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Postal Surveys

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Abstract

Postal surveys are an important data collection mode in social science survey research. One key task when implementing postal surveys is to motivate the potential respondents to participate. This is done by means of the cover letter, the design of the questionnaire, and repeated contacts. Methodological aspects of the implementation of postal surveys are discussed against the background of theories that explain the willingness to participate.

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1. What are postal surveys?

Postal surveys are self-administered, paper-based, standardised surveys in which the questionnaires are sent by post. Self-administered means that the respondents fill out the questionnaire themselves. Postal surveys are also known as paper-and-pencil surveys. In social science survey research, postal surveys have established themselves as a cost-efficient survey type, compared to other modes of data collection. Although web surveys are even more cost-efficient, they have not been able to supplant postal surveys. This is due, on the one hand, to the fact that some target persons do not have Internet access. On the other hand, frames for drawing samples for population surveys via the Internet are lacking. Therefore, recruitment in other modes, such as face-to-face contacting by the interviewers, must be used. Postal surveys can also usefully complement other survey modes. For example, the GESIS Online Panel uses postal surveys in order to include persons who do not have Internet access (http://www.gesis.org/unser-angebot/daten-erheben/gesis-panel/).

According to a meta-analysis conducted by Shi and Fan (2008), response rates of postal surveys are, on average, around 40%, and thus approximately 10% higher than those of web surveys. The authors analysed comparisons of the two modes that were undertaken between 1988 and 2006 for various target groups (students, employees, certain occupational groups, and the general population). However, follow-up reminders may be decisive for increasing the response rate because a number of studies achieved the same response rates in both modes with equally frequent follow-up reminders (Kaplowitz, Handlock & Levine, 2004; Shih & Fan, 2008). Nonetheless, willingness to participate in a postal survey is not encouraged by single measures, such as follow-up reminders, but rather by a range of different measures. Don A. Dillman has established guiding principles for postal and Internet surveys (Dillman 2007; Dillman, Smyth, & Christian, 2009).

The present contribution is organised as follows. It begins by dealing with the cases in which it makes sense to choose postal surveys as a data collection mode. It then outlines the theories that inform decisions on measures to increase target persons' willingness to participate. And, finally, it provides a brief overview of different measures applied when implementing postal surveys.

2. When is a postal survey the right choice?

In general, surveys can be characterised in terms of (a) physical distance to the respondent (great or small), (b) the manner in which the questionnaire is administered (self- or interviewer-administered), and (c) computer assistance (present or absent). These characteristics determine the methodological decisions made when conducting surveys. For example, the greater the physical distance to the respondent (target person), the quicker they may tire. This implies that in postal surveys – where the distance is large – completion time is limited. The lack of personal contact and the large distance also imply that particular efforts must be made to motivate the target persons to participate. However, the advantage of self-administration is that there is no possibility of the respondent's response behaviour being influenced by an interviewer. The absence of computer assistance in the case of postal surveys also has implications – for example, complex filters cannot be realised.

For postal surveys, one needs postal addresses of the target persons. Address lists of the target persons must be available in sufficient quality to allow random samples to be drawn. For detailed information on sampling issues, see the contributions to the "Representation" section of the GESIS Survey Guidelines.

Financial resources, or financial limitations, also play a role in the choice of the data collection mode. Face-to-face surveys are considerably more expensive than postal surveys. However, costs occur in postal surveys, too – namely, for sampling, production of the questionnaires, postage, and data processing. These costs must be calculated in the run-up to the survey.

Postal or other self-administered surveys would also be the method of choice if the aim was to avoid interviewer effects – for example, in the case of sensitive issues. The implementation of postal surveys presupposes that the target persons have the necessary reading and writing skills and that it is possible to measure the topics of interest with a relatively short questionnaire and without complex filters.

