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# Focus Group Discussion: how many Participants in a Group?

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**Abstract**

Focus group technique is often described as a subaltern procedure for collecting and analysing data, underestimating the FG great value; today this method has such a big scientific reputation that it is widely applied in different social research areas such as marketing, education, communication. This theoretical study aims at deeply analyze the matter about the right number of participants for a focus group; this methodological consideration can provide useful elements in order to balance risks and benefits when planning qualitative research in social context. In addition to the numerosity matter there are some elements to carefully consider for an effective focus group research: the sensitivity of themes, the scope of the research, the recording setting, the social category of both participants and researcher, the client.

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La tecnica dei Focus group è spesso descritta come una procedura subalterna per la raccolta e l'analisi dei dati, sottovalutando il grande valore dei focus group (FG); oggi questo metodo ha una tale reputazione scientifica che viene ampiamente applicato in diverse aree della ricerca sociale come il marketing, l'educazione, la comunicazione. Questo studio teorico ha l'obiettivo di analizzare in profondità la questione riguardo al giusto numero di partecipanti per un focus group; questa considerazione metodologica può fornire elementi utili per bilanciare rischi e benefici durante la progettazione di ricerche qualitative nei contesti sociali. Oltre alla questione della numerosità è necessario considerare con attenzione alcuni elementi per un focus group efficace: la sensibilità dei temi, lo scopo della ricerca, il setting per la registrazione, le categorie sociali di partecipanti e ricercatore, il cliente.

**Keywords**: Focus group; Numerosity; Qualitative; Technique; Participants.

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# 1. Introduction

It was 1987 when Basch blamed on the scientific community for the wrong focus group (FG) interpretation, as a subaltern technique for collecting and analysing data, underestimating the FG great value. This is a qualitative technique based on the discussion between a small group of people, invited by one or more moderators to talk to each other, in depth, about the topic being investigated (Corrao, 2000). It is effective in mobilizing conscious, semi-conscious and unconscious psychological and sociocultural characteristics and processes (Basch, 1987). Today this method has such a big scientific reputation that it is widely applied in different social research areas, such as theoretical and practical purposes: educational sciences (Gibbs, 2012; Duarte, Veloso, Marques, & Sebastião, 2015), marketing (Grandclément & Gaglio, 2011; Tadajewski, 2016), gender studies (Medina Maldonado, Torres Torres, & Navarro de Sáez, 2013), communication research (Hartman, 2004). There is wide availability of methodology handbooks in Italian (Corrao, 2000) and international literature (Greenbaum, 1998; Puchta & Potter, 2004; Stewart, Shamdasani & Rook, 2006), even if mainly directed to marketing operators. We detected a need, especially for the Italian literature, of a deep reflection concerning the participants number to a discussion group. The originality of the present paper resides in the in-depth analysis concerning the right number of participants to a focus group and the related consequences in terms of risks and benefits; moreover, the aim is to provide an advancement concerning the same matter for the online focus group.

Ignoring this specific aspect can lead to the risk of resources and timing non-optimization during the data-collecting process, a lack in the data richness evaluation, and further major risk of FG technique wrong application (and linked wrong analysis, Greenbaum, 1998).

Therefore, while on one hand, we will positively consider the increasing FG application, on the other hand it is alarming how often there is a lack of focusing on method, early hypothesis and target of the research. Indeed, according to Clark (2016) there is the need for more frequent systematic reviews on qualitative methods that could update the Focus Group field too.

Starting with above considerations, this work aims to study the problems deriving from the FG numerosity on every research steps, from planning to discussing progresses and to analysing collected data.

# 2. Group's numerosity matter in different collecting data techniques

According to handbook literatures, FG are classified in: dyads, triads, mini-groups (up to six participants) and full-groups (more than seven participants). Even though several FG technique scholars suggest from 8 to 12 as an ideal number (Stagi, 2000), actually the number is very variable and there are few explanations about the reasons for a numerosity choice over another, with the exception for some obvious ones such as setting availability and interviewer style (Currie & Kelly, 2012) or timing and financial resources (Greenbaum, 1998).

The group's numerosity matter is also not clear in other collecting data techniques based on groups philosophy (Palumbo & Garbarino, 2006), but these are useful for some considerations.

