NİTEL VERİLERİN İÇERİK ANALİZİ : ÖĞRETMEN PERFORMANSININ DEĞERLENDİRİLMESİ KONUSUNDA YAPILAN BİR DURUM ÇALIŞMASINDAN BİR ÖRNEK
APPLYING CONTENT ANALYSIS TO QUALITATIVE DATA : EXAMPLE FROM A CASE STUDY ON SCHOOL-BASED INSTRUCTIONAL SUPERVISION

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ABSTRACT

This paper outlines a set of data analysis procedures developed through a case study on school-based instructional supervision at a private secondary school. These procedures should not be taken as strict rules in qualitative data analysis, but be viewed as flexible guidelines that may be adopted as a whole or be modified to suit the nature of the respective study. This data analysis approach outlines a process to explore underlying concepts and events, discover patterns and relationships that give shape to the data, and finally organize the data for meaningful representation of the reality.

ÖZET

Bu makale, özel bir lisedeki okul-içi öğretmen performansının değerlendirilmesi ile ilgili bir araştırmada elde edilen nitel verilerin analizinde kullanılan içerik analizi sürecini tanımlamaktadır. Bu süreç, amaca ve elde edilen verilerin özelliğine göre çeşitli nitel araştırmalarda farklı biçimlerde işleyebilir. Bu makalede sunulan veri analiz sürecinde temel amaç, nitel verilerde ortaya çıkan temel kavram ve olayları tespit etmek, verileri şekillendiren tema ve yönelimleri belirlemek ve bu çerçevede araştırma bulgularını anlamlı bir biçimde organize etmek ve sunmaktır.

INTRODUCTION

The term analysis imparts the feel of numbers and the manipulation of those numbers. However, not everything can be equated to numbers and meaning can be derived from combining those numbers to form significant patterns. When dealing with human issues, patterns are complex and meanings sometimes hidden in inference or expression of terms. Having a totally different nature from quantitative research, qualitative research traditions offer varied ways to study naturally occurring human behavior and perceptions (Bryman, 1988). In comparison to quantitative studies, qualitative research makes varied assumptions about human nature and society, adds new foci, and uses different methodologies. In the field of education, it looks at classroom behavior in the wider context of cultural standards, behavior and setting patterns, participant's goals, and external social influences. Qualitative methods offer researchers ways to reach rich and in-depth understanding of educational issues and problems.

There are no standard approaches for qualitative researchers, however, they share certain common practices. First, qualitative researchers have a commitment to use naturally occurring data and perform systematic studies in unpretentious settings. Second, they view problems from a holistic perspective. Problems are studied as complex systems which, in most instances, are more than the sum of their parts (Patton, 1990). Salomon

(1991) clarifies this concept by stating "The systematic approach mainly assumes that elements are interdependent, inseparable, and even define each other in a transactional manner so that a change in one changes everything else and thus requires the study of patterns, not of single variables." Third, the qualitative researcher during data collection is closer to the sources of data by talking, observing, and even sharing experiences with subjects. Fourth, the perspectives and experiences of participants are sources for the researcher's conclusion. Fifth, in order to understand phenomena studied, qualitative researchers involve themselves in detailed descriptions, work with data collected and explore the underlying relations or patterns. Lastly, qualitative research allows flexibility of design since it is assumed that rigid design restricts effective data collection and exploration of problems. Regardless of which philosophical, epistemological, or methodological perspectives researchers are working with, triangulation is vital, that is, use multiple methods and sources of data in execution of a study to withstand critique by colleagues (Hammersley & Atkinson, 1983; Denzin, 1978).

Qualitative researchers should present their methods clearly so that the study can be replicated or as Salomon (1991) states, there is a "means of validation." The original report should act as an operating manual. This operational manual should clearly explain data

collection, analysis and narrative report writing methods used. For a study to be valid and reliable the ability to confirm, and if needed repeated, is vital when considering methodology.

As Bogdan and Biklen (1992) point out, data analysis is a process of systematically searching and arranging interview transcripts, fieldnotes and other materials to increase understanding of the subject and thereby, enable the researcher to present the results. In this process, analysis involves working with data, organizing and breaking them into manageable units, synthesizing them, searching for patterns, discerning importance and what is to be learned, and, ultimately, deciding what to report.