3. Theoretical explanations of willingness to participate in surveys

One key task in postal surveys is to motivate the target persons to participate in the survey. Two theories provide a framework and a justification for the measures to increase target persons' willingness to participate. The first is the so-called leverage-salience theory of survey participation proposed by Groves, Singer, and Corning (2000), which essentially states the following:

1) Different target persons assign different importance (leverage) to different aspects of a survey, for example the topic, the sponsor, the time required, etc.
2) The prominence (salience) of these aspects of the survey may be perceived differently by different target persons.
3) The interaction between leverage and salience is decisive for survey participation. If, for example, a target person is interested in the topic of the survey, and if this topic is communicated to him or her in a clear and concise way, his or her willingness to participate increases. If a target person who does not have a lot of time perceives as salient the fact that the questionnaire will take a long time to answer, his or her willingness to participate will decrease.
4) If only one aspect of the survey – for example, the topic – dominates the perception of the target persons, this may lead to serious biases in the sample because only those who are interested in the topic of survey can be surveyed. When implementing surveys one should therefore make sure that persons with different motives are targeted to an equal extent.

The second theory is social exchange theory (Thibaut & Kelley, 1959), which describes motives for participating in surveys. According to this theory, participation in surveys is a voluntary commitment that is motivated by the expectation that the investment will be recovered. This voluntary commitment can be expected when the perceived benefits are higher than the perceived costs. The costs involve investments, for example, invested time, effort, and disclosure of information. The benefits are measured on the basis of the perceived return on the investment. Social dimensions such as support, recognition, and social benefits are the main decisive factors, while economic dimensions of the benefits are of secondary importance. Thus, confidence that the costs will pay off and be rewarded is decisive for the willingness to participate.

These theories constitute a basis for the choice of measures to increase willingness to participate. According to social exchange theory, the focus is on the following objectives:

- To increase perceived benefits / to minimise perceived costs
- To establish trust
- To ensure a positive social exchange

With regard to the possibilities of influencing the subjective cost-benefit analyses, the leverage-salience theory shows that several different aspects should be taken into account in order to avoid a situation where only one aspect, or a small number of aspects, of the survey are perceived as dominant by the target persons.

Figure 1 lists survey design measures that correspond to the above-mentioned three objectives when social exchange theory is applied. Depending on the survey mode, the approaches to the implementation of these measures differ in part. The approach to be adopted within the framework of a postal survey is the subject of the following sections.

Figure 1. Measures to increase willingness to participate in surveys

To increase perceived benefits

- Inform the target persons about the survey
- Request their support
- Point out the usefulness of the survey
- Say thank you
- Support group values (as a citizen; the relevance of the sponsor, the topic)
- Incentive as a thank you
- Interesting questionnaire
- Give social validation (in the case of repeated contacts, mention that many others have already completed the survey)
- Communicate the fact that the possibility of participating in the survey is limited by sampling – that is, not everyone may participate.

To reduce perceived costs

- The questionnaire should be uncomplicated and easy to answer
- Hierarchies, for example between researchers and respondents, should be avoided (e.g., by avoiding subordinating language)
- The questionnaire should be short
- Questions that are too personal and sensitive should be avoided or limited in number

To establish trust

- Communicate the reputability of the surveyor
- Provide material incentives in advance
- Stress the usefulness and importance of answering the questionnaire
- Guarantee confidentiality in handling data and data protection

4. Design aspects of postal surveys

Following the leverage-salience theory, a number of aspects that increase the perceived benefits and reduce the perceived costs should be taken into account when designing a survey. With the "Tailored Design Method," Dillman (e.g., 2007) presented a general approach to achieving this. This method comprises the following elements: a user-friendly questionnaire, repeated contacting of the target person, a personalised cover letter enclosing a stamped return envelope, and a financial incentive provided in advance. In what follows, aspects of questionnaire design, contact strategy, and the design of the cover letter are outlined. The provision of incentives is addressed by Pforr in his contribution to the GESIS Survey Guidelines (2014) and by Porst (2001). Because each element of the Tailored Design Method represents – on its own – a necessary but not a sufficient condition for the success of the survey, all of these elements must be implemented. A motivating cover letter and repeated contacts are of little use if the questionnaire is difficult and burdensome to answer.

4.1 The questionnaire

With a focus on postal surveys, this section deals with aspects of questionnaire construction that manipulate the salience of the factors that influence willingness to participate. However, it is essential that the questionnaire as a whole is interesting, simple, and that it can be answered quickly. Therefore, in addition to the aspects outlined in what follows (questionnaire length, design of the cover page, instructions, and questionnaire structure), attention should be paid to the question wording and the design of the response formats. The formulation of survey questions is the subject of Lenzner and Menold's contribution (2016) to the GESIS Survey Guidelines, while Menold and Bogner's contribution (2016) deals with response formats.

