

**Supplemental Tables for:**

Sallis, J.F., Prochaska, J.J., Taylor, W.C., Hill, J.O., and Geraci, J.C. (1999). Correlates of physical activity in a national sample of girls and boys in grades four through twelve. **Health Psychology, 18**, 410-415.

## Supplemental Table 1

Items in the Child's Global Physical Activity Index (Cronbach Alpha = 0.76)

Respondent	Question	Source	Range
Child	On how many of the past 7 days did you exercise or participate in sport activities for at least 20 minutes that made you sweat and breathe hard, such as basketball, jogging, swimming laps, tennis, fast bicycling, or similar aerobic activities?	YRBS	[0,7]
Child	On how many of the past 7 days did you do stretching exercises, such as toe touching, knee bending, or leg stretching?	YRBS	[0,7]
Child	On how many of the past 7 days did you do exercises to strengthen or tone your muscles, such as push-ups, sit-ups, or weight lifting?	YRBS	[0,7]
Child	On how many of the past 7 days did you walk or bicycle for at least 30 minutes at a time? Include walking or bicycling to or from school.	YRBS	[0,7]
Child	During the past 12 months, on how many sports teams run by your school, did you play? Do not include PE classes.	YRBS	[0,3+]
Child	During the past 12 months, on how many sports teams run by organizations outside of your school, did you play? Do not include PE classes.	YRBS	[0,3+]
Child	Approximately how many hours per week are you physically active?	new	[0,168]
Child	Please give a rating for your own physical activity level.	new	[0,10]
Child	On how many days during the past 7 days did you get at least 30 minutes of moderate physical activity?	new	[0,7]
Parent	Please give a rating for your child's physical activity level.	new	[0,10]
Parent	How often does your child participate in organized sports or in other vigorous physical activity?	new	[1,5]

Note. YRBS = Youth Risk Behavior Survey.

Supplemental Table 2  
Description of 22 Explanatory Variables

Variable Name	Respondent	Description, sample items
Demographic variables		
Parent education (1 item)	parent	Parent education: 1 = < H.S. graduate 6 = Post-graduate Degree
Single parent status (1 item)	parent	Parent marital status: 1 = Single parent 2 = Two-parent household
Child's race/ethnicity (1 item)	parent	Child's racial/ethnic group: African American, Caucasian, Hispanic, Other
Child psychological & biological variables		
Body mass index (BMI) (2 items)	child	Body Mass Index: weight in kg/(height in meters) <sup>2</sup>
Body satisfaction (1 item)	child	Do you like your body? No, Sometimes, Yes
Enjoyment of PE (1 item)	child	Do you enjoy PE class? No, Yes
Sum of general barriers to PA (9 items)	child	Factors that prevent participation in PA - health problems, self-conscious, perceived overweight, lack of interest or enjoyment, self-discipline, energy, knowledge, athletic competence, not wanting to be muscular.
Sum of time barriers (5 items)	child	Factors related to time constraints that prevent participation in PA - no time, too busy, job demands, homework, other hobbies.
School grades (1 item)	child	Most common grade received on last report card: 0=F 5=C+ 10=A
Use of afternoon time (1 item)	child	Activity that "takes up the most amount of time from the time school gets out until dinner." -1 = Watch TV/play video or computer games +1 = Play outside/Play a Sport 0 = All other (e.g. read, homework, practice an instrument)
Getting to school (1 item)	child	Form of transportation to school - 1= walking, biking 0 = all others
Social variables		

