Gender, Social Class, Leisure and Well-Being: Challenging Leisure as the Holy Grail Marybeth J. Mattingly, University of New Hampshire and Liana C. Sayer, Ohio State University

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# Abstract

Research documents gender and class differences in the quantity, quality, and experience of leisure. Less is known about how differences are correlated with health and well-being. We use data from the 2010 American Time Use Survey and Well-being Module to extend work from the 1990s that found women's leisure is less refreshing than men's. We consider gender and social class differences in the distribution, experience, and perception of leisure, and investigate if gender, social class, and leisure independently and jointly affect feeling well rested and health. Preliminary results indicate women have less leisure than men and leisure declines steadily as education and income increase. We also find gender and social class variation in associations of leisure with health outcomes. In future analyses, we will consider if gender and social class differences persist across new measures of leisure quality and if differences are mediated by subjective perceptions of leisure.

## **Extended Abstract**

Beliefs that time use is consequential for well-being are widespread and have motivated an international stream of research on how adults and children spend time. They are also implicit in public health studies of health behaviors and correlations with sociodemographic characteristics and health outcomes (Tudor-Locke et al. 2009). However, research examining associations between leisure time and health outcomes offers weak and inconsistent empirical evidence (Pampel, Krueger, and Denney 2010). We believe these inconsistencies result because prior work does not consider both the quality and quantity of types of leisure and how these vary by gender and socioeconomic status. Our contribution is to address these gaps in the literature.

We hypothesize that leisure quality and quantity are gendered health resources. Gender differences in health are associated with gendered employment and caregiving patterns that reduce women's access to economic resources and increase obligatory time demands (Bird 2008). 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." Our expectation is gendered caregiving patterns reduce both the quantity and quality of leisure time for women, with these objective indicators of time scarcity acting as potential pathways through which women's and men's time use differentially affects health outcomes (Cockerham 2005; Jabs and Devine 2006).

We also extend existing research by exploring variation by social class as well as gender in associations of leisure quality and quantity with health. Time use and health outcomes have both been shown to vary by socioeconomic status. Scholars have conceptualized socioeconomic status (SES) as a "fundamental" determinant of health (Link and Phelan 1995) but how SES advantage translates into better health outcomes is unclear (Elo 2009). One of the main findings from time diary trend studies is the reversal of the historical pattern of more leisure time among higher status individuals, due to pervasive post-industrial workplace transformations associated with global competition and corporate downsizing and changes in families. Today, women and men who are highly educated and who work in professional occupations typically devote less time to leisure compared with lower socioeconomic status individuals (Aguiar and Hurst 2007, Gershuny 2000, Jacobs and Gerson 2004). Time pressures associated with the emergence of dual earner families and intensive parenting have also intensified among higher-SES individuals, further reducing leisure time, more so among women (Bianchi, Robinson, and Milkie 2006). In contrast, lower SES individuals have more leisure and are also more likely to have employment conditions like shift work and schedule inflexibility that are correlated with lower quality leisure (Devine

et al 2003). Questions remain, however, about how SES is correlated with the quality of leisure time — the most finite resource — and how gender and social class differentiated leisure patterns affect health outcomes. We anticipate association between leisure and social class with health outcomes may be nonlinear, because of differences in subjective experience and quality of leisure. We also anticipate the relationship between leisure and social class and health may differ for women and men because of gendered work and family patterns.

### **Research Questions**

- 1. Are there gender, and social class differences in the amount, quality, and experience of leisure?
- 2. How do gender, class and leisure experiences each relate to health outcomes?
- 3. Does the effect of leisure on health outcomes vary by gender and social class?

### **Data and Methods**

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 highquality 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). The 2010 ATUS included a Well-Being module sponsored by the U.S. National Institute on Aging. The module was designed to assess people's subjective experiences of time use in 3 randomly chosen time intervals. Respondents reported on a 6 point scale how happy, tired, stressed, sad, or in paid they were during the activity and how meaningful they considered the activity. We use these as indicators of subjective quality and experience of select leisure activities (Krueger 2007). The module 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. We use the latter two measures in this analysis. Weights are used in all analyses to correct for nonresponse and adjust for the ATUS oversample of weekend days.

