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Research Article

Opinions of Expert Academicians on Online Data Collection and Voluntary Participation in Social Sciences Research

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Abstract

This study aims to determine the opinions of academicians who teach scientific research methods courses in the field of social sciences on collecting data through online surveys, on the “voluntary basis” of academic research, and on their comparisons of voluntary participation in face-to-face and online-survey data collection methods. For this purpose, data were collected utilizing the semi-structured interview technique. In accordance with purposeful sampling, the preliminary condition for seeking participants is that the academicians to be interviewed will have taught a scientific research methods course for at least one semester at the undergraduate, graduate, or post-graduate level. The qualitative data has been subjected to content analysis with the help of the NVIVO package program. As a result of the research, field experts emphasize that although online data collection has such disadvantages as a low return rate and low external validity, advantages such as facilitating data processing, quicker data collecting from more participants, reduced data loss, increased voluntary participation, and the ability to conduct research on sensitive and confidential matters make it prominent. Field experts have made some important suggestions for collecting online data and increasing voluntary participation. Additionally, field experts also emphasize that voluntary participation enhances research validity and reliability. When examining field experts’ opinions on data collected using online and face-to-face survey methods, almost all experts are determined to report that data collected online increases a research’s validity and reliability. Field experts explain the reason for this situation as being that participants are more free, flexible, and independent in online environments.

Keywords

Social sciences • Research ethics • Voluntariness • Online data collection • Survey

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The comparison of data collection through online surveys and face-to-face surveys has become a key research topic occupying the social science research agenda in recent years (Akbulut, 2015). These comparisons show the two different formats to have psychometric equivalence (Brock, Barry, Lawrence, Dey, & Rolffs, 2012; Hedman et al., 2010). Participants are considered as a single source for revealing the psychometric properties of both formats and for measuring the margin of error (Castro, 2013). Therefore, participants' voluntary involvement in a survey is a decisive factor in determining margin of error (Chesney & Penny, 2013). For this reason, as indicated by Spruce and Bol (2015), one can say that voluntary participation in data collection through the survey method is of critical value in terms of a research's success and accuracy.

Voluntariness, which is frequently voiced but rarely understood or practiced correctly in research ethics, is defined as a choice or action performed without others' influence or being subjected to any compelling external exposure (Agrawal, 2003). Studies show that survey answers tend to be less misleading when respondents voluntarily participate in a scientific research questionnaire (Chesney & Penny, 2013).

In other words, without voluntary participation, survey participants can report their desired behaviors while hiding unwanted ones (Kreuter, Presser, & Tourangeau, 2008). Those who involuntarily participate in the data collection process through either online or face-to-face surveys can give misleading information about their gender (Zaheer & Griffiths, 2008), academic performance (Kuncel, Credé, & Thomas, 2005), and physical characteristics (Toma, Hancock, & Ellison, 2008). Based on the relevant studies (Hoerger, 2010; Naquin, Kurtzberg, & Belkin, 2010), the rate of misleading information can be said to vary depending on the survey technique used in the research process (online or face-to-face).

One methodological consideration is which survey technique provides voluntariness and reduces misleading answers for a given situations. Naquin et al. (2010) found that respondents who answer surveys by email were more misleading than respondents who give paper-based responses. Hoerger (2010), however, noted that online surveys are an important part of the psychological research process in the context of ethical and voluntary participation. Accordingly, in research where respondents are sensitive and do not want their identities to be exposed, online surveys may provide more flexible and positive results than face-to-face surveys. On this point, one can say that both survey techniques have certain advantages and disadvantages.

In a study comparing the superiorities and deficiencies of survey techniques, Tiene (2000) noted that the required explanations can be made in face-to-face surveys if the question posed cannot be understood because the participant is in the same physical environment. This situation is said to increase the cooperation and trust between

participant and researcher. The same study also cites that among the deficiencies of the face-to-face survey technique are the effects of the surveyors' prejudices and misbehaviors on the quality of data being collected, the process being time consuming and costly, and the need for a large number of interviewees. [Heiervang and Goodman \(2011\)](#) stated in their study that the online survey technique has advantages such as being able to quickly and inexpensively collect data. On the other hand, they emphasized participants' inability to find a competent authority to ask questions of when having a problem responding to the survey as a deficiency of this technique.

That researchers compare the advantages and deficiencies of both survey techniques is important for being able to select the appropriate survey technique for a study. Selecting the right survey technique contributes to participants' voluntary involvement in a survey. Their voluntary participation in a research affects not only the dimensions of validity and reliability but also the research's ethical foundations ([Spruce & Bol, 2015](#)).

A study with no ethical basis loses its validity in the academic world because even if it fully complies with scientific rules, its results from the collected data are invalid ([Uzbay, 2006](#)). Ethics is defined as a branch of philosophy that investigates human values, the nature and foundations of moral good or bad, right or wrong ([Israel & Hay, 2006](#); [Ürker & Çobanoğlu, 2011](#)). Therefore, scientific thinking must conform to the general rules of science and be ethical ([Israel & Hay, 2006](#)). On this point it is thought a function that monitors whether the work carried out is ethically based should exist. One can say that the required process can be realized by universities' ethics committees.

Ethics in Data Collection: Ethics Committees

Problems with ethics and therefore voluntariness have become widespread in scientific research, particularly with the spread of information and communication technologies (ICTs). [Akbulut, Uysal, Odabaşı, and Kuzu \(2008\)](#) stated that ethical violations have increased in studies with the development of computer technology. This increase in ethical violations includes the data collection process within the scope of a study. Likewise, [Ercan \(2009\)](#) noted that ethical violations have also increased in parallel with the widespread use of ICTs. With respect to controlling the increase in ethical violations, ethical committees serve to establish ethical culture in the public, set ethical codes of conduct that civil servants should obey while performing their duties, and ensure that they act in accordance with these principles ([Yıldırım & Kadioğlu, 2007](#)). Ethics committees' control over the data-collection tools used in scientific research, especially in research with human subjects, can be seen as an important point for providing an ethical basis for performed studies. This way, an official institution's observance of the rights of those involved in research increases

the ethical sensitivity in studies to be performed in the social sciences field. Together with increased sensitivity, the academicians who will pass through the mechanisms of self-control and external control at the point of attaining their goals will be able to avoid problems related to ethical issues.

