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Abstract

I found Stefan Timmermans and Iddo Tavory's 2022 book, entitled *Data Analysis in Qualitative Research: Theorizing with Abductive Analysis*, to be an illustrative, to-the-point guide for qualitative researchers to analyze their studies promptly. In each section, the book brought illustrative examples to make the readers grasp the very idea of the book easily. Moreover, the book's compilation of abductive arguments of data analysis other than the familiar ways of argument (i.e., deductive and inductive) made it interesting.

Keywords

qualitative, research methodology, qualitative data analysis

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Developing Novel Hypotheses Based on Unexpected Research Results -- A Review of *Data Analysis in Qualitative Research: Theorizing with Abductive Analysis*

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I found Stefan Timmermans and Iddo Tavory's 2022 book, entitled *Data Analysis in Qualitative Research: Theorizing with Abductive Analysis*, to be an illustrative, to-the-point guide for qualitative researchers to analyze their studies promptly. In each section, the book brought illustrative examples to make the readers grasp the very idea of the book easily. Moreover, the book's compilation of abductive arguments of data analysis other than the familiar ways of argument (i.e., deductive and inductive) made it interesting.

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Introduction

Data Analysis in Qualitative Research: Theorizing with Abductive Analysis, by Stefan Timmermans and Iddo Tavory (2022), consists of nine separate sections plus some supportive materials. Each section of the book illustrates the qualitative research analysis by considering the abductive argument. This will make the readers interested in arguing their analysis.

Overall Review of the Book

The authors began by introducing readers to the abductive style of reasoning, which serves as the book's principal plot device. In scientific research, abduction is a logic that structures the process of developing a novel hypothesis based on unexpected research results. It steps in where there is a conflict between following the usual suspects because you are interested in them and staying open to new, unexpected discoveries for which a usual suspect's explanation is insufficient. They called the subject "SURPRISE" for this reason. As a result, they asserted that inductive and deductive reasonings are frequently rigid fantasies cut off from the gritty reality of analyzing qualitative research data. It is well known that the abductive approach begins with startling facts or "puzzles" and devotes the entire research process to explaining them. In contrast, the abductive technique, particularly in the context of theory development, is an underestimated feature of reasoning in the research process. By doing this, the authors reinforced the idea that to make theoretical contributions, one must have a thorough understanding of a wide range of social theories and engage actively with observations through abductive analysis.

The abductive analysis, according to the authors, mentions the process of crafting theory; that is, identifying both what surprising theoretical observations are and where the theoretical case and the findings diverge in interesting ways. This is in contrast to the familiar reasoning approaches, where most methods books in qualitative research state about coming up with something from scratch or about testing, verifying, and generalizing theory. They also identified the problem with the abductive approach; namely, that there is no easy, foolproof

protocol for a surprise. They used the "cooking metaphor" to convey their point about discriminating between several lines of reasoning.

Finally, it was observed that the authors' objective is to translate their theories about abduction into concrete research procedures. They claim that abductive analysis requires performing qualitative research differently, not just relabeling what you were previously doing. Additionally, it entails consciously planning research to increase the likelihood of data surprises, engaging the literature in a new way, approaching data coding with a mentality intended to defamiliarize the familiar, and purposefully and reflexively writing research up to elicit abductive insights.

The book begins by outlining how qualitative researchers start their analysis in a novel method, after familiarizing the reader to the startling way of analyzing research data. The researchers were encouraged to become sensitive in nurturing surprise results by the authors to highlight the qualitative research's startlingly unexpected analysis.

In the following chapter, they go over some of the fundamental principles of abductive analysis before getting right into how to prepare research for surprises. They start by addressing the theory: what you should read, how to interact with readings, and when to stop. They demonstrated how literature gives you "landmarks of expectation" that you may compare to new theoretical paths using the metaphors of a map and compass. They recommended that readers become accustomed to their subfield's organizational structure. They added that sociology also includes more esoteric navigational tools in addition to fundamental theories. The reader is made aware by the book that theories such as Bourdieu's habitus capital and field, interactionism's definition of the situation, or actor-network theory's perspective on assemblages don't describe any particular field to the reader. However, they do provide the reader with information on how to navigate various terrains and what kinds of occurrences to anticipate.

The authors further explained in chapter three that creating theoretical frameworks to explain social existence is not just a task for social scientists. They claimed that to learn how to act based on what has previously occurred, we all develop theories in the course of daily life. They urged the readers to pay close attention to the beliefs and ongoing problems of the people they are studying. They coined the term "principle of engagement" to give their concept a concrete name, and they refer to it often throughout the book as one of the most crucial qualitative research methodology principles. They argued that even while readers shouldn't define a certain social reality as their interlocutors do within it, doing so will be beneficial. They said it in the first place because it is both a morally and analytically sound position. Reading in your field of study and listening to how people organize their surroundings can both lead to unexpected discoveries. Additionally, they clarified how moments of abduction relate to all of these theoretical sources of inspiration. In the conclusion, the authors urged the readers to use literature as a staging ground for their studies or to read it strategically.