Patton (1987) regards the qualitative data analysis as a "creative process." He points out "there are no formulas, as in statistics. It is a demanding intellectual process and a great deal of hard, thoughtful work. Because different people manage their creativity, intellectual endeavors and hard work in different ways there is no one right way to go about organizing, analyzing and interpreting qualitative data (p. 146)." As pointed out by Tesch (1990) the prime intellectual tool used during the analysis is comparison. By manipulating the qualitative data, an "eclectic activity," meaning is molded into a higher level synthesis of thought. The researcher becomes an "intellectual craftsman" as described by Mills (1959). They have the opportunity "to communicate with others and make interpretations, but in making these interpretations one must learn how to get away from preestablished interpretations" (Feldman, 1995, p.64). Feldman goes on to state that the preestablished interpretations are those coming from the interviewees and other researchers of the same subjects. One must be able to remove oneself from presupposed outcomes and opinions, and understand the unique phenomena in the data. How and when we place ourselves, in terms of the study, influences our "perspective through which we frame the collection and interpretation of data" (Ely, Vinz, Downing, Anzul, 1997). It is vital that researchers be cognizant of their relationship to the data, assuring absence of personal bias.

When viewing overall qualitative analysis aspects, Tesch (1990) notes that analysis should be concurrent with data collection or be performed in a cyclical manner and that the analysis process should be systematic and comprehensive, but not rigid. A reflective stage during data collection should result in analytical notes, which can guide the process during later steps. Tesch, further, contends that connection to the whole should be maintained even though it is segmented and divided into units, which apply and give meaning. In most studies as the researcher begins to gather data it is difficult to discern gist and, therefore, all data take on importance. As the researcher progresses, data "piles up geometrically" (Miles and Huberman, 1994). "This raw data pile" may become overwhelming if not for a system of coding by which an analysis can be performed. By labelling, flagging and tabs the researcher categorizes raw data into groupings and subgroups which, hopefully, will later give meaning to the study. This breakdown of data is tentative, preliminary and flexible. Actual labelling or categorizing is derived from the body of data.

Though the analysis leads to rhetorical prose, the displaying of data in other forms ie, charts, diagrams, graphs and tables, enhance the ability of readers to understand meanings that the researcher is trying to convey. They form the embodiment of our thoughts (Wolcott, 1990) and are an invitation to explore "seemingly discrete data" for links "in previously unrecognized ways" by assimilating the data into these non-contextual form.

Adapting content analysis to pursue meaning in a qualitative research on school-based supervision was a step into a creative endeavor. Creativeness does not give a license to create something from nothing, but a license to discover and a responsibility to report findings in an accurate manner. This study provides an example of data analysis procedures, but is not intended to limit methodology other researchers may follow.

The Case

This methodology was derived from a case study conducted at a private secondary school in Turkey. The purpose was to present a holistic picture of the school-based supervisory practices through the perceptions of critical informants and school documents.

Four research questions guided this case study: 1) What types of supervisory practices are carried out at this private school? 2) How are the supervisory practices perceived in terms of their strengths and weaknesses by administrators, department heads, teachers and students? 3) What impact do the supervisory practices have on teaching and learning, teacher development and overall school improvement processes? 4) What recommendations can be made to improve the current supervision system?

The participants were the members of the administrative board (2), the principal, assistant heads (3 out of 6), department heads (all 6), teachers (15 out of 78 full-time teachers) and students (50 out of 1259). Teachers and assistant heads were chosen by a stratified random sampling technique. The strata for teachers included subject area, overall teaching experience, teaching experience at the school, gender and school level taught. One lowest, one middle and one highest grade level assistant head were selected as representative

sampling. A systematic sampling technique was used for students. Seven students were selected from each grade level, based on their position in the class roster

Three qualitative data collection techniques, namely interview, critical incident and document review, were used. Six interview schedules of approximately 25 questions were designed for each subject group. Moreover, the principal and sampled teachers wrote their thoughts regarding what they considered successful and unsuccessful supervisory practices using a critical incident form developed by the researcher. The documents reviewed included announcements, school prospectus, the school-based training programs and administrative documents, such as those used during supervisory practices by inspectors and student teacher .evaluation forms. These documents provided supplementary data beyond interviews and critical incidents

Data Analysis Procedures

The interviews were conducted in Turkish, the native language of the interviewees. Notes were also taken in Turkish. All other steps of data analysis (coding, categorizing, etc.) were carried out in English. When two or more languages are involved in which the write up is in another language other than the interview, it has proven beneficial to make a distinctive break. It allows the researcher to assimilate thoughts and prepare accurate translation at one given point.

All data analysis was performed manually without assistance of a database. This afforded the researchers an in-depth understanding of the subject studied and, therefore, allowed intimate detail to be compiled that would have been otherwise overlooked or lost.

