

Respondent incentives in social surveys: an overview of recent experiences and findings

Maja Rynko^a

Abstract. Respondent incentives are an element of survey methodology that are shown to impact response rates and selected aspects of survey quality. They are becoming more and more commonly used to counteract the growing reluctance of individuals to respond to surveys. There are different types of incentives, including monetary and non-monetary and conditional or unconditional ones (provided only if a person takes part in the survey or regardless of the person's participation, respectively). The monetary value of the incentive may also differ depending on the survey's budget, and the individual needs and expectations of a respondent. It was proven that different incentives have various effects, but there is no single and optimal recommendation as to which type of incentive should be used. The results depend not only on the incentives themselves, but also on such survey characteristics as the topic, survey mode, target population, the length of the survey or the time when the fieldwork was conducted. The aim of the article is to review the general state of knowledge about the above-mentioned aspects concerning the use of incentives in social surveys, both in cross-sectional and longitudinal studies. Special attention is paid to the effects of incentives on the response rate, the quality of answers and the sample composition. Additionally, ethical considerations and Polish experiences in the use of incentives are discussed. This article may help survey methodologists in deciding on the optimal type and way of using respondent incentives.

Keywords: social surveys, survey methodology, respondent incentives, response rates, data quality, data collection

JEL: C80, C81, C83, C93

Zachęty do uczestnictwa w badaniach ankietowych – przegląd aktualnego stanu wiedzy

Streszczenie. Zachęty do uczestnictwa w badaniach, zwane zachętami dla respondentów, są elementem metodologii badań ankietowych, który – jak pokazują liczne przykłady przedstawione w literaturze naukowej – ma wpływ na wskaźniki odpowiedzi i wybrane aspekty jakości badań. Stosowanie zachęt staje się coraz częstsze z uwagi na rosnącą niechęć potencjalnych respondentów do brania udziału w ankietach. Istnieją różne rodzaje zachęt: pieniężne lub rzeczowe, warunkowe lub bezwarunkowe (czyli zależne lub niezależne od wzięcia udziału w badaniu). Wartość pieniężna zachęt może być zróżnicowana, w zależności od budżetu badania, ale także dostosowana do potrzeb i oczekiwań poszczególnych respondentów. Udowodniono zróżnicowanie efektów stosowania różnych zachęt, ale nie jest możliwe zarekomendowanie jednego, optymalnego ich typu. Efekty i skuteczność zachęt zależą nie tylko od ich rodzaju, lecz także od charakterystyki badania, m.in. od jego tematyki,

^a Szkoła Główna Handlowa w Warszawie, Instytut Statystyki i Demografii, Polska / SGH Warsaw School of Economics, Institute of Statistics and Demography, Poland.

ORCID: <https://orcid.org/0000-0002-3064-7492>. E-mail: maja.rynko@sgh.waw.pl.

sposobu zbierania danych, populacji docelowej, długości wywiadu oraz czasu przeprowadzania badania. Celem artykułu jest przedstawienie obecnego stanu wiedzy dotyczącego wymienionych aspektów stosowania zachęt do uczestnictwa zarówno w badaniach przekrojowych, jak i wzdłużnych. Omówiono wyniki badań dotyczących wpływu zachęt na wskaźniki i jakość odpowiedzi oraz skład próby. Ponadto przedyskutowano wybrane etyczne aspekty stosowania zachęt oraz polskie doświadczenia w tym zakresie. Niniejszy przegląd może być przydatny metodologom badań ankietowych przy podejmowaniu decyzji, jakiego rodzaju i w jaki sposób stosować zachęty do uczestnictwa w badaniach.

