obese**		**Overweight**		**Obese**	
Only Mother Non-Standard	1.423	**	1.709	***	1.163		1.338	
	(0.256)		(0.326)		(0.188)		(0.312)	
Only Father Non-Standard	1.034		1.178		1.198		0.902	
	(0.146)		(0.189)		(0.193)		(0.210)	
Both Non-Standard	1.145		1.404	**	1.159		1.328	
	(0.189)		(0.239)		(0.179)		(0.293)	
Log Average Income	0.963		0.817		0.936		0.832	
	(0.180)		(0.151)		(0.140)		(0.168)	
Mother Part-time	0.976		0.930		0.943		0.952	
	(0.131)		(0.140)		(0.129)		(0.163)	
Father Part-time	1.554		2.474	**	0.456	**	0.604	
	(0.735)		(1.044)		(0.152)		(0.264)	
Mother's Weeks of Work	0.985	*	0.992		1.002		0.987	
	(0.008)		(0.008)		(0.009)		(0.011)	
Father's Weeks of Work	1.005		1.001		0.992		1.006	
	(0.010)		(0.011)		(0.009)		(0.013)	
Pseudo-R-squared	0.052		0.074		0.049		0.104	

*, ** and *** indicate odds-ratio is statistically significant at 90%, 95%, and 99%, respectively. Standard errors in parentheses. Baseline case is both parents work full-time, standard schedules and only parental care for the child. Regressions also include controls for household income, occupation and industry, education, province, rural or urban area, age of parent and child, sex of child, family size, and self-employment. Sample size is 2858 for Not in School and 4731 for In School.

Table 3: Observations on the Common Support

	Both Parents Standard	Only Mother Non-Standard	Only Father Non-Standard	Both Non-Standard
Not in School				
Observations Before	891	467	794	706
Observations After	636	401	584	537
Percent deleted	28.62	14.13	26.45	23.94
In School				
Observations Before	1400	825	1304	1202
Observations After	1092	728	1077	980
Percent deleted	22.00	11.76	17.41	18.47

Table 5: Percent of Sample that Experience No Change in Parental Work Schedule or weight status

	Both Standard	Both Non-Standard	Mother Non-Standard	Father Non-Standard	Change
Full Sample	21.01	21.62	18.6	12.79	25.98
Not in School	24.99	23.03	20.41	13.37	18.2
In School	18.67	20.79	17.54	12.45	30.55

	Overweight	Obese	Normal	Change in/out over	Change in/out obese
Full Sample	26.91	14.03	50.42	22.67	15.91
Not in School	33.16	20.28	49.83	17.01	13.54
In School	23.37	10.49	50.75	25.88	17.26

Table 6: Fixed–effect models

	Fixed Effect Linear Models				Conditional FE Logit			
	Overweight		Obese		Overweight		Obese	
Not in School								
Only Mother Non-Standard	-0.029		-0.007		-0.179		-0.068	
	(0.037)		(0.033)		(0.193)		(0.217)	
Only Father Non-Standard	0.006		0.016		0.036		-0.023	
	(0.045)		(0.040)		(0.235)		(0.254)	
Both Non-Standard	-0.092	**	-0.018		-0.478	*	-0.080	
	(0.047)		(0.042)		(0.251)		(0.274)	
Household Income	0.000		0.000		0.000		0.000	
	(0.000)		(0.000)		(0.000)		(0.000)	
Mother Works Part-time	-0.078	**	-0.050	*	-0.389	**	-0.290	
	(0.031)		(0.027)		(0.162)		(0.183)	
Father Works Part-time	-0.104		0.032		-0.480		-0.064	
	(0.094)		(0.084)		(0.436)		(0.534)	
Weeks Mother Works	0.002	**	0.002	**	0.011	**	0.012	**
	(0.001)		(0.001)		(0.005)		(0.006)	
Weeks Father Works	-0.001		-0.001		-0.002		-0.008	
	(0.002)		(0.002)		(0.010)		(0.011)	
In School								
Only Mother Non-Standard	-0.007		-0.007		-0.054		-0.070	
	(0.033)		(0.018)		(0.119)		(0.152)	
Only Father Non-Standard	0.016		0.002		0.192		0.025	
	(0.040)		(0.020)		(0.138)		(0.175)	
Both Non-Standard	-0.018		0.021		0.248	*	0.148	
	(0.042)		(0.021)		(0.138)		(0.179)	
Household Income	0.000		0.000	*	0.000		0.000	
	(0.000)		(0.000)		(0.000)		(0.000)	
Mother Works Part-time	-0.050	*	0.044	***	0.150		0.385	***
	(0.027)		(0.014)		(0.095)		(0.128)	
Father Works Part-time	0.032		-0.013		-0.314		-0.148	
	(0.084)		(0.037)		(0.252)		(0.285)	
Weeks Mother Works	0.002	**	0.000		0.003		0.003	
	(0.001)		(0.000)		(0.003)		(0.004)	
Weeks Father Works	-0.001		0.000		-0.001		0.002	
	(0.002)		(0.001)		(0.005)		(0.006)	

