

Virtual Focus Group Methodology – Example from IT Industry

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ABSTRACT: *This article offers a systematic explanation of the usage of the virtual focus group approach in research, frequently employed to gain an in-depth grasp of the nuances of a given phenomenon. How to focus group approach utilization is suitable pros and cons, and data analysis. An application from Brazilian IT faces some challenges in the virtual environment. Finally, the relevance of employing focus groups is discussed, along with a justification for their broader use in qualitative research.*

KEYWORDS: focus group, qualitative interview, methodology, IT industry

INTRODUCTION

According to Robinson (1999), Focus Group is defined as “an in-depth, open-ended group discussion of 1-2 hours' duration that explores a specific set of issues on a predefined and limited topic.” (p.905) This work revisits the current on Focus Group (Naeem & Ozuem, 2022; Ward & Delamond, 2020; Rabbie, 2004; Robinson, 1999; Merton, 1987; Basch, 1987), which is one of the most popular instruments for data collection in qualitative research. Focus group is supported by Dramaturgical Theory (Goffman, 1959, 1961), in which the focus group, as a social interaction may be compared to a theatrical drama, where participants (actors), have their roles (scripts), sitting around a table, or a chat room (stage). According to Patton (1990), Focus Group approach serves the following objectives: (i) basic research;(ii) applied research; (iii) summative research; (iv) formative evaluation, and finally, (vi) action research.

Focus group technique was created in the 1920s to collect valuable information on product preferences from conversations (Bogardus, 1926). Merton (1956) explored people's attitudes toward wartime propaganda. Focus group became prominent to other fields of research in the last decades such as (a) research methods (Ward & Delamont, 2020; Milward, 2000; Knodel, 1993; Morgan, 1993; Patton, 1990; Stewart & Shamdasani, 1990; Merton, 1987); (b) health care (Robinson, 1999; Basch, 1987; Kitzinger, 1996); (c) domestic violence (Gower, et al., 1993); (d) multicultural studies (Hughes & Dumont, 1993); (e) nutrition (Rabiee, 2004); (f) social media (Naeem & Ozuem, 2022); (g) Covid-19 pandemics (Mbous, Mohamed, & Rudisill, 2022); (g) parental perceptions (Parry, et al., 2023); (h) mental health (van der Westhuizen et al., 2023); (i) food consumption (Lee, Bradbury, Yoxall, & Sargeant, 2023).

Therefore, a Virtual Focus Group (VFG) is an in-depth interview conducted with several people in one virtual meeting. Usually, six to ten people are gathered in one room with a facilitator who introduces the questions, moderates debates, and collects data from face-to-face meetings. However, with the COVID-19 pandemic, severe sanitary measures were imposed by governments worldwide to contain the virus spread, such as social isolation, lockdown, and home offices. As a result, the only way of collecting data allowed by sanitary authorities during the coronavirus pandemic was through virtual meetings, benefiting from ICT technology improvements. Focus Group, like all sorts of social agglomerations, was directly affected.

Therefore, previous research on Focus Groups relies on face-to-face meetings; many original studies were conducted before the internet (Bogardus, 1926; Merton, 1956; Merton, 1987; Robinson, 1999). Furthermore, more research on Virtual Focus Group (VFG) applied to the IT industry is needed, a shortcoming this work addresses.

Advantages and Disadvantages of Focus Group

Robinson (1999) enumerated advantages and disadvantages to Focus Group. The most relevant are introduced, such as the following (a) advantages: (i) interviewing many participants at the same time; (ii) higher quality controls on data gathering; (iii) group dynamics help focusing on the target subject; (iv) more relaxing framework than in-depth interview; (v) relatively inexpensive when compared to other methods of data collection; (vi) illiterate people could participate without literacy barriers posed by a questionnaire, for example. Finally, (b) Disadvantages: (i) number of questions should be limited. Previous Focus Groups revealed that it is difficult to pose more than ten questions in one hour. (ii) Facilitating the group process needs a high level of skill. (iii) attrition; (iv) conflicts; (v) subject deviations, among others (Robinson, 1999).

FOCUS GROUP METHOD

The fundamental ideas of Focus Group approach have been revised and refined during the past decades (Ward & Delamont, 2020; Milward, 2000; Knodel, 1993; Robinson, 1999; Patton, 1990). A Focus Group is simply an interview, not a discussion, problem-solving, decision, or policy-making strategy (Robinson, 1990). The sampling technique is usually purposive, and the participants are typically chosen as a homogeneous group beforehand. In interviews, participants are called interviewees. In Focus Groups, there are participants. It is a common mistake to need clarification on terms when the study is written.

