

Differences between Online and Face to Face Focus Groups, Viewed through Two Approaches

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Abstract

The increasing prominence of online focus groups in market research and the complexity that the Internet environment adds to the conduct of research with focus groups has led to a certain interest in discovering how this method can be applied effectively and to which situations or purposes it is best suited. Based on an examination of the literature and on an empirical survey of the heads of qualitative research at 112 market research companies in Spain, a basic classification of focus groups is proposed, distinguishing between the European and Anglo-Saxon approaches. Within this frame of reference, a set of factors or dimensions is identified that makes it possible to compare online and face to face groups, assess whether the former can really be considered focus groups which resemble either of the two approaches and, as a result, suggest the most appropriate uses or applications.

Keywords: Online focus group, Face to face focus group, Qualitative market research, Online market research, Methodology

1 Introduction

Qualitative studies are generally becoming better known and accepted in professional marketing circles [36], [43], [55]. As a result, the academic world is taking an interest in these methods and in quantifying their impact [25], [53].

Focus groups are the most commonly-used method in the area of market research, essentially because of their wide variety of applications – from exploring and achieving a basic understanding of consumer behaviour to making decisions in relation to the marketing mix – and their adaptability to different situations. They account for 70% of the turnover generated by qualitative methods worldwide [17], which has led to their becoming a synonym for qualitative market research [5], [10], [23], [24].

Because of their flexibility, market researchers have developed a number of adaptations of this method. The new applications or types – mini focus groups, nominal groups, recall focus groups, triads, or dyads (pairs) – present some substantial differences compared to traditional focus groups. This raises the question of whether these variations can really be called focus groups and, consequently, whether what is known about researching focus groups is applicable to them.

More recently, online qualitative research, particularly the online or internet focus group, has started to become relatively important in the market research sector [17]. This has compounded the complexity of the question, since the added technology can affect the purpose, design and dynamics of focus groups. Moreover, variations that create important differences are also developing within online groups (real-time and asynchronous). Interest in the viability and practical use of online groups has prompted at least one study on the subject [6], [63]. However, the specific benefits and areas of application of online groups compared to face-to-face ones are unclear, although some researchers suggest that they have different uses [61]. From this point of view, [13] notes that few qualitative researchers could point to both methods' leading to the same results. Nevertheless, it should be stressed that the situations and applications in which they can be used effectively are not known.

The fundamental questions in the debate between the face to face and online techniques can be summarised as follows: (1) Is an online focus group a focus group? (2) What are the differences between online and traditional focus groups? (3) Are the recommendations about how to do research with focus groups applicable to the online environment? (4) Do they produce the same results? and (5) In what cases can online groups be used?

The basic premise upheld in this paper is that it is very difficult to contrast face to face and online groups directly because, conceptually, a focus group is something so simple that it can cover a wide range of practices, apparently similar yet with profound variations in their purpose and design and in the frame of reference of the researchers.

This is borne out by an empirical study in Spain in which the heads of qualitative research from 112 market research companies were interviewed, which showed the lack of consensus over how to plan and conduct focus groups and analyse their results [53]. Additionally, the budget differences were so large – ranging between €1000 and €4000 – as to call into question whether market researchers have the same research method in mind when they use the term *focus group* – the scenario was a session with 8 housewives from the same city to study habits and motives in buying a common food product.

Given this ambiguity, before drawing any comparisons it is important to establish clear terms of reference and define the different classes of focus group, their theoretical basis and recommendations for their use more clearly. The present paper proposes a basic classification of focus groups, distinguishing between the European and the Anglo-Saxon approaches. These approaches and the main differences between them provide a reference framework for establishing a set of factors or dimensions that make it possible to determine whether online focus groups resemble either of the two approaches or whether they constitute a separate category.

2 Method

The selection of the elements that shape what a focus group is, what it is for, which factors need to be taken into account in research involving focus groups and how many types of focus group can be formed is based on a review of the literature and on an empirical study in which the heads of qualitative research at 112 Spanish market research companies were interviewed, comprising 80 percent of the companies that conduct qualitative research in this country – according to data from the Spanish market research association AEDEMO (Asociación Española de Estudios de Mercado, Marketing y Opinión), the number of market research companies in Spain was 258 and of these, 140 conducted qualitative research. The sample included different types of companies in terms of turnover and the type of studies they undertake. They ranged from small specialist firms where qualitative research accounted for over 90% of income (14.3% of the sample) to large companies, generally multinational, that derived under 10% of their income from qualitative research (12.5% of the sample).

The respondents' qualifications were also very heterogeneous, although there was a preponderance of sociologists, psychologists and marketing and market research specialists. The proportion of men and women was similar. Their ages spanned between around 35 years and, in a few cases, nearly 60 years of age. Some also had an academic profile and taught at a university. Also, some of the respondents are highly respected in the industry and have had considerable influence on the development of qualitative research in Spain.

Most of the interviews were conducted on the premises of the companies for which the respondents worked. The script used in these interviews began by talking about the market research sector and qualitative research and ended with specific aspects concerning costs, technical difficulties and the decisions involved in planning and conducting focus groups. The main aims of this study were to ascertain practices concerning the use of focus groups, general problems in applying these techniques, problems of an ethical nature and whether companies use them in a similar manner or with major variations in their application.

The interviews obtained information on the principal components or dimensions of the design and application of the method, such as the type of task, the influence of the participants' unfamiliarity with it, whether or not the participants had previously taken part in a focus group, the recruitment systems employed, the degree of homogeneity/heterogeneity of the participants, their unfamiliarity with the topic to be explored, the moderator's leadership style, the size of the groups, the discussion guide, the type of incentive, where the session is held, etc.

In general, the information provided by the respondents was influenced by the fact of their feeling themselves to be experts in both the topic of the interview and the interview technique. This led to a complex situation in which they were favourably disposed to collaborate but controlled the information they provided because (1) they were very interested in the topic and were prepared to reflect on it, (2) there was some resistance to proffering sensitive information, not only about their own firms but also about practices in the sector – particularly as regards ethical aspects, since there are practices of which they do not approve and which they think can damage the sector's image – and (3) they were very interested in finding out about the practices and opinions of other professionals working in the same sector, as their intense competition considerably limits the cooperation between them.

After transcribing the interviews, the data were analysed from an interpretative or hermeneutic perspective, bearing in mind the context of the interviews and the situation and trends in the sector – greater price competition, unqualified people entering the profession, the increasing influence of the clients on the design processes, etc – that helped in understanding and explaining the practices and problems of the sector in relation to the application of qualitative research in general.