Słowa kluczowe: badania społeczne, metodologia badań ankietowych, zachęty do uczestnictwa w badaniu, wskaźniki odpowiedzi, jakość danych, zbieranie danych

1. Introduction

Presently, respondent incentives are in most cases regarded as an indispensable part of survey methodology. Incentives should either encourage participation or express gratitude to respondents for devoting their time to a survey. The main reason for offering incentives is the falling response rates in most studies. In the U.S. the response rate for individuals in the National Health Interview Survey (NHIS) decreased from 80% in the late 1990s to 50%–60% in the 2010s (National Center for Health Statistics [NCHS], 2017). The response rate for the General Social Survey (GSS) was well above 70% until 2000, around 70% during the next decade and only 60% in 2018 (National Opinion Research Center [NORC], 2019). The situation in Europe is no different. In the second round of the European Social Survey (ESS) in 2004, only two out of 26 participating countries failed to exceed a response rate of 50%. In 2010 (ESS5), this figure increased to 4 out of 27, while in 2018 (ESS9), it was already 13 out of 29 participating countries (Norwegian Centre for Research Data; Nor. Norsk senter for forskningsdata [NSD], 2018a, 2018b, 2021). This negative trend also relates to surveys coordinated by Eurostat: in the second wave of the European Health Interview Survey (EHIS), in the years 2013–2015, 5 out of 30 countries reported response rates below 50%, while in the third wave (2018–2020), it was 7 out of 29 (Eurostat, 2018, 2022).

The data for Poland also point to a gradual increase in the negative attitudes towards survey cooperation. The Labour Force Survey coordinated by Statistics Poland reported a fall of more than 17 percentage points in interview rates (calculated for sampled dwellings) over a decade, i.e. from 74.7% in the last quarter of 2008 to 57.5% in the last quarter of 2018 (Główny Urząd Statystyczny [GUS], 2009, 2019). The ESS response rates reported in Poland are among the highest in Europe – their values exceeded 70% in the first six rounds and were estimated at 65.8%, 69.6% and 60.4% in consecutive rounds (NSD, 2018a, 2018b, 2018c, 2020, 2021). These fluctuations do not point unambiguously to a downward trend. However, the COVID-19 pandemic caused people to participate in face-to-face

interviews less willingly. The 2022 ESS10 response rate in Poland dropped to 39.2%, which was the median result among the 31 participating countries (Sikt, 2023). In the above-mentioned American NHIS and GSS surveys, response rates fell below 50% in 2022 (NCHS, 2023; NORC, 2022). The quoted response rates may follow different methodological guidelines for their exact calculations, therefore their direct comparison should be made with caution. The changes in response rates may be difficult to interpret even for the same survey, as the COVID-19 pandemic in many cases forced a temporary or permanent transition to mixed-mode data collection. Additionally, the figures above do not show the complete picture as they are limited to a few selected examples and the post-pandemic period may have brought a spontaneous improvement in the response rates. Nevertheless, the long-term drop in people's willingness to participate in surveys is difficult to deny.

The situation observed at the end of the previous century did not herald the fall in response rates, and the use of incentives was not recommended for surveys lasting less than an hour (Singer, 2018, p. 405). In the past, survey incentives were used for studies that were especially burdensome for respondents, involving e.g. multiple interviews (Fowler, 2008, p. 51). Goldenberg et al. (2009) state that, traditionally, surveys sponsored and funded by the U.S. government did not offer incentives to the sampled individuals and the government sponsorship itself of a survey proved a major factor in achieving high response rates. On the other hand, according to Laurie and Lynn (2009), selected major longitudinal surveys such as the Canadian Survey of Labour and Income Dynamics (SLID), the Swiss Household Panel (SHP) and the British Birth Cohort Studies (NCDS, BCS70, Millennium Cohort) for a long time did not offer respondent incentives.

The processes observed in the 1990s changed this perception. For instance, the U.S. Census Bureau initiated a series of incentive experiments showing that offering additional motivation to participate in surveys is beneficial not only for non-government surveys. Nowadays, incentives are also used in the case of one-time interviews and are commonly shown to have an impact on response rates, mainly in the form of reduced refusal rates. Incentives work both for telephone and mail surveys, as well as for face-to-face ones, although they seem to play a smaller role in interviewer-mediated surveys (Singer et al., 1999), as the presence of an interviewer is believed to lessen the need for an incentive.

