

Qualitative Research and Quilting: Advice for Novice Researchers

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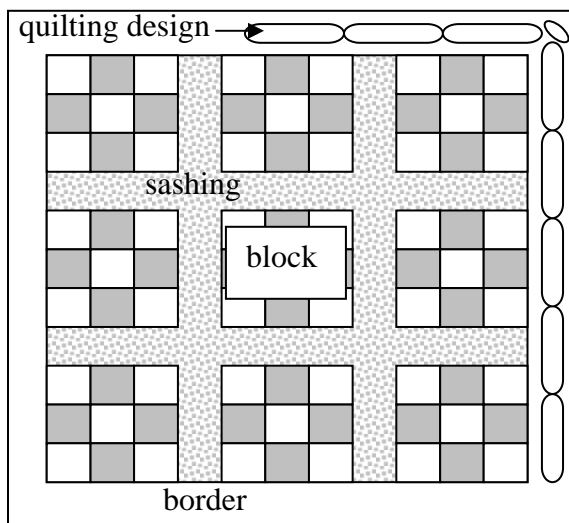
This paper relates how the author, a novice qualitative researcher, uses the familiar process of quilting to help her clarify the research process. Other novice researchers are advised to look around for similar connections they can make in their lives to assist with their research. Key Words: Qualitative Research, Research Process, Advice, and Novice Researchers

I am a qualitative researcher and a quilter. I have been a quilter for 25 years. I have been a researcher for 2 years. I have discovered conducting research is a lot like quilting and that the research process is a lot like the creative process of quilting. My purpose in this paper is to share how my connection with quilting has helped with my research. It is my hope that by seeing how I connected the quilting process with the research process, you might see some connections between your hobbies and interests that might assist you in your research, especially if you are a novice researcher as I am.

The Quilting Process-An Overview

Traditional quilting involves cutting up fabric into pieces and sewing them back together in a pattern to make a top. That top is then put over the filler, called batting, and another piece of fabric called backing. The three layers are held together by stitching, called quilting. The raw edges of the quilt are covered by a fabric edging, called binding. There are five steps to go through in completing a quilt: planning, cutting, sewing, quilting, and binding.

Figure 1. The parts of a quilt.



When you make a quilt, you carefully consider the pattern, the colors, and the fabrics that will be suitable for your quilt's purpose. You often plan on paper before you go to the quilt store, sketching the design and deciding on colors, so you know how much to buy of each of the needed fabrics.

Next you consider the pieces of fabric you will need to cut. Do you need to cut some long border pieces? If so, cut those first and then lay them aside. You cut any large triangles or strips next, and then cut smaller pieces.

Then the real fun begins - the sewing. This proceeds in an orderly fashion, sewing small pieces together, building blocks, then putting blocks together into rows, adding sashing (strips of fabric put between blocks) and borders as your design dictates. Even though you have a plan, you really don't know what the finished quilt will look like until it is all together. The sketch you made on paper just does not look the same as the real fabrics. So all the while you are sewing the pieces together you are in suspense. Will the quilt look like you expected? Will it have the visual effect you wanted? Will that pretty piece of green fabric stand out too much? Will that soft blue be too pale-looking?

When the top is completed then that part of the suspense is over. The next step will add texture and dimension to your quilt and hold the three layers together: In fact, this is what will make it a quilt, the quilting! You must decide what quilting design will complement the pattern on the top, and again you will not truly know the outcome until it is all done.

The last step is putting on the binding, finishing off those raw edges. Then the quilt will be ready to use and to share with others.

At each step in the process, you must evaluate the outcome, make adjustments, and decide on the next step. Sometimes you have to step away from the quilt, have someone else look at it critically, and give you feedback.

The Research Process

How does quilting relate to qualitative research? Recall that there are steps to follow to complete a quilt. There are also steps to follow in carrying out a qualitative research project: planning, data collection, data analysis, and reporting.

Initial Planning

When you conduct qualitative research, you must make a plan. You must consider your research questions and pick an appropriate methodology and methods that are suitable for your questions, just as you choose a quilt design and fabrics that are appropriate for the quilt's intended purpose. If your research questions involve how and why questions, a case study would most likely be the best methodology or strategy to choose for your research study (Yin, 1994). If your research questions call for extended time in the field, close interaction with the study participants, and the need to "gain a multi-dimensional appreciation of the setting" (Massey, 1998, ¶13), then an ethnographic approach would be appropriate. If your research questions aim "to discover the theory implicit in the data" (Dick, 2005, ¶23), or "to find what theory accounts for the research situation as it is" (Dick, ¶23), then grounded theory methodology is what you need. There

are other types of qualitative research, but these will serve for purposes of illustration in this paper.

