

## **Evidence Based Library and Information Practice**

## **Editorial**

## The Appropriateness of Hierarchies

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In the early days of EBLIP, then referred to as evidence based librarianship (EBL), there were calls to strengthen our research base with "better" forms of evidence. These proposed better quality research methods were all quantitative and I admit myself to saying that "librarianship tends to reflect more qualitative, social sciences/humanities in its research methods and study types which tend to be less rigorous and more prone to bias" (Crumley and Koufogiannakis 2002, p.61). Although this was not meant to be a slight to qualitative research, I can see how it came across as one. Now, I would not put "less rigorous and more prone to bias" in that sentence, although the first half of the statement certainly still holds true. In our 2002 article, the general point that Ellen Crumley and I were trying to make is that a medical style research hierarchy is not a good fit for librarianship, where qualitative methods are generally more appropriate. At that time, we proposed a "core-centred approach to librarianship research" (p.68) rather than a hierarchical one, although this did not gain much traction within the EBLIP literature. We noted: "rather than relying on an evidence hierarchy, which is an artificial concept for

librarians, Fig.3 suggests a core-centred approach. The types of studies that are likely to be conducted by librarians are placed near the centre, moving from a hierarchical to an encompassing model. ... [This] presents a more equitable view of a model for research in the profession" (p.67).

Today I am even more resolved that it is time to remove the concept of a hierarchy of evidence from EBLIP. This concept is tied very closely to the medical model of evidence based medicine (EBM) and is solely focused on quantitative research. Library and information studies (LIS) is a social sciences discipline and as such is concerned mostly with questions of why we do things and how people function in the world. The actions of people are complex and not easily fit into tidy boxes of absolute truth, as are commonly given preference in science, technology and medicine fields.

I believe the focus on quantitative research arose within EBLIP for two reasons: 1) EBL formed within medical librarianship and those librarians identified more closely with the medical model of problem solving, which placed a higher level of trust in quantitative research; and, 2) there was a tide-swell of professional librarians who were tired of seeing our literature dominated by stories of "how I did it good", and wanted to see more research being published rather than opinion. This led to sometimes strongly worded and simplistic rhetoric noting that some forms of publication were not scientific, in order perhaps to highlight the importance of quality research. Unfortunately, qualitative research was caught up in this wave and projected as not as worthy as quantitative research. This is clearly noted in the levels of evidence hierarchies that became part of the EBLIP doctrine.

In both his original published article on the levels of evidence within EBL (2000a), and a subsequent version (2002), Eldredge places qualitative forms of evidence at or near the bottom of the spectrum, although elsewhere he has recognized the role of both quantitative and qualitative research (2000b). The 2002 version of Eldredge's levels of evidence does put "qualitative research" at the middle of the continuum for exploration-type questions, but it still seems marginalized, summed up by a single line as if all qualitative research is one; whereas in the other categories, quantitative methods are given granular description. This model has been readily accepted, but there remains a lack of research on why this would work for librarianship. My concern is that the hierarchical structure may have been too easily accepted and taken as truth, marginalizing other forms of research and not referring back to the original research question. It also could have alienated a number of practitioners who think that EBLIP is not for them because of the focus on quantitative methods.

LIS does not need to be able to point and say that we have a certain number of randomized controlled trials in our field to prove that our research has worth. We don't need to pat ourselves on the back for doing a particular type of research. What we need to do is ensure the research method is the right one to better understand the question posed, and that the research is well done. If we find research that

meets those two criteria, regardless of the type of method used, then we will be in a much better position to incorporate that research into our decision making, and can pat ourselves on the back for doing good quality, rigorous research that is valid or trustworthy.

After more than 10 years of growth in EBLIP, I trust that many of us who try to practice in an evidence based manner realize that the type of evidence we choose has to be directly drawn from the research question we are asking (Eve 2008; Robson 2002; Given 2006). For example, one would not use a randomized controlled trial to study whether children who are read to exhibit greater literacy skills at school age. And if you did find an RCT on that topic, you would certainly need to question it! Research, and trying to incorporate research into decision making, is far more complicated than following the rules of a simple hierarchy – in fact, doing so may harm the entire process and leave practitioners without any hope of finding "good" evidence on which to base their decisions. In my opinion, it is time to do away with hierarchies, as they do us no favours. Rather than challenging us to think critically about each and every question, a hierarchy creates a false sense of being able to quickly determine research worth.

Booth (2010), in his Health Information and Libraries Journal column, "Using evidence in practice", also bemoans the seeming authority of 'the hierarchy of evidence'. He proposes two alternatives to evidence hierarchies, signal-to-noise ratios and evidence typologies. I personally favour the latter, in which "a typology of evidence stresses the need to consider which type of studies are most appropriate for answering different types of questions" (p.87). But whether we can find a way to create such a typology within LIS that would be more than a token is questionable. Where it could be helpful is in providing practitioners with ideas of the types of research they may consider for different types of questions, and the reasons why these methods are appropriate.

Why bog ourselves down in a context of one research method being better than another? This is simply divisive and does not contribute solutions. Let's stop talking in terms of research hierarchies and inherent worth of particular methods and instead talk about appropriateness and good research design. Even better, let's get on with doing studies that are appropriate, rigorous, and relevant to practice.

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