Participants from Focus Groups do not necessarily have to agree or to reach consensus (Robinson, 1999). Even with homogeneous groups, different opinions are allowed and respected. Nevertheless, one dominant participant may influence the response of the other. It is up to the facilitator to avoid the monopolization of conversation. The facilitator must proportionate a warm and supportive environment for the participants. Kitzinger 1994 observed that various methods for communication are relevant to group work, such as everyday interactions, including jokes, for instance.

Instead of limited-response surveys, this approach aims to avoid getting a generalized or representative summary of viewpoints. According to Robinson (1999), "Focus group methodology assumes that opinions are not always readily available and are open to influence by others in an interactive setting." (p.906). Focus groups were not created to foster a particular opinion. Sometimes sensitive issues arise, and the facilitator should make field notes on the reactions, underlying motivations, and shifts in the subject. As in interviews, a Focus Group's success relies on the quality of data gathered rather than the quantity or recentness. Different from qualitative in-depth interviews, in which questions can be structured, unstructured, and semi-structured (Myers & Newman, 2007), Focus group questions should primarily semi-structured. The rationale behind the choice allows the researcher the liberty to make questions as they appear, in the middle of the session, within a pre-established scope. Also, sensitive topics may generate attrition and stress (Robinson, 1999).

Criteria sampling

The participants in a Virtual Focus Group should meet requirements established for the research, such as time of work experience, academic background, for instance. Professionals, consumers, such as IT workers, for instance. The criteria selection should match the research objectives. Ethnographic data should, therefore, be registered for further use, as illustrated in Table 1:

Table 1 Focus Group ethnographic summary

Participants	Job position	Local	Time of Experience (Years)	Age (years old)	Gender (M/F)	Education Level
P#1						
P#2						
P#3						
P#4						
P#5						
P#6						
P#7						
P#8						
P#9						
P#10						
P#11						
P#12	Electronic Engineer	Rio de Janeiro	25	54	M	Doctorate
P#13						

Sometimes a confederate should be used to observe behaviors, take field notes, to register non-verbal cues in face-to-face meetings. Virtual Focus Groups could be applied to different purposes. For instance, to serve as co-host in virtual chatting, welcome participants, and register field notes. The facilitator should initiate warm-up questions (Myers & Newman, 2007) to stimulate participants' talk. Initially, a disclaimer should be introduced, stating that (a) the research is purely academic, with no commercial purposes; (b) the real identities of the participants are preserved for ethical and compliance issues. (c) participation is voluntary, and the decision to stop is accessible anytime. However, suppose all participants stop answering before all the questions are posed. In that case, the participant must be informed that the Focus Group is invalid, and a further session should be scheduled.

After the disclaimer, the participant is encouraged to start with ethnographic questions, serving as warm-up questions. Finally, the facilitator should provide a collaborative atmosphere, encouraging shy participants to talk, controlling dominant participants avoiding losing temper in the process. Next, according to Robinson (1999), the facilitators should be able to “engage strangers quickly to talk about their experiences, formulate their ideas and draw out cognitive structures that previously have not been articulated.” (p.906)

Some techniques to stimulate participation include (a) *Advert Game* (Kitzinger, 1990), used primarily in marketing, where a slogan is introduced, and the participants are encouraged to envision what are the underlying factors embedded within that particular slogan. (b) the *News*

Game (Kitzinger, 1990; Philo, 1990), in which a picture is introduced, and the participants are encouraged to form a headline, such as a journalist. Finally, (c) the *Card Game* (Brook, 1988), where cards containing the questions are sorted out, and the participants are encouraged to infer answers from the cards. These techniques help trigger the debate.

Virtual Focus Group (VFG)

With the sanitary measures due to the coronavirus pandemic and variants, including social isolation and home office, for instance, face-to-face meetings were substituted for virtual meetings because of the ever-increasing improvement of Information and Communication Technology (ICT). Face-to-face Focus Group was from day-to-night substituted for Virtual Focus Groups (VFG), based on chatrooms, such as Zoom, or Google Teams, for instance.

The advantages included (a) prevention of contamination with COVID-19 and variants; (b) gathering people from other states, localities, or countries with no distance restrictions; (c) video recording every session; (d) fewer costs of room location, accommodations, infrastructure. The disadvantages included (e) poor internet or Wi-Fi signal; (f) power failures; (g) cameras closed; (h) poor audio and video quality; (i) the absence of non-verbal language cues once only the participants' face is visible during the live streaming, for example.