With regard to the nature of focus groups and recommendations about their design, which are the part of the information obtained which is of interest for the present study, an intra-subject follow-up of the interviews was carried out, relating the respondents' opinions on the various design aspects to each other and seeking shared reply patterns among them: for instance, those who consider the moderator ought to use a directing style are mostly of the opinion that participants can know each other or can have relevant experience. This process made it possible to identify which aspects of the design are usually related and, finally, two differentiated ways of understanding focus groups, which are discussed in the next section.

3 What is a Focus Group? Two Approaches

The main finding about market research company practices concerning focus groups was the lack of any clear-cut, convergent model of application. For every dimension of design and application there were participants who advocated opposing stances, citing specific examples and cases. From a methodological point of view, the absence of a clear framework for applying focus groups is highly damaging, as it helps to create a climate where the principle of flexibility makes anything permissible.

The lack of convergent responses about how to apply focus groups comes about because the different theoretical orientations or research paradigms lead to researchers' using the same term to refer to different things, with different assumptions about their basis, use, design and practical application.

From a review of the literature, the study of market research company practices and analysis of how design factors are interrelated, the present study has identified two main ways of understanding focus groups: the European approach and the Anglo-Saxon approach.

The European approach largely comprises the contributions of Spanish researchers, with sociology and psychoanalysis as the frames of reference for studying focus groups [2], [8], [9], [26], [38], [57]. In this approach, the group is an instrument for producing group discourses that represent the discourses of segments of a population with regard to how they experience a topic. It is not simply a device for people to shed their inhibitions and talk, but a way of getting information that existed a priori to emerge, made manifest by the participants in their role as representatives of their social groups.

[26] took this idea further and saw the group as a discourse-producing machine – a discourse can be defined as the set of words and phrases that a person uses to express his or her opinions and ideas. Through interaction, the underlying ideas of each individual flow together, giving rise to a group discourse that reflects the ideas shared by the members of the group. In the course of its development, agreements and disagreements are sought and desires, needs and beliefs – the preformed information in the mind of the individual which contrasts with that of others and which comes from the lessons of everyday life, from life experiences and what is perceived through them – are revealed. These manifestations have their referents in social reality. In short, the fundamental function of the group is to reveal the feelings or thoughts of people with a particular profile in relation to a topic, with the aim of generalising the results to a population – this refers to qualitative representativeness rather than statistical generalisation. The aim is that the way the participants experience a phenomenon (the feelings that emerge, dimensions or perspectives for thinking about it, motives, attitudes, etc.) should reflect how people with their profile experience it.

However, generalisation of results has always been one of the weaknesses of qualitative research in general. In this context, in this approach, particular attention is paid to aspects concerning design and moderation as a way to guarantee quality – and to be able to generalise the results. For example, recruitment-related decisions are particularly important. Selecting participants who are clearly typical of their social profile is the only form of gaining access in a natural way to the social groups that they represent.

It is also essential to attempt to avoid their knowing what the discussion will be about in order to avoid prior preparation of the discourse, since if people know that they will be going somewhere to talk about a certain topic they may well read up on it beforehand, or be more sensitive to information that appears on the television or in other media. Instead of obtaining the discourse of the target population, in that case the outcome will be a group of people who have artificially prepared a discourse for a specific situation.

It is also important for the discourse to be constructed by the participants themselves. It is they who must decide which aspects of the topic are relevant to the discussion and which are not worth talking about. This in turn highlights another key aspect of this approach: the moderator has very little influence on discourse production. Too great an influence would lead to the group constructing an artificial discourse, as over-motivation and excessive participation by the group members would lead to a skewed discourse, adapted to the requests and demands of the moderator but unreal in relation to what the participants really think and feel.

However, a moderator who gives the group very little input in order not to bias the results may have a problem in obtaining the members' involvement and participation. In the European approach, particular care needs to be taken over the planning and design process so that all the decisions work towards this aim. In this approach, for instance, especially important aspects include avoiding using people with focus group experience or groups composed of people who are similar in relation to the topic (same goals, knowledge, involvement, way of experiencing the subject, etc).

In short, the main feature of the European approach which is decisive in every decision concerning research with focus groups is that the group is a way of accessing preformed, pre-existing information and the aim is to collect this information, not to influence it. This is of great importance if the focus group results are to be linked to those of the target population.

The Anglo-Saxon approach is based, essentially, on the interactive current of thought on group dynamics. In this approach, the group is where people relate to each other and attention centres on what happens during the interaction process [4], [21], [20], [29]-[33], [45]-[52], [62]. Interaction between the participants is the basis for producing information and the group is basically a means to achieve dynamism and disinhibition in order to maximise interaction. The interest centres on how the information resulting from the interaction is constructed, how opinions are articulated, censured, opposed and changed through social interaction and how this relates to communication and the group rules [27]. As Wilkinson [69] p. 338 says, the focus group is an opportunity to observe *the construction of meaning in action*.

In short, the interest of the group centres on the interaction within the decision-making process which makes it possible to obtain real exchanges of opinion, demonstrate persuasion processes and uncover latent notions and ideas [12].

Essentially, this approach is based on getting the group to work, produce and think, and the group is a means to motivate and disinhibit people so that they will participate. In this perspective the subject is considered a representative of his or her own self and the group is nothing more than a way to persuade the subject to offer information. This approach is particularly useful in studies that aim to spur a group of consumers to carry out a task with greater intensity, motivation and concentration than under normal conditions, as when testing packaging, a product or questionnaire items or pretesting advertising. It should be pointed out that these tasks form no part of people's everyday experience but are very useful for marketing decisions. The comments and interactions of individuals who are focusing on analysing different packages are not part of their daily life, for instance, and it would be difficult to project the results to the population at large, but they can provide very useful information for decisions about packaging. The group's focus on a specific task is both its main strength and its main weakness: useful ideas are obtained but given the imposition of the topics and the excessive influence of the moderator, it can hardly be

supposed that the group's results would really form part of the discourse of the reference groups, in terms of both the selection of the aspects to be covered and the depth of the discussion. The moderator and the pre-scripted discussion guide are decisive in setting the direction that the discourse will take. As a result, the participants lose the lead in deciding the relevance of the topics and interesting points of view can be overlooked if the moderator does not take them into account.