For instance, in case of brainstorming there are ambiguous evidence referred to the ideal group's numerosity. Osborn (1953), one of the founder of this technique, suggests at least five person but no more than ten; Slater (1958) considers a five members group as the ideal solution in case of human relationship discussion; Bouchard and Hare (1970) found that 5 persons group and 9 persons group produced the same quantity of ideas, and Bouchard, Barsaloux and Drauden (1974) confirmed the same for 4 and 7 members group too. But these results are in contradiction with others which underline that larger is the group, less is the amount of the ideas generated: it is known as "blocking effect." It could be caused by the one-at-a-time speaking rule, since this rule could cause the forgetfulness of own idea while listening to other member's ideas (Nijstad & Stroebe, 2006). More recent studies have compared the ideas generation between alone and group condition (Korde & Paulus, 2016), the authors found that the alternation of individual and group sessions was the more effective in terms of ideas generated.

In case of problem solving and game simulation groups technique, Nakamura (2003) underlines how important is the correlation between group's numerosity and internal relationships in the group itself. Nakamura finalizes how much difficult is to fix the right numerosity that can ensure the best benefit for the group. As much interesting is the case of decision groups with unknown profiles, practically when the group members must solve a problem using the information known by single persons only, they will necessary interact. The technique's father, Stasser (1992), found that larger groups share more information, with better results. Later on the group's structure has been analysed as independent variable, finding an interaction effect between structure and numerosity of the group and a benefit for small groups as well (Mesmer-Magnus & DeChurch, 2009). In the same study are considered the individual perceptions for the first time and findings show how the individual satisfaction decreases when group is larger. Ohtsubo and Masuchi (2004) revisiting the Davis social decision scheme model (Davis & Hinsz, 1982) found that final decisions are not always connected to majority, it seems that the superior status member's influence decreases when passing from 3 to 4 members, and increases when passing from 4 to 5 participants. This statement can be explained only making interact the numerosity variable with individual's certainty level and with majority (Davis & Hinsz, 1982).

Apart from the different techniques introduced, there are interesting outcomes from those theories concerning the group itself. For almost 40 years psychologists have been considering the membership social implications. Steiner (1972) finalized a group performance's predictive model based on a classification task:

- additive task: addition of single duties;
- compensatory task: the average of every single judgment represents the group final product;
- separate task: just a single product or judgment is chosen among everyone's;
- joined task: every member has a specific duty, contributing to the whole group.

Studying the first condition Steiner reconsidered the past Ringelmann's theory (in Kravitz & Martin, 1986) in a qualitative point of view about the inversely proportional relationship between members group's number and individual performance.

In Ringelmann's view the performance's loss is due to the lacking coordination, Steiner also considers the motivation's loss deriving from social inertia paradigm an important variable (Latanè, Williams & Harkins, 1979).

De Grada (2000) observes that numerosity can influence not only the tasks but also the internal group relationship. The group relationship, from both quantity and quality point of view, will be treated separately given their important role in the FG method. In the case of two members group — a couple or a dyad — just one relationship is possible. In a three members — trialogue — the potential relationships are 7, causing as a consequence more difficult interactions. Further additions (in terms of members) to the group will cause an explosion of diversified relationships and their increasing superficiality; as the group become larger it could happen that some disequilibrium in relationship will promote sub-groups creations. According to Steiner (1972) the different numerosity depends on different tasks and processes of small groups. Anyway, in literature there is wide agreement that natural groups have quite always no more than seven members (Bakeman & Beck, 1974; Desportes & Lemaine, 1988; De Grada, 2000).

An author who studied this subject in depth is Fern (1982): he compared 4 and 8 members FG, finding that the larger group produced more ideas than 4 ones. From a numerical point of view, the 8 members group produces less than double the ideas of a 4 one, thus it should be better to conduct two FG with 4 participants rather than only one FG with 8. Fern explanation is linked to the social loafing theory, quoted before; in the same study, he claims that the moderator's efficiency is not affected by participants number. In the conclusion of his study (appeared in the Journal of Marketing Research), the author suggests to prefer single interviews to FG, admitting that the research had a small sample. But for our purpose we should remark the qualitative difference linked to the numerosity: the target of FG technique is to observe and to point out the groups' interaction, rather than evaluate the number of ideas produced.

# 3. Group's numerosity management in different FG research's steps

Dealing with group numerosity, it is useful to consider every single step of the FG research, in order to suggest the most accurate tips and guidelines.