4.1.1 Questionnaire length

As mentioned in Section 4.1, the longer the questionnaire is, the less willing people will be to participate in the survey because the perceived costs are greater. The following best practices with regard to questionnaire length in postal surveys have gained acceptance (Hippler, 1988; Dillman et al., 2009):

- The questionnaire should not be more than 12 pages long.
- The number of questions in the questionnaire should be such that completion time does not exceed ten minutes. Completion time should be carefully tested in advance
- Care should be taken to ensure that the visual layout of the questionnaire is clear and appealing; too much content on one page should be avoided.

4.1.2 Cover page

The cover page serves to convey a positive impression and to help target persons to recall the survey better when they are re-contacted (Dillman et al., 2009). To achieve this, it is important, first of all, that the title of the survey is simple and easy to remember. The function of the title is to communicate the topic of the survey – that is, what the survey is about – to the target persons in keywords.

The graphic design used for the cover page should be simple and neutral and, at the same time, objective and serious – as befits the sender's institution. Complicated and detailed images should be avoided. Cartoons and caricatures may have a differential appeal among target persons. Following the leverage-salience theory, this may lead to sampling bias. For this reason, they should be avoided. The cover page may feature the logo, the name, and the address of the surveyor. However, the address given should be identical to the address to which the completed questionnaires are to be returned.

4.1.3 Instructions

In some questionnaires, instructions are placed on a separate page. These instructions give information about the kind of questions asked and about answering single-, multi-item, and open-ended questions. It is often pointed out that there are no right or wrong answers and that respondents should choose the answer that best describes their own personal opinion. Placing the instructions in a separate part of the questionnaire is not a very efficient approach as it suggests that the effort needed to complete the questionnaire (i.e., the perceived cost) is high. For, in addition to completing the questionnaire, the target persons have to read the instructions, memorise them, and follow them when filling out the questionnaire. Therefore, the instructions on how to complete the questionnaire should be placed directly beside the corresponding questions. In this way, it is also easier for the target persons to follow them.

4.1.4 Structure

A clear and meaningful questionnaire structure enables the target persons to obtain an overview of the contents, for example when they leaf through the questionnaire. It also makes it easier for them to assess whether the contents of the questionnaire are interesting and significant. The latter aspect influences subjective cost-benefit analyses that are associated with participation in the survey.

The aim of the questionnaire structure is to thematically group the questions. It should be ensured that a topic is dealt with in one place in the questionnaire and that it does not crop up repeatedly. In other words, the thematic sequence of the questions should be strictly adhered to. This reduces the cognitive effort when filling out the questionnaire, because memory content relating to a particular topic does not have to be repeatedly activated (Tourangeau, Rips, & Rasinksi, 2000).

As a further structuring principle, the contents may be didactically structured – for example, from most interesting to less interesting, or from the central topic of the survey to the peripheral topics. The logical sequence should also be observed – for example, the temporal ordering of the questions, or the arrangement of items from the specific to the general (or vice versa). As far as possible, the items should be grouped according to similar formal characteristics, for example the same type of response scale. However, the substantive and logical order should always have priority over organising content according to formal aspects.

The first question of the questionnaire is particularly important – in all surveys (Dillman, 2007; Dillman et al., 2009). It should reflect the topic of the questionnaire, that is, it should correspond to the title of the survey. Moreover, it should apply to all respondents. Therefore, questions that some of the respondents would have to answer with "don't know" or "does not apply to me" are not suitable for use as a first question. The first question should also be interesting, as it serves to arouse or increase interest in the topic. And last but not least, the first question should be easy to read, understand, and answer. Difficult, sensitive, or boring questions should be placed at the end of the questionnaire.

Socio-demographic questions are not appropriate first questions. This is because they are not related to the topic, they are boring, and – as in the case of occupation or income questions, for example – they may be difficult to answer. These questions should therefore be placed at the end of the questionnaire. However, certain socio-demographic questions may have a filtering function. In such cases, they can be placed nearer the front of the questionnaire when the thematic structure so requires.

