



## In Defense of Qualitative Research

Twelve years ago, I started a graduate program in dental hygiene education. One of the core requirements was to develop and execute a thesis project. Another core requirement was to take a 3-series course on biostatistics. The word “quantitative” was offered up early on in these classes to describe our research projects. Research was about designing a question and then getting an answer in the form of a number or numbers (i.e. percentages).

My master’s research project was entitled, “The effects of relaxation training on dental phobia during dental hygiene treatment.” Pain perception and feelings of dental anxiety via Likert scales were monitored at various points during a dental prophylaxis, along with vital signs. The numbers were crunched to see if there was a statistically significant difference between the control group and the experimental group or those who received relaxation training. What I remember most about my project, however, are the stories the study participants presented to me, unsolicited, during the course of our time together. They told me how and why their fear developed, what they had done (or not done) to cope with it and how it affected other areas of their lives. Here, then, was a different kind of data and I was unprepared for, and I didn’t know what to do with it beyond a brief mention in my thesis. My project, after all, was about those numbers.

Fast forward several years, and I enrolled in an evening doctoral program in Adult and Higher Education. At present, I am still in the program. Most of the professors are heavily qualitative and the atmosphere regarding research is completely different. I can remember how initially resistant I was to the concept of qualitative research being in the same league with quantitative research. How can you study what people feel? How can you base anything on a series of answers to open-ended questions and how do you measure that? Then I remembered my dental phobia stories. That was qualitative data and it was important to the overall picture of the phenomena of dental phobia. I wanted to know more.

So what exactly is qualitative research? Qualitative research, by its nature, is exploratory and is “concerned with words and their meanings in different

contexts” and “summarizing themes.”<sup>1</sup> Traditionally, qualitative inquiry often was a starting point for an eventual quantitative research study, but it has recently gained acceptance as a “legitimate” methodology on its own.<sup>1-3</sup> Some of the methods employed in this type of research include open-ended questions, interviews, focus groups, observations and analyzing documents (i.e. journals written by subjects in a study).<sup>2</sup> While there are many different qualitative approaches, I have chosen to briefly discuss 5 basic approaches: narrative research, phenomenology, grounded theory, ethnography and case study. Qualitative researchers choose their approach based upon the population to be studied and the research question they seek to answer.<sup>2,3</sup>

Narrative research seeks to hear and make meaning of the stories, either spoken or via written text, of an individual or individuals.<sup>2</sup> The environment, or the individual(s) context, is also analyzed so that the researcher can “restory” the stories into a type of “framework” where “themes” are analyzed.<sup>2</sup> Singh explored job satisfaction among a group of “dental therapists” trained at the same university by asking a single question about job satisfaction.<sup>4</sup> Their answers, or narratives, were then analyzed for common themes.<sup>4</sup> The narrative approach works best when the subject is an individual or a small group.<sup>2</sup>

Phenomenological research is the study of the meaning of “lived experiences” of a group of people around a specific concept (phenomenon).<sup>2</sup> Reeson et al studied the perceptions of both dental students and dental technician trainees as they worked together to provide complete and partial dentures.<sup>5</sup> Focus groups, personal diaries and feedback from the students provided insight into how to successfully create interdisciplinary collaboration in an educational setting.<sup>5</sup> Moustakas recommends asking 2 universal questions: “What have you experienced in terms of the phenomenon? What contexts or situations have typically influenced or affected your experiences of the phenomenon?”<sup>6</sup> In the end, researchers develop a description, called “textural description,” of the shared experience of the study participants.<sup>2</sup>

Grounded theory takes the study of the shared experience of the group of individuals a step fur-

ther. The goal is to “move beyond description and to generate or discover a theory, an abstract analytical schema of a process.”<sup>2</sup> The whole idea of a theory or potential theory from this approach is that it is “grounded” in the data obtained from the individual experiences and perceptions of the experiences according to Strauss and Corbin (as cited by Creswell).<sup>2</sup> The data drives the emerging theory. Rojo sought to explore how dental hygienists viewed their role in influencing the problem of access to oral health care from a grounded theory perspective.<sup>7</sup>

Ethnography moves beyond grounded research and explores whole cultural systems with their many intricacies.<sup>2</sup> The groups can also consist of teams or organizations.<sup>1</sup> The study population tends to be large and the researcher acts as an observer “immersed in the day-to-day lives” of those within the group.<sup>2</sup> Naturally, this approach draws heavily from the disciplines of anthropology and sociology.<sup>2</sup> Laloo et al conducted a study on the cultural experiences of dental students in a “remote rural” area of Australia where the students lived within the community and kept journals on their experiences and observations.<sup>8</sup>

Case study research seeks to identify and investigate an issue explored through one or more cases within a bounded system” and has been historically utilized across many disciplines, including health care.<sup>2</sup> The case can be bounded by time, for example, or place. Data is collected via a variety of sources (i.e. interviews, documents, observations).<sup>2,3</sup> Koerber et al studied 19 dental hygiene programs across

the U.S. on their tobacco cessation training within each curriculum and found them remarkably similar in their approach.<sup>9</sup> What is appealing about the case study methodology is the extensive data collection via a variety of methods. This aids the researcher in fully describing and analyzing the case and their relationship to the research problem.

As dental hygienists we seek to provide evidence-based practice. Qualitative research provides special insight into aspects of dentistry through the use of open-ended questions, interviews, focus groups, observations, and analyzing documents.<sup>2</sup> The 5 types of qualitative inquiry explored here (narrative, phenomenology, grounded theory, ethnography and case study) are some of the more common approaches.<sup>2</sup> Recently qualitative research has gained favor as a valid methodology by itself.<sup>1-3</sup> Many researchers, however, have chosen to conduct mixed methods research or to include both quantitative and qualitative methods in their studies. One method informs or enhances the other and they are seen as “complementary” not separate.<sup>1</sup> This, then, is a third option in the qualitative/quantitative debate. It is, perhaps, the best one.

Sincerely,

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