Multimedia Appendix 9. Subgroup analysis by control group type.

Subgroup analysis by control group type for the outcome walking.

tudy or Subgroup	Mean	ervention SD	Total	Mean	Control SD	Total	Weight	Std. Mean Difference IV, Random, 95% Cl	Std. Mean Difference IV, Random, 95% CI
.1.1 No/minimal intervention			100	404	400	140	1 70	0.07 [-0.18, 0.33]	- <u></u>
ittasalo, 2012 [41] Isaleh, 2016 [79]	457 36.7	306 109.8	123 66	431 16.5	403 58.7	118 79	1.7% 1.5%	0.23 [-0.09, 0.56]	
shton, 2017 [80]	1,588.2	2,740.6	26	575.4	2,735.1	24	1.2%	0.36 [-0.20, 0.92]	
aker, 2008 [81]	9,977	4,669	39	7,078	2,911	40	1.3%	0.74 [0.28, 1.20]	
arwais, 2013 [82]	1,625	553.8	18	483	175.9	15	0.7%	2.61 [1.65, 3.57]	
utler, 2004 [83]	56,396	3,315	17	53,666	6,543	16	1.0%	0.52 [-0.18, 1.21]	
admus-Bertram, 2019 [84]	6,697	2,878	24	4,853	1,703	23	1.1%	0.76 [0.17, 1.36]	
oelho, 2018 [43]	8,853	3,320	20	6,248	2,030	17	1.0%	0.91 [0.23, 1.59]	
ompernolle, 2015 [85]	9,484	4,875	86	8,589	4,380	93	1.6%	0.19 [-0.10, 0.49]	
reel, 2016 [86]	6,084	873	52	5,253	421	35	1.3%	1.13 [0.67, 1.60]	
roteau, 2004 [129]	2,419	6,074.6	7	2,320	4,732	8	0.6%	0.02 [-1.00, 1.03]	
roteau, 2007 (130)	6,180	3,530	79	6,378	2,994	68	1.5%	-0.06 [-0.38, 0.26]	
adaczynski, 2017 (87)	526.5	240.6	80	442.9	200.4	64	1.5%	0.37 [0.04, 0.70]	
e Blok, 2006 [88]	3,927	2,617	8	3,554	2,019.6	8	0.7%	0.15 [-0.83, 1.13]	
eGreef, 2010 [73]	9,601	5,002	20	5,538	3,877	21	1.0%	0.89 [0.25, 1.54]	
eGreef, 2011[89]	7,703	2,729	60	3,883	2,537	32	1.3%	1.42 [0.94, 1.90]	the second se
eGreef, 2011a [74]	6,771	3,889	43	5,173	3,094	24	1.3%	0.44 [-0.07, 0.94]	
emeyer, 2017 (90)	7	32.5	129	-10	23.5	132	1.7%	0.60 [0.35, 0.85]	A STATE OF
ishman, 2009 (91)	14.8	17.3	564	11.2	17.3	265	1.8%	0.21 [0.06, 0.35]	
inkelstein, 2016 [48]	-480	2,568	201	43.7	2,640.7	599	1.8%	-0.20 [-0.36, -0.04]	
eldsoe, 2010 (94)	16.7	89.4	45	0.3	89.4	43	1.4%	0.18 [-0.24, 0.60]	
urber, 2010 (50)	249.9	196	97	202.6	189.5	107	1.6%	0.24 [-0.03, 0.52]	
ill, 2019 [96]	1,646	3,302	59	-1,485	3,171.5	59	1.5%	0.96 [0.58, 1.34]	
lynn, 2014 [97]	5,855	4,264	31	4,859	3,474	35	1.3%	0.25 [-0.23, 0.74]	
ardeman, 2020 (98)	8,419	3,224	417	8,191	3,003	442	1.8%	0.07 [-0.06, 0.21]	-
arris, 2018 [75]	8,306	3,140	778	7,198	2,809	456	1.8%	0.37 [0.25, 0.48]	-
ornikx, 2015 [99]	984	1,208	12	1,013	1,275	15	0.9%	-0.02 [-0.78, 0.74]	
ospes, 2009 (100) auto 2014 (101)	7,872	3,962	18	6,172	3,194	17	1.0%	0.46 [-0.21, 1.13]	
loule, 2011 [101]	9,850	3,282	23	7,970	3,433	22	1.1%	0.55 [-0.05, 1.15]	
lultquist, 2005 [102]	10,159	292	27	8,270	354	31	0.5%	5.70 [4.51, 6.90]	
ames, 2015 (51) otmorali: 2011/1041	800.8	2,820.6	57	-1,294	3,304.4	52	1.4%	0.68 [0.29, 1.07]	
atzmarzyk, 2011[104] arrest, 2010 (52)	7,248	2,737	20	6,637	2,418	23	1.1%	0.23 [-0.37, 0.83]	
ernot, 2019 (52)	276.3	221.7	74	235	218.9	33	1.4%	0.19 [-0.23, 0.60]	
ing, 2013 [106]	253.5	248.7	20	26.8	67	19	1.0%	1.21 [0.52, 1.89]	
i, 2020 [107]	6,673	3,462	55	5,819	2,860	57	1.5%	0.27 [-0.10, 0.64]	
ong, 2013 [108]	65,983	18,069	38	47,596	13,900	33	1.3%	1.12 [0.61, 1.62]	
ynch, 2019 (109)	8,193	3,301	37	7,539	3,404	40	1.3%	0.19 [-0.26, 0.64]	
yons, 2017 (110)	6,193	3,183	20 51	4,586 160	2,476 185	20 59	1.1%	0.55 [-0.08, 1.19] 0.72 [0.33, 1.10]	
aher, 2015 [53]	332	289					1.4%		ALC: ALC: ALC: ALC: ALC: ALC: ALC: ALC:
ansi, 2015 [54] artin, 2015 [111]	9,792	2,053	29	6,551	1,154	29	1.1%	1.92 [1.29, 2.55] 0.97 [0.34, 1.61]	
	1,067	2,098	32	-1,042	2,202	16	1.1%		
elville, 2015 [112]	4,823	2,059	42	4,784	2,613	40	1.4%	0.02 [-0.42, 0.45]	
lutrie, 2012 [58]	9,351	2,017	20	7,138	2,169	19	1.0%	1.04 [0.36, 1.71]	
