Gender Differences in Perceptions and Meanings of Time Use and Health Outcomes

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Abstract

Childcare is the most rewarding, yet most exhausting work. Using data from the well-being module of 2010 American Time Use Survey, we examine gender differences in parents' subjective perceptions on four major daily activities: paid work, childcare, housework, and leisure. Our findings reveal that parents find much more meaning in the time they spend taking care of their children than in their time at paid work. Yet, parents also perceive childcare time as more exhausting compared with either paid work or housework. We also document gender differences: mothers report more exhaustion than fathers in in all four activities but do not report higher levels of stress compared with fathers. We explore the factors behind these gender differences by considering differences between the types and lengths of mothers and fathers' detailed activities. We also examine the link between mothers and fathers' time use, feelings about time use activities, and general well-being.

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Gender differences in objective indicators of time use are an enduring feature of contemporary life, despite the growth of dual earner and single parent families and growing support for greater similar in parents' breadwinning and caregiving roles (Sayer 2010; Bianchi et al. 2012; Parker and Wang, 2013). Ample literature has examined these differences, documenting mothers devote more time to housework and childcare, and less time to paid work and leisure, than fathers (Bianchi, Robinson, and Milkie 2006). Changes in workplace time structures (e.g. the emergence of 24/7 economy and downsizing) have intensified time pressures on mothers and fathers (Jacobs and Gerson 2004; Schieman, Glavin, and Milkie 2009). The majority of parents report feeling they devote insufficient time to children, and these feelings are greater among fathers who work long hours (Milkie et al. 2004).

Although both parents are juggling multiple roles to balance the demands of children, work and home life, gendered role activities and expectations still expose mothers and fathers to different set of daily "hassles," experiences and demands. Gendered experiences of time are theorized to be associated with disparate subjective perceptions of time and influences of time use on physical and mental health (Bird and Rieker 2008). Two recent studies have examined subjective experiences of time and show that parents report both more positive affect and greater stress in child care activities and activities spent multitasking child care with other types of time use (Krueger 2007; Offer and Schneider 2011). However, little recent research has specifically considered gender differences in objective and subjective dimensions of all types of time use, or how objective indicators and subjective perceptions of time use are associated with gender differences in health.

Our contribution in this analysis is to address this gap in the literature. Examining gender differences in perceptions of time and consequences of time use for health outcomes may shed light on the paradox of women's higher morbidity and lower mortality compared with men (Bird & Fremont, 1991; Rieker & Bird 2005). Previous studies have considered only how economic resources might condition gender differences in health, overlooking potential contributions of gendered time resources. The gendered division of labor means that access to discretionary time is a gendered resource. Women have less leisure than men and gender disparities in caregiving time contribute to women's leisure being more fragmented, more intertwined with caregiving, and thus less relaxing and refreshing.

Women are also more likely to handle what Hochschild (1997) refers to as the "third shift"—noticing and responding to social-psychological consequences for families that result from the "second shift." Gendered time use patterns associated with greater work-family and marital stress among women are associated with unhealthy coping strategies, such as overeating and excessive alcohol use, and reduced time in health-promoting activities like exercise (Nomaguchi & Bianchi 2004; Pinquart & Sorensen 2007). Bird and Fremont (1991) find that when gender differences in social roles (measured by their time allocation) are controlled, women experience better health than men, which is more consistent with their greater longevity.

Taking advantage of the richness of the well-being module of the ATUS, we explore the link between the amount of time parents spend in four major daily activities, how they feel about these activities and their health outcomes. We limit our analysis to parents ages 18 to 64 with children younger than 18, because this is the group engaging in daily child care activities and also the group experiencing greater objective and subjective time pressures (Milkie et al. 2010; Milkie, Raley, and Bianchi 2009). Using the 2010 well-being module of the American Time Use Survey, we find that parents find more meaning in the time they spend taking care of their children than in their time at paid work. At the same time, childcare is more exhausting for parents than either paid work or housework.

Data

Our data are from the 2010 American Time Use Survey (ATUS) collected by the Census Bureau for the Bureau of Labor Statistics (Bureau of Labor Statistics and U.S.Census Bureau 2011). Respondents ages 15 and over are drawn from the outgoing rotation of the Current Population Survey (CPS) and are representative of the American population. Time diaries are "yesterday" diaries that span 4 am to 4 pm on the day prior to the ATUS interview. Because the ATUS sample is a subsample of the CPS, it has high-quality data on employment and education, and household and individual characteristics. The response rate for 2010 is 56.9% (see Table 3.3, ATUS User's Guide November 2011, BLS).