## 3.1. Research planning

The research planning step is full of questions, first and foremost those concerning the main research object: "What do we want to investigate?" This question will guide the methodological choices, data collecting and analysis techniques.

To start with an interesting argument, it is important to evaluate the subject and the participants' sensitiveness. There are some emotional themes that have to be considered related to the research framework and the expectations generated (Barbour & Kitzinger, 1999). The themes' sensitiveness is indeed always linked to research framework and for this reason Hoppe and colleagues (1995) list the management rules requested in these cases, underlining how important a good introduction to the focus and an effective warm up of participants are in the perception of sensitiveness (usually this step is not reported in the transcription and data analysis documents).

Regarding the proper number of members in the discussion group there are two different positions: some consider the sensitive themes better fitted for small groups (Bristol & Fern, 1996), while others emphasize the discussion power of the group to let the emotions flow freely (Farquhar, 1999; Sweeney, Soutar, Hausknecht, Dallin, & Johnsonet, 1997). When setting the group number it has to be considered that bigger is the group, the more the discussion will be extensional (talking more about the topics but in a superficial way) rather than intentional (talking less but in an inner way). From an ethic point of view the participants' safety and privacy should be considered: it might happen that one person's speech can hurt someone else, and that is why a smaller group is better when treating with sensitive themes. Further considerations should be set on the researcher ethic commitment of non-disclosure, while is not possible to guarantee the same for the group's members. In case of high sensitiveness themes the FG numerosity is not the only variable to consider: the social framework of the precise moment in time (individual and communal) must be evaluated, as well as the time of the meeting and the people involved (Baker & Hinton, 1999). Furthermore, according to Farquhar (1999), the sensitiveness depends not only on the theme itself, but also on differences in participants' social classes and researchers too. So, when the social origins are different it is better to choose a small group in order to have intentional knowledge and discussion and to have easier data analysis. There are also recent researches that have confirmed focus group as more likely to cause personal disclosure rather than individual interviews (Guest, Namey, Taylor, Eley & McKenna, 2017).

A special approach is required in case of sensitive people, as children or ethnic minorities when the researcher is part of the "out-group." According to the social decision model's literature (Davis, 1982) the creation of a bigger group would be recommended — 12 members at least — so that the social status difference could be counterweighed.

The important second question in the planning step is about the research purpose; Calder (1977) divides FG in 2 different types: exploratory and experiential-clinical. In the first class (Dawson, Manderson & Tallo, 1993, they consider the exploratory the only possible model) the full group is the best way, as FG is used as an introductory technique before set up a survey and the aim is gather as much as possible hints in order to draw up a detailed questionnaire. An experiential-clinical analysis is aimed to deeply report the group experience concerning a single event or object, in this case is better to choose a mini group for two reasons: first to reduce people's and experiences' diversity, second to ensure the quality information rather than quantity (Fern, 1982). From this point of view the FG technique should be used not only to raise questions but also to give answers (Corrao, 2000). It is interesting to note that in an ethic-quantitative view the research is validated with big numbers following an exploratory research on fewer people; on the other hand the FG has an emic-qualitative view, so that the opposite logic is correct (from large groups to small groups).

If the study's purpose is to notice the natural interaction, it has to be considered that people require research methods similar to their own life experience (Corrao, 2000); so we may ask, what about a natural group's numerosity? De Grada (2000) has observed real experiences with 5 members group, as a consequence a full group analysis is inappropriate. In other words, it is important to maintain a consistent setting between the real event occurrence and the discussion group, for example if the focus is on the decision making process in a typical Italian family it is useless to create a group larger than 4 people.

The last consideration regards timing and financial resources, both for basic research and applied customer research. FG has a cost, especially when it is necessary to reward people for their participation, in order to reduce recruiting time. In these conditions, a common used economic habit, is to analyse bigger groups for saving on the renting fee and other technical issues (e.g. the recording phase). Conducting one large FG means saving time, but on the other hand it makes harder transcription, analysis and interpretation steps.