The aim of the article is to review the general state of knowledge about incentives in social surveys, both internationally and nationally, with stress placed on interviewer-mediated surveys and on the more recent results (mainly articles published after the year 2000 are quoted here). The role of incentives in marketing research is not discussed here, neither is the use of incentives in web surveys due to the common problem of convenience sampling or non-coverage issues in these

types of surveys. The results presented in this article may help in planning the optimal application of incentives in social surveys and provide a better understanding of the process of building cooperation with respondents. However, this article does not specifically identify the optimal incentive, as this seems to be survey-specific and depending on the target population, studied topic, as well as many other survey-related and cultural aspects. This article rather shows what a complex issue the use of incentives is.

2. Theoretical framework

Most studies show that incentives influence different aspects of surveys. In order to understand how and why incentives work, one should seek to answer the question as to why people agree or refuse to participate in surveys. Singer (2018) points to different reasons for respondents' cooperation: altruistic motives (willingness to help society, sense of civic duty), egoistic reasons (enjoying surveys or the benefits, i.e. the incentive received) or a wish to learn something. Survey incentives, especially unconditional ones, are highly likely to respond to mainly the egoistic reasons.

Most theoretical approaches to the use of incentives in social surveys concern the decision-making theory, such as the social exchange theory, which appeals to trust and reciprocity. The household or person should reciprocate the incentive, i.e. respond to it (Brick et al., 2005). 'A token of appreciation' attached to an advance letter demonstrates a researcher's trust that the potential respondent will answer the survey (Ryu et al., 2006). Reciprocity does not necessarily concern only a material incentive. Respondents may also perceive the participation in a socially important project as rewarding, feel satisfaction when fulfilling their civic duty, or being honoured by an invitation to participate in a survey (Sztabiński, 2006).

Monetary incentives can likewise be referenced in the economic (monetary) exchange theory, according to which the value of the incentive may be directly linked to the level of the burdensomeness of the survey, analogous to other economic decisions (Shettle & Mooney, 1999). A social exchange may thus evolve into an economic exchange along with the increase in the value of the monetary gift offered.

A different approach is suggested by the utility theory. Among it is e.g. the reasoned action theory (Singer & Ye, 2013), where the agents are perceived as rational decision-makers weighing the costs against the benefits of an action. Similarly, the leverage-salience theory described by Groves et al. (2000) assumes that people weigh the negative and positive aspects of a survey and decide whether to participate or not. This theory sees incentives as a positive survey feature that may counterbalance some of its negative features (relating to e.g. the topic or sponsorship).

Groves et al. (1992) present a list of factors influencing survey participation, which includes the respondent's socio-demographic characteristics, the survey design, as well as the nature of the interaction between the interviewer and the respondent. Stoop et al. (2010) describe four blocks of factors determining survey participation: the social environment, the characteristics of the households and individuals, survey design and interviewer attributes. At the same time, the social environment (e.g. the degree of social cohesion, the legitimacy of institutions) and survey design may influence the interaction between the respondent and the interviewer (Singer, 2012). Incentives may be seen as an element of survey design, but also as an element of the interaction between the interviewer and the respondent (when incentives are handed over by the former to the latter).

Different motivation mechanisms may appeal to different respondents and one person may be motivated by several factors. Therefore, the above-mentioned theoretical explanations of why incentives work are not mutually exclusive.

3. Types of incentives and their effectiveness

3.1. Monetary or non-monetary?

The discussion on whether monetary or non-monetary incentives should be offered has been ongoing for several decades now. Different studies show that monetary incentives are more efficient in increasing response rates (e.g. Church, 1993; Edwards et al., 2002; Ryu et al., 2006; Singer et al., 1999). However, the decision as to what incentive to use in a specific survey may not be easy. According to Singer et al. (1999, p. 222), 'gifts may function more easily as a token of appreciation, whereas cash may be more likely to be perceived as compensation for the respondent's time'. Moreover, there are also cultural differences in the perception of money as a gift.

