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FOCUS GROUPS AND CRITICAL SOCIAL IS RESEARCH: HOW THE CHOICE OF METHOD CAN PROMOTE EMANCIPATION OF RESPONDENTS AND RESEARCHERS

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Abstract

Critical social research in information systems has been gaining prominence for some time and is increasingly viewed as a valid research approach. One problem of the critical tradition is that there is a lack of empirical research. A contributing factor to this gap in the literature is the lack of agreement on what constitutes appropriate methodologies for critical research. The present paper contributes to this debate by outlining the role that focus group research can play in the critical approach. The paper outlines the main characteristics of critical research with an emphasis on its emancipatory faculties. It then goes on to review the focus group method in general and gives an account of two research projects that used focus groups as a method of data collection. It is argued that focus groups can contribute to emancipation of researchers as well as respondents. This argument is built upon the critical theories of the two most prominent theorists currently relied upon in critical social IS research, namely Jürgen Habermas and Michel Foucault. Focus groups can improve communication and move real discourses closer to the Habermas's ideas speech situation. At the same time, they can contribute to the challenging of prevailing orthodoxy and thereby overcome established regimes of truth in the Foucauldian tradition. The paper ends with a critical reflection of the shortcomings of focus groups as a critical method and of the specific approach chosen in this paper.

Keywords: critical social research, focus groups, research methodology, information systems

1 APPROACH AND MOTIVATION

IS researchers have embraced the critical approach as a viable and adequate alternative to study IT problems (e.g., (Orlikowski and Baroudi 1991; Trauth and Jessup 2000; Richardson and Robinson 2007; Stahl and Brooke 2008). The critical approach allows for a departure of the purely descriptive approaches commonly used in IS. As Richardson and Robinson (2007) indicate: "Critical research in IS serves as a reminder that IS is about the people as well as the business strategy, competitive advantage or systems development regardless of human cost".

Despite increasing prominence of the critical approach in the field of information systems (IS), there is no agreement on appropriate methodologies for critical studies (McGrath 2005). While it has been observed that questions of methodology are not necessarily central to the critical agenda (Avgerou 2005; Walsham 2005), it would still be desirable to have a clearer understanding of the relationship between certain methods and critical research. The present paper contributes to this debate by offering a discussion of focus groups as a method of data collection and its relationship to critical research.

The potential of the use of focus groups for critical research has been investigated by social researchers (Kitzinger and Barbour 1999; Webb and Kevern 2008). Quality criteria of critical theory research are related to historical situatedness and its ability to overcome ignorance and misapprehensions which can facilitate emancipation. The focus group method can support these criteria as each participant comes in with their own experiential insights, which may change as they learn of the experiences and insights from other participants.

This paper contributes to the literature by discussing how the experience of focus groups as a critical method can be used and built upon in IS research. It argues that emancipation as the central aim of critical research can be furthered using focus groups. Emancipation can be supported for different stakeholder groups, most notably for researchers as well as focus group participants. Developing the argument requires us to give an account of the main concepts, i.e. critical research and focus groups, and to show that these are conceptually compatible. We will then describe and contrast two separate studies to support the argument empirically.

2 CRITICAL SOCIAL RESEARCH

In the field of IS, critical research is often referred to as a paradigm, which offers an alternative to the more established paradigms of positivism and interpretivism (Orlikowski and Baroudi 1991). In order to clearly distinguish our view of critical research, we follow the suggestion of Harvey (1990) and Klein (2008) and add the term "social" in order to render it clear that we follow a particular tradition of thought, which goes beyond the critical considerations of established facts, theories, and data that pervades all research. Critical social research can be defined using a number of different but interlinked characteristics. In this paper we follow Stahl's (2008) view that the most important defining feature of critical social research is its intention to promote emancipation. This critical intention finds its justification in a perception of the world as being imperfect and unjust and the belief that research should address this and aim to improve the status quo. This starting belief sets the critical approach apart from both the positivist and the interpretivist tradition, which are predominantly descriptive.

