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Finding A Path Through The Research Maze

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There comes a time when a researcher has to face the truth. Gathering research data is a lot more fun than analyzing and reporting it. This moment of truth hit me after I had finished traveling around the United States interviewing families working together as part of my dissertation research on women in family business. Talking to business families about gender issues and dual relationships had been both interesting and exciting; the task of analyzing and reporting the data seemed overwhelming. I read books on data analysis and presentation and found Lincoln and Guba's (1985) interpretation of the constant comparative method (Glaser & Strauss, 1967) a promising lead. Yet, the authors' step by step process of data analysis and the suggestions for presentation confused me. I needed some conceptual framework to help guide me through the process--a map of sorts to lead me along the unmarked path of analysis and reporting.

I remembered one of my professors recalling the pile of napkins that helped him with his dissertation research. The napkins contained scribbled notes from lunch meetings with his faculty chair. Writing a research project from notes on food-stained napkins seemed an unlikely possibility until my own dissertation lunch meetings began. At one of these, I whined to my methodology advisor, Ron Chenail, that I did not understand the concepts behind data analysis and presentation. The more I read, the more confused I became. Ron whipped out a pen and began scribbling on a piece of napkin. The matrix he drew pulled all the ideas about research analysis and reporting into a simple conceptual framework that helped guide me through the process. The figure he drew consisted of two concentric circles. In the inner circle he wrote, "Central Tendencies." Outside the inner circle and inside the outer circle he wrote "Expected" and "Unexpected." On the left, right, top, and bottom sides of the outer circle, he wrote, "Range" (see Figure 1).

Figure 1

Chenail's Qualitative Matrix
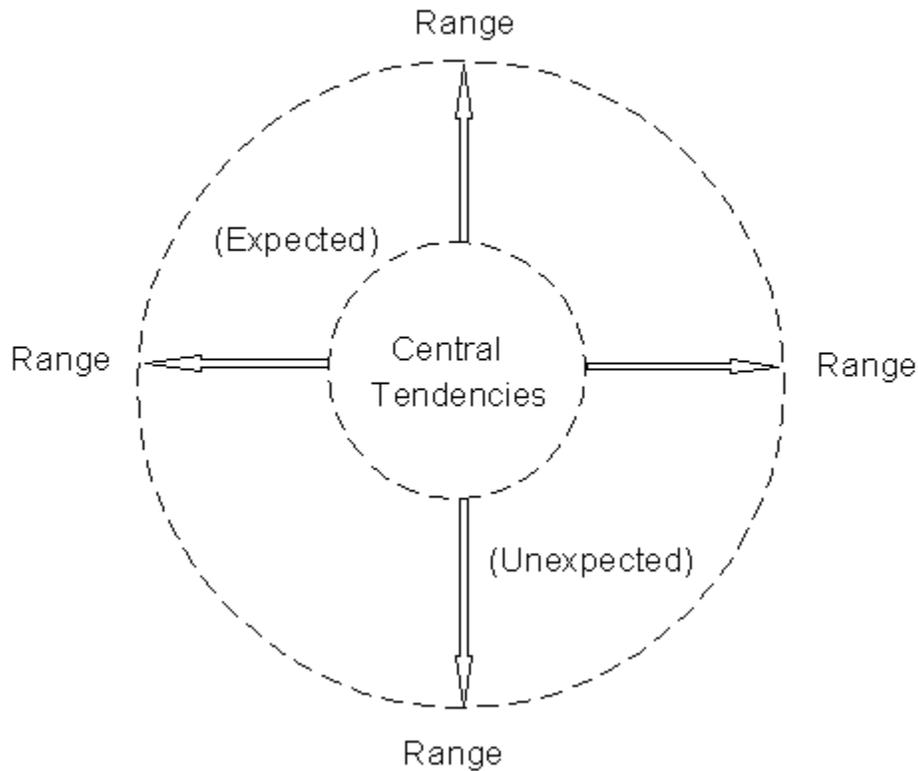
What I needed to make sense of the data were four main concepts:

1. Central Tendencies

2. Ranges

3. Expected

4. Unexpected

The following discussion explains these concepts with illustrations from my dissertation research (which I finally finished thanks to the matrix.) Section One discusses data analysis and how the ideas of central tendencies and ranges help clarify the process. Section Two discusses data presentation organized by the concepts of expected and unexpected.