The very last page of the questionnaire should be left as empty as possible and should not contain any questions. This is advisable because researchers have no control over what the target persons in a postal survey look at first. If they look at the last page first, then they might be confronted with boring or sensitive questions, as it is recommended that these questions be placed at the end of the questionnaire. The last page can be used to request open-ended comments and to thank respondents for their participation.

4.2 Number and type of contacts

To achieve a good response rate, it is essential to contact the target persons several times (see Dillman 2007; Shih & Fan, 2008) because an increase in the number of contacts results in an increase in the response rate. Dillman's method (2007; Dillman et al., 2009), which is presented in Figure 2, has established itself in survey practice. It entails contacting the target persons several times. The first time, the target persons are sent the questionnaire and a cover letter. Dillman (2007, p. 151) also recommends sending a prenotice letter to the target persons to alert them to the fact that they will be receiving the questionnaire in a few days time. The second – or third – contact is a thank-you/reminder postcard sent to all target persons irrespective of whether they have already returned the completed questionnaire. Approximately three weeks after the initial posting, the questionnaire is sent once again. An approach that includes the monitoring of returns saves costs and is user-friendly because then the second questionnaire is sent only to those target persons who have not yet responded. In order to maintain confidentiality in handling personal data, the names and addresses of the respondents should not appear in the returned questionnaires. Instead, code numbers are used, which are stored separately from personal data and can be assigned to address data by means of a key. And finally, approximately seven weeks after the initial questionnaire posting, it is sent once again to those who have not yet responded. This time, the cover letter should be adapted in order to more strongly persuade these persons to participate. Sample cover letters can be found in Dillman et al. (2009). The costs of printing and posting the questionnaires depends on the number of contacts.

Posting Action	Time
1. First questionnaire posting	1. Wednesday
2. Thank-you/reminder postcard to all sampled persons	2. One week after first posting
3. Second questionnaire posting with reminder	3. Three weeks after first posting
4. Third questionnaire posting with reminder	4. Seven weeks after first posting

Figure 2. Contact strategy following Dillman's "Tailored Design Method" (2007)

Older studies on the use of this strategy have shown that the response rate achieved with each follow-up posting action (based on the respective remaining population) was almost equal to that achieved with the initial questionnaire posting (see Hippler, 1988). If 3000 questionnaires were sent, and 20% (600 questionnaires) were returned after the first posting, around 480 additional questionnaires (20% of 2400) would be received after posting the reminder postcard. After the second questionnaire posting, around 384 returned questionnaires (20% of 1920) would be expected. And finally, after the third reminder, a further 200 questionnaires should be received. Thus, approximately 1664 questionnaires would be returned so that the response rate would be 55%. Nowadays, however, such a plan would appear to be too optimistic. Repeated contacts and other measures that motivate target persons to participate are therefore all the more important to achieve an acceptable response rate. Three to four times as many persons should be written to as are required for the net sample.

4.3 Cover letter

Besides the questionnaire itself, which should be visually appealing and easy to answer, the cover letter represents a further opportunity to motivate target persons to participate in the survey. The aims of the cover letter are threefold (see Chapter 3): (1) to increase the perceived benefits, (2) to minimise the perceived costs, and (3) to establish trust. Moreover, the cover letter (like the questionnaire itself) should convey a good first impression and seriousness. Researchers should communicate with the target persons as equals – after all, the target persons are experts on the topics surveyed.

The cover letter informs the target person about the institution that is conducting the survey. This can also convey the seriousness and importance of the survey. When the sender (e.g., a university or government agency) appears to the target persons to be honest and reputable, this enhances the response rate. Note that, to avoid confusion, only the address of the institution to whom the questionnaires are to be returned should appear in the cover letter. Moreover, the layout of the cover letter should be businesslike rather than colourful.

Addressing the target person personally in the cover letter creates a positive social exchange and establishes trust. However, a personalised letter may cause the target persons to be concerned about the anonymity of the survey. For this reason, it is helpful to briefly explain why the person has been written to, or how he or she was selected, and to point out that not everyone may participate (see Figure 1). As a matter of priority, an assurance should be given in the cover letter that the data will be treated confidentially and that data protection regulations will be complied with. The code numbers that serve to monitor returns should be explained. A data protection statement may be enclosed with the questionnaire.

