

Reporting Summary

Nature Portfolio wishes to improve the reproducibility of the work that we publish. This form provides structure for consistency and transparency in reporting. For further information on Nature Portfolio policies, see our [Editorial Policies](#) and the [Editorial Policy Checklist](#).

Statistics

For all statistical analyses, confirm that the following items are present in the figure legend, table legend, main text, or Methods section.

n/a	Confirmed
☐	☒ The exact sample size (<i>n</i>) for each experimental group/condition, given as a discrete number and unit of measurement
☒	☐ A statement on whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
☐	☒ The statistical test(s) used AND whether they are one- or two-sided <i>Only common tests should be described solely by name; describe more complex techniques in the Methods section.</i>
☒	☐ A description of all covariates tested
☒	☐ A description of any assumptions or corrections, such as tests of normality and adjustment for multiple comparisons
☐	☒ A full description of the statistical parameters including central tendency (e.g. means) or other basic estimates (e.g. regression coefficient) AND variation (e.g. standard deviation) or associated estimates of uncertainty (e.g. confidence intervals)
☐	☒ For null hypothesis testing, the test statistic (e.g. <i>F</i> , <i>t</i> , <i>r</i>) with confidence intervals, effect sizes, degrees of freedom and <i>P</i> value noted <i>Give P values as exact values whenever suitable.</i>
☒	☐ For Bayesian analysis, information on the choice of priors and Markov chain Monte Carlo settings
☒	☐ For hierarchical and complex designs, identification of the appropriate level for tests and full reporting of outcomes
☒	☐ Estimates of effect sizes (e.g. Cohen's <i>d</i> , Pearson's <i>r</i>), indicating how they were calculated

Our web collection on [statistics for biologists](#) contains articles on many of the points above.

Software and code

Policy information about [availability of computer code](#)

Data collection	We did not collect data as part of this study.
Data analysis	Data analysis was conducted using Stata (StataCorp. 2025. Stata Statistical Software: Release 19. College Station, TX: StataCorp LLC.). Our code is available at: https://github.com/dsalvolab/pa-inequalities

For manuscripts utilizing custom algorithms or software that are central to the research but not yet described in published literature, software must be made available to editors and reviewers. We strongly encourage code deposition in a community repository (e.g. GitHub). See the Nature Portfolio [guidelines for submitting code & software](#) for further information.

Data

Policy information about [availability of data](#)

All manuscripts must include a [data availability statement](#). This statement should provide the following information, where applicable:

- Accession codes, unique identifiers, or web links for publicly available datasets
- A description of any restrictions on data availability
- For clinical datasets or third party data, please ensure that the statement adheres to our [policy](#)

The data utilized for the global analysis of domain-specific physical activity inequalities are publicly available from the WHO STEPS dataset (reference: his is a secondary datanalysis of publicly available WHO STEPS data: World Health Organization. STEPwise approach to NCD risk factor surveillance (STEPS). <https://>

www.who.int/teams/noncommunicable-diseases/surveillance/systems-tools/steps). All other data resulting from the different narrative and scoping reviews conducted as part of this work is available in the Online Supplement.

Research involving human participants, their data, or biological material

Policy information about studies with [human participants or human data](#). See also policy information about [sex, gender \(identity/presentation\), and sexual orientation](#) and [race, ethnicity and racism](#).

Reporting on sex and gender	The analysis and findings in this paper pertain to gender and are reported as such.
Reporting on race, ethnicity, or other socially relevant groupings	We do not report on race or ethnicity, but do report on socioeconomic status, assessed using educational attainment as a proxy. A meticulous harmonization process took place, and is described in the Methods section, for calculating this variable.
Population characteristics	All data used in this secondary analysis is from adult participants, but specific age values were not used in the analysis, nor were other variables beyond gender and socioeconomic status (educational attainment) employed, as described above.
Recruitment	No primary data collection or recruitment took place. This is a secondary data analysis.
Ethics oversight	This study is exempt for ethics board approval as it is a secondary data analysis of publicly available, de-identified data from WHO.

Note that full information on the approval of the study protocol must also be provided in the manuscript.

Field-specific reporting

Please select the one below that is the best fit for your research. If you are not sure, read the appropriate sections before making your selection.

☐ Life sciences ☒ Behavioural & social sciences ☐ Ecological, evolutionary & environmental sciences

For a reference copy of the document with all sections, see nature.com/documents/nr-reporting-summary-flat.pdf

Behavioural & social sciences study design

All studies must disclose on these points even when the disclosure is negative.

Study description	Quantitative, survey-based data of self-reported physical activity, self-reported gender, and self-reported educational attainment, from the WHO STEPS dataset.
Research sample	Representative samples of free-living adults from the WHO STEPS dataset across 68 countries.
Sampling strategy	This is a secondary data analysis, so our research team is not in charge of the sampling protocol. However, briefly, the WHO STEPS data derive from nationally representative surveys that use a multistage, clustered-random sampling protocol standardized across participating countries.
Data collection	Again, our team was not involved in data collection activities and only used secondary data from WHO STEPS. Briefly, WHO works through the Ministries of Health of affiliated countries and through their corresponding national health surveillance systems for collection of the data.
Timing	We did not collect the data ourselves, as this is a secondary data analysis. However, WHO reports that the WHO STEPS data we utilized were collected between 2008 and 2019.
Data exclusions	This is a secondary data analysis. Only data from countries reporting domain-specific physical activity estimates, with gender and educational attainment data were included. Subnational surveys and surveys lacking information on sample weights were excluded from our analysis. Our analysis is based on data from 68 countries out of the original 122 countries that participated in STEPS.
Non-participation	We did not collect primary data for this study, so this is a non-applicable item.
Randomization	Non-applicable.

Reporting for specific materials, systems and methods

We require information from authors about some types of materials, experimental systems and methods used in many studies. Here, indicate whether each material, system or method listed is relevant to your study. If you are not sure if a list item applies to your research, read the appropriate section before selecting a response.

Materials & experimental systems

n/a	Involved in the study
☒	☐ Antibodies
☒	☐ Eukaryotic cell lines
☒	☐ Palaeontology and archaeology
☒	☐ Animals and other organisms
☒	☐ Clinical data
☒	☐ Dual use research of concern
☒	☐ Plants

Methods

n/a	Involved in the study
☒	☐ ChIP-seq
☒	☐ Flow cytometry
☒	☐ MRI-based neuroimaging

Plants

Seed stocks

Non-applicable

Novel plant genotypes

Non-applicable

Authentication

Non-applicable