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Experimental methods in sociology used in sensitive questions: List experiment example

Abstract. This article explores experimental methods in sociology that are used to address sensitive questions. Sensitive questions are those that involve socially stigmatized or taboo subjects, such as illegal activities, personal beliefs, and sexual behavior. The use of traditional survey methods to investigate sensitive questions may lead to response bias or social desirability bias. To overcome these limitations, scientists have developed innovative experimental methods, such as the list experiment.

The list experiment is a survey-based technique that provides respondents with a list of items and asks them how many items on the list they have experienced or endorse. Unlike direct questioning, this method allows respondents to express their opinions anonymously and reduces social desirability bias. Moreover, the list experiment can estimate the prevalence of sensitive behaviors or attitudes without revealing individual responses, which makes it particularly useful in studying politically or socially sensitive topics.

This article describes the theoretical foundations, design, and implementation of the list experiment. With the help of the VOSviewer program, a bibliographic analysis was carried out based on Scopus database. At the same time, it discusses the advantages and limitations of this method compared to other experimental techniques and highlights some of its practical applications in sociological research. Overall, this article provides a comprehensive overview of the list experiment and its contribution to the advancement of sociological research.

Keywords: sociology, sensitive questions, list experiment, bibliographic analysis.

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Introduction

Sociology is the science of social phenomena and processes in society, and experimental methods in sociology are important for studying social phenomena and relationships between people. Especially important is the use of experimental methods in sensitive issues that may cause dislike, shame or inconvenience in research participants. One of these methods is the list experiment, which will be discussed in this article.

Sociological experiments are one of the most common research methods in sociology. They allow you to study social phenomena, determine their causes and effects, and establish relationships between various variables. Experimental methods have certain advantages over other methods of sociological research, such as simple surveys, observations and data analysis, as they allow you to establish causal relationships between variables and control the influence of external factors.

Since the time of Comte, sociologists have been looking for a method applied to the data of society that would give the same positive results as those achieved in the field of physical science. The experimental method has made a great contribution to the achievements of modern science. This method allows you to analyze causal relationships faster and more clearly than other methods. The studies of many scientists allow us to judge in this way. Experimental

methods have replaced unfounded prejudice with a certain kind of evidence that has achieved sufficient certainty to justify the prediction.

An experiment is simply observation under controlled conditions. When observation alone fails to reveal the factors at work in a given problem, the scientist has to resort to experiment if necessary. The line between observation and experiment is not very clear. Observation tends to gradually take on the character of an experiment. An experiment can be considered started when there is a real human intervention in the conditions that determine the observed phenomenon (Chapin and Stuart, 1917).

The social sciences, beginning with psychology, have borrowed the experimental method from the natural sciences. Psychology was fully embraced by experiment only after 1900. Wilhelm M. Wundt (1832–1920), a German psychologist and physiologist, introduced the experimental method to psychology. In the late 1800s, Germany was the center of graduate education, and sociologists traveled there to study from all over the world. Wundt founded a laboratory for experiments in psychology, which became a model for social research. By 1900, US universities and elsewhere established psychological laboratories to conduct experimental research. The experiment supplanted a more philosophical, introspective, integrative approach in psychology that was closer to the interpretive approach of the social sciences (Newman, 2014: 284-286).

From 1900 to 1950, social researchers developed the experimental method until it became widely used in some areas. The attraction of the experiment lay in its objective, unbiased, scientific approach to the study of mental and social life in an era when the scientific study of social life was only gaining wide public recognition. According to Newman, four trends have accelerated the spread of experimental social research: the growth of behaviorism, the spread of quantification, changes in the composition of research participants, and the practical application of the method (Newman, 2014: 284-286).