Monetary incentives can be provided in the form of cash, a voucher, cheque, money order or a debit card with a PIN number given to the respondent. Another option may be the chance to take part in a lottery, but this type of incentive has not been proven efficient (Warriner et al., 1996). Non-monetary gifts may take the form of calendars, pens, stamps, commemorative coins, jigsaws, board games, passes to a regional park, etc. Choosing gifts over a monetary incentive may be motivated by financial limitations, since offering a small amount of money as motivation to cooperate may be actually irritating to the potential participants and lead to a possible reduction in the response rate (Sztabiński et al., 2012). Some U.S. experiments, however, show that even small amounts of money motivate people to cooperate (see discussion in Ryu et al., 2006). Gifts may be perceived as having a lower value than money, particularly if they are unlikely to be used. Finally, there

are also legal and ethical issues regarding monetary incentives. In some countries, for instance, sending cash by regular mail (as a prepaid incentive) may be illegal (Sztabiński et al., 2012). Moreover, low-income people may be left with no choice but to accept participating in a survey due to the fact that they need the money they are offered as an incentive.

Few social surveys involve a charity donation on behalf of the respondent as an incentive. Warriner et al. (1996) showed in a 1994 Canadian experiment that charity donations have little effect on response rates and that monetary incentives have a much greater effect. Similar results are quoted by Laurie and Lynn (2009). Charity donations are likely correlated with the feeling of civic duty or an act of altruism in survey participation, with the two latter being also correlated with survey participation (Lengacher et al., 1995). Therefore, using charity donations as an incentive will most likely fail to increase the response rate among reluctant individuals. However, in some surveys, charity donations are one of the gift options presented to respondents (e.g. European Social Survey in Switzerland, NSD, 2018a). Generally, providing a list of gifts to choose from may be a good option for accommodating respondents' individual preferences.

3.2. Conditional or unconditional?

Incentives may be conditional (contingent or promised, i.e. provided upon completing the survey) or unconditional (non-contingent, i.e. given to the target person regardless of their participation in the survey, e.g. prepaid incentives). In fact, promised incentives should be called *rewards*, but the methodological literature uses the term *incentives* for both of the above-mentioned cases.

The recommendation made in the handbook of Survey Research Methods (Fowler, 2008, p. 50) is to provide a small unconditional incentive ('cash is best') enclosed in the advance letter to enlist cooperation. This recommendation is consistent with the results of other studies, where unconditional incentives are shown to be more effective in building cooperation with respondents both in cross-sectional and longitudinal surveys (see for example the meta-analysis by Church, 1993; Edwards et al., 2002; Laurie & Lynn, 2009; Petrolia & Bhattacharjee, 2009; Scherpenzeel & Toepoel, 2012; Singer et al., 1999). The study by Castiglioni et al. (2008) is an exception. They showed that conditional incentives yield a higher response rate in a longitudinal study.

Small prepayments may motivate individuals to read the advance letter or listen to the interviewer's instructions. They may also create some positive feelings and encourage reciprocity (Fowler, 2008). Conditional incentives, i.e. those delivered upon the completion of the interview, are less efficient, but still work better than

no-incentive settings. The norm of reciprocity is more likely to occur in the case of an unconditional incentive rather than a conditional one. Only when the relationship between the respondent and the survey organisation is longer (e.g. in panel studies), may a conditional incentive work as well as an unconditional one (de Leeuw & Hox, 2012).

There are also some additional practical aspects that need to be considered when choosing between conditional or unconditional incentives. As mentioned above, sending money by mail may not be legal in some countries. On the other hand, sending gifts may significantly increase the costs of the survey. Such limitations suggest that conditional incentives may be used in an interviewer-mediated survey or a modified form of an unconditional gift should be otherwise offered; instead of sending the incentive by mail, it may be handed over by interviewers at the respondents' doorstep and used as an opportunity for face-to-face contact to encourage an individual to participate (Sztabiński et al., 2012).

There are situations in which unconditional incentives cannot be applied, such as when there is no information on the address of the sampled person, as in many random digit dial (RDD) or web surveys. An incentive, conditional or unconditional, cannot be offered unless the respondent provides some personal data enabling a gift to be delivered (which rather implies a conditional form of incentive). In the case of a charity donation, the only choice is a promised incentive, as an unconditional solution does not make sense here.