The literature addresses many different styles and approaches for gathering, organising and analysing data (Becker, 1970; Bogdan and Biklen, 1992; Bogdan and Taylor, 1975; Lofland, 1971; Miles and Huberman, 1984, 1994; Schatzman and Strauss, 1973; Spradley, 1979; Strauss, 1987). The data analysis methodology presented below evolved from a trial and error process. The steps were the result of this process and are rudimentary yet explicit on how to make the data manageable and, ultimately, enhance the feasibility of the results. The same procedure was followed for the critical incident data.

Step 1. Preparing the Data in Transcript Form

The researchers transcribed the interview notes word by word from tapes recorded during the interviews. Transcription was performed on a word processing program and produced 400 pages of raw data. The researchers inserted notes based on non-verbal interview events, such as nervous moments, reluctant answers, excitement and impressions or guesses regarding the

context of the verbal comments. Having transcribed the data, the researchers became thoroughly acquainted with the content. Further, the transcription was performed as an on going process so that interview data were fresh in mind. This timing sequence of interview/ transcription assured minimal loss of data. Familiarity is a critical aspect for the process of analysis, and provided an additional opportunity to review and connect with the data (Tutty, Rothery, Grinnel, 1996).

Step 2. Formatting the Transcript for Analysis and Filing Interview Transcripts

The transcript was formatted double space, leaving the right margin four inches wide for easy reading and space for comments.

A hard copy of each interview was filed in one of six groups, namely, teachers, department heads, assistant heads, the principal, administrative board members, and students. Moreover, each group was given a distinct code, "T" for teachers, "D" for department heads, "A" for assistant heads, "S" for students, "P" for the principal and administrators. Each individual within a group had a distinct number for identity i. e. T1, T2, T3ÖÖÖD1, D2 etc..

It is critical from the beginning that a filing system be maintained that can be accessed, modified, added to and referenced during and after a study is complete.

Step 3. Identifying Meaningful Data Units

The next step was to organize the data into a manageable format. According to Tutty et al. (1996), this is the process of classifying and collapsing data into "meaning units," where decisions are made as to which data fit together. Ultimately, these segments are categorized, coded and sorted. Then patterns are identified to summarize the researcher's data interpretation.

Researchers began the analysis with the largest group, the teacher interview data set. The first few interview data sets were analyzed together to reach an agreement identifying meaningful data units. A first reading of the interview was performed without notation. Thus, the interview was absorbed for gist. On the second reading comments were written in the margins indicating what could be performed with the data.

Step 4. Coding the Data

After the preview of the first interview, the researchers coded the data, keeping certain resources in mind. Relevant literature was always in mind. The research questions and focus should be a constant thought. Given the actual data, inferences, the researcher's perceptions and previous knowledge and experiences (Dey 1993, p 100) should be drawn upon. Lastly, substantive, policy and theoretical issues should be reviewed. Box.1 presents a few examples of this coding stage.

Box 1

An Example of Coding Stage. (Text translated for this display only).

3. What is your perception of "effective school"?	3. Perception of an "effective school"
{In an "effective school" administration must be secular and democratic,} ⟶	**School Policy** Secular & Democratic
{there must not a political pressure. We observe this pressure in the state schools very much. The principal or the administrators treat the guests, parents and the teachers according to their political preferences. I mean they favor the ones who are in line with their political preferences. Further, we observe this while the course books are chosen. They try to choose the books, which were written by the authors who have the same political preference.} ⟶	Interference of political preferences (QUOTE)
{The school must follow the principles, which were established by Ataturk, the founder of Turkish Republic.} ⟶	Ataturk's principles, Kemalist thought
{One should trust the administration.} ⟶	Administrative reliability
{An "effective school" must have the necessary things to provide a high quality education such as a good library, video, maps which we can use to supplement our classes,} ⟶	**Equipment** Library Video camera Maps
{a comfortable classroom.........} ⟶	**Physical environment** Comfortable

Step 5. Generating Categories

This organized the coded data into broad topics. Those definitions which came out of the meaningful data units reflected the questions posed to the interviewees and critical events that occurred and/or experiences shared. Each succeeding meaning unit was compared to the previous meaning unit or grouping of meaning units and, if no similarity was observed, then a new category was created. This process continued until all meaning units were categorized from the first interview transcript. 13 categories emerged.

