

XXVIII PEDIATRIC WORK PHYSIOLOGY

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Peer Support for Physical Activity Promotion in children and adolescents.

Systematic Review of the Literature

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Background

Methods

Results

Conclusions

- ➡ PA benefits
- ➡ Nevertheless, low levels of PA and high levels of SB...?!
- ➡ How change this behavior?
 - ➡ Peers?



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➤ **Inclusion Criteria:**

- English language papers in peer-reviewed journals
- PubMed electronic database
- Participants: 5-17 years
- Publication date: 1.1.2008 – 21.1.2012



➤ **Exclusion Criteria:**

- Non-RCT's
- Studies involving diseases, minorities or drugs administration



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➤ Search strategy:

- PICO Model - Population, Intervention, Control and Outcomes (Richardson, Wilson, Nishikawa & Hayward, 1995).

➤ Assessing the Quality of Studies:

- PEDro Scale - Physiotherapy Evidence Database (Maher et. al, 2003)



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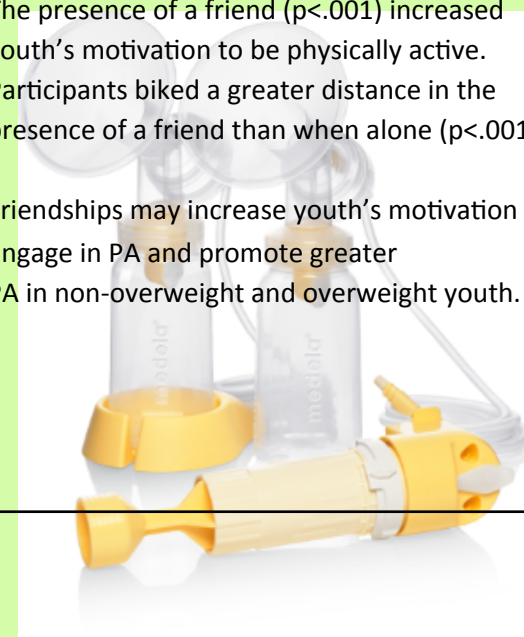
Results

Conclusions

➡ Data Extraction:

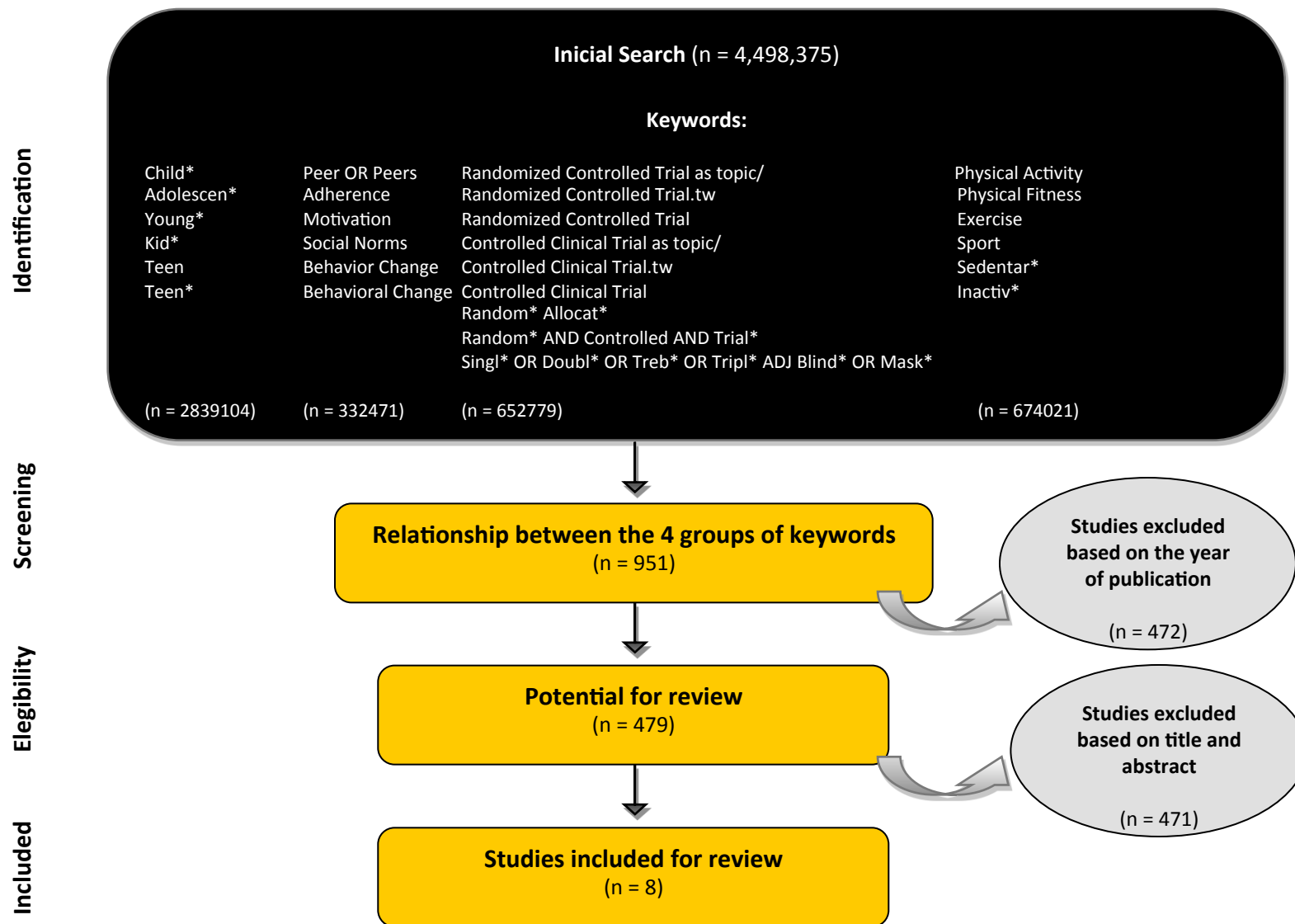
➡ Data extraction forms

Study	Population	Methods	Main outcomes and conclusions
- Salvy et al. (2009) - Title: <i>Effect of Peers and Friends on Youth Physical Activity and Motivation to be Physically Active</i> - Country: USA - Type: RCT - PEDro score: 6/11	- n = 88 (44M e 44F) - Age: 12-14 y (M = 13 y) - Characteristics: recruited through newspapers, radio, TV, posters, church and <i>newsletters</i>	- Intervention: 2x2x2 design - Through a computerized relative reinforcing value task to earn points exchangeable for physical and/or sedentary activities - Duration: 1 day - Measurement: - Anthropometry: BMI, percentil - PA: number of pedal revolutions	The presence of a friend ($p < .001$) increased youth's motivation to be physically active. Participants biked a greater distance in the presence of a friend than when alone ($p < .001$). Friendships may increase youth's motivation to engage in PA and promote greater PA in non-overweight and overweight youth.



#	Search (21 Jan 2012)	Results
<i>Fase I</i>		
1	Child*	1749999
2	Adolescen*	1469174
3	Young*	614646
4	Kid*	2677
5	Teen OR Teen*	1454320
6	#1 OR #2 OR #3 OR #4 OR #5	2839104
<i>Fase II</i>		
7	Peer OR Peers	49380
8	Adherence	69672
9	Motivation	131821
10	Social Norms	5015
11	Behavior Change OR Behavioral Change	92001
12	#7 OR #8 OR #9 OR #10 OR #11	332471
<i>Fase III</i>		
13	Randomized Controlled Trial as topic/	106252
14	Randomized Controlled Trial.tw	420154
15	Randomized Controlled Trial	393997
16	Controlled Clinical Trial as topic/	99274
17	Controlled Clinical Trial.tw	431081
18	Controlled Clinical Trial	169127
19	Random* Allocat*	96752
20	Random* AND Controlled AND Trial*	422943
21	Singl* OR Doubl* OR Treb* OR Tripl* ADJ Blind* OR Mask*	54676
22	#13 OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21	652779

#	Search (21 Jan 2012)	Results
<i>Fase IV</i>		
23	Physical Activity	255763
24	Physical Fitness	24430
25	Exercise	233610
26	Sport	133627
27	Sedentar*	14540
28	Inactiv*	223230
29	#23 OR #24 OR #25 OR #26 OR #27 OR #28	674021
<i>Fase V</i>		
30	#6 AND #12 AND #22 AND #29	951
31	#30 AND ("2008/01/01"[Date - Publication] : "2012/01/21"[Date - Publication])	479



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➔ **Eight** randomized controlled trials were selected

➔ Data covering a total of **11,014 participants**

Authors

Country

Participants

Anderson, Winett, Wojcik & Williams (2010)	USA	n = 661
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➔ Peers support appears to promote a **decrease in sedentary activities**

Hardman, Horne & Lowe (2011)	UK	n = 386
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Lubans & Silva (2009)	UK	n = 78
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➔ Peers support appears to promote an **increase in moderate and moderate-to-vigorous PA** in children and adolescents

Lytle et al. (2009)	USA	n = 8066
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Rosenkranz, Behrens & Dziewaltowski (2010)	USA	n = 76
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Salvy et al. (2009)	USA	n = 88
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Wilson, Lawman, Segal & Chappell (2011)	USA	n = 679
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➔ A presence of a friend can **increase motivation** for performing PA

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- ➡ **Peer support** appears to be an **effective mediator** to promote PA and decreased SB in children and adolescents
- ➡ **Implications for practice:** who wants to implement programs to promote PA in children and youth should consider peer support
- ➡ **Implications for research:** how this mediator acts and how it influences PA and SB in different populations and contexts needs further investigation



“You must be the change you wish to see in the world.”

Mahatma Gandhi (1869-1948)

Thank you

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