Iolan, 2017 (59) Niveire, 2010 (60)	272 7,507	2,275.9	63	155 7,401	2,557.1	59 55	1.5% 1.5%	0.05 [-0.31, 0.40]	
liveira, 2019 [60] aul, 2016 [115]	5,791	3,077 2,952	54 15	2,947	2,841 2,399	55	0.7%	0.04 [-0.34, 0.41]	
	5,411	2,952	107	4,751		110	1.6%	0.99 [0.07, 1.90]	
oirier, 2016 (116) restwich, 2010 (118)	1.98	1.9	88	1.17	1,834	46	1.5%	0.32 [0.05, 0.59] 0.45 [0.09, 0.81]	
eijonsaari, 2012 [119]	2,047	1,650	264	2,338	1,762	257	1.8%	-0.17 [-0.34, 0.00]	
toos, 2014 [120]	3,810	10,993.5	29	817.3	2,349.2	22	1.2%	0.35 [-0.21, 0.91]	
towley, 2019 [121]	9,015	2,842	97	4,654	1,447	32	1.3%	1.69 [1.23, 2.14]	
imons, 2018 [64]	7,741	4,553	55	8,061	5,112	63	1.5%	-0.07 [-0.43, 0.30]	
tacey, 2016 [65]	10,849	5,127	75	8,014	4,568	58	1.5%	0.58 [0.23, 0.93]	
abak, 2014 [123]	5,603	3,475.8	13	4,617	3,460	16	0.9%	0.28 [0.46, 1.01]	
horndike, 2014 [124]	7,886	3,622	50	7,600	3,492	49	1.4%	0.08 [-0.31, 0.47]	
udor-Locke, 2004 [69]	9,123	4,539	24	5,622	2,405	23	1.1%	0.94 [0.34, 1.55]	
allance, 2016 (125)	5,923	3,109	41	6,885	3,576	37	1.3%	-0.29 [-0.73, 0.16]	
an Blarigan, 2019 [126]	10,047	4,461	20	12,541	5,535	19	1.0%	-0.49 [-1.13, 0.15]	
an Hoye, 2018 [72]	13.2	29.6	157	6.7	. 26	50	1.6%	0.23 [-0.09, 0.54]	+
Ayke, 2019 [77]	9,801	3,730	464	8,518	3,254	471	1.8%	0.37 [0.24, 0.50]	-
amada, 2012 [128]	3,726	1,607	40	2,267	1,837	42	1.3%	0.84 [0.38, 1.29]	
ates, 2017 [78]	-486	2,252	287	-690	2,041	272	1.8%	0.09 [-0.07, 0.26]	+
ubtotal (95% CI)			5607			5037	80.7%	0.47 [0.36, 0.59]	•
eterogeneity: Tau² = 0.14; Cl est for overall effect: Z = 8.29			^o < 0.00	1001); I² =	85%				
4.2 Alternative laterative	a andra ta								
1.2 Alternative intervention			(012)	100000000	2121010	3/22			10.0
ruz, 2016 [44]	10,440	4,012	13	6,430	2,613	13	0.8%	1.15 [0.31, 1.99]	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
uru, 2010 (92)	9,883	14,014	34	2,426	8,429	28	1.2%	0.62 [0.11, 1.14]	
ngel, 2006 (93)	150	117	24	216	87	30	1.2%	-0.64 [-1.19, -0.09]	
ell, 2015 [95]	6,867.7	2,227	41	6,189	2,297	46	1.4%	0.30 [-0.13, 0.72]	
awa, 2012 (103) Gwegeobi, 2015 (105)	8,609.6	3,064.5		5,512.9	2,571.8	51	1.4%	1.09 [0.67, 1.50]	
awagoshi, 2015 (105) alt, 2012 (76)	51.3	63.7	12	12.3	25.5	15	0.8%	0.82 [0.02, 1.61]	
olt, 2012 [76] Jondozo, 2015 [112]	107.4	164.9	130	92.2	120.5	123	1.7%	0.10 [-0.14, 0.35]	
lendoza, 2015 (113) one: 2019 (117)	3,080	3,254	52	138	1,950	50	1.4%	1.08 [0.67, 1.50]	
ope, 2018 [117] albet, 2002 [67]	5,175	2,308	12	4,746	2,045	8	0.7%	0.19 [-0.71, 1.08] 0.13 [-0.54, 0.80]	
albot, 2003 [67] ubtotal (95% CI)	4,337	2,903	17 387	3,972	2,563	17 381	1.0% 11.6%	0.48 [0.12, 0.83]	-
eterogeneity: Tau ² = 0.25; Cl)1); I² = 8I	0%	501	11.0%	0.40 [0.12, 0.05]	-
est for overall effect: Z = 2.60		,							
.1.3 Combined control group		107.47	405	40.0	100.00	200	4 7~	0.0010.04 0.001	
lerom, 2007 [114]	52	107.17	105	48.9	126.83	209	1.7%	0.03 [-0.21, 0.26]	
libeiro, 2014 [63]	969.7	1,464.1	101	-181.5	2,284	94	1.6%	0.60 [0.32, 0.89]	
pence, 2009 [122]	690	450.2	32	592.5	368.9	31	1.3%	0.23 [-0.26, 0.73]	
er Hoeve, 2018 [68]	8	2.6	121	7.7	3	252	1.7%	0.10 [-0.11, 0.32]	
Varren, 2014 [127]	8,371	3,069	37	7,576	2,993	69	1.4%	0.26 [-0.14, 0.66]	
ubtotal (95% CI)			396			655	7.7%	0.23 [0.01, 0.45]	-
eterogeneity: Tau ² = 0.04; CI		af = 4 (P =	0.03);1	r= 62%					
est for overall effort: 7 = 2 no									
est for overall effect: Z = 2.08 otal (95% CI)			6300			6072	100.0*	0 46 10 36 0 55	
est for overall effect: Z = 2.08 otal (95% CI) eterogeneity: Tauª = 0.14; CI		i, df= 76 (l	<mark>6390</mark> > < 0.00	1001): I ^z =	83%	6073	100.0%	0.46 [0.36, 0.55]	-2 -1 0 1 2

Subgroup analysis by control group type for the outcome moderate-to-vigorous physical activity.