Bryman argues that true experiments are rather uncommon in sociology, but are used in related fields of research such as social psychology and organizational studies, while social policy researchers sometimes use them to assess the impact of new reforms or policies. In addition, the present experiment is often used as the yardstick by which non-experimental studies are judged. Experimental studies are often viewed as a touchstone because they generate significant confidence in the reliability and validity of causal relationships. In other words, actual experiments tend to be very strong in terms of internal validity (Bryman, 2012: 50). The experiment is distinguished by the activity of the researcher, who determines the conditions under which the study will be conducted. Wholly or partly, the researcher creates, builds, or controls the study parameters (Willer and Walker, Building Experiments, Testing Social Theory, p. 2). Experimental studies are based on the principles of the positivist approach. Natural scientists, like chemists or biologists, as well as researchers in related applied fields: in agriculture, engineering and medicine, conduct experiments. Experiments are used in education, criminal justice, journalism, marketing, nursing, political science, psychology, social work, and sociology to explore many social issues and theories. As Pager's (2007) experiment on race and criminal record in job search in the introductory box shows, the (replace your) experiment provides us with strong evidence of how one or two variables affect the dependent variable (Newman, 2011: 282).

In common sense language, experimenting means modifying something in a situation and then comparing the result with what existed without the modification. The experiment begins with a «cause hypothesis». (Newman, 2011: 282). Experimental technique is usually best suited for questions that have a narrow scope or scope (Newman, 2011: 283).

For researchers in various fields who research sensitive topics, it is difficult to get truthful answers from respondents. Survey questions on sensitive topics such as drug use, sexual behavior, voting, and income data often result in relatively higher non-response rates or higher measurement errors in response than questions on other insensitive topics. People sometimes hide their actions and opinions, occasionally they can refuse to answer questions, thinking about the norms that are inherent in a certain society (Blair and Imai, 2012). Underreporting of sensitive behavior seems to be a common occurrence in surveys. Respondents deny extreme

or unpopular views, especially racist views, and underreport a range of sensitive behaviors, including illicit drug use, alcohol use, smoking, abortion, energy consumption, certain types of income, crime victimization, and criminal behavior (Tourangeau and others, 2000: 269-270). It is hard to define intrusive or threatening questions, but Tourangeau, Rips, and Rasinski (2000) in their work distinguish three different meanings of «sensitivity». First, questions can be seen as intrusive. Secondly, there is the threat of disclosure, that is, the fear of possible consequences if the data becomes known to others. Third, the traditional concept of social desirability, where a question elicits responses that are socially unacceptable or socially undesirable (Tourangeau and Yan, 2007: 860). That is, «the social (un)desirability of responses, the invasion of privacy, and the risk of disclosing responses to third parties» (Tourangeau and others, 2000: 257). As well as the systematic misrepresentation of information on sensitive topics in surveys, usually takes two forms. First, respondents consistently underestimate socially undesirable behaviors and consistently miscalculate desirable ones. Sexual behavior reports are a particularly interesting case from a methodological point of view since men are prone to one form of error and women to another (Tourangeau and others, 2000: 269-270). In general, there are several reasons why it can be difficult to get accurate answers from respondents on sensitive topics in sociology. social desirability bias, fear of judgment, lack of trust, confidentiality. Indeed, it is important that sociologists be aware of these factors when designing surveys or conducting research on sensitive topics and take steps to address these issues in order to obtain the most accurate data possible.

As we have previously identified, many researchers who study sensitive, embarrassing, incriminating topics have trouble getting reliable information in surveys. The form of the survey may be different: direct or indirect, and the identity of the respondent may be known or hidden. But in any cases, the magnitude of bias depends on the degree of respondents' confidence in the anonymity of their answers. It is also important to consider the time, cost, accuracy, and acceptability of the method being used. Various solutions to this problem have been given by researchers. As we know, a universal method for all situations has not been developed, so it would be better to consider alternatives.

Since the middle of the last century, the list experiment method has been widely used in the academic community. First there was the «Black Box (BB)» method, then other scientists began to improve it and methods appeared like «Randomized Response Method (RRT)», "Block Total Response (BTR)", "List experiment (or ICT, UCT)". For example, «Black Box» (BB) method is the anonymous direct question method. The process is that the respondent secretly completes an unmarked questionnaire and places it in a large, locked box in which other questionnaires are stored. The contents of the box are then thoroughly mixed in front of the respondent (Raghavarao and Federer, 1979).