Besides data protection, it is essential that the researchers and surveyors undertake to comply with research-ethical principles. Before target persons decide to participate, they should be fully informed about the survey and possible consequences (informed consent). In other words, they should be informed about the objectives and contents of the survey, the way in which the results will be used, and the way in which data will be handled (especially data with the help of which persons can be identified). Moreover, the voluntary nature of participation should be mentioned. Information on ethical guidelines can be found on the websites of the professional associations (e.g., ADM: https://www.adm-ev.de and AAPOR: http://www.aapor.org/AAPOR_Code_of_Ethics.htm#.U8-05hDIxbU).

The cover letter should inform the target persons about the survey and its objectives. It is advisable to use a survey title that is meaningful to the target persons. To make it clear that the effort and the time invested are worthwhile, and that by participating in the survey the target person can make a meaningful contribution, the usefulness and significance of the results should be highlighted. It should be implied, in particular, that the results will be useful for the target persons themselves (see social exchange theory in Chapter 3). Therefore, if the research may have positive implications for the lives, thinking, or behaviour of respondents, these implications could be mentioned. To enable the target persons to assess what awaits them, the contents of the questionnaire should be listed as topics.

And finally, the target persons should be informed about the incentives provided (if applicable) and about returning the questionnaire (for a detailed discussion of the impact of incentives, see Pforr (2016) in the GESIS Survey Guidelines). A return envelope (postage paid by recipient) must be enclosed. Cover letter examples can be found in Dillman et al. (2009).

To sum up, the cover letter should address the following issues:

- The topic of the survey
- The institution conducting the survey
- The objective of the survey
- The importance and usefulness of the results, and, where possible, positive implications for the target persons
- The contents of the questionnaire
- The reason why the target person has been written to, or the way in which the target person was selected
- The request to participate
- Confidentiality and data protection
- The voluntary nature of participation
- Information about returning the questionnaire
- The incentive, if applicable
- Who to contact with questions (should be reachable during the time period indicated)
- Thank you

5. References

Dillman, D. A. (2007). *Mail and internet surveys. The tailored design method.* New Jersey: Wiley.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys. The tailored design method.* Wiley: New Jersey.

Hippler, H.-J. (1988). Methodische Aspekte schriftlicher Befragungen: Probleme und Forschungsperspektiven. *Planung und Analyse*, *6*, pp. 244-248.

Groves, R., Singer, E., & Corning, A. (2000). Leverage-salience theory of survey participation: Description and an Illustration. *Public Opinion Quarterly*, *64*, 299–308.

Kaplowitz, M. D., Hadlock, T. D., & Levine, R. (2004): A comparison of web and mail survey response rates. *Public Opinion Quarterly 68 (1)*, 94–101.

Lenzner, T., & Menold, N. (2016). Question Wording. *GESIS Survey Guidelines*. Mannheim, Germany: GESIS – Leibniz Institute for the Social Sciences. doi: 10.15465/gesis-sg_en_017

Menold, N., & Bogner, K. (2016). Design of Rating Scales in Questionnaires. *GESIS Survey Guidelines*. Mannheim, Germany: GESIS – Leibniz Institute for the Social Sciences. doi: 10.15465/gesis-sg_en_015

Pforr, K. (2016). Incentives. *GESIS Survey Guidelines*. Mannheim, Germany: GESIS – Leibniz Institute for the Social Sciences. doi: 10.15465/gesis-sg_en_001

Porst, R. (2001). Wie man die Rücklaufquote bei postalischen Befragungen erhöht. GESIS How-to-Reihe, 9. http://www.gesis.org/fileadmin/upload/forschung/publikationen/gesis_reihen/howto/how-to9rp.pdf

Shih, T.-H., & Fan, X. (2008). Comparing response rates from web and mail surveys: A meta-analysis. *Field Methods*, *3*, 249-271.doi: 10.1177/1525822X08317085.

Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups.* New York: Wiley.

Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The psychology of survey response*. Cambridge: Cambridge University Press.