Research culture in a regional Australian health setting

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Project Aims

- **To evaluate the research culture and capacity of AH professionals in a regional setting to identify and understand the barriers and enablers for the conduct of research.**

Significance of the Project

- **Allied health professionals require a level of research capacity and culture to produce high quality evidence and improve health outcomes.**

- **Allied health research considered emerging**

- **Allied health research culture could be considered low**

- **Emerging evidence that differences in allied health research culture and capacity exist between rural, regional and metropolitan areas (Howard, et al., 2013; Pain et al., 2015; Williams et al., 2015)**

- **Understanding the issues facing various allied health professionals, at all levels in different locations, is needed to assist the development of effective strategies to enhance AH research culture and capacity**

Research culture

Research culture defined as "a culture that embraces the expectation that everyday health and social care should be based upon the best available knowledge or research findings, rather than custom and practice, requiring that all professionals are critical consumers of research". (Ilott and Bury, 2002, p. 195)

The definition of research culture was extended by Borkowski et al., (2016) to include research generation and translation into practice.

Research capacity

Research capacity building defined as "a process of individual and institutional development that leads to higher levels of skills and greater ability to perform useful research"

(Trostle, 1992, pp 1321)

Project

- **Systematic review**

- **Ethics applications**

- **Data collection**

  - **Survey of Bendigo Health allied health professionals**

- **Data analysis**

- **Dissemination of findings**

Systematic Review

- **identified tools that were used to measure research culture and capacity**

- **reported on the current level of research culture and capacity of individual and multiple allied health professions.**

- **15 studies included.**

- **Allied health professionals motivated to conduct research to increase research skills, improve job satisfaction and enhance career advancements.**

- **Barriers – lack of time, skills, resources and team and organisational support.**

- **(Borkowski, et al., 2016)**

Research questions

What is the research capacity and culture of allied health staff at Bendigo Health?

Are there any differences in research culture and capacity between disciplines or groups in this regional health setting?

What are the barriers and enablers to the conduct of research at Bendigo Health for allied health professionals?

Methods

- **The Research Capacity and Culture tool (Queensland Health & Griffith University, 2011) was used to evaluate research capacity and culture across individual, team and organisation domains.**

- **Each domain has a series of statements, with participants responding by rating research skill and success on a 10-point scale, with 1 being the lowest and 10 being the highest.**

- **The RCC also enables the collection of data relating to perceived motivators and barriers to research via open and closed-ended questions**

- **One-way ANOVA was used to determine differences between allied health professions, while responses to open ended questions was themed using open coding.**

Participants

Bendigo Health physiotherapists, occupational therapists, social workers, psychologists, speech pathologists, dietitians, podiatrists, exercise physiologists, and audiologists were eligible to participate.

280 AH staff were sent the RCC and 164 participants commenced the survey but data of 28 participants who did not complete the RCC tool were removed

The overall response rate was 46%.

	Physiotherapy	Occupational Therapy	Social Work	Other
<1 year	4	1	0	2
1-5 years	14	12	5	13
6-10 years	10	12	5	9
11-15 years	6	5	5	6
>16 years	7	10	2	8
Total	41	40	17	38

Table 1: Demographic data of allied health professionals
Key: *The "other" group includes podiatry, exercise physiology, audiology, speech pathology, dietetics, psychology

Individual

Individual domain skill	Allied Health n=112	Physiotherapy n=34	Occupational Therapy n=36	Social Work n=12	Other* n=30
i) Finding relevant literature	7.3 (1.7)	7.3 (1.8)	7.4 (1.3)	7.3 (1.4)	7.2 (2.1)
ii) Critically reviewing the literature	6.9 (1.8)	6.8 (1.9)	7.1 (1.6)	7.0 (1.4)	6.8 (2.1)
iii) Using a computer referencing system (eg Endnote)	5.0 (2.7)	5.3 (2.7)	4.8 (2.5)	4.3 (2.0)	5.4 (3.0)
iv) Writing a research protocol	4.2 (2.5)	4.1 (2.6)	4.5 (2.3)	3.1 (2.0)	4.5 (2.7)
v) Securing research funding	2.8 (1.9)	2.6 (1.7)	3.2 (1.9)	2.6 (2.0)	2.8 (2.1)
xi) Analysing quantitative research data	4.5 (2.6)	3.6 (2.4)	4.9 (2.4)	3.8 (1.9)	5.3 (3.0)
xii) Writing a research report	4.8 (2.7)	4.0 (2.5)	5.0 (2.4)	4.5 (2.5)	5.5 (3.4)
xiii) Writing for publication in peer-reviewed journals	3.6 (2.5)	3.0 (2.1)	3.8 (2.2)	3.4 (2.4)	4.3 (3.1)
xiv) Providing advice to less experienced researchers	3.4 (2.2)	2.9 (1.9)	3.8 (2.0)	3.0 (2.3)	3.6 (2.6)
Individual	4.7 (1.9)	4.3 (1.7)	4.9 (1.6)	4.2 (1.8)	5.2 (2.3)

