IPEN-Adolescent: Description of Countries and Procedures

	AUSTRALIA	BANGLAD ESH	BELGIUM	BRAZIL	CZECH REPUBLIC	DENMARK	HONG KONG SAR	INDIA	ISRAEL	MALAYSIA	NEW ZEALAND	NIGERIA	PORTUGAL	SPAIN	USA
Principal Investigator	Salmon & Timperio	Islam	Van Dyck	Reis	Mitáš & Frömel	Troelsen	Cerin	Anjana	Epel	Manan	Hinckson	Oyeyemi	Mota & Santos	Molina- García	Sallis
														Co- Investigator : Ana Queralt	
Funding sources in addition to NHLBI IPEN grant			Research Foundation Flanders	The Brazilian National Council for Scientific and Technologic al Developmen t (CNPq)	Czech Science Foundation and Faculty of Physical Culture	Faculty of Health Science, SDU	Health and Medical Research Fund – Hong Kong SAR	Madras Diabetes Research Foundation	Israel Science Foundation	Universiti Sains Malaysia Internationa I Research Collaborati on Grant (IReC)	Health Research Council of New Zealand		Research Centre (CIAFEL) supported by FCT (Portuguese Foundation for Science and Technology)	Valencian Communit y, Spain	National Heart, Lung, & Blood Institute
Study name & website	NEArbY Study	IPEN- Adolescent Bangladesh	IPEN- Adolescent Belgium	ESPACOS- adolescentes	IPEN Adolescent: International research of Built Environment and Physical Activity	IPEN- Adolescent Denmark	iHealt(H)	BE ACTIV INDIA !	IPEN - Israel	IPEN Adolescent: Study of Built Environment and Physical Activity	BEANZ	IPEN Adolesc ent- Nigeria	IPEN- Portugal	IPEN Adolescent- Spain	TEAN
Study specific publications (up to 5)		Islam et al., 2016 ¹		Alberico et al., 2016 ² ; Prado et al., 2017 ³			Cerin et al., 2014 ⁴ ; Cerin et al., 2017 ⁵				Hinckson et al., 2017 ⁶ ; Hinckson et al., 2017 ⁷ ; Schofield et al., 2015 ⁸		Pizarro et al., 2017 ⁹ ; Pizarro et al., 2016 ¹⁰	- Molina- Garcia et al., 2017 ^{11;} Aznar et al., 2018 ^{12;} Estevan et al., 2018 ^{13;}	Sallis et al., 2018 ^{16;} Borner et al., 2018 ^{17;} Xiaoba et al.,

Table 1: Study details & summary statistics for 15 IPEN-Adolescent study countries to demonstrate range of across-country variability

														Molina- Garcia et al., 2019 ¹⁴ ; Queralt et al., 2019 ¹⁵	2017 ¹⁸ ; Carlson et al., 2017 ¹⁹ ; Carlson et al., 2017 ²⁰
GDP per capita in US dollars ²¹	49,900	4,200	46,300	15,500	35,200	49,600	61,000	7,200	36,200	28,900	38,500	5,900	30,300	38,200	59,500
Obesity rates % BMI 30+ ²²	Males: 29.6 Fem: 28.4	Males: 2.3 Fem: 5.0	Males: 23.1 Fem: 21.0	Males: 18.5 Fem: 25.4	Males: 26.4 Fem: 25.4	Males: 22.3 Fem: 17.0	Males: 35.4 Fem: 30.1 BMI <u>≥</u> 25	Males: 2.7 Fem: 5.1	Males: 25.9 Fem: 26.2	Males: 13.0 Fem: 17.9	Males: 30.1 Fem: 31.4	Males: 4.6 Fem: 13.1	Males: 20.3 Fem: 21.2	Males: 24.6 Fem: 22.8	Males: 35.5 Fem: 37.0
Life expectancy in years ²²	84.8	73.1	83.5	78.7	81.7	82.5	77.6 (China)	69.9	84.3	77.3	83.3	55.6	83.9	85.5	81.6
Deaths from non- communica ble diseases (%) ²³	91.0	59.0	87.0	74.0	90.0	90.0	missing	60.0	86.0	73	82	24	86	92	88
Prevalence of meeting PA guidelines in adults ²³	43.0	73.0	67.0	72.0	76.0	76.0	40.0	87.0	32.0	48	52	78	65	70	68.0
Population per sqkm ²⁴	3.1	1277.0	373.1	24.7	136.7	135.1	6847.2	426.1	420.4	96.3	17.8	204.3	112.9	93.2	35.3
Car ownership per 1000 population ²⁵	740	3	559	249	485	480	77	151	383	361	774	61	548	593	795