Table 1: Main features of and differences between the European and Anglo-Saxon approaches to focus groups

	European approach	Anglo-Saxon approach
Definition	Technique for producing discourses that facilitates the emergence of the shared opinions of all the participants, representing not only their way of thinking but also that of the social or reference groups to which they belong.	Technique that allows the members of the group to shed inhibitions, reveal their opinions and share their experiences, generating a discussion of great qualitative richness that allows shared and individual points of view to surface.
Purpose of dynamics	Collecting existing information which is typical of the participants' social groups. Understanding and explaining behaviour.	Generating and identifying ideas and opinions. Producing information.
Most suitable types of study	General studies of consumer behaviour, motives, attitudes, meanings.	Creative and evaluation studies (questions and scales for surveys, concept testing, product testing, etc.). Studies to answer specific questions and take marketing mix related decisions. Studies to reach saturation on many pre-established factors related to consumer behaviour.
Group size	Traditional (8-12 participants) or reduced (5-6 participants) depending on interest/involvement in the topic.	Traditional (8-12 participants).
Group composition	Homogeneity and cohesion among the participants as the basic criterion. Results very sensitive to the composition of the group.	Heterogeneity and some degree of homogeneity among the participants as the basic criterion. Results less sensitive to the composition of the group.
Discussion guide	Open, general questions on a few matters.	Specific, semi-structured questions on a large number of matters.
Result of dynamics	Free conversation.	Guided conversation (moderator and script).
Participant's function	Person as typical representative of a social group or profile. Provides information on the behaviour of his or her group in relation to the topic. Person as informant.	Person as individual motivated to produce own information on specific matters. Person as worker.
Moderator	Attitude: listen and learn from the participants' experience. Maximum interest in their comments. No judgement on the relevance of the topics. Maximum flexibility, has to help the group to explore the topic. Skills: sensitive, empathetic, good at listening and asking questions, introspective, logical and analytical. Requires more training. Style: not very directing leadership. Going deeper into meanings, learning from the group, not showing judgements or attitudes towards the topic, not influencing.	Attitude: has to be less flexible, keep the group focused on the task or subject matter, motivate, achieve dynamism. Skills: creative, communicative, spontaneous, empathetic, able to work with groups and knows how to guide the participants. Style: more directing or structured leadership. Directing the discourse so that the group focuses on a particular task, meeting the research objective. Control over the blocks of topics and the time spent on each. More prominent role.
Other design aspects that require particular attention	Results more dependant on the recruitment process. Greater control over selection and recruitment of participants. Avoid those with focus group experience. Influence of knowledge of the topic on group dynamics.	Results less sensitive to recruitment process. Recruitment-related decisions less important.
Dynamics and information	Highly interactive. Produces more reflective, subconscious, in-depth information. Information related to how the social groups experience the topic.	Highly interactive. Produces a large quantity of data. Information is spontaneous, creative, generated in the group situation.
Effects on the participants	Delve deeper into topics and answers. Topics as social references.	Greater number of ideas, comments, dimensions. Topics as responses to session stimuli.
Strength of the dynamics	Discover how a phenomenon is experienced.	Maximise participation and interaction. Suitable for generating and producing data.
Weakness of the dynamics	Little information (at times), difficulty in obtaining information from subjects with little interest/involvement in the topic.	Artificiality in responses (at times), possibility of discussion guide and moderator influence leading to unreal information.

Source: own elaboration

Both approaches are widely used in practice. While they clearly match the most common definitions of focus groups, they represent different purposes and dynamics. Not taking these differences into account may lead to mistaken methodological recommendations. For instance, one variable that has been used to measure the effectiveness of focus groups is the number of ideas generated [18], which makes sense for some applications in the Anglo-Saxon approach but none in the European approach. In short, the two converge in the idea of groupness, but the European approach sees this variable as a representation of social structures while the Anglo-Saxon approach sees it as a communication device. Table 1 shows the main differences between the two approaches.

The differences in approach constitute a less ambiguous and more illuminating frame of reference than the generic concept of a focus group, making it possible to compare the different group techniques (including online focus groups) with the two approaches to focus groups and assess their similarity. It should also be emphasised that many design-related decisions on which there is no consensus in the literature or in business practice are more easily defined when the research is planned in accordance with either one or the other of these approaches.

Nevertheless, it should be emphasised that these two approaches are not incompatible or mutually exclusive. Although there were some respondents who only used one of the two approaches – this depends on their education and training. Some followers of the European approach take a very orthodox line on the postulates of the technique and undervalue the Anglo-Saxon approach – others adapted their approach to the objective or the task to be accomplished, in line with the view advocated in this paper. It may even be appropriate to adopt both approaches during a single session, such as a first stage using the European approach to capture the participants' discourse, followed by a second stage using the Anglo-Saxon approach to focus their attention on some specific type of task, such as assessing different prototypes or versions of new products. Evidently, in these cases it would be necessary to keep all the precautions regarding group design, recruitment and moderation in mind.

4 Online Focus Groups: Are they True Focus Groups?

The introduction of the Internet has made it possible to develop research methods and instruments which in many cases are adaptations of traditional methods to the online environment, as is the case with internet focus groups. Market research companies have fostered the development of these instruments as a way to offer more services in the information market and differentiate themselves from others, conveying an aura of dynamism, modernity and competitiveness to clients, as well as solving some classic problems with face to face groups. The mushrooming of this method has not gone unnoticed among researchers into the marketing sector and has aroused interest in its possible advantages, limitations and applications.

The literature has identified some strengths of online focus groups [11], [15], [23], [28], [34], [35], [42], [44], [64], that can be summarised as follows: (1) they make it possible to involve geographically remote participants; (2) they are cheaper than traditional focus groups because they cut out some of the costs, such as hiring rooms, the moderator's travelling expenses, etc.; (3) the nature of electronic communication leads to dynamics that encourage the participants to express their opinions reasonably swiftly, setting up a stimulus-response reaction; (4) the participants make a greater number of comments, although these are shorter and simpler [61]; (5) they favour anonymity among the participants, reducing the risk of inhibition on their part [54], [56], [65]; (6) in the case of chat-type online focus groups, the transcriptions are available as soon as the session ends; (7) they have the potential to access participants who are difficult to recruit, such as professionals and travelling salespeople; (8) participation is convenient and easy; and (9) participation is more balanced in terms of the number of comments made by the members.

The main limitations are: (1) only Internet users can be recruited as focus group members; (2) the participants may experience technical difficulties in interacting, such as loss of connection; (3) the attendance or connection rate is low; (4) information from non-verbal signs, which contribute great richness to analysis of the discourse, cannot be used; (5) the role of the moderator is much reduced as a result of the lack of visual contact with the participants; (6) the topics of discussion and the group dynamics are more limited; (7) the client's confidentiality could be endangered by the lower level of control over the participants; (8) the security of the information is limited as the moderator cannot check whether the participant in the chat is the person who is generating the information; (9) the clients cannot sit close to the participants, so their only contact is viewing the participants' comments on the computer screen; and (10) the participants are less given to making detailed comments explaining their motives or reasons, confining themselves to writing messages that only give a favourable or unfavourable opinion, and this prevents their focusing totally on the topic [14], [15], [23], [44], [61], [67].

