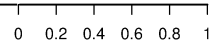


A) From increaser to decreaser / Increaser **

| | N | Measure | Method | Class size (SE) | Class size (95% CI) |
|-----------------------|-------------------------------------|---------|--------------------|-----------------|---------------------|
| Youngest group | | | | | |
| 1 | Audrain–McGovern, 2012 | 1,429 | MVPA | SR | 0.05 (0.01) • |
| 2 | Farooq 2017: Females | 283 | Total PA volume | OBM | |
| 3 | Farooq 2017: Males | 262 | Total PA volume | OBM | |
| 4 | Farooq 2017: Females | 283 | MVPA | OBM | |
| 5 | Farooq 2017: Males | 262 | MVPA | OBM | |
| 6 | Findlay, 2009: Females | 4,497 | Organized PA | PR + SR | |
| 7 | Findlay, 2009: Males | 4,320 | Organized PA | PR + SR | |
| 8 | Findlay, 2010: Females | 4,489 | Unorganized PA | PR + SR | |
| 9 | Findlay, 2010: Males | 4,489 | Unorganized PA | PR + SR | |
| 10 | Howie, 2016: Females | 823 | Organized SP | PR | |
| 11 | Howie, 2016: Males | 856 | Organized SP | PR | 0.08 (0.01) • |
| 12 | Janz, 2014: Females | 265 | MVPA | OBM | |
| 13 | Janz, 2014: Males | 265 | MVPA | OBM | 0.23 (0.03) → |
| 14 | Kwon, 2015a* | 537 | MVPA | OBM | |
| 15 | Kwon, 2015a* | 537 | SP | SR | |
| 16 | Kwon, Lee, Carnethon, 2015: Females | 2,155 | PA | SR | |
| 17 | Rodriguez, 2004 | 1,098 | Team participation | SR | 0.07 (0.01) • |
| Middle group | | | | | |
| 18 | Barnett, 2008 | 884 | LTPA | SR | 0.25 (0.01) • |
| 19 | Dishman, 2010 | 497 | MVPA | SR | 0.19 (0.02) → |
| 20 | Kaseva, 2016 | 3,564 | LTPA | SR | |
| 21 | 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) • |
| Oldest group | | | | | |
| 26 | Aggio, 2018: Males | 4,952 | PA | SR | 0.24 (0.01) • |
| 27 | Artaud, 2016 | 10,205 | PA | SR | 0.23 (0.00) • |
| 28 | Gabriel, 2017: Females | 1,771 | Sport and exercise | SR | 0.13 (0.01) • |
| 29 | Hsu, 2013: Females | 2,256 | Regular exercise | SR | 0.19 (0.01) • |
| 30 | Hsu, 2013: Males | 2,544 | Regular exercise | SR | 0.23 (0.01) • |
| 31 | Laddu, 2017b: Males | 5,964 | PA | SR | |
| 32 | Nguyen, 2013: Females | 92,629 | PA | SR | |
| 33 | Pan, 2015 | 4,018 | PA | SR | 0.23 (0.01) • |
| 34 | Xue, 2012: Females | 433 | PA | SR | |



B) Highly active

C) Active

D) Inactive

Class size (SE)

Class size (95% CI)

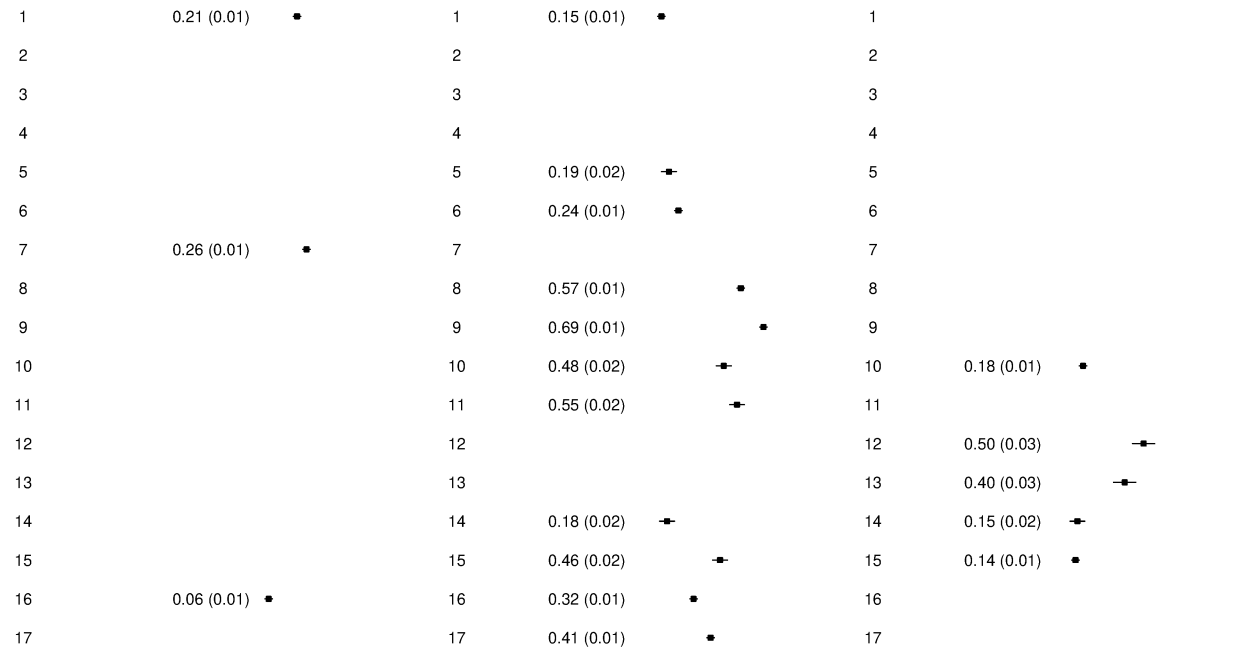
Class size (SE)