Study or Subgroup	Mean	erventio SD	n Total		control SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI	Std. Mean Difference IV, Random, 95% Cl
3.2.1 No/minimal intervention	ontrol						200000	Colorest Management in State	
Alsaleh, 2016 (79)	237.9	121.1	66	108.9	198	79	1.8%	0.77 [0.43, 1.11]	
Ashton, 2017 [80]	154.1	216.1	26	26.1	210.2	24	1.0%	0.59 [0.02, 1.16]	1 may 200 may
Barnes, 2015 [42]	0.2	1.6	23	-0.2	1.5	19	0.9%	0.25 [-0.36, 0.86]	
Barwais, 2013 [82]		494.9	18			15	0.7%	1.13 [0.38, 1.87]	10 June 10 June 10
Cadmus-Bertram, 2019 [84]	230	120	24	143	107	23	1.0%	0.75 [0.16, 1.35]	
Compernolle, 2015 [85]	32.4	37.7	62	38.4	60	79	1.9%	-0.12 [-0.45, 0.22]	and the second
Creel, 2016 [86]	37	41.6	52	20.4	17.1	35	1.4%	0.48 [0.05, 0.92]	
Dadaczynski, 2017 [87] De Greef, 2010 (72)	310.9	129.4	80	291.8	114	64	1.9%	0.15 [-0.17, 0.48]	
DeGreef, 2010 [73]	44	38	20	24	29	21	0.9%	0.58 [-0.04, 1.21]	
DeGreef, 2011[89] DeGreef, 2011a (74)	23 82	20 84	60 43	20 27	25 39	32 24	1.5% 1.2%	0.14 [-0.29, 0.57] 0.76 [0.24, 1.28]	
DeGreef, 2011a (74) Demeyer, 2017 (90)	8	21.1	43	-3	17.5	140	2.3%	0.57 [0.33, 0.80]	
Dishman, 2009 (91)	10.6	15.5	564	7.9	15.1	265	2.3%	0.18 [0.03, 0.32]	
Eakin, 2014 [46]		155.6	119	114.6	108.6	127	2.3%	0.37 [0.11, 0.62]	
Edney, 2020 [47]	108.1	74.1	272	108.9	52.6	130	2.5%	-0.01 [-0.22, 0.20]	
Fjeldsoe, 2010 (94)		167.3	45		167.4	43	1.5%	0.01 [-0.41, 0.43]	
Golsteijn, 2018 [133]	331	234	208	301	219	211	2.6%	0.13 [-0.06, 0.32]	
Hardeman, 2020 [98]	77.3	36.5	417	76.7	35.4	442	2.8%	0.02 [-0.12, 0.15]	+
Harris, 2018 [75]	374	179	778	310	168	456	2.9%	0.37 [0.25, 0.48]	
James, 2015 [51]	33.9	145.3	57	9.6	128.6	52	1.7%	0.18 [-0.20, 0.55]	
Katzmarzyk, 2011[104]	16.3	17.3	20	16.2	17.1	23	1.0%	0.01 [-0.59, 0.60]	
Kendzor, 2017 [134]	76	67	17	46	43	15	0.8%	0.51 [-0.19, 1.22]	
Kernot, 2019 [52]	204.1	131	74	150	96.9	33	1.5%	0.44 [0.03, 0.86]	
Keyserling, 2008 [135]	14	3.71	86	13	2.8	89	2.0%	0.30 [0.01, 0.60]	
King, 2008 [137]	310.6	298.3	19	135	208.2	18	0.8%	0.66 [0.00, 1.33]	
Koizumi, 2009 [138]	27.2	14.7	34	19	9.8	34	1.3%	0.65 [0.16, 1.14]	
Li, 2017 [139]	64.2	70.5	17	56	60.1	17	0.8%	0.12 [-0.55, 0.80]	
Li, 2020 [107]	44.7	41.2	55	31.6	32.4	57	1.7%	0.35 [-0.02, 0.73]	
Lynch, 2019 [109]	249.6	159.7	40	170.1	127.9	40	1.4%	0.54 [0.10, 0.99]	
Maher, 2015 [53]	528	391	51	391	371	59	1.7%	0.36 [-0.02, 0.74]	
Mansi, 2015 (54)	1,469	524	29	538	254	29	0.8%	2.23 [1.57, 2.90]	
Maxwell Smith, 2019 [140]	312	229.3	34	240	177.7	33	1.3%	0.35 [-0.14, 0.83]	10 10 10 10 10 10 10 10 10 10 10 10 10 1
Melville, 2015 [112]	3	2.6	42	3.1	2.1	40	1.4%	-0.04 [-0.47, 0.39]	
Murawski, 2019 [57]	428.4	523.4	59	319.7	378.2	66	1.8%	0.24 [-0.11, 0.59]	
Nolan, 2017 (59)	11	68.8	63	11	58.8	59	1.8%	0.00 [-0.36, 0.36]	
Pekmezi, 2017 [141]	31.5	58.9	39	20.8	38.2	37	1.4%	0.21 [-0.24, 0.66]	
Sharp, 2016 [144]	100	109	72	90	119	65	1.9%	0.09 [-0.25, 0.42]	San San
Simons, 2018 [64]	27.3	26.7	55	30.1	31	63	1.7%	-0.10 [-0.46, 0.27]	20 - 10 C
Vallance, 2016 [125]	143	132	41	146	155	37	1.4%	-0.02 [-0.47, 0.42]	
Van Blarigan, 2019 [126]	46.6	48.4	20	54.5	24.9	19	0.9%	-0.20 [-0.83, 0.43]	
Van Hoye, 2018 [72]	17.8	49.6	157	9.6	34	50	1.9%	0.18 [-0.14, 0.49]	
Wijsman, 2013 [147]	11.1	21.8	108	-0.1	15.4	105	2.1%	0.59 [0.32, 0.86]	
Yates, 2017 [78] Subtotal (95% CI)	-4.1	19	287 4493	-5.9	17.7	272 3541	2.7% 69.7%	0.10 [-0.07, 0.26] 0.29 [0.21, 0.38]	
Heterogeneity: Tau ² = 0.05; Cl	hi2 - 195	00 df-			111-12-		03.170	0.29 [0.21, 0.30]	•
Test for overall effect: Z = 6.52			42 (F	.0000	JI), I –	07.90			
3.2.2 Alternative intervention	control	group							
3.2.2 Alternative intervention Cruz 2016 [44]			12	26.7	196	12	20 A D	1 11 10 28 1 051	
Cruz, 2016 [44]	57.8	32.8	13 104	26.7	19.6 196	13 107	0.6%	1.11 [0.28, 1.95] 0.09 [-0.18_0.36]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49]	57.8 -8	32.8 262.4	104	-29.2	196	107	2.2%	0.09 [-0.18, 0.36]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136]	57.8 -8 51.2	32.8 262.4 4.43	104 41	-29.2 50.25	196 4.4	107 42	2.2% 1.5%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76]	57.8 -8 51.2 121.2	32.8 262.4 4.43 184.4	104 41 130	-29.2 50.25 111.4	196 4.4 110.6	107 42 123	2.2% 1.5% 2.3%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31]	