Data Analysis

While data is being collected, the analysis process can begin (Glaser & Strauss, 1967). In my research, I noticed how patterns formed from one interview to another. After the interviews were

completed and transcribed, I began a formal coding system by organizing these patterns into central tendencies and ranges:

1. **Central tendencies** describe how the data chunk together into the research participants' common themes or categories.
2. **Ranges** allow for the differences within those categories to be discussed.

How central tendencies and ranges work together is illustrated in the following example. In pouring over the interview transcripts, I noticed that the research participant families all talked about the need to separate family and work when business discussions infringed upon family time. They needed to remind themselves that they had a family relationship outside of business. Therefore, "Separating Business from Family" became a central tendency that was coded into a category. But within that central tendency of separating work from family, each family had a different method of division. One family had a designated person who said, "No, we are finished talking business." In another family, a husband working with his wife held a newspaper in front of his face if she brought up company problems at home. In a third family, the daughter moved out of her parents' house to avoid "shoptalk" with her father when they returned home from their family business. These examples illustrate the different **ranges** within the **central tendency** of "Separating Business from Family."

Data Presentation

Following data analysis, the challenge becomes how to transform these materials clearly and effectively so that others can benefit from them (Strauss & Corbin, 1990). The Chenail Qualitative Matrix insures a relationship between data presentation, data analysis and the literature review. The matrix not only provides a conceptual frame for coding the data, but also suggests a map for reproducing analyzed data into an organized pattern that connects the findings of the research with the review of the literature. The terms **expected** and **unexpected** are used to organize the data presentation:

3. **Expected** refers to data that confirms the ideas of the authors in the literature review or the researcher's assumptions.
4. **Unexpected** refers to data that departs from the authors' ideas in the literature review or the researcher's assumptions.

For example, in separating work from family, I assumed that the responsibility to protect family time from business time would fall to the women. The literature review underscores women's nurturing behavior in family business, so I **expected** women more than men to play traffic cop in directing work and family time. However, more male participants than female described themselves as the protector of the family and refused to discuss business with relatives when the work day ended. That finding was **unexpected** and important to include in the final report. As I continued writing about my research findings, I constantly wove them back into what I expected to find or what others had written before.

Conclusion

In applying the Chenail Qualitative Matrix, researchers have an opportunity to discover the serendipitous or unexpected instead of staying focused only on what was known through literature searches and previous observations. As Chenail concludes:

Qualitative researchers have a habit of focusing on what is familiar and central to the study at hand....What may be missed through this study of inquiry is an opportunity for investigators to know what might not be known to them prior to the study....Also, the margins of a project often provide some of the most interesting and informative patterns for investigators if they include a curiosity for the exception in their work and a hesitancy to explain quickly that which might turn out to be unexplainable. (p. 44)

In my own research, the matrix reminded me to explore and report all the ranges and differences between the participants' stories instead of trying to quickly reduce the data. I fought the inclination to wrestle the research findings into tidy categories organized by only the similarities or central tendencies of the stories. I welcomed the serendipitous in the narratives and placed the unexpected data side-by-side with the expected results. In doing so, I believe my dissertation research possesses a certain robustness that would have been weakened without ideas from the matrix. Of all the academic books and articles I read, it was a pizza-stained napkin that guided me through the research maze.

References

Chenail, R. J. (1992, Spring). Qualitative research: Central tendencies and ranges. *AFTA Newsletter,* pp. 43-44.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* New York: Aldine De Gruyter.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Beverly Hills, CA: Sage.

Strauss, A. L., & Corbin, J. (1990). *Basics of qualitative research.* Newbury Park, CA: Sage.

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