In addition to the standard time use diary, the 2010 ATUS included new measures to gauge respondents' emotional state during various activities. After respondents completed a 24-hour diary, they were asked about how they felt during the time they engaged in three randomly selected activities. Respondents reported on a 6 point scale how happy, tired, stressed, sad, or in pain they were during the activity and how meaningful they considered the activity. We use these as indicators of feelings about four types of activities: paid work, housework, child care, and leisure (Krueger 2007). A list of detailed activities in each broad category is shown in Appendix 2. The module also included four questions about health status, including whether respondents took pain medication on the prior day, if they had high blood pressure, if they felt well-rested, and self-assessments of overall health status ("Would you say your health in general is excellent, very good, good, fair, or poor?). We plan to examine the latter two measures.

Our sample consists of mothers and fathers. In analysis to be completed by the time of the PAA meetings, we will analyze associations between time spent in paid work, housework, child care and leisure, feelings about time in these activities, and two of health indicators, feeling well-rested and overall health. In early analyses presented here, we describe how the amount and subjective experience of time in paid work, housework, child care and leisure differs by gender. Multivariate models will include controls identified as confounders, including marital status, number and age of children, employment, education, occupation, race-ethnicity, the day of the

¹ On March 26, 2013, the Bureau of Labor Statistics (BLS) issued a notice about an error in the activity selection process for the 2010 well-being module to the American Time Use Survey (ATUS) (http://www.bls.gov/tus/wbnotice.htm). After consulting with BLS, it is likely that future corrections of the dataset will not affect results presented here. For more information about the measures in the well-being module, see Appendix 1.

week and season of the time diary. Weights are used in all analyses to correct for nonresponse and adjust for the ATUS oversample of weekend days. If it is released as planned in winter 2013, we will add data from the ATUS 2012 well-being module. Including this data will allow us to obtain larger sample sizes for some subgroups (e.g., the lowest number of activities selected in the 2010 well-being module was 68, for fathers' housework).

Results

We present the basic findings of parents' perceptions about time in paid work, housework, child care and leisure in Table 1. We show the percentages of top scale as well as the mean ratings. We also include Figure 1-2 to highlight the gender differences in the feelings about childcare. Figure 3 shows the overall time allocation of mothers and fathers in paid work, unpaid work and leisure. Finally we show in Figure 4 how mothers and fathers spend time in different type of childcare activities.

As shown in Table 1 (illustrated in Figure 1-2), mothers and fathers are equally likely to find meaning in the time they spend caring for their children. Paid work has similar meaning to fathers and mothers as well. When it comes to housework and leisure activities, mothers are more likely than fathers to feel what they do are very meaningful. At the same time, mothers feel more exhausted than fathers in all four of these realms, and the largest gap is in childcare time (Mothers report "very tired" in 15% of childcare activities, and fathers feel this way in 6% of childcare activities).

Mothers also feel a higher level of happiness than fathers when taking care of children (see Table 1). Some 37% of mothers' childcare activities were "very happy" moments, compared with about 29% of fathers' childcare activities. No significant gender differences are found in the stress level mothers and fathers experience during childcare and paid work.

As illustrated in Figure 3, overall, fathers spend significantly more hours each week in paid work than do mothers (40 hours vs. 23 hours), while mothers' time in unpaid work (childcare and housework) is much longer than that of fathers (31 hours vs. 17 hours per week). Fathers have four hours per week more leisure time than mothers do.

When looking at the specific activities that parents engage in, the results also suggest that fathers and mothers allocate their time quite differently during similar type of activities (See Figure 4). Fathers spend significantly less time than mothers in almost all childcare activities except for one -- playing with children. Fathers on average spend about 2.2 hours per week in recreational-type childcare activities, compared with the 2.5 hours that mothers spend.

Mothers and fathers are also somewhat different in terms of types of leisure activities they engage in. Fathers tend to spend more leisure time in watching TV or playing sports than mothers do, while mothers engage in more social activities.

Table 1. Parents Perceptions about Time in Paid Work, Housework, Child Care and Leisure

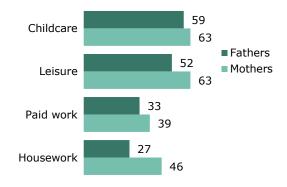
	All parents		Fathers		Mothers	
	% very	Mean	% very	Mean	% very	Mean
Нарру	70 TC: Y	ricuii	70 VCI y	ricuii	70 VCI y	Hean
Paid work	19	4.0	17	3.8	20	4.1
Housework	21	4.0	10	3.7	23	4.1
Childcare	35	4.6	29	4.6	37	4.7
Leisure	41	4.7	40	4.8	43	4.7
Meaningful						
Paid work	36	4.5	33	4.5	39	4.5
Housework	43	4.4	27	3.8	46	4.5
Childcare	62	5.0	59	5.0	63	5.0
Leisure	59	5.2	52	5.0	63	5.3
Stressed						
Paid work	5	2.5	4	2.5	6	2.5
Housework	5	1.9	9	2.2	5	1.9
Childcare	3	1.3	0	1.2	4	1.3
Leisure	4	1.3	1	1.1	6	1.4
Tired						
Paid work	5	2.5	4	2.3	7	2.7
Housework	7	2.6	1	2.2	8	2.7
Childcare	12	2.9	6	2.5	15	3.0
Leisure	5	2.1	2	1.8	7	2.3

