

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	1492	21	1.8	7.4	> \$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).

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>

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-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

Research Funding

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

Awards

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