

Appendices to Fomby, Paula, Joshua A. Goode, Kim-Phuong Truong-Vu, and Stefanie Mollborn (2019). "Adolescent Technology, Sleep, and Physical Activity Time in Two U.S. Cohorts." *Youth & Society*. Three tables and one figure.

Table A1. Estimated coefficients and robust standard errors from ordinary least squares regressions predicting weekly sleep hours and negative binomial regressions predicting weekly physical activity hours, 2002-03 and 2004-16, adolescents aged 11-17 years, Panel Study of Income Dynamics Child Development Supplement.

	Sleep		Physical Activity	
Total time spent using technology	-0.02 (0.03)	-0.03 (0.03)	-0.02*** (0.00)	-0.02*** (0.00)
Cohort observed in 2014-16 [reference=observed in 2002-03]	1.00 (0.81)	0.00 (2.27)	-0.22 (0.11)	0.37 (0.28)
2014-16 cohort x Total time spent using technology		0.03 (0.07)		-0.02* (0.01)
Adolescent is male [reference=female]	0.35 (0.62)	0.34 (0.62)	0.54*** (0.09)	0.56*** (0.09)
Race/Ethnicity [reference=Non-Hispanic White]				
Non-Hispanic Black	0.26 (1.00)	0.29 (0.99)	-0.11 (0.14)	-0.12 (0.15)
Hispanic	-0.48 (1.84)	-0.49 (1.85)	-0.32 (0.23)	-0.35 (0.23)
Other race/ethnicity	0.05 (1.77)	0.03 (1.79)	-0.63* (0.25)	-0.65* (0.25)
Primary caregiver's education [reference=High school Graduate]				
Less than High School	1.25 (1.65)	1.22 (1.61)	0.23 (0.19)	0.30 (0.20)
Some College	-1.14 (1.02)	-1.14 (1.01)	-0.04 (0.15)	-0.02 (0.15)
4-Year College Graduate	-2.53** (0.82)	-2.54** (0.81)	0.23 (0.15)	0.25 (0.16)
Adolescent Age in Years	-0.77*** (0.17)	-0.77*** (0.17)	0.04 (0.03)	0.04 (0.03)
Two Parents in Home [reference=Other]	-1.01 (0.94)	-0.97 (0.96)	0.10 (0.13)	0.10 (0.13)
Number of Minor Children in Home	0.20 (0.58)	0.21 (0.58)	0.05 (0.04)	0.05 (0.04)
Constant	77.70*** (3.62)	77.96*** (3.62)	0.95* (0.40)	0.77 (0.42)
Overdispersion parameter (natural log of alpha)			1.34*** (0.06)	1.34*** (0.06)
<i>N</i>	1866	1866	1866	1866

Table A2. Item-Response Probabilities and Descriptive Means for Technology Use Profiles, 2014-16
Source: Panel Study of Income Dynamics Child Development Supplement Time Diaries. *Notes.* All data are weighted.