Variable Name	Respondent	Description, sample items
Parent PA index (6 items) Cronbach $\alpha = 0.66$	parent	Scale of 6 items related to time spent in vigorous and moderate physical activities, stretching & strengthening
Importance of child's PA (1 item)	parent	Importance of child participating in PA to parents 1 = not very important 4 = consider it critical
Parent PA enjoyment (2 items)	parent	Parents personal enjoyment of PA or sports: Yes, No, Not applicable
Paid fees for PA (1 item)	parent	Payment of fees for child to participate in PA: 0 = has not paid fees 1 = has paid fees
Family support index (15 items) Cronbach $\alpha = 0.68$	child & parent	Support from family members for child to be involved in PA - e.g., watch child compete, transportation, encouragement, plays with child.
Sum of social barriers (4 items)	child	Report of social factors that prevent participation in organized sports or other PA - e.g., no one to exercise with, chosen last for teams, kids tease me, friends don't exercise.
Parent BMI (2 items)	parent	Body Mass Index (BMI): weight in kg/(height in meters) <sup>2</sup>
Environmental variables		
Access to play space (3 items)	parent	Availability of convenient places for child to be physically active - e.g., sidewalks, big yard, park area.
Play rules index (5 items) Cronbach $\alpha = 0.75$	parent	Report of restrictions on child's PA - e.g., not allowing child in neighborhood without adult supervision, not allowing child to walk to the park or recreation facility.
Supervised programs (10 items)	parent	Availability of supervised programs for child in the community [Sum of times available x Sum of different types of activities]
Sum of environmental barriers (3 items)	child	Report of environmental factors that prevent participation in PA - lack of equipment, unsafe in the neighborhood, no transportation.

Note. PA = physical activity; PE = physical education; BMI = body mass index.

Supplemental Table 3

## Descriptive Statistics for Variables by Age and Sex Subgroups, % Or Mean (SD)

	Males in Grade			Females in Grade		
	4 <sup>th</sup> -6 <sup>th</sup>	7 <sup>th</sup> -9 <sup>th</sup>	10 <sup>th</sup> -12 <sup>th</sup>	4 <sup>th</sup> -6 <sup>th</sup>	7 <sup>th</sup> -9 <sup>th</sup>	10 <sup>th</sup> -12 <sup>th</sup>
	n=284	n=283	n=211	n=273	n=239	n=214
Child PA Index (mean=0, SD=1.0)	-0.03 (0.87)	0.23 (0.96)	0.18 (1.09)	-0.30 (0.86)	-0.07 (1.01)	-0.05 (1.14)
Vigorous PA (days per week)	4.49 (1.91)	4.96 (1.83)	4.57 (2.10)	4.02 (2.03)	4.28 (2.12)	3.81 (2.23)
Stretching (days per week)	3.15 (2.01)	3.76 (2.36)	3.46 (2.48)	3.20 (2.00)	4.17 (2.18)	3.65 (2.39)
Strengthening (days per week)	2.88 (2.04)	3.24 (2.17)	3.46 (2.27)	2.36 (1.88)	3.09 (2.33)	3.22 (2.28)
Walk/Bike (days per week)	2.77 (2.37)	2.75 (2.43)	2.45 (2.46)	2.58 (2.34)	2.90 (2.52)	2.36 (2.32)
School sports (no. of teams)	0.76 (1.01)	1.05 (1.08)	1.17 (1.12)	0.80 (1.00)	1.02 (1.09)	0.94 (1.06)
Non-school sports (no. of teams)	1.19 (1.10)	0.97 (1.06)	0.73 (0.92)	0.95 (1.00)	0.84 (0.98)	0.64 (0.90)
Hours/week all PA	11.04 (13.02)	14.74 (14.19)	17.63 (19.23)	8.52 (10.26)	11.45 (12.32)	12.16 (13.15)
Moderate PA (days per week)	3.71 (2.18)	4.51 (2.23)	4.53 (2.11)	3.83 (2.26)	4.13 (2.17)	4.02 (2.18)
PA rating (child report) (range = 1-10)	6.84 (1.95)	6.62 (1.51)	6.56 (1.71)	6.83 (1.96)	6.40 (1.63)	5.97 (1.80)
PA rating (parent report) (range = 1-10)	6.89 (1.85)	7.05 (1.90)	7.26 (1.96)	6.63 (1.75)	6.47 (2.04)	6.50 (2.29)
Vigorous PA (parent report)	1.49 (0.71)	1.64 (0.81)	1.74 (0.89)	1.63 (0.72)	1.90 (0.92)	2.23 (1.24)
Parent education ≤ H.S. graduate	7%	4%	7%	8%	8%	6%

