

How we use our time in adolescence and young adulthood: another look at social inequities by race and gender in the U.S.

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The ideal dispersion of time for youth has long been debated, especially when considering divisions such as time between education and work, leisure and work, and types of leisure, with dichotomies drawn between “structured”¹ and “un-structured” forms [1, 2, 3]. The normative ideal is often framed in this way -- adequate time should be devoted to educational endeavors that will allow for securing sufficient knowledge; adding part-time work may allow for a more balanced individual by securing skilled-training and networks for future career employment [3, 4]; and, a slice of time in household chores may instill maturity and responsibility [5]. The remaining time available to an adolescent is best served in structured leisure activities that stimulate the mind, provide outlets for physical exertion, and opportunities to promote social skills and networks [6]. Recent studies have shown that achieving this ideal may be less available for some groups, with notable differences in time-use profiles by race and gender.

For example, some extant studies have examined gender differences in time use among adolescents [7-12]. A general conclusion is that teenage males engage more heavily in paid work than females, as well as in sleep and leisure activities such as sports, T.V. and games; while teenage females spend more time than males, especially on non-school days, in studying, housework, caregiving, and social and artistic forms of leisure. Far fewer studies have examined time-use patterns in adolescence by race. Feldman and Matjasko [10] constructed time-use profiles of adolescent school-based extracurricular activities, and found there were no significant differences by race/ethnicity in the rates of single activity portfolio participation. However, whites were more likely to participate in multiple activities in comparison to blacks. In one study of 6-12 year olds, using data from a 2003 Panel Study of Income dynamics child supplement, and one of 15-17 year olds using ATUS data, race was included as a covariate in multivariate analyses of time-use [7,11]. Looking across these studies, the only consistent finding is that black adolescents appear to be spending more time watching t.v. and less time in structured / high-supervision leisure than white adolescents.

Given the dearth of studies that examine time-use in adolescence by race, and the lack of studies that look at how time-use differs by race at the intersection of other identities, a number of questions remain. For example, would we see different time-use patterns between black and white adolescents if we also stratified by gender? Do any differences observed in adolescence persist through young adulthood? What role does SEP play in any differences observed between black and white adolescents and young adults, and does this role change depending upon gender? This paper aims to answer these questions by using nationally-representative data from the American Time Use Survey (ATUS) to describe how

¹ Structured activities have been defined as activities that are a.) organized and/or supervised by an adult, b.) limited by place, and c.) focus on skill building [3].

non-Hispanic Black and White males and females spend their time as they age from adolescence to young adulthood, and what factors are associated with observed differences.

Theoretical framework

Time is a fundamental resource, and can be utilized as an indicator of individualized demands, and socially patterned differences in time-use may also reflect structured opportunities, demands and constraints, in households, larger environments and marginalized populations [2, 13, 14]. Because of its attention to race/ethnicity and gender, and its explicit interest in how these shape not only material deprivation, but also the accumulation of psychosocial stressors, the Weathering Hypothesis [15] will be used to guide my research. I will utilize this theory to examine the ways age-graded, racialized, and gendered social roles result in differentially stressful lived experiences among youth and young adults, proxied by time-use.

Methods

Using the 2003-2012 American Time Use Survey (ATUS) microdata file, the sample for this analysis was limited to non-Hispanic White and Black males and females, age 15-35 years (n=40,573). For each race-gender group, I calculated the standard measures [16] in time use data, population level estimates of average minutes per day spent in an activity and the daily participation rates (percent of persons who did the activity) across the following age-brackets (15-17, 18-24, 25-29, and 30-35 years). Six key time-use domains: work and job-searching, education, household tasks, caregiving demands, sleep, and the umbrella category of discretionary time (split between structured and less-structured subcategories) are reported on for the four race-gender groups and p-values denote statistical significance between race-groups (i.e., White males compared to Black males) and within gender (i.e., White females compared to Black females). Multivariate models, using OLS regression, were then run separately for males and females to see if racial differences persisted for each gender group in the presence of available socioeconomic position variables (household income, educational attainment) and other controls.

Preliminary results:

Preliminary results from our descriptive analyses show significant differences in time-use that stratify by race and gender. While all results cannot be discussed here, I will highlight a few of the more notable initial findings and include select descriptive tables. Starting in the teen years, a greater proportion of White males and females work compared to Blacks. Men of both race groups surpass their female counterparts in average minutes per day in work as they age into young adulthood, but this transition occurs later for Black men (late 20s) than it does for White men (early 20s). Blacks instead, are spending markedly more time in job-searching and interviewing, and this is especially true for Black males, averaging 2-4 times the amount of time for White males (see tables 1 and 2).

