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Author(s): Lounassalo, Irinja; Salin, Kasper; Kankaanpää, Anna; Hirvensalo, Mirja; Palomäki, Sanna; Tolvanen, Asko; Yang, Xiaolin; Tammelin, Tuija H.

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	Ν	Measure	Method	Class size (SE)	Class size (95% Cl)
/oungest group					
Audrain-McGovern, 2012	1,429	MVPA	SR	0.05 (0.01)	•
Parooq 2017: Females	283	Total PA volume	OBM		
Farooq 2017: Males	262	Total PA volume	OBM		
Farooq 2017: Females	283	MVPA	OBM		
Farooq 2017: Males	262	MVPA	OBM		
Findlay, 2009: Females	4,497	Organized PA	PR + SR		
Findlay, 2009: Males	4,320	Organized PA	PR + SR		
Findlay, 2010: Females	4,489	Unorganized PA	PR + SR		
Findlay, 2010: Males	4,489	Unorganized PA	PR + SR		
0 Howie, 2016: Females	823	Organized SP	PR		
1 Howie, 2016: Males	856	Organized SP	PR	0.08 (0.01)	•
2 Janz, 2014: Females	265	MVPA	OBM		
3 Janz, 2014: Males	265	MVPA	OBM	0.23 (0.03)	
4 Kwon, 2015a*	537	MVPA	OBM		
5 Kwon, 2015a*	537	SP	SR		
6 Kwon, Lee, Carnethon, 2015: Females	3 2,155	PA	SR		
7 Rodriguez, 2004	1,098	Team participation	SR	0.07 (0.01)	•
Aiddle group					
8 Barnett, 2008	884	LTPA	SR	0.25 (0.01)	-
9 Dishman, 2010	497	MVPA	SR	0.19 (0.02)	+
20 Kaseva, 2016	3,564	LTPA	SR		
1 Kim, 2016: Females	669	PA	OBM		
22 Kiviniemi*, 2016: Females	1,776	LTPA	SR		
23 Kiviniemi*, 2016: Males	1,286	LTPA	SR		
24 Laddu, 2017a	3,175	LTPA	SR		
25 Rovio, 2017	2,841	LTPA	SR	0.14 (0.01)	•
Didest group					
e Aggio, 2018: Males	4,952	PA	SR	0.24 (0.01)	•
27 Artaud, 2016	10,205	PA	SR	0.23 (0.00)	•
8 Gabriel, 2017: Females	1,771	Sport and exercise	SR	0.13 (0.01)	•
9 Hsu, 2013: Females	2,256	Regular exercise	SR	0.19 (0.01)	-
0 Hsu, 2013: Males	2,544	Regular exercise	SR	0.23 (0.01)	•
1 Laddu, 2017b: Males	5,964	PA	SR		
2 Nguyen, 2013: Females	92,629	PA	SR		
33 Pan, 2015	4,018	PA	SR	0.23 (0.01)	•
4 Xue, 2012: Females	433	PA	SR		