	Males in Grade			Females in Grade		
	4 <sup>th</sup> -6 <sup>th</sup>	7 <sup>th</sup> -9 <sup>th</sup>	10 <sup>th</sup> -12 <sup>th</sup>	4 <sup>th</sup> -6 <sup>th</sup>	7 <sup>th</sup> -9 <sup>th</sup>	10 <sup>th</sup> -12 <sup>th</sup>
Graduated H.S.	16%	20%	18%	15%	19%	20%
Attended college	40%	36%	37%	38%	42%	40%
Graduated college	20%	19%	18%	21%	17%	13%
Post-graduate	17%	21%	19%	18%	13%	22%
Single parent status						
Married/divorced/widowed	86%	89%	86%	88%	84%	81%
Never married	14%	11%	14%	12%	16%	19%
Child race/ethnicity						
Caucasian	71%	76%	74%	73%	76%	72%
Hispanic	10%	8%	11%	9%	9%	6%
African American	15%	11%	11%	16%	11%	17%
Other	5%	5%	3%	3%	3%	4%
Body mass index (BMI)	18.76 (3.74)	20.55 (3.73)	22.82 (3.73)	18.53 (3.67)	20.05 (3.61)	21.10 (2.82)
Body satisfaction						
Like body as is	88%	89%	82%	84%	77%	75%
Sometimes like	4%	1%	4%	4%	4%	4.2%
Do not like body	9%	10%	14%	11%	19%	21%
Enjoyment of PE (yes)	86%	79%	52%	88%	69%	43%
General barriers to PA [range: 0,9]	1.09 (1.47)	0.63 (0.95)	0.74 (1.10)	0.87 (1.19)	0.95 (1.29)	1.07 (1.40)
Time barriers to PA [range: 0,5]	1.37 (1.27)	1.40 (1.29)	1.74 (1.61)	1.39 (1.35)	1.60 (1.46)	2.00 (1.73)
School grades [range: 0,10]	8.30 (2.05)	7.78 (2.11)	7.42 (1.94)	9.03 (1.55)	8.36 (2.04)	7.76 (2.06)
Use of afternoon time						
Play outside/sport	42%	45%	46%	37%	23%	26%
Watch TV/video	13%	14%	13%	8%	10%	10%
All other	45%	41%	39%	55%	67%	62%

	Males in Grade			Females in Grade		
	4 <sup>th</sup> -6 <sup>th</sup>	7 <sup>th</sup> -9 <sup>th</sup>	10 <sup>th</sup> -12 <sup>th</sup>	4 <sup>th</sup> -6 <sup>th</sup>	7 <sup>th</sup> -9 <sup>th</sup>	10 <sup>th</sup> -12 <sup>th</sup>
Walk/bike to school	25%	16%	7%	17%	9%	9%
Parent PA index	-0.01	0.06	-0.04	-0.05	0.03	0.00
(mean=0, SD=1.0)	(0.97)	(0.94)	(1.04)	(0.95)	(1.09)	(1.02)
Importance of child's PA	2.88	2.83	2.88	2.88	2.80	2.75
[range: 1,4]	(0.57)	(0.65)	(0.63)	(0.62)	(0.62)	(0.61)
Parent enjoyment of PA						
Both parents	63%	58%	57%	58%	56%	57%
One parent	23%	22%	26%	22%	25%	18%
Neither	5%	7%	4%	5%	5%	5%
Paid fees for child's PA	82%	74%	70%	77%	73%	65%
Family support	11.03	10.85	10.27	11.05	10.72	9.89
[range: 0,15]	(2.42)	(2.56)	(2.90)	(2.55)	(2.80)	(2.85)
Social barriers	0.61	0.42	0.27	0.35	0.44	0.38
[range: 0,5]	(0.82)	(0.72)	(0.55)	(0.71)	(0.75)	(0.68)
Access to play space	2.02	2.04	2.08	2.08	1.93	2.06
[range: 0,3]	(0.86)	(0.85)	(0.84)	(0.83)	(0.83)	(0.80)
Play rules	2.94	4.00	4.33	2.31	3.17	4.09
[range: 0,5]	(1.38)	(1.14)	(1.09)	(1.42)	(1.47)	(1.29)
Supervised programs	11.06	11.27	13.03	11.00	11.34	11.33
[range: 0,24]	(5.94)	(6.02)	(6.25)	(6.07)	(6.24)	(6.47)
Environmental barriers	0.60	0.45	0.27	0.40	0.45	0.39
[range: 0,2]	(0.85)	(0.70)	(0.55)	(0.65)	(0.70)	(0.70)