Fable 2: Neighborhood selectior	criteria for 15	5 IPEN-Adolescent countries
---------------------------------	-----------------	-----------------------------

	AUSTRALIA	BANGLA DESH	BELGIUM	BRAZIL	CZECH REPUBLIC	DENMARK	HONG KONG SAR	INDIA	ISRAEL	MALAYSIA	NEW ZEALAND	NIGERIA	PORTUGAL	SPAIN	USA
Cities/ regions	Melbourne	Dhaka	Ghent	Curitiba	Olomouc & Hradec Králové	Odense	Hong Kong	Chennai	Haifa	Kuala Lumpur	Auckland & Wellington	Maiduguri	Porto, Gondomar, Matosinhos, Maia, Valongo	Valencia	Baltimore , MD & Seattle, WA
# schools or admin units (if did not recruit through schools)	19 schools	6 schools	4 schools	40 census tracts	10 schools	8 schools	19 schools	157 wards	51 statistical areas	15 schools	8 schools	8 schools	6 schools	9 schools	447 block groups
Walkability administrati ve unit	SA1 (Statistical Area 1)	Wards	Statistical sectors	Census tracts	Cadastral Areas	Statistical Units	Tertiary Planning Units (TPU's)	Wards	Statistical areas defined by the Israel Central bureau of statistics	Neighborho od units	Meshblocks	Census enumeratio n areas	Census block groups "Secção"	Census tracts	U.S. Census block groups (2000)
Walkability index details	GIS: 5 land uses, intersection density, gross residential density, No retail FAR	GIS: 10 land uses, Intersecti on density, net residential density, land use mix No retail FAR	GIS: 5 land uses, Intersection density, net residential density, land use mix No retail FAR	GIS: 5 land uses, intersectio ns density, net residential density, land use mix, retail density	GIS: 4 land uses, intersection density, net residential density, land use mix, retail FAR	GIS: 6 land uses, intersection density, net residential density, land use mix, retail FAR	GIS: 5 land uses, Intersecti on density, net residential density, land use mix No retail FAR	No GIS	GIS: 3 land uses, intersectio n density, net residential density, land use mix No retail FAR	GIS: No land uses, intersection density, net residential density, land use mix No retail FAR	GIS: 5 land uses, intersectio n density, gross residential density, land use mix No retail FAR	No GIS	GIS: 8 land uses, intersection density, net residential density, land use mix No retail FAR	GIS: 7 land uses, intersectio n density, net residential density, land use mix No retail FAR	GIS: 5 land uses, intersecti on density, net residenti al density, land use mix, retail FAR

Walkability criteria	Deciles 1-5 (low) Deciles 6 to 10 (high)	25 th %tile and lower (low) 75th %tile higher (high)	Deciles 6- 10 (low) Deciles 1 to 5 (high)	Deciles 2- 3 (low) Deciles 8 to 9 (high	Deciles 1-4 (low) Deciles 7 to 10 (high)	Deciles 1-5 (low) Deciles 6 to 10 (high)	Deciles 1- 5 (low) Deciles 6 to 10 (high)	High or low based on expert judgments by people familiar with GIS-based walkability components	Deciles 1- 5 (low) Deciles 6 to 10 (high)	Deciles 1-5 (low) Deciles 6 to 10 (high)	Deciles 1-5 (low) Deciles 6 to 10 (high)	High or low based on expert judgments by people familiar with GIS- based walkability components	Deciles 1-4 (low) Deciles 7 to 10 (high)	Deciles 1- 5 (low) Deciles 6 to 10 (high)	Deciles 1-4 (low) Deciles 7 to 10 (high)
SES criteria	Deciles 1-5 (low) Deciles 6 to 10 (high)	25 th %tile and lower (low) 75th %tile and higher (high)	Deciles 6- 10 (low) Deciles 1 to 5 (high)	Deciles 2- 4 (low) Deciles 8 to 9 (high)	Deciles 2-4 (low) Deciles 7 to 9 (high)	Deciles 1-5 (low) Deciles 6 to 10 (high)	Deciles 1- 5 (low) Deciles 6 to 10 (high)	High or low based on expert judgment	Deciles 1- 5 (low) Deciles 6 to 10 (high)	0 (low) 1 (high)	Deciles 1-5 (low) Deciles 6 to 10 (high)	High or low based on expert judgment	Deciles 1-4 (low) Deciles 7 to 10 (high)	Deciles 1- 5 (low) Deciles 6 to 10 (high)	Deciles 1-5 (low) Deciles 7-9 (high)
SES sources	Median household income from Australian Bureau of Statistics 2011	Education (Literacy rate) from Banglade sh Bureau of Statistics 2011	Household income from city council Ghent 2012	Household income from Brazilian Institute of Geography and Statistics (IBGE) (http://ww w.ibge.gov .br/english/) 2010	Degree of education, rate of unemploym ent from Czech Census of Population and Housing 2011	Household income from Municipality of Odense 2013	Median household income at the TPU level from Census and Statistics Departme nt - Hong Kong 2011	Expert judgments	SES index of the Israeli Central Bureau of Statistics: composite measure: demograp hics, employme nt, income, education, car ownership, density. 2008	Self reported Income 2015	Census median personal income from Statistics New Zealand 2006	National Population Commission	Education from the Portuguese Census 2011	Education from Spanish National Statistics Institute 2011	Median household income (2000 U.S. Census). 1999

