Critical Rehabilitation Research: Why it matters for all research.

COMMENTARY
By: Barbara E. Gibson

Critical research approaches are gaining in popularity in the rehabilitation sciences and yet there remains some confusion regarding the meaning of “critical” and its applications to research and practice. While a burgeoning interdisciplinary literature is available explaining critical approaches, very little of this work is specific to the rehabilitation context. My new book, Rehabilitation: A post-critical approach (1) was intended, in part, to address this gap. In this commentary, I draw from the book to sketch out the main tenets of critical research across its variants (including my ‘post-critical’ approach), and to make the case for why rehabilitation research benefits from the inclusion of critical elements regardless of substantive focus, methodology, or patient population. Thus in keeping with the theme of this issue of rehabINK, my goal is to discuss the importance of a critical stance for rehabilitation researchers working across the lifespan.

What is meant by “critical” research? The use of this term is often a source of confusion in that it has common lay usages (e.g., acute, judgmental), pedagogical and clinical usages (e.g., ‘critical appraisal’), as well as the philosophical usage that I describe here. Often but not exclusively associated with qualitative research, critical research draws on social, political and cultural theories to guide inquiry and analyses. Criticality is expressed in different disciplines in unique ways and traverses fields of study including literature, art, geography, political science, cultural studies, disability studies, physics and the health sciences, to name a few. The common imperative that links these diverse fields is a commitment to questioning the taken-for-granted. While each critical scholar will focus her/his inquiry on a different object of interest, each will interrogate what is taken-for-granted as ‘true’ or ‘given’ in its context. For example, in health care, disability is largely viewed as a problem to be fixed (2), while in literature, critical work might question what constitutes the literary canon and/or the privileging of white, male and/or western perspectives (3). In each of these examples, the veracity of a previously entrenched idea is opened for examination or ‘problematized’.

In what follows, I unpack some of the central tenets of critical research but first want to begin to address the claim in my title that critical research matters for rehabilitation research across the lifespan. People have different health concerns over the course of lifespan and at least some rehabilitation programs are organized according to age groups, e.g. children’s rehabilitation, geriatric rehabilitation. Age-based criteria have been critiqued on a number of fronts because they rely on particular assumptions about the characteristics of the group and/or their needs. For example, in my own work I have
questioned the wisdom of discharging severely-compromised children from paediatric long term care facilities when they reach an arbitrary age and asked whose interests are served or denied (4). Age-based divisions also structure research agendas such that there are institutes, programs, and funding competitions specifically aligned with different life stages. My claim that critical research matters for research across the lifespan is meant to suggest that its central ideas have wide applicability, but also to suggest that how we think about lifespan is itself open to critical critique.

To my mind, the central tenet of questioning the taken-for-granted reflects the spirit and intent of the research enterprise in its broadest application. We often think of research as geared towards investigating the unknown and/or generating new knowledge, and in that respect the best research is always oriented to moving a given field in new directions. Bold or “ground breaking” research is willing to go out on a limb, to question the central premises that have both guided and constrained inquiry, and to seek that fresh idea that turn a field on its head. Think about, for example, how Einstein’s work forever altered physics theory and research, or the major shifts in how pain is understood and investigated in health research. These shifts required an openness to questioning received wisdom - not only in regard to substantive ‘facts’, but also dominant methodologies.

Importantly, critical researchers are not only creative and questioning, but also concerned with who has the power to determine and perpetuate particular ways of knowing. They are committed to addressing injustices within the research process whether, e.g., at the macro-level of institutions and funding, or the micro-level of how study questions are formulated, participants are chosen, and findings are interpreted. It seems to me that these commitments are important for all research and can only enhance rehabilitation inquiry as it continues to grow in exciting new directions. I return to these notions at the end of the paper.

