

Reviewer's report

Title: Mapping New Theoretical and Methodological Terrain for Knowledge Translation: Contributions from Critical Realism and the Arts

Version: 1 **Date:** 26 June 2008

Reviewer: Carole Estabrooks

Reviewer's report:

Reviewer's Report

Title: Mapping new theoretical and methodological terrain for knowledge translation: Contributions from critical realism and the arts

Reviewer: Carole Estabrooks

General

This manuscript presents the development of a new knowledge translation framework called Critical Realism & the Arts Research Utilization Model (CRARUM). The CRARUM model, which is an adapted and modified version of Logan and Graham's Ottawa Model of Research Use (ORMU), attempts to combine critical realism philosophy with arts-based approaches for knowledge translation. While the model is potentially important and relevant to knowledge translation scholars, there are a number of areas in the manuscript that need to be addressed before a decision on publication can be made.

This said I am quite enthusiastic about this manuscript and think that it should be published subsequent to revisions! It adds an interesting and important perspective to ongoing discourse about knowledge translation that has potential to deepen and enrich the theoretical discourse in the field significantly. In particular it opens up interesting potential around the examination of causation and affords new ways into the understanding of the central importance of relationships, power differentials and various forms of capital in the travel of knowledge within complex organizations. Analyses with a gendered or a class lens, for example, are long overdue in this field.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Why a new KT model? And why chose the OMRU model?

The authors have chosen to modify the OMRU without exploration of other models that exist which explore context. For example, Diffusion of Innovation (Rogers 2003), The PARIHS framework (Kitson, Harvey, & McCormack 1998), The Coordinated Implementation Model (Lomas 1993), The Knowledge-to-Action Process Framework (Graham et al. 2006), and Understanding-User-Context

Framework (Jacobson et al., 2003), to name just a few, are also context related models of knowledge transfer. An assessment of existing models is a key component missing from this manuscript. Such an assessment is necessary to rationalize: (1) why yet another knowledge transfer model is necessary and (2) why the OMRU was chosen to be the model that was adapted. If the author's purpose from the start was solely to adapt the OMRU, this should be stated early and they should clearly rationalize why other models were not being considered. It would then be helpful to know how the CRARUM was developed – what was the process by which the factors embedded into the model came into play? How did the authors go from the OMRU to CRARUM? This process is deeply embedded in the critical realism discussion but should be more clearly articulated for readers lacking familiarity with this perspective on philosophy of science. In fact, the decision to clothe the entire paper on a refurbishing of the OMRU model is puzzling. This has the potential to draw I believe the focus away from the central tenets of the argument as I understand it. So if the authors are intent on this refurbishing as the vehicle of their arguments how this is crafted requires more consideration – so as not to place the focus on OMRU in need of revisions but as an illustration (would be my recommendation).

The lack of clarity of the concept 'context'

The authors allude in the background to the importance of context to knowledge translation but provide limited detail as to what context refers to, or to existing evidence suggesting its importance to knowledge translation. Furthermore, the works of key authors in the field of context and knowledge translation (e.g., Kitson, Gibbons, Lomas, Glisson, etc.) are not discussed. The paper is somewhat underdeveloped with respect to the literature presented on context. There is relatively little discussion on "context" as it has been theorized (or not) in the knowledge translation literature – what it is and what aspects (or how) it influences knowledge translation – which is the aim of CRARUM. For example, only one reference is cited with respect to capital (social, cultural, material). With respect to power authors such as Moxley (2000) are not referred to, not is literature on shared leadership which speaks to the importance of power to knowledge transfer. The CRARUM model itself also offers little guidance with respect to what in "context" influences knowledge transfer, or how context influences knowledge transfer. While I appreciate that their view of context differs radically from the majority of perspectives in the KT literature it would be useful to enhance their text somewhat with some comment on existing conceptualizations and their shortfalls vis a vis a critical realist perspective.

The authors use the definition of 'context' as:

"the (local) mix of conditions and events (social agents, objects and interactions) which characterize open systems, and whose unique confluence in time and space selectively activates (triggers, blocks or modifies) causal powers (mechanisms) in a chain of reactions that may result in very different outcomes depending on the dynamic interplay of conditions and mechanisms over time and space" by Poland et al (forthcoming). This redefinition is not self-evident in the CARNUM figure. The authors discuss power as important to context and that

power relations manifest in different ways in different settings – however there is no reference in the figure of CRARUM to indicate this belief. Also on page 10, the authors state that “interventions intersect powerfully with other dynamics (racism, classism, labour-management relations, staff burn-out, . . . , etc.) in ways that, by virtue of the underlying causal powers at play, have the ability to either enhance or undermine change initiatives” – again a powerful point that is not reflected in the figure of the CRARUM model. So it may be useful to revisit the depiction of the model, or at least to clarify in text.

The need of a clarification/explanation of Critical Realism

While the authors articulate many of the main assumptions of critical realism throughout their discussion, the paper would benefit from an early clear (brief) description of what critical realism is, including very briefly its ontology, epistemology, and methodology. At minimum it should be noted early in the discussion that critical realism is a philosophy that asserts that science’s explanatory power is best when it’s underpinning ontological, epistemological, and methodological assumptions are made explicit. Further explanation re some of the critical realism assumptions which underpinned the development of the CRARUM model is also needed. For example, on page 7 of the manuscript, the authors discuss the distinction between the real, the actual, and the empirical. This is central to the ontology of critical realism and thus, the CRARUM model. This distinction between the real, the actual, and the empirical, for example, has led to critical realism being referred to by some as an ontology of intransitive structures and mechanisms (that are real and exist independently of us) that transitive theories and laws (factual knowledge of the world) designed to describe them aims to penetrate. This understanding of critical realism’s ontology is important to understanding the interconnectedness and interaction between the adopter and context set forth in CRARUM. It will also assist readers to assess the relevance of critical realism to their own beliefs and theoretical positions.

This paper has the potential to make a significant contribution to the knowledge translation literature with respect to its discussion of arts-based approaches to increasing knowledge transfer (page 12). Were the studies presented using the arts-based approaches conducted in healthcare? This is needed to know how generalizable they are to increasing knowledge transfer in healthcare settings. These details should be provided in a table or additional file. In addition, what are the author’s recommendations for future research for arts-based interventions?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Page 3 – the statement “The identification and use of best evidence through careful and rigorous clinical trials research and standardized application is increasingly emphasized by the governments of Canada (Canadian Institutes of Health Research Act), the US (Agency for Healthcare Research Quality), UK (National Health Service Centre for Reviews and Dissemination), and Australia (National Institute of Clinical Studies) primarily due to concerns about

cost-containment, quality improvement, and accountability” should have primary references from these agencies.

Discretionary Revisions

I would not refer to CRARUM as a ‘novel’ knowledge translation framework – I would suggest referring to it as a model of knowledge translation, adapted from the OMRU.

There is a rich literature emerging in a number of areas that the authors may want to consider in the process of revisions. For example, in the areas of engaged scholarship (Van de Ven), context as process (Dopson & Fitzgerald), learning organizations (Gherardi & Niccolini).

There are numerous elements in the KT literature writ large that could be woven into the paper in a meaningful way. For example, the early work of Rice & Rogers on reinvention seems particularly suited as an illustrative point in the discussion of what critical realism and art might bring to the KT discourse. There are many others. While these are not necessary one or more of these unresolved, in fact, for the most part unattended to areas may be useful illustrative points in the paper as it is revised.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.