

# Promoting cultural rigour through critical appraisal tools in First Nations peoples' research

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Judging the methodological quality of research articles is aided by critical appraisal tools (CATs) such as the Cochrane Handbook for Systematic Reviews, the Effective Public Health Practice Project, the Critical Appraisal Skills Program, and the Schema for Evaluating Evidence on Public Health Interventions. However, these are based on Western scientific methods and miss the assessment of 'quality' through First Nations peoples' world views.<sup>1</sup> Subsequently, the accumulated knowledge base about health interventions excludes First Nations peoples' diverse cultural knowledge.

Our recent systematic review of the effectiveness of nutrition policy actions for First Nations peoples<sup>2</sup> used the suite of tools developed in Australia by the Joanna Briggs Institute (JBI) to appraise the quality of different study types. Of the thirteen checklists, only the JBI Checklist for Qualitative Research (2020) asked, "Is there a statement locating the researcher culturally or theoretically?"<sup>3(p3)</sup> to direct the assessor's attention to the cultural beliefs and values of the researcher as a source of bias. This prompted the First Nations researchers in our project (ML and TW) to think about the cultural basis of knowledge and ponder: while CATs direct appraisal to detect methodological biases, what about cultural biases?

The resulting evidence base left us with the sense that the recommended actions arising from the research were structured about First Nations peoples, yet without them. That is, the CATs reflected a colonial ethic whereby non-First Nations peoples' conceptions of 'quality' and 'rigour' were 'best

## Abstract

**Objective:** To highlight the emerging ethos of cultural rigour in the use of critical appraisal tools in research involving First Nations peoples.

**Methods:** Critical reflection on recent systematic review experience.

**Results:** The concept of cultural rigour is notably undefined in peer-reviewed journal articles but is evident in the development of critical appraisal tools developed by First Nations peoples.

**Conclusions:** Conventional critical appraisal tools for assessing study quality are built on a limited view of health that excludes the cultural knowledge of First Nations peoples. Cultural rigour is an emerging field of activity that epitomises First Nations peoples' diverse cultural knowledge through community participation in all aspects of research.

**Implications for public health:** Critical appraisal tools developed by First Nations peoples are available to researchers and direct attention to the social, cultural, political and human rights basis of health research.

**Key words:** cultural rigour, cultural safety, critical appraisal tools, First Nations peoples, nutrition

practice' in the production of knowledge underpinning health policy solutions for First Nations peoples. This disempowering ethic diminishes, demeans and devalues First Nations peoples' cultural knowledge, which goes against shifting power imbalances to promote cultural safety.<sup>4</sup> Shifting power is partly about providing the right tools for the job, such as appraisal tools developed through First Nations peoples' world views.

First Nations peoples worldwide are reclaiming their rights to be included in policy decisions so that food systems reflect their knowledge and cultural preferences. As the worldwide movement on food sovereignty shows,<sup>5</sup> colonisation has resulted in the exclusion of First Nations peoples from their traditional food and cultural practices. The effects are devastating – type 2 diabetes, obesity, cardiovascular disease and renal failure are common throughout First Nations

peoples whose countries have been colonised by invading imperial forces. Based on our review experience, the widely used JBI CATs do not reflect the social, political or cultural framing of food sovereignty movements that call for the rights of First Nations peoples to define their own food systems from within their sociocultural meanings of foods.<sup>6</sup>

Linda Tuhiwai Smith, in 1999, challenged the assumption "that only the West can define, produce, and regulate knowledge, and further, that knowledge is always obtained through Western scientific methods."<sup>7(p281)</sup> Ninomiya et al. (2017) claim that there are "systemic and insidious inequities built into research institutions."<sup>8(p2)</sup> Nevertheless, First Nations researchers are leading change in research practice, where, as shown by Ninomiya et al. (2017), even a systematic review protocol can strongly include First Nations peoples' participation. A recently-

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developed CAT by Well Living House, a Canadian First Nations health and wellbeing research centre, includes a “community relevance domain...that specifically and purposefully incorporate First Nations’ knowledge systems and priorities.”<sup>8(p4)</sup> This is not standard practice – yet.

The use of CATs drives researchers to improve the quality of their research design elements, such as community participation. Our systematic review of international evidence found that reporting of the participation of First Nations peoples in nutrition policy research varied considerably, a phenomenon noted by Huria et al. (2019).<sup>9</sup> This ranged from active and ongoing involvement as researchers to members of advisory committees to more passive community feedback/translation workshops.<sup>2</sup> A recent Australian review also noted the inconsistent reporting of First Nations peoples’ participation in nutrition intervention research.<sup>10</sup> In short, there lacks rigorous practice and reporting in research towards ensuring high-quality participation of First Nations peoples.

The value of First Nations peoples’ cultural knowledge is exemplified in the work of Australian First Nations writer Bruce Pascoe in *Dark Emu*, which documents First Nations peoples’ practices about the environment, seasons, food choices and attendant social and cultural norms.<sup>11</sup> In contrast, we felt that conventional CATs filtered out the researcher’s attention to cultural knowledge and signalled that 65,000 years of Australian First Nations peoples’ deep connection to land was irrelevant to the nutrition policy evidence base. Instead, the narrow clinical nutrition view of health can result in the appropriation of data that helps researchers progress their careers (e.g. through journal publications) but provides little to no benefits to those being researched. The fact that the norms of the research system, as expressed through standard CATs, authorise this practice is of concern because ‘culture’ matters in health.<sup>12</sup>

As such, we argue that cultural rigour alongside scientific rigour directs researchers to adjust their quality appraisal to epitomise First Nations peoples’ worldviews. Despite the appearance of ‘cultural rigour’ as a phrase in academic articles,<sup>13-15</sup> we could not find a definition. We propose an initial definition of cultural rigour as the detailed attention to protocols of engaging with First Nations peoples in all research processes to ensure the cultural validity of the results.

As a result, First Nations peoples’ diverse cultural knowledge is epitomised in research design, governance, and evidence-based recommendations.

The emerging ethos of cultural rigour is present in the work of Huria et al.<sup>9</sup> who developed ‘Consolidated criteria for strengthening reporting of health research involving indigenous [sic] peoples: the CONSIDER statement’ as a quality improvement tool for researchers. Relevant to CATs, Harfield et al.<sup>1</sup> in Australia developed the ‘Aboriginal and Torres Strait Islander Quality Appraisal Tool’ to be used alongside conventional CATs. Their tools guide researchers towards quality improvement in their practices and demonstrate how high-quality participation can be achieved so that First Nations peoples’ diverse cultural knowledge complements Western research. Global health research operates in a world where First Nations peoples are embedded in Western systems and structures, often without their consent. Reformulating those structures to improve First Nations peoples’ nutrition, health and wellbeing outcomes must privilege – nay, epitomise – their cultural knowledge. Cultural rigour is an emerging ethos where First Nations peoples direct research so that evidence-based policies and programs reflect their diverse cultural knowledge. As such, First Nations researchers and their communities can see the power of themselves and their cultures as valid evidence for health policy reform.

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