Additional File 1 Cohort characteristics, TSP data source, hierarchy of evidence score and quality appraisal for each study.


|  |  | and subjective |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | interview |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Canadian high | self-report | 342 |  | 11 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 11 |
| al [69] | school | questionnaire |  | (0.1) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | students |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grimmer et | Australian | subjective | 60 F , | 13-17 | 11 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| al [12] | schoolchildren | interview | 72 M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hagen et al | Norwegian | self-report | 25,922 | 20-80 | IV | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 10 |
| [43] | adults | questionnaire |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Harreby et al | Danish | self-report | 718 F , | 14-15 | IV | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 7 |
| [64] | schoolchildren | questionnaire | 671 B |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Korovessis | Greek | subjective | 664 F, | 15.0 | IV | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 10 |
| et al [44] | schoolchildren | interview | 588 M | (2.0) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Korovessis | Greek | subjective | 1816 F, | 12.0 | IV | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 11 |
| et al [65] | schoolchildren | interview | 1625 M | (1.5) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kujala et al | Finnish | self-report | 344 F, | 10-16 | IV | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 9 |
| [45] | schoolchildren | questionnaire | 354 M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Linton et al | Swedish | self-report | 1004 F , | 35-45 | IV | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 8 |
| [47] | adults | questionnaire | 910 M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Linton et al | Swedish | self-report | 500 | 35-45 | IV | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 10 |
| [46] | adults | questionnaire |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mikkelsson | Finnish | self-report | 894 F, | 9.8 | II | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 |
| et al [66] | schoolchildren | questionnaire | 862 M | (0.3) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | and |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| al [55] | female adults | interview |  | (7.7) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Veerapen et | Adults living in | subjective | 1420 F, | > 15 | IV | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 9 |
| al [56] | Malaysia | interview | 1174 M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wedderkopp | Danish female | subjective | 254 F | 8-10, | IV | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| et al [57] | schoolchildren | interview | children | 14-16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | , 165 F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | adolesc |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ents |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wedderkopp | Danish | subjective | 419 F, | 8-16 | IV | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| et al [11] | schoolchildren | interview | 387 M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Whittfield et | New Zealand | Self-report | 70 F , | 13.6 | IV | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 11 |
| al [58] | schoolchildren | questionnaire | 70 M | (1.3) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | and |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | (0.6) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Proportion of | - |  | - | - | - | 97.0 | 63.6 | 100 | 33.3 | 6.1 | 81.8 | 42.4 | 33.9 | 42.4 | 93.9 | 90.9 | 97.0 | 97.0 | 93.9 | 66.7 | Mean |
| studies with |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (SD): |
| positive |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 10.5 |
| score (\%) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | (2.0) |

* Key to scoring (Law et al. [36]): all items 1 for yes, 0 for no except biases (0 for yes, 1 for no).
$1=$ Was the study purpose stated clearly? $2=$ Was relevant background literature reviewed? $3=$ Was the design appropriate for the study question? 4 = Were there any biases present (minimum response rate of $80 \%$ for sample bias, blinding of investigators when physical measure were taken)? $5=$ Was sample size justified? $6=$ Was the sample described in detail? (had to include the number of participants by gender, age,
and a description of where the cohort was sampled from) $7=$ Was informed consent obtained? (if not described, assume no); $8=$ Were the outcome measures valid? (if all not described, assume no); $9=$ Were the outcome measures reliable? (if all not described, assume no); $10=$ Results were reported in terms of statistical significance? $11=$ Clinical importance was reported? $12=$ Were the statistical analysis methods appropriate? 13 = Conclusions were appropriate given the study methods? 14 = Are there implications for clinical practice given the results of the study (based on the experience of the reviewers)? $15=$ Were limitations of the study acknowledged and described by the authors?
$\mathrm{M}=$ males, $\mathrm{F}=$ females