The concept of emancipation raises a number of complex issues. First, there is its definition. Even following a relatively wide and uncontentious definition, such as the one suggested by Klein & Huynh (2004 p. 163): "Emancipation means that more people can achieve their potential to a greater degree," raises problems. How can we know what people's potential is and how can we know the best way for people to achieve it? What can the role of research be in promoting emancipation and what is to be done if the views of the research objects on their emancipation does not reflect the researcher's views. How do we avoid critical social research turning into a dictatorship of the intellectual (Stahl 2006)?

Despite these and other open questions, we believe that emancipation is central to understanding the critical view and that it explains most other characteristics of the approach. The interest in emancipation sharpens awareness of impediments and requires sensitivity to non-obvious facts and relationships. Critical social research has a history of concentrating on social structures that alienate humans, which notably include economic structures.

The emancipatory intention has implications for epistemology and research strategy. Critical scholars tend to be sceptical of truth claims that are based on an objectivist ontology. The constructed nature of social reality requires them to understand the process of construction of individual and collective life-worlds. This leads to a dialectical understanding of research, which is often described in direct opposition to positivist approaches. Critical researchers understand that knowledge claims are always contested and aim to understand under which circumstances they become accepted as truth. They also realise that all knowledge claims are based on particular interests and that there is no value-free and objective description of social realities. Knowledge must, therefore, be understood in its historical context. Given the scepticism of truth claims and the starting assumption that the world should be improved, critical social researchers tend to have an ambiguous relationship to empirical data, which can always only say what the world is like but rarely give indications of what it should be. This may to some degree explain the ongoing problem of methodology in critical social research in IS. In addition, the historically contingent nature of critical social research requires the researcher to continually reflect on their activities and the role they play in shaping the outcomes. Reflexivity is therefore a frequently cited aim of critical social research (e.g., Kvasny and Richardson 2006).

Another aspect of the critical approach that has bearing on the role of focus group research is that of theory. A considerable number of theories have been used in critical research. In the field of IS, one can observe that the work of two researchers has gained prominence: Jürgen Habermas and Michel Foucault (Brooke 2002). We will outline brief aspects of their theoretical positions which allow for a wider interpretation of the role of focus group research in the context of critical social research.

Habermas is often considered a leading representative of the Frankfurt School of social theory. Whereas the first generation of Frankfurt scholars were more closely aligned with Marxist thoughts, Habermas developed social critique by establishing the Theory of Communicative Action (TCA) (1981), which posits that there are different ways of coordinating social action and that the most desirable is that of communicative action. This means that interlocutors are accepted as equal and valuable individuals and that the aim of communication is the achievement of consensus on the basis of rational exchange of arguments. Central to this idea is the concept of discourse. In any speech act, the speaker raises a number of validity claims (truth, legitimacy, authenticity). Whenever these are contested, discourses take place where arguments are exchanged to clarify the differences and come to a conclusion. Such discourses presuppose the (counterfactual) ideal speech situation. This is a situation where all speakers are endowed with the same ability to express their views and are willing to accept each others' arguments. Due to the construction of discourses and their presuppositions, the TCA implies certain ethical views, which Habermas has developed in his discourse ethics (1983; 1991). Important aspects of his work that inform our interpretation of focus groups include the discursive nature of social reality, the ideal speech situation as an aim which indicates the way towards emancipation and the ethical nature of communicative interaction.

The second theorist who has gained prominence in critical social IS research is Michel Foucault. Similar to Habermas, he sees the importance of discourses in establishing social reality. Unlike Habermas, however, Foucault is interested in the question of who gets included or excluded from discourses and on what grounds (1971). Where Habermas implies a view of truth that is based on a consensus (albeit often a fictitious one), Foucault holds that there are "regimes of truth", which determine what can count as true in a particular context. In his extensive studies of different social realms, he undertook genealogies of historical discourses with the aim of determining the ways in which legitimate knowledge is created. For our purposes, some of the interesting aspects of his work include the emphasis on bodily discipline in establishing discursive dominance, the whole idea of regimes of truth as well as the importance of power relationships in discourses.

3 FOCUS GROUPS FOR CRITICAL RESEARCH

Focus groups have a long history in market research, social research (Morgan 1988), and more recently in medical research. However, they continue to be under-used in information systems research as a primary method of data collection, even though they can be particularly valuable in exploring and recognizing the socio-technical nature of information systems.