# participants per quadrant	High walk/high SES=99	High walk / high SES:23	High walk / high SES: 48	High walk / high SES:106	High walk / high SES: 332	High walk / high SES: 55	High walk / high SES: 318	High walk / high SES: 77 High walk /	High walk / high SES: 35	High walk / high SES: 237	High walk / high SES: 146	High walk / high SES: 16	High walk / high SES: 39	High walk / high SES: 110	High walk / high SES: 269
	High walk/low SES=141	High walk /low SES:19	High walk /low SES:135	High walk /low SES:116	High walk /low SES: 332	High walk /low SES:64	High walk /low SES:351	low SES: 90 Low walk /high SES: 80	High walk /low SES:42	High walk /low SES:385	High walk /low SES:136	High walk /low SES: 132	High walk /low SES:22	High walk /low SES:64	High walk /low SES:271
	Low walk/high SES=99	Low walk /high SES:24	Low walk /high SES:111	Low walk /high SES:146	Low walk /high SES:85	Low walk /high SES: 70	Low walk /high SES: 366	Low walk /low SES: 77	Low walk /high SES: 42	Low walk /high SES: 68	Low walk /high SES: 298	Low walk /high SES: 96	Low walk /high SES: 15	Low walk /high SES: 139	Low walk /high SES: 259
	Low walk/low SES=106	Low walk /low SES:29	Low walk /low SES: 9	Low walk /low SES: 126	Low walk /low SES: 86	Low walk /low SES:44	Low walk /low SES:360		Low walk /low SES:38	Low walk /low SES:77	Low walk /low SES:154	Low walk /low SES: 25	Low walk /low SES:44	Low walk /low SES:152	Low walk /low SES:279

Table 3: Recruitment methods and rates across 15 IPEN-Adolescent countries

	AUSTRALIA	BANGLA DESH	BELGIUM	BRAZIL	CZECH REPUBLIC	DENMARK	HONG KONG SAR	INDIA	ISRAEL	MALAYSIA	NEW ZEALAND	NIGERIA	PORTUGAL	SPAIN	USA
Recruitment Dates	July 2015- Dec 2015	Dec 2015- Jan 2016	Sep 2014– Dec 2015	Aug 2013- June 2014	Spring 2014 - Oct 2015	Fall 2014 + Spring 2015	Oct 2012- Dec 2014	Feb 2015– June 2016	Jan 2015- Jan 2016	Oct 2015– Dec 2016	Sep 2014- June 2015	June 2013- April 2014	Sept 2014– June 2016	April 2013- Oct 2015	2009-2011
Participant identification	Schools	Schools	a) Previous study participants (n=187) b) Schools (n=188)	Address registry	Schools	Schools	Schools	Door to door based on: a) Direct approach b) Staff/ volunteer database c)School database	Direct approach, snowball	Schools	Schools	Schools	Schools	Schools	Telephon e #s from commerci al company
Participant selection method	Recruited from schools selected in neighborho ods stratified by SES and walkability	Recruited from schools selected in neighborho ods stratified by SES and walkability	 a) Recruited previous study participants living in neighborho ods stratified by SES and walkability b) Recruited from schools selected in neighborho ods stratified by SES and walkability 	Recruited directly from residential addresses located in census tracts stratified by SES and walkability	Recruited from schools selected in neighborho ods stratified by SES and walkability	Recruited from schools selected in neighborh oods stratified by SES and walkability	Recruited students from schools living in pre- selected neighborh oods stratified by SES and walkability	Recruited directly from residential addresses located in neighborho ods stratified by walkability and SES based on expert judgment Used other methods such as school- based databases	Recruited directly from residential addresses located in neighborho ods selected to vary on walkability and SES	Recruited from schools in areas stratified by SES and walkability	Recruited from schools in areas stratified by SES and walkability	Recruited from schools selected in neighborho ods stratified by SES and walkability, then random sampling of students from schools.	Recruited from schools selected in areas stratified by SES and walkability, then random sampling of students from schools.	Recruited from schools in areas stratified by SES and walkability	Recruited directly from randomly sampled residential addresses located in neighborh oods stratified on SES and walkability, many NH used all available records