I have already stated two important tenets of critical work: questioning assumptions and attending to power relations, and now turn to a third – critiquing the dominance of positivism (5,6). Positivism dominates health research. It underpins the scientific method and its assumptions of a stable reality that can be objectively discovered or determined. Bioscientific research assumes that phenomena such as health, pain, depression, disability, or quality of life exist in exactly the same way whether we understand them ‘correctly’ or not. The assumed task of scientific research is to uncover this underlying reality and establish relationships of cause and effect. Positivism emphasizes that science is objective, rational, neutral and value-free; and separate from the particulars of time and place or emotional, subjective, or political viewpoints (7). Most health and rehabilitation researchers (and clinicians) are trained in the scientific method and taught to apply its principles to clinical practice through imperatives such as ‘evidenced-based practice’ (8). Positivist bioscience is the dominant paradigm in research but is only one way of investigating phenomena amongst a host of other (marginalized) methodologies.

To further demonstrate how the positivist assumption of a stable and objective reality plays out in research, I use the example of health-related quality of life (HRQOL). HRQOL measures are used extensively across every field of health
research, with every age group, and can be condition-specific or global. Questionnaires that purport to measure HRQOL assume a pre-existing entity with a stable set of properties that can be measured under discrete ‘domains’ (e.g., physical, psychological, social). The measures produce a set of scores which reduce quality of life to a set of numbers that can be statistically analyzed, interpreted, and used to make clinical and/or policy decisions about individual patients, cohorts, or populations. This is not a problem in itself, but reveals how an existential concept as complex as life quality is reduced to a defined object with stable properties (9).

The critical researcher questions the taken-for-granted ways that HRQOL and related research is talked about by exploring their historical developments and investigating the less obvious and unintended consequences of prevailing measures. The first step is to recognize that because quality of life is a concept that was created by people, it must be understood as only one possible way of framing experience. Said differently, quality of life did not pre-exist its invention by humans. Its domains were ‘discovered’ in particular ways that carry with them their own assumptions that are repeated across quality of life studies. One of these, for example, is the polling of non-disabled people to ask them how various imagined impairments would affect the quality of their lives (9). This practice has been heavily critiqued because of its assumption that a person without impairment can imagine a disabled state, while largely dismissing the opinions of disabled people themselves (10).

The example of HRQOL research reveals how the scientific method is so dominant in healthcare that it is usually not recognized as a particular way of knowing, and other ways of knowing are seen as unthinkable (8). Critical work does not reject the scientific method but rather asserts that all knowledge is perspectival. Thus there is never a view from nowhere: what counts as legitimate knowledge arises from historical, political, and social conditions and norms (11).

The common features of critical research that I have outlined - questioning assumptions, attending to power relations, critiquing the dominance of positivism - have implications for all rehabilitation research. They highlight the importance of analyzing how contemporary practices grew from contingent historical assumptions and in so doing suggest alternative areas of inquiry, new ways of producing knowledge, and different ways of examining common issues in rehabilitation.

A final example from the field of prosthetics helps to situate the wider applicability of critical approaches beyond ‘social’ research. Recently the imperative to design life-like prosthetics has been questioned and set aside to address other principles and goals. For example, fit for purpose ‘Cheetah blades’ are used by competitive track athletes, and ice axe ‘hands’ are available for climbers. Moreover all kinds of bespoke prostheses are available that provide a mode of individual expression more reminiscent of functional art than biological body parts (see for example the “fashion-forward prosthetic leg covers” of ALLELES).
What do these prosthetics have to do with critical research? Each of these designs is the result of questioning entrenched assumptions about disability. The notion of creating a life-like prosthesis relies on an assumption that impairment is a problem that needs to be fixed and that the best fix is one that as a closely as possible mimics ‘normal’ functioning and aesthetics. The new designs challenge these assumptions to produce a richer diversity of options for amputees. Moreover they contribute to efforts that question the goals of ‘restoring to normal’ that are pervasive in rehabilitation and inadvertently marginalize people while intending to help them.

In this brief article I have provided an introduction to the tenets of critical research and suggested that these tenets have implications for all rehabilitation research. There are several valuable resources available that provide a more in-depth introduction to critical research (e.g., 6,12,15) and a growing corpus of applied critical rehabilitation research (e.g. 16-29). Finally the Critical Physiotherapy Network and the University of Toronto Centre for Critical Qualitative Health Research have a number of useful resources.

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References


