

Evidence Based Library and Information Practice

EBL 101

Research Methods: Design, Methods, Case Study...oh my!

Virginia Wilson Liaison Librarian, Murray Library University of Saskatchewan Saskatoon, Saskatchewan, Canada Email: virginia.wilson@usask.ca

Received: 13 Aug. 2011 Accepted: 16 Aug. 2011

© 2011 Wilson. This is an Open Access article distributed under the terms of the Creative Commons-Attribution-Noncommercial-Share Alike License 2.5 Canada (http://creativecommons.org/licenses/by-nc-sa/2.5/ca/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly attributed, not used for commercial purposes, and, if transformed, the resulting work is redistributed under the same or similar license to this one.

As this column transitions into looking at various research methods, some preliminary topics must be explored in order to put research methods into context. Last time I looked at qualitative and quantitative research in general, and discussed the background of both types of research and the tension between researchers invested in each of these methods. Lately, the mixed methods approach has gained traction, and I will discuss that in forthcoming columns as well. But first, in order to situate research methods, this column will explore research design.

Before undertaking research, there must be a plan, and that is where design comes in. But research design is not merely a work plan. Research design is "the entire process of research from conceptualizing a problem to writing research questions, and on to data collection, analysis, interpretation, and report

writing" (Bodgan & Taylor, 1975, p. 5, as cited in Creswell, 2007). It is the "logical sequence that connects the empirical data to a study's initial research questions, and ultimately, to its conclusions" (Yin, 2003, p. 5, as cited in in Creswell, 2007). The confusing part is that, while reviewing research literature as well as websites focusing on research, I have found that quite often the terms research design and research methods are used inconsistently. For example, the terms research design and research method are both used to refer to a case study, a third, and different, entity.

Let's think about "case study" for a minute. The chapter on qualitative case studies in *The Sage Handbook of Qualitative Research* states that a "case study is not a methodological choice but a choice of what to be studied," and goes on to say that "by whatever methods, we choose to study the *case*" (Stake, 2005, p. 443). The book *Case*

Study Research: Design and Methods "covers the distinctive characteristics of the case study as a research method" (Yin, 2003, p. 2). So is the case study both a method and a design? Is it a method sometimes and a design at others? And where is the definitive answer? There really isn't one. Just as I was about to throw my hands up in despair, I came across an article in the information systems field which puts forth a straightforward delineation between research design and research method that I am going to use for this column: "Research strategy [or research design] is defined as 'a way of going about one's research, embodying a particular style and employing different methods.' Research method is defined as 'a way to systemise [sic] observation, describing ways of collecting evidence and indicating the type of tools and techniques to be used during data collection" (Cavaye, 1996, p. 227).

Based on this delineation, a case study is first and foremost a research design, and it makes sense that a variety of methods could be used to collect the evidence, depending upon which angle one is taking in approaching the research question. Cavaye (1996) reminds us that case study research is multi-faceted and can be undertaken by using "a positivist or an interpretivist stance, can take a deductive or an inductive approach, can use qualitative and quantitative methods, [and] can investigate one or multiple cases" (p. 227). While Cavaye does describe some characteristics of a case study method that are employed in case study research—it does not seek to control variables; it

looks at a case in its natural context; focuses on (generally) one site; and it uses qualitative, in addition to quantitative, tools and techniques—even these characteristics seem more akin to design than to method (p. 229).

So for the purposes of this ongoing column, in which I will examine various research methods and provide some sources for further exploration, I will adopt the initial definitions from Cavaye seen above. I may focus a later column on case study research in more detail. But as it is, I am ready to move on to a specific, hopefully more straightforward, method. Next time around, I will look at content analysis.

References

- Cavaye, A.L.M. (1996). Case study research: a multi-faceted research approach for IS. *Information systems journal 6*(3): 227-242.
- Creswell, J.W. (2007). *Qualitative inquiry & research design* (2nd ed.). London: Sage.
- Stake, R.E. (2005). Qualitative case studies. In N.K Denzin and Y.S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed.). (pp.443-446), Thousand Oaks, CA: Sage.
- Yin, R.K. (2003). *Case study research: Desing and methods.* Thousand Oaks, CA: Sage.