Validity and Reliability in Scientific Researches

Apart from an ethical basis, the issue of validity and reliability can be said to be an element relatable to voluntariness in scientific research. The value of a scientific research is based on two basic criteria: reliability and validity (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz, & Demirel, 2010). The concepts of validity and reliability are interconnected (Şencan, 2005). Research validity is related to a study's aim and scope, as well as its relevance to the value being measured and the accuracy of the measurements to be made, while the reliability of a research is related to the repeatability of measurements and the similarity of results for measurements at different times (Büyüköztürk et al., 2010; McMillan & Schumacher, 2010). As opposed to validity and reliability measures that are definitively determined in terms of qualitative, quantitative, and mixed methods, validity and reliability measures proposed in scientific research exist in terms of the principles and limitations introduced by the method used (Geray, 2004). However, based on these definitions of validity and reliability, one can say that participants should respond sincerely in scientific research that involves people in order to give valid and reliable results. The necessity to determine participants based on voluntariness corresponds to the measures of explaining the characteristics of the sample and determining the method of sample selection; these are among the measures proposed by Yıldırım and Şimşek (2006) for validity and reliability. Other validity and reliability measures specified by Yıldırım and Şimşek are descriptions of the data collection tool and process, explanations of the data analysis process, descriptions of assumptions and limitations, descriptions of the researcher's role, diversifying, preventing data loss by using a recorder, performing a reliability study between evaluators, and checking the consistency among data. Topu, Baydaş, Turan, and Göktaş's (2013) study determined the validity and reliability measures used in doctoral dissertations in the field of instructional technology and reported that participants' voluntariness was taken as a validity measure for all qualitative theses and most quantitative and mixed method theses examined in the scope of their study. In this context, ensuring participants' voluntariness is important for making scientific studies valid and reliable, especially those with human participation.

Related Literature

The rapid growth of the Internet has increased the frequency with which internet environments are used as a source for collecting data in social research (Schaefer & Dillman, 1998; Stanton, 1998). Data can be collected from individuals who will participate in research through recently developed Internet-based surveys. Individuals can be contacted asynchronously (Hewson, Laurent, & Vogel, 1996), and the limits accessible within the scope of a study can be expanded (Schaefer & Dillman, 1998). Thanks to Internet technologies, researchers can now collect data from any part of the world, twenty-four hours a day and seven days a week. All kinds of data collection tools such as surveys, tests, scales, and evaluation forms created in an electronic environment can be delivered to a target group through the web within a few minutes. Data collected from such tools is delivered quickly to everyone connected to the web and can be saved automatically without any special hardware, paper, mailing costs, or labor. The amount of research made using electronic media and tools has been observed to increase daily. Individuals are able to express their opinions in on-line environments more openly and freely than in any other place or through any other medium. In a study on this subject, Stanton and Rogelberg (2001) stated that individuals can freely and openly express their opinions in an electronic environment. The fact that a large majority of the world's communities have access to the Internet is viewed as a factor that contributes to large-scale survey research (Akbulut, 2015; Skitka & Sargis, 2006). Taking advantage of online methods is an element that accelerates adopting Internet-based surveys in social science research (Payne & Barnfather, 2012). Surveys conducted in an intranet-based environment provide easy access to difficult-to-reach samples and special groups (Baltar & Brunet, 2012). Therefore, the tools used in the data collection process in scientific research can be said to have diversified through the online environments that emerged as a result of technological developments. In the scope of this study, we focus on the data collection processes through face-to-face and online surveys, and respondents' participation in these surveys is voluntary.

Numerous studies on voluntary participation in science and health sciences have been accessed in the literature survey conducted during this study. Voluntary participation was seen to have been studied in detail, especially in clinical trials. However, sufficient research on voluntary participation could not be found in the literature survey for the field of social sciences. Table 1 shows the relevant studies reached in the literature.

Table 1
Relevant Studies

Researcher(s)	Field of study
Olsaretti (1998)	Analysis of elements neglecting voluntariness
Agrawal (2003)	Analysis of voluntariness from the aspects of coercion, vulnerability and exploitation
Pace & Emanuel (2005)	Ethics in clinical researches
Olsaretti (2008)	Analysis of the concept of voluntariness
Colburn (2008)	Making choice voluntarily
Appelbaum, Lidz, & Klitzman (2009a)	Developing two universal scales of voluntariness and applying them to the participants
Appelbaum, Lidz, & Klitzman (2009b)	Voluntariness in the process of research
Payne & Barnfather (2012)	Analysis of the differences between online and face-to-face survey techniques
Akbulut (2015)	Analysis of the inconsistent answers given in surveys conducted on online environments

Olsaretti (1998) stated in one of her studies that some elements exist that ignore voluntariness, the first of which is coercion. She mentioned that individuals can choose what others want, rather than choosing what they want, when researchers or other individuals force them to make a certain choice. The second element that draws attention is oppression. She noted that the difference with oppression, which emerges as another type of coercion, is that it requires a constant threat. According to Olsaretti (2008), both oppression and coercion violate the principle of voluntariness. Individuals cannot behave as they feel when exposed to oppression and coercion.

Agrawal's (2003) study analyzed voluntariness from three perspectives (i.e., coercion, vulnerability, and exploitation) because these terms as related to voluntariness are frequently discussed, and their misuse can lead to confusion about it. Agrawal also noted that being able to perceive these terms correctly is important, mentioning that most concerns about threatening voluntariness are actually related to exploitation and that using these terms frivolously may be dangerous. In other words, these terms bear important moral values. Labeling an individual as vulnerable, forced, or exploited prevents that person from speaking comfortably. Therefore, these terms must be used with caution. Consequently, when examining these terms that threaten voluntariness, the proper characterization of terms suggests the existence of possible ways to improve upon these dangers. This study defines the concepts of coercion, vulnerability, and exploitation and associates them with voluntariness as explained below. Vulnerability occurs in situations where one is not able to protect self-interests. Its relevance to voluntariness depends on one's willingness to consent. Coercion is a person's negative application of emotional pressure on another. Its relevance to voluntariness directly violates voluntariness. Exploitation is the unfair distribution of benefits and workload in a task to be performed. Not related to voluntariness, it instead relates to risks and benefits.