Many of the advantages and limitations described in the literature are evident consequences of the online environment and some are very intuitive. Summarising, the Internet opens up new possibilities for focus groups because people who are physically apart can form groups. This has given rise, for example, to a greater frequency of multi-country studies, which would be far more difficult to conduct in an off-line environment. It is important to highlight that in these cases a series of issues and difficulties arise as a result of cultural differences, considerably increasing the complexity of applying the technique, and these must be borne in mind because of their influence on the quality of the results – for instance, it is important to remember that mixing people from different cultures in the same session will affect the interaction and communication between the participants, as the perception of not being

with similar people leads to greater inhibition, less spontaneity and greater self-control over what is communicated. Many ideas might not be expressed owing to uncertainty about how they will be interpreted by the group. Another important factor is the moderator's familiarity with the group's culture, which is necessary in order to be able to lead it, to stimulate the participants, change the subject, or delve deeper into some aspects. Finally, a further important problem arises in interpreting the results, which can only be done if there is cultural proximity between the moderator and the participant. Although there are studies that give some suggestions in relation to cultural traits and focus group planning [19], more research is needed in this area. However, the fundamental question is whether or not these practices constitute true focus groups, as the applicability or otherwise of the methods suggested for traditional groups depends on the answer. This issue will now be examined more deeply.

Firstly, however, it should be pointed out that the strengths and limitations noted by the various authors mentioned above are generic and treat all online focus groups as a single method. However, the term *online focus group* does in fact cover different situations, with different designs, dynamics and results, making it difficult to generalise. One important distinction relates to real-time response systems – video conference or chat room – and delayed response groups – blogs, e-mail, web sites, etc. – where the participants manage their own time, deciding when to connect to the web, read the others' comments and express their opinion.

While some authors consider this second type a focus group [15], [63], the time delay and the nature of written communication have certain consequences which strongly suggest that this is in fact a different technique, and one in which the moderator does not have or cannot use the same resources as in real-time studies. One important problem concerns how little control there is over the participants, in the sense that more are invited to take part than finally make up the group and their participation depends on the time they have available and on their level of interest in the topic. This means that the information obtained is not typical of a person with that profile but of a group within that profile that is more interested or involved in the topic.

For the same reason, it is very difficult to get subjects with little interest in it to participate and the moderator has more limited options for energising and motivating the participants. In this situation, studies of products or topics that hold little interest for the participants are very difficult, considerably reducing the sphere of application of these groups.

In relation to the discourse produced, the risk that the participants could use the group for their own purposes should be considered. For instance, people who are very interested in the topic could use the group situation to influence the others' opinions, persuading them or imposing their own stance or point of view.

Another potentially important problem is that in parallel, while they are disconnected from the group, the participants could obtain external information. As a result, the discourse obtained would not be the pre-existing discourse of the reference groups nor reflect their reality, but a discourse intentionally constructed in greater depth and more intense detail.

Moreover, the fact of writing implies that the participants read what they write before sending it to the group, which entails self-criticism of thoughts, toning down expressions, changing words, etc. As there is no obligation to read and answer immediately, the information obtained is much more rational, reflective and prudent – even a concern to avoid spelling or grammar mistakes can have considerable influence on the choice of words and the spontaneity of the expressions employed. In other words, greater self-control over the language reduces the spontaneity of the discourse. The underlying problem is that the results will give the perspective of a more rational, reflective consumer, which may be far from the reality.

However, the main difference is that there is less interaction between the participants. This should be emphasised, as it is precisely interaction and its consequences – mutual encouragement, disinhibition, the perception of being among similar people, empathy, etc – that make the focus group method work, whether in the European or Anglo-Saxon approach. In the Internet environment it would appear evident that there is far less intensity of communication between people, as the only contact with other participants is the comments some made a while back in the online space, and when posting an answer there cannot even be any certainty of having read the comments on all the previous ones.

Furthermore, the anachronism of the answers generally makes it impossible to comply with the fundamental principal of this type of research: the formation of a group. There is no time sequence of interventions that gradually qualify previous statements, construct the discourse and shift or change the subject. Quite the contrary, in fact, as comments do not usually refer to those immediately preceding them and are not necessarily influenced by these. As a result, different conversations take place simultaneously. Instead of a group moving forward together in a single direction, parallel conversations take place as small groups each discuss their own topics.

Given all these considerations, it is difficult to accept that asynchronous online groups can be considered true focus groups.

Real-time groups avoid some of the above limitations, although here too there are differences between those in which the participants write their answers and those which allow spoken communication while seeing the

participants' faces. The former (chat rooms) present the same limitations regarding the written medium as asynchronous groups, with important repercussions for interaction between the participants that the moderator can do little about – poorer information derived from the interaction process has been identified as one of the main problems with online groups [37], [58]. The responses of online group participants are considered to be shorter than in face to face groups [3], which has led to speculation about lower quality results. However, not everyone agrees with this view [59], [66]. Although the moderator can set topics continually and encourage participation, the need to write the answers usually leads to a question-answer dynamics in which the main point of reference is the moderator rather than the group. As a result, this technique is more like a situation in which a moderator interviews various people simultaneously but independently. In short, there is a danger of losing the basis for focus groups: groupness and the interaction it brings about.

In the knowledge that a word or a simple gesture can convey much more information than the written medium, symbols or graphic expressions (emoticons) are often used to increase the transmission of information, both in speed and content. However, they only reflect the emotions that the participant consciously decides to transmit.

Groups based on real-time use of sound and images, in other word video conferences, are more like focus groups as they allow greater communicative interaction, within the technical limitations of the online setting. Apart from the means of communication (voice and image), the main difference compared to the previous types of online group is the observance of speech turns, in that when one speaks the others listen. This generates group dynamics rather than a set of isolated interventions on different topics being discussed simultaneously in mini-groups. The difference is clear: a conjoint task is carried out in which all the participants are members of a single group and are working in the same direction.

In short, only synchronic groups using image and sound (video conference) make it possible to consider that the members constitute a group which is cohesive or centred on a single task throughout the session. It would be far more difficult for this to take place in the other cases (asynchronous and chat room), which give rise to different dynamics. That does not mean that their results are not valid, but that their usefulness can vary depending on the nature of the problems being researched. For instance, such groups can be particularly useful when seeking individual ideas or opinions, for tasks that seek many points of view (breadth) and for relatively simple topics. They can also be useful for revealing the discourse of people with a high degree of involvement, considerable information and deep-rooted opinions, i.e. sector professionals. It should be noted that in these cases the participants do not change their opinions during the session, nor are opinions formed, they simply present their points of view. Although they may appear to be contrary cases, asynchronous and chat room groups do have something in common: interaction is not very important, as what is sought in both is personal opinions in isolation – first impressions or deep ideas – rather than opinions that are generated and modified by working in a group. When interaction is important, the written word is a poor substitute for the voice and body language.