Powell et al. define a focus group as “a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research” (1996 p. 499). The focus group draws upon respondent’s attitudes, feelings, beliefs, experiences, and reactions in a way that is not feasible using other field methods (e.g. one-on-one interviews, surveys, observation). An individual interview provides a one-dimensional perspective, whereas the focus group elicits multiple views through processes that can prompt reaction, synthesis of new information and experiences provided by others, and recall of the forgotten. Focus groups are a special form of group interviewing. General group interviewing has an emphasis on questions and responses between the researcher and participants. Focus groups are distinguished in that they rely on the collaborative construction within the group to inform topics provided by the researcher (Morgan 1997). The researcher prompts things to happen in a focus group in an organized fashion, as opposed to observational methods where the researcher waits for things to happen in a natural way.

Conversing among peers in a comfortable setting with limited moderator prompts may result in more information about organizational issues, knowledge structures, and interacting with users or IT staff than a participant may otherwise provide. Through group discourse, researchers tap into the many different forms of communication that people use in day-to-day interaction, including jokes, teasing, and arguing, (Kitzinger 1995). Gaining access to such variety of communication is useful because people's knowledge and attitudes are not entirely encapsulated in reasoned responses to direct questions, such as those presented in survey or one-on-one interview. Tapping into interpersonal communication is also important because this can highlight (sub)cultural values or group norms. Through analysing the operation of humour, consensus, and dissent and examining different types of narrative used, the researcher can identify shared and common knowledge. Furthermore, when an individual user’s or IT staff’s perspective is limited, focus groups can draw participants from the full set of involved stakeholders. And, because the participants are exposed to a wide range of ideas and perspectives of the information system of interest, these stakeholders can give a multi-perspective view of the technology of interest. The focus group method can highlight individual stakeholders’ reflections and build on these conceptual insights via other participants’ perspectives.

From critical theories such as Habermas's and Foucault's, we learn about the importance of power in any social interaction. Focus groups are no exception to this. Using the critical lens, scholars become more sensitive to power issues, which include obvious ones, such as the choice of focus group topics and selection of respondents, but also less obvious ones as expressed in moderation techniques or seating arrangements. It should not be assumed that groups are, by definition, inhibiting or that focus groups are inappropriate when researching sensitive topics. Group work can actively facilitate empowerment to discuss taboo topics because the less inhibited members of the group break the ice for shyer participants (Kitzinger 1995). Participants can also provide mutual support in expressing feelings that are common to their group, but which they consider to deviate from mainstream culture (or the assumed culture of the researcher).

Criticalists realize that one can never escape power relationships and that this would not even be desirable. The way to address them is to make them explicit and open them up to discussion and revision. The focus group discourse may expose asymmetric power relations in the organization and to allow silenced voices be heard. A focus group provides a means to obtain assessment from a group of stakeholders through collaborative construction of independent attitudes, experiences, and beliefs, rather than consensus or negotiation (Morgan 1997). From Foucault we can learn that power is always

bi-directional and all power leads to reactions, which are often unforeseen. The role of the researcher should, therefore, be discussed as well as other influencing factors, including the power that the focus group members have over the researcher. The critical perspective requires a different interpretation of research findings. Given the contingencies of power relationship and corresponding reality constructions, it is clear that no research, including focus group-based one, can produce a true representation of reality. Rather, all research needs to be understood as a contribution to the discourses that lead to accepted truth claims (Habermas) and that establish regimes of truth (Foucault). Focus groups are arguably better equipped to undertake this role than other means of empirical data collection because of their discursive nature, which allows for an easy recognition of factors of interest to critical research, such as ideology, hegemony, power, perceptions of rationality, etc. In the next section two research studies are used to illustrate how focus groups can be utilized for critical analysis.

4 DESCRIPTION OF TWO RESEARCH STUDIES

In this section we describe two different information systems studies within the healthcare context, which will be used to illustrate how the discursive nature of focus groups contributes to critical social research.

