

# Taren Sanders

ACADEMIC RESEARCHER & DATA SCIENTIST

Institute for Positive Psychology and Education, Australian Catholic University

☎ 0412 278 640 | ✉ Taren.Sanders@acu.edu.au | 📠 0000-0002-4504-6008 | 🌐 tarensanders | 🐦 tarensanders

## Education

### Doctor of Philosophy

WESTERN SYDNEY UNIVERSITY

2016

- Thesis: Investigating associations between neighbourhood green space and weight status: A longitudinal study of Australian children aged 4 to 13 years old.

### Master of Data Science (Applied)

ADELAIDE UNIVERSITY

2022

### Bachelor of Health Science (Honours; First Class)

WESTERN SYDNEY UNIVERSITY

2012

- Thesis: Measuring adolescent boys' physical activity: Bout length and the influence of accelerometer epoch length.

### Bachelor of Health Science (PDHPE)

WESTERN SYDNEY UNIVERSITY

2011

## Employment History

### Program Leader

INSTITUTE FOR POSITIVE PSYCHOLOGY AND EDUCATION, AUSTRALIAN CATHOLIC UNIVERSITY

2021–Current

- Drive the strategic direction and focus of the research program
- Support academic and professional staff, as well as higher-degree students, within the program
- Provide input as a member of the Institute Executive Management Committee on Institute priorities, and advocate for my research program
- Developed and implemented new project management processes, including making agile management strategies standard practice.

### Deputy Program Leader

INSTITUTE FOR POSITIVE PSYCHOLOGY AND EDUCATION, AUSTRALIAN CATHOLIC UNIVERSITY

2017–2021

- Supported Program Leader to manage the research program

### Research Fellow

INSTITUTE FOR POSITIVE PSYCHOLOGY AND EDUCATION, AUSTRALIAN CATHOLIC UNIVERSITY

2016–Current

- Conduct original, high-impact, and translational research in the areas of health, education, and psychology.
- Oversee the development, evaluation, and management of multiple large-scale school-based research projects (e.g., iPLAY; 180 schools).
- Conduct analyses of primary and secondary data, and provided statistical support to colleagues including statistics workshops.
- Work with industry partners (NSW Department of Education, NSW Health, Sport Australia) to provide project updates and seek input.
- Author academic and non-academic outputs, including journal articles, grant applications, stakeholder reports, and data visualisations.
- Mentor doctoral and honours students, including reviewing and evaluating their analyses and writing.

## Research Summary

Publications	Citations	h-Index	Mean CNCI	Mean Impact Factor	Funding
36	1496	21	1.8	7.2	> \$1 million

## Technical Skills

### Programming Languages

R, PYTHON, STATA, JULIA

### Software Development

R PACKAGES (INCLUDING CRAN SUBMISSION), PYTHON PACKAGES

### Statistical Methods

MACHINE LEARNING, MULTILEVEL MODELLING, INTERVENTION EVALUATION, META-ANALYSES

### Research Methods

STUDY DESIGN, INTERVENTION DEVELOPMENT, ETHICS AND RECRUITMENT

## Selected Publications

---

For a full list of publications see my full CV ([bit.ly/TarenSanders](https://bit.ly/TarenSanders)).

### PEER-REVIEWED PUBLICATIONS

Lubans, D. R., **Sanders, T.**, Noetel, M., Parker, P., McKay, H., Morgan, P., Salmon, J., Kirwan, M., Bennie, A., Peralta, L., Cinelli, R., Moodie, M., Hartwig, T., Boyer, J., Kennedy, S. G., Plotnikoff, R. C., Hansen, V., Vasconcellos, D., Lee, J., ... Lonsdale, C. (2022). Scale-up of the Internet-based Professional Learning to help teachers promote Activity in Youth (iPLAY) intervention: A hybrid type 3 implementation-effectiveness trial. *International Journal of Behavioral Nutrition and Physical Activity*, 19(1), 141. <https://doi.org/10.1186/s12966-022-01371-4> | JIF: 4