Whether or not to inform the respondents about the intended rewards is another aspect of conditional incentives. Not informing the potential survey participant means that the reward expectations or reciprocity mechanisms cannot be initiated. On the other hand, providing details on the gift in the letter may cause disappointment (e.g. if the expected gift is of a small nominal value) or trigger associations with initiatives where the letter recipients are tricked by promised rewards or special bargains (Sztabiński et al., 2012).

In the case of unconditional incentives, survey methodological teams may consider whether to inform the interviewers about the incentives sent beforehand with the advance letter. Many people take the view that the interviewers should be aware of all the methodological aspects of the survey. However, Singer et al. (2000) report results of an RDD experiment in which the cooperation rate was higher in cases where the interviewers did not know whether the respondents had received an incentive in the advance letter or not. Additionally, when an experiment is conducted e.g. on the amount of the incentive, many researchers suggest leaving the interviewers unaware of the amount of the incentive, as disentangling the effect of the incentives and the interviewers (with their expectations) may be impossible.

Many researchers analyse the cost-effectiveness of incentives. Some of them point to the substantial costs of unconditional incentives, especially when the sample is large and the eligibility rate is low (e.g. Singer & Ye, 2013). For instance, some telephone studies are designed to screen out ineligible households in the initial phase and proceed only with the eligible ones. Sending prepaid incentives would mean rewarding many contacted households for answering one or two screening questions only. Shettle and Mooney (1999) discuss the cost-effectiveness of incentives in relation to the expected cooperation rate. According to the authors, incentives (monetary unconditional incentive sent with the advance letter in their study) are most cost-effective for achieving a high, but not extraordinarily high cooperation rate (ca. 80% for the case analysed). When the expectations for the response rate are rather low, specialists even suggest not offering incentives at all. Pforr et al. (2015) analysed the cost-effectiveness of incentives in selected German surveys and found that prepaid incentives increase response rates more cost-effectively than conditional incentives assuming a response rate of 50%.

3.3. If monetary, then of what value?

Singer (2018, p. 411) states that ‘there is no good evidence for how big an incentive should be’. Cantor et al. (2007) compare the effects of monetary incentives of different values in telephone surveys and find that the response rate increases along with the increase in the value of the incentive. However, this relationship proved to be weak and the increase in the value of the response rate diminishes as the value of the incentive increases. A meta-analysis conducted by Church (1993) shows that response rates generally increase as monetary amounts go up in the case of mail surveys. This result was supported also by Trussell and Lavrakas (2004).

Martin et al. (2001) conducted an experiment on the U.S. longitudinal Survey of Income and Program Participation (SIPP) involving non-responding households and found that a higher monetary incentive (sent with the advance letter) increased the conversion rate more than when there was no incentive, but the difference between the offered \$20 and \$40 was not statistically significant. Goldenberg et al. (2009) show, however, different results. They conducted an experiment on the Consumer Expenditure Quarterly Interview Survey in the years 2005–2006 in which half of the sample received unconditional incentives (a \$20 or \$40 debit card) before the first interview. The response rate for the \$40 debit card was the highest and, what is more, the difference between the \$20 and \$40 incentive groups exceeded the difference between the control group (no incentive) and the \$20 group. The incentives helped to reduce both refusals and non-contact ratios.

The examples above relate to the U.S. experiences. It is also interesting to learn about Germany's experiences in motivating individuals to cooperate in surveys, as Germans are one of the most survey-reluctant among Europeans (see e.g. data on response rates in Germany in ESS in: NSD, 2018a, 2021). Martin et al. (2014) describe an incentive experiment based on the German Programme for the International Assessment of Adult Competencies (PIAAC) field test using three incentive treatments (€10 commemorative silver coin, and €25 and €50 in cash). The respondents were given the incentives at the end of the interview, but were informed of them in the advance letter. The results clearly show that the response rates increase as the value of the incentives increases and, consequently, the refusal rates decrease as the value of the incentive increases. The results of the German experiment are consistent with the analogical PIAAC field test experiments conducted in the United Kingdom (vouchers of £20 or £30) and in the United States (\$35 and \$50). The PIAAC is a demanding survey: in addition to a long interviewer-administered interview, respondents have to complete a cognitive assessment on their own. Incentives could be seen as a compensation for this additional burden.