4.1 Emancipating Participants: Exploring Patient's Concepts of Telemedicine Encounter Quality

The extent to which telemedicine positively impacts the health status of patients and equalizes access to care are social issues purported to be at the core of telemedicine. This is underscored by the motives of our organization and the socio-technical nature of the telemedicine encounter itself. The organizations participating in this study were part of a large government-run telemedicine network. Medical vision conferencing, the form of telemedicine addressed in this study, involves conducting patient encounters (i.e. clinical exams and consultations) using video conferencing equipment and related peripherals. The telemedicine network studied initiated medical video conferencing as a means to provide high-level speciality care to remote patients and as a means to reduce patient wait times for care, rural patient anxiety and time associated with travelling to an urban area for care, and travel reimbursement costs paid to patients. The purpose of this study was to identify the socio-technical attributes that contribute to a successful medical video conferencing encounter workflow and process.

A critical question arose among the research team regarding informants, namely who had the power (using Habermas's and Foucault's concept of power in social interaction) to define utility, efficacy, and process in the telemedicine context. In the telemedicine domain the business philosophy acknowledges that the patient is the icon that underpins each dimension of success and justifies each decision. Yet, this does not necessarily translate into participatory democracy or a public sphere that encourages debate deliberation, agreement, and action (Villa 1992). In a healthcare service encounter, the relationship between patients and medical providers is asymmetrical: the patient subscribes to the professional authority and knowledge of the physician in seeking medical care.

Even though patients may be considered partners in their medical care, patients have some degree of dependence upon medical care providers in the context of a medical encounter. Research indicates a patient's dependence on a medical care provider (particularly physicians) is based on the physician's command of an esoteric body of knowledge acquired through training and experience legitimizing the profession, the ability to justify his/her authority and the ability to evoke the client's trust, confidence, and norm of obedience in following prescriptions for care (Parsons 1975). Despite this power difference, which is of intrinsic interest to the critical perspective, there are functional reasons for exploring patients' views: their description of symptoms is required for diagnosis, they represent the "consumer" of healthcare, and they shape the competitive market of healthcare. It is, thus, plausible for a healthcare technology study to include data collected directly from patients.

Early forms of data collection in this study and reviews of telemedicine patient satisfaction literature recognize that studies indicate patients are satisfied with telemedicine (Collins, Nicholson et al. 2000),

but provide limited critical analysis from the patient perspective. Critical social research seeks, however, to question shared assumptions and unearth social realities behind such simplistic views. In their review, Collins, Nicholson, and Brown (2000) note some of the limitations of quantitative measurement of patient satisfaction including the propensity for patients to express high levels of satisfaction due in part to their reluctance to say the wrong thing or complain for fear of unfavorable treatment in the future. Direct observation provided relevant data for the general purposes of the study, but did not seem to adequately augment the patient perspective.

Focus groups were chosen to provide the means by which to give the patients a stronger voice in the study. In the spirit of ideal speech, every subject with the competence to speak and act is allowed to take part in the discourse (Habermas 1981). Patient encounters may be sporadic or limited precluding a rich breath of experience and the chance to share experiences with others to understand norms and nuances. We looked to focus groups to provide a means to obtain patient “expertise” through collaborative construction and learning from the related experiences of others (Morgan 1997). In addition, it was thought that the process of interactive discourse in the focus group may provided a collective strength to help empower the patient to overcome reluctance to say the wrong thing or provide an acquiescent response set.

Deliberate attempts were made in the design of the focus groups to enhance patient empowerment and the voice of individual patient participants that might find it more difficult to express their attitudes, desires, and needs. Efforts included the use of aliases by participant, rules to promote an “ideal speech” environment provided in writing before and read to the groups during the session, and the strategic placement of participants around the table.

An attempt to enhance and empower patients was also made through the use of a trained peer moderator the patients might see as someone they would generally have conversation with, as opposed to a research team member or healthcare provider. The assistant commanded a voice only at the end of the focus group to clarify areas of confusion, to facilitate complete information and accurate coding, and to provide a summary of interpretations of focus group comments at the end of the session. This closing discourse between researcher and focus group members was an initial effort towards validating interpretive analysis and some degree of sharing power with participants in the analysis process.