Pace and Emanuel (2005) reported in their study on clinical trials that considerable debate on ethics in clinical trials in developing countries has existed since the early 2000s. They stated that exploitation, coercion, incentives, violation of voluntariness, and many similar issues are on the agenda. According to Pace and Emanuel, the main question in this regard is whether the respondents have participated in the research voluntarily. To address this problem, researchers conducted interviews with participants in clinical trials in both developed and developing countries. As a result, the possibility of encountering many ethical problems was observed in research studies, especially neglect for the principal of voluntariness. They noted in their study that defining the circumstances where voluntariness is neglected might be complicated. In their study, parents of 347 students were asked whether their children had participated in the study voluntarily; almost all said that their children had volunteered. On the other hand, some of them commented on coercion from others. Yet, more than half said they felt pressured to participate in the study because of their child's illness. Coercion, the greatest threat to voluntariness, is defined as direct pressure from researchers or others on participants. However, pressure from a child's illness is not a type of coercion. In the results of the interviews made during the study, the most important factors observed to affect voluntariness were coercion, exploitation, unfair choices, and misunderstandings.

In a study on the concept of voluntariness, Olsaretti (2008) mentioned that it relates to the individual's sense of responsibility. At the same time, according to Olsaretti (2008), voluntariness is a self-made choice where an individual pays some price. The choice of options motivating people was shown as the main principle of voluntariness in the study. Again, according to Olsaretti (2008), if individuals have an acceptable alternative, they'll choose it. However, if there is no acceptable alternative, they'll avoid choosing that option. Individuals who choose among unacceptable alternatives do not choose voluntarily. In such cases, participants are forced by an external factor. According to Colburn (2008), who is a researcher mentioned in Olsaretti's (2008) study, individuals who conduct surveys should inform participants about what they'll encounter during the research and try to persuade them. If participants receive accurate and complete information about a survey, they are likely to participate. According to the studies, forced choices in cases where the individual does not volunteer also have a negative sense of moral values. Outcomes from choices imposed by any external element lead to the approval of morally unacceptable options and are not seen as proper.

Colburn (2008) expressed Olsaretti's (2008) views in his work. According to Olsaretti (2008), voluntariness is important in two respects. The first is that responsibility lies largely in the shadow of voluntariness, not freedom. Therefore, if an individual makes involuntary choices, the decision-makers do not want to take responsibility even if the individual was free. Secondly, the case of voluntariness may

be a choice for individual autonomy so that individuals can succeed in determining their own destiny. Thus, if individuals are to live autonomously, they should make choices voluntarily. According to Colburn (2008), individuals must be given sufficient information about the research so they can make voluntary choices. This can increase their motivation in the research and help them act voluntarily. If no alternatives are acceptable, individuals' choices will be reluctant.

Appelbaum, Lidz, and Klitzman (2009a) developed two universal scales in their study and applied these scales to the participants. The first is the Perceived Coercion Scale and the other is the Voluntariness Ladder. Scores range from 0 to 5 in the Perceived Coercion Scale. Measurements were made using right/wrong answers for the five questions. Higher values indicate an increase in perceived coercion. Sixty-five of the 86 participants in the survey had scores of 0. Eighteen participants' had scores of 1, and three participants' had scores of 2. On the Voluntariness Ladder, score range between 1 and 10. A score of 1 indicates the participants were not voluntary at all, and 10 means they are completely voluntary. Seventy-three of the 85 who participated in the survey stated their decisions were entirely voluntary. Only one person scored below 5. The relationship between these two universal measurement scales is significant. Both scales favorably increase voluntary motivation, which increases individual participation in research.

Another study by Appelbaum, Lidz, and Klitzman (2009b) noted that voluntariness plays an important role in the research process. Voluntariness is absolutely critical in human participation research in this regard and states the individuals who participate in research should participate on the basis of their own will. In the majority of bioethical researches, voluntariness is said to be mentioned and can be neglected in the following ways. (a) Individuals may be given significant material offers to participate in research. (b) Participants may feel pressure from their physicians to participate in investigations at the facilities where they receive care. Furthermore, in the scope of the study, practices and policies that can negatively affect voluntariness as related to pertinent situations in human participation research are said to be implementable; compensation practice in particular are said to be widely applied in the US. However, in order to prevent this situation, many policies that restrict the amount of compensation to participants are offered are said to be implementable, and researchers are also often prevented from advertising about the proposed compensation.

Payne and Barnfather (2012), referring to the demographic and individual characteristics of survey respondents, applied the same survey both online and face-to-face to the same student population in South Africa in their study on the differences between online and face-to-face survey techniques. Their findings suggest that the

majority (75.2%) of respondents chose face-to-face paper-based surveys. These findings show that demographic factors play an active role in the choice of online environments. Moreover, such individual differences as race, age, time spent in online environments, informal education process and gender are said to influence survey-type selection.

Logistic regression results within the scope of the study support these findings and show that black African respondents who access the Internet less frequently respond to surveys conducted online less than other racial groups. The Internet-access rate of those who choose to respond to online surveys was 94.6%, while the Internet-access rate of those who want to respond to face-to-face surveys is 69.7%.

In a study conducted by Akbulut (2015) for examining inconsistent responses given in online surveys, whether the answers given in the surveys were consistent was examined. Two online surveys were conducted on the same participants with the help of a gaming application run on Facebook, after which participants' answers given with the same nickname were compared. The study's findings showed that 45.7% of participants reported incorrect personal information such as age, education, and gender. Participants' responses to the attitude scales were relatively consistent. In this context, one can say that the answers for demographics in online surveys are more inconsistent. However, ensuring participants' voluntary participation in surveys has emerged as an element for reducing inconsistent data.

Because social sciences study the human aspects of life, studies in this area should respect the sense of humanity and research must be conducted by observing ethical and moral rules (Israel & Hay, 2006). This principle of voluntariness, which is an important branch of such ethical and moral rules, must be analyzed meticulously. A lack of work in the literature on the principles that provide voluntariness in scientific studies can be said to exist. Particularly in the social sciences, virtually no research exists on participants' voluntariness in face-to-face and online environments. Despite the widespread use of ICTs in the data collection processes of social sciences research, participants' voluntariness under these new conditions remains a subject open to research. In this study, we compare the techniques of online surveys and face-to-face surveys in the context of voluntariness by investigating the advantages and deficiencies of the data collected through online surveys resulting from ICT use and experts' views on the issue of voluntariness. In this way, the study will contribute to eliminating deficiencies in the literature on the concept of voluntariness, to the factors affecting voluntariness positively or negatively, and to voluntary participation in online and face-to-face data collection.