Class size (95% CI)

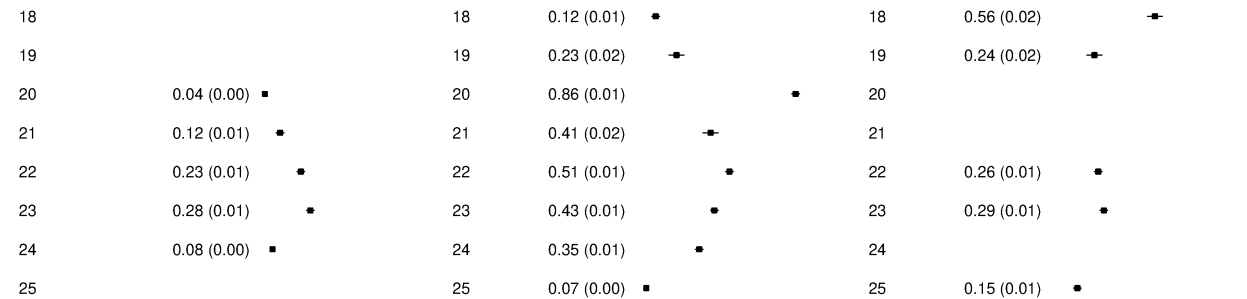
Class size (SE)

Class size (95% CI)

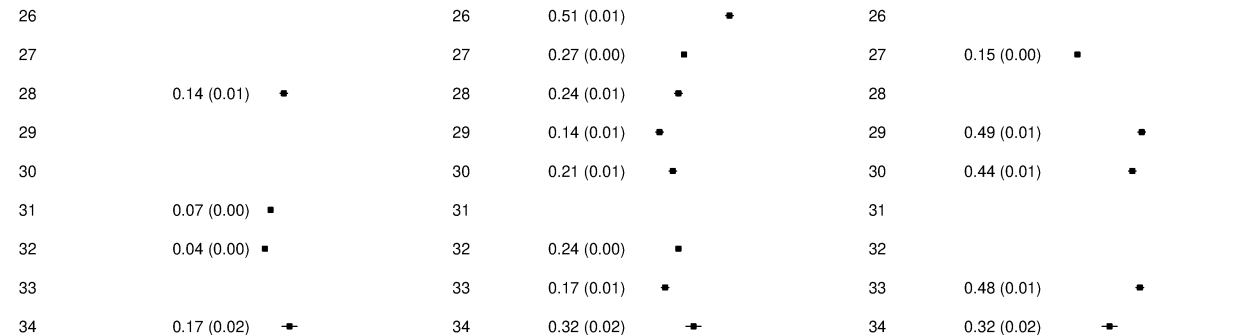
Youngest



Middle



Oldest



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) Decreaser of moderate PA

G) Decreaser of low PA / Low-active

Class size (SE)

Class size (95% CI)