4.2 Emancipating the Researcher: Evaluating Data Quality in Health Policy Decision Making

The second study focused on issues of data quality. Healthcare enterprises can be regarded as ‘data rich’ (Abidi 2001) and the quality of this rich data is a crucial basis of strategic decision. This study proposed several data quality calculations and presentation methods meant to inform the decision maker of three data quality problems in a health planning/aggregated data environment: 1) missing data, 2) small sample sizes and 3) erratic trends in underlying data that could indicate incorrect data.

The focus groups were the final step in this study and were meant as an evaluation of the three data quality presentation methods. “Vignettes” or story lines were used to create fictitious decision scenarios based on current healthcare situations and sample healthcare data. (Table 1 contains some examples for cases of missing data). The strategy taken was to present the data with and without the data quality information in order to detect differences in the collective decision making processes. The moderator presented the experimental vignettes and encouraged the participants to play the role of a healthcare decision-maker. In order to analyze the data, the focus group guided the moderator in exploring the healthcare data. For example, participants were encouraged to ask the moderator to drill down or roll up the OLAP tool data in order to thoroughly understand and compare data for different counties as part of their decision making process.

Vignette	Decision
There is evidence that smoking is responsible for most cancers of the larynx, oral cavity and pharynx, esophagus, and bladder, but possibly for other cancers such as kidney, pancreatic, cervical, stomach, and acute myeloid leukemia.	Is there correlation between smoking and certain types of cancer?

When Hispanics are diagnosed with a certain cancer they're less likely to receive chemotherapy than non Hispanics.	Is there disparity in care between ethnic groups?
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Table 1 Example Vignettes

The main researcher in this study intended to use the focus groups to empirically demonstrate the utility and efficacy of presenting data quality information to for improved decision making. However, the open-ended discourses generated by the focus group techniques perplexed the researcher. The researcher's background as computer scientist had guided her research topic choices, initial assumptions and an objectivist approach to research. In the focus group discourses, the researcher noticed non-obvious facts and relationships on how decision support tools were used in decision making, which were contrary to her initial assumptions. This motivated the researcher to retrospectively analyze the focus group transcripts using a critical lens.

5 ANALYSIS USING CRITICAL APPROACH

When focus group dynamics work well, the participants work alongside the researcher, taking the research in new and often unexpected directions (Kitzinger 1995 p. 300). In this section we illuminate some of the unexpected directions the focus groups in the two referenced studies introduced to cause questioning of assumptions. We use Habermas' concept of ideal speech and Foucault's concept of regimes of truth to highlight some unexpected directions and the questioning of assumptions.

5.1 Study One: Patient Focus Groups and the Ideal Speech Situation

Though attempts to create a microcosmic public sphere supportive of debate, deliberation, agreement, and action were made and signs of such were evident, there is no guarantee that each and every participant was emancipated in the discourse (Villa 1992). Participants asserted positive views of process and action in the telemedicine encounters as well as incidents of imperfect experiences and possibilities for enhancement that they had not previously revealed by organizational or research surveys or on record as complaints or compliments. As the focus group conversation transpired, shared stories seemed to evoke a greater attention to detail and recall and the ability to more closely examine the process with a critical lens. For example, comments regarding potential issues with the provider interacting with technology included:

"Well, I found that there was a lot of time wasted in adjusting the cameras. Half the time was adjusting the cameras and instructing the nurse to focus in on different parts of my body, rather than to talk to me directly about my symptoms & my problems. I'm sure it was important, but to me that was a negative. In person he wouldn't have to adjust anything."

These issues were not suggested through survey responses, even in open-ended survey questions, nor by patient reactions in direct observation of telemedicine encounters.

Empowerment moved from a description of their reality to a more collective inter-subjective vision of what an ideal medical video conferencing encounter should be like. In building this vision, participants would interject prescriptions for process and performance. For example, in discussing the medical assistant responsible for operating cameras in the room with the patient, one patient commented that the assistant should:

"... be familiar with the doctor, have, you know, just don't have, it has to be someone that and make them like a team. She is that doctor's representative here and so she has to know the doctor well enough that if he does say something and it can be taken three different ways she usually knows which way he means it."