Cruz, 2016 (44) Fjeldsoe, 2015 (49) Kim, 2018 (136) Kolt, 2012 (76) Pinto, 2013 (61)	57.8 -8 51.2 121.2 214	32.8 262.4 4.43 184.4 147.3	104 41 130 19	-29.2 50.25 111.4 97	196 4.4 110.6 148	107 42 123 24	2.2% 1.5% 2.3% 0.9%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2013 [62]	57.8 -8 51.2 121.2 214 70.3	32.8 262.4 4.43 184.4 147.3 65.9	104 41 130 19 36	-29.2 50.25 111.4 97 16.5	196 4.4 110.6 148 31.9	107 42 123	2.2% 1.5% 2.3% 0.9% 1.2%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2013 [62] Pope, 2018 [117]	57.8 -8 51.2 121.2 214 70.3 34.2	32.8 262.4 4.43 184.4 147.3 65.9 18.7	104 41 130 19 36 12	-29.2 50.25 111.4 97 16.5 37.8	196 4.4 110.6 148 31.9 20.4	107 42 123 24 32 8	2.2% 1.5% 2.3% 0.9% 1.2% 0.5%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Pinto, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Jnick, 2012 [145]	57.8 -8 51.2 121.2 214 70.3 34.2 133	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217	104 41 130 19 36 12 11	-29.2 50.25 111.4 97 16.5 37.8 44.8	196 4.4 110.6 148 31.9 20.4 124.6	107 42 123 24 32 8 12	2.2% 1.5% 2.3% 0.9% 1.2% 0.5% 0.6%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] <(m, 2018 [136] Colt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Junick, 2018 [145] ∕andelanotte, 2018 [146]	57.8 -8 51.2 121.2 214 70.3 34.2 133	32.8 262.4 4.43 184.4 147.3 65.9 18.7	104 41 130 19 36 12	-29.2 50.25 111.4 97 16.5 37.8	196 4.4 110.6 148 31.9 20.4	107 42 123 24 32 8	2.2% 1.5% 2.3% 0.9% 1.2% 0.5%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Pinto, 2013 [61] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Jnick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% C1) Heterogeneity: Tau ² = 0.08; C1	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ^z = 21.1	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8	104 41 130 19 36 12 11 78 444	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8	196 4.4 110.6 148 31.9 20.4 124.6 77.1	107 42 123 24 32 8 12 46	2.2% 1.5% 2.3% 0.9% 1.2% 0.5% 0.6% 1.7%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Pinto, 2013 [61] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CH Test for overall effect: Z = 3.06	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ² = 21.1 5 (P = 0.00	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8	104 41 130 19 36 12 11 78 444	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8	196 4.4 110.6 148 31.9 20.4 124.6 77.1	107 42 123 24 32 8 12 46	2.2% 1.5% 2.3% 0.9% 1.2% 0.5% 0.6% 1.7%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Pinto, 2013 [61] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CH Test for overall effect: Z = 3.06 3.2.3 Combined control grouj	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ² = 21.1 6 (P = 0.01	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02)	104 41 130 19 36 12 11 78 444 (P = 0	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62%	107 42 123 24 32 8 12 46 407	2.2% 1.5% 2.3% 0.9% 1.2% 0.5% 0.6% 1.7% 11.4%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CH Test for overall effect: Z = 3.06 3.2.3 Combined control group Aittasalo, 2006 [131]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ² = 21.1 5 (P = 0.0) p 95	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 18.df = 8 02) 83.7	104 41 130 19 36 12 11 78 444 4(P = 0 203	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); I ² 94	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9	107 42 123 24 32 8 12 46 407	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.1%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] 0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CH Test for overall effect. Z = 3.06 3.2.3 Combined control group Atttasalo, 2006 [131] Fischer, 2019 [132]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ² = 21.1 5 (P = 0.00 p 95 228.4	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8	104 41 130 36 12 11 78 444 s (P = 0 203 63	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); I ² 94 194	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9 136	107 42 123 24 32 8 12 46 407 62 128	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] 0.49 [-0.35, 1.32] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CI Test for overall effect: Z = 3.06 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ² = 21.1 δ (P = 0.01 p 95 228.4 134.4	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.4	