Purpose

Ensuring voluntary participation in online or face-to-face data collection processes is seen as an important element for the validity and reliability of scientific research and for establishing the ethical basis of such research. On this point, this study aims to determine field experts' opinions on collecting data through online surveys and the "volunteer basis" of academic research, and to compare voluntary participation in face-to-face and online survey data collection methods. In line with these purposes, the following questions are asked in the search for answers. (a) What are academicians' opinions regarding data collection through online surveys? (b) What are their views on the subject of voluntariness in social sciences research? (c) What are their opinions on voluntary participation in data collection using online surveys and on voluntary participation in data collection using face-to-face surveys?

Method

This research uses the interview technique, a qualitative research method used for in-depth analysis of one or more specific cases (Creswell, 2013). The interview method is seen as a strong data collection method due to the interactions between the researcher and data source and because it is easy for the researcher to confirm, explain, and elaborate the gathered data (Yıldırım & Şimşek, 2005). The semi-structured interview technique is used in the interviews conducted with the experts who have taught the scientific research methods courses. Semi-structured interviews provide greater flexibility than structured interviews (Firat, Kabakçı Yurdakul, & Ersoy, 2014; Türnüklü, 2000).

Participants

Purposeful sampling has been preferred for determining the study's participants. Purposeful sampling is an expedient sampling method in qualitative research (Creswell, 2005). In this method, people's qualities are taken as criteria and chosen to reflect the differences within the group to ensure the inclusion of certain qualifications (Berg, 1998). In this study, the following characteristics for the scientific research course were taken into consideration: (a) it deals with the process of collecting data in scientific research, and (b) it covers the subject of the validity-reliability aspects of scientific research, which include the concept of voluntariness. Acting on this basis, academicians who teach courses on scientific research in social sciences are thought to have more experience and knowledge on data collection and voluntary participation in social sciences studies and, therefore, have been identified as the research participants.

In purposeful sampling, the prerequisite in searching for the academicians to be interviewed is that they are to have taught a scientific research methods course for at least one semester at the undergraduate, graduate, or post-graduate level. Within this scope, 15 field experts who are academicians at Anadolu University in 2015 have been identified through purposeful sampling. Of these academicians, 10 have been interviewed. Their demographic information is given in Table 2.

Table 2
Participants' Features

Feature	Sub-feature	Number of participants
Gender	Female	6
	Male	4
Title	Professor	3
	Associate Professor	5
	Doctor	2
Institute	Institute of Social Sciences	5
	Institute of Education Sciences	5
Experience	1-10 years	7
	10-20 years	2
	over 20 years	1

The 10 academicians who participated in the research are seen to mostly have 1-10 years of experience teaching a research methods course in social sciences. However, all academicians are seen to have a doctoral degree in their fields; the number of participants from social sciences and educational sciences institutes is the same, with the number of females being one more than that of males.

Data Collection Tool

Semi-structured interview forms are used in the study as data collection tools. The semi-structured interview forms consist of three components. The first part of the form provides information on the subject, purpose, and scope of the interview. The second part of the interview is a written consent form that contains information on how the interview will be conducted; the recording techniques and tools to be used; how, under which conditions, and by whom the data will be preserved; how and for what purpose the data will be used and shared; and the researchers' contact information. In addition, the written consent form of the semi-structure interview includes a two-dimension written-consent chart on the participants' involvement. The first dimension is the participants' approval of the interview being recorded, and the second dimension is on sharing of direct quotations. The last component of the semi-structured interview form consists of three interview questions reflecting the purpose of the research. Auxiliary questions have also been prepared for each interview question.

The interview questions inquire into field experts' opinions on collecting data through online surveys and the "voluntary basis" of academic research, as well as a comparison of voluntary participation in face-to-face and online-survey data collection methods. The semi-structured interview form used in the research was presented to two academicians who are experts on qualitative research in terms of face and content validity. In line with the opinions received from academicians, the written consent and interview questions of the interview form were revised. Thus, the interview form was finalized before its application.

Data Collection Process

Printouts of the semi-structured interview form, which was prepared to determine the views of the academician experts in scientific research methods, were made. Fifteen academicians who instruct at the Institute of Social Sciences and the Institute of Educational Sciences were identified in the purposeful sampling. An appointment was requested from each academician for an interview. Appointments were secured with 10 academicians for the interviews. The most convenient time and place for the researchers and participants was determined, and the place and time of the interviews were recorded and made in accordance with this. Before passing on to the interview questions in the interview, informative and written consent forms for the semi-structured interview form were given to the participants. Participants were given time to examine and sign these forms. In this process, participants' questions were taken and necessary explanations were made. After receiving the participants' verbal consent one more time, the interview moved on to the questions. Beginning with the verbal consent, the interview was recorded using a voice recorder. The interviews took an average of 20 minutes, which included the examination and signing of the preliminary forms. After the interviews were completed, participants were given contact details and told they could communicate with the researchers at any time.

Analysis of the Data

The transcription and coding of the voice-record data obtained during the participant interviews was cross-checked by two researchers. The data from the voice records were transcribed into text and exported to the NVIVO package program for analysis. NVIVO is a program that can process most data types used such as documents, audio and video recordings, e-mails, visuals, and photographs, especially in qualitative research. Content analysis was used to analyze data from the semi-structured interviews. Inductive analysis was used for content analysis. Inductive analysis is a method that requires in-depth data analysis with the possibility of revealing previously unrecognized themes and dimensions to reach concepts and associations (Yıldırım & Şimşek, 2005). The data, which had been grouped

according to the research questions, were read for induction analysis, and the nature and general appearance of the data were revealed. Subsequently, the main themes and codes related to these main themes were drawn forth based on the research questions. Relations between themes and codes have been determined by taking into account the related literature together with the obtained data (Creswell, 2013). Finally, the findings were interpreted by enriching them with relevant texts according to their significance in response to the research questions, and interpretations were made using direct quotations. Code names like A1 or A10 were used instead of participants' real names.