	Traditional	Comm.	Media Saturated	Gaming Focused	95% CI	
Item-Response Probabilities						
Listening to Music						
None	0.14	0.00	0.00	0.37	0.10	0.19
Bottom 25%	0.20	0.00	0.18	0.01	0.11	0.19
Middle 50%	0.46	0.51	0.66	0.18	0.38	0.51
Highest 25%	0.20	0.49	0.15	0.44	0.20	0.32
Television						
None	0.01	0.07	0.05	0.25	0.03	0.08
Bottom 25%	0.26	0.49	0.00	0.05	0.18	0.29
Middle 50%	0.57	0.44	0.27	0.19	0.41	0.54
Highest 25%	0.16	0.00	0.69	0.52	0.19	0.30
Video Games						
None	0.36	0.79	0.61	0.41	0.37	0.50
Bottom 25%	0.23	0.00	0.01	0.00	0.10	0.20
Middle 50%	0.28	0.15	0.36	0.32	0.22	0.34
Highest 25%	0.14	0.05	0.02	0.27	0.09	0.18
Communication						
None	0.68	0.02	0.02	0.96	0.53	0.65
Bottom 25%	0.15	0.06	0.04	0.01	0.07	0.15
Middle 50%	0.15	0.42	0.42	0.00	0.13	0.23
Highest 25%	0.02	0.50	0.52	0.04	0.08	0.17
Social Media						
None	0.75	0.58	0.04	0.87	0.62	0.74
Bottom 25%	0.07	0.37	0.01	0.13	0.06	0.15
Middle 50%	0.14	0.05	0.45	0.00	0.09	0.19
Highest 25%	0.04	0.00	0.50	0.00	0.04	0.10
Any Web/Other	0.28	0.56	0.26	0.17	0.23	0.35
Descriptive Means						
Age	14.20	15.74	15.57	14.39	14.24	14.79
Male	0.51	0.30	0.43	0.65	0.42	0.57
Race/Ethnicity						
Non-Hispanic White	0.67	0.65	0.48	0.70	0.58	0.73
Non-Hispanic Black	0.16	0.14	0.19	0.09	0.09	0.21
Hispanic	0.12	0.11	0.27	0.15	0.08	0.19
Other	0.04	0.09	0.06	0.06	0.02	0.08
Primary Caregiver Education						
Less than High School	0.09	0.05	0.16	0.09	0.05	0.14
High School Grad	0.26	0.32	0.39	0.25	0.19	0.36
Some College	0.34	0.17	0.27	0.42	0.24	0.41
4-Year College Grad	0.31	0.46	0.18	0.24	0.23	0.38
2 Parents in Home	0.61	0.64	0.52	0.45	0.48	0.69
Kids in Home	2.29	2.36	1.98	2.24	2.07	2.46
Total Technology Time	29.91	33.38	47.31	39.44	30.73	35.24
Total Technology Time (No TV)	16.96	27.98	30.02	23.55	18.03	22.22
Devices in Home						
Smartphone	0.93	0.97	0.94	0.73	0.87	0.96
Computer	0.90	0.96	0.84	0.89	0.86	0.94
Tablet	0.73	0.82	0.79	0.61	0.67	0.80
<i>N</i>	388	40	34	65	527	

Table A3. Estimated coefficients and robust standard errors from ordinary least squares regressions predicting weekly sleep hours and negative binomial regressions predicting weekly physical activity hours as a function of technology use profile, adolescents aged 11-17 years, Panel Study of Income Dynamics 2014 Child Development Supplement.

	Sleep	Physical Activity
Technology Use Profile [reference=Traditional]		
Gaming Focused	0.58 (1.74)	-1.13** (0.32)
Communicators	-0.38 (2.51)	-0.09 (0.32)
Media Saturated	1.09 (2.55)	-0.12 (0.30)
Adolescent is male [reference=female]	-0.40 (1.56)	0.78*** (0.19)
Race/Ethnicity [reference=Non-Hispanic White]		
Non-Hispanic Black	2.75 (2.26)	-0.09 (0.30)
Hispanic	-3.42 (4.36)	-0.66 (0.37)
Other race/ethnicity	-3.01 (2.34)	-0.09 (0.50)
Primary caregiver's education [reference=High school Graduate]		
Less than High School	3.49 (3.26)	-0.11 (0.27)
Some College	-0.92 (2.43)	-0.06 (0.28)
4-Year College Graduate	-0.53 (1.95)	0.41 (0.29)
Adolescent Age in Years	-0.79 (0.42)	0.05 (0.05)
Two Parents in Home [reference=Other]	-0.35 (2.50)	0.32 (0.21)
Number of Minor Children in Home	-1.26 (0.82)	0.05 (0.08)
Constant	80.74*** (6.63)	-0.18 (0.69)
Overdispersion parameter (natural log of alpha)		1.40*** (0.15)
<i>N</i>	527	527