104 41 130 36 12 11 78 444 (P = 0 203 63 11	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); I ² 94 194 185.5	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3	107 42 123 24 32 8 12 46 407 62 128 21	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [52] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% Cl) Heterogeneity: Tau ² = 0.08; Cl Test for overall effect: Z = 3.06 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ^z = 21.1 5 (P = 0.01 p 95 228.4 134.4 79	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.4 543.7	104 41 130 19 36 12 11 78 444 (P = 0 203 63 11 105	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); I ² 94 194 185.5 32.8	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3 171.3	107 42 123 24 32 8 12 46 407 62 128 21 209	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.1% 2.0% 0.7% 2.4%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.01 [-0.27, 0.30] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Pinto, 2013 [61] Pinto, 2013 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CI Test for overall effect: Z = 3.06 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi² = 21.1 6 (P = 0.00 p 95 228.4 134.4 79 1.3	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.4 543.7 1.2	104 41 130 19 36 12 11 78 444 5 (P = 0 203 63 11 105 60	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); I ² 94 194 185.5 32.8 0.97	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3 171.3 171.3	107 42 123 24 32 8 12 46 407 62 128 21 209 94	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.1% 2.1% 2.1% 2.1% 1.9%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.01 [-0.27, 0.30] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.02, 0.63]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CH Test for overall effect: Z = 3.06 3.2.3 Combined control groug Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ² = 21.1 5 (P = 0.00 p 95 228.4 134.4 799 1.3 473.5	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.7 157.8 83.7 157.8 83.7 1.2 913.2	104 41 130 19 36 12 11 78 444 \$(P = 0 203 63 11 105 60 101	-29.2 50.25 111.4 97 16.5 37.8 79.8 .007); 1 ² 94 194 185.5 32.8 0.97 58.5	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3 171.3 171.3 1484.3	107 42 123 24 32 8 12 46 407 62 128 21 209 94 94	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.1% 2.0% 0.7% 2.4% 2.1%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] 0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.01 [-0.27, 0.30] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.02, 0.63] 0.56 [0.27, 0.85]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% Cl) Heterogeneity: Tau ² = 0.08; Cł Test for overall effect. Z = 3.06 3.2.3 Combined control grou; Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63] Samuels, 2011 [143]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 $hi^{2} = 21.1$ 5 (P = 0.00 p 95 228.4 134.4 79 1.33 473.5 34.8	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.4 543.7 1.2 913.2 13.6	104 41 130 19 36 12 17 78 444 (P = 0 203 63 11 105 60 101 12	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .0077); 1 ² 94 194 185.5 32.8 0.97 58.5 26.5	196 4.4 110.6 148 31.9 20.4 124.6 77.1 2=62% 70.9 136 126.3 171.3 171.3 1484.3 16.1	107 42 123 24 32 8 12 46 407 62 128 21 209 94 94 25	2.2% 1.5% 2.3% 0.5% 0.6% 1.7% 11.4% 2.1% 2.0% 0.7% 2.4% 1.9% 2.1% 0.8%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 1.078 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.49 [-0.35, 1.32] 0.39 [0.14, 0.65] 0.01 [-0.27, 0.30] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.02, 0.63] 0.56 [0.27, 0.85] 0.53 [-0.17, 1.23]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2013 [61] Pinto, 2013 [61] Pinto, 2013 [61] Vandelanotte, 2018 [146] Subtotal (95% C1) Heterogeneity: Tau ² = 0.08; Cf Test for overall effect: Z = 3.06 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63] Samuels, 2011 [143] Ter Hoeve, 2018 [68]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ² = 21.1 5 (P = 0.00 p 95 228.4 134.4 79 1.3 473.5 34.8 6.7	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.4 543.7 1.2 913.2 13.6 3	104 41 130 19 36 12 12 11 11 78 444 4(P = 0 (P = 0 203 63 11 105 60 101 12 121	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); ² 94 194 185.5 32.8 0.97 58.5 