The second method of obtaining correct answers to sensitive questions known as the randomized response method (RRT), created in 1965 by Warner, is a well-known method in this field. Since its inception, there have been several extensions to the theory and use of the RR procedure (see, for example, Greenberg et al., 1969; Warner, 1971; Folsom et al., 1973). RR is considered to be a very useful technique, but one must take into account the situations where it is applied (Raghavarao and Federer, 1979). Since, depending on the specific situation, its applicability may vary like other methods.

The next method, which has an anonymous-direct approach, is called «Block Total Response (BTR)» or «Block total response technique (BTRT)». In 1979, Raghavrao and Federer introduced a method to enhance the anonymity of respondents which focused on the development of innovative randomization devices for both qualitative and quantitative characteristics. They include the main elements of the experimental design of the RRT method. The method allows for assessing the level of a sensitive problem among the population, overcoming the prejudices that arise due to false reports.

One of the popular options for the aggregate response and the method that is our subject of study is the list experiment. It is called differently by different researchers, for example Raghavarao and Federer (1979) used the name «Block Total Response (Block Total Response)», and Miller (1984) «Item-Count Technique», Dalton, Wimbush and Daily (1994), Kuklinski, Cobb, and Gilens (1997) used the name «List Experiment» and this name we use in this article. Researchers like Dalton, Wimbush and Daily (1994), Tourangeau, Rips and Rasinski (2000), Ahart, Alison and Sackett (2004), Glynn (2013), Li and Noortgate (2019) found that the list experiment has gained popularity and become a more suitable method that can give better results compared to other methods at this time.

The purpose of our research is to study the consistency and effectiveness of the list experiment method.

Discussion

Method: List experiment

The use of experimental methods in sensitive issues has been a subject of interest for sociology and beyond for several decades (Nuno and John, 2015: 4). Scholars and researchers who work with the public face the limitation of not getting answers to their questions from respondents. The question arises why people do not answer the questions asked with the truth, why we see distortions. There are multiple theories like Cognitive Dissonance Theory, Reasoned Action and Planned Behavior Theory, Adult-to-Adult Communication Theory, Gamification Theory, Influence Theory, Presuasion Theory, Leverage Saliency Theory, Benefit-Cost Theory, Social-Exchange Theory (Dillman, 2020) that attempt to explain the number of non-responses. Many of the theoretical views are socio-psychological in nature, emphasizing that these constructs influence behavior. Thus, most of the seven categories of influences identified earlier in this chapter are simply ignored. Because there were these changes in survey methods and factors that could greatly improve response rates, the response rate theories used by some to guide design were not particularly helpful. It seems like a good time to update and rethink theories so that they can provide better guidance for designing future surveys that will provide reasonable response rates and be representative of the survey population (Groves et al., 2004).

Over the past few decades, various survey methods have been developed and successfully applied, including the list experiment method. Recently, this method has received much attention from sociologists as an alternative survey methodology that offers a potential solution to this measurement problem (Blair and Imai, 2012).

In this article we will focus to the list experiment method, also known as unmatchedcount technique (UCT), or item count technique (ICT), which has been used in the last three decades to ask about sensitive topics such as sexual risk behaviors, dangerous driving, racial prejudice and illegal bushmeat hunting (A. Nuno and F.A.V. St John, 2014: 4). As an empirical illustration, the proposed methodology is applied to the 1991 National Race and Politics Survey, in which researchers used the item count method to measure the extent of racial hatred in the United States. Fine-scale modeling studies show that maximum likelihood estimation can be significantly more efficient than alternative estimates (Imai, 2011). And also this method was used to assess the: baseline for a number of prohibited activities for professional auctioneers (Dalton, Wimbush, & Daily, 1994); baseline rates of sexual risk behavior and post-alcohol sexual risk behavior (Joseph W. LaBrie and Mitchell Earleywine, 2000); baseline rates of gay hate crime among college students (Nadine Recker Rayburn Mitchell Earleywine Gerald C. Davison, 2003); public reaction to the nomination of Jewish candidates for high office (James G. Kane, Stephen C. Craig, Kenneth D. Wald, 2004); whether people voted for a referendum against abortion (Bryn Rosenfeld, Kosuke Imai, Jacob N. Shapiro, 2015); self-reported attitudes towards abortion (Heidi Moseson, Caitlin Gerdts, Christine Dehlendorf, Robert A. Hiatt and Eric Vittinghoff, 2017); sexual violence during war (Richard Traunmuller, Sara Kijewski, and Markus Freitag, 2019), etc.;