Note. PA = physical activity; VPA = vigorous physical activity; MPA = moderate physical activity; YRBS = Youth Risk Behavior Survey; PE = physical education; BMI = body mass index.

Appendix Table 4  
Bivariate Correlations: Demographic, Child, Social & Environmental Variables with  
 Child Physical Activity Index

	<u>Males in Grades</u>			<u>Females in Grades</u>		
	4-6	7-9	10-12	4-6	7-9	10-12
Demographic variables						
Parent Education	0.09	0.05	0.14*	0.08	0.11	0.00
Single Parent Status	-0.10	-0.07	0.10	-0.04	0.05	0.03
Child Race/Ethnicity						
Black	-0.05	-0.03	0.07	0.02	-0.05	-0.05
Hispanic	0.09	0.03	0.00	0.11	-0.04	0.09
White	-0.02	0.07	-0.07	-0.01	-0.05	0.05
Child variables						
Child BMI	-0.12	-0.02	-0.23**	-0.10	-0.18**	-0.01
Body Satisfaction	0.02	0.10	0.30**	0.08	0.13	0.14*
Enjoyment of PE	0.16**	0.13*	0.24**	0.09	0.24**	0.26**
General PA Barriers	-0.08	-0.21**	-0.32**	-0.10	-0.26**	-0.39**
Time Barriers to PA	-0.08	-0.18**	-0.49**	-0.24**	-0.26**	-0.38**
School Grades	0.10	0.06	0.11	-0.02	0.14*	0.05
Use of Afternoon Time	0.24**	0.32**	0.31**	0.28**	0.32**	0.52**
Getting to School	0.12	0.04	-0.12	0.00	0.04	0.18**
Social variables						
Parent PA Index	0.17**	0.17**	0.11	0.11	0.12	0.07
Importance of Child's PA	0.13*	0.20**	0.25**	0.01	0.20**	0.40**
Parent Enjoyment of PA	0.09	0.17**	0.12	-0.02	0.11	0.18**
Paid Fees for PA	0.06	0.32**	0.36**	0.11	0.22**	0.38**
Family Support	0.31**	0.34**	0.37**	0.29**	0.27**	0.60**
Social Barriers	-0.12	-0.22**	-0.20**	-0.11*	-0.18**	-0.23**
Parent BMI	-0.04	-0.14	-0.10	-0.01	-0.09	0.02
Environmental variables						
Access to Play Space	0.02	0.04	-0.06	0.02	0.01	0.09

	<u>Males in Grades</u>			<u>Females in Grades</u>		
	4-6	7-9	10-12	4-6	7-9	10-12
Play Rules	-0.02	0.16**	-0.09	0.04	0.11	0.19**
Supervised Programs	0.04	0.14*	0.14*	0.04	0.10	0.19**
Environmental Barriers	-0.05	-0.13*	-0.17*	-0.11	-0.18**	-0.14*

\*  $p < .05$ . \*\*  $p < .01$ .