26.5 6.5	196 4.4 110.6 148 31.9 20.4 124.6 77.1 2=62% 70.9 136 126.3 171.3 1484.3 16.1 3.1	107 42 123 24 32 8 12 46 407 62 128 21 209 94 25 252	2.2% 1.5% 2.3% 0.9% 1.2% 0.5% 0.6% 1.7% 11.4% 2.1% 2.0% 0.7% 2.4% 1.9% 2.4% 2.8% 2.4%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.39 [0.14, 0.65] 0.24 [-0.66, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.22, 0.63] 0.56 [0.27, 0.85] 0.53 [-0.17, 1.23] 0.07 [-0.15, 0.28]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CI Test for overall effect: Z = 3.06 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63] Samuels, 2011 [143] Ter Hoeve, 2018 [68] Vallance, 2008 [70]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi [≠] = 21.1 5 (P = 0.00 p 95 228.4 134.4 79 1.3 473.5 34.8 6.7 213	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.4 543.7 1.2 913.2 13.6 3 173	104 41 130 19 36 12 11 78 444 6 (P=0 203 63 11 105 60 101 12 121 121	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); * 94 194 185.5 32.8 0.97 58.5 26.5 6.5 180	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3 171.3 161.3 1484.3 161.3 141	107 42 123 24 32 8 12 46 407 62 128 21 209 94 94 94 252 252 166	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.1% 2.1% 2.1% 0.7% 2.4% 1.9% 2.1% 0.8% 2.5%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.39 [0.14, 0.65] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.02, 0.63] 0.56 [0.27, 0.86] 0.53 [-0.17, 1.23] 0.07 [-0.15, 0.28] 0.21 [-0.01, 0.42]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% Cl) Heterogeneity: Tau ² = 0.08; Cl Test for overall effect: Z = 3.06 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [155] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63] Samuels, 2011 [143] Ter Hoeve, 2018 [68] Vallance, 2008 [70] Van der Weegen, 2015 [71]	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 hi ² = 21.1 5 (P = 0.00 p 95 228.4 134.4 79 1.3 473.5 34.8 6.7	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.4 543.7 1.2 913.2 13.6 3	104 41 130 19 36 12 11 78 444 (P=0 203 63 11 105 60 101 12 121 172 65	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); ² 94 194 185.5 32.8 0.97 58.5 26.5 6.5	196 4.4 110.6 148 31.9 20.4 124.6 77.1 2=62% 70.9 136 126.3 171.3 1484.3 16.1 3.1	107 42 123 24 32 8 12 46 407 62 128 21 209 94 25 252 252 166 134	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.1% 0.7% 2.1% 0.7% 2.1% 0.8% 2.4% 2.1% 0.8% 2.2%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.39 [0.14, 0.65] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.22, 0.63] 0.56 [0.27, 0.85] 0.53 [-0.17, 1.23] 0.7 [-0.15, 0.28] 0.21 [-0.04, 0.42] 0.21 [-0.09, 0.51]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Pointo, 2013 [61] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Jnick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CH Test for overall effect: Z = 3.06 3.2.3 Combined control grouy Wittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63] Bamuels, 2011 [143] Ter Hoeve, 2018 [68] Vallance, 2008 [70] Van der Weegen, 2015 [71] Subtotal (95% CI) Heterogeneity: Tau ² = 0.01; CH	57.8 -8 51.2 121.2 2144 70.3 34.2 1333 148.8 $hi^{2} = 21.1$ 5 (P = 0.00 p 95 228.4 134.4 79 1.33 473.5 34.8 6.7 213 48.2 $hi^{2} = 13.6$	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 18, df = 8 02) 83.7 157.8 83.4 543.7 1.2 913.2 913.2 913.2 913.2 3.8 3 68, df = 9	104 41 130 19 366 12 11 78 444 (P=0 203 63 11 105 60 101 12 121 172 65 913	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); * 94 195.5 32.8 0.97 58.5 26.5 6.5 180 42.9	196 4.4 110.6 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3 171.3 1484.3 16.1 3.1 141 25.8	107 42 123 24 32 8 12 46 407 62 128 21 209 94 94 94 252 252 166	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.1% 2.1% 2.1% 0.7% 2.4% 1.9% 2.1% 0.8% 2.5%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.39 [0.14, 0.65] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.02, 0.63] 0.56 [0.27, 0.86] 0.53 [-0.17, 1.23] 0.07 [-0.15, 0.28] 0.21 [-0.01, 0.42]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2013 [62] Pope, 2018 [117] Jinick, 2012 [145] Kandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CI Fest for overall effect: $Z = 3.06$ 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63] Samuels, 2011 [143] Fer Hoeve, 2018 [68] /allance, 2008 [70] /an der Weegen, 2015 [71] Subtotal (95% CI) Heterogeneity: Tau ² = 0.01; CF Fest for overall effect: $Z = 3.33$	57.8 -8 51.2 121.2 2144 70.3 34.2 1333 148.8 $hi^{2} = 21.1$ 5 (P = 0.00 p 95 228.4 134.4 79 1.33 473.5 34.8 6.7 213 48.2 $hi^{2} = 13.6$	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 18, df = 8 02) 83.7 157.8 83.4 543.7 1.2 913.2 913.2 913.2 913.2 3.8 3 68, df = 9	104 41 130 19 36 12 11 78 444 (P=0 203 63 11 105 60 101 12 121 172 65 913 1(P=0	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); * 94 195.5 32.8 0.97 58.5 26.5 6.5 180 42.9	196 4.4 110.6 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3 171.3 1484.3 16.1 3.1 141 25.8	107 42 123 24 32 8 12 46 407 62 128 21 209 94 94 94 94 25 252 166 134 1185	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.0% 2.0% 2.4% 1.9% 2.4% 1.9% 2.1% 0.8% 2.4% 1.9% 2.5% 2.0% 18.9%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.39 [0.14, 0.65] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.02, 0.63] 0.56 [0.27, 0.86] 0.53 [-0.17, 1.23] 0.76 [0.15, 0.28] 0.21 [-0.01, 0.42] 0.21 [-0.09, 0.51] 0.20 [0.08, 0.32]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Pinto, 2013 [61] Pinto, 2013 [61] Pinto, 2015 [52] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CI Test for overall effect: Z = 3.06 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63] Samuels, 2011 [143] Ter Hoeve, 2018 [68] Vallance, 2008 [70] Van der Weegen, 2015 [71] Subtotal (95% CI) Heterogeneity: Tau ² = 0.01; CI Test for overall effect: Z = 3.33 Total (95% CI)	57.8 -8 51.2 121.2 214 70.3 34.2 133 148.8 $hi^{2} = 21.1$ 5 (P = 0.00 p 95 228.4 134.4 79 1.3 473.5 34.8 6.7 213 48.2 $hi^{2} = 13.6$ 8 (P = 0.00	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8, df = 8 02) 83.7 157.8 83.4 543.7 1.2 913.2 13.8 3173 23.8 58, df = 9 009)	104 41 130 19 36 12 11 78 444 (P=0 203 63 11 105 60 101 12 121 172 65 913 0(P=0 5850	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); ² 94 194 185.5 32.8 0.97 58.5 26.5 180 42.9 13); ²=	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3 171.3 1484.3 16.1 3.6.1 141 25.8 34%	107 42 123 24 32 8 12 46 407 62 128 21 209 94 25 25 166 134 1185 5133	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.1% 0.7% 2.1% 0.7% 2.1% 0.8% 2.4% 2.1% 0.8% 2.2%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.39 [0.14, 0.65] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.22, 0.63] 0.56 [0.27, 0.85] 0.53 [-0.17, 1.23] 0.7 [-0.15, 0.28] 0.21 [-0.04, 0.42] 0.21 [-0.09, 0.51]	
Cruz, 2016 [44] Fjeldsoe, 2015 [49] Kim, 2018 [136] Kolt, 2012 [76] Pinto, 2013 [61] Pinto, 2013 [61] Pinto, 2015 [62] Pope, 2018 [117] Unick, 2012 [145] Vandelanotte, 2018 [146] Subtotal (95% CI) Heterogeneity: Tau ² = 0.08; CI Test for overall effect: $Z = 3.06$ 3.2.3 Combined control group Aittasalo, 2006 [131] Fischer, 2019 [132] Maselli, 2019 [55] Merom, 2007 [114] Prestwich, 2009 [142] Ribeiro, 2014 [63] Samuels, 2011 [143] Ter Hoeve, 2018 [68] Vallance, 2008 [70] Van der Weegen, 2015 [71] Subtotal (95% CI) Heterogeneity: Tau ² = 0.01; CH Test for overall effect: $Z = 3.33$	57.8 -8 51.2 121.2 2144 70.3 34.2 133 148.8 $hi^2 = 21.1$ 5 (P = 0.00 p 95 228.4 134.4 79 1.33 473.5 34.8 6.7 213 48.2 $hi^2 = 13.6$ 8 (P = 0.01 $hi^2 = 162.$	32.8 262.4 4.43 184.4 147.3 65.9 18.7 217 181.1 8.df = 6 02) 83.7 157.8 83.4 543.7 1.2 913.2 13.6 3 173 23.8 68,df = 9 009)	104 41 130 19 36 12 11 78 444 (P=0 203 63 11 105 60 101 12 121 172 65 913 0(P=0 5850	-29.2 50.25 111.4 97 16.5 37.8 44.8 79.8 .007); ² 94 194 185.5 32.8 0.97 58.5 26.5 180 42.9 13); ²=	196 4.4 110.6 148 31.9 20.4 124.6 77.1 = 62% 70.9 136 126.3 171.3 1484.3 16.1 3.6.1 141 25.8 34%	107 42 123 24 32 8 12 46 407 62 128 21 209 94 25 25 166 134 1185 5133	2.2% 1.5% 2.3% 0.9% 1.2% 0.6% 1.7% 11.4% 2.0% 2.0% 2.4% 1.9% 2.4% 1.9% 2.1% 0.8% 2.4% 1.9% 2.5% 2.0% 18.9%	0.09 [-0.18, 0.36] 0.21 [-0.22, 0.64] 0.06 [-0.18, 0.31] 0.78 [0.15, 1.40] 1.01 [0.50, 1.52] -0.18 [-1.07, 0.72] 0.49 [-0.35, 1.32] 0.45 [0.08, 0.82] 0.39 [0.14, 0.65] 0.39 [0.14, 0.65] 0.24 [-0.06, 0.54] -0.44 [-1.18, 0.30] 0.13 [-0.10, 0.37] 0.30 [-0.02, 0.63] 0.56 [0.27, 0.86] 0.53 [-0.17, 1.23] 0.21 [-0.01, 0.42] 0.21 [-0.09, 0.51] 0.20 [0.08, 0.32] 0.28 [0.21, 0.35]	

Subgroup analysis by control group type for the outcome total physical activity.