School schedules	Mon-Fri schedule	Sat – Thurs for most. Morning and afternoon sessions.	Mon-Fri schedule	Morning, afternoon, and/or evening sessions. Some classes on Saturdays	Mon-Fri schedule	Mon-Fri schedule	Mon-Fri schedule	Mon-Fri schedule with classes on some Saturdays and Sundays also.	Sun-Thurs or Fri. Variable schedules.	Mon-Fri schedule Morning and afternoon sessions	Mon-Fri schedule	Mon-Fri schedule	Mon-Fri schedule. Some students attended school twice a day (morning & afternoon)	Mon-Fri schedule. Some students attended school twice a day (morning & afternoon	Mon-Fri schedule
Contact mode	In person	In person	In person	In person	In person	In person	In person	In person	In person	In person	In person	In person	In person	In person	Mail/phone
Number of participants with	1 day: n=472	1 day: n=96	1 day: n=315	1 day: n=465	1 day: n=354	1 day: n=191	1 day: n=549	1 day: n=324	1 day: n=226	1 day: n=425	1 day: n=564	1 day: n=279	1 day: n=197	1 day: n=373	1 day: n=913
accelerometer data (1 valid day, 4 valid days)	4 days: n=428	4 days: n=96	4 days: n=284	4 days: n=429	4 days: n=277	4 days: n= 142	4 days: n=545	4 days: n=325	4 days: n=225	4 days: n=358	4 days: n=563	4 days: n=255	4 days: n=172	4 days: n=373	4 days: n=863
Incentives	none	none	none	none	none	Participants were part of a draw to win outdoor play equipment	HK\$50 for survey; HK\$ 50 for accelerom etry	Rs. 750 - 1000 (USD 12-15) gift vouchers	150 Israeli shekels per individual	RM 30 MYR (in form of T-shirt /meal)	Participants went into a draw to receive \$100 Westfield voucher/ \$200 voucher for parents	Gift (Souvenirs) worth \$10 USD	None	None	\$40 USD
Age range	12-19	11-18	11-17	11-17	12-18	11-16	11-18	12-17	11-18	12-17	11-18	12-18	11-18	14-18	12-17
Participation rate (consents/ eligible contacts)	26.3% * (516 consents/ 1961 invited) *this excludes one visit to	Unable to calculate as the number of invited participant s is unknown	42.3% * (187 consents/ 442 eligible contacts from previous study)	61.7% (590 enrolled/ 956 eligible and accessible contacts)	89.7% (758 consents/ 845 invited)	16.7% (286 consents/ 1,716 invited)	68%	11%; 67% * (11 agreed / 100 approached using staff database method; 113 agreed/ 170	Unable to calculate as the number of invited participants is unknown	73.3% (440 consents/ 600 distributed)	12.8% (752 consents/ 5883 invited)	43.1% (279 enrolled/ 648 invited)	35.7% (240 consents/ 673 invited)	80% Schools chose classrooms to participate. Within classrooms	39.6% (1038 enrolled/ 2619 eligible contacts)

	*upoble to		approached			rooruitmont	
a school as	unable to		approached			recruitment	
the	calculate		using school			rate was	
recruitment	rate from		references			80% on	
sheet is not	school		method)			average.	
available	recruitment						
	as number		*unable to				
	of invited		calculate				
	participant		rate from				
	is unknown		direct				
			approach				
			as number				
			of invited				
			participant				
			is unknown				