The PIAAC results are consistent with those of another German experiment based on the German General Social Survey (ALLBUS) in which a conditional €10 incentive was tested (Blohm & Koch, 2013). A broader analysis of the role of incentives in Germany is provided by Pforr et al. (2015). They analyse altogether ten incentive experiments involving eight large-scale German social surveys and find evidence showing that the effects of the offered incentives become more profound as their monetary value grows.

An interesting result is provided by Börsch-Supan et al. (2013) for an incentive experiment conducted on a refreshment sample of the fourth wave of the Survey of Health Ageing and Retirement in Europe (SHARE) carried out in Germany. The results consistently show an increase in the response rate along with the increase of a monetary unconditional incentive (no incentive versus €10, €20 or €40 incentives). At the same time, the refusals rate via the hotline was higher for the incentive groups (6.5% vs 1.5% for the control group, with no significant differences between the treatment groups). This may suggest that some individuals may have been concerned about the legitimacy of the survey or felt being pressured into participation when being sent the cash.

Finally, a Dutch experiment concerning the recruitment process of a new online household panel also used the options of no incentive or €10, €20 or €40 incentives. The results show the highest response rate for the prepaid incentive of €10. This solution also resulted in the lowest costs per registered household (Scherpenzeel & Toepoel, 2012).

Different research results show different amounts of money as optimal incentives. Trussell and Lavrakas (2004) even claim that the optimal amount of money used as an incentive varies between households. They analysed the effects of monetary incentives ranging between \$0 and \$10 in a mail survey. The research showed clear differences in the increment in the amount sent to sampled individuals who declined when contacted in the prior RDD (the effect is stronger for higher amounts of money) and individuals who had previously agreed to cooperate (proportionally lower increase in the cooperation rate as the incentive increases).

The proper verification of the costs of incentives and their cost-effectiveness is needed to find an optimal incentive value, but at the same time this task remains difficult due to the lack of relevant data. Although incentives themselves generate extra costs, in the end they may reduce the field costs by reducing the necessary contacts between the interviewers and respondents.

4. Incentives in longitudinal surveys

The discussion above concerns mainly cross-sectional surveys, in which respondents are interviewed only once. Incentives in longitudinal surveys may impact not only the response rate in one wave, but also the attrition or retention rates in the subsequent waves. The effects can be temporary, constant, delayed or cumulative (Laurie & Lynn, 2009). Incentives offered in one wave may raise the respondents' expectations as to the next waves. For this reason, not using incentives in the future editions of a survey may have an adverse effect on the respondents' cooperation. Longitudinal surveys are particularly burdensome for respondents as they require regular participation (sometimes of all household members) and consist of often long and complex questionnaires or even psychological or cognitive modules. At the same time, this repeated cooperation is highly valuable for researchers. Incentives may therefore play an even greater role in this case than in cross-section studies in expressing gratitude and appreciation for respondents' efforts, but also in motivating them and tracing down those who change their address between waves.

Laurie & Lynn (2009) present an in-depth discussion on incentives in longitudinal studies, drawing also on experiments carried out on the British Election Panel Survey, the British Household Panel Survey (BHPS) and the England and Wales Youth Cohort Study (EWYCS). The general conclusion of the experiments is that a higher incentive in one wave may also result in higher response rates in the subsequent waves. In the case of EWYCS, differences between incentive and no-incentive groups even increased over the subsequent waves (see also Jäckle & Lynn, 2008). The BHPS results show that the increases in incentive value improved the response rates across all demographic groups tested to similar degrees.

Martin et al. (2001) refer to experimental results on the U.S. longitudinal SIPP and claim that incentives have a positive effect on cumulative response rates. Also, German experiments in longitudinal studies show that incentives increased retention rates (Pforr et al., 2015). On the other hand, Lengacher et al. (1995) showed the results for the U.S. Health and Retirement Study, in which the reluctant individuals were paid even \$100 in wave one. When the incentive value was decreased to \$20 in the next wave, the cooperation rate dropped, which supports the claim that incentives tend to have short-term effects on response rates.