DATA ANALYSIS

The raw data should be collected in the native language (Myers & Newman, 2007), then transcribed to the research language, if necessary, coded, and analyzed (Miles, Huberman & Saldaña, 2014). Content analysis is the most used analysis technique (Bardin, 2016). Content analysis is an iterative process. The data should be revisited as many times as necessary. Word clouds and Frequency distribution are often used to help reveal emerging themes, which are sentences that could be gathered under a representative title. Also, in vivo coding is required to honor the participants' opinion (Miles, Huberman & Saldaña, 2014). The data processing should be performed with the assistance of NVivo software or similar.

Example from the IT Industry

Schmitz & Dias (2013) investigated the factors that influence the return to work and Psychological Well-Being (PWB) of teleworkers in the Brazilian IT industry, the tenth global market and the first in Latina America, as illustrated in Figure 1:

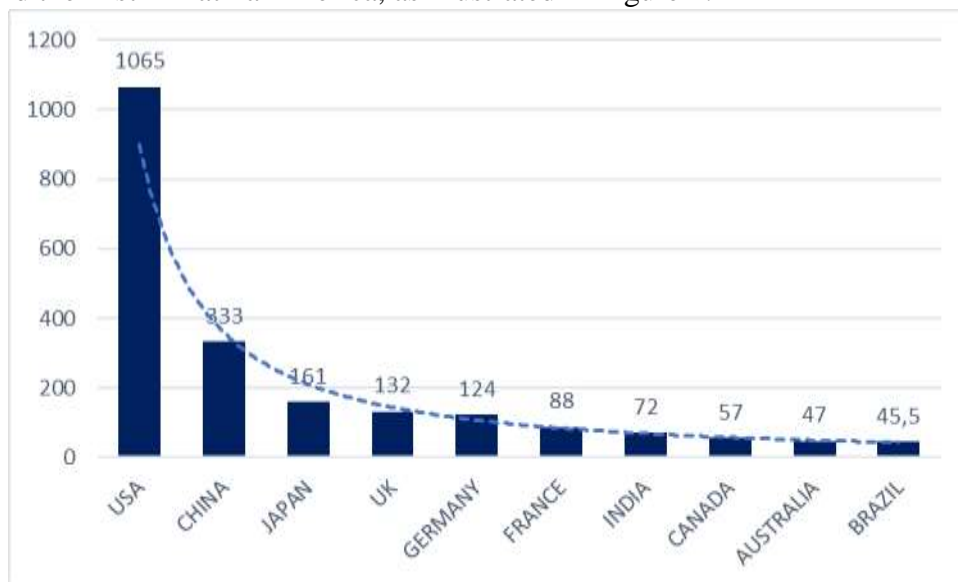


Figure 1 IT World Market 2021. Source: adapted from ABES, 2022

In 2022, there were indications that the virulence and fatality of the coronavirus and its variations were beginning to decline. Eventually, employees had to re-adjust from forced teleworking to a major return to face-to-face employment, while others wanted to continue working from home. This study evaluated the various forms of employment and their impact on Psychological Well-Being (PWB) in the Brazilian IT sector using Virtual Focus Groups and qualitative in-depth interviews. The study involved an extensive literature review. However, only the archival and literature research were not able to answer the research questions. Therefore, a Virtual Focus Group was scheduled with 15 participants, who were invited by phone call, from which 13 answered (87 percent response rate). The VFG session was scheduled and served to gain deeper insights on the perceptions of the participants about the gradually return to work after almost two years of social isolation, confinement and home office or teleworking. Return to work in Brazil is illustrated in Figure 2:

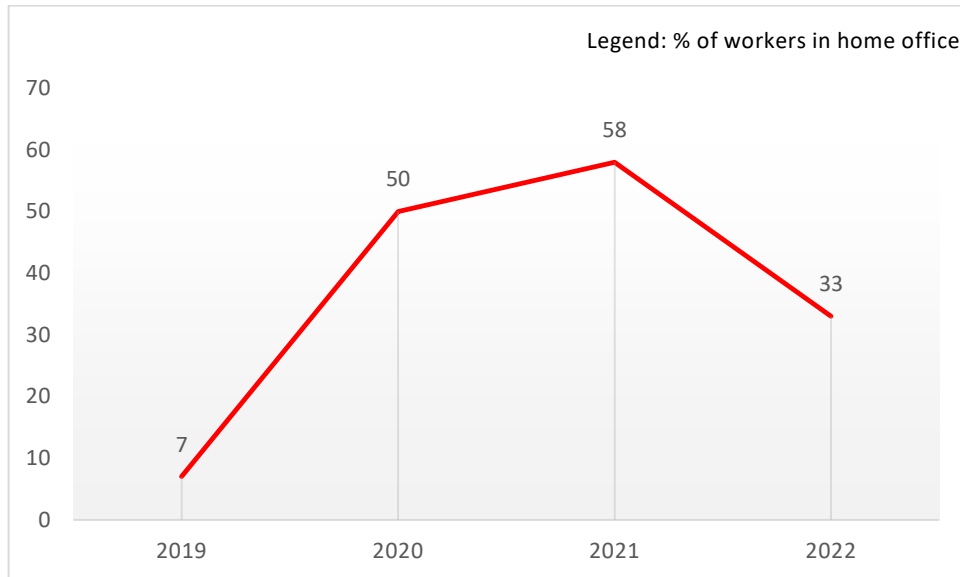


Figure 2 Percentage of Teleworking in Brazil (2019-2022). Source: IBGE, PNAD,2022

Figure 2 showed a decrease in the number of teleworkers after the pandemics. Virtual Focus Groups, therefore, are a powerful tool to understanding the perceptions of the participants about the overall process, as well as grasping nuances of Psychological Well-Being (PWB), which previous investigations proved inconclusive. This is a phenomenon that the quality of the answers and subtleties cannot be captured in a questionnaire, or analyzed through quantitative tools. Thus, Virtual Focus Group is a powerful tool to understanding the process.

Figure 3 illustrates the Virtual Focus Group session, performed with Zoom platform on 16 March 2023, 9:PM with teleworkers in Brazilian IT industry, a two-hour session. Note one camera closed. Questions were presented in rounds. All participants had their identities preserved (see Figures 3 and 4 – the real identities were hidden), despite the use of image and citation allowed.