Step 6. Indexing the Data

Under each category, emerged sub-categories. The researchers decided on a numeric coding system. Numeric coding is more flexible than alpha, but there is no reason to limit one's coding to only numeric. However, it is essential to use some form of coding. Box 2 presents an example of coding by numbers.

The data were then indexed. After each sub-category the interview number (in) and the page number (pn) were written to assure ease of reference during the write-up. Furthermore, the researchers looked for quotations that correlated with the intended context and marked them as quotations (qn) listing interview and page numbers. Table 1 presents an example of this stage.

Box 2
An Example of Coding by Numbers

3. What is your perception of "effective school"?	**3**
{In an "effective school administration must be secular and democratic,}	**3.1** 3.1.1 3.1.2
{there must not a political pressure. We observe this pressure in the state schools very much. The principal or the administrators treat the guests, parents and the teachers according to their political preferences. I mean they favor the ones who are in line with their political preferences. Further, we observe this while the course books are chosen. They try to choose the books, which were written by the authors who have the same political preference.}	3.1.3 (QUOTE)
{The school must follow principles which, were established by Ataturk, the founder of Turkish Republic.}	3.1.4
{One should trust the administration.}	3.1.5
{An "effective school" must have the necessary things to provide a high quality education such as a good li rary, video, maps which we can use to supplement our classes,} {a comfortable classroom.........}	**3.2** 3.2.1 3.2.2 3.2.3 **3.3** 3.3.1

After the first interview was analyzed the initial outcome was computerized. The second interview analysis was conducted with a printout of this initial outcome. Throughout this procedure, issues, which were repeated by any participant, were inserted by giving the interviewee number and page number in the interview transcript. If a new issue arose it was coded and indexed accordingly. Therefore, the procedure evolved by analysis, printout, analysis ... and so on.

Step 7. Refining and Reorganizing the Categories

The researchers then worked back and forth between the data collected verifying the meaningfulness and accuracy of the divisions and the proper categorization of data. Some categories, which were too large, were broken down into smaller categories to attain more comprehensive classifications. This process continued until completion of data analysis for 8 teachers, at which point a clear theme picture had been established. Tutty et al. (1996) terms this stage "category saturation". The data become repetitive and further analysis only confirms the ground covered. Twenty seven categories were ultimately generated after all data analysis was performed. At this stage the final version of themes emerged from the teacher interviews.

Table 1

Example of Indexed Data

3- Perception of an "effective" school
3.1. School Policy
3.1.1. secular
t-t1, p4
3.1.2. democratic
T-t1, p4-t2, p2, 3 quote - t7, p5
3.1.3. interference of political preferences
T-t1, p4 quote-t10, p3
3.1.4. Ataturk's principles, Kemalist tought
T-t1, p4
3.1.5. administrative reliability
T-t1, p4-t2, p2

Step 8. Cross Checking Data within Different Subject Groups and Generating Additional Categories

The same procedures were followed for the analysis of the data from the principal and administration, assistant heads, department heads and students. After the analysis of each group, the categories were cross-checked providing a clearer picture. Table 2 shows an example of the last version of data for category 3, sub-category 3.1.

Table 2

An Example of Indexed Data for all Subject Groups

3- Perception of an "effective" school
3.1. School Policy
3.1.15. providing appropriate environment (building, necessary materials, etc.l) for teaching and learning
T-t5, p3-t6, p3 quote-t14, p3
D-d4, p2 quote-d6, p2-d6, p3 quote
A-a1, p2 - a2, p2
S-s1, p3 quote
P-p1, page7 quote, page8 quote

After completing the analysis of all interview groups 10 additional categories emerged. These were in addition to the 27 categories from the teachers.

Step 9. Looking for Meaning and Relationship

The researchers now pursued meaning and relationships among the categories. Tutty et al. (1996) describes the basic advantage of this step by stating "First, you will have to develop an interpretation of your data. Interpretations are sometimes descriptive, but may also suggest causal explanations of important events. Second, the research process and conclusions must be assessed for credibility and dependability (p. 109)."

The researchers identified relationships between the major themes. This helped to develop logical interpretations of the themes that remained consistent with the earlier categorization schemes and meaning units.

In the literature several strategies are suggested for extracting meaning from a data set (Miles and Huberman, 1994; Tutty et al., 1996): draw a cluster diagram, make a matrix, count the number of times a meaning unit or category appears, create a metaphor, look for missing links, note contradictory evidences.

With the help of the suggestions above, the researchers performed a sieve analysis, skimming off extraneous data. Second, interconnections between themes and categories were identified. Lastly, these categories were outlined under the relevant research questions.

