

Research Fellow / Senior Research Fellow (Psychometrician)

ABOUT THE COMPANY

ACER is an independent, not-for-profit educational research and development organisation focused on creating and promoting research-based knowledge, products and services that can be used to improve learning across the life span.

The Psychometrics and Methodology team provides psychometric services and support for research and assessment programs within ACER, undertakes commissioned work and provides consultancy for outside agencies, including State and Territory Education Departments and other national and international bodies. The team also conducts research into fundamental psychometrics and quantitative methodology issues. Supporting and participating in the work of project teams, the Senior Research Fellow will specify, apply, and evaluate scaling models for assessment and questionnaire data, perform complex statistical analyses, prepare research results, write reports, and make presentations to internal and external stakeholders.

Psychometrics and Methodology team members have sound knowledge of statistics and statistical modelling. Psychometricians in this role work with large datasets using a range of statistical programming languages or packages such as R, SAS, SPSS or Python. This role requires expertise in various applied psychometric and statistical models for analysing assessment data, including efficiently applying and evaluating different Item Response Models. At times, knowledge of multilevel modelling, multidimensional latent regression modelling, Structural Equation Modelling, contemporary machine learning methodologies and approaches to analysing log-file data may be employed to resolve analytical issues relating to educational data sets.

ABOUT THE OPPORTUNITY

We seek a research expert with at least five-years' experience in operational psychometrics. They will be responsible for achieving relevant project objectives, making original contributions to educational knowledge, policy or practice, and building knowledge in one or more areas of applied psychometrics expertise.

The successful candidate will lead operational psychometrics processes and contribute to test development processes, statistical analysis, data interpretation, and collaboration with multidisciplinary teams locally within ACER, Australia, and internationally. They will work to ensure assessments meet reliability and validity standards, perform item analysis, run scaling models, and provide recommendations to improve assessments in development, including for large scale assessments. They will interpret psychometric data for stakeholders, track and prepare technical performance information and documentation, and serve as a source of advice, providing guidance on psychometric methods and applications as appropriate.

Strong written and verbal communication skills are essential, with a proven ability to communicate technical details confidently to diverse audiences. Experience directing projects, leading people, and collaborating with internal and external stakeholders to deliver quality

research and project outcomes is desirable. The ability to develop and review project proposals and plans and determine the necessary time frames, procedures, and staffing requirements in response to client requests and general tenders is important.

We are seeking a Research Fellow for this position; however, we are open to candidates with the right skills and experience at the Senior Research Fellow level. The final offer will be determined based on the candidate's professional experience and qualifications.

SKILLS AND EXPERIENCE

RESEARCH FELLOW

- Provide expert methodological advice and rigorous, efficient statistical modelling in one or more areas of applied educational measurement research or practice
- Work collaboratively with both internal and external project stakeholders to enable the delivery of research and project outcomes to agreed objectives, standards, timelines and budgets
- Conduct and deliver components of high-quality research to meet project objectives
- Contribute to survey and instrument design and construct components of survey and assessment instruments and learning materials
- Undertake data collection and analysis
- Prepare components of reports and other forms of project dissemination and communication
- Contribute to preparing research proposal submissions, applications and tenders for new business
- Actively contribute to and participate in continuous improvement activities to enhance the delivery of research outcomes at ACER
- Develop and build professional collegiality through participation in events, forums, workshops and conferences at ACER and in the broader research community
- Contribute to ACER's higher education courses through writing content, teaching and online moderation where agreed and as appropriate/relevant

SENIOR RESEARCH FELLOW

- Provide leadership in one or more specialised areas of applied educational measurement research and development with a strong operational focus
- Make original contributions to educational knowledge, policy or practice
- Identify, initiate and lead the development of research proposal submissions, applications and tenders for new business
- Lead and manage large and complex research projects that deliver agreed objectives, standards, timelines and budgets
- Lead, manage and coach staff for optimal individual and team performance
- Regularly disseminate and communicate research project outcomes by presenting and publishing work undertaken at/for ACER
- Actively contribute to and participate in continuous improvement activities to enhance the delivery of research outcomes at ACER

- Develop and build professional collegiality and networks through participation in events, forums, workshops and conferences at ACER and in the broader research community
- Promote ACER's research profile by effectively engaging, collaborating and partnering with external stakeholders across academic, government and industry bodies
- Contribute to ACER's higher education courses through writing content, teaching and online moderation where agreed and as appropriate/relevant

BENEFITS

- 17% employer contribution to superannuation
- Ongoing professional development opportunities
- Flexible work arrangements
- 20 days of personal leave accumulated each year
- Free and confidential counselling service for employees and dependents

This appointment is offered on an ongoing, full-time basis. This position can be based at any of ACER's Melbourne, Sydney, Brisbane, Adelaide, or Perth offices. ACER is currently operating in a hybrid work environment; working from home is at the manager's approval.

Research Fellow salary is within the range of \$114,319 - \$145,183 per annum (plus 17% ACER contribution to superannuation).

Senior Research Fellow salary is within the range of \$148,392 - \$185,199 per annum (plus 17% ACER contribution to superannuation).

For a full copy of the position description or to apply, click on 'Apply' or visit our career site <https://www.acer.org/au/about-us/careers>.

Applications will close at midnight (AEDT) on Sunday 1 December 2024.

ACER is committed to actively fostering an inclusive and diverse work environment and is proud to be an equal opportunity employer. ACER will consider qualified applicants for employment based on their merit, individual skills, qualifications and other appropriate criteria relevant to the role for which they are applying.