### Dependent Variables

*Very well-rested* is indicated and coded (1) for those stating they felt very well rested when they woke up yesterday. Those responding somewhat rested, a little rested, or not at all rested are coded (0).

Those responding excellent or very good to "Would you say your health in general is excellent, very good, good, fair, or poor?" are coded 1 on *excellent or very good health*. Those replying fair or poor are coded (0).

### Key Independent Variables

In future analyses, we will be constructing measures to assess the nature and quality of leisure. For now, we analyze the total number of leisure episodes and minutes per day of leisure. *Leisure episodes* is a count of the number of discreet times each day that an individual engaged in a leisure activity. Total leisure time is a sum of the total minutes spent in a leisure activity divided by 60 to obtain a *total leisure hours* estimate.

Gender is coded (1) for *female*, (0) for male.

We operationalize social class through measures of educational attainment and income quintile. Education is based on the highest completed level of education and coded into a series of four binary variables: *High school degree or less, some college, Bachelor's degree, and advanced degree*. High school degree or less serves as the reference category in the regression models.

Family income is coded into binary variables indicating quintiles. *Quintile 1* represents those earning less than \$20,000 per year. *Quintile 2* represents those earning between \$20,000 and \$34,999. *Quintile 3* represents those earning between \$35,000-\$59,999. *Quintile 4* represents those earning \$60,000 to \$99,999. *Quintile 5* represents those earning \$100,000 or more. Note that the quintile distribution is based upon a categorical variable. Quintile 3 serves as the reference category in the regression models. <u>Methods</u>

In early analyses presented here, we describe how the amount and episodes of leisure differs by gender and social class. We show descriptive and preliminary logistic regression results. For this iteration, the regression models focus on total leisure, but we will explore fragmentation, with whom leisure is spent, leisure activity types (cognitive, active, and passive), and subjective experiences of leisure in subsequent analyses. We will estimate additive and interactive models to assess mediating and moderating influences of leisure, gender, and social class on health. We also plan to estimate structural equation models to assess reciprocal associations among leisure and health outcomes. Multivariate models will include controls identified as confounders, including employment, parental, and marital status, occupation, race-ethnicity, controls for the day of the week and the season in which the time diary took place, as well as region of the country and metropolitan status.

#### **Preliminary Results**

Figure 1 shows mean total leisure each day by our focal independent variables: gender, education and income quintile. As expected, we find that men average more leisure than women. Leisure is highest among those with only a high school degree and declines steadily as education increases. It is similarly high among the lowest earners and decreases steadily with income. Given known relationships between social class and health outcomes, this may suggest that leisure is less "refreshing" and may be qualitatively different among those with lower earnings or lower educational attainment.

### [Figure 1 About Here]

Table 1 shows the distribution of leisure episodes and total hours of leisure by health outcome status and demographic characteristics. Gender differences by health outcomes are indicated directly to the right of the columns and between group differences are indicated to the far right of each outcome.

# [Table 1 About Here]

The first line, for all respondents, reveals that health outcomes are associated with leisure. While those not in excellent or very good health have more leisure than do those who report healthier responses on these outcomes, those who say they feel very well rested have more leisure than those who do not. Results are consistent when broken down by gender, education and income. However, there are some differences that emerge within groups. As noted above, women, the less educated and lower income individuals report less total leisure and the less educated and lower income individuals experience fewer leisure episodes per day. Consistent with prior research, we find that women's shorter duration of leisure, over forty minutes less per day, is fragmented into similar episodes as men's longer leisure.

Table 3 presents results from logistic regression models. When gender, education and income are simultaneously analyzed, and controls for race, marital status, parental status, and age are added, we see relationships between leisure and health outcomes persist. That is, those with more leisure are *more likely* to report a health status other than excellent or very good. More leisure is also associated with increased odds of feeling very well rested. Education is tied to self-reported health, with higher educated individuals more often reporting better health. Education is also linked to feeling well rested, with some suggestion that those with a high school degree or less and those with an advanced degree are most similar. Those with some college or a Bachelor's degree are least likely to report feeling very well rested. There are no income differences in feeling well rested, but those of higher income report better self-rated health and those with lower income report their health as excellent or very good less often.