Table 4: Survey and accelerometer methods and content across 15 IPEN-Adolescent countries (Highlight means still in progress and will be completed along with final codebooks in Aug 2019)

	AUSTRALIA	BANGLADESH	BELGIUM	BRAZIL	CZECH REPUBLIC	DENMARK	HONG KONG SAR	INDIA	ISRAEL	MALAYSIA	NEW ZEALAND	NIGERIA	PORTUGAL	SPAIN	USA
Administration mode	In person, but self- administration of online survey completed at school. Researcher present to answer questions Parents: self- administered (hard copy)	In person	In person, but self- administration of questionnaire. Researcher present to answer questions	In person. Two home visits, with interview conducted in the second	In person/ Online	Online	In person, but self- administrat ion of questionna ire.	In person	In person, but self- administ ration of questio nnaire. Researc her present to answer questio ns	In person	In person	In person	In person	In person	Mail/ Online
NEWS:															
Traffic hazards	В	В	В	В	В	В	В	В	В	В	С	В	В	В	В
Crime safety	В	В	В	В	В	В	В	В	В	В	С	В	В	В	В
Land use mix -access	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	С	Р	Р	Р	Р
Street connectivity	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	С	Р	Р	Р	Р
Infrastructure & safety for walking	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Р	Р	Р	С	Ρ	Ρ	Р	Р
Aesthetics	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	С	Р	Р	Р	Р
Land use mix- diversity	В	Р	Р	Р	Р	Р	Р	Р	Р	Р	С	Р	Р	Р	Р
Residential density	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	С	Р	Р	Р	Р

PA measures:															
Active school commuting	с	С	с	С	С	С	С	С	С	С	С	С	с	С	С
PA at school	с	С	с	С	С		С	С	с	С	С	С	с	С	С
PA outside of school	С	С	с	С	С	С	С	С	С	С	С	С	с	С	С
PA in neighborhood															
PA locations outside of neighborhood															
Walk/bike for transport															
Sports teams outside of school															
Global Physical Activity Questionnair e (GPAQ)															
(work, transport, recreation)															
PA rules															
Sedentary measures: Sedentary behaviors	В	С	С	С	с	С	с	В	с	В	С	В	С	С	В
Sedentary rules															
Sedentary time with															

others															
Psychosocia I measures:															
Benefits & barriers to PA	с	с	с	С	с	С	С	С		С	С	С	с	С	с
Self –efficacy for PA	с	с	с	С	с	С	С	С		с	С	С	С	с	с
Enjoyment of PA	с	с	с	С	С	С	С	С	С	С	С	С	с	с	с
Social support for PA	с	С	С	С	с	С	С	с	с	С	С	С	с	С	с
Self-efficacy to reduce SB															
Enjoyment of SB															
Barriers to reducing SB															
Adolescent BMI	Self-report	Self-report	Self-report	Self-report	Self-report	Self-report	In-person	Self- report	Self- report	Self-report	In-person	Self- report	Self-report	Self- report	Self- report
Other environment measures:															
Home environment	с	с	с	С	С	С	С	С	С	с	С	С	С	с	с
Public transport	с	с	с	С	С	С	С	С	С	С	С	С	с	с	с
Barriers to active school transport Barriers to neighborhood PA Neighborhoo	С	С	С	С	С	С	С	С	С	С	С	С	С	С	С

Demographi cs/Other:															
Adolescent age	Р	Р	Р	Р	Р	Р	Ρ	Р	Р	Р	С	Р	Р	Ρ	Р
Adolescent sex	Р	Р	Р	Р	Р	Р	Р	Ρ	Р	Р	С	Р	Р	Р	Р
Highest household education Parent marital status Self selection # in household	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	Ρ	С	Ρ	Ρ	Ρ	Ρ
# children in household Adolescent driver's license Motor vehicle access															
# motor vehicles in household	Р	Р	Р	Р	Ρ	Р	Ρ	Р	Р	Р		Р	Р	Ρ	Р
Length at residence	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Ρ	Р	Р
Length in neighborhood	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Ρ	Р	Ρ	Ρ	Р
Home ownership Dog ownership Adolescent employment		Ρ			Ρ	Ρ	Ρ		Ρ	Ρ		Ρ			Ρ
GIS (individual	Y	N	Y	Y	Y	Y	Y	N	Y	N	Y	N	Y	Y	Y