Appendix A: Multinomial Logit for Parental Work Schedules

	Not In School					
	Only Mother Non-Standard		**Only Father Non-Standard**		**Both Non-Standard**	
Average Household Income	-0.810	***	-0.288	*	-0.858	***
	(0.192)		(0.160)		(0.181)	
Mother Works Part-time	0.860	***	-0.154		0.431	***
	(0.146)		(0.137)		(0.139)	
Father Works Part-time	0.092		0.995	*	0.458	
	(0.622)		(0.531)		(0.556)	
Weeks Mother Worked	0.019	**	-0.002		0.014	*
	(0.009)		(0.007)		(0.008)	
Weeks Father Worked	-0.006		-0.007		-0.001	
	(0.010)		(0.009)		(0.009)	
Mother works in own business	-0.219		-0.403	**	0.067	
	(0.213)		(0.184)		(0.179)	
Father works in own business	-0.193		1.070	***	1.171	***
	(0.236)		(0.162)		(0.174)	
Mother's Occupation						
Health Sector	2.343	***	0.094		1.686	***
	(0.232)		(0.212)		(0.217)	
Retail/Service	0.813	***	0.345	**	0.509	***
	(0.206)		(0.167)		(0.184)	
Manual labour	0.653	**	0.159		0.485	*
	(0.315)		(0.290)		(0.278)	
Clerical	-0.317		0.497	***	-0.471	**
	(0.212)		(0.144)		(0.188)	
Father's Occupation						
Health Sector	-0.093		1.038	***	1.783	***
	(0.510)		(0.398)		(0.397)	
Retail/Service	-0.469	**	0.537	***	0.613	***
	(0.221)		(0.168)		(0.179)	
Manual labour	0.039		0.599	***	0.365	**
	(0.171)		(0.146)		(0.161)	
Clerical	0.152		-0.135		-0.434	
	(0.241)		(0.231)		(0.278)	
Mother's Industry						
Public Service	-0.889	***	0.016		-0.723	***
	(0.183)		(0.134)		(0.155)	
CMT	0.125		0.028		0.215	
	(0.173)		(0.153)		(0.156)	
Father's Industry						
Public Service	0.171		-0.094		-0.285	
	(0.203)		(0.174)		(0.195)	
CMT	-0.193		-0.297	**	-0.568	***
	(0.147)		(0.120)		(0.131)	
Mother's Education						
Less than High School	-0.044		-0.236		-0.122	

	(0.302)		(0.296)		(0.276)	
Some PS	0.044		0.343	**	0.067	
	(0.190)		(0.163)		(0.163)	
University	0.038		0.428	**	-0.027	
	(0.245)		(0.199)		(0.214)	
Father's Education						
Less than High School	0.171		-0.186		-0.082	
	(0.240)		(0.206)		(0.215)	
Some PS	-0.075		-0.275	*	-0.342	**
	(0.179)		(0.143)		(0.151)	
University	-0.313		-0.749	***	-0.810	***
	(0.219)		(0.188)		(0.206)	
Province						
Newfoundland	0.201		-0.494	*	0.356	
	(0.285)		(0.274)		(0.264)	
PEI	-0.311		-0.023		0.149	
	(0.387)		(0.278)		(0.303)	
Nova Scotia	-0.032		-0.021		0.113	
	(0.262)		(0.225)		(0.238)	
New Brunswick	0.138		0.442	*	0.099	
	(0.300)		(0.238)		(0.268)	
Quebec	-0.551	***	-0.365	**	-0.697	***
	(0.204)		(0.167)		(0.194)	
Manitoba	-0.150		0.055		-0.482	**
	(0.267)		(0.215)		(0.244)	
Saskatchewan	-0.495	*	-0.278		-0.332	
	(0.289)		(0.226)		(0.241)	
Alberta	-0.477	*	-0.053		-0.326	
	(0.252)		(0.210)		(0.224)	
BC	0.084		-0.103		-0.118	
	(0.290)		(0.259)		(0.286)	
Family Characteristics						
Rural	0.078		0.373	**	0.270	
	(0.202)		(0.160)		(0.181)	
Small Urban	-0.039		0.063		0.279	**
	(0.154)		(0.130)		(0.139)	
Number of Children	0.027		0.052		0.116	
	(0.078)		(0.069)		(0.074)	
Child's Age	0.160	**	-0.012		0.023	
	(0.079)		(0.064)		(0.073)	
Child Male	0.057		-0.146		-0.023	
	(0.126)		(0.104)		(0.115)	
Mother's Age 30-39	-0.070		0.053		-0.144	
	(0.178)		(0.159)		(0.165)	
Mother's Age >39	-0.628	*	-0.008		-0.260	
	(0.337)		(0.258)		(0.294)	
Father's Age 30-39	-0.043		-0.155		-0.254	
	(0.222)		(0.199)		(0.202)	
Father's Age >39	0.178		-0.219		-0.182	