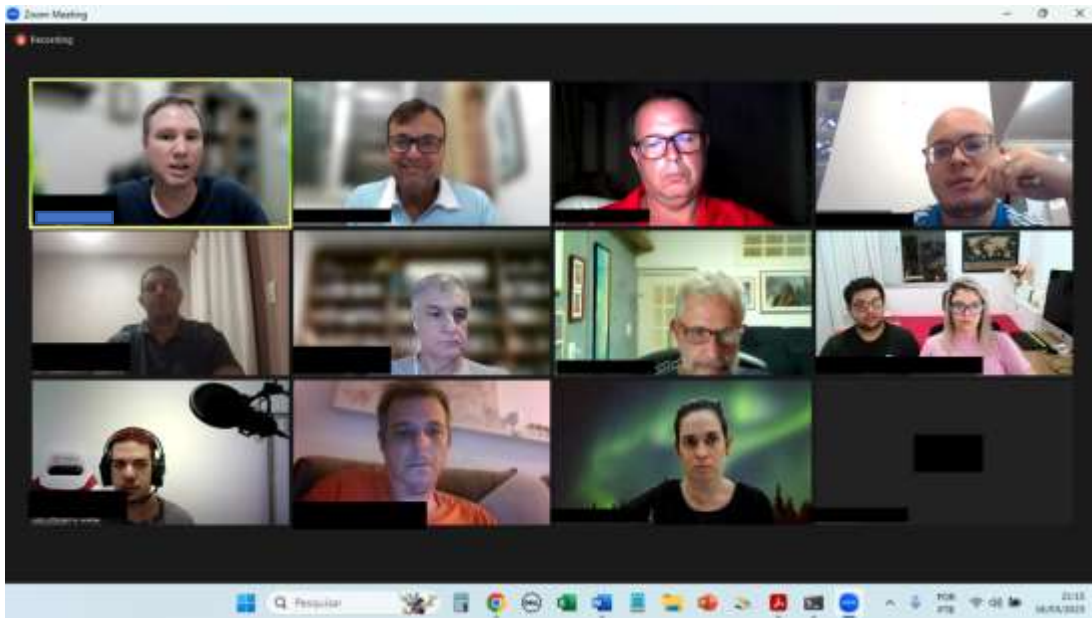


Figure 3 VFG: one closed camera. Reprinted under permission

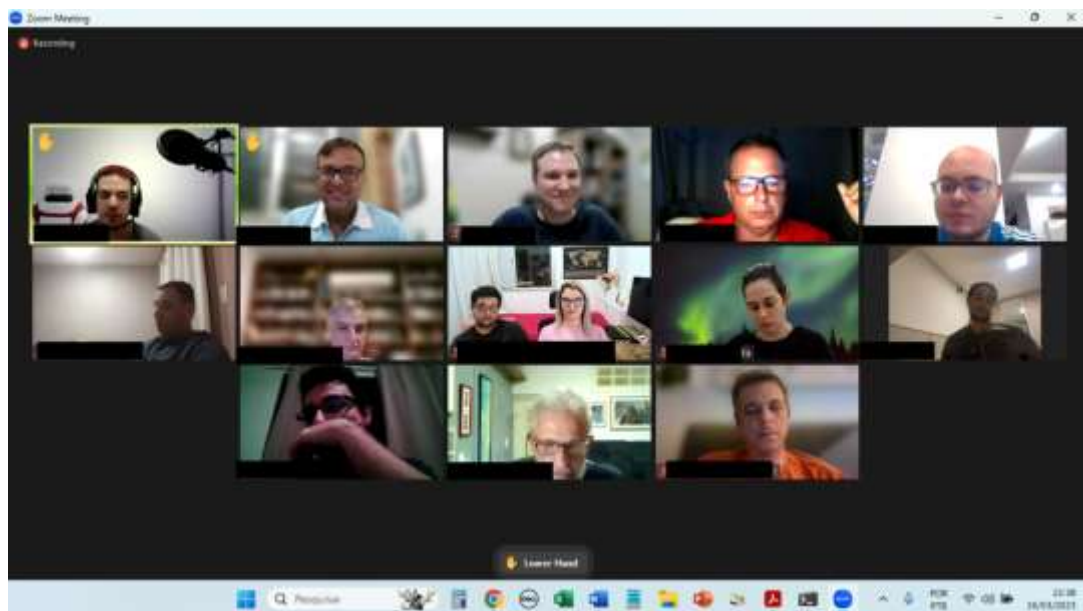


Figure 4 VFG serial participation. Reprinted under permission

Figure 4 shows VFG session. 12 participants and one facilitator. Each participant speaks in rounds. Raising hands to get the facilitator attention. Facilitator introduced the subject and each participant gave its opinion. Compare Figures 3 and 4. One participant joined the meeting late. All cameras were turn on and remained on.

Comments

Participants reported increased workload hours within the pandemic, 100 percent home office. In practice, work and personal life overlap. Many reports in the IT segment believed that the market accepted teleworking well. Most of them reported the necessity for adaptation to teleworking. One participant revealed a new workplace behavior: a virtual lunch, where all employees lunch together, each employee back home. Some reported the necessity of getting used to new perspectives and behaviors. Most reported an increase in the quality of life because of eliminating traffic jams due to teleworking. Some reported a change of habits regarding the adoption of virtual meetings. Some participants reported that the pandemic brought a break in prejudice and paradigm towards teleworking. Negotiations in teleworking were perceived more active in asynchronous communication.

Implications

Researchers at IT industry responsible for assessing the Psychological-Well Being (PWB) of their teleworkers will have more opportunity to design individualized quality assessment programs as outcomes research continues to expand, through Virtual Focus Groups. The problem is to create a combination and equilibrium of research efforts that provide useful findings and can be incorporated into a continuous monitoring system. Although it is necessary to customize the focus group process within the context of the Brazilian IT industry scenario, it has the advantage of allowing the study of several common dimensions of care, such as return to work (RTW) and PWB for instance. Every IT company may utilize virtual focus groups to augment their current expertise and provide powerful, rich data on service delivery and future market and program development.

Finally, this study was designed to address the Virtual Focus Group Methodology, with implications in other fields of research, such as (i) virtual education (Dias, Lopes and Teles, 2020, 2020b; Dias & Teles, 2019); (ii) virtual buyer-seller negotiations (Dias et al., 2022; Dias et al., 2022b; Dias et al., 2022c; Dias et al., 2021); (iii) retail business (Paradela, Dias, M. Sampaio, Plácido & Fernandes, 2019; Carvalho & Dias, M., 2019); (iv) public works (Silva, Melo & Dias, M., 2022; Craveiro, & Dias, M., 2019; Dias, M., 2018; Dias, M. & Teles, 2018), for instance.

CONCLUSION

This article has shown how Virtual Focus Groups (VFG) approach helps provide depth, clarity, and a better grasp of social interactions. Furthermore, the flexibility of qualitative exploratory approaches and the method can only improve their appeal within the research community.

Future Research

Future research is encouraged in other countries, market segments, and fields of research in which data quality is more important than quantity. Additional studies are encouraged to investigate the combination with Virtual Focus Group and qualitative in-depth interviews to gain deeper insights on the subjects under scrutiny.

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