Findings

This section contains findings from the conducted research. The findings obtained as a result of analyzing the semi-structured interview data with the NVIVO program are presented by supporting them with direct quotations in accordance with the research purpose and the research questions. Findings from the study are given under appropriate headings according to the relevant research questions.

Opinions on Collecting Data with the Online Survey Technique

Academicians' answers to the research question, "What are academicians' opinions on collecting data through online surveys" were analyzed. As a result of the NVIVO analysis, the main themes and codes connected to these main themes were drawn from the interviews. Three themes for this question were identified for online data collection: advantages, disadvantages, and recommendations. The themes of advantages/disadvantages for collecting online data and the codes for these themes are given in Figure 1.

The numbers on the arrows showing the relations of the main theme and codes on Figure 1 show how many times each code is repeated in the interview data. As shown in Figure 1, 10 participant field experts pointed out some advantages and disadvantages related to collecting data through the online survey technique. These advantages and disadvantages are given in codes. Collecting data through the online survey technique concluded with nine codes for advantages and five codes for disadvantages. From among the advantages, the ones most referred to are "More Participants" and "Ease of Data Processing." Direct quotations on experts' opinions on these two codes are given below.

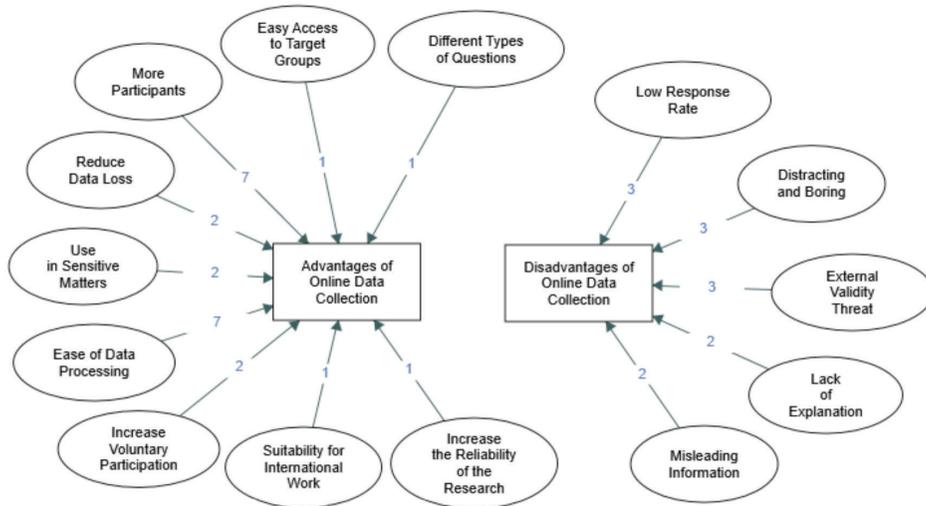


Figure 1. Advantages and disadvantages of data collection through the online survey technique.

You can reach large masses, but you cannot reach them face-to-face. I can say that this is more advantageous and superior in this respect. (A3)

The easiest thing with it is you can expect answers to all questions from people when you gather data. You can transfer data to the computer and start analysis immediately after collecting data. (A1)

As seen from the direct quotations, higher numbers of participants and easy data processing come into prominence. For the disadvantages of data collection with the online survey technique, participating field experts pointed out the codes of “Low Response Rate,” “Distracting and Boring,” and “External Validity Danger.” A direct quote taken from a field experts’ views on the code of “External Validity Danger” follows.

You may not be able to generalize the data that you’ve collected through the online environment survey method to people who cannot readily access those technologies offline. In other words, it is a danger to external validity. That is to say, if the subject matter of the study is not specifically related to the nature of online environments, it is dangerous to generalize the data you’ve collected through online surveys to people who have no opportunity to access an online environment or any knowledge about such technologies. The danger of being biased exists in the context of selection. So if you send millions or thousands of random invitations but only a small group responds, it may be that the responding group does not reflect those thousands/millions of invited people. Situations exist in studies where a small group responds after inviting large groups, as well as the cases in which they are analyzed, which means a danger exists contextually in its representation. (A1)

The third theme obtained from the answers given to the survey’s first question includes field experts’ recommendations for the technique of online survey data collection. This main theme and the codes under it are given in Figure 2.

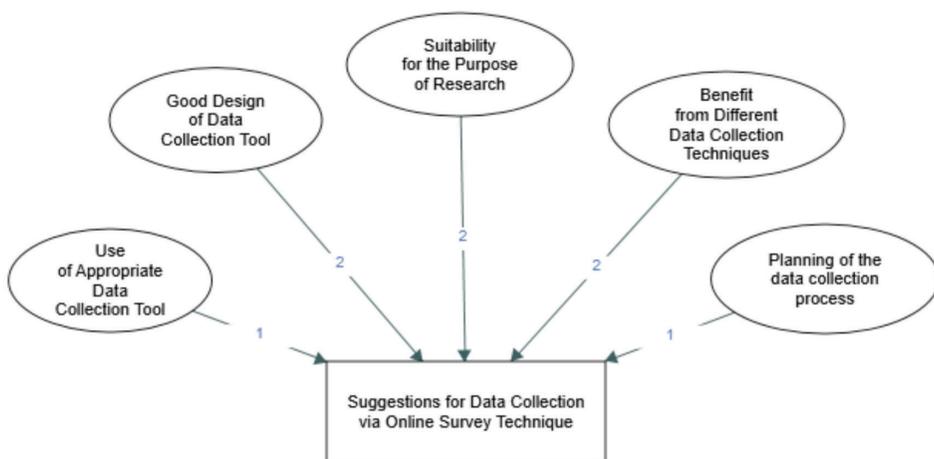


Figure 2. Recommendations on data collection through the online survey technique.

When examining the participating field experts' suggestions on data collection through the online survey technique, the codes, "Suitability for the Purpose of Research," "Benefit from Different Data Collection Techniques," and "Good Design of Data Collection Tool," are seen to come into prominence. Direct quotes from field experts on these three codes are given below.