Antczak, D., Lonsdale, C., del Pozo Cruz, B., Parker, P., & **Sanders, T.** (2021). Reliability of GENEActiv accelerometers to estimate sleep, physical activity, and sedentary time in children. *International Journal of Behavioral Nutrition and Physical Activity*, 18(1), 73. <https://doi.org/10.1186/s12966-021-01143-6> | Citations: 5; JIF: 8.9; CNCI: 1.1

Noetel, M., Griffith, S., Delaney, O., Harris, N. R., **Sanders, T.**, Parker, P., del Pozo Cruz, B., & Lonsdale, C. (2021). Multimedia Design for Learning: An Overview of Reviews With Meta-Analysis. *Review of Educational Research*. <https://doi.org/10.3102/00346543211052329> | Citations: 3; JIF: 13.6; CNCI: 0.6

Lee, J., **Sanders, T.**, Antczak, D., Parker, R., Noetel, M., Parker, P., & Lonsdale, C. (2021). Influences on User Engagement in Online Professional Learning: A Narrative Synthesis and Meta-Analysis. *Review of Educational Research*, 91(4), 518–576. <https://doi.org/10.3102/0034654321997918> | Citations: 5; JIF: 13.6; CNCI: 2.1

Hartwig, T. B., **Sanders, T.**, Vasconcellos, D., Noetel, M., Parker, P. D., Lubans, D. R., Andrade, S., Ávila-García, M., Bartholomew, J., Belton, S., Brooks, N. E., Bugge, A., Caverio-Redondo, I., Christiansen, L. B., Cohen, K., Coppinger, T., Dyrstad, S., Errisuriz, V., Fairclough, S., ... del Pozo Cruz, B. (2021). School-based interventions modestly increase physical activity and cardiorespiratory fitness but are least effective for youth who need them most: An individual participant pooled analysis of 20 controlled trials. *British Journal of Sports Medicine*, 55(13), 721–729. <https://doi.org/10.1136/bjsports-2020-102740> | Citations: 21; JIF: 18.5; CNCI: 3.6

Lonsdale, C., **Sanders, T.**, Parker, P., Noetel, M., Hartwig, T., Vasconcellos, D., Lee, J., Antczak, D., Kirwan, M., Morgan, P., Salmon, J., Moodie, M., McKay, H., Bennie, A., Plotnikoff, R. C., Cinelli, R., Greene, D., Peralta, L., Cliff, D., ... Lubans, D. R. (2021). Effect of a Scalable School-Based Intervention on Cardiorespiratory Fitness in Children: A Cluster Randomized Clinical Trial. *JAMA Pediatrics*, 175(7), 680. <https://doi.org/10.1001/jamapediatrics.2021.0417> | Citations: 11; JIF: 26.8; CNCI: 3.6

Noetel, M., Griffith, S., Delaney, O., **Sanders, T.**, Parker, P., del Pozo Cruz, B., & Lonsdale, C. (2021). Video Improves Learning in Higher Education: A Systematic Review. *Review of Educational Research*, 91(2), 204–236. <https://doi.org/10.3102/0034654321990713> | Citations: 25; JIF: 13.6; CNCI: 4.9

Antczak, D., Lonsdale, C., Lee, J., Hilland, T., Duncan, M. J., del Pozo Cruz, B., Hulteen, R. M., Parker, P. D., & **Sanders, T.** (2020). Physical activity and sleep are inconsistently related in healthy children: A systematic review and meta-analysis. *Sleep Medicine Reviews*, 51, 101278. <https://doi.org/10.1016/j.smrv.2020.101278> | Citations: 20; JIF: 11.6; CNCI: 1.2