## A) From increaser to decreaser / Increaser \*\*

	B) Highly active		C) Active		D) Inactive		
	Class size (SE)	Class size (95% CI)	Class size (SE)	Class size (95% Cl)		Class size (SE)	Class size (95% Cl)
Youngest							
1	0.21 (0.01)	• 1	0.15 (0.01)	•	1		
2		2			2		
3		3			3		
4		4			4		
5		5	0.19 (0.02)	+	5		
6		6	0.24 (0.01)	•	6		
7	0.26 (0.01)	• 7			7		
8		8	0.57 (0.01)	•	8		
9		9	0.69 (0.01)	•	9		
10		10	0.48 (0.02)	+	10	0.18 (0.01)	•
11		11	0.55 (0.02)	+	11		
12		12			12	0.50 (0.03)	-•-
13		13			13	0.40 (0.03)	-
14		14	0.18 (0.02)	+	14	0.15 (0.02)	+
15		15	0.46 (0.02)	+	15	0.14 (0.01)	•
16	0.06 (0.01)	• 16	0.32 (0.01)	•	16		
17		17	0.41 (0.01)	•	17		
Middle							
18		18	0.12 (0.01)	•	18	0.56 (0.02)	+
19		19	0.23 (0.02)	+	19	0.24 (0.02)	+
20	0.04 (0.00) •	20	0.86 (0.01)	•	20		
21	0.12 (0.01)	• 21	0.41 (0.02)	+	21		
22	0.23 (0.01)	• 22	0.51 (0.01)	•	22	0.26 (0.01)	•
23	0.28 (0.01)	• 23	0.43 (0.01)	•	23	0.29 (0.01)	•
24	0.08 (0.00)	• 24	0.35 (0.01)	•	24		
25		25	0.07 (0.00)	•	25	0.15 (0.01)	•
Oldest							
26		26	0.51 (0.01)	•	26		
27		27	0.27 (0.00)	•	27	0.15 (0.00)	•
28	0.14 (0.01)	• 28	0.24 (0.01)	•	28		
29		29	0.14 (0.01)	•	29	0.49 (0.01)	•
30		30	0.21 (0.01)	•	30	0.44 (0.01)	•
31	0.07 (0.00)	• 31			31		
32	0.04 (0.00) •	32	0.24 (0.00)	•	32		
33		33	0.17 (0.01)	•	33	0.48 (0.01)	•
34	0.17 (0.02)	<b>-</b> 34	0.32 (0.02)	+	34	0.32 (0.02)	+
	ı 0	0.2 0.4 0.6 0.8 1	0	0.2 0.4 0.6 0.8 1		0	0.2 0.4 0.6 0.8 1

	E) Decreaser of high PA		F) Decrea	F) Decreaser of moderate PA		G) Decreaser of low PA / Low-a	
	Class size (SE)	Class size (95% Cl)	Class size (SE)	Class size (95% Cl)	1	Class size (SE)	Class size (95% C
Youngest							
1	0.12 (0.01)	• 1			1	0.47 (0.01)	•
2		2	1.00 (0.00)	•	2		
3	0.10 (0.02)	• 3	0.36 (0.03)	-•-	3	0.54 (0.03)	-
4	0.19 (0.02)	<b>-</b> 4	0.62 (0.03)	-•-	4	0.19 (0.02)	+
5	0.17 (0.02)	<b>-</b> 5	0.62 (0.03)	-•-	5	0.03 (0.01) •	
6	0.37 (0.01)	• 6			6	0.39 (0.01)	•
7	0.32 (0.01)	• 7			7	0.42 (0.01)	•
8		8			8	0.43 (0.01)	•
9		9			9	0.31 (0.01)	•
10		10	0.34 (0.02)	+	10		
11		11	0.37 (0.02)	+	11		
12	0.06 (0.01) •	12	0.45 (0.03)		12		
13		13	0.37 (0.03)	-	13		
14	0.14 (0.01)	• 14	0.53 (0.02)	+	14		
15		15	0.40 (0.02)	+	15		
16	0.09 (0.01)	• 16	0.53 (0.01)	•	16		
17		17	0.13 (0.01)	•	17	0.39 (0.01)	•
Middle							
18		18	0.07 (0.01)	•	18		
19		19	0.34 (0.02)	+	19		
20		20			20	0.10 (0.01)	•
21		21			21	0.47 (0.02)	+
22		22			22		
23		23			23		
24		24			24	0.57 (0.01)	•
25		25	0.14 (0.01)	•	25	0.51 (0.01)	•
Oldest							
26		26			26	0.25 (0.01)	•
27		27	0.36 (0.00)	•	27		
28		28	0.22 (0.01)	•	28	0.26 (0.01)	•
29		29	0.17 (0.01)	•	29		
30		30	0.11 (0.01)	•	30		
31		31	0.50 (0.01)	•	31	0.43 (0.01)	•
32		32			32	0.72 (0.00)	•
33		33	0.12 (0.01)	•	33		
34		34	0.19 (0.02)	+	34		

0 0.2 0.4 0.6 0.8 1

0 0.2 0.4 0.6 0.8 1

0 0.2 0.4 0.6 0.8 1

Abbreviations: N = sample size of the study population; SE = standard error; CI = confidence interval; PA = physical activity; MVPA = moderate to vigorous intensity physical activity; LTPA = leisure-time physical activity; SP = sport participation; OBM = objectively measured; SR = self-reported; PR = parent-reported.

\*These exact same trajectories were reported in other study / other studies as well. The duplicates were omitted from the figure.

\*\*The From increaser to decreaser category applies to the youngest group while the Increaser category applies to the middle and the oldest group.