variables in participant- based buffers)															
MAPS-Global pedestrian audit data collected	Y (reliability)	N	Y	Y	N	N	Y	Y	N	Y	N	Y	N	Y	Y
GPS data collected	Y (subsample)	Ν	Yes (subsample)	Yes (subsample)	Y	Y	Yes (subsample)	Y	Ν	Ν	Y	N	Y	N	Y
Accelerometer model/filter (%'s using each)	GT3X+ LFE (100%)	GT3X LFE (74.0%) GT3X+ LFE (26.0%)	GT3X LFE (17.8) GT3X+ LFE (82.2%)	GT3X LFE (1.7%) GT3X+ LFE (98.3%)	GT1M LFE (58.8%) GT3X LFE (41.2%)	GT3X Normal (100%)	GT3X+ LFE (100%)	GT1M Normal (49.5%) GT3X+ LFE (50.5%)	GT3X+ LFE (100%)	GT3X+ LFE (100%)	GT3X LFE (1.2%) GT3X+ LFE (98.8%)	GT3X+ LFE (100%)	GT3X+ LFE (100%)	GT1M LFE (2.9%) GT3X+ LFE (97.1%)	7164 (89.7%) GT1M Normal (7.5%) GT3X+ Normal (2.7%)

C= survey measure completed by child

P= survey measure completed by parent

B= survey measure completed by both child and parent

Y=yes

N=no

REFERENCES

- 1. Islam Mohammed Z, Moore R, Cosco, N. Child-Friendly, Active, Healthy Neighborhoods: Physical Characteristics and Children's Time Outdoors. Environment *& Behavior, 2016, 48(5); 711-736.???
- 2. Alberico, C. O., Schipperijn, J., & Reis, R. S. (2017). Use of global positioning system for physical activity research in youth: ESPACOS Adolescentes, Brazil. Preventive Medicine, 103, S59-S65. doi:10.1016/j.ypmed.2016.12.026
- 3. Prado, C. V., Rech, C. R., Hino, A. A. F., & Reis, R. S. (2017). Perception of neighborhood safety and screen time in adolescents from Curitiba, Brazil. *Rev Bras Epidemiol, 20*(4), 688-701. doi:10.1590/1980-5497201700040011
- 4. Cerin E, Sit CHP, Huang YJ, Barnett A, Macfarlane DJ, Wong SHS (2014). Repeatability of self-report measures of physical activity, sedentary and travel behaviour in Hong Kong adolescents for the iHealt(H) and IPEN Adolescent studies. BMC Pediatrics, 14, 142
- 5. Cerin E, Sit CHP, Barnett A, Huang WYJ, Gao GY, Wong SHS, Sallis JF. (2017). Reliability of self-report measures of correlates of obesity-related behaviours in Hong Kong adolescents for the iHealt(H) and IPEN Adolescent studies. Archives of Public Health, 75, 38. (doi: 10.1186/s13690-017-0209-5).
- 6. Hinckson E, Cerin E, Mavoa S, Smith M, Badland H, Stewart T, et al. Associations of the perceived and objective neighborhood environment with physical activity and sedentary time in New Zealand adolescents. International journal of behavioral nutrition and physical activity. 2017;14(1):145. IF=4.396
- 7. Hinckson E, Duncan S, Oliver M, Mavoa S, Cerin E, Badland H, et al. Built environment and physical activity in New Zealand adolescents: a protocol for a cross-sectional study. BMJ Open 2014;4:e004475 doi:10.1136/bmjopen-2013-004475. IF= 2.369

