

## Reconsidering Child Care Decisions: The Share Hypothesis

Voluminous research on parents' child care time has found that mothers spend more time than fathers in direct child care even when parental employment patterns are held constant (Bianchi, 2000; Coltrane, 1988; Hallberg and Klevmarken 2003; Nock and Kingston, 1988). This research also finds that fathers spend more of their child care time in play activities than mothers, whereas mothers spend more time than fathers in basic care of children and management activities (e.g., Harris and Morgan, 1991; Hofferth, 2003; Kimmel and Connelly, 2007; Lamb 2000; LaRossa, 1988; Sayer, Bianchi, and Robinson, 2004; Yeung et al., 2001), suggesting that parents play distinct gender-based parenting roles. However, the extent to which mothers and fathers play distinct roles may vary by parental education level: not only do highly educated mothers and fathers spend more time in direct child care than less educated parents (Kalil, Ryan, & Corey, 2010; Sayer et al., 2004), but highly educated fathers spend more time in basic care and management of children than less educated fathers.

Although this pattern suggests that highly educated mothers and fathers play more similar parenting roles than less educated parents, the fact that highly educated fathers spend more time in basic care and management than less educated fathers does not necessarily mean they play less distinct parenting roles. Highly educated fathers spend more time than their counterparts in all child care activities, thus additional time in basic care could simply reflect additional time invested in parenting generally. To determine if highly educated parents play less distinct parenting roles, one needs to examine the *share* of all child care time parents allocate to different activities, such as basic care, management and play, for only the distribution of time in different activities, and not the total amount, reveals parenting priorities. It is possible that because highly educated fathers are expected to take on more basic care like diapers and feeding, mothers are able to engage more in play and teaching than occurs in less educated families, and that this exchange alters the way mothers and fathers allocate time to children. If so, mothers and fathers parenting roles would be more similar at higher levels of education and more distinct at lower levels of education.

We test this hypothesis by creating measures of the share of all child care time parents spend in developmentally relevant domains of child care. We then compare the distribution of these shares across levels of parental education and between mothers and fathers. By examining the share of child care time parents spend in different activities, we capture the roles parents create from the time they allocate to child care. That is, we capture more accurately parents' decisions about how to spend the time they have with children, rather than focusing exclusively on their relative time contributions as a vast literature has already done.

### *Data and Methods*

To investigate these patterns we use the 2003-7 American Time Use Survey (ATUS). The rich ATUS data allow us to look at the amount of time fathers spend engaged in specific

activities – basic care, teaching, play, and management – that taken together reflect different roles in children’s lives. The analytic sample ( $N=8833$ ) is limited to mothers or fathers with resident biological or adopted children because data on child care time is only reliably available for these individuals. The sample is also limited to individuals where information was available for all covariates. The provided ATUS weights are used for all analyses.

We distinguish four levels of paternal education: less than high school (including GED recipients) (14%); high school graduates (14%); non-graduating college attendees and those with two year degrees (24%); and college degree or higher (33%). Among these groups we treat college as the reference category. To test our hypothesis that parenting roles converge as education increased, we interact education with gender in OLS regression models predicting share of total child care time spent in each activity. Significant interactions would indicate a difference in share allocation in the four parenting domains across levels of education. We also include race, number of children, mean centered income, partner’s employment status, if the study day is a weekday or weekend, and if the youngest child is an infant or toddler (0-2 years) or in early childhood (3-5 years) as controls.

### *Preliminary Results*

Figure 1 shows stacked bar charts, broken out by gender and education, for the percent of total child care time spent in each of the four child care types. As education increases the difference in the percentage of time mothers and fathers spend in basic care and play converge. At the highest level of education mothers and fathers look very similar.

Table 1 shows the results of the OLS regression models. Within each care type the first model shows the predicted percentage of total care in that activity, controlling only for gender and education. In Model 2, gender and education are interacted, and controls for other parent and family characteristics are entered. There is no main effect for gender in the percentage of child care time spent in teaching or management in either model, and among the reference category of college educated parents the effect of gender is not significant. Education affects the share of care time spent in both teaching and management, but this effect disappears when interacted with gender with one notable exception – those men with the least education spend a significantly smaller portion of their child care time teaching than those with the highest level of education.

Gender is a significant predictor of the amount of time spent in basic care and the interaction with education shows that the gender gap is smallest for college educated fathers (-5%). High school age fathers show an additional gender gap of -4% on top of the 5% found by college educated fathers. Those with less than a high school education show an even greater gap of additional 16% over the 5% gap in percentage of care time allocated to basic care by college educated fathers. All effects are significant at the .05 level or higher. College educated fathers spend an additional six percent of their time in play, and the gender gap increased an additional 10.7% for the least educated fathers. Fathers with a high school diploma or some college

experience spend about 3% more of their child care time in care compared to comparably educated women, but this is only marginally significant.

### Conclusions

We find convergence in how fathers divide their care time compared to similarly educated mothers as education levels increase. This is similar but more telling than the convergence of care time among highly educated mothers and fathers. While prior research has shown that men do less childcare, especially in basic care, this research shows that their distribution of time in care provides crucial insights into the process by which this occurs. Men at all education levels de-prioritize basic care in favor of play, but this effect is much smaller among more highly educated fathers. Highly educated fathers and mothers distribute their child care time much more similarly than less educated fathers and mothers, suggesting that the fathering roles indeed grown less distinct as paternal education level increases.

Figure 1. Average Share of Time in Each Child Care Activity out of Total Child Care Time.