	(0.282)		(0.250)		(0.260)	
Child Care						
Relative in Home	0.156		0.037		0.647	***
	(0.272)		(0.260)		(0.240)	
Non-relative in Home	-0.287		0.167		-0.111	
	(0.273)		(0.236)		(0.247)	
Relative out of Home	-0.146		-0.026		-0.040	
	(0.273)		(0.201)		(0.205)	
Non-Relative out of Home	-0.288	*	-0.026		-0.568	***
	(0.172)		(0.149)		(0.158)	
Family disfunctioning	0.015		0.041		0.026	
	(0.066)		(0.054)		(0.060)	
Missing Family disfunctioning	-0.327		-0.493		0.155	
	(0.675)		(0.567)		(0.553)	
Mother's health > Good	-0.158		0.729	**	-0.207	
	(0.353)		(0.348)		(0.312)	
Father's health > Good	-0.362		-0.601	*	-0.715	*
	(0.413)		(0.356)		(0.372)	
Depressive symptoms	0.028		-0.154		0.112	
	(0.272)		(0.266)		(0.281)	
Depressive symptoms * Female PMK	0.010		0.311		0.142	
	(0.280)		(0.274)		(0.288)	
Missing Depressive symptoms	0.052		-0.224		-0.049	
	(0.332)		(0.279)		(0.305)	
Constant	-1.020		-0.076		0.404	
	(0.907)		(0.804)		(0.831)	

	In School					
	Only Mother Non-Standard		**Only Father Non-Standard**		**Both Non-Standard**	
Average Household Income	-0.561	***	-0.010		-0.468	
	(0.163)		(0.141)		(0.151)	
Mother Works Part-time	0.708	***	0.282	**	0.525	
	(0.131)		(0.131)		(0.130)	
Father Works Part-time	0.614		0.633	*	0.718	
	(0.464)		(0.354)		(0.360)	
Weeks Mother Worked	0.010		-0.003		0.009	
	(0.009)		(0.007)		(0.008)	
Weeks Father Worked	-0.016	*	-0.003		-0.002	
	(0.009)		(0.008)		(0.008)	
Mother works in own business	0.216		-0.422	**	0.252	
	(0.178)		(0.171)		(0.155)	
Father works in own business	0.163		1.093	***	1.262	
	(0.188)		(0.146)		(0.153)	
Mother's Occupation						
Health Sector	1.620	***	-0.016		1.549	
	(0.192)		(0.196)		(0.193)	
Retail/Service	0.508	***	-0.042		0.433	
	(0.168)		(0.157)		(0.164)	