Focus group participants also prescribed special training for medical professionals involved in such encounters as demonstrated by the following comment, *"they to have some video training and to have it critiqued on their performance, because it's really a performance, they're on television."*

For many such prescriptions, it seemed ensuing comments rallied support. However, not all statements produced unison. There were differing opinions on the mix of in-person with video exams, though

most groups contained members that supported the first vision in person as a means to start discourse with the doctor as described below:

“There's a lot you can learn about the doctor by the way he handles you and how close he gets and his demeanour. It's important to the care of the patient and that's what you get from that first visit in person.”

Some patients also seemed liberated to report on issues of their own shortcomings and awkward moments and stories seemed particularly forthcoming once one focus group member “broke the ice”. For example, some patients commented that they were captivated by the “television” and thus missed some of the doctor’s directives. In follow-up, another patient recounted that they did not realize they did not have to speak very loudly; and when told they did not have to shout, the embarrassment provoked them to cease free-flowing conversation with the doctor. A couple of other patients indicated they overlooked or were not informed that they were not having an in-person exam and shared their reactions as described below:

“I was shocked. I did not know I was having a television exam. My wife was with me and she says who's talking? I said it was somebody over there. I'd just tell them to give us just a brief orientation, so that they would not be shocked.”

The question for the research team was whether and how to share the “patient voice” expressed in the focus groups beyond intended research outlets. The telemedicine coordinator and a leading doctor of the participating organization with the most telemedicine sites were invited to participate in the coding process to afford a more direct means of “seeing the voice” of the patients than general reports to participating organizations. The practitioners were trained; and practitioner coding was compared to researcher coding. In addition to providing the practitioners with direct access to patient comments, this process provided a means of analytical discourse among the researchers and the practitioners. The convergence found between the coding of the research and practitioner teams provided another level of validation to the study. In the spirit of ideal speech, it also introduced an unexpected discourse into the study. Though practitioners are often the subject and source of data in IS research, they are not often brought into the analysis process. Through their elevated role in this study, the practitioners voiced contextual experience as well as their emotional and intellectual reactions into the design, experiences, and observations associated with the analysis process. The researchers felt this discourse complemented and expanded their capabilities and insight.

In response to patient responses, practitioners involved in the coding and reconciling process were alarmed by some patient comments indicating they had not received a telemedicine encounter orientation to suit their particular concerns and needs for information. Transformation is enlisted in critical research in response to insight and critique. Once management was apprised of the patient orientation issues, the researchers were asked to work with the practitioners to develop patient orientation materials with content reflecting patient orientation needs as indicated by the focus-group discussion. To continue the discourse with patients, a validating survey was sent to patients participating in the focus group by the research team to confirm analytical insights. This procedure of soliciting patient feedback on patient education materials provides further indications of research and the patient voice transforming practice.

5.2 Study Two: Questioning the Orthodoxy: Challenging regimes of truth

The second study investigated issues of data quality in the context of public policy health planning. The intent was to aid human decision makers to better understand the quality of the data they had and in the presence of potentially incomplete and unreliable information from multiple data sources. The underlying premise held by the researcher at the start of the study was that additional data quality information would be valued. Thus, the core issue of the study was what data quality information to present and how best to present this information. Focus groups were used to inform the design and to evaluate if the enhanced decision support tool would improve decision making for public policy health planning issues. The loosely structured format of the focus groups (as opposed to an individual interview where there are structured questions, or a controlled experiment, where all variability is

carefully controlled) had an interesting effect. First, it allowed the conversation to navigate to areas that the researcher had not intended to cover, such as, why data quality problems exist. This new discourse added rich information to the research topic and contradicted some of the initial assumptions held by the researcher. Secondly, as focus groups became more comfortable in sharing their ideas, when they stumbled on to a particular aspect of the topic that excited them or bothered them, their resulting solidarity shifted the power from the moderator to the participants. Finally, because of the unintended discussions, the problems that motivated the researcher to pursue the study appeared in a different light, and forced her to question whether the chosen research focus of presenting data quality information to decision makers was the most pressing to investigate or even of importance.