5 Comparison between Online Focus Groups (Image and Sound) and Traditional Focus Groups

Video conference groups are the online focus groups with the greatest resemblance to traditional focus groups but are also the least studied of these types. However, they too present some differences that make them more suitable for certain uses and less suitable for others. Based on the factors used in Table 1 to establish the distinguishing features of the European and Anglo-Saxon approaches, Table 2 compares video conference online groups with face to face focus groups. The basis for this analysis is the opinions of the 112 qualitative research professionals surveyed in the empirical study. In view of the quantity of information obtained, these opinions have been combined, summarised and interpreted.

Table 2: Differences between face to face focus groups and online groups using image and sound

	Differences found in online groups	Remarks
Definition or concept	Interpersonal contact is through a computer screen, there is no physical proximity.	This difference has important consequences for the way in which people relate to each other and with the moderator, their involvement in the group situation and the types of study that can be carried out. It is impossible to conduct studies involving senses such as smell, taste or touch, i.e. product testing. The visual stimuli are restricted by the computer screen, the software and the download speed. Difficulties in observing body language (except the face).
Purpose of the dynamics	In principle there are no differences, although there are advantages and drawbacks which make them particularly advisable for some cases and unsuitable for others.	
Group size	6-8 members (slightly smaller than traditional groups)	Justified by problems concerning the moderator's control over a group of people who are not physically present. Greater difficulty in enforcing rules. More problems in motivating all the members to participate.
Group composition	Heterogeneity or homogeneity is not a key design variable, given the difficulty of checking the participants' profiles. There is no guarantee that the participants really possess the desired profile (are not lying). Recruitment on the Internet or by other methods.	Greater difficulty in getting the members of the group to perceive that they are among similar people, which hinders communication. People need to be familiar with online interaction. Recruitment problems due to difficulties in finding Internet users with the desired profile. Difficulties in guaranteeing that the participant matches the target population.
Result of the dynamics	Highly directed conversation (greater control of timing and topics).	The moderator's greater influence on the group affects the latter's liberty to raise topics. Closer to the Anglo-Saxon approach, although the sessions are structured to a greater degree.
Moderator	Very important, highly skilful in guiding the discussion towards the research subject, motivating all involved, enforcing order and controlling the length of turns. More structured conduct of the group and more directing leadership.	Greater difficulty in getting subjects with little involvement in the topic to participate. Greater difficulty in keeping the group interested in the topic (avoiding voluntary disconnection). Greater difficulty in imposing rules on the group.
Dynamics and information	Favours anonymity and lessens inhibition but makes personal involvement difficult. Participation is more egalitarian because of the lower number of participants and greater intervention by the moderator. More spontaneous information but less depth, as a result of the moderator's role. Interaction more limited because of the online environment.	Participants feel less involved in the group situation but are continually encouraged by the moderator, leading to a greater number of interventions, but of lower quality. Fosters stimulus-response dynamics, which can give rise to forced, unreal opinions. Technical problems such as sound delays can be frustrating for the participants. It is impossible to control each participant's setting so external factors or distractions may be an influence.
Effects on the participants	Greater number of comments, short and simple. In general, less self-analysis and reflection.	In general, less involvement, sensitivity and reaction to the comments of the other participants. Responses essentially motivated by the moderator's behaviour.
Strength of the dynamics	Practical and financial aspects: speed of execution, lower cost, possibility of reaching participants who are difficult to recruit because of time, place or mobility problems.	Recommended for studies that require a very specific target population which is difficult to recruit (e.g. doctors, sector professionals), to obtain first impressions on the topics, to generate ideas.
Weakness of the dynamics	Less richness/depth of information, less possibility of observing non-verbal behaviour (body language), difficult to obtain information on topics where group interaction is important, more difficult to capture emotions and, sometimes, the presence of the web-cam and being looked at directly by many faces can inhibit some people.	Problems in applying the technique in studies with low involvement or ones of attitudes or motivations. Greater difficulty in applying projective techniques. Greater difficulty in generalising group results to the target population.

Source: own elaboration

Generally speaking, despite the differences, there would seem to be clear indications that online focus groups are closer to the Anglo-Saxon approach than to the European one. From that point of view, they could provide a replacement for the former (with a few limitations). However, they also offer some advantages that can make them the only possible alternative. In particular, this type of focus group makes it possible to interview target populations that could previously only be reached by an in-depth interview: ill people, people with reduced mobility, executives, etc. Finally, it is important to note that this type of group can also be used to obtain information in greater depth but there is less guarantee of being able to extrapolate the results to a population, given the problem of ensuring appropriate selection of the participants. Moreover, the role of the moderator and the resulting dynamics make it

doubtful that the topics which arise during the conversation and the depth to which they are addressed represent the discourse of the target population, which is the main purpose of the European approach.

Considering all the relationships between design decisions and their effects on people's behaviour, on the dynamics and on the results, three basic elements have been identified that summarise the essence of a focus group and can be used as a basic frame of reference for comparing different methods: the interaction process or group dynamics, the influence of the moderator and the research topic or aim – these three elements are the result of a two-fold process. Firstly, based on the opinions and suggestions of the interviewees, all the cause-effect relations between the technique design variables and their results were isolated. Secondly, structural analysis was performed with the MICMAC method. The complete study can be found in [53]. With these three elements, the comparative analysis can be completed.

The interaction process: This is mentioned in the literature as the main reason why the focus group method works [29]. From the perspective of the Anglo-Saxon approach, [18] explains that the group situation creates a climate of trust in which people pluck up courage and become less inhibited about sharing their feelings, opinions and experiences. [60], taking the European point of view, summarises the focus group as enhancing the individuals' capacity for self-analysis and creating a situation in which more points of view are exchanged and individual reactions are multiplied, so the participants are stimulated and find it easier to disclose, analyse and describe their ideas, attitudes, experiences and behaviour.

Given the importance of the interaction process, fostering and pursuing the greatest possible interaction between the participants must be a guiding aim in the design of online groups [1], [16].

Moderator style: This is another key factor in the group process [7], [22], [40], [41], [62] and is closely related to the interaction process. In general it is assumed that whatever the approach, the moderator must generate a creative, synergistic and non-inhibiting atmosphere [39].

In broad outline, the moderator can use one of two group leadership styles, which are identified with the two approaches: a directing style in which the moderator intervenes to organise both the information and the interaction between the participants – the Anglo-Saxon style – or a non-directing style, which cuts the moderator's intervention to the minimum so that the group can express itself with greater liberty. In this case – the European style – it is the group that decides on the relevance of the topics. In face to face groups either style can be used, depending on the theoretical orientation and on the type of task or the aim of the research. For exploratory studies, the choice will depend on whether shared or unique ideas are sought. However, a non-directing style is advisable for tasks that are intended to discover and understand motives, life experiences, preferences and shared behaviour [19], so these would be difficult to conduct in an online setting.