This initial planning for your research project correlates to the initial planning you do for a quilt. Just as you match your methodology and methods in your research project, you also match your quilt design, and colors and fabrics. For example, in planning a quilt for a child, you would most likely choose a pattern that is youthful-looking and suitable such as bright cheerful colors. You might choose a pattern that incorporates boats or trucks, or cats, or dolls, or some other object that is special to the child. A quilt to be made for a newly-married couple might use a traditional pattern called “double wedding ring,” and uses the colors that the couple has chosen for their new home. The fabrics in the quilt could reflect a contemporary or a traditional feel, to blend in with the décor of the couple’s home. In both of these examples, you can see that there is a match between the purpose of the quilt and the quilt’s fabrics, and colors and design, just as there is between the research questions, methodology, and methods in a research study.

Collecting Data

After the initial planning, you must consider how you will collect your data. This is a reflection of the methodology and methods that you have chosen, as they all are related. If you are conducting a case study, you would probably collect your data using some combination of documents, archival records, interviews, direct observation, participant observations, and physical artifacts (Stake, 1995; Yin, 1994). If you have decided upon an ethnographic study, you would most likely be using participant observation, field notes, documents, and interviews as your sources of data (Massey, 1998). If grounded theory is your choice of methodology for your study, you would probably use interviews, documents, observations, and focus groups for data sources, although you are certainly not limited to any particular form (Dick, 2005).

Choosing the appropriate methods for collecting your data is like choosing the appropriate tools with which to construct your quilt. Using the correct tools makes the implementation of a project easier and more efficient and the results more accurate and meaningful. In the case of a research project, using the appropriate methods for data collection will result in richer and more complete data that will provide more complete answers for the research questions. In the case of a quilt, using the right tools for cutting out the pieces and sewing the blocks together will result in faster and more accurate work, resulting in a smoother quilt top, one without ripples and distortions.

Frequently data in a research project needs to be collected in a planned sequence so that certain activities can help inform subsequent ones. Just as you cut your fabric for a quilt top in a planned sequence so as not to waste it, you plan how you will collect your data so as not to waste your time and resources.

Another part of data collection is considering how you will gain access to the participants you wish to have in your study. I liken this to gathering the fabrics you need for your quilt. The quality and number of participants can determine the final quality and richness of the project’s results, and the contribution it can make to the field of study, just as the quality and types of fabrics can determine the overall look and feel of the quilt. Inexpensive fabric will not wear well and will look cheap, lending a shoddy look to an otherwise well-done quilt. Making a hasty decision to use that piece of red fabric you

already have, instead of waiting until you can get to the fabric store to find a piece of red that is just a bit darker, could be something you will regret later. The quilt will be lacking a certain quality of richness that darker red would have contributed. Sometimes you have to hang a quilt in progress on the wall and “audition” various pieces of fabric (hang or pin them up) until you find just the right one. Gaining access to participants can often be a difficult process and can be accomplished in many different ways depending on the type of data that is to be gathered, and the way in which it is to be gathered. Very often, just as you audition different fabrics, so too must you audition participants. You must talk to potential participants, people who might know potential participants, and people who might help you gain access to potential participants, until you get just the right people for your study; the ones who will be able to contribute the rich and valuable data that will help you answer your research questions.

Analyzing Data

Analyzing your data is like piecing your quilt top. Just as there must be some process to piecing your quilt top (certain parts have to be put together before other pieces), so must the data analysis be done in an organized fashion. Just as the process for piecing a quilt top is written down and diagrammed in a book, on paper, or on the computer, so it can be followed by others, your process for analyzing your data must be recorded also. The type of data analysis you choose for your research project flows from the methodology and methods you have chosen. In general, your data analysis will consist of “three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification” (Miles & Huberman, 1994, p. 10). How this is achieved depends on how your data was collected.

For example, in a case study, there are many choices depending on the type of case study done and the types of data collected. Some possible choices suggested by Miles and Huberman (1994) are analytic techniques such as matrices, arrays, flowcharts, data displays, tabulating frequencies, and using means, variances, and cross tabulations to examine relationships. Pattern-matching (Yin, 1994) and categorical aggregation (Stake, 1995) are two more data analysis techniques suggested for case studies. In many quilt patterns you have choices as to how the quilt top will be put together. Depending on the block design, there may be some choices as to the order in which the pieces are sewn together. You can sew the pieces together by hand or by machine. You can put the blocks together in vertical rows or horizontal rows. It just depends on the pattern.

For an ethnography, in which rich, thick description drawn from multiple data sources has been created, Merriam (1988) suggested developing a classification scheme from the data in order to condense them, and then comparing elements within these classification schemes so that tentative hypotheses and explanations can be constructed. Miles and Huberman (1994) noted that in the process of condensing this data, “in deciding what to leave in, what to highlight, what to report first and last, what to interconnect, and what main ideas are important, analytic choices are being made continuously” (p. 8), so it is with a quilt, although those choices usually have to do with which fabrics and colors to leave in and take out and which fabrics to place where in the quilt blocks.