### [Table 3 About Here]

### Limitations and Next Steps

The primary limitation of this work is the cross-sectional nature of the data. While we think about ways in which leisure may influence health and wellbeing, it is equally plausible that well-being and health circumstances drive leisure experiences. Hence, we are not making claims about causality and are careful not to use causal language. The present analysis is also limited in its focus on the overall amount of leisure, without considering the quality. While it is impossible to fully overcome this with quantitative data, future analyses presented at the PAA will make fuller use of the ATUS data to explore the specific nature of leisure experiences, including with whom people spend their leisure time, and the nature of their leisure activities.



Table 1: Health/Well-Being Outcomes by Demographic Characteristics (Percentages)											
	v	Vell Rested	ł	General Health							
				Excellent							
Characteristics			Chi-	and Very		Chi-					
	Very	Other	square	Good	Other	square					
ALL	39.61	60.39		53.64	46.36						
Sex											
Male	40.86	59.14		53.66	46.34						
Female	38.43	61.57	*	53.62	46.38						
Education Level											
HS or Less	41.99	58.01		45.7	54.73						
Some College	37.79	62.21		54.15	45.85						
Bachelor's Degree	35.2	64.8		66.66	33.34						
Advanced Degree	41.07	58.93	***	68.17	31.83	***					
Income Quintiles											
Quintile 1	41.88	58.12		39.08	60.92						
Quintile 2	40.29	59.71		43.18	56.82						
Quintile 3	40.47	59.53		52.16	47.84						
Quintile 4	36.46	63.54		60.45	39.55						
Quintile 5	39.19	60.81	*	68.65	31.35	***					
Race											
White	38.33	61.67		54.84	45.16						
Black	48.3	51.7		45.29	54.71						
Other	39.79	60.21	***	53.88	46.12	***					
Marital Status											
Married	39.51	60.49		55.04	44.96						
Widowed, Divorced, Separated	41.86	58.14		41.62	58.38						
Never Married	38.56	61.44		57.77	42.23	***					
Parental Status											
Non-Parent	42.61	57.39		50.82	49.18						
Parent	35.31	64.69	***	57.68	42.32	***					
Percentages and chi-square resul											
*p<0.05, **p<0.01, *** p<0.001											
Well Rested: Other includes somewhat, a little and not at all.											
General Health: Other includes go											