The major underlying assumption made by the researcher was that decision makers understood that poor data quality was prevalent in many data sources. But in contrast, it appeared that most decision-makers were under the impression that data quality did not cause problems in their organizations. They indicated that they knew which data sources are not reliable, and they just avoid using them. This is evident in the following participant's comment:

"I think some of it's probably documented but there are some variables like that every researcher would know like don't even bother using it. It's so bad. But you know- it has a reputation for being bad. And you might know that by reading the literature but most likely you're probably gonna know by informal network."

In another vignette, participants were asked to determine whether there was a correlation between smoking and certain types of cancer in the presence of significant missing data. The participants indicated it depended on the stakeholder. The information about the missing data, along with the drilling capability of the OLAP tool could be used to either argue either side. This was treated with humour, but it was apparent that data could, and was at times, manipulated for the desired outcome.

Another assumption held by the researcher was that decision-makers would use the provided data quality information for improved decision making. Yet, when presented with the system prototype showing data quality information, the participants collectively began to speculate regarding the reason for the data quality problem, rather than concentrating on using the tool to help them with the test case decision tasks. For example, in the vignette where participants were asked to explore healthcare disparities in cancer screening for Hispanics, the participants speculated on the cause for the missing data, illustrating discourse deviating from the researcher's initial intention:

"Years ago we started to do press screening in migrant Mexicans - among migrant Mexicans and we tried to give them the free ones and they didn't feel like they deserved that kind of care. That that was for rich people and wasn't for them which would you know sort of figure in some of the cultural issues related to this beyond just sort of race."

The solidarity that formed among the participants had an interesting effect. In one particular focus group that consisted of Ph.D. statisticians at a large hospital centre, participant solidarity actually shifted the power and control from the moderator to the participants. The group disliked the decision task vignettes that were chosen as test cases and refused to make decisions with the data that was presented to them. This was interesting because the examples were based on simplified versions of real decision-making scenarios within their context. This particular group resisted any sort of "watering-down" of tasks that were similar to their every day tasks. In retrospect, the participants were incensed that the task design did not consider the situational nuances and unique decision making skills they had acquired by doing this kind of work. They felt that the data quality issues that were being covered minimized the actual issues they faced. For example, again with the Hispanic disparities case one participant noted:

"My concern is that the census classification of Hispanic allowed for people that aren't Hispanic, for documentation purposes...Hispanic is anything that doesn't fall under white or black or that some people may not consider themselves Hispanic if they are of a mixed race"

In a similar fashion, this particular group nitpicked each task scenario, and the data quality information was ignored. As the moderator tried to re-focus their attention on the data quality issues and the

related tool, they participants basically revolted and said it was just too much to consider, given other information that they also needed to consider in the decision making process. Their overwhelming consensus was that the addition of data quality information to the decision support tool would force them to consider too much information and would actually decrease their decision making efficiency:

“I think that ideally your decisions would be more effective, but I can see you might spend a lot of time if you are digging through that (data quality information), and that time could be wasteful in an of itself”

As the researcher analyzed the conversation and some of the observed resistance to considering the data quality information in the test decision-making scenarios, the complexity of decision making with flexible decision support systems such as OLAP became apparent. Albeit, data quality is an important aspect in decision making, it is just a small part of the myriad of issues in health policy decision making. In fact, inserting more doubt about the fitness of the data used for these tasks may actuallyacerbate or corrode the processes that health planners and clinical researchers use to make decisions.

6 REFLECTIONS

Critical research aims to be reflective and question its own assumptions, beliefs, and outcomes. This paper seeks to come to a better understanding of the role that focus groups can play in critical research or, to put it differently, whether and how focus group research can further emancipation.

6.1 Emancipation of the respondents

The stories shared by patients participating in the first telemedicine study eroded elements of ignorance and misapprehensions in sharing what was beneath the surface regarding their medical video conferencing experiences not revealed by other methods of data collection. Positive experiences were not negated, but perceptions of the ideal sometimes shifted. In the telemedicine study, each patient had unique telemedicine exam experience and opinion of success that they brought into the group. The sharing of unique situations and experiences and commonalities evoked a new virtual reality of what it would take to achieve an ideal telemedicine process. Though some individual differences in opinion still existed, a shared common knowledgebase of histories (to varying degrees) transformed the participants. A richer analysis evolved in recognition that even positive situations can merit from a critical lens and multiple organizations applied results from the study to move to a higher level of service and understanding regarding medical video conferencing. Consciously improving communication situations in accordance with Habermas' ideal speech situation can improve individuals' understanding of technologies and also lead to a better understanding of different stakeholder groups (e.g. patients and clinicians). Focus groups are uniquely suited for such improvement of speech situations because by their very nature they are close to discourse situations. Making positive use of social dynamics can help researchers enforce emancipatory consequences of qualitative research by using focus groups.