Here, I think the purpose of your research is very important as you should decide whether or not you can collect data with an online survey based on the purpose of research, because not every kind of research is suitable for collecting data with online surveys. Namely, it may also require the face-to-face method. The purpose and participants' levels are important here. (A5)

They can organize surveys on the Internet and send mail to attendees, or put a tool on social media and access it through that tool. (A3)

If you don't design the online survey properly, problems arising from the design, from the technological infrastructure required by the survey (i.e., people with technical problems can't participate in the target group), or from some design elements originating from the nature of the survey can affect the results, such as problems encountered due to the reliability of the application. Therefore, it must be well-designed. (A1)

When examining field experts' opinions, one sees certain reasons are highlighted for these three emerging recommendations. Firstly, academicians emphasize that data collection should be done through online or face-to-face survey technique in accordance with the purpose and participant level of the research. In addition, academicians emphasize that different types of questions with multiple media support can be used in online data collection tools, and these tools must be designed clearly, understandably, and simply so as not to annoy participants.

Opinions on the “Voluntary Basis” of Social Sciences Research

Academicians’ answers to the research question, “What do you think about the ‘voluntary basis’ of social sciences research?”, were analyzed. As a result of the NVIVO analysis, the main themes and codes connected to these main themes were drawn forth from the interviews. The two main themes for this question are: “What can be done to ensure voluntary participation” and “Voluntary participation influences the research’s validity and reliability.” The codes from the main theme of “What can be done to ensure voluntary participation” are given in Figure 3.

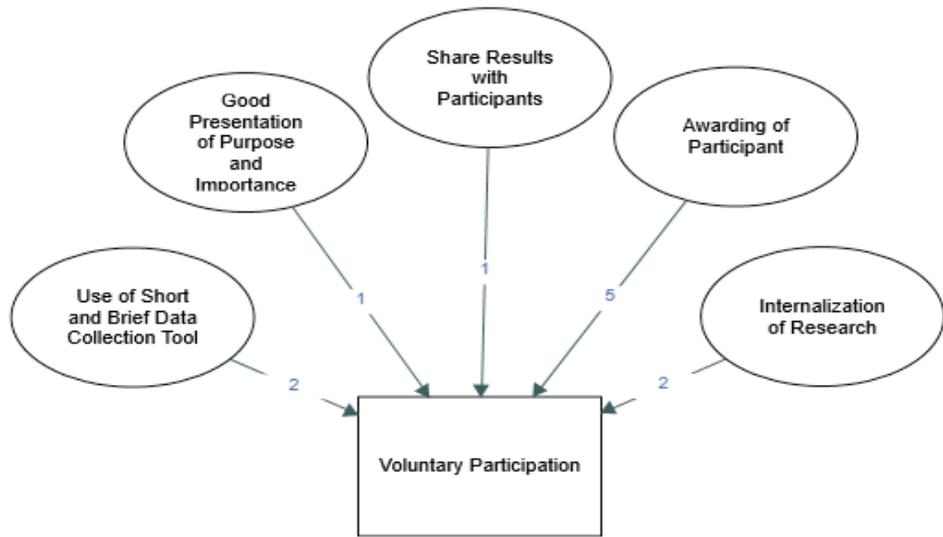


Figure 3. Ensuring voluntary participation.

As shown in Figure 3, field experts have submitted five code suggestions for voluntary participation. From these proposals, one sees that “Awarding Participants,” “Internalization of Research,” and “Using a Short, Brief Data Collection Tool” are highlighted. Direct quotes from field experts for these codes are given below.

Gifts can be given to increase voluntariness, and things can be done to thank the participants. (A7)

It is important that your participants feel safe so they can internalize the study because it will provide you with more accurate, sincere, and reliable information. And you need to respect that. (A6)

I have seen in my studies that if you are to explain your research briefly and concisely, you must explain the benefit of the research and be careful about it. If you tell how much information the researcher will use and use a more polite style in your informative text, I observed myself that you reach more qualified participants. Here, the information you have must be short, clear, and concise. (A2)

The direct quotations emphasize that awarding participants with a gift and a data collection tool being more explanatory and better designed can increase voluntary participation. The second main theme derived from field experts' views on the research's second question is that voluntary participation enhances the validity and reliability of the research. Nine participating field experts supported this theme. Accordingly, one direct quotation obtained from their opinions is given below.

Voluntariness is important because it affects the answers they give, as well as the validity and reliability, which are the two most fundamental processes of research. Answers collected through certain online tools can also influence privacy. If you cannot provide it, there may be problems with the validity and reliability. (A10)

Almost all field expert academicians stated that voluntary participation increases a research's validity and reliability. As seen in the direct quotation, the academicians stated the reason for this increase is that sincere and correct answers can be achieved only with voluntary participation.

Opinions on Voluntary Participation when Collecting Data with Online Surveys and Face-to-Face Surveys

The final question of this study is the comparison of voluntary participation in data collection with surveys in an online environment and voluntary participation in collecting data through face-to-face surveys. Field experts' opinions were re-sorted in order to find an answer to this question. Three main themes were reached after analyzing their views: "Voluntary participation is high in online data collection," "It is easier to ensure voluntariness in face-to-face data collection," and "Voluntary participation doesn't differ for face-to-face or online data collection." At this point, field experts' views lean towards data collection through surveys in both settings. The diagram for the obtained views is given in Figure 4.

As seen in Figure 4, field experts' opinions on voluntariness in data collection with online and face-to-face survey techniques are gathered under three groups. However, the opinion, "Voluntary participation in online data collection is high," is repeated six times, while the opinion, "It is easier to ensure voluntariness in face-to-face data collection," is repeated just once. However, the opinion, "Voluntary participation does not differ for face-to-face or online data collection," is repeated five times. According to field experts supporting voluntary participation in data collection through online surveys, participants feeling pressured, forced, not free, or uncomfortable are factors that make voluntary participation difficult in face-to-face data collection. In addition, field experts emphasize that voluntary participation is high in online environments because participants are more freely and broadly involved. One direct quotation from the field experts' views in this regard is given below.