Manual labour	0.042		0.191		0.505
	(0.262)		(0.232)		(0.225)
Clerical	-0.977	***	0.051		-0.748
	(0.180)		(0.133)		(0.163)
Father's Occupation					
Health Sector	-0.147		1.097	***	1.392
	(0.483)		(0.377)		(0.392)
Retail/Service	-0.207		1.000	***	1.116
	(0.191)		(0.158)		(0.168)
Manual labour	-0.051		0.594	***	0.792
	(0.144)		(0.130)		(0.141)
Clerical	0.156		-0.479	**	-0.147
	(0.199)		(0.220)		(0.239)
Mother's Industry					
Public Service	-0.432	***	0.194		-0.706
	(0.145)		(0.124)		(0.139)
CMT	0.422	***	0.076		0.165
	(0.149)		(0.136)		(0.137)
Father's Industry					
Public Service	0.336	**	-0.373	**	-0.169
	(0.169)		(0.157)		(0.175)
CMT	0.165		-0.293	***	-0.075
	(0.128)		(0.109)		-0.116
Mother's Education					
Less than High School	-0.190		-0.261		-0.046
	(0.267)		(0.262)		(0.252)
Some PS	-0.179		-0.087		0.021
	(0.149)		(0.131)		(0.139)
University	-0.321		0.085		0.090
	(0.204)		(0.171)		(0.188)
Father's Education					
Less than High School	0.042		0.158		0.372
	(0.212)		(0.189)		(0.193)
Some PS	-0.011		-0.153		-0.005
	(0.151)		(0.126)		(0.138)
University	-0.204		-0.916	***	-0.326
	(0.195)		(0.178)		(0.195)
Province					
Newfoundland	0.434	*	0.364		0.370
	(0.247)		(0.224)		(0.231)
PEI	0.755	**	0.431		0.059
	(0.378)		(0.319)		(0.366)
Nova Scotia	0.408	*	-0.006		0.015
	(0.234)		(0.212)		(0.222)
New Brunswick	-0.355		-0.680	***	-0.831
	(0.217)		(0.200)		(0.217)
Quebec	-0.568	***	-0.594	***	-1.203
	(0.174)		(0.146)		(0.171)
Manitoba	-0.058		-0.023		-0.101

	(0.210)		(0.188)		(0.196)
Saskatchewan	-0.017		0.036		-0.256
	(0.230)		(0.197)		(0.215)
Alberta	-0.092		-0.021		0.100
	(0.227)		(0.194)		(0.201)
BC	0.266		-0.033		0.096
	(0.231)		(0.213)		(0.210)
Family Characteristics					
Rural	-0.160		0.217		0.403
	(0.163)		(0.139)		(0.150)
Small Urban	-0.166		0.125		0.239
	(0.129)		(0.116)		(0.124)
Number of Children	0.043		0.034		0.092
	(0.075)		(0.063)		(0.067)
Child's Age	-0.009		-0.052	**	-0.036
	(0.025)		(0.022)		(0.023)
Child Male	-0.002		-0.018		-0.005
	(0.094)		(0.084)		(0.089)
Mother's Age 30-39	-0.267		-0.035		-0.246
	(0.234)		(0.203)		(0.212)
Mother's Age >39	-0.026		0.044		-0.071
	(0.279)		(0.238)		(0.254)
Father's Age 30-39	-0.414		-0.287		-0.428
	(0.305)		(0.282)		(0.280)
Father's Age >39	-0.698	**	-0.473		-0.573
	(0.332)		(0.300)		(0.304)
Child Care					
Relative in Home	0.289	*	-0.084		0.080
	(0.168)		(0.148)		(0.152)
Non-relative in Home	0.033		-0.443	*	0.116
	(0.244)		(0.229)		(0.210)
Relative out of Home	0.408	**	-0.302		0.114
	(0.193)		(0.185)		(0.180)
Non-Relative out of Home	-0.073		-0.357	***	-0.560
	(0.139)		(0.119)		(0.134)
Family disfunctioning	-0.007		0.028		-0.004
	(0.057)		(0.051)		(0.053)
Missing Family disfunctioning	-0.864		0.253		-0.209
	(0.623)		(0.443)		(0.485)
Mother's health > Good	-0.322		0.271		-0.269
	(0.294)		(0.288)		(0.261)
Father's health > Good	-0.113		-0.184		0.052
	(0.299)		(0.270)		(0.280)
Depressive symptoms	-0.274		0.019		-0.002
	(0.303)		(0.225)		(0.242)
Depressive symptoms * Female PMK	0.273		0.021		0.173
	(0.308)		(0.231)		(0.247)
Missing Depressive symptoms	0.067		0.114		0.064
	(0.295)		(0.245)		(0.285)

Constant	0.809	0.830	-0.124
	(0.791)	(0.690)	(0.731)

Table 4: Average Treatment Effect on Treated
Nearest Neighbour Matching

Percentage Overweight
Not in School

	Control			
Treatment	**Both Standard**	**Only Mother Non-Standard**	**Only Father Non-Standard**	**Both Non-Standard**
Both Standard	_____	-0.090 *	0.002	-0.044
		(0.046)	(0.043)	(0.052)
Only Mother	-0.034	_____	-0.027	0.032
Non-Standard	(0.047)		(0.063)	(0.043)
Only Father	-0.023	-0.149 ***	_____	-0.002
Non-Standard	(0.043)	(0.056)		(0.043)
Both Non-	-0.019	-0.042	0.011	_____
Standard	(0.050)	(0.048)	(0.052)	