Data on education-related activities show Black males and females are spending less time in homework and research-related activities in high school and beyond and more time in their high school commute, compared to their White counterparts. A larger proportion of Black females, however, are engaging in homework/research, compared to Black males across adolescence and into young adulthood. Also noteworthy, Black women supersede White women and all others in time devoted to education, and this appears to be due to greater participation rates in taking classes during their late 20s and early 30s (See tables 3 and 4).

Very noticeable differences in time on household tasks are present by gender for both race groups, with significantly larger proportions of women committing more time in this area than males, even in adolescence. This gender imbalance holds true across young adulthood, although the gender gap is greater for Whites. It appears that a greater proportion of Black males engage in traditional housework and grocery shopping in their teens and early 20s, compared to White males, and generally spend longer periods of time in food-prep and clean-up (see Tables 5 and 6).

Lastly, I'd like to highlight the differences observed in structured forms of leisure. Black females, in particular, are engaging in far fewer structured leisure pursuits, compared to all other race-gender groups and this pattern continues across all sub-domains through adulthood. Among females, Blacks are participating at lower rates and for less time than Whites in all sub-domains – extracurricular clubs, sports and recreation, and hobbies. While Black males are also participating at lower rates in extracurricular clubs, when compared to White males, differences in time devoted to sports and recreation does not emerge until the late 20s. Interestingly, White women show gains in time spent on structured leisure as they age into young adulthood, surpassing White men in participation rates and result in comparable average minutes per day.

Multivariate analyses are not shown here. Initial analyses suggest that racial differences in education, work, and leisure noted in the young adult years for males remain after controlling for SEP and other covariates. In contrast, observed differences in time spent in work and education among Black and White females in the young adult years appear to be attenuated by SEP. Time use differences in structured leisure noted between Black and White females, however, remain after controlling for SEP and other covariates.

Tables 1 and 2: Average minutes per day and percent participating in work

Activity	White Males				Black Males			
	15-17	18-24	25-29	30-35	15-17	18-24	25-29	30-35
Summary variable: all forms of work^a	48.38	218.64	315.20	329.61	40.47	147.32***	274.98**	278***
%	18.50	49.90	65.48	66.86	11.92***	34.96***	56.52***	57.04***
Avg min of participants	261.52	438.12	481.36	492.97	339.52	421.37	486.54	487.40
Work (Avg min)	41.98	216.58	313.77	328.61	36.24	145.35***	269.88**	276.04
%	14.08	48.76	64.82	66.67	8.76***	34.18***	55.97**	56.29***
Avg min of participants	298.28	444.20	484.07	492.91	413.61	425.22	482.15	490.35
Other income generating activities (Avg min)	6.40	2.06	1.43	1.00	4.22	1.97	5.11	1.96
%	4.67	1.46	1.23	0.85	3.16	0.89	1.23	1.11
Avg min of participants	136.87	140.86	116.24	117.24	133.78	219.77	416.19	176.01
Job-searching & interviewing (Avg min)	0.35	3.30	2.75	2.07	1.88	6.61*	3.24	8.29**
%	0.85	0.37	0.25	1.69	1.54	7.25**	3.31	5.26***
Avg min of participants	40.92	89.41	111.61	122.45	122.65	91.10	97.89	157.55

Activity	White Females				Black Females			
	15-17	18-24	25-29	30-35	15-17	18-24	25-29	30-35
Summary variable: all forms of work^a	48.07	187.82	292.87	271.97	43.74	150.97**	208.52**	205.92
%	17.84	46.35	59.04	50.25	16.97	37.22**	49.36	45.51**
Avg min of participants	269.44	405.25	488.89	421.69	257.80	405.45	427.49	457.49
Work (Avg min)	43.06	185.94	290.67	270.28	39.97	146.87**	207.97*	204.78
%	15.22	45.60	52.56	49.64	10.59**	35.27**	49.04	45.27**
Avg min of participants	282.92	407.74	488.85	428.59	320.18	416.26	428.96	457.40
Other income generating activities (Avg min)	5.07	1.88	2.14	1.69	9.82	4.09	0.61**	1.74
%	2.97	1.05	1.09	0.90	6.89*	2.07	0.84	0.52
Avg min of participants	168.86	168.73	202.28	181.13	142.58	208.29	72.76	221.84
Job-searching & interviewing (Avg min)	0.30	2.13	1.27	2.16	0.24	4.71*	4.17**	2.79
%	0.84	2.07	1.28	1.60	0.53	4.00**	3.07**	2.98**
Avg min of participants	35.88	105.85	99.74	134.26	46.25	117.80	138.52	91.88