Note: Based on a scale of 0-6, where a 0 means "not meaningful at all" and 6 means "very meaningful." The number of activities in each category is 100 cases or more, except for fathers' housework (n=68).

Source: Author analysis of 2010 American Time Use Survey, Well-being Module.

Figure 1. Mothers Find More Meaning in Most Daily Activities ...

% of ...activities rated "very meaningful"

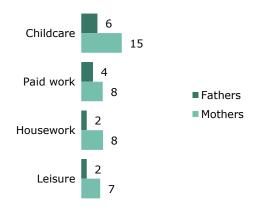


Note: DK/Refused not included. Based on ratings of adults ages $18\ \text{to}\ 64\ \text{with own child(ren)}$ under age $18\ \text{living}$ in the household.

Source: Author analysis of 2010 American Time Use Survey, Well-being Module.

Figure 2. But They Also Feel More Exhausted

% of activities in which respondent felt "very tired"

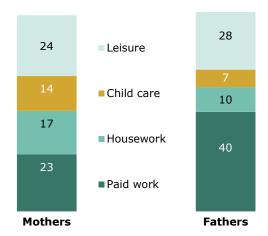


Note: DK/Refused not included. Based on ratings of adults ages $18\ \text{to}\ 64\ \text{with own child(ren)}$ under age $18\ \text{living}$ in the household.

Source: Author analysis of 2010 American Time Use Survey, Well-being Module

Figure 3. How Moms and Dads Spend Their Time

Average number of hours per week spent on...

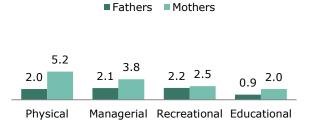


Note: Based on adults ages 18 to 64 with own child(ren) under age 18 living in the household. Paid work and child care include relevant travel time.

Source: Author analysis of 2010 American Time Use Survey.

Figure 4. How Mothers and Fathers Spend Their Time with Children

Average number of hours per week on different childcare activities



Note: Based on adults ages $18\ \text{to}\ 64\ \text{with own child(ren)}$ under age $18\ \text{living}$ in the household.

Source: Author analysis of 2010 American Time Use Survey.

Appendix 1.

How does the American Time Use Survey Measure People's Feelings?

Sponsored by the U.S. National Institute on Aging, the American Time Use Survey (ATUS) introduced a new well-being module in 2010 to collect data on quality of life. After respondents completed a 24-hour diary, they were asked about how they felt during the time they engage in three randomly selected activities (To be eligible for selection, the activity had to be at least 5 minutes in duration, and sleeping, grooming, and personal activities were not included).

Below are questions extracted from the questionnaire (http://www.bls.gov/tus/wbmquestionnaire.pdf):

Now I want to go back and ask you some questions about how you felt yesterday. We're asking these questions to better understand people's health and well-being during their daily lives. As before, whatever you tell us will be kept confidential. The computer has selected 3 time intervals that I will ask about.

Between [STARTTIME OF EPISODE] and [STOPTIME OF EPISODE] yesterday, you said you were doing [ACTIVITY]. The next set of questions asks how you felt during this particular time.

Please use a scale from 0 to 6, where a 0 means you did not experience this feeling at all and a 6 means the feeling was very strong. You may choose any number 0,1,2,3,4,5 or 6 to reflect how strongly you experienced this feeling during this time.

- 1. Happy First, from o 6, where a o means you were not happy at all and a 6 means you were very happy, how happy did you feel during this time?
- 2. Tired From o 6, where a o means you were not tired at all and a 6 means you were very tired, how tired did you feel during this time?
- 3. Stressed From o 6, where a o means you were not stressed at all and a 6 means you were very stressed, how stressed did you feel during this time?
- 4. Sad From o 6, where a o means you were not sad at all and a 6 means you were very sad, how sad did you feel during this time?
- 5. Pain From o 6, where a o means you did not feel any pain at all and a 6 means you were in severe pain, how much pain did you feel during this time if any?
- 6. Meaningful From 0 to 6, how meaningful did you consider what you were doing? 0 means it was not meaningful at all to you and a 6 means it was very meaningful to you.

