



Responsible knowledge use: The importance of critical appraisal in occupational therapy research and publication

In a recent post in the *Scholarly Kitchen*, Todd Carpenter reminded us that “The publishing process has always relied on technology, from paper and ink with which scribes noted their work... to the earliest typesetters and printers, to the digital markup and repository tools of today”¹. Digital information is ubiquitous and accessible to us all to enrich our knowledge and provide a launchpad from which we generate new knowledge. While this ever-expanding technology makes information available literally *at the touch of a button*, it is the responsibility of all users of information to have guardrails in place and critically evaluate all information sourced to safeguard the scholarly record.

Evidence-based practice (EBP) encourages the generation of, and use of knowledge to guide practice which responds to the diverse occupational needs of the people we work with²⁻⁴. Critical appraisal is a key element of EBP and is the process by which we determine and critically evaluate the rigour, impact, relevance, and acceptability of the knowledge or information we have sourced to answer a focused question we have posed in relation to our teaching, research and/or practice⁵⁻⁶. We live in a world where access to knowledge is ever increasing, and this provides exciting opportunities for occupational therapists to use knowledge to inform their practice. Knowledge is indeed power, but as socially responsive and evidence informed professionals, we must be responsible in the use of this power. Sadly, not all information is the best match to guide our teaching, practice, and research. It is for this reason that we should conduct a critical appraisal of existing knowledge in relation to the following dimensions:

1. Methodological rigour

Here we should ask the question: *How well has the study been carried out?* Using this lens, we explore how confident we are that the study design has been appropriately applied and that the results are not due to chance, other confounding variables and/or bias.

2. Impact

Here we should ask the question: *What is the impact or clinical value of the results/findings of the study or alternatively What is the value of the study findings for my teaching, my research, and my practice?* This demands careful consideration of the intervention goals you and your clients/students/research participants have developed and how the results will help achieve these goals.

3. Relevance and applicability

Here we should ask the question: *Can these study findings*

be applied in our context to guide our teaching, research, and/or practice? This question encourages us to think about what might limit us from applying the study findings, and if it is worthwhile to consider addressing these limitations, to be able to apply the study results.

4. Responsibility

A fourth dimension, ‘responsibility’ relates to the question: *What further research do we have to engage in to generate evidence for the questions that remain after our appraisal of the existing evidence?* This is important given that we hold a responsibility to both engage with and generate knowledge which will guide best practice⁷.

The *South African Journal of Occupational Therapy* (SAJOT) publishes papers that contribute to the dissemination of knowledge which has been critically appraised through rigorous editorial practices and a double blinded review process in relation to the above four dimensions. Continued engagement with knowledge published in SAJOT and other journals, will help contribute to an ongoing appraisal of the existing knowledge-base and will encourage further discussion and research to support the development of the profession.

Pamela Gretschel

<https://orcid.org/0000-0002-7890-3635>

Blanche Pretorius

<https://orcid.org/0000-0002-3543-0743>

Helen Buchanan

<https://orcid.org/0000-0001-5540-9926>

REFERENCES

1. Carpeneter, T. A Serious Game for Scholarly Publishers: The STM Trends 2027 Helps Publishers Level Up. The Scholarly Kitchen, April 2023. <https://scholarlykitchen.sspnet.org/2023/04/28/the-stm-association-released-its/#:~:text=The%20STM%20Trends%202027%20output,Social%20Responsibility%20and%20Research%20Integrity>
2. Buchanan, H. (2017). Evidence-based practice and practice-based evidence. In: S. Dsouza, R. Galvaan, E. Ramugondo (Eds.). *Concepts in Occupational Therapy: Understanding Southern Perspectives*. Manipal University Press, pp. 316-339.
3. Franzsen, D. & Pretorius, B. The need for high quality clinical

research in occupational therapy. South African Journal of Occupational Therapy. Vol 53 No1, April 2023.

<https://doi.org/10.17159/2310-3883/2023/vol53n1a1>

4. Pitout, Hanlie. (2014). Barriers and strategies to increase research involvement of South African occupational therapists. South African Journal of Occupational Therapy, 44(2), 17-21. Retrieved June 18, 2023, from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2310-38332014000200005&lng=en&tlng=en.
5. Hoffmann, T., Bennett, S & Del Mar, C (2013). Introduction to evidence-based practice. In Hoffmann, T., Bennett, S & Del Mar, C (Eds.). Evidence Based Practice across the Health Professions. Sydney: Churchill Livingstone.
6. Sackett, D.L., Richardson, W.S., Rosenberg, W.M., & Haynes, R.B. (1997). Evidence-Based Medicine: How to Practice and Teach EBM. 1st ed. New York: Churchill Livingstone.
7. Critical Appraisal Skills Programme <http://www.casp-uk.net/>

Useful resources

- <https://guides.library.unisa.edu.au/OccupationalTherapy/OTFieldPractice4>
- <http://www.otseeker.com/Info/Tutorial.aspx>
- <https://pressbooks.pub/Optimizingyourcapstoneexperience/chapter/3/>