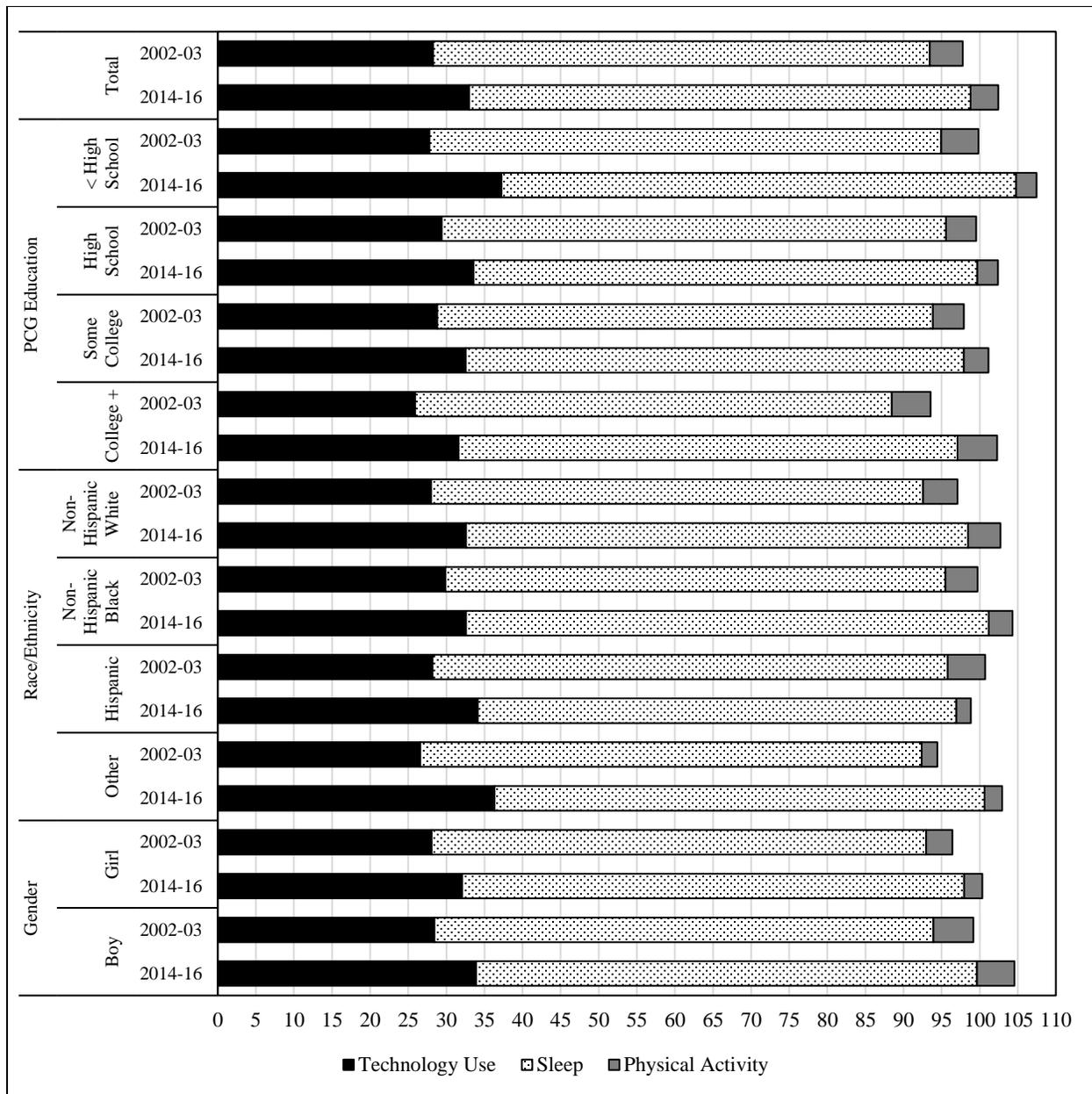


Figure A1. Total Time in Technology Use, Sleep, and Physical Activity by Primary Caregiver Education, Race/Ethnicity, and Gender, 2002-03 and 2014-16. Source: *Panel Study of Income Dynamics Child Development Supplement Time Diaries*. $N = 1,866$.