The authors' fourth chapter, "Collecting," which discusses issues with research design, focuses on data gathering. They made the case that the focus of qualitative research design is an interaction between focusing and defocusing research, between zooming in on particular questions and zooming out on the interconnectedness of social life, by pursuing ethnography and interview research as the two main methodological anchors. They stated that every study must collect data that is sufficiently robust to allow for the possibility of surprise, but different qualitative methodologies encounter various difficulties. We need to concentrate our expanding study, for instance, using the nearly infinitely adjustable method of participant observation. By including a site as a comparative case or by following our participants around the locations where they live their lives, we may be able to accomplish this. The authors also discussed how the researcher strategically defocuses the questions early on in the interview to increase the likelihood of surprise. Interview design is much more rigid than ethnography due

to the question format and time constraints. Most crucially, the interaction between focusing and defocusing causes the research to be organized differently from how these techniques are typically used in the social sciences. To recognize surprises, the authors recommended a constant agile adjustment of bringing the phenomena into clear focus and a step back to study previously disregarded features.

In chapters five and six, the writers moved past research design and into the analytical task of coding. They started their coding with a more organized kind of open coding used in grounded theory. They made an effort to understand the data more deeply and detachedly throughout the early stages of coding. They did this by mapping and describing the dramatic data structure. They emphasized who does what, when, when, how, and to what practical results, connecting through a modified form of Kenneth Burke's grammar of motives and rhetoric carried down at least since Aristotle. Aspects of their data that they either neglected or took for granted in the interview or the field were brought to light by this periodic questioning of their findings. As a result, such open coding provided two additional advantages: first, it enabled them to inquire about how action and interaction progress in their data, motivating them to search for processes and giving preference to mechanism-based explanations of their subject. Second, it helped them recognize what they still don't know, such as the references made by their interlocutors as well as the omissions and gaps in their data. The coding finally provided them with direction on where to move forward with their data collection operations. Because of this, it must start early and continue steadily throughout the fieldwork, not at the conclusion.

Chapter six's examination of focused coding and the index case serves to complement that of open coding. Focused coding elaborates on a theme that we infer (i.e., from experience and one's acquaintance with the existing literature) as promising, in contrast to open coding, which attempted to decipher a promising theme in the noise of the observations. Although these themes identify patterns in the data, according to the authors, they do not "emerge" from the data but rather already have a place in the theoretical traditions in which the researcher is interested. The researcher's work ultimately tells an empirical and analytical story using an index case, or sort of "patient zero" in their data, as an anchoring device. The main goal of focused coding is to select and evaluate one's index case's power before analyzing variance in light of the index case.

When we are still unsure about what is worthwhile in our study endeavor, the writers of chapter seven demonstrate the most promising course to follow. They made an effort to reconnect to the engagement principle, or the duty to treat study participants seriously. The writers further asserted that to better understand the social reality they investigate, they concentrated on tensions within it, drawing on both a long tradition of theoretical work and their own practical research experience. They discussed the importance of looking for "jokes in the structure" of the worlds they study, not to reveal what is going on but rather because understanding the pattern underlying these tensions leads them to theoretical questions specific to their research project. They did this by drawing on the work of cultural anthropologist Mary Douglas on humor and ritual.

The writers showed how the writing process is filled with analytical choices over what to include, how to narrate, how to reply to the dreaded reviewer two, and how to captivate your audience in chapter eight. These choices are not merely decorative in their expression; they represent the researcher's theoretical contributions. They stated that summarizing research turns into a test of one's aptitude: is something one may deem unexpected and the novel really that novel and unexpected? What one initially believed to be her/his surprising results and what the theoretical intervention is may need to be extensively revised. They explained how the organizational structure of setting up a surprise and then having a theoretical climax in the text works well for abduction. Furthermore, the writers urged the reader to use this structure and to

write in a way that supported rather than masked the theorizing process. They then argued for reflective writing that uses words, information, and ideas to persuade an audience to agree with what the writer wants them to take away. The last chapter wraps the book up with reflections on qualitative research, and the authors added an appendix about the place of abduction in the emerging world of computational social sciences, where abductive “big data” approaches have been developed over the past few years.

Strength and Weakness

From the reviewer’s view, the book’s simple language and writing style throws light on the reader’s mind to grasp much from it. As a strength, this book is an all-inclusive guide and can be considered as resourceful as it has several illustrative examples. As the topic of the book specifically focuses on the analysis of qualitative research, it gives concentrated, detailed, and focused know-how on the same. Moreover, the book’s language is very easy, and the integration of different previous works makes it credible and very interesting.

As a weakness, in the organization of the chapters, there is a lack of segregation of different concepts with different subtopics. This leads to accumulating a pool of contents under a single topic. This may leave the readers under ambiguity. In conclusion, this book can serve as an ideal user manual and reference work on the analysis of qualitative research for different disciplines.

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