*p<.10; **p<.05; ***p<.01

A. This variables includes traditional work and other-income generating activities.

Tables 3 and 4: Average minutes per day and percent participating in education

Activity	White Males				Black Males			
	15-17	18-24	25-29	30-35	15-17	18-24	25-29	30-35
Summary variable: all education^a	221.57	68.87	27.52	9.68	189.73**	51.57**	15.18**	15.97
%	55.84	21.26	8.50	3.67	46.37**	18.46	6.97	5.50
Avg min of participants	396.82	323.93	323.82	263.78	409.13	279.35	279.79	290.04
Taking classes (Avg min)	174.23	35.53	10.80	3.47	157.88	32.59	8.48	4.61
%	46.90	14.43	4.87	1.95	41.90	11.87	3.87	2.34
Avg min of participants	371.49	246.24	224.26	177.95	382.77	274.48	222.35	196.80
Homework/Research (Avg min)	36.07	27.85	14.31	5.59	18.86**	14.92**	5.49**	10.41
%	33.67	14.92	6.98	2.46	24.46**	9.73**	4.32*	3.90
Avg min of participants	102.14	186.63	204.97	222.05	77.13	153.29	122.00	262.08
Travel for education (Avg min)	11.27	5.49	2.41	62.61	12.99	4.06	1.21*	0.95
%	39.79	15.82	4.99	1.68	34.37	12.90	3.80	3.29
Avg min of participants	28.31	34.68	48.28	37.19	37.29	31.47	31.84	28.72

Activity	White Females				Black Females			
	15-17	18-24	25-29	30-35	15-17	18-24	25-29	30-35
Summary variable: all education^a	232.65	75.87	20.94	12.63	209.85	66.21	22.96	19.27**
%	59.18	24.30	7.91	5.07	50.97**	22.77	10.04	9.54**
Avg min of participants	393.10	312.22	264.60	252.63	411.74	290.29	278.46	202.03
Taking classes (Avg min)	169.77	31.19	8.57	7.27	163.50	34.68	9.68	8.30
%	45.81	19.78	3.98	2.40	49.08	15.38	3.36	4.95**
Avg min of participants	370.62	248.16	215.05	178.21	379.94	225.51	180.74	162.79
Homework/Research (Avg min)	50.61	35.99	10.77	7.39	31.65**	24.05**	15.54	8.79**
%	40.73	19.55	5.97	3.69	34.86*	15.21	7.82	7.12**
Avg min of participants	124.25	184.12	180.47	202.10	90.29	151.50	188.23	122.68
Traveled for education (Avg min)	12.26	5.69	1.60	1.05	14.70	8.48*	2.79	2.24**
%	41.05	14.83	4.08	2.38	40.15	15.70	5.79	5.14**
Avg min of participants	29.87	38.35	39.13	44.22	36.60	54.08	47.14	48.56

*p<.10; **p<.05; ***p<.01

A. This summary variable includes taking classes for degree/personal and homework/research

Tables 5 and 6: Average minutes per day and percent participating in household tasks

Activity	White Males				Black Males			
	15-17	18-24	25-29	30-35	15-17	18-24	25-29	30-35
Summary variable: household tasks^a (Avg min)	19.19	30.19	42.53	45.93	21.08	32.92	33.81**	30.23
%	39.64	45.23	57.69	62.22	42.21	46.73	51.94*	38.76
Avg min of participants	48.42	66.22	73.22	73.23	49.94	70.43	65.10	85.52
Housework (Avg min)	6.74	10.82	16.13	15.99	9.88	15.36*	14.52	16.64
%	11.83	14.04	21.22	19.82	18.98***	21.93***	20.09	22.63
Avg min of participants	37.01	83.33	75.93	80.21	32.06	70.03	72.53	73.54
Food prep & clean-up (Avg min)	4.46	9.75	14.41	17.32	4.46	10.61	10.93**	22.4***
%	12.21	26.60	38.20	43.36	15.13	25.50	29.43**	41.84
Avg min of participants	25.19	34.40	32.21	40.06	29.42	41.61	32.13	33.53
Grocery shopping	0.85	2.49	4.24	3.74	1.91	2.70	3.40	4.32
%	2.93	5.93	10.89	10.14	5.45**	6.35	10.20	10.54
Avg min of participants	29.03	41.93	38.91	36.90	35.13	42.49	33.34	41.46