Step 10. Organizing Relevant Categories Under the Research Questions

The relevant categories were organized under the four research questions. Table 3 presents this organization.

The rest of the categories were organized under three headings for a clearer picture of the context and the relevant perceptions of the people involved (Table 4).

Table 4

Rest of the Categories Used for the Background of the Research

School profile
25- Communication flow within the school
27- How to recruit teachers
29-Meetings held at school
34- How to recruit assistant heads
Profile of the subjects
1- Kinds of in-service training attended by teachers
Perception of a good teacher and an effective school
2- Perception of a good teacher
3- Perception of an effective school
20- Perception of an ideal supervision
36- Principal's perception of the organizational structure

Step 11. Compiling the Data into a Booklet

Once all the processes were completed, a booklet of codes and categories was produced giving the researchers an organized quick reference to the analysis for the write-up. This seemed a practical and economic way rather than punch-card principle (Becker, 1986) or loose stacks of cards or papers (Wolcott, 1990) or even software programs (Conrad and Reinharz, 1984).

Table 3
Categories Matched with the Research Questions

Research question 1: What types of supervisory practices are carried out at the school?
5- Types of supervisory practices carried out at school
6- Ministry of Education Inspection
7- Procedure of Ministry of Education Inspection
10- School-based supervision
11- How are the results of the supervision used?
12- Types of school-based supervisory practices
13- Procedure of the supervisory practices carried out in class by the principal
14- Procedure for other types of supervision by department and assistant heads
16- Formal teacher evaluation performed by the students
19- Types of supervision
28- Role of department and assistant heads in teacher evaluation
30- Evaluation of department heads
31- Evaluation of the principal
32- Evaluation of assistant heads
33- Procedure of evaluation in the organization

Research question 2: How are supervisory practices perceived in terms of their strengths and weaknesses by administrators, assistant heads, department heads, teachers and students?
5- Types of supervisory practices carried out at school
8- Criticism of Ministry of Education Inspection
15- Criticism of the supervisory practices at school
17- Criticism of the formal teacher evaluation performed by the students
20.4- Efficiency of the supervisors at the school
6.4- Efficiency of Ministry of Education Inspection

Research question 3: What impact do supervisory practices have on teaching and learning, teacher development, and overall school improvement process?
22- Impact of supervisory practices
23- Nature of impact

Research question 4: What recommendations can be made to improve the supervision system further?
9- Recommendations for Ministry of Education Inspection
18- Recommendations for formal teacher evaluation performed by students
21- Recommendations for a more effective teacher evaluation
26- Any other ideas regarding teacher supervision

Step 12. Pre-Write-up Stage

The complied data booklet was used to construct understanding before the write-up stage. The researchers looked for the ways to explain, describe, categorize and summarize the data. Moreover, in order to display the results in a comprehensive manner, the evidences were weighed and cross-checked to the respective subjects. Finally, examples and quotes were chosen in order to verify and solidify the data. Items were crossed out in the booklet as they were used avoid repetition and to assure items were not omitted.

Step 13. Final Write-up

Triangulating the study by gathering data from each subject group, using of different data collection instruments and methods, allowed the researchers to present results in a comprehensive framework. Therefore, the results gleaned from the interviews and the critical incidents were integrated with the information obtained from the written documents during the write-up. This drew a coherent picture of the school's supervisory practices. All the data were presented under seven titles presented in Table 3. Graphic representations supplemented data write-ups. Charts, graphs, representations, figures, and flow diagrams assured conveyance of ideas and thoughts (Miles and Huberman, 1994; Wolcott, 1990). They were a reflection of the text and allowed the reader to visualize ideas that are less descriptive in text form. This methodology assured understanding by both the reader and the researcher. It allowed the researchers to organize thought patterns and form comprehensive models.
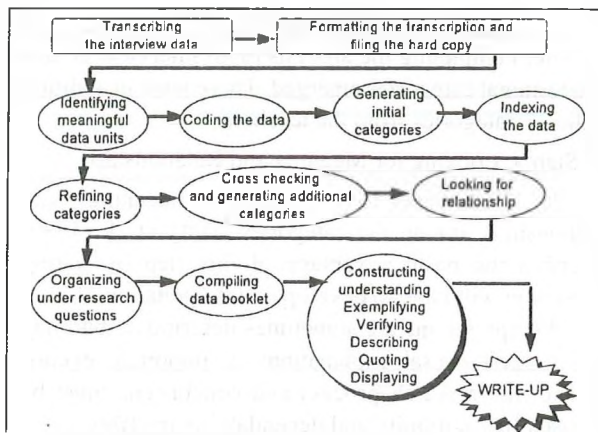

