

Running Header: ARTICLE CRITIQUE – USE OF TRIANGULATION FOR  
COMPLETENESS PURPOSES

Article Critique – Use of Triangulation for Completeness Purposes

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Adami, M. F., & Kiger, A. (2005). The use of triangulation for completeness purposes. *Nurse Researcher*, 12(4), 19-29. Retrieved September 13, 2006, from Academic Search Premier.

### Article Summary

The article summarizes the current utilization of triangulation in research. The authors provide positive argument for the use of triangulation, and more specifically – person (data) triangulation, in exploratory research. Additionally, the authors contend that triangulation research can serve two purposes:

- 1) confirmatory – confirmation or validity of data findings, and
- 2) completeness – completeness of purpose

The article espouses that although triangulation has traditionally been considered the utilization of multiple techniques for the purpose of *confirming* data findings, recent findings appear to give credence to those researchers who are proponents of using triangulation for *completeness of purpose* – either in conjunction with confirmation of findings, or as a stand-alone purpose. The article provides diverse arguments from opponents and proponents of the research methodology, ranging from discounting triangulation as a viable research alternative towards objective truth to revering the use of completeness of purpose toward the appropriation of a holistic view of the phenomenon being studied. Although not explicitly stated, Adami and Kiger (2005) appear to side with inclusion of either or both approaches – confirmation and completeness, as applicable to a particular study.

Supporting the work of Denzin (1989), the authors proffer four types of triangulation and include a fifth as purported by Kimchi, et al. (1991): (a) data, (b) investigator, (c) theory, (d) method, and (e) analysis. Data triangulation is further divided into three types – one of which is

person triangulation, the main subject matter of the article. A case study - promulgated for the purpose of completeness, *not* confirmation (or validity), is provided as the supportive example.

The case study – a person triangulation research, seeks to explore the adequacy of the educational system for nurses located in Malta. Explicit in the study is the fact that researcher – author Adami (2005), was not interested in validity of the findings or in the generalization of the results, but completeness. Adami and Kider followed Leninger's (1985) advice to use three core questions in the design of the person triangulated study and then proceeded to identify the total population and sub-populations subsequent to identifying the various categories of nurses in Malta. All important to this study – or any completeness of purpose study, is the requirement to include all viable variations of the population. Thus, a total population was comprised through categorization of the variations of the study population, with each categorization considered to be a sub-population.

Representation of each sub-population was met using randomly-selected constant-size sample sets instead of using a proportionate sample from each sub-population category. This election was approved by a judge panel that oversaw the research effort in Malta. The reasoning was based on the premise that, although representation may not be proportionally in alignment with each individual sub-population category; in total, all constant-size sample sets represented the target population. The article provides a full listing of all sub-populations yet rather abruptly concludes that the exploration of the education system for nurses in Malta, through the use of person triangulation, proved to meet the goal of the study. The conclusive statement was not supported by a revelation of research findings.

## Article Critique

The article's information is an important contribution to the study of qualitative research in that it brings together some diverse arguments regarding the use of triangulation. These varied arguments provided me with a broader understanding of the subject matter, allowing me to form my own opinions on the use of triangulation. One example relates to the author's inclusion of Fielding and Fielding's (1986) argument "that triangulation conceptualized as a means to achieve convergent validity has limited relevance for the qualitative researcher who seldom, if ever, is concerned with measurement of a discrete concept" (p. 20). Although I do not profess to agree wholeheartedly with Fielding and Fielding's statement regarding limited relevance of convergent validity and the lack of the researcher's concern for measurement, I do believe that qualitative researchers probably have a *primary* interest in *seeking to understand* the phenomenon while retaining a *secondary or subordinated* interest in the *measure* of that same phenomenon.

Notwithstanding, the intent of the article was to "show how its [(triangulation's)] use facilitated one researcher's attempt to provide a complete picture of the nurse education system in Malta" (Adami & Kiger, 2005, abstract). Accordingly, in my opinion, the authors failed to deliver the intended result, for there was no disclosure of actual findings or details of how the various views and opinions of the nursing population contributed to the purported completion. The anecdotal evidence, in the form of a conclusive statement, lacked support for the presumed actualization of completeness; albeit, it is reasonable to *assume* that person triangulation did indeed facilitate the researcher's attempt. Accordingly, the article's premise that the use of triangulation can be supported by "a second purpose – completeness" (p. 19), could have been better supported through "evidence" that the views and opinions, as gathered from individuals

within the various sub-populations comprising the total nursing population, actually provided completeness that could not have otherwise been garnered without the use of such triangulation.

#### Article Link to Text

This article is linked to Patton's (2002) chapter five discussion of triangulation.