[THE ORDER OF THE AFFECTIVE DIMENSIONS (ITEMS 1-5) WAS RANDOMIZED BY RESPONDENT].

Appendix 2.

Time Use Activities for Paid Work, Housework, Child Care and Leisure

Time use classification	Examples of activities included	Code in ATUS
Paid work	At work (main job or other jobs), work-related activities (eg.,	05 series,
	socializing, events, lunch with clients), other income-generating activities(e.g., making arts for sale, playing in a band for pay), job	180501-180599
	searching and interviewing, work-related travel, etc.	
Housework		02 series
Cleaning	Laundry, cleaning	
Cooking	Food and drink Preparation, Presentation, and Clean-up	
Management	Household management, financial management, planning, pet care	
Repair	Interior and exterior maintenance, lawn, gardens, vehicles	
Child care		0301-0303 series 180301-180304
Physical	Physical care, providing medical care to children, travel related to children's health	100301 10030
Managerial	Organizing/planning activities for household children, attending children's events, picking up or dropping off children	
Recreational	Playing with children, arts and crafts with children, playing sports with children	
Educational	Reading to children, Helping with children's homework, home	
	schooling, Talking with/listening to children	
Leisure		12 and 13 series
TV and other	Television & movies, games, music, radio, computer use for leisure	
Social	Socializing, attending/hosting social events, relaxing, hobbies, reading interest, attending performing arts, museums	g for personal
Sports	Playing sports, biking, bowling, dancing, fishing, exercising, attending sports/recreational events	

Source: U.S. Bureau of Labor Statistics: American Time Use Survey Activity Lexicon 2003-11.

REFERENCES

- Bianchi, S.M., L.C. Sayer, M.A. Milkie, and J.P. Robinson. 2012. "Housework: Who Did, Does, or Will Do It and How Much Does It Matter?" *Social Forces*.
- Bianchi, S.M., J.P. Robinson, and M.A. Milkie. 2006. *Changing Rhythms of American Family Life*. New York: Russell Sage Foundation.
- Bird, C.E. and P.P. Rieker. 2008. *Gender and Health: The Effects of Constrained Choices and Social Policies*. New York: Cambridge University Press.
- Bird, C.E. and Allen Fremont. 1991 "Gender, Time Use, and Health" Health Soc Behav. 1991 Jun;32(2):114-29.
- Bureau of Labor Statistics and U.S.Census Bureau. 2011. "American Time Use Survey User's Guide." Bureau of Labor Statistics.
- Jacobs, J.A. and K. Gerson. 2004. *The Time Divide: Work, Family, and Gender Inequality*. Cambridge, Mass.: Harvard University Press.
- Krueger, A. 2007. "Are We Having More Fun Yet? Categorizing and Evaluating Changes in Time Allocation." 2. Brookings Institute.
- Milkie, M.A., S.M. Kendig, K.M. Nomaguchi, and K.E. Denny. 2010. "Time With Children, Children's Well-Being, and Work-Family Balance Among Employed Parents." *Journal of Marriage and Family* 72:1329-1343.
- Milkie, M.A., M.J. Mattingly, K.M. Nomaguchi, S.M. Bianchi, and J.P. Robinson. 2004. "The Time Squeeze: Parental Statuses and Feelings About Time With Children." *Journal of Marriage and Family* 66:739-761.
- Milkie, M.A., S.B. Raley, and S.M. Bianchi. 2009. "Taking on the Second Shift: Time Allocations and Time Pressures of U.S. Parents With Preschoolers." *Social Forces* 88:487-517.
- Offer, S. and B. Schneider. 2011. "Revisiting the Gender Gap in Time-Use Patterns." *American Sociological Review* 76:809-833.
- Parker, Kim and Wendy Wang. 2013. "Modern Parenthood: Roles of Moms and Dads Converge as They Balance Work and Family" Pew Research Center report, March 14, 2013 (http://www.pewsocialtrends.org/2013/03/14/modern-parenthood-roles-of-moms-and-dads-converge-as-they-balance-work-and-family/)

- Rieker, Patricia and Chloe E. Bird. 2005 "Rethinking Gender Differences in health: why we need to integrate social and biological perspectives." J Gerontol B Psychol Sci Soc Sci. 2005 Oct;60 Spec No 2:40-7.
- Sayer, L.C. 2010. "Trends in Housework." Pp. 19-38 in *Dividing the Domestic: Men, Women, and Household Work in Cross-National Perspective*, edited by J. Treas and S. Drobnic. Stanford: Stanford University Press.
- Schieman, S., P. Glavin, and M.A. Milkie. 2009. "When Work Interferes With Life: Work-Nonwork Interference and the Influence of Work-Related Demands and Resources." *American Sociological Review* 74:966-988.