Figure 1. Overall Data Analysis Steps

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To sum up, through the data analysis process explained above, the researchers constantly made direct links between the analytical thoughts, the original research design, the research questions and intellectual puzzles. The steps, undertaken at the researchers' discretion, helped make the data comprehensive and manageable. These steps were not based on a menu, but derived through a time consuming hands-on experience analyzing data, looking at themes and patterns, solving problems, reflecting, thinking backward and forward, comparisons, categorizing, interpreting and drawing conclusions. Figure 1 presents all the steps followed by the researchers in data analysis process starting with transcribing the data and ended with final write-up.

DISCUSSION

It has been said every journey begins with the first step, so it is with Qualitative Study. The path from start to finish is the shortest when one has a map to follow and some one has travelled the same road before. For these reasons, by having a methodology for a Qualitative Data Analysis, the reader is presented with a guide for traversing a similar course. This is not to say that the same map works for everybody, however, it points in the right direction and lends itself to modification.

When judging the methodology presented, herein, it should be noted that all analysis was manually performed. Though not necessary, with the fact that the raw data were in a coded form, a computer data base analysis could give a greater range of combinations and sorts. It should, however, be noted that analysis programs in languages other than those of the West, generally do not exist and, therefore, computer applications are limited. The researchers, however, feel intimacies that were gained through the hands-on sorting of data, rather than the impersonal click of the computer keys were vital in order to connect to the essence of the background. It is the researchers' opinion that by using computer generated output, the qualitative analysis would be reduced to no more than a quantitative analysis disguise. Tutty et al. (1996) describe the degree of personal involvement in the terms of "understanding the personal realities of research participants in depth", as well as "aiming for a deep understanding of the experience and the meaning attached to it, but also of the context within which the experience is reported" (p 91).

The fact that during the process, a hard copy was filed on each subject interviewed, though considerable time consuming, was time well spent. If performed, researchers will find that they can instantly reference data that may be lost or require endless hour of searching to retrieve. Further, by having the hard copy, one can highlight notations, quotes, reconfirm concurrent thoughts between subjects, and serve as a memory jog

without listening to tape after tape of interview. All of these transcripts were stored on computer disk. Perhaps on other studies key word searches could be explored and added as a modification to the methodology. None the less, the hard copy provides a good reference by which researchers can readily access facts.

What forms patterns and what actually is "meaningful data"? It is the prime goal of the each study to identify these two items and simplistic definitions can not serve to convey an understanding. However, "meaningful data", in gist, are facts that have a commonality throughout the study and patterns are analysis of the relationships that tie these facts together. This was best expressed by Frankel (1995) as "facts and analysis are the bricks and mortar of responsible writing." He further states that "facts and analysis lead only slowly and cumulatively to a perception of truth, a perception also colored by individual, value-laden opinion." Each researcher must grapple with the duty to report accurately what they have observed. Therefore, as previously pointed out, reporting factually is a responsibility. This is by far the strongest advantage that qualitative research has over quantitative. Does the sheer fact of superior numbers absolutely dictate right? Of course not. Truth and "meaningful data", though sometimes in minority, may constitute right. As Lecompte and Goetz (1979) point out the value of scientific research is partially dependent on the ability of individual researchers to demonstrate the credibility of their findings. Thus, one of the essential qualities of any scientific research should be the trustworthiness of its findings/diagnoses. Facts should be generalizable and accountable. Only by following methodology that is traceable and repeatable can reliability be achieved.

In closing, it is important to note that this methodology was one of the first academic attempts at a large scale qualitative analysis in Turkey. During the actual study the researchers experienced emotional ups and downs due to not knowing what logical steps should be taken next, and then discovering a method to the next level. There seems to be little elementary literature by which a sequence is offered to guide the inexperienced researchers through this maze. "Unlike with quantitative designs, few writers agree on a precise procedure for data collection, analysis, and reporting of qualitative research. Unfortunately, reading qualitative journal articles provides little assistance because authors truncate the steps in order to emphasize results or to meet editorial restrictions on length."(Creswell, 1994; p.143). As with Eisner (1993), the researchers wish only to allow other researchers to "create images that displayed their own personal signature." Their qualitative studies should be enhanced by "Individuality of outcome, not conformity to a predetermined common standard."

It is hoped that this paper presents a simple, yet effective, method by which researchers can find food for thought which will lead them through their qualitative research analysis.

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