Based on world experience, it has been observed that the list experiment method collects more correct answers to sensitive questions than the «direct questioning (DQ)» and RRT methods. (Takahirotsuchiya Yoko Hirai Shigeru Ono, 2007; Elisabeth Coutts And Ben Jann, 2011;

Bryn Rosenfeld, Kosuke Imai, Jacob N. Shapiro, 2015; Jiayuan Li And Wim Van Den Noortgate, 2019 And Others). We will try to analyze this fact that based on previous studies.

A variant of this method was originally proposed by Raghavarao and Federer (1979), who called it the full block response method, and has been applied in various disciplines (Blair and Imai, 2012: 48). Raghavarao and Federer (1973), apparently building on Warner's (1971) work on developing linear randomized response models, presented the original technique, then called «balanced incomplete block design,» in a series of notes from the biometrics department at Cornell University. The conceptual work that followed, focusing on the statistical foundations of the method, has been criticized based on computational complexity, which may be beyond the will or ability of some subjects (Dalton and others, 1994: 819). It was subsequently developed and empirically tested by Miller (1984) (Wolter and Laier, 2014: 154).

List experiment does not allow the researcher to draw conclusions about the behavior of respondents based on survey responses. It asks respondents directly about their own sensitive behaviors, while at the same time asking them about a range of neutral or socially desirable behaviors. Estimating the prevalence of sensitive behavior requires estimating the cumulative prevalence of other behaviors (Coutts, Jann 2011: 172).

How this method works?

List experiment - type of survey-based experimental method used to study sensitive questions in sociology and procedure designed to increase the reliability of collecting confidential information. The basic protocol for LE is to randomly allocate people into two groups. One of these groups receives a series of nonsensical statements. Individuals in this group are asked to indicate the number of statements that are true in their case. It is important to note that the individual does not indicate the exact statements that are true, but how many of them are true. A person whose answer is 2, for example, indicates agreement with two of the five statements.

The second group receives six statements, five of which are harmless and identical to those received by the first group, and one additional statement that is sensitive. People in this group are also asked to indicate the number of statements they agree with. Since the groups are randomly assigned, the differences in the mean responses for the two groups should be a function of some individuals in the second group indicating agreement with the sensitive statement. From this information, an estimate of the base speed for the sensitive behavior can be obtained. But sometimes the number of questions can be different depending on the researchers methodology.

It should, however, be recognized that some of the observed differences, despite random distribution, may be some function of the differences between the two groups, not entirely related to the number of subjects considering the additional survey. It is clear that this trend is minimised and the stability of the estimates increases as the group sample sizes increase (Dalton and others, 1994: 818). In Table 1, we see a good example of list experiment questions from the field of racial prejudice, which shows good calculations, presented by Kuklinsky, Cobb and Gilens (1997).

Table 1

Example of Item Lists

Source Question	Kuklinski et al. (1997, p. 405) "Now I'm going to read you three/four things that sometimes make people angry or upset. After I read all three/four, just tell me how many of them upset you. I don't want to know which ones, just how many."	
List A with non- sensitive questions	 The federal government increases the tax on gasoline; Professional athletes getting million-dollar salaries; Large corporations polluting the environment. 	
List B with sensitive questions	 The federal government increases the tax on gasoline; Professional athletes getting million-dollar salaries; Large corporations polluting the environment. A black family moving in next door. 	