Team

Team Domain Skill	Allied Health n=115	Physiotherapy n=34	Occupational Therapy n=36	Social Work n=15	Other* n=30
i) has adequate resources to support staff research training	4.8 (2.5)	5.2 (2.3)	5.4 (2.4)	2.9 (1.5)	4.6 (2.6)
ii) has funds, equipment or admin to support research activities	4.1 (2.3)	4.5 (2.1)	4.4 (2.3)	2.5 (1.7)	3.9 (2.4)
iii) does team level planning for research development	4.7 (2.3)	5.7(2.0)	4.8 (2.4)	3.0 (1.7)	4.4 (2.4)
iv) ensures staff involvement in developing that plan	4.8 (2.5)	5.6 (2.2)	5.2 (2.6)	2.6 (1.3)	4.5 (2.7)
v) has team leaders that support research	6.0 (2.5)	6.7 (1.9)	6.0 (2.7)	3.9 (2.2)	6.2 (2.5)
vi) provides opportunities to get involved in research	5.2 (2.6)	5.9 (2.2)	5.4 (2.6)	3.2 (1.7)	5.1 (2.9)
vii) does planning that is guided by evidence	6.4 (2.5)	6.9 (2.0)	6.5 (2.6)	4.9 (2.4)	6.4 (2.7)
viii) has consumer involvement in research activities/planning	5.0 (2.5)	5.7 (2.1)	4.8 (2.6)	3.4 (1.8)	5.2 (2.7)

Team continued

	4.7 (2.8)	5.5 (2.4)	4.8 (2.9)	3.1 (2.0)	4.6 (3.2)
ix) has applied for external funding for research					
x) conducts research activities relevant to practice	5.8 (2.9)	6.8 (2.4)	6.0 (2.9)	3.4 (2.2)	5.5 (3.2)
xi) supports applications for research scholarships/ degrees	5.8 (2.9)	7.0 (2.4)	5.9 (2.9)	3.3 (2.5)	5.7 (3.1)
xii) has mechanisms to monitor research quality	5.1 (2.7)	5.8 (2.2)	5.5 (2.7)	2.6 (2.0)	4.9 (3.0)
xiii) has identified experts accessible for research advice	5.4 (2.8)	6.1 (2.8)	5.8 (2.7)	3.0 (2.0)	5.5 (3.0)
xiv) disseminates research results at research forums/seminars	5.7 (2.9)	6.8 (2.1)	5.9 (2.8)	3.6 (2.7)	5.5 (3.3)
xv) supports a multi-disciplinary approach to research	5.8 (2.7)	6.5 (2.1)	6.3 (2.7)	3.6 (2.0)	5.7 (3.1)
xvi) has incentives & support for mentoring activities	5.1 (2.8)	5.9 (2.4)	5.4 (3.0)	3.1 (2.1)	5.1 (3.0)
xvii) has external partners (eg universities) engaged in research	5.8 (3.0)	6.8 (2.3)	6.1 (3.1)	3.6 (2.0)	5.6 (3.5)
xviii) supports peer-reviewed publication of research	5.7 (2.8)	6.5 (2.0)	5.9 (2.7)	3.1 (2.1)	5.8 (3.2)
xix) has software available to support research activities	4.3 (2.6)	4.8 (2.3)	4.7 (2.7)	2.4 (1.7)	4.3 (2.9)
Team	5.3 (2.3)	6.0 (1.8)	5.5 (2.3)	3.2 (1.5)	5.2 (2.5)

