

Table S2. Extracted data of studies included in systematic review (gender-related findings).

#	Author (year) Country	Study design / Data collection / Participants (sample size; age range (mean); gender; response rate)	Outdoor Play Definition Measurement	Parental correlates Measurement	Main findings of gender differences	Study quality
1	Aarts et al. (2010) [56] Netherlands	<p>Study design cross-sectional</p> <p>Data collection Sep 2007 - Jan 2008</p> <p>Participants n = 6,470 4-12 yrs (7.9 yrs) 49.9% (F) rr = 60%</p>	<p>Definition natural way for children to be physically active [56]; in contrast to organized sports, outdoor play is cheap, informal and easily accessible [8]</p> <p>Measurement parental report: (considering a typical week in the last mo./separately questions for week- and week-end days): 'How many days does your child play outside on week-days/weekends?'; 'On average, how long does your child</p>	<p>Parents' perceived neighborhood physical environment (1) degree of unoccupied houses (2) presence of dog waste (3) presence of water (4) diversity of routes</p> <p>Parents' perceived neighborhood social environment (5) social cohesion</p> <p>Measurements parental report: response options: Five-point Likert scale from 'strongly agree' to 'strongly disagree' [93]</p>	<p>Multivariate GEE analysis (Relative rate; 95% CI): - adjusted for parental education</p> <p>Parents' perceived neighborhood physical environment (1) positive association of the degree of unoccupied houses and outdoor play in boys (10-12 yrs, RR = 1.05, CI: 1.02, 1.08); no association for girls (10-12 yrs)</p> <p>(2) positive association of the presence of dog waste and outdoor play in girls (4-6 yrs, RR = 1.03, CI: 1.00, 1.05); no association for boys (4-6 yrs)</p> <p>(3) positive association of the presence of water and outdoor play in boys (4-6 yrs, RR = 1.04, CI: 1.01, 1.07); no association for girls (4-6 yrs)</p> <p>(4) positive association of the perceived diversity of routes and outdoor play in girls (7-9 yrs, RR = 1.03, CI: 0.99, 1.06) and boys (10-12 yrs, RR = 1.08, CI: 1.03, 1.13); no association for boys (7-9 yrs) and girls (10-12 yrs)</p>	high

			<p><i>spend on out-door play on such a weekday/weekend day?' [93]</i></p>		<p><u>Parents' perceived neighborhood social environment</u> (5) positive association of perceived social cohesion and outdoor play in girls (10-12 yrs, RR = 1.02, CI: 1.01, 1.04); no association for boys (10-12 yrs)</p>	
					<p>Longitudinal linear regression (adjusted β coefficient; 95% CI; p-value): - adjusted for maternal education, parental marital status, outdoor tendencies, parental encouragement, social opportunities, supervision, dog ownership, yard size, home PA opportunities, weather</p>	
2	<p>Cleland et al. (2010) [23] Australia</p>	<p><u>Study design</u> longitudinal</p> <p><u>Data collection</u> Jul - Dec 2001, 2004 and 2006 (The Children Living in Active Neighborhoods (CLAN) study)</p> <p><u>Participants</u> n = 421 5-6 and 10-12 yrs at baseline (n.c.) n.c. (F) rr = 38.3%</p>	<p><u>Definition</u> n.r.</p> <p><u>Measurement parental report:</u> <i>'In total, how many hrs/min does your child usually spend outside during a typical week after school?'</i> (separately for week- and weekend days)</p>	<p><u>Parenting practices</u> (1) outdoor social opportunities <u>Parents' social and cultural correlates</u> (2) parental encouragement</p> <p><u>Measurements parental report:</u> (1) four statements about who the child goes outside with (ICC 0.61-0.79) (2) responses to two statements about encouragement of and success in getting the child to play outside (ICC 0.42-0.54)</p>	<p><u>Parenting practices</u> (1) high social opportunities ($\beta=169.7$; CI: 25.9, 313.6; $p<0.05$) are positively associated with average weekly time (minutes/week) spent outdoors in boys (5-6 yrs) (ref low); no association of high social opportunities and outdoor play ($p>0.05$) for girls (5-6 yrs)</p> <p><u>Social and cultural correlates</u> (2) high parental encouragement ($\beta=234.0$; CI: 30.1, 437.8; $p<0.05$) is positively associated with average weekly time (minutes/week) spent outdoors in girls (5-6 yrs) (ref low); no association of high parental encouragement and outdoor play ($p>0.05$) for boys (5-6 yrs)</p> <p>(2) high parental encouragement ($\beta=151.4$; CI: 66.6, 236.2; $p<0.01$) is positively associated with</p>	<p><i>fair</i></p>