## 3.2. Recruiting – sampling

The recruiting step is more often a rational process rather than a casual one, because FG technique is not aimed to extend its results to all population and results are often influenced by the research framework (Krueger, 1994), even though there are some examples of severe casual sampling, later on we will discuss the group's numerosity for this case. This premise is useful to remark the numerosity double meaning in sampling step: the problem of the number of members in a group and of the total number of participants to the research. Concerning how many groups to create, this has inevitably to be linked to available funds (Greenbaum, 1998). Without a fixed total numerosity, the Grounded Theory saturation criterion is often applied (Glaser & Strauss, 1999) as suggested by the emic strategy: sampling stops when the newest group doesn't add anything to already achieved results. This principle is also applied to the thematic data saturation, which is reached when there are no new ideas in the data (Hancock, Amankwaa, Revell & Mueller, 2016). Obviously the same criterion cannot be used for the internal group numerosity, because each additional member changes the interaction setting (De Grada, 2000) and the saturation will not occur. At the same time the correlation between the group's numerosity and relationship complexity makes it possible to recruit larger groups with their advantages, already exposed.

Concerning the link between the numerosity of total population with single FG, it is common to have 20 or more total participants, and our suggestion is to create similarly numerous groups. In fact it is normal to over-recruit subjects for 20%, and then eventually dismiss some in case everybody shows up (Morgan, 1993; Greenbaum, 1998). The only certain criteria that we can infer from literature and experience is that it is necessary to conduct at least 3 or 4 groups for every variation in the composition of the FG in terms of numerosity and of variance.

Another delicate point concerns the possibility of previous contact among participants. Up to some years ago it was preferred not to have had any, but recently this is not intended as a limitation anymore, give some precautions. About the numerosity matter: the mutual previous contact is an advantage for mini group because it is difficult to have natural groups with more than 7 persons and also because each member has a different relation with each other in the group (Barbour, 1999); getting a full group could increase the diversity both in participants and in internal relationship. Moreover the researcher has to clearly understand that many natural groups are already sources of sensitiveness, take for example the organizational context that is also characterized by small groups; it would make sense to manage small groups and eventually put the same persons in different groups.[1] The previous contact between participants can create a problem connected to the numerosity; a pre-existent group will prevent the oversampling as it has already a specific persons' number. But large groups can create problems in the logistics (make everybody agree on the meeting time and location) and even more serious consequences can occur if one member miss the FG, it will cause the unsettling of the internal dynamic and relationship.

The location choice is connected to the numerosity matter too, and the structural characteristics will communicate something to participants. For instance the perceived formality will influence the potential relationship to create. We agree with Palo Alto school's theorists that every single choice made

1. The reuse of subjects in different groups doesn't impact the quality of results, not being tied to statistical but to qualitative indices. (*cf.* Atkinsons, 1998).

by the researcher will communicate something; the participants' feeling will influence the sensitiveness of themes and, as an indirect consequence, the numerosity group's choice.

## 3.3. Group management

There are several management styles, due not only to leader personality differences. First of all we can imagine the different style on a continuum that goes from formal to informal attitudes, but also the FG theme and framework discussion have an important role. Moreover it is possible to distinguish a participative style, when the leader become a real group member; and an impartial style that occurs when the leader has a neutral role and just makes the discussion flow.

### 3.3.1. The dyad

This kind of FG with only 2 members is oriented to analyse consumer's behaviours or attitudes managed by 2 persons in a real context, for example children education or the holiday destination's choice in a couple; for these reasons it is a fact that the couple members already knew each other before the FG. It is researcher's purpose to find out the negotiation strategy used in the couple before the FG, if it reflects communal real agreement or it could be a way to obtain social desirability.[2]

This assumption lead us to the interesting conversational power's analysis, through several indicators amongst which: the silence and the conversational time management (Cortini, 2001); therefore, the analysis starts at the same time of the discussion with accurate although temporary hypotheses.

Summing-up, the conductor has to be a discussion referee, in order to guarantee the turn-taking and starting the interpretation supported by triangulation hypothesis-backtalk. These hypothesis are supported by the poor question list in the dyad FG which is also forced by the asymmetric discussion balance in advantage of the conductor (who benefits of a one-up position, because he can choose the discussion theme).

It is worth to note that not all authors agree that a FG can be composed only of two participants. For instance, Arksey (1996) and Eisikovits (2010) consider it more appropriate to use the joint interviews. Instead, Morgan and colleagues (2013) prefer to talk about dyadic interviews, in which two participants interact in response to open-ended research questions; they suggest using FG only with more than four participants (Morgan & Hoffman, 2018).

