

“A Comparison of U.S. Parents’ Time with Children by Child Gender and Family Structure”

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## 1. Introduction

As noted by Binder and Bound (2019), real hourly earnings for prime-aged males in the U.S. with a high school diploma fell by 18.2% from 1973 to 2015, and their labor force participation rates fell by well over 10 percentage points. Based on their thorough analysis they assert that traditional labor market-based explanations are insufficient to explain the full labor force decline. Instead, they argue that “changing family structure shifts male labor supply incentives independently of labor market conditions, and that, in addition, changing family structure may moderate the effect of a male labor demand shock on labor force participation. Because male earnings potential is an important determinant of new marriage formation, a persistent labor demand shock that reduces male earnings potential could impact male labor-force participation through its effects on the marriage market.” (pg. 164)<sup>1</sup>

A disturbing consequence of Binder and Bound’s narrative is outlined in Autor and Wasserman’s paper (2013) in which they argue that the social and economic problems associated with the well-documented labor market decline for low-skilled men over the past four decades is magnified across generations, in part, because low-income children are now more likely to be growing up without fathers in the household.<sup>2</sup> Autor *et al* (2019) and Autor and Wasserman (2013) present evidence that these cross-market reinforcements (labor market and marriage market) produce outcomes that are exacerbated further by intergenerational effects. As marriage rates fall, there are more children being raised by single parents, most typically, single mothers. These authors argue that sons are particularly disadvantaged by growing up in a single mother family, leading to an increasing gender gap favoring women, both in educational attainment and in labor market outcomes. As the authors note, the mechanisms by which this intergenerational effect is transmitted are not well understood. One hypothesis focuses on differential parental time inputs, suggesting that not only do sons in single parent families have less contact with their fathers than sons in married households, but also that single mothers themselves spend more time with

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<sup>1</sup> Edin *et al* (2019) describe the findings of their sociological study in a particularly thoughtful way. “Work, family and religion have traditionally played an important role in furnishing working-class Americans with economic resources, moral guidance, and opportunities for civic engagement. Ongoing attachments to work, family, and religion connected working-class men to social bonds and defined identities that kept them in the formal labor market and forestalled health problems. Conversely, precarious attachments to these key social institutions, we argue, may now dilute their power to shepherd and shift men’s trajectories and may place them at risk of a host of negative outcomes.” (pg. 211)

<sup>2</sup> See also Lundberg et al (2016) for a thorough analysis of the evolution of family structure by economic status and education.

their daughters than their sons, resulting in boys growing up in single mother families receiving less overall parenting time than girls growing up in like circumstances.

Much of the discussion of the so-called “single-parent disadvantage” relies on two logical assumptions (often without supporting data), first, that children who grow up in single parent families enjoy less total parenting time (considering the sum of the time of the coresident parent plus the time of the non-coresident parent), and second and more specifically, that boys receive less parenting time in single mother families, but not in married parent families. Our paper seeks to provide the missing supporting data concerning the potentially complex interrelationships between family structure and gender differences in parenting time with the goal of better framing the discussion of the well-documented labor market concerns of lesser-educated men. Our paper answers two questions First, do the data support the suggestion that boys who grow up in single mother families experience less parenting time than do similarly-raised girls? Relatedly, do boys and girls who live with married parents experience comparable parenting time investments?<sup>3</sup> Second, what factors explain these differences or similarities? We expand the set of possible family relationships to include the oft-ignored, but potentially important children’s parenting by non-coresident parents. We employ a regression-based approach to facilitate conditional comparisons; i.e., holding constant potentially confounding factors such as income.

## 2. Conceptualizing and Measuring Parenting Time

Our study uses the full combined sample of the American Time Use Survey data from the years 2003 - 2018. Combining many years of ATUS data provides a sufficient sample size such that focusing on a variety of family structures is feasible. Using the extensive time use and demographic data from the American Time Use Survey, we rely on three distinct measures of time with children: primary childcare time, secondary childcare time, and time engaged in any activity in which children are present (i.e., “who was in the room” information).

Exploiting all three sources of parenting time available in the ATUS permits us to capture as best as possible with the ATUS the full array of parents’ time expenditures devoted to their children as described in conceptual terms by Mammen (2011) who draws on earlier work by Lamb (2005) to provide a clear conceptualization of parenting. Mammen focuses on fathers’ time with their children, and according to Mammen, there are three categories of this fathering time: interaction, availability, and responsibility. Interaction involves fathers’ time use that involves direction interaction with their children, while time during which the father is engaged in some other primary activity, but is available to the children can be categorized as availability. Responsibility includes fathers’ time devoted to tasks undertaken on their children’s behalf, along with fathers’ time with their children when the mother is not present.