average weekly time (minutes/week) spent outdoors in girls (10-12 yrs) (ref low); no association of high parental encouragement and outdoor play ($p>0.05$) for boys (10-12 yrs)

3	<p>Nicksic et al. (2018) [48]</p> <p>United States</p>	<p>Study design cross-sectional</p> <p>Data collection 2012 - 2014 (from Texas Childhood Obesity Research Demonstration (TX CORD))</p> <p>Participants n = 748 grade 5 (n.r.) 57.9% (F) rr = ~90%</p>	<p>Definition n.r.</p> <p>Measurement parental report: <i>'Most of the time does your child play outdoors for at least 30 min per day? Do not count outdoor play during school hrs.'</i></p> <p>child's report: <i>'Last week, on what days did you play outdoors for at least 30 min or more? Do not count outdoor play during school hrs.'</i> (Spearman's correlation between child's and parents report 0.168; $p=0.01$)</p>	<p>Parents' social and cultural correlates (1) parental encouragement</p> <p>Parents' perceived neighborhood social environment (2) neighborhood safety</p> <p>Measurements parental report: (1) extent of agreement with the statement 'If the weather is good, I encourage my child to play outside.'; (Likert scale: 'strongly disagree' to 'strongly agree') [109]</p> <p>(2) 11-item scale (Cronbach's $\alpha=0.91$); adapted from the Teen Health 2000 Study [110]</p>	<p>Multivariate models (β coefficient; p-value): - adjusted for sociodemographic variables, child's weight status, parent's PA</p> <p>Social and cultural correlates (1) positive association of parental encouragement and child's reported outdoor play in girls ($\beta=0.650$; $p=0.018$); no significant association for boys ($p>0.05$)</p> <p>Parents' perceived neighborhood social environment (2) positive association of perceived neighborhood safety ($\beta=0.667$; $p=0.033$) and child's reported outdoor play in boys; no association for girls ($p>0.05$)</p>	<p><i>high</i></p>
4	<p>Wilkie et al. (2018) [57]</p>	<p>Study design cross-sectional</p> <p>Data collection</p>	<p>Definition n.r.</p> <p>Measurement</p>	<p>Parents' perceived neighborhood physical environment (1) traffic related safety concerns</p>	<p>Multivariate logistic regression (OR; 95% CI; p-value): - adjusted for age, sex, SES</p>	<p><i>high</i></p>

United Kingdom	Sep 2011 - Jan 2013 (from International Study of Childhood Obesity, Lifestyle and the Environment (ISCOLE))	child's report: <i>time spend outside 'on a school day after school before bedtime' and 'on a weekend day' ('<1hr'; '1hr'; '2hrs'; '3hrs'; '4hrs'; '5 or more hrs' (Diet and Lifestyle Questionnaire [120]</i>	Measurements parental report: (1) traffic related safety concerns (10 items): Neighborhood Environment Walkability Scale for Youth [118]	Parents' perceived neighborhood physical environment (1) per increased unit in the traffic-related safety concerns score lower odds of spending more time outdoors after school in boys only (OR=0.52;CI: 0.28, 0.97; p=0.040) were found; no significant association for girls (OR=1.36, CI: 0.84, 2.21; p=0.207)
	Participants n = 462 9-11 yrs (10.9 yrs) <i>girls: 55%</i> rr = n.r.			

Note: PA= physical activity; MVPA = moderate-to-vigorous physical activity; BMI= body mass index; rr = response rate; yrs = years; mo. (s) = month/months; n.r. = not reported; n.c. = not calculable; hr(s) = hour(s); min = minutes; italic and in green colored indications = self calculated