Source: Kuklinski et al. (1997, p. 405)

In a 1991 study by the National Survey of Race and Politics, respondents were asked questions that appear in the table. The goal of the researchers was to get an estimate of the proportion of people who were dissatisfied with the racial element. This element is a black family moving next door. From there it was necessary to calculate the average level (Middle Level) of the reported elements in both groups, and then look at the difference between these two states. To get the difference, the original condition is subtracted from the test condition (Gosen, 2014, 26-27). The advantage of the list experiment is that the questions do not have to be answered directly. A sensitive question is asked in an indirect way, so respondents are not afraid to give truthful answers. Since no one will know exactly what he meant. In this case, a negative answer about a black family is contrary to the generally accepted norm of equality and other nations should not be discriminated against on the basis of their ethnicity (Blair and Imai, 2012: 48).

Estimation

To obtain an estimate of the proportion of people dissatisfied with a racial trait, the mean level (ML) of reported items in both groups is calculated and the difference between the two conditions is then determined. For this, the following formula is used:

$$p = ML_{TC} - ML_{BC} \tag{1}$$

TC = test condition (with sensitive item)

BC = baseline condition (nonsensitive items)

In (Kuklinski, Cobb, & Gilens, 1997) the difference between the two was 0.42. It must be multiplied by 100 and we get 42%. This means that «42% were outraged by the claim that a black family lives next door.»

Some researchers use the «Difference of Proportion Test» which includes z-statistics:

$$Z = \frac{(abs(p_1 - p_2))}{\sqrt{(SE_1^2 - SE_2^2)}}$$
 (2)

z = standard score

p = population

SE = standart error

Here's the standard error:

$$SE_p = \sqrt{(p*(1-p))/n}$$
 (3)

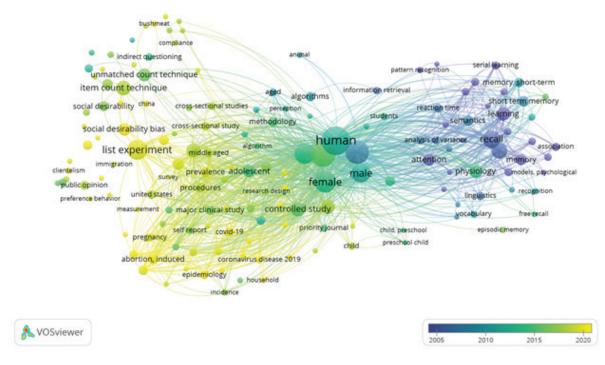
p – sample proportion

n – the sample size, which is the total number of observations in the sample

The Difference of Proportion Test helps assess «how the list experiment reduces the social desirability bias, the list experiment evaluation compares to direct self-report questions» (Gosen, 2014: 27-28).

Method

In this article, a bibliometric analysis was done using VOSviewer. This software allows clustering and network analysis of literature related to the research topic. To find out how often the researchers used the term «list experiment» in their work, a sample (n=483) was collected based on the Scopus database (www.scopus.com). The key search terms were «list experiment», «item count technique», «unmatched count technique» (the following query was used for the analysis: «list experiment» or «item count technique» or «unmatched count technique», as they can swap with each other). During the search on this database, 483 works related to this topic were identified (Map 1).



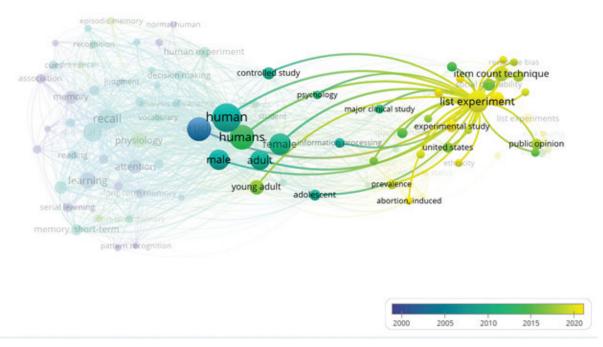
Map 1. Bibliometric map of publications

(Source: Scopus, tool: VOSviewer: Keywords: list experiment, item count technique, unmatched count technique)

A VOSviewer map built on the basis of Scopus search results for keywords related to the topic of the article can help to understand the structure and relationships between scientific articles related to this research method. The article deals with social sciences, for this reason,

changes were made in the scopus database and restrictions were added in subjects like «Social sciences», «psychology», the sample was reduced by 304 (map 2).