The dynamics generated by online focus groups require a more directing and structured moderator style than for face to face groups. The moderator therefore needs to be very skilful at controlling the group, guiding the discussion, introducing and returning to questions, directing the participants and ensuring that the conversation flows as smoothly as possible. Moreover, the moderator of an online group has no access to non-verbal or body signals. This makes it more difficult for the moderator to assess and analyse the answers and adapt his or her behaviour in response to the signals received from the group in an online setting, ruling out subtle, delicate moderation in response to the nuances highlighted by the participants.

The type of task: This is another element that must be taken into account when planning the research, given its important repercussions on the other variables. [53] attempts a synthesis and concludes that in face to face groups, the type of task can be classified into two perspectives. One is depth, for studies that aim to understand or interpret a phenomenon in the greatest possible depth, to explain more. These have an inductive/theoretical aim. The other is breadth, for studies that aim to consider every possible way of seeing or exploring a phenomenon, such as determining the factors that form the basis for perceptions of quality or satisfaction when visiting a shop, or reaching saturation in their regard. Naturally, the dimension of breadth is more superficial.

Based on the particular features of internet group interaction processes, the online format could be more appropriate for research aims that seek the dimension of breadth. In line with this idea, [61], [68] consider that online groups are suitable for studies that seek first impressions of new products or ideas, in other words, for tasks that aim to obtain a wide spectrum of opinions. Equally, they are less suitable for obtaining information concerning the participants' feelings and motives. This does not mean that they cannot be used for studies that seek the dimension of depth, although the quality of the results cannot be guaranteed to the same extent.

The above three elements must be taken into account when planning research using online focus groups, from the point of view of analysing how the specific decisions that are taken can affect the results of the research.

6 Conclusions

This paper presents a comparative analysis between online and face to face focus groups. As the term *focus group* is employed to refer to different situations, a prior step was to distinguish the European and Anglo-Saxon approaches. This classification is based on a review of the literature and on a study comprising 112 in-depth interviews with heads of qualitative marketing research that centred on the theory and practical application of focus groups.

The main contribution made by this work may be its identification of the two approaches and of the set of factors or dimensions that describe them. This provides a frame of reference that can be used to compare different variants or types of focus group and to give more guidance for decision-making in research conducted with focus groups. For instance, research using the European approach will pay particular attention to factors such as participant recruitment (attempting to ensure that group members are typical of the target profile or population), to the participants' not knowing the details of the topic to be discussed and to the moderator's interventions (not artificially introducing topics that are not part of the target population's discourse), among others. In the Anglo-Saxon approach, on the other hand, avoiding the moderator's potential influence on the discourse is less important than achieving greater participation and disinhibition, so he or she intervenes more.

The proposed separation into two approaches may be useful in research on focus groups because it provides guidance on the dependent variables that need to be taken into account when designing experiments or studies that centre on the methodological aspects of focus groups. One of the problems in such studies has been the selection of dependent variables to measure the results of manipulating some variables (different group sizes, incentives, etc.), which can lead to errors of interpretation if the essential task to be performed and the approach within which the research is conducted are not taken into account. In a study of the basic motivations and behaviour of young people with regard to joining a gymnasium, conducted to gain an understanding of their behaviour (European approach), it does not make much sense to use variables related to group work and productivity, which are typical of the Anglo-Saxon approach. In this case the quality of the results depends on the degree of fit between the discourse obtained and that of the target population so, for instance, using the number of different ideas or number of speech turns as dependent variables is not related to the purpose of the study. Indeed, a large number of ideas may indicate an unreal discourse with little freedom, unduly influenced by a moderator who is continually attempting to encourage and disinhibit the group. Consequently, before designing an experiment it is advisable to consider what approach to take, and this depends on the type of task. Practically every task can be included in one of two main groupings: listening to the group and obtaining an existing discourse (European approach) or making the group work, think, assess or provide ideas and suggestions (Anglo-Saxon approach).

Using the two approaches as a comparative framework for analysing online focus groups, important differences were encountered between these, raising questions about the extent to which they can be included in a single category under the generic term *online focus group*. Online groups based on written communication, whether synchronic or asynchronous, present problems in fulfilling two basic premises that constitute the essence of a focus group: groupness and interaction. As a result, they can hardly be considered valid universal substitutes for face to face groups. Moreover, if they constitute different techniques, the question that needs to be asked is how far the methods and suggestions for applying face to face research can be extrapolated to online groups based on the written medium. Further experimental research will be needed to provide solid guidelines to working with online groups using written communication.

Only in synchronic focus groups with image and sound (video conference) can all the participants be considered to act in a cohesive way and to centre on carrying out the task or research aim. In groups using written communication, these dynamics are very difficult to achieve. Even with image and sound there is less interaction, because the limitations of the online setting (absence of physical contact, less perception of body language, potential distractions, etc.) make it difficult for the participants to become as involved in the session. This leads to slower dynamics, obliging the moderators to intervene constantly and use a much more structured and directing leadership style.

The lower degree of interaction between the participants and the need for constant intervention by the moderator to guide the discussion constitute a limitation for online groups with image and sound. As a result, this technique is less able to obtain deeper, more reflective information and, above all, to distinguish whether the participants' words are a result of ideas they already had or are an artificial response to the moderator's interventions. Consequently, these focus groups would seem to be more suitable for work-type tasks (Anglo-Saxon approach). Nevertheless, despite their weaknesses, they possess clear advantages that make them advisable in particular market research contexts, owing to their cheapness, speed and convenience. For instance, achieving the participation of people who are difficult to recruit or geographically scattered could be a factor that would suggest their use.

In view of the foregoing, in which circumstances should online groups be used and how should they be used? While it must be emphasised that deeper research into focus group methodology is needed, from the point of view of the two approaches discussed in this paper and the variables employed to compare them it is possible to venture a few suggestions. The first consideration is the aim of the research. If it is to obtain and analyse an existing discourse

(European approach) then online groups would not seem the best option, as their excessive structuring and the continual intervention of the moderator will hamper the external validity of the results. If it is individual performance of tasks, the quality of the results could be similar to that of face to face groups in the Anglo-Saxon approach, provided that certain precautions are taken to mitigate the reduced interaction and involvement of the participants and keep them interested in the meeting. This requires greater preparation of the session, with a selection of topics and tasks that avoids any dead time and stimulates the group members constantly. Using more games and projective techniques could be an option. However, the main dynamic factor is the moderator, who needs special training to encourage participation in an online setting. In this context, including a trained false participant to motivate the others without attempting to influence their answers could be helpful for this purpose. Lastly, if the aim is not to generalise the results to a target population but only to produce information, using participants with group experience who have shown an open, participative personality in other studies could be a way of enlivening the others, and market research company data bases contain people of this type. Naturally, the importance of these considerations increases in inverse proportion to the participants' interest in the topic or task demanded of the group.