6.2 Emancipation of the researcher

The interaction and often camaraderie that is evident in focus groups guided the researcher to reflect about some of pre-conceived notions about decision making in an important context, health public policy decision-making in our second example. It should be evident that giving information about the quality of the data should empower the decision makers to improve how they approach decisions. Using Foucault's concept of regimes of truth, we experienced the power of focus groups of questioning established beliefs. IS researchers tend to use an unproblematic view of agents' rationality which translates into the belief that high quality data will lead to good decisions. Exploring discourses during the focus group research showed that this orthodoxy is fundamentally flawed. Respondents were not as interested in data quality as standard theories suggest they should or would be. In reality, most decision makers paid limited attention to data quality issues in comparison to alternative realities about decision making that emerged in this context. Personal biases in decision making (such as

questionable racial stereotypes), speculation about reasons for data quality problems, stakeholder issues and limitations in the amount of data that a person can or is willing to process objectively, were in themselves problematic. These findings allowed the researcher not only to come to new insights into data quality issues in healthcare settings but, moreover, to question the very assumptions that the research project was based on. By coming to this new position, the researcher was emancipated from prevailing thoughts and free to explore alternative explanations of social realities.

6.3 Focus Groups as critical method

We believe that this paper gives a convincing account of the positive contribution that focus group research can make to the critical tradition in IS. It can be emancipatory for participants as well as researchers and there are diverse theoretical explanations of the critical faculties of the focus group method. This should not be misunderstood as saying that focus group should be viewed as a "critical method" per se. There are weaknesses to focus group research in general and to our approach in particular that need to be kept in mind.

When using the focus group method for critical research, one needs to be aware that it can never achieve the (transcendental) ideal speech situation. The researcher will always play a central role that has a tremendous influence on outcomes. The researcher sets the topic, established legitimacy of research question, selects participants, influences discourse situations, has control over physical resources, and decides how to use the data. While the process can be made as transparent and democratic as possible, it will always remain skewed towards the perspective of the researcher. An awareness and sensitivity towards critical topics is necessary for the focus group research to display its critical characteristics.

Another problem with our approach is that it is fundamentally functional, i.e. it did not question the technology and its context of usage. It is not obvious whether the socio-economic framework in which our investigations took place is truly geared towards emancipation. Accepting the description of healthcare as a market raises a number of problems. It means that financial considerations are central to healthcare which certainly not all critical scholars would find acceptable. This has to do with questions of distribution and justice. Using a Habermasian perspective, one can say that it represents the colonisation of the life-world which he would not find acceptable. Our approach is thus open to the charge of being fundamentally uncritical because it uses the critical repertoire of ideas to improve a social context and use of technology whose legitimacy per se is not certain.

A further and fundamental problem of all critical social research is the question of successful emancipation. Due to a number of conceptual and epistemological issues, most active critical researchers settle for the idea of "transformative redefinition" (Alvesson and Deetz 2000) as the hallmark of success. The idea is that emancipatory change can be effected by allowing people to reconceptualise their world. The question for us then is whether the focus group approach is truly conducive to such transformative redefinition and whether it is possible to provide evidence of them. Our account of the research suggests that the interaction during the focus groups has given rise to such redefinition but whether they were truly transformative is a difficult question.

One can summarise this paper by saying that we think that there is a good case to be made that focus groups are a research method that goes well with the critical approach. At the same time it raises a number of questions, which require the critical researcher to remain careful. It is of particular importance to underline the fact that the choice of whatever method, including focus groups, will not automatically render a piece of research critical. Criticality requires ongoing attention to issues of emancipation, which may nevertheless remain elusive.

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