### 3.3.2. The trialogue[3]

The reasons to decide for triad are similar to dyad ones. A trialogue is a special group since it is the only group that cannot split. In other words, a trialogic discussion keeps the conversational unity, hard to keep in multi-participants discussion, even only 4 persons. The conductor's effort will concern the equal discussion time for every member. In this case it is interesting to observe the conversational power and how it is «locally» managed (Sacks, Schegloff & Jefferson, 1974), in order to point out alliances and related risks: it is important to avoid that a trialogue turns into a dyad with one spectator. Finally the few numerosity, as it is for the dyad, makes necessary a rough questions list also to create a less formal setting, due to the conversational asymmetry and the difference in rules between participants and moderator.

### 3.3.3. Mini-Group

The literature (Greenbaum, 1998; Barbour & Kitzinger, 1999) describes mini groups as usually of 4 to 7 participants and a good internal homogeneity, that will facilitate the freeing emotions process in members. It could happen that the small numerosity coupled with sensitive themes provokes more stress

2. Couples in focus groups are always couples which have a pre-existent affective relation. Referring to dyads in the ordinary life is always with an implicit emotional bond, they can be couples, relatives, friends or colleagues, in the latter case the relationship can be vertical or horizontal and there could be very often a status gap between those members. As it is better to conduct homogeneous focus groups, it is hard to find dyadic focus group without an emotional involvement; for this type of couple it is important to show an internal consensus, defending the «couple's face», as Goffman would call it.

3. We prefer the term «trialogue» (Kerbrat-Orecchioni and Plantin, 1995) to the word «triad».

on the individual, whom will be evaluated for his own contribution instead of the group as a whole (Basch, 1987), and can occur an anxious impression management, a kind of Ringelmann counter-effect. An informal management style can help make up for the pressure effect on participants; another way to invite persons to express their opinions consists in asking "pilot question" in order to improve their self-esteem and make them independent during the discussion.

#### 3.3.4. Full-Group

The biggest risk in this case is the non-homogeneity, because when adding to the group's numerosity the internal group variability will increase too. Being the FG technique enough unpredictable compared to other data collecting techniques it is advisable to apply rigid rules. The question list construction should also follow pragmatic principles to face the higher complexity of numerous groups. A rigid question list could reduce the risk of subgroups creations in a numerous FG where participants already know each other, attracting the members' attention to one theme, but at the same time the relationships could be less natural. In a different case, when members haven't met each other before, a simple variety of persons has to turn in a group and it could be easier for the conductor when higher will be the group numerosity; furthermore a large group can balance the asymmetry due to the institutional gap between conductor and participants (Mariampolski, 1989). Another possible help for the conductor in creating the group can arrive from at least one evident different feature on a dichotomous variable, in this way the group identification will be easier thanks to the shared perception (Waterton & Wynne, 1998); imagine for example an immigrant women FG managed by a man.

Should be noted that more participants will generate more background noise and this can affect the full group analysis, some countermeasures could be: a soundproof setting, to adopt a discussion formal style which can produce a more regular turn taking in the discussion and can contrast the blocking effect.

A further risk in a full group is connected to the participants' strong desire to talk (Barbour & Kitzinger, 1999) compromising the natural interaction and increasing the background noise; having a formal style and using a rigid question list are useful guidelines to follow.

In our opinion the addition of a second moderator (Krueger, 1994) in a numerous group can complicate the situation instead of supporting the minority, and can cause even more problems in the moderators' mutual management, emphasizing the blocking effect and adding difficulties in the reporting and analysis step.

### 3.4. The analysis

The FG is a qualitative data analysis technique but its data can be analysed both in a qualitative and quantitative way; the choice of the analysis unit is fundamental, and will depend on research type and purpose.

A typical FG research can concern an object's deep perception of many different persons or can investigate a population, with different representative FG. In the first example the analysis unit will correspond to the group itself, whereas in the second example a finer unit should be used: in an intrapersonal point of view it will be individual contributions, while in a interpersonal one it will be represented by the participants' interactions.

Concerning the research purpose, it is convenient to use a group macro-unit in case of explorative analysis, whereas in case of confirmatory analysis it should be a conversational micro-unit, being it speaking in turns or sequence. The group macro-unit does not interfere with the group's numerosity, the only difficulty could categorizing and synthetizing the several positions expressed. On the other hand, the conversational micro-units are affected by the number of participants and the interpretation of the management of the discussion space and time. For example a "self-turn management" is a natural process in a dyad, but it can have different meanings with the group enlargement in terms of social power and "conversational discourtesy." The silence is as much relevant as the communication style: in a dyad it represents a path of conflict, in a trialogue and in larger groups silence means consensus (Cortini, 2001).