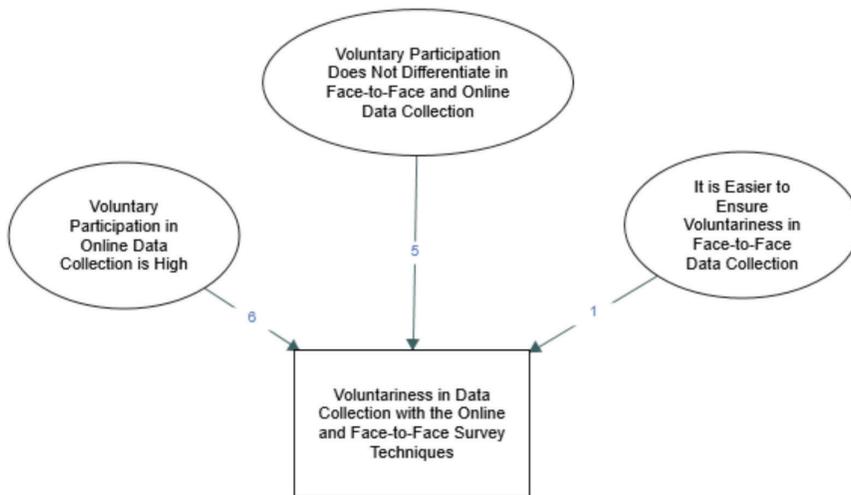


Figure 4. Voluntariness in data collection using online and/or face-to-face survey techniques.

Participants do not come face to face so they can express their thoughts more comfortably. Thus, those who fill in online surveys are the voluntary ones who fill them in genuinely. We can say that. (A5)

Field experts who claim it is easier to ensure voluntariness in data collection with face-to-face surveys explain their reasoning as participants in face-to-face data collection taking the research seriously and face-to-face communication being superior. A direct quotation from field experts’ views in this regard is given below.

Obviously there is a positive contribution from being face to face with the one conducting a survey. In addition to voluntariness, when you collect face-to-face data there is a possibility that people will take it more seriously face-to-face because they identify the researcher implementing the survey. (A1)

Field experts who advocate that voluntary participation does not differ for data collection through face-to-face or online survey techniques stated that voluntary participation doesn’t dependent on the environment but on the research subject and is influenced by the participant’s interests and motivations. A direct quote from the views of a field expert in this regard is given below.

I do not think it technically differs for me because voluntariness is a variable independent of being online or face-to-face. (A9)

The opinions of the experienced field experts who participated in the survey on data collection through face-to-face and online survey techniques can be separated into three. Firstly, one field expert reported that voluntary participation is easier to achieve in face-to-face data collection because seriousness can be achieved and communications with the participant is stronger. However, six of the ten participating

field experts claimed that voluntary participation is higher in online data collection. The basic reasons for this are that participants are freer in online environments and are under more pressure in face-to-face environments. In addition, half the field experts stated that voluntary participation is related to the interests and motivations of the participant and independent of the setting in which the research is conducted.

Discussion

This study aims to determine the opinions of academicians giving courses on scientific research methods in the field of social sciences on the advantages and disadvantages of collecting data through online surveys in ensuring voluntary participation in social sciences research, on voluntariness, and on the comparison between the online-survey data collection method and the face-to-face data collection method within the context of voluntary participation. Findings for each research question as determined in the direction of the research's aim are discussed under this heading. Accordingly, the field experts' opinions on data collection through online surveys are analyzed first. As a result of the content analysis, field experts have found that collecting data through online surveys is prominent, with such advantages as facilitating data processing, collecting data faster from more participants, having less data loss, supporting data collection tools through multimedia and different types of questions, increasing voluntary participation, and being able to research sensitive and confidential matters, while having disadvantages such as low response rates, external validity dangers, lack of explanations, and being bothersome/boring.

Findings related to the limitations and advantages of collecting data through online surveys are also supported by the research in the literature review. A study by [Naquin et al. \(2010\)](#) found that respondents who answer surveys by e-mail were more misleading than those responding through paper-based methods. Accordingly, one can show that having more misleading answers is one of the disadvantages of collecting data through online surveys. One of the reasons why participants respond more misleadingly in online environments can be said to be that their personal information is hidden in online environments. In order to avoid this situation, one needs to ensure that participants respond to questionnaires voluntarily. However, hiding personal information in online environments can be said to be advantageous in terms of voluntary participation for certain cases. In this regard, [Hoerger \(2010\)](#) indicates online surveys are an important part of ethical and voluntary participation in the psychological research process and that surveys conducted in online environments are more flexible than those conducted face-to-face; online surveys may produce more positive results in cases where participants are sensitive and do not want their identities to be revealed.

On the basis of the views examined in the codes for the disadvantages of data collection through online surveys, the disadvantages are understood to be mainly due to technology-based research culture and its prevalence not having been established. These findings regarding the advantages and disadvantages of online data collection demonstrate that research experts greatly emphasize the advantages of online data collection. This view is supported by [Çakıroğlu \(2007\)](#), who emphasized that some considerable advantages exist apart from the disadvantages of data collection in online environments. As a result of examining the opinions of field experts for the first research question, four basic proposals were determined to appear related to data collection through online surveys. These recommendations are: selecting data collection techniques appropriate for the purpose of the research; designing data collection tools informatively, clearly, intelligibly, notably, and interestingly; having a valid and reliable data collection tool; and having a data collection tool with components that provide data diversity. These proposals can be said to have been emphasized in relevant studies in the literature. Informing participants was emphasized by [Colburn \(2008\)](#), selecting data collection methods appropriate to the research purpose was emphasized by [Akbulut \(2015\)](#), while having flexibility that supports voluntary participation was emphasized by [Olsaretti \(2008\)](#) and [Colburn \(2008\)](#). Similarly, [Payne and Barnfather \(2012\)](#) emphasized that in research data collection techniques should be appropriate to the purpose and that target audiences' characteristics must be selected.

When field expert's opinions on voluntary participation in social sciences research are examined, it is found that they make some suggestions on what should be done to achieve voluntary participation. These suggestions may be cited as, rewarding, internalizing the research, asking short and concise questions, sharing the results with participants, and explaining the purpose and importance of the research well. These measures to ensure voluntary participation are also in line with the measures proposed by the relevant research. [Geray \(2004\)](#) stated that appropriate research methods and appropriate voluntary participation measures would increase the effectiveness of the research. It is also stated by [Colburn \(2008\)](#) that whether it is voluntary or not is related to the motivation of the individual, and that the choices that keep the motivation of the individual high are chosen voluntarily. Preferring options that motivate people are among the basic principles of voluntariness ([Colburn, 2008](#)). In this context, it is important for researchers to inform the participants in details about the research content and to present the content of the research in a way that motivates the individual so that the participants can decide voluntarily ([Olsaretti, 2008](#)). Similarly, [Creswell \(2013\)](#) stated that forcing the participants and exploiting the power held by the researchers were wrong, adding that motivation should be kept high so that participants can participate in the study voluntarily and that research should provide benefits to the participants in order to keep their motivation high.