The most significant drawback of the ATUS survey is that the bulk of survey respondents are adults and when child care time is reported, the identity (and thus the gender) of the child is not identified except to differentiate among own coresident children, own non-coresident children, and non-own children. We address this data deficiency by examining several subsamples of the ATUS, including households with just one child in order to be certain about that child’s sex and by employing the “who’s in the room” information in conjunction with the activity code. The “who’s in the room” data do identify exact persons in the household roster allowing us to know the gender of each person in the room.

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<sup>3</sup> Importantly, Buchman and DiPrete (2006) find that girls are outperforming boys in two-parent families as well as single parent families.

### 3. Description of Data and Empirical Methods

#### 3.A. Data Description

We use a merged sample from the 2003-2018 ATUS, with initial sample selection contingent upon age restrictions (18 to 65), the presence of at least one child under the age of 18 in the household or the existence of at least one own non-coresident child under the age of 18—think of it as a sample of all parents of minor children. The parents are divided into subsamples based on their marital and coresidence status with a partner and on the gender composition of their children. For example, we divided the full sample of parents with coresident children into: married men with (any) sons (note they may also have daughters), married men with any daughters (note they may also have sons), married women with sons, married women with daughters, then the corresponding four subsamples for partnered men and women, and four more subsamples for single men and women. In addition, we analyze the subsample of parents of children under the age of 13 and no older children in residence, and the sample of parents with children no older than 6 and no older children in residence. These distinctions are important since there is well documented evidence that young children receive substantially more time than older children, but not much is known about differences in time devoted to children of different ages by the gender of the children. We further analyze subsamples of parents whose children are all one gender, and then again for parents who have just one child.

Our preliminary descriptive statistics focus on parents mean minutes of time use in various child care time use categories. We have not provided these tables for this extended abstract, but we offer a few key descriptive statistics here. First, note that the sample sizes are fairly large. For example, considering parents with coresident children under the age of 18, there are 17,370 married men with coresident sons (they may also have daughters) and 17,070 married men with coresident daughters (they may also have daughters), as compared to 19,564 married mothers with coresident sons and 18,973 married mothers with coresident daughters. The partnered samples (cohabiting couples) are relatively small. Importantly, the single parent samples seem large enough to permit quality data analyses, with the single mother samples much larger than the single father samples, as expected. There are 1,566 single men with coresident sons, 1,301 single men with coresident daughters, 7,436 single women with coresident sons and 7,373 single women with coresident daughters. Looking at the samples with parents of just one child under the age of 18, such that we can be sure of gender of the child and not be concerned about varying numbers of children, there are 4,538 married men with a coresident only son, 4,421 married men with a coresident only daughter, 5,076 married women with a coresident only son, 4,876 married women with a coresident only daughter, 841 single men with a coresident only son, 663 single men with a coresident only daughter, 3,036 single women with a coresident only son and 2,970 single women with a coresident only daughter.

Our full paper will highlight similarities and differences in parenting time by family structure and family gender, using a spectrum of parenting time measures. Here we present below several key highlights of notable child gender differences in parenting time relying on the broad measure of total time with an own child in the room as the measure of parenting time, and focusing just on the samples in which there is just one child in the household (in order to know with certainty the gender of the child with whom the parent is engaging in parenting time).

#### I. One child under the age of 6:

Married man with a son vs a daughter:	339 vs 352 minutes
Married woman with a son vs a daughter:	476 vs 478 minutes
Single man with a son vs a daughter:	334 vs 290 minutes (13% son advantage)
Single woman with a son vs a daughter:	428 vs 418 minutes

II. One child between age 6 and 12:

Married man with a son vs a daughter:	303 vs 265 minutes (12% son advantage)
Married woman with a son vs a daughter:	344 vs 361 minutes
Single man with a son vs a daughter:	244 vs 264 minutes
Single woman with a son vs a daughter:	301 vs 349 minutes (14% daughter advantage)

III. One child between age 13 and 17:

Married man with a son vs a daughter:	197 vs 176 minutes
Married woman with a son vs a daughter:	215 vs 249 minutes (13% daughter advantage)
Single man with a son vs a daughter:	212 vs 165 minutes (22% son advantage)
Single woman with a son vs a daughter:	186 vs 239 minutes (22% daughter advantage)

Looking at parenting time that includes only reading/playing with own coresident children, in families in which there is just one child, the highlight daily mean minutes are as follows:

IV. Only child less than 13 years of age: Married men with son vs daughters: 36 vs 25 minutes (30% son advantage)

V. Only child less than 6 years of age: married men with a son vs daughter: 50 vs 37 minutes (26% son advantage)

One of the key contributions of our research will be to examine parenting time patterns for non-coresident parents. For children growing up in single-parent families and so have just one co-resident parent with whom to share time, it is important to learn how much time is made up by time spent with the non-coresident parent. Focusing on parenting time of non-coresident parents (more often fathers than mothers) will help us to paint the full portrait of parental time investments and also will permit us to determine of the finding of Lundberg et al (2007) that non-coresident fathers devote equal time to daughters and sons, holds true with our data and our broader sample.

As expected, our samples of parents reporting a non-coresident child are not large. There are only 2,300 total parents with own non-coresident children in the full sample. Married men are much more likely to have a non-coresident child than married women. Looking at the subsamples of parents with non-coresident children who have just one child, the samples are even smaller. There are 344 single men with a son, 365 single men with a daughter, 110 single women with a son and 81 single women with a daughter. Despite these small samples, it is worth noting the one highlight daily mean difference below:

VI. Only one child under the age of 18:

Single man with son vs daughter: 69 minutes vs 78.8 minutes (10% daughter advantage)

### 3.B. Intended Empirical Strategy

Our intended empirical approach has four elements as delineated below.

(1) We will compare mean child caregiving time across family structure, child gender, parent gender, and co-resident status (i.e., does the parent coreside with the child). These means will include a variety of crosstabs designed to further inform the subsequent regression equation specifications.

(2) We will estimate time use equations using the various measures for parenting time: We will estimate these equations separately by parent gender. This empirical strategy is similar to that employed effectively in Connelly and Kimmel (2014). The regression approach permits us to control characteristics

of both the respondent and his or her children. Among the regressors we included in that 2014 paper were: mother's age; dummy variable for weekend diary; dummy variable for summer month diary; parent works for pay fulltime; income; ATUS survey year dummy variables; Great Recession dummy variable. In our current research the independent variables will also include parent's marital status, the age and gender composition of their children, interactions between marital status and age and gender of the children. The resulting estimated coefficients on marital status and on the interactions between marital status and gender of the children will provide further evidence of potential differences (or similarities also very much a possibility) in time devoted to children by the gender, controlling for the marital status of the parents and other differences across these groups of parents.

(3) Using the regression coefficients produced in (2) above, we will construct a variety of "predicted" time uses based on a predetermined prototypical single mother of boys and of girls and similarly a prototypical single father of boys and girls, which will then be compared to boys and girls from prototypical married mothers and fathers. We will also use the resulting predicted time uses for single coresident parents and single non-coresident parents of the opposite gender to construct predicted total parental time use estimates for boys versus girls. The same will be done for married parents to provide evidence for (or against) the differential input hypotheses asserted in the literature on the emerging gender gap in achievement for low-income boys versus girls.

(4) Using the regression coefficients produced in (2) above, we will use an Oaxaca Decomposition approach to determine which factors are most important in explaining differences or similarities in these time uses between two family structures and between boys and girls.

#### **4. Final Comments**

While the evidence of the growing struggles of lesser-educated men is growing, both in terms of their involvement in paid work and in marriage, it has proven difficult for researchers to identify causal factors. Our goal with this paper is to bite off just one small piece of that very large apple by answering two specific questions. First, do the data support the suggestion that boys who grow up in single mother families experience less parenting time than do similarly-raised girls? Relatedly, do boys and girls who live with married parents experience comparable parenting time investments? Second, what factors explain these differences or similarities?

There need be no *a priori* expectation that we *will* identify substantive child gender differences in parenting time within and across family structures. Preliminary descriptive statistics suggest some differences, but not widespread gender-specific advantages in parenting time, regardless of family structure. However, even in the presence of time input similarities, it still be interesting to examine the role of different factors in producing those time inputs.

These concerns are not new. Smeeding et al (2004) and Garfinkel (2004) described some of the same concerns stemming from the relationships between labor markets and marriage markets. If the intergenerational concerns are significant, then there will need to be policy ideas at both the local and national level. Providing evidence of parenting time inputs and possible differences by child and parent gender, and by family structure, will contribute to this public policy debate in a variety of ways. Most importantly, it will determine whether the problems faced by boys growing up in single mother families (as described by Autor and his coauthors), are at their core "boy problems" or "family structure problems" or both.

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