**Sanders, T.**, Parker, P. D., del Pozo-Cruz, B., Noetel, M., & Lonsdale, C. (2019). Type of screen time moderates effects on outcomes in 4013 children: Evidence from the Longitudinal Study of Australian Children. *International Journal of Behavioral Nutrition and Physical Activity*, 16(1), 117. <https://doi.org/10.1186/s12966-019-0881-7> | Citations: 49; JIF: 6.7; CNCI: 3.9

**Sanders, T.**, Feng, X., Fahey, P. P., Lonsdale, C., & Astell-Burt, T. (2015). The influence of neighbourhood green space on children's physical activity and screen time: Findings from the longitudinal study of Australian children. *International Journal of Behavioral Nutrition and Physical Activity*, 12(1), 126. <https://doi.org/10.1186/s12966-015-0288-z> | Citations: 56; JIF: 4; CNCI: 2.5

### BOOK CHAPTERS

Parker, P., Guo, J., & **Sanders, T.** (2019). Socioeconomic Inequality and Student Outcomes in Australia. In L. Volante, S. V. Schnepf, J. Jerrim, & D. A. Klinger (Eds.), *Socioeconomic Inequality and Student Outcomes: Cross-National Trends, Policies, and Practices* (pp. 189–204). Springer Singapore. [https://doi.org/10.1007/978-981-13-9863-6\\_11](https://doi.org/10.1007/978-981-13-9863-6_11)

## Research Funding

<b>Australian Research Council</b>	\$658,544
CHIEF INVESTIGATOR — DISCOVERY PROJECT DP200101912	2020–2023
SQUARE EYES OR ALL LIES? UNDERSTANDING CHILDREN’S EXPOSURE TO SCREENS.	
<b>Australian Catholic University</b>	\$21,597
CHIEF INVESTIGATOR (LEAD) — TRANSLATE4IMPACT	2023–2023
RAISING AWARENESS OF THE RISKS AND BENEFITS OF CHILDREN’S INTERACTIONS WITH ELECTRONIC SCREENS TO PARENTS AND POLICYMAKERS	
<b>Catholic Schools New South Wales</b>	\$76,333
CHIEF INVESTIGATOR	2021–2022
AUSTRALIAN PRINCIPAL HEALTH AND WELLBEING	
<b>NSW Department of Education</b>	\$20,000
CHIEF INVESTIGATOR	2019–2020
IPLAY FOR INCLUSION	
<b>Sport Australia</b>	\$248,802
CHIEF INVESTIGATOR — ‘MOVE IT AUS’ PARTICIPATION GRANT PROGRAM	2019–2020
IPLAY FOR INCLUSION	
<b>Australian Sports Commission</b>	\$54,546
CHIEF INVESTIGATOR	2019–2019
IPLAY SPORTING SCHOOLS PILOT PROJECT	
<b>Australian Catholic University</b>	\$7,865
CHIEF INVESTIGATOR (LEAD) — FACULTY OF HEALTH SCIENCES RESEARCH PROJECT GRANT SCHEME	2018–2018
INVESTIGATING THE CORRELATES OF CHILDREN’S SCREEN TIME	
<b>NSW Department of Education</b>	\$11,500
CHIEF INVESTIGATOR	2018–2018
IPLAY NUTRITION PROOF-OF-CONCEPT MODULE	

## Awards

2013	<b>Australian Postgraduate Award</b> Western Sydney University. \$105,000AUD plus tuition fees.
2017	<b>ACU Discipline Winner and National Finalist</b> 5 Minute Research Pitch.
2021	<b>Excellence and Innovation in Public Health Education and Research</b> Council of Academic Public Health Institutions Australasia. Team Award (iPLAY Project)
2021	<b>Vice-Chancellor’s Staff Excellence Award: Excellence in Research and Research Partnership</b> Australian Catholic University. Team Award (iPLAY Project)
2022	<b>Vice-Chancellor’s Staff Excellence Award: Excellence in Research and Research Partnership</b> Australian Catholic University. Team Award (Principals Project)