Finally, the results and conclusions of the present study are based on an interpretation of the market research sector professionals' practices, suggestions, reflections and understandings of the qualitative method. To complete these results and investigate them in greater depth, it would be interesting to conduct experimental research into the extent to which design decisions affect the dynamics and results of each of the two approaches and of the different types of online focus group. The type of task to be carried out (or the approach to be adopted) would need to be considered in order to make an appropriate choice of dependent variables.

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References

- [1] C. Y. Adriaenssens and L. Cadman, An adaptation of moderated e-mail focus groups to assess the potential for a new online (Internet) financial services offer in the UK, *Journal of The Market Research Society*, vol. 41, no. 2, pp. 417-424, 1999.
- [2] L. E. Alonso, *La Mirada Cualitativa en Sociología*. Madrid: Editorial Fundamentos, 1998.
- [3] R. Beasley and K. Chapin, Paradoxes in cyberspace. A qualitative perspective on research through the internet, in *Proceedings of the Worldwide Internet Seminar and Exhibition, Paris, ESOMAR, 1998*, pp.195-200.
- [4] T. Bedford and J. Burgess, The focus group experience, in *Qualitative Methodologies for Geographers: Issues and Debates* (M. Limb and C. Dwyer, Eds.). New York: Arnold, 2001, pp. 121-135.
- [5] R. Birn, P. Hague, and P. Vangelder, *A Handbook of Market Research Techniques*. London: Kogan Page, 1990.
- [6] E. Brüggen and P. Willems, A critical comparison of offline focus groups, online focus groups and e-delphi, *International Journal of Market Research*, vol. 51, no. 3, pp. 363-385, 2009.
- [7] J. Bystedt, S. Lynn, and D Potts, *Moderating to the Max: A Full-Tilt Guide to Creative, Insightful Focus Groups and Depth Interviews*. New York: Paramount Marketing Publishing, 2003.
- [8] J. Callejo, *El Grupo de Discusión: Introducción a Una Práctica de Investigación*. Barcelona: Ariel, 2001.
- [9] M. Canales and A. Peinado, Grupos de discusión, en *Métodos y Técnicas Cualitativas de Investigación en Ciencias Sociales* (J. M. Delgado and J. Gutiérrez, Eds.). Madrid: Síntesis Psicología, 1998, pp. 287-316.
- [10] C. Cassell and G. Symon, *Essential Guide to Qualitative Methods in Organizational Research*, London: Sage Publications, 2004.
- [11] R. Daft and R. Lengel, Organizational information requirements, media richness, and structural design, *Management Science*, vol. 32, no. 5, pp. 554-571, 1986.
- [12] M. Delli Carpini and B. Williams, The method is the message: Focus groups as a method of social psychological and political inquiry, *Research in Micropolitics*, vol. 4, pp. 57-85, 1994.
- [13] P. Desai, *Methods Beyond Interviewing in Qualitative Market Research*. London: Sage Publications, 2002.
- [14] V. Dubrovsky, S. Kiesler, and B. Sethna, The equalization phenomena: Status effects in computer-mediated and face-to-face decision-making groups, *Journal of Human Computer Interaction*, vol. 13, no. 2, pp. 133-152, 1991.
- [15] H. Edmunds, *The Focus Group. Research Handbook*. Chicago: American Marketing Association and Ntc Business Books, 1999.
- [16] V. Eke and P. Comley, *Moderated Email Groups: Computing Magazine Case Study*. London: Virtual Surveys, 1999.
- [17] Esomar, *Global market research 2010*, ESOMAR Research, Amsterdam, Netherlands, Technical Report, 2010.
- [18] E. F. Fern, Why focus groups work: A review and integration of small group process theories, *Advances in Consumer Research*, vol. 9, no. 1, pp. 445-451, 1982.
- [19] E. F. Fern, *Advanced Focus Group Research*. California: Sage Publications, 2001.
- [20] A. Gibbs (1997, Winter). Focus groups, *Social Research Update*, 19, Department of Sociology, University of Surrey. [Online]. Available: <http://sru.soc.surrey.ac.uk/SRU19.html>.
- [21] A. E. Goldman, The group depth interview, *Journal of Marketing*, vol. 26, no. 3, pp. 61-68, 1962.