In addition to what can be done to ensure voluntary participation, field specialists have also emphasized that voluntary participation can increase a study's validity and reliability. The reason for this is that voluntary participation has a significant effect on the validity of data. This view is also supported by research from the literature (Meade & Craig, 2012; Uzbay, 2006). In a thesis study, Topu et al. (2013) determined that participants' voluntariness was taken as a validity measure for all qualitative method theses and most quantitative and mixed method theses examined in the scope of their study. Pace and Emanuel (2005) proposed that rewards can similarly be used for voluntary participation. When examining field experts' opinions on data collection through online and face-to-face surveys, almost all experts were determined to express the opinion that data collection through online survey increases a survey's validity and reliability. Based on field experts' views, the pros and cons of voluntariness in data collection through online and face-to-face survey were tabulated. The comparison made is given in Table 3.

Table 3
Pros/Cons of Voluntariness in Data Collected through Online and Face-To-Face Surveys

Feature	Online	Face-to-Face
Participants feel pressured to participate in the survey	+	-
Participants feel compelled to participate in the survey	+	-
Participants feel free to participate in the survey	+	-
Participants feel comfortable during the research	+	-
Participants can participate in the survey at any time they like	+	-
Participants can leave the research at any time they like	+	-
Participants take the research seriously	-	+
Participants give misleading response to the survey	-	+
Participants establish face-to-face contact with the researcher	-	+

+ = Pros, - = Cons

As seen in the table, collecting data through online surveys turns out to provide a more suitable environment for voluntariness than data collected through face-to-face surveys. The field experts explain the reason of this as being that participants can participate in research in online environments more freely and flexibly, without feeling compulsion or coercion, and independent of time and space. In addition, field experts emphasize that participants may feel obligated or under certain pressures even though face-to-face data collection makes surveys more sincere and less misleading through face-to-face communication opportunities with the researcher. In a study by Stanton and Rogelberg (2001), the fact that individuals can express their thoughts freely and clearly in electronic environments also supports these findings. Similarly, these findings support Agrawal's (2003) finding that the most striking factors threatening voluntariness are coercion and compulsion. In social sciences, whose basic element is humans, participants' voluntary participation in research without any constraint is considered an indispensable feature of valid and reliable research (Appelbaum et al., 2009b).

Conclusion and Suggestions

Social sciences are a field of research whose subject is humans and an area that examines the human and social aspects of the world and life (Rosenberg, 1988). Therefore, the human factor is of great importance in studies carried out in this field. For this reason, observing the principle of voluntariness in researches carried out in the field of social sciences can be said to be crucial for the success of a research. The current research examines the issue of voluntariness in data collection through online and face-to-face surveys. For this purpose, interviews were held with field experts experienced in teaching research methods in social sciences. The opinions of 10 scholars who are experts in scientific research methods in social sciences were subjected to content analysis to search for answers to three predetermined research questions, thus reaching the themes and codes for each research question. These themes and codes have been discussed alongside the related literature.

In this study with respect to the first research question, academicians who teach research methods in social sciences positively approach collecting data through online surveys, though they had certain reservations. Field experts view participants' ability to engage research freely, independently, and flexibly without pressure as the most important advantage of collecting data through online surveys. Low response rates, threats to external validity, lack of explanations, being disturbing and boring, and giving misleading answers emerged as its most important disadvantages. Finally, suggestions were made to select data collection techniques appropriate for the purpose of research and use valid, reliable, multimedia-rich data collection tools for data collected through online surveys. Based on these research results, one can say data collected through online or face-to-face surveys must be selected appropriate to the research purpose, both techniques have certain advantages and disadvantages, and data collected through online surveys are relatively more advantageous in terms of voluntary participation.

As a result of the findings and discussions related to the second research question, field experts were determined to view voluntary participation in social sciences research as an indispensable component of valid and reliable research. The field experts also pointed out that measures can be taken to ensure voluntariness, such as giving rewards, internalizing research, asking short and concise questions, sharing results with participants, and explaining the purpose and importance of the research. These recommendations are consistent with those presented in the literature. When discussing the findings for the last research question, field experts were determined to express that collecting data through online surveys supports voluntary participation more than face-to-face surveys. Both data collection techniques were concluded to have advantages and limitations, and that the appropriate technique should be selected according to the research purpose.

While the advantages of collecting data through online surveys, which has become prominent, are its potential to reach private research groups that are normally difficult to reach and its abilities to provide a faster, more flexible environment for participants and to facilitate data processing, the advantages of face-to-face surveys are fewer misleading responses, higher response rates, and opportunities for communications between participants and researchers. In addition to these results, some suggestions can be made for future research.

Suggestions for Research

The findings and results of this research can be strengthened in the future by analyzing the opinions of field experts from different fields. Nevertheless, participants are the most important element of research on voluntary participation in social sciences research and on voluntary participation in online data collection. For this reason, future research can carry out extensive investigations on voluntary participation in social sciences directly through the views of participants. In addition, those who participate both in online and in face-to-face data collection processes can be consulted, and research may be conducted on their opinions with respect to voluntariness in both methods. Thus, voluntary participation in both methods of data collection can be compared. In the social sciences, collecting data online where it is normally difficult to reach specific target groups may be useful. Collecting online data can be used as an effective method when working with groups in need of special education in the education sciences, disadvantaged individuals in society, and groups with special skills or abilities. Likewise, online data collection can be applied in the case of research with groups that do not have face-to-face study opportunities in distance education. The fact that the current educational practices of distance education are based on online environments and tools opens up this area for online data collection and scientific research. Due to the nature of today's distance-learning practice, benefitting from the advantages, convenience, and opportunities of online data collection has become possible. In this context, extensive researches is thought doable in the field of distance education using current online research methods and techniques such as learning analytics, social network analysis, and large data analysis.

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