	Overall					Well Rested									General Health								
	Mean Le Episod	isure les	Mean T Time	otal in	N	Mean Leisure Episodes Mean Total Time in Leisure							re	Mean Leisure Episodes Mean Total Time in Leisure									
		v	Very		Other		Very		Other			Excellent and Very Good		Other			Excellent and Very Good		Other				
ALL	3.28		4.96		3.3	,	3.23		**	5.33		4.70		***	3.23		3.37		**	4.60		5.35	***
Sex																							
Male	3.27		5.32	***	3.39	)	3.23		*	5.66	***	5.11	***	***	3.24		3.35			4.96	***	5.77	***
Female	3.29		4.62		3.3	3	3.24		* 5.	5.01	)1	4.32	- ***	***	3.21	3.21	3.39		*	4.26		4.96	***
Education Level																							
HS or Less	3.4		5.53		3.4	3	3.39			5.87		5.26		***	3.35		3.46			5.19		5.78	***
Some College	3.17	***	4.72	***	3.24	L	3.15	**	*	5.00	***	4.54	***	**	3.15		3.22	1		4.51	***	4.96	***
Bachelor's Degree	3.18		4.30		3.4		3.1		*	4.77		4.05		***	3.15	3.32	3.32		4.12		4.67	**	
Advanced Degree	3.17		4.03		3.4	,	3		**	4.37		3.83		*	3.12		3.34			3.79		4.59	**
Income Quintiles																							
Quintile 1	3.42		6.04		3.3	3	3.49			6.05		6.05	***		3.22 3.34		3.59		**	5.44		6.44	***
Quintile 2	3.41		5.36		3.4	,	3.39	9		5.67	***	5.12		**			3.48			5.02		5.58	**
Quintile 3	3.21	**	4.92 4.50	***	3.4	3.41	3.11	**	* **	5.42		4.59		***	3.19		3.27	**		4.71	***	5.16	*** *
Quintile 4	3.23				3.3	2	3.19	3.19		4.96		4.25		***	3.23		3.25			4.42		4.65	
Quintile 5	3.34		4.19		3.3	)	3.07		*	4.57		3.89		***	3.23		3.12			4.04		4.41	
Race																							
White	3.3		4.92		3.4		3.25	**	5.28	5.28	4.67		***	3.25		3.39		*	4.56		5.33	***	
Black	3.18		5.40	***	3.3	3	3.08		*	5.94	***	4.94		***	3.08		3.34		*	5.18	**	5.63	
Other	3.22		4.62		3.1	;	3.29			4.54		4.65			3.19		3.29			4.26		5.00	*
Marital Status																							
Married	3.19		4.56		3.3	3.3	3.14		*	4.91		4.31	***	***	3.14		3.29		*	4.18		5.00	***
Widowed, Divorced, Separated	3.43	***	5.80	***	*** 3.5	*	3.39	**	*	6.03	***	5.61		* *	3.26	*	3.56	3.56 *	**	5.24	***	6.17	*** ***
Never Married	3.37		5.19		3.4	'	3.32		5.67	5.67	67	4.89			3.36		3.4			5.04		5.39	*
Parental Status																							
Non-Parent	3.42	***	5.45	***	3.4	8 **	3.38	**	*	5.69		5.24	***	***	3.29	*	3.56	***	***	4.97	***	5.92	***
Parent	3.09		4.25		3.2	2	3.04		*	4.71	***	4.01		***	3.14		3.06			4.13		4.42	**
Rates and significance tests are w	eighted.																						
*p<0.05, **p<0.01, *** p<0.001																							
Well Rested: Other includes som	ewhat, a	little	and not a	at all.																			
General Health: Other includes g	ood, fair a	and po	oor.																				
Merged cells with significance ma	arkers are	resu	lts of we	ighter	differen	re of m	eans tes	ts acr	nss arr	uns (Male	vs Fer	nale• Wh	ite v	Blac	k vs Other <sup>,</sup> e	tc )							

		Well Res	sted	Excellent/Very Good Health						
	Odds Ratio	Coef.	SE		Odds Ratio	Coef.	SE			
Total Time in Leisure	1.034	0.033	0.008	***	0.983	-0.018	0.008	*		
Sex										
Male ( <i>Reference</i> )										
Female	0.934	-0.068	0.052		1.059	0.057	0.053			
Education Level										
HS or Less (Reference)										
Some College	0.828	-0.188	0.064	**	1.307	0.268	0.065	***		
Bachelor's Degree	0.754	-0.282	0.075	***	1.941	0.663	0.076	***		
Advanced Degree	0.913	-0.091	0.089		2.071	0.728	0.093	***		
Income Quintiles										
Quintile 1	0.927	-0.076	0.083		0.689	-0.373	0.082	***		
Quintile 2	0.915	-0.089	0.079		0.785	-0.242	0.079	**		
Quintile 3 (Reference)										
Quintile 4	0.910	-0.094	0.075		1.214	0.194	0.076	**		
Quintile 5	1.069	0.066	0.083		1.541	0.432	0.090	***		
Race										
White ( <i>Reference</i> )										
Black	1.520	0.419	0.073	***	0.785	-0.242	0.076	***		
Other	1.159	0.148	0.110		0.785	-0.242	0.114	*		
Marital Status										
Married (Reference)										
Widowed, Divorced, Separated	0.917	-0.086	0.070		0.879	-0.129	0.070			
Never Married	1.135	0.126	0.073		0.930	-0.072	0.076			
Parental Status										
Parent ( <i>Reference</i> )										
Non-Parent	1.141	0.132	0.064	*	1.067	0.065	0.067			
Age	1.011	0.011	0.002	***	0.982	-0.019	0.002	***		
Constant		-1.060	0.113	***		0.796	0.115	***		
Sample Size		12,291				12,291				
F-Statistic		12.16		***		37.6		***		
*p<.05 **p<.01 ***p<.001										

Table 3. Logistic Regression Results of High Blood Pressure, Pain Medication, Well Rested, andExcellent/Very Good Health on Leisure Time and Demographic Characterisitics

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