(«list experiment») or («item count technique») or («unmatched count technique») and limit to (SUBJAREA, «SOCI») or limit to (SUBJAREA, «PSYC»).



Map 2. Bibliometric map of publications

(Source: Scopus, tool: VOSviewer: Keywords: list experiment, item count technique, unmatched count technique)

The VOSviewer map can help identify key topics and areas related to the «list experiment», «item count technique», and «unmatched count technique». It can also show which terms are most related to each other and help identify trends and directions for research in this area. Node shows selected terms used in scientific articles related to «list experiment» techniques. And Link shows the relationship between nodes, which indicate the similarity or difference between terms. The larger the node size, the more often the term is mentioned in scientific articles. The more uses of a term, the larger its node on the map. The color of the node is used to display the frequency of the term. Clusters are groups of related terms that are often used together (Van Eck and Waltman, 2023: 9-10).

Based on this map and the data that was obtained from the Scopus, it can be seen that in recent years the number of articles related to this topic has been increasing (2020 = 26, 2021 = 32, 2022 = 42). Among them, in the social sciences 230, in psychology 123, in the humanities 94. Especially in the USA (173), Great Britain (45), Germany (26), Canada (22) it is most used. Based on this analysis, we can say that this topic is relevant, especially in the social sciences.

Results

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The list experiment, a technique that has gained popularity in recent years due to its ability to measure sensitive attitudes or behaviors in a way that is less subject to social desirability bias. The results of this study support the idea that this experimental method can be a valuable tool in the study of sensitive topics in sociology. Using the randomized response method, the list experiment can provide a more accurate estimate of the prevalence of stigmatized attitudes or behaviors. List experiment method has some advantages and disadvantages, here are some of them:

Advantages and Disadvantages of List Experiment

Advantages of List Experiment

Disadvantages of List Experiment

Enhanced confidentiality. This method is useful in situations where participants may be reluctant to give honest answers to sensitive questions in a direct interview. The list experiment increases the privacy and anonymity of the participants and therefore reduces the social desirability bias and increases the chances of getting more accurate answers (Ahart, 2004, Coutts, 2011: 184)

It is important to consider the cultural context. On the topic, people's reactions can change, as values differ in different societies. For example, social desirability pressures may not influence Americans' responses to online surveys (Holbrook, 2010), but they may bias Japanese responses (Tsuchiya, Hirai, and Ono 2007). The cultural context is important. Thus, this method may not work in some situations, depending on the topic (Gosen, 2014: 81-82) since different topics can be perceived differently.

Reducing social desirability bias. With this method, social science researchers can evaluate socially undesirable behavior, as it helps reduce the social desirability bias that is often associated with direct questioning. It also removes the incentive to deliberately lie and removes the motivation to distort information about oneself ((Holbrook & Krosnick, 2010: 57, Lépine, Treibich, & D'Exelle, 2020)

It is necessary to take into account the education of the respondents. To successfully conduct a survey, respondents must understand how this method works. If the anonymous feature of LE is not understood, the answers may be skewed. Therefore, this method is more effective for highly educated respondents (Tsuchiya, 2007: 269).

Ease of implementation and economy. Does not require respondents to be randomized. This simplicity may allow many applied researchers to use this method when designing their own surveys (Imai, 2011: 414-415). It is also relatively simple and cost-effective to implement because it requires minimal resources and can be applied to a large group of people at the same time. In addition, it is economical to conduct if conducted through online surveys or telephone surveys.

High sample variance. Large samples are required to obtain accurate estimates (Coutts, 2011: 184; Ahart, 2004: 112-113).

Clarity. Respondents can easily understand why LE provides privacy (Imai, 2011: 414-415).

Limited number of items. It is possible to include a limited number of elements in the list, which can make it difficult to study complex phenomena or measure multiple dimensions of a single design.

Utility. Qualitatively conducted research using LE can provide valuable information related to sensitive topics. In the future, this data can have an important impact, because it can serve as a basis for social policy and interventions (Dalton, 1994: 826).

Lack of control. In conducting a study using the LE method, participants in the experiment are expected to randomly select items from a list. Because this method is based on assumptions, it is difficult to predict and control respondents' responses given potential confounding factors.