Organisation

Organisation Domain Skill	Allied Health n=136	Physiotherapy n=41	Occupational Therapy n=40	Social Work n=17	Other* n=38
i) has adequate resources to support staff research training	5.6 (2.2)	5.9 (2.1)	6.3 (2.1)	4.4 (1.9)	5.2 (2.3)
ii) has funds, equipment or admin to support research activities	4.6 (2.2)	5.1 (1.9)	5.1 (2.1)	3.1 (1.7)	4.1 (2.3)
iii) has a plan or policy for research development	5.7 (2.2)	6.1 (2.0)	6.1 (2.1)	4.5 (1.9)	5.3 (2.5)
iv) has senior managers that support research	6.8 (2.2)	7.3 (1.7)	7.1 (2.1)	4.9 (2.1)	6.7 (2.5)
v) ensures staff career pathways are available in research	4.9 (2.3)	5.2 (2.2)	5.1 (2.3)	4.0 (1.8)	4.6 (2.4)
vi) ensures organisation planning is guided by evidence	6.7 (2.1)	6.6 (2.0)	6.8 (2.3)	6.0 (2.1)	7.1 (1.9)
vii) has consumers involved in research	5.7 (2.1)	6.0 (1.7)	5.5 (2.3)	4.8 (1.7)	6.0 (2.3)
viii) accesses external funding for research	5.5 (2.4)	5.5 (2.2)	6.0 (2.2)	3.7 (2.2)	5.7 (2.5)

Organisation continued

ix) promotes clinical practice based on evidence	**7.7 (1.8)**	**8.0 (1.7)**	**7.6 (1.9)**	**6.6 (2.1)**	**8.1 (1.8)**
x) encourages research activities relevant to practice	**6.6 (2.3)**	**7.1 (1.8)**	**6.6 (2.5)**	**4.4 (2.0)**	**6.9 (2.4)**
xi) has software programs for analysing research data	**5.1 (2.6)**	**5.6 (2.5)**	**5.4 (2.5)**	**3.7 (2.4)**	**4.7 (2.6)**
xii) has mechanisms to monitor research quality	**5.7 (2.5)**	**6.1 (2.5)**	**5.9 (2.4)**	**4.8 (2.8)**	**5.4 (2.5)**
xiii) has identified experts accessible for research advice	**5.9 (2.4)**	**6.2 (2.0)**	**6.2 (2.3)**	**4.9 (2.5)**	**5.6 (2.8)**
xiv) supports a multi-disciplinary approach to research	**6.2 (2.4)**	**6.4 (2.0)**	**6.6 (2.4)**	**5.2 (1.9)**	**6.2 (2.8)**
xv) has regular forums/bulletins to present research findings	**5.8 (2.5)**	**6.7 (1.8)**	**5.9 (2.4)**	**4.1 (2.3)**	**5.4 (2.9)**

Organisation continued.

xvi) engages external partners (eg universities) in research	6.7 (2.3)	7.2 (2.0)	6.9 (2.5)	5.2 (1.5)	6.6 (2.6)
xvii) supports applications for research scholarships/ degrees	6.3 (2.4)	6.6 (2.1)	6.3 (2.3)	4.4 (2.3)	6.6 (2.6)
xviii) supports the peer-reviewed publication of research	6.1 (2.4)	6.2 (2.2)	6.4 (2.5)	4.2 (2.3)	6.5 (2.4)
Organisation	6.0 (1.8)	6.3 (1.6)	6.2 (1.9)	4.6 (1.6)	5.9 (1.9)

Overall findings

Barriers for Occupational Therapists:

- **Other work tasks take priority (83%)**

- **Lack of time for research (78%)**

- **Desire for work/life balance (43%)**

- **Lack of skills for research (40%)**

Motivators for Occupational Therapists

- **To develop skills (73%)**

- **Increased job satisfaction (53%)**

- **Career advancement (48%)**

Recommendations

- **Multi-layered strategies are needed at the individual, team, organisation and supra-organisation domains to improve AH research culture and capacity for AH practice and allied health policy.**

- **Address barriers to research conduct and leverage motivators to facilitate and improve allied health research culture and capacity**

- **That skills to conduct research and skills to translate research findings into practice be further supported at undergraduate and post-graduate levels**

- **Further research is needed.**

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