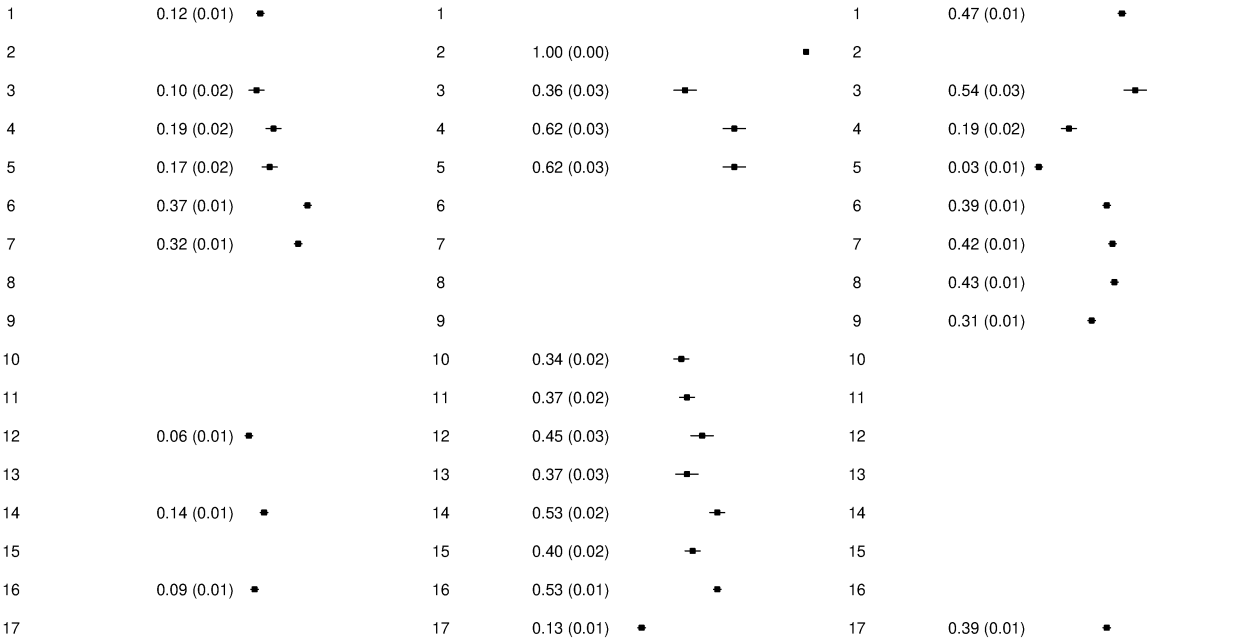
Class size (SE)

Class size (95% CI)

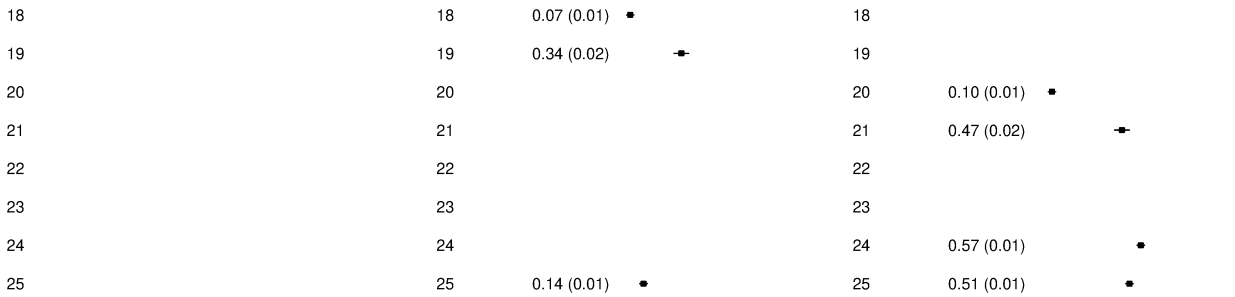
Class size (SE)

Class size (95% CI)

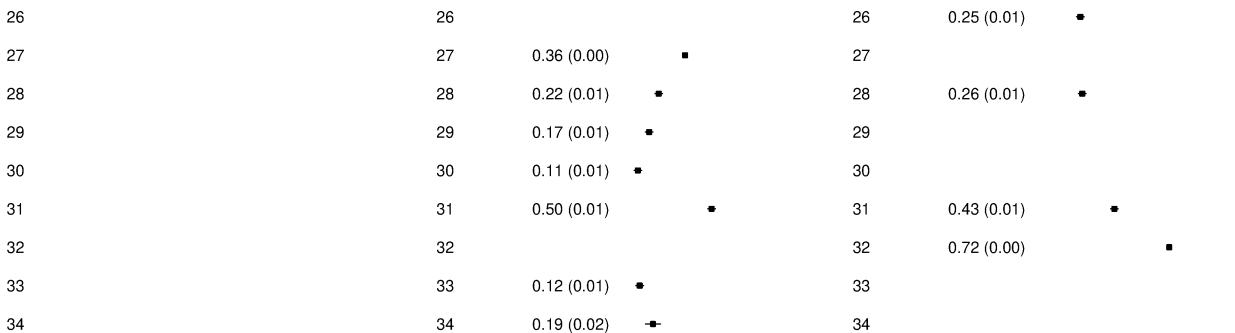
Youngest



Middle



Oldest



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.