Generalizability: In the case of large-scale studies, the results can easily be generalized.	Interpretation of results. Interpreting the results can be challenging, especially when the items included in the list are related to each other or when they measure different constructs.
	Sample questions. The sample for the LE method must be representative to ensure the validity of the results. But sometimes it is difficult to get a truly representative one, especially when studying hard-to-reach populations.
	Experimenting with lists requires careful construction of elements. Other items on the list should be similar in content and context to sensitive items so that they do not influence respondents' responses to sensitive questions. If respondents find sensitive questions, this may skew the results and limit the accuracy of the measurement.

Source: Own table based on previous studies.

Overall, the results show that list experiments are a promising method for exploring sensitive topics in sociology, especially when traditional survey methods are not possible or when respondents are hesitant to give honest answers. When implementing this method, there are important points that need to be considered in carrying out:

- The method may be more effective for highly educated respondents to understand the complete anonymity that LE can offer (Tsuchiya, 2007: 269). Failing that, Bell and Bishai (2019) suggests using fewer control elements (three elements). Fewer items can minimize the cognitive needs associated with answering questions, which can help implement the method in low literacy settings (Bell and Bishai, 2019: 15-16).
- The interviewer should inspire confidence (Bell and Bishai, 2019; Tsuchiya, 2007: 269)), they can be taken from local communities and questions and list items need to be adapted due to cultural characteristics; And also, in the preparation of interviewers, regardless of the fact that they participated or not in this method, it is necessary to devote sufficient time to their training. It should always be stated that this technique completely preserves the anonymity of the respondents and that even the interviewers will not know what they have chosen in the list (Bell and Bishai, 2019; Ahart, 2004: 112-113).
- It is necessary to pay attention to cognitive distortions in matters related to prejudice. In a study related to anti-Semitism (Gosen, 2014), questions in LE are related to feelings of anger, while a direct question is about personal opinion or agreement with a point. Here respondents can get confused in the interpretation of the questions, and it is not clear "whether the respondents resent the fact that Jews have too much influence in the world, or the statement itself" (Gosen, 2014: 81-82). Therefore, it is important to consider the combination of questions and its wording.
- In the pilot study, it is recommended to conduct qualitative cognitive interviews, this will help to better understand the interpretation of the elements by the respondents. In addition, it is recommended to include direct questions for comparison (Bell, 2019).
- Using the double list experiment can significantly reduce the standard errors (Lépine A, Treibich C, D'Exelle B., 2020).
- In many cases internet-survey that can help achieve accurate measurements with LE in research on attitudes and behaviors associated with social desirability (Holbrook, 2010).

As we can see from the table, there are some difficulties in implementing the LE method. Regardless, the list experiment can be a valuable tool in the study of sensitive topics in sociology. Because experimentation in social research provides the most reliable test of causality compared

to other methodologies (Newman, 2014: 282). Further research should continue to explore the effectiveness of the method in different populations and contexts, as well as its limitations and potential for improvement. In our research, we will try to study this method in more depth in the realities of Kazakhstan in order to better understand the limitations and potential errors, as well as to study how this method can be used in various cultural and social contexts.

Conclusion

In conclusion, experimental methods have become increasingly popular in sociology, particularly when studying sensitive topics. List experiments, in particular, have proven to be a valuable tool for researchers to gather accurate data on sensitive issues, while also protecting the privacy and anonymity of participants.

Through the use of list experiments, researchers can measure the prevalence of socially undesirable behaviors or attitudes without directly asking participants about their own behavior or attitudes. Bibliographic analysis revealed that every year the relevance of this technique is growing. This technique allows participants to answer truthfully without fear of social stigma or repercussions. Despite the disadvantages of this method, it can be said that it is one of the best methods that can be applied to sensitive matters.

Overall, the use of list experiments in sociology offers a promising approach to studying sensitive questions, allowing researchers to obtain reliable data while respecting participants' privacy and ethical considerations. As such, this technique has the potential to enhance our understanding of important social issues and inform evidence-based policies and interventions.