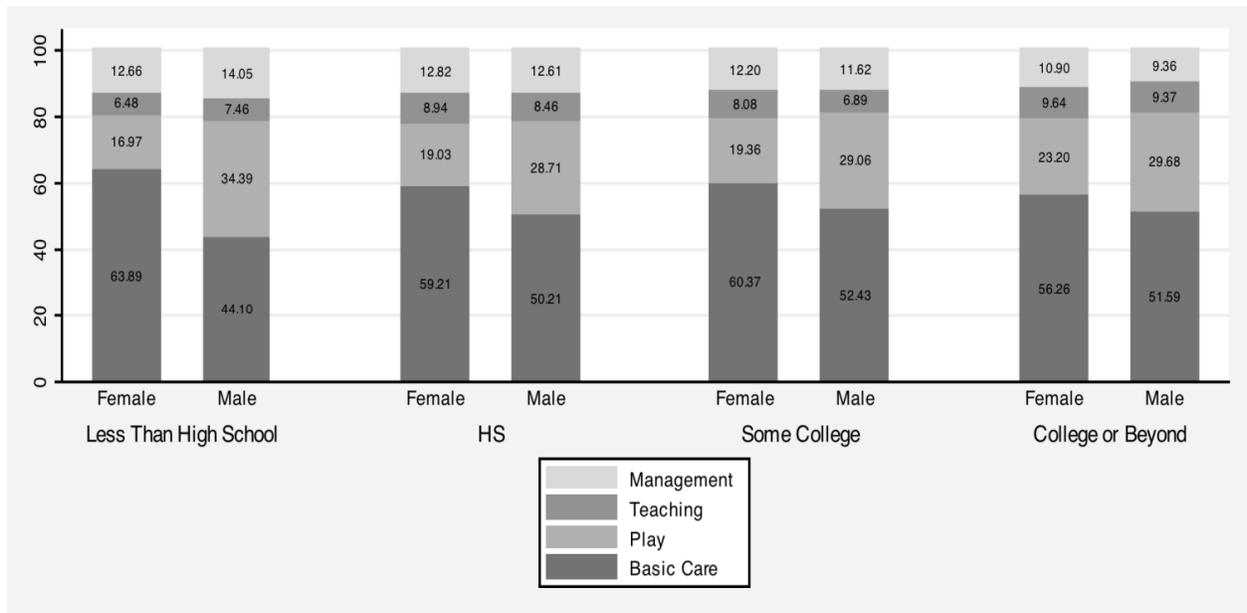


Table 1. Regression Coefficients for Percent of Child Care Time in Four Categories

	Basic		Play		Teach		Management	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Male	-7.41**	-5.16**	8.69**	5.81**	-0.46	-0.76	-0.83	0.11
	[-9.55]	[-4.30]	[12.16]	[5.34]	[-1.09]	[-1.19]	[-1.59]	[0.14]
Less Than HS	0.64	5.82*	-1.19	0.18	-3.25**	-5.41**	3.79**	-0.59
	[0.40]	[2.57]	[-0.79]	[0.09]	[-3.70]	[-4.48]	[3.48]	[-0.40]
High School	1.58	3.09*	-3.03**	-1.93	-0.77	-1.31 <sup>+</sup>	2.22**	0.16
	[1.52]	[2.15]	[-3.18]	[-1.48]	[-1.38]	[-1.72]	[3.21]	[0.17]
Some College	2.73**	3.60**	-2.49**	-2.16 <sup>+</sup>	-1.94**	-1.90**	1.70**	0.46
	[2.92]	[2.89]	[-2.90]	[-1.92]	[-3.85]	[-2.87]	[2.72]	[0.56]
Male * <HS		-16.88**		10.74**		2.15		4.00 <sup>+</sup>
		[-5.02]		[3.52]		[1.20]		[1.80]
Male * HS		-4.41*		3.18 <sup>+</sup>		-0.03		1.26
		[-2.12]		[1.69]		[-0.03]		[0.91]
Male * Some Coll		-2.80		2.94 <sup>+</sup>		-0.66		0.53
		[-1.49]		[1.72]		[-0.66]		[0.42]
African American		5.94**		-9.06**		0.01		3.11*
		[3.06]		[-5.15]		[0.01]		[2.43]
Hispanic		0.32		-3.75**		1.07		2.36**
		[0.25]		[-3.22]		[1.57]		[2.78]
Number of Kids		1.37**		-5.06**		1.74**		1.95**
		[3.55]		[-14.50]		[8.49]		[7.68]
Income		-0.38		0.45		0.34		-0.41
		[-0.63]		[0.82]		[1.05]		[-1.03]
Partner Employed		0.41		0.66 <sup>+</sup>		0.23		-1.30**
		[1.08]		[1.91]		[1.13]		[-5.17]
Youngest Aged 3-5		-4.62**		-7.31**		5.34**		6.60**
		[-5.98]		[-10.43]		[12.97]		[12.91]
Weekday		-6.23**		-3.95**		4.48**		5.70**
		[-8.21]		[-5.75]		[11.08]		[11.38]
Constant	57.43**	59.73**	22.26**	32.16**	9.72**	2.82**	10.59**	5.29**
	[90.16]	[46.96]	[37.95]	[27.88]	[28.26]	[4.16]	[24.81]	[6.29]
Adj_R-squared	0.011	0.027	0.018	0.063	0.002	0.044	0.002	0.047
N	8833	8833	8833	8833	8833	8833	8833	8833

Notes: Reference categories are female, college educated, White, Asian, or other, one child, partner unemployed, youngest child aged 0-2, and weekend. Income is mean centered and adjusted to \$2006.