Percentage Obese
Not in School

	Control			
Treatment	**Both Standard**	**Only Mother Non-Standard**	**Only Father Non-Standard**	**Both Non-Standard**
Both Standard	_____	-0.100 ***	-0.039	-0.074
		(0.042)	(0.037)	(0.050)
Only Mother	-0.022	_____	-0.030	0.012
Non-Standard	(0.046)		(0.046)	(0.048)
Only Father	-0.014	-0.086	_____	-0.010
Non-Standard	(0.036)	(0.058)		(0.040)
Both Non-	-0.022	-0.031	-0.002	_____
Standard	(0.048)	(0.045)	(0.039)	

Percentage Overweight
In School

	Control			
Treatment	**Both Standard**	**Only Mother Non-Standard**	**Only Father Non-Standard**	**Both Non-Standard**
Both Standard	_____	-0.007	-0.041	0.005
		(0.035)	(0.032)	(0.038)
Only Mother	-0.007	_____	-0.066 *	-0.021
Non-Standard	(0.037)		(0.040)	(0.032)
Only Father	-0.013	0.007	_____	0.044
Non-Standard	(0.027)	(0.038)		(0.029)
Both Non-	0.004	0.017	-0.013	_____
Standard	(0.043)	(0.030)	(0.031)	

Percentage Obese
In School

	Control			
Treatment	**Both Standard**	**Only Mother Non-Standard**	**Only Father Non-Standard**	**Both Non-Standard**
Both Standard	_____	-0.018	-0.036	-0.016
		(0.029)	(0.023)	(0.024)
Only Mother	-0.007	_____	-0.052 *	-0.021
Non-Standard	(0.026)		(0.029)	(0.027)
Only Father	-0.001	-0.011	_____	0.010
Non-Standard	(0.022)	(0.028)		(0.023)
Both Non-	0.018	0.018	-0.015	_____
Standard	(0.028)	(0.022)	(0.025)	

Average Treatment Effect on Treated
Kernel Matching Method
Percentage Overweight
Not in School

Treatment	Control: Both Standard	Only Mother Non-Standard	Only Father Non-Standard	Both Non-Standard
Both Standard	_____	-0.061 *	0.011	0.003
		(0.034)	(0.029)	(0.035)
Only Mother	0.022	_____	0.01	0.009
Non-Standard	(0.032)		(0.039)	(0.039)
Only Father	-0.008	-0.098 **	_____	-0.02
Non-Standard	(0.029)	(0.041)		(0.039)
Both Non-	0.039	-0.021	0.027	_____
Standard	(0.039)	(0.037)	(0.039)	

Percentage Obese
Not in School

Treatment	Control: Both Standard	Only Mother Non-Standard	Only Father Non-Standard	Both Non-Standard
Both Standard	_____	-0.089 ***	-0.024	-0.048
		(0.036)	(0.028)	(0.036)
Only Mother	0.042	_____	0.009	0.005
Non-Standard	(0.034)		(0.040)	(0.031)
Only Father	0.01	-0.09 *	_____	-0.034
Non-Standard	(0.027)	(0.047)		(0.031)
Both Non-	0.032	-0.025	0.019	_____
Standard	(0.031)	(0.033)	(0.031)	

Percentage Overweight
In School

Treatment	Control: Both Standard	Only Mother Non-Standard	Only Father Non-Standard	Both Non-Standard
Both Standard	_____	0.006	-0.001	-0.006
		(0.026)	(0.023)	(0.025)
Only Mother	-0.006	_____	-0.008	-0.025
Non-Standard	(0.024)		(0.030)	(0.026)
Only Father	0.008	0.01	_____	-0.003
Non-Standard	(0.020)	(0.032)		(0.025)
Both Non-	0.022	0.03	0.023	_____
Standard	(0.024)	(0.025)	(0.022)	

Percentage Obese
In School

Treatment	Control: Both Standard	Only Mother Non-Standard	Only Father Non-Standard	Both Non-Standard
Both Standard	_____	-0.011	-0.015	-0.024
		(0.019)	(0.015)	(0.018)
Only Mother	0.002	_____	-0.017	-0.023
Non-Standard	(0.020)		(0.021)	(0.018)
Only Father	0.006	-0.001	_____	-0.017
Non-Standard	(0.016)	(0.024)		(0.019)
Both Non-	0.02	0.024	0.015	_____
Standard	(0.024)	(0.019)	(0.017)	