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Сезімтал сұрақтарды сұрауға арналған әлеуметтанудағы эксперименттік әдістер: тізімдік эксперимент мысалы

Аңдатпа. Бұл мақала әлеуметтанудағы сезімтал сұрақтарды шешу үшін қолданылатын эксперименттік әдістерді зерттейді. Сезімтал сұрақтар – заңсыз әрекеттер, табу және жыныстық мінез-құлық сияқты әлеуметтік стигматизацияланған немесе тыйым салынған тақырыптарды қамтитын сұрақтар. Сезімтал сұрақтарды зерттеу үшін дәстүрлі сауалнама әдістерін пайдалану жауап берудің бұрмалануына немесе әлеуметтік сұранысқа бейімділікке әкелуі мүмкін. Осы шектеулерді жеңу үшін ғалымдар тізімдік эксперимент сияқты инновациялық эксперименттік әдістерді әзірледі.

Тізімдік эксперимент респонденттерге элементтер тізімін беретін сауалнамаға негізделген әдіс болып табылады және олардан тізімде қанша элементті бастан өткергенін немесе мақұлдайтынын сұрайды. Тікелей сұрақ қоюдан айырмашылығы, бұл әдіс респонденттерге өз пікірлерін жасырын түрде білдіруге мүмкіндік береді және дұрыс жауап беруге бағытталған әлеуметтік сұранысты төмендетеді. Сонымен қатар, тізімдік эксперимент жеке жауаптарды көрсетпей-ақ сезімтал мінезқұлық немесе көзқарастардың таралуын бағалай алады, бұл оны әсіресе саяси немесе әлеуметтік сезімтал тақырыптарды зерттеуде пайдалы етеді.

Бұл мақалада тізімдік эксперименттің теориялық негіздері, дизайны және орындалуы сипатталған. «VOSviewer» бағдарламасының көмегімен «scopus» деректер базасы негізінде библиографиялық талдау жүргізілді. Сонымен бірге бұл әдістің басқа эксперименттік әдістемелермен салыстырғандағы артықшылықтары мен шектеулері талқыланып, оның

социологиялық зерттеулердегі кейбір практикалық қолданылуын атап көрсетеді. Жалпы, бұл мақала тізімдік экспериментке және оның әлеуметтанулық зерттеулерді ілгерілетуге қосқан үлесіне толық шолу жасайды.

Түйін сөздер: әлеуметтану, сезімтал сұрақтар, тізімдік эксперимент, библиографиялық талдау.

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Экспериментальные методы в социологии, используемые в деликатных вопросах: пример списочного эксперимента

Аннотация. В этой статье исследуются экспериментальные методы в социологии, которые используются для решения деликатных вопросов. Чувствительные вопросы — это те, которые касаются социально стигматизированных или табуированных тем, таких, как незаконная деятельность, личные убеждения и сексуальное поведение. Использование традиционных методов опроса для исследования деликатных вопросов может привести к систематической ошибке в ответах или социальной желательности. Чтобы преодолеть эти ограничения, ученые разработали инновационные экспериментальные методы, такие, как эксперимент со списком.

Эксперимент со списком — это метод, основанный на опросе, который предоставляет респондентам список элементов и спрашивает их, сколько элементов в списке они испытали или одобрили. В отличие от прямого опроса, этот метод позволяет респондентам анонимно выражать свое мнение и снижает предвзятость социальной желательности. Кроме того, эксперимент со списком может оценить распространенность деликатного поведения или отношения без выявления индивидуальных ответов, что делает его особенно полезным при изучении политически или социально чувствительных тем.

В этой статье описываются теоретические основы, дизайн и реализация эксперимента со списками. С помощью программы «VOSviewer» был проведен библиографический анализ на основе базы данных «scopus». В то же время обсуждаются преимущества и ограничения этого метода по сравнению с другими экспериментальными методами и освещаются некоторые его практические применения в социологических исследованиях. В целом эта статья представляет собой всесторонний обзор эксперимента со списками и его вклада в развитие социологических исследований.

Ключевые слова: социология, деликатные вопросы, списочный эксперимент, библиографический анализ.

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