- [22] K. P. Goncalves, Moderating to the Max: A full-tilt guide to creative, insightful focus groups and depth interviews, *Journal of Consumer Marketing*, vol. 22, no. 2, pp. 107-108, 2005.
- [23] T. L. Greenbaum, *The Handbook for Focus Group Research*. California: Sage Publications, 1998.
- [24] T. L. Greenbaum, Focus group research: Why the traditional research methodology works so effectively and why it deserves to be the most respected of all qualitative research tools, *Quirk's Marketing Research Review*, June, pp. 1-5, 2003.
- [25] D. Hanson and M. Grimmer, The mix of qualitative and quantitative research in major marketing journals, 1993-2002, *European Journal of Marketing*, vol. 41, no. 1/2, pp. 58-70, 2007.
- [26] J. Ibáñez, *Más Allá de la Sociología. El Grupo de Discusión: Técnica y Crítica*. Madrid: Siglo XXI, 1979.
- [27] J. Kitzinger and R. Barbour, Introduction: The challenge and promise of focus groups, in *Developing Focus Group Research: Politics, Theory and Practice* (R. Barbour and J. Kitzinger, Eds.). California: Sage Publications, 2001, pp. 1-20.
- [28] E. E. Klein, T. Tellefsen, and P. J. Herskovitz, The use of group support systems in focus groups: Information technology meets qualitative research, *Computers in Human Behavior*, vol. 23, no. 5, pp. 2.113-2.132, 2007.
- [29] R. A. Krueger, *El Grupo de Discusión. Guía Práctica para la Investigación Aplicada*. Madrid: Pirámide, Colección Psicología, 1991.
- [30] R. A. Krueger, *Developing Questions for Focus Groups*. California: Sage Publications, 1998.
- [31] R. A. Krueger, *Moderating Focus Groups*. California: Sage Publications, 1998.
- [32] R. A. Krueger, *Analyzing and Reporting Focus Group Results*. California: Sage Publications, 1998.
- [33] R. A. Krueger and M. A. Casey, *Focus Groups: A Practical Guide for Applied Research*. California: Sage Publications, 2000.
- [34] D. Landreth, Focus groups on the net: Some pros and cons of doing qualitative research online, *Marketing*, vol. 103, pp. 16-17, 1998.
- [35] K. Maddox. (1998, June) Virtual panels add real insight for marketers: Online focus group use expanding. *Advertising Age*. [Online]. Available: <http://adage.com/article/news/virtual-panels-add-real-insight-marketers-online-focus-group-expanding/65373/>.
- [36] N. K. Malhotra and M. Peterson, Marketing research in the new millennium: Emerging issues and trends, *Marketing Intelligence and Planning*, vol. 19, no. 4, pp. 216-235, 2001.
- [37] S. Manoranjitham and K. S. Jacob, Focus group discussion, *Nursing Journal of India*, vol. 6, no. 98, pp. 125-127, 2007.
- [38] E. Martín-Criado, El grupo de discusión como situación social, *Revista Española de Investigaciones Sociológicas*, no. 79, pp. 81-112, 1997.
- [39] W. J. McDonald, The influence of moderator philosophy on the content of focus group sessions: A multivariate analysis of group session content, in *Enhancing Knowledge Development in Marketing* (R. P. Leone and V. Kumar, Eds.). Chicago: American Marketing Association, 1992, pp. 540-545.
- [40] W. J. McDonald, Focus group research dynamics and reporting: An examination of research objectives and moderator influences, *Journal of The Academy of Marketing Science*, vol. 21, no. 2, pp. 161-168, 1993.
- [41] W. J. McDonald, Provider perceptions of focus group research use: A multicountry perspective, *Journal of The Academy of Marketing Science*, vol. 22, no. 3, pp. 265-273, 1994.
- [42] C. Miller, Focus groups where none has been before, *Marketing News*, no. 28, pp. 2-14, 1994.
- [43] J. Milliken, Qualitative research and marketing management, *Management Decision*, vol. 39, no. 1, pp. 71-77, 2001.
- [44] M. M. Montoya-Weiss, A. P. Massey, and D. L. Clapper, On-line focus groups: Conceptual issues and a research tool, *European Journal of Marketing*, vol. 32, no. 7/8, pp. 713-723, 1998.
- [45] D. L. Morgan, Future directions for focus groups, in *Successful Focus Groups: Advancing the State of the Art* (D. L. Morgan, Ed.). California: Sage Publications, 1993, pp. 225-244.
- [46] D. L. Morgan, Why things (sometimes) go wrong in focus groups, *Qualitative Health Research*, vol. 5, no. 4, pp. 516-523, 1995.
- [47] D. L. Morgan, Focus group, *Annual Review of Sociology*, vol. 22, no.1, pp. 129-152, 1996.
- [48] D. L. Morgan, *Focus Groups as Qualitative Research*. California: Sage Publications, 1997.
- [49] D. L. Morgan, *The Focus Group Guidebook*. California: Sage Publications, 1998.
- [50] D. L. Morgan, *Planning Focus Groups*. California: Sage Publications, 1998.
- [51] D. L. Morgan, Reconsidering the role of interaction in analyzing and reporting focus group, *Qualitative Health Research*, vol. 20, no. 5, pp. 718-722, 2010.
- [52] D. L. Morgan and R. A. Krueger, When to use focus groups and why, in *Successful Focus Groups: Advancing the State of the Art* (D. L. Morgan, Ed.). California: Sage Publications, 1993, pp. 3-19.
- [53] E. M. Murgado-Armenteros, *Teoría y práctica del grupo de discusión en la investigación de mercados: Un modelo normativo*, Ph.D. Thesis Doctoral, University of Jaén, Jaén, Spain, 2011.
- [54] D. A. Murphy, S. Durako, L. R. Muenz, and C. M. Wilson, Marijuana use among hiv-positive and high-risk adolescents: A comparison of self-report through audio computer-assisted self-administered interviewing and urinalysis, *American Journal of Epidemiology*, vol. 152, no. 9, pp. 805-813, 2000.
- [55] C. Nancarrow, A. Barker, and L. Tiu Wright, Engaging the right mindset in qualitative marketing research, *Marketing Intelligence and Planning*, vol. 19, no. 4, pp. 236-244, 2001.
- [56] J. Nunamaker, R. Briggs, D. Mittleman, D. Vogel, and P. Balthazard, Lessons from a dozen years of group support systems research: A discussion of lab and field findings, *Journal of Management Information Systems*, vol. 13, no. 3, pp. 163-207, 1997.

- [57] A. Ortí, La apertura y el enfoque cualitativo o estructural: La entrevista abierta semidirectiva y la discusión de grupo, en *El Análisis de la Realidad Social. Métodos y Técnicas de Investigación* (M. García Ferrando, J. Ibáñez and F. Alvira, Comps.). Madrid: Alianza Editorial, 2005, pp. 219-282.
- [58] L. Peek and A. Fothergill, Using focus groups: Lessons from studying daycare centers, 9/11, and hurricane Katrina, *Qualitative Research*, vol. 9, no. 1, pp. 31-59, 2009.
- [59] D. J. Reid and F. J. M. Reid, Online focus groups, *International Journal of Market Research*, vol. 47, no. 2, pp. 131, 2005.
- [60] J. I. Ruiz-Olabuénaga, *Metodología de la Investigación Cualitativa*. Bilbao: Universidad De Deusto, 1999.
- [61] S. J. Schneider, J. Kerwin, J. Frechtling, and B.A. Vivari, Characteristics of the discussion in online and face-to-face focus groups, *Social Science Computer Review*, vol. 20, no. 1, pp. 31-42, 2002.
- [62] D. W. Stewart, P. N. Shamdasani, and D. W. Rook, *Focus Groups: Theory and Practice*. California: Sage Publications, 2007.
- [63] K. Stewart and M. Williams, Researching online populations: The use of online focus groups for social research, *Qualitative Research*, vol. 5, no. 4, pp. 395-416, 2005.
- [64] S. G. Strauss, Getting a clue: The effects of communication media and information distribution on participation and performance in computer-mediated and face to face groups, *Small Group Research*, vol. 27, no. 1, pp. 115-142, 1996.
- [65] C. F. Turner, L. Ku, S. M. Rogers, L. D. Lindberg, J. H. Pleck, and F. L. Sonenstein, Adolescent sexual behavior, drug use, and violence: Increased reporting with computer survey technology, *Science*, vol. 280, no. 5365, pp. 867-873, 1998.
- [66] C. Underhill and M. G. Olmsted, An experimental comparison of computer-mediated and face to face focus groups, *Social Science Computer Review*, vol. 21, no. 4, pp. 506-512, 2003.
- [67] R. X. Weissman, Online or off target?, *American Demographics*, vol. 20, no. 11, pp. 20-21, 1998.
- [68] R. Whiting. (2001, July) Virtual focus group. *Informationweek*. [Online]. Available: <http://www.informationweek.com/news/6505865>.
- [69] S. Wilkinson, Focus group methodology: A review, *International Journal of Social Research Methodology, Theory and Practice*, vol. 1, no. 3, pp. 181-204, 1998.