In groups composed of acquaintances it could be sometimes difficult for the moderator to understand every discussion theme, since participants could refer to shared experiences unknown to the moderator (Corrao, 2000). Paradoxal as it seems, this scenario disappears with the group enlargement.

For quantitative analysis conducted on a casual sample is important the independence of the answer of the participant, in order to measure the degrees of freedom which in turn affect the result statistic's significance. If the research purpose is to investigate the group's influence on individuals' behaviour and attitude, there will be an independent design and the total degrees of freedom will correspond to the participants' total number in FG minus one. Instead if the research purpose is about the interactions, each unit will be represented by a group and the degrees of freedom will be total number of groups minus one.

Although members' interdependence is the most representative group characteristic (Fern, 2001), is not possible to determine neither a collectivist position nor a pure individualistic one when interpreting and analysing data; we also reckon that an interesting alternative analysis unit could be represented by the group's internal alliances, whose degrees of freedom will be total number of alliances minus one (Fern, 2001).

Concerning statistic software and (semi-) automatic analysis we would point out that these programs, like the first Ethnograph, are often set to work on single lemma's or semantic aggregates' frequency: this forces the researcher to collect a huge dataset to have statistical significance. The software T-lab allows researchers to optimize data analysis with a triangulation of methods, merging quantitative and qualitative approaches (Cortini & Tria, 2014; Trobia, 2005; Verrocchio, Cortini & Marchetti, 2012). Textual material is a qualitative data set, but it is possible also to refer to the repetitions or associations of words so that the focus of the analysis will be the quantity. Qualitative data analysis (QDA) software are increasingly utilized in social research and this can be a certain benefit in terms of replicability and effectiveness (Hwang, 2008); for example Atlas.ti can work on textual data as well as video or other digital media formats (Hwang, 2008).

There is the need for software able to process data analysis from interactions (Catterall & Maclaran, 1997; Waterton & Wynne, 1998), a task even more difficult with numerous groups and high internal variability.

## 4. Online Focus Groups

In the contemporary digitalised world almost every behaviour that we perform is technology mediated, the pervasiveness of technology cannot be ignored even when talking of a qualitative methodology based on human interaction.

During the '90s online discussions and online focus groups begun to be implemented in marketing first and then also in social research methodology. There is a broad agreement in the literature for what concerns the identification of two different typologies of online focus group: the synchronous FG and the asynchronous one (Stewart & Williams, 2005; Murgado-Armenteros, Torres-Ruiz & Vega-Zamora, 2012; Abrams, Wang, Song & Galindo-Gonzalez, 2014). The former corresponds to a real time discussion, it can be carried out through a video conference or a chat room and it allows every participant to be connected at the same time contributing at the discussion. The asynchronous FG category includes different kind of communication online, such as e-mail, web-board, forum and all those situations which let participants discuss on the same topic but in different time.

Scholars have expressed discordant opinions regarding the comparison between synchronous, asynchronous and the face-to-face FG: on one hand only the real time discussion is considered comparable to the face-to-face FG (Van Eeden-Moorefield, Proulx & Pasley, 2008; Murgado-Armenteros et al., 2012), there are empirical studies that confirmed how a synchronous FG can produce the same data quantity and quality of a real FG (Murgado-Armenteros et al., 2012; Abrams et al., 2014; Boydell, 2014); on the other hand some authors stated that the asynchronous can be described as a real FG as well (Stewart & Williams, 2005). There are other elements to take into account when comparing synchronous and asynchronous FG, for example it seems that during a synchronous one there could be the risk of obtain shorter answers from participants (Burton & Goldsmith, 2002; Graffigna & Bosio, 2006).

Considering the whole category of online FG there are relevant advantages and drawbacks to notice: one of the most significant benefit is the possibility to reach persons hard to recruit in face to face situations (Boydell, 2014), people enabled to move because of a disease or people who prefer to have a sort of anonymity between other participants (i.e. homosexuals). It is also noteworthy the easiness

to participate from every part of the world and the chance for cross-cultural studies, but this could be an ambivalent issue since there are surely less costs in terms of travelling needs and management costs charged to the researcher, but at the same time in case of synchronous FG the researcher has to take into account, especially during the analysis, the different physiologic conditions of participants due to different jet-lag (Stewart & Williams, 2005).