Kerlinger (2000), however, does not appear to significantly approach the subject matter. I base this upon the absence of the term *triangulation* as a subject within the textbook's subject index. As such, this article link to text will focus only upon the discourse provided by Patton.

I was led to this article through Patton's (2002) reference to Denzin (1978). Patton, in his opening paragraph on the subject of triangulation, discloses that there are "several kinds of methods or data, including using both quantitative and qualitative approaches" (p. 247). He then goes on to list and describe Denzin's "four basic types of triangulation" (p. 247), as were cited earlier in this paper. My search for Denzin's original work led me to Adami and Kiger's (2005) intriguing article, *The Use of Triangulation for Completeness Purposes*. I chose this particular article because it seemed to me at the outset – that is, prior to reading the article, that it would make sense that triangulation could serve the purpose of both confirmation and completeness.

Yet, Patton (2002) never speaks of the purposes of triangulation using the terminology *confirmation* and *completeness*, nor does he seem to support such notions. Instead, he suggests that "a common misunderstanding about triangulation is that the point is to demonstrate that different data sources or inquiry approaches yield essentially the same result .... [when] the point is really to test for such consistency" (p. 248). He goes on to support his argument by saying that even inconsistent findings should "not be viewed as weakening the credibility of results, but rather as offering opportunities for deeper insight into the relationship between inquiry approach and the phenomenon under study" (p. 246).

What I think is really important with this issue – the stark contrast in viewpoints between Patton (2002) and Amagi and Kiger (2005) as well as diverse viewpoints raised in the article in regards to the purposes of triangulation, is that all seem to have gotten off of the central focus when it comes to the inclusion of qualitative research in a triangulation study; which is, allowing the data to speak for itself and the research to evolve organically from the ongoing results. A good researcher should maintain an all-encompassing mindset and approach that seeks to find completeness – if completeness can be found, and seeks to find confirmation – if confirmation can be found, but only if these purposes maintain integrity and best support the aim of the research.

#### Application for Field-based Research

I am intrigued by the unlimited prospects of being able to use triangulation in field-based research. For instance the phenomenon may be researched by:

- using more than one “method, empirical stand, perspective [or] observer in a single study” (Adami & Kiger, 2005, p. 20), per Denzin and Lincoln (1989)
- incorporating both qualitative and quantitative approaches and the varieties available therein
- using multiple triangulation which is “two or more types of triangulation in one study (Begley 1996)” (Adami & Kiger, p. 22)
- studying the same phenomenon at varying times – data triangulation: time (Denzin (1989), as cited in Adami & Kiger)
- studying the same phenomenon in different context – data triangulation: space (Denzin, (1989), as cited in Adami & Kiger)

- studying the same phenomenon by collecting data from various individuals or groups of individuals – data triangulation: person (Denzin (1989), as cited in Adami & Kiger, 2005)

However, as alluring and tempting as it may be for a researcher to want to use a triangulation approach, it should be noted that there are cautions. The cautions given by both Creswell (1994) and Patton (2002) forewarn the researcher that triangulation generally requires an increased expenditure of both time and money. Adami & Kiger (2005) add that “the varied meanings and applications of the term [triangulation] suggest that the researcher needs to provide explicit clarification of, and justification for, the use of triangulation in a research study” (p. 20).

One example of how I have used triangulation research in a very small, informal, quasi-experimental study at my workplace is when I incorporated a survey instrument and interview session within the same study. The survey went to a proportionate sample population of library personnel – excluding student employees and one employee on leave of absence. Interview questions were then developed using response data from returned surveys. Next, a sampling of the survey respondents was extrapolated to include a smaller, but proportional, representation of noted variables in the study (i.e., employee age, gender, seniority, department, exemption status). An informal half-hour group interview session was conducted using questions derived from the survey analysis, and following the interview session, I met with an individual employee to “dig deeper” into some confidential issues. I was amazed at how much could be gained by such a simple process. I had not invested a lot of time, yet I (and the company) reaped a multitude of benefits from the findings. Interestingly, the employees so enjoyed the interview process that they suggested we should have similar periodic sessions in the future.

My experience is indicative of Amadi and Kiger's (2005) suggestion when citing the works of Fielding and Fielding (1986) and Begley (1996): "The completeness application is increasingly being used by qualitative researchers to gain a holistic view of the phenomenon under study and to add to the investigator's depth and breadth of understanding" (p. 21). And though I must admit that my initial research was an inadvertent aim toward completeness, the breadth of information gleaned from the surveys and the depth of revelations that came to light through interviews served to provide this researcher with a more complete understanding of the phenomenon being studied.



References

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