Data analysis in grounded theory research is characterized by the constant comparison method. This involves “categorizing or coding data as they are collected and continually examining data for examples of similar cases and patterns” (Savenye & Robinson, 2003, p. 1060). Thorne (2000) described this as “taking one piece of data (one interview, one statement, one theme) and comparing it with all others that may be similar or different in order to develop conceptualizations of the possible relations between various pieces of data” (§ 10). When you are sewing a quilt block, you are constantly comparing the seam you just sewed to the standard $\frac{1}{4}$ inch seam to see if it is accurate, and comparing the block you just sewed to the picture of the block in the directions to see if all the pieces are in the correct place and the block is as it should be. As you sew the blocks into rows and the quilt top comes into being, you are constantly looking to see that the blocks are being sewn in the correct order (if that is critical to the pattern) or in the correct orientation (if that is critical to the pattern).

It is in the analysis of the data where the real fun is, just like sewing your quilt top together. Since analysis begins early in the process in qualitative research, and often occurs along with data collection, bit by bit the answer to your research question comes together much like the quilt top. Out of all the bits and pieces of the different types of data comes the order that the analysis establishes upon it, just as piecing the blocks and then sewing the blocks into the quilt top brings order to all those pieces of fabric you cut out. Will you get the answers you anticipated to your research questions? Will your quilt top look like you expected? Will that tan fabric be too dull-looking after all? Will there be some unexpected findings to your research questions? Did you sew a piece in your quilt in upside down? Will that bright yellow fabric overshadow the other colors in the quilt top?

Reporting the Data

Writing the report or article after the data analysis is finished is like putting the binding on the quilt. It is the finishing touch. It is your opportunity to bring the project to completion, to gain new insights, and to reveal unexpected findings. There are several different types of binding and edgings that can be put on the raw edges of a quilt to finish it off, just as there are different avenues through which to report the findings of a research project. Whether you are deciding on what type of binding to put on a quilt or how, when, or where to report your research findings, you must consider the purpose of your project, the design or methodology, and the methods. What will be most appropriate? What do you want to accomplish with the report?

When the report is finished, you have the opportunity to share your work with others and obtain their feedback and comments. Performing a self-critique and asking for comments and honest opinions from peers on specific aspects of your work can help you see your work from a different perspective and help you understand how you can improve your skills and your work on your next project. This is valuable for quilters and researchers alike.

An Example

In a research project I am currently working on, I am having some difficulty gaining access to the participants I would like to have in my study. The process of contacting the people who are busy school district-level administrative personnel and gaining their permission to participate is slow. I want to make them interested in contributing to the study but, at the same time, not intrude in their busy schedules and make a pest of myself. I have to remind myself that this process of gaining access might take a while, but going about it the right way will pay off in the end. I look at some quilts where I rushed, where I used a fabric I had on hand instead of waiting until I could get to the fabric store to purchase just the right piece. I think of that quilt where I took a shortcut and did not put as much quilting on the piece as I could have. Those quilts could have had a better outcome; they could have been richer in color or had more texture. However, I rushed and got less-than-satisfactory results. That is a lesson to be remembered for this current project. I will remember that quilt with the beige background that should have had the light blue. I will keep on working at gaining access, remembering that this project will be better and richer if I can get more participants, and get the right participants, the participants that can contribute the most to the project.

Advice to Novice Researchers

Completing a quilt requires patience. The steps cannot be rushed. It takes thought to consider how all the elements will be put together in a harmonious whole. It is the same for qualitative research, only your elements are different. Remember, no matter if you are making a quilt or conducting research, the process is one of continuous adjustment. You are always determining where you are, where you want to go, and what you need to do next. Sometimes you have to step away from your project, get feedback from someone else, and make changes accordingly.

My advice to other novice researchers is to look around. Consider your hobbies and your interests as I did. You just might find connections between the research process and other aspects of your life. Those connections might just provide the insight to help you get a research project better organized or refine your method of data analysis. They might help you persevere when you get distracted and discouraged. Any creative endeavor – scrapbooking, knitting, sewing, photography – can have the same sorts of connections to qualitative research that quilting does. Consider the process you go through when completing a project in your chosen creative field. List the steps you follow. Think about how those steps relate to the research process. You will most likely find the same kinds of connections I did which can assist you with your research.

When I hit stumbling blocks in the process of conducting research, I think about my quilts and the process I go through to complete one. This helps me clarify my research project, gives me insight, and points me in the right direction. It reminds me that I might just need patience and perseverance to complete the project. Sometimes I only need to wrap myself in the comfort of a quilt to provide inspiration! What will be your inspiration and your connection to the research process?

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