Another relevant concern is about the ethical issue: an online FG could be a good deal for those sensitive topics characterized by hard to reach samples, indeed there are some empirical evidences that the interaction with a computer can stimulate an incremented self-disclosure (Moon, 2000; Woodyatt, Finneran & Stephenson, 2015); but at the same time the researcher has to care about the security of information stored online (Galloway, 2011) and nowadays it could be a very hard task.

With regard to the asynchronous FG one of the biggest concern is the total absence of non-verbal communication clues, the difficulty to create a real group dynamics (Greenbaum, 1997), and the presence of a written communication to manage during the analysis; the researcher needs new skills in order to succeed in the focus group text analysis. It has been noticed also a loss of participation and interaction between participants and an increased amount of formal messages (Graffigna & Bosio, 2006); this could be an entire issue to deepen since a written communication has many different aspects worth to investigate, such as the fact that a written message represents a more reflective and slow way of communication, it makes persons think more carefully on the creation of their thoughts, causing a loss of spontaneous thinking.

In both offline and online FG participants are allowed to quit the discussion whenever they feel uncomfortable, but we can assume that it could be easier in an online situation as there is not the direct comparison nor the feedback from others. But at the same time we may wonder if in this condition of full perceived free will in attending and leaving the discussion participants would be more engaged in the process; however it is clear and shared among scholars the concern about the regular follow-up of participants during and after the recruiting process (Stewart & Shamdasani, 2017).

Among the new skills that the researcher should improve in order to moderate online FG, it has to be mentioned the digital literacy which could also represent a sort of discriminating element during the recruitment phase. Furthermore the researcher needs the ability to analyse mixed data, as in some cases participants can type instantaneous messages during the discussion.

During an online FG participants take part at the discussion from different locations, since the environmental variables cannot be controlled, we may wonder how the researcher could take into account this aspect?

At the best of our knowledge there is still an uncomplete literature on some aspects, such as the methodology: even if an online focus group can have the same objectives of a face to face one, there will be different procedures for every phase, from the research planning and the recruitment to the management and data analysis. We think it should be worth to investigate which are the best conditions for choosing an online FG instead a face to face one as a methodology.

Another relevant issue to further deepen is the mediating role of technology during the FG: the relation with the computer as mediating channel is a very subjective attitude, there could be many different interpretations of the same message communicated through computer but also different degree of trust in the technology (Lankton, McKnight, & Tripp, 2008); so it is an added intervening variable that the researcher has to take into account; but how this influence can be evaluated during a FG?

It could seem that in an online FG the main objective of the research should be just data and information produced, rather than participants' interaction; since, as said before, the interactions are computer mediated and they can result less deep and not directly observable. But on the other hand the conduction of an online FG provides to the moderator different tools new not available for the traditional FG.

## 5. Conclusions

Our considerations have started from the limits of methodology in FG literature and we decided to restrict them just to the problems referred to the group numerosity.

To sum up we can say that the larger the group is, the bigger the management and recording savings will be, but on the opposite there will be a conspicuous work later during the analysis phase and it should be requested a great ability to the moderator and the researcher as well.

So it is once more confirmed that the collecting and analysis methods should be imposed by the research object, for this reason we define the Fern (1982) position as weak because he prefers individual interviews rather than FG and in case of FG he selects mini-group instead of full-group. There are some elements which need specific attention from the researcher in order to make efficient the FG research: the sensitivity of themes, the scope of the research, the recording setting, the social category of both participants and researcher, the client.

Furthermore we believe it is relevant to highlight that the participant's self-perception of the experience is still little investigated and it could be interesting to extend this aspect from an emic point of view for what concern the FG experience in general and, more specific, for what concern the participation to discussion groups more or less numerous.

Finally it could be interesting to investigate the aspect of numerosity in online FG and compare it with traditional FG; there is also the need to deepen the dynamics concerning the online group relationship among participants and with the moderator as well. Since the digital divide is slowly decreasing more and more people can be involved in an online FG, so we should take into account that online FG can become a feasible method in qualitative research and therefore it is important to determine for example what are the needed skills for researchers or what is the best setting for an online FG.

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