		rvention			ontrol	0.000		Std. Mean Difference	Std. Mean Difference
Study or Subgroup	Mean		Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
3.3.1 No/minimal intervention									
Cadmus-Bertram, 2019 [84]	1,463	489	24	1,343	395	23	2.5%	0.26 [-0.31, 0.84]	
Compernolle, 2015 [85]	81.6	78	52	90.6	100.2	71	3.4%	-0.10 [-0.46, 0.26]	
DeGreef, 2010 [73]	301	106	20	260	104	21	2.3%	0.38 [-0.24, 1.00]	
DeGreef, 2011[89]	93	66	60	40	56	32	3.0%	0.84 [0.39, 1.28]	20 20 50
DeGreef, 2011a [74]	176	108	43	65	68	24	2.6%	1.15 [0.61, 1.68]	The second se
Dlugonski, 2012 [45]	28.2	15.6	22	15.4	13.9	23	2.3%	0.85 [0.24, 1.47]	the second se
Furber, 2010 [50]	366.5	270.8	97	270.9	244.4	107	3.8%	0.37 [0.09, 0.65]	
Gill, 2019 [96]	2.1	25.8	59	1.37	25.7	59	3.4%	0.03 [-0.33, 0.39]	
Kernot, 2019 [52]	298.9	97.7	74	288.8	68.6	33	3.2%	0.11 [-0.30, 0.52]	
Keyserling, 2008 [135]	29.8	6.5	86	28.6	5.7	90	3.7%	0.20 [-0.10, 0.49]	
Lane, 2015 (149)	84.9	50.3	125	80.3	32.8	159	4.0%	0.11 [-0.12, 0.35]	
Lyons, 2017 [110]	117	121	20	58	33	20	2.2%	0.65 [0.01, 1.29]	
Mailey, 2010 [150]	299,792	102,800	24	251,625	83,081	23	2.5%	0.51 [-0.08, 1.09]	
Mansi, 2015 (54)	1,035	444	29	188	135	29	2.0%	2.55 [1.84, 3.25]	-
Martin, 2015 [111]	10.5	21.1	32	-8	23	16	2.3%	0.84 [0.21, 1.46]	
Melville, 2015 [112]	33.5	10	42	34	12	40	3.1%	-0.04 [-0.48, 0.39]	
Motl, 2011 [151]	24.7	18.8	23	12.4	14.2	25	2.4%	0.73 [0.14, 1.32]	
Müller, 2016 [56]	383.4	843.4	18	377.4	842.6	21	2.3%	0.01 [-0.62, 0.64]	
Prestwich, 2010 [118]	2.96	1.8	88	2.3	14.3	46	3.5%	0.08 [-0.28, 0.43]	
Simons, 2018 [64]	317	135	55	359.5	146	63	3.4%	-0.30 [-0.66, 0.06]	
Thorsteinsen, 2014 [153]	574	435	12	502	323	8	1.5%	0.17 [-0.72, 1.07]	
Van Hoye, 2018 [72]	1.8	8.3	157	0.6	7	50	3.6%	0.15 [-0.17, 0.47]	-+
Wyke, 2019 [77]	3,717	3,307	499	2,741	2,951	505	4.4%	0.31 [0.19, 0.44]	
Yates, 2017 [78]	-32.3	94.6	287	-40.3	. 85	272	4.3%	0.09 [-0.08, 0.25]	
Subtotal (95% CI)			1948			1760	72.0%	0.34 [0.19, 0.50]	•
Heterogeneity: Tau ² = 0.09; Ch Test for overall effect: Z = 4.40 3.3.2 Alternative intervention	(P < 0.000	1)	< U.UUI	JUT), I= 7	0%				
Carr, 2013 [148]	171.4	234.5	25	121.8	174.6	28	2.6%	0.24 [-0.30, 0.78]	
Cruz, 2016 [44]	279.5	234.5	13	212	53.9	13	1.7%	1.01 [0.19, 1.83]	
Kolt, 2012 [76]	168.9	190.5	130	146.3	163.5	123	4.0%	0.13 [-0.12, 0.37]	
Sugden, 2008 (152)	108.7	54.7	26	113.8	62.3	123	2.4%	-0.09 [-0.69, 0.51]	
	49.5	39.6	79	5.8	33.9	79	3.5%	1.18 [0.84, 1.52]	
Suggs, 2013 [66] Vandelanotte, 2018 [146]	49.5 387.7	39.0	78	230	- 33.9 164.1	46	3.4%	0.50 [0.13, 0.87]	
Subtotal (95% CI)	301.1	311.1	351	230	104.1	307	17.6%	0.48 [0.06, 0.91]	-
Heterogeneity: Tau ² = 0.22; Ch Test for overall effect: Z = 2.23		df=5(P <	0.000	1); I² = 83%	5				
3.3.3 Combined control group	0								
Aittasalo, 2006 [131]	509.5	479.4	203	555	519.7	62	3.8%	-0.09 [-0.38, 0.19]	
Merom, 2007 [114]	91	243.1	105	84.2	231.8	209	4.0%	0.03 [-0.21, 0.26]	
Schwerdtfeger, 2012 [154] Subtotal (95% CI)	738.6	245.7	21	690.5	217.1	41 312	2.7%	0.03 [-0.27, 0.20] 0.21 [-0.32, 0.74] 0.00 [-0.17, 0.17]	•
Heterogeneity: Tau ² = 0.00; Ch Test for overall effect: Z = 0.04		f= 2 (P = (= 0%					
Total (95% CI)			2628			2379	100.0%	0.34 [0.20, 0.47]	•
Heterogeneity: Tau² = 0.10; Ch Test for overall effect: Z = 4.96 Test for subgroup differences:	(P ≤ 0.000	D1)							2 -1 0 1 2 Favors control Favors intervention