Activity	White Females				Black Females			
	15-17	18-24	25-29	30-35	15-17	18-24	25-29	30-35
Summary variable: household tasks^a (Avg min)	32.98	64.83	94.88	114.89	35.48	39.33	31.96***	104.64**
%	35.83	65.24	80.03	85.18	31.16	62.24	23.69***	30.43***
Avg min of participants	68.02	98.63	118.32	134.32	69.33	95.36	111.20	130.02
Housework (Avg min)	14.20	22.98	43.36	32.42	16.26	28.51	34.20***	33.92***
%	20.94	30.63	44.01	32.83	24.63	30.52	39.06**	44.43***
Avg min of participants	62.81	91.33	98.51	99.23	68.01	93.41	82.56	98.93
Food prep & clean-up (Avg min)	9.22	19.52	34.19	42.03	12.82	21.00	36.04	48.52***
%	24.96	38.31	60.23	69.41	22.63	41.23	36.98	68.00
Avg min of participants	38.93	30.94	36.28	60.58	46.40	30.91	63.23	21.42
Grocery shopping	2.18	4.43	6.85	8.22	1.04***	4.99	6.22	2.06
%	5.02	9.05	14.82	19.03	2.99**	11.01	12.54	12.52
Avg min of participants	43.36	48.99	46.23	43.16	34.24	45.32	48.22	40.19

Tables 7 and 8: Average minutes per day and percent participating in structured leisure

Activity	White Males				Black Males			
	15-17	18-24	25-29	30-35	15-17	18-24	25-29	30-35
Summary: Doing leisure^a (Avg min)	28.04	45.34	32.53	31.16	21.24	39.02	23.06**	22.26***
%	31.31	35.09	28.63	30.20	45.54*	28.21**	23.38*	24.06**
Avg min of participants	152.08	129.22	113.33	103.22	156.44	138.32	98.63	94.62
Extracurricular (Avg min)	4.02	0.40	-	-	0.20***	0.23	-	-
%	2.86	0.39	-	-	0.22***	0.10*	-	-
Avg min of participants	140.33	103.82	-	-	264.88	128.00	-	-
Sports / recreation (Avg min)	64.24	35.48	23.52	21.24	66.43	28.22	14.66***	15.13**
%	42.31	26.53	18.22	18.58	41.22	21.43**	12.62	15.03*
Avg min of participants	153.04	133.63	123.30	114.29	159.11	133.88	83.24	100.22
Hobbies / crafts (Avg min)	9.22	9.46	9.00	9.93	4.08***	10.22	3.40	2.62
%	11.46	12.03	12.83	15.19	6.42***	9.23	8.21**	11.10**
Avg min of participants	80.89	28.54	20.11	65.33	63.04	103.05	102.32	68.56
Volunteering (Avg min)	10.28	6.21	3.01	3.54	12.39	2.24	4.26	9.00*
%	2.31	3.04	3.60	4.32	10.63	3.22	4.22	3.54
Avg min of participants	140.22	123.26	139.06	128.24	116.64	221.23	113.98	162.45

Activity	White Females				Black Females			
	15-17	18-24	25-29	30-35	15-17	18-24	25-29	30-35
Summary: Doing leisure^a (Avg min)	34.50	30.36	22.28	29.23	25.94***	16.50***	16.23**	12.22***
%	43.92	22.22	31.64	34.52	21.20***	16.94***	18.41**	19.31**
Avg min of participants	123.92	109.32	86.21	84.60	119.30	92.43	90.82	62.28
Extracurricular (Avg min)	3.31	0.29	-	-	1.60***	1.05	-	-
%	4.83	0.32	-	-	1.63***	0.41	-	-
Avg min of participants	109.96	90.02	-	-	92.23	256.49	-	-
Sports / recreation (Avg min)	33.23	16.63	13.81	13.68	18.40**	9.26***	6.86***	6.09***
%	22.43	16.31	12.80	12.62	14.38**	9.45***	8.41***	9.20***
Avg min of participants	123.05	102.06	22.60	22.62	122.96	96.94	81.54	66.23
Hobbies / crafts (Avg min)	15.44	13.42	13.46	15.52	3.95***	6.30***	9.82*	6.10***
%	18.42	14.62	18.42	21.21	6.84***	8.00***	11.26**	11.48**
Avg min of participants	83.62	91.80	23.08	21.21	86.89	28.22	82.69	32.42

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