- 8. Schofield G, Hinckson E, Oliver M, Duncan J, Badland H, Mavoa S, et al. Built Environments and Physical Activity in New Zealand Youth: a report for the Health Research Council of New Zealand. Auckland: AUT University; 2015.
- 9. Pizarro AN, Schipperijn J, Ribeiro JC, Figueiredo A, Mota J, Santos MP. Gender differences in the domain-specific contributions to MVPA, accessed by GPS. Journal of Physical Activity and Health, 14(6): 474-478, 2017
- 10. Pizarro AI, Schipperijn J, Andersen HB, Ribeiro JC, Mota J, Santos MP. Active commuting to school in Portuguese adolescents: Using PALMS to detect trips. Journal of Transport & Health. 2016
- 11. Molina-García, J., Queralt, A., Adams, M. A., Conway, T. L., & Sallis, J. F. (2017). Neighborhood built environment and socio-economic status in relation to multiple health outcomes in adolescents. Preventive Medicine, 105, 88-94.
- 12. Aznar, S., Queralt, A., García-Massó, X., Villarrasa-Sapiña, I., & Molina-García, J. (2018). Multifactorial combinations predicting active vs inactive stages of change for physical activity in adolescents considering built environment and psychosocial factors: A classification tree approach. Health & Place, 53, 150-154.
- 13. Estevan, I., Queralt, A., & Molina-García, J. (2018). Biking to school: the role of bicycle-sharing programs in adolescents. Journal of School Health, 88(12), 871-876.
- 14. Molina-García, J., García-Massó, X., Estevan, I., & Queralt, A. (2019). Built environment, psychosocial factors and active commuting to school in adolescents: clustering a self-organizing map analysis. International Journal of Environmental Research and Public Health, 16(1), 83.
- 15. Queralt, A., & Molina-García, J. (2019). Physical activity and active commuting in relation to objectively measured built-environment attributes among adolescents. Journal of Physical Activity & Health, in press
- 16. Sallis, J.F., Conway, T.L., Cain, K.L., Carlson, J.A., Frank, L.D., Kerr, J., Glanz, K., Chapman, J.E., and Saelens, B.E. (2018). Neighborhood built environment and socioeconomic status in relation to physical activity, sedentary behavior, and weight status of adolescents. Preventive Medicine, 110, 47-54. https://doi.org/10.1016/j.ypmed.2018.02.009
- 17. Borner, K.B., Mitchell, T.B., Carlson, J.A., Kerr, J., Saelens, B.E., Schipperijn, J., Frank, L.D., Conway, T.L., Glanz, K., Chapman, J.E., Cain, K.L., & Sallis, J.F. (2018). Latent profile analysis of young adolescents' physical activity across locations on schooldays. *Journal of Transport & Health*, 10; 304-14.
- 18. Xiaobo Wang, Terry L. Conway, Kelli L. Cain, Lawrence D. Frank, Brian E. Saelens, Carrie Geremia, Jacqueline Kerr, Karen Glanz, Jordan A. Carlson, James F. Sallis (2017). Interactions of psychosocial factors with built environments in explaining adolescents' active transportation. *Preventive Medicine*, 100:76-83. doi: 10.1016/j.ypmed.2017.04.008. Epub 2017 Apr 4.
- 19. Carlson, J.A., Mitchell, T.B., Saelens, B.E., Staggs, V.S., Kerr, J., Frank, L.D., Schipperijn, J., Conway, T.L., Glanz, K., Chapman, J.E., Xiaobo Wang, Terry L. Conway, Kelli L. Cain, Lawrence D. Frank, Brian E. Saelens, Carrie Geremia, Jacqueline Kerr, Karen Glanz, Jordan A. Carlson, James F. Sallis (2017). Interactions of psychosocial factors with built environments in explaining adolescents' active transportation. *Preventive Medicine*, 100:76-83. doi: 10.1016/j.ypmed.2017.04.008. Epub 2017 Apr 4.
- 20. Carlson, J.A., Mitchell, T.B., Saelens, B.E., Staggs, V.S., Kerr, J., Frank, L.D., Schipperijn, J., Conway, T.L., Glanz, K., Chapman, J.E., Cain, K.L., & Sallis, J.F. (2017). Within-person associations of young adolescents' physical activity across five primary locations: Is there evidence of cross-location compensation. *International Journal of Behavioral Nutrition & Physical Activity*,14:50, DOI: 10.1186/s12966-017-0507-x
- 21. CIA World Factbook. Available at: https://www.cia.gov/library/publications/the-world-factbook/index.html. Accessed March 26, 2018.
- 22. WHO Global Infobase. Available at: https://apps.who.int/infobase/Comparisons.aspx. Accessed March 26, 2018.
- 23. <u>http://www.globalphysicalactivityobservatory.com/country-cards.</u> Accessed March 26, 2018
- 24. Population of the World. 2010. Available at: http://world.bymap.org/Population.html. Accessed March 26, 2018.
- 25. Wikipedia-List of countries by vehicles per capita. Available at: http://en.wikipedia.org/wiki/List_of_countries_by_vehicles_per_capita. Accessed March 26, 2018.