## Students

### DOCTOR OF PHILOSOPHY

2016–2020	Jane Lee	Assistant Supervisor
2016–2021	Devan Antcazk	Assistant Supervisor
2019–2022	Katrina Wilhite	Principal Supervisor
2020–	Bridget Booker	Principal Supervisor
2020–	Roberta Vasconcellos	Co-supervisor
2021–	Ella Tremaine	Principal Supervisor
2022–	Anum Urooj	Principal Supervisor

### HONOURS

2019–2019	Bridget Booker	Principal Supervisor
-----------	----------------	----------------------

## Invited Talks

- 2018 **Australian Council for Health, Physical Education and Recreation.** Keynote Lecture: Evidence-Based School Physical Activity Programs. K-6 Physical Activity and Health Conference
- 2021 **ResBaz Sydney.** Keystory: How We Do Reproducible Research.

## Conference Presentations

---

(Presenting author presentations listed only)

Lonsdale, C., Lubans, D., Noetel, M., & **Sanders, T.** (2019). Scaling-up an Efficacious Comprehensive School-based Physical Activity Intervention: Development, Evaluation and Dissemination of the iPLAY Program. *Sports Medicine Australia*.

**Sanders, T.**, Parker, P. D., Del Pozo-Cruz, B., Noetel, M., & Lonsdale, C. (2019). Content of Screen Time Moderates the Effects of Exposure on Physical Health, Psychological and Educational Outcomes in a Longitudinal Study of 4,013 Children. *International Society for Behavioral Nutrition and Physical Activity*.

**Sanders, T.**, Lonsdale, C., & Del Pozo-Cruz, B. (2018). Sleep Quality Mediates the Relationship between Screen Time and Depression in Adults: A Cross-Sectional Study of the NHANES 2005-2006 Cycle. *International Society for Behavioral Nutrition and Physical Activity*.

**Sanders, T.**, Feng, X., Fahey, P. P., Lonsdale, C., & Astell-Burt, T. (2017). Neighbourhood Green Space and Children's Enjoyment of Physical Activity: Evidence from the Longitudinal Study of Australian Children. *SELF Conference*.

**Sanders, T.**, Feng, X., Fahey, P. P., Lonsdale, C., & Astell-Burt, T. (2016). Does Physical Activity Explain the Relationship Between Green Space and Children's BMI? Mediation Analyses from the Longitudinal Study of Australian Children. *International Society for Physical Activity and Health*.

**Sanders, T.**, Feng, X., Fahey, P. P., Lonsdale, C., & Astell-Burt, T. (2015). The Longitudinal Influence of Neighbourhood Green Space on Children's Physical Activity, Screen Time, and Body Mass Index. *International Society for Behavioral Nutrition and Physical Activity*.

## Selected Software

---

For a complete list of the software I have developed or contributed to, please see my Github page.

### R PACKAGES

#### cloudstoR

[CRAN Link](#)

PROVIDES PROGRAMMATIC ACCESS TO AARNET'S CLOUDSTOR CLOUD STORAGE SERVICE

- Author and Maintainer.
- Available on CRAN - approx 400 downloads per month.

#### sleepIPD

[GitHub Link](#)

A STANDARDISED METHOD FOR REPROCESSING ACCELEROMETRY DATA FOR A VERY LARGE SLEEP AND PHYSICAL ACTIVITY

POOLED ANALYSIS

- Author and Maintainer.
- Used by teams all over the world to reprocess data exactly as required for our study.

#### gt3x2csv

[GitHub Link](#)

CONVERT ACTIGRAPH GT3X FILES TO CSV, IN A FRACTION OF THE TIME

- Author and Maintainer.
- Approximately 7x faster than using the proprietary software.

### PYTHON PACKAGES

#### faceblurring

[GitHub Link](#)

AN IMPLEMENTATION OF A FACE DETECTION MODEL USED TO PROTECT PRIVACY IN AN ARC PROJECT

- Author and Maintainer.
- Working version available, still in development.