Finally, the effects of incentives on attrition bias are unclear, as they may have a disproportionate impact on sample members with low retention propensities, which, in turn, will reduce the bias; some studies, on the other hand, have not shown any effects on sample composition. Certainly, more research, especially on long-term effects of incentives, is needed.

5. Incentives and selected aspects of survey quality

5.1. The quality of the answers

The majority of studies concentrate on how incentives affect response rates. Meanwhile, incentives can also influence other dimensions of survey quality, especially response quality that is reflected in the proportions of item non-response and 'Don't know' answers, the length of open-ended responses or the total length of the interview. Singer (2018) mentions two opposing mechanisms of how incentives shape the quality of answers: one is that the respondent once rewarded will do the survey, but not really pay attention to the answers, while the other mechanism is based on the feeling of obligation to do one's best after being paid. There is, however, not much evidence of the effects of incentives on data quality, and some of them are contradictory.

The negative impact of incentives on response quality is discussed by a variety of scientists, including Krosnick (1991). He concentrates on the issue of satisficing in surveys, defined as the process of formulating answers based on cognitive shortcuts to intellectually demanding questions. Forms of satisficing include selecting the first response alternative that seems reasonable, agreeing with assertions, endorsing the *status quo*, non-differentiation in using rating scales, selecting 'Don't know' as the answer, and mental coin-flipping. Respondents with low motivation have a higher propensity to exhibit satisficing behaviour. Reluctant respondents convinced by the incentive will probably fall into the low-motivated group and provide low-quality answers (Medway & Tourangeau, 2015; Sztabiński, 1995).

Several empirical studies which are mainly based on randomised experiments analyse the influence of incentives on different aspects of survey quality. Goldenberg et al. (2009) find in the U.S. Consumer Expenditure Interview Survey that generally incentives affect the quality of the obtained data to a small extent. The incentive groups performed overall better than the control group in terms of the number of questions answered, the number of 'Don't know' or refusal answers, or records consulted in the information book during the interview (which ensures more accurate reporting), but the differences were not always statistically significant.

Medway and Tourangeau (2015) describe the results of an experiment conducted on a telephone survey in the United States in 2011, in which a randomly selected subsample of the sample members received a \$5 prepaid incentive. They considered 11 indicators of response quality, including item non-response, the length of responses to open-ended items, non-differentiation, acquiescence, response order effects, use of rounded or prototypical values for numerical responses, the lack of attention to important exclusions presented along with the question, the accuracy of survey reports as compared to frame data, interview length, interviewers' rating of the respondent's level of effort during the interview and the shortcutting index (aggregating several of the previously mentioned indicators). Significant differences between the incentive groups and control group were observed for only 2 of the 11 indicators: the incentives correlated with less item non-response, but also less time per question.

Zagorsky and Rhoton (2008) describe a 2003 incentive experiment on 'Mature Women' and 'Young Women' studies included in the U.S. National Longitudinal Surveys. They found that incentives improved the quality of the interviews (interviews were longer and more items were answered) among the previously discouraged respondents, but the effects on those respondents who were previously willing to cooperate varied.

Fricker and Tourangeau (2010) analysed several, mainly American, interviewer-mediated surveys, and showed diverse results of the effects of incentives on survey quality. Compared to early respondents and those not requiring refusal conversion, late respondents and initial refusers were in some cases shown to be more likely to skip items, give shorter or less informative answers to open-ended questions and provide 'Don't know', 'not applicable', or 'no opinion' responses. Different results were also presented. Their own insight into the 2001–2003 Current Population Survey and the 2003 American Time Use Survey suggests a drop in data quality together with an increase in the cooperation rate. Similarly, Singer and Ye (2013) present in their meta-analysis both positive and negative examples of incentive effects on data quality, both for cross-sectional and longitudinal studies. This leaves

an open question of whether the efforts made to reduce non-response lead to poorer data quality and an increase in the occurrence of a total measurement error.

5.2. Non-response bias

Apart from the impact on response quality, incentives may also change the sample composition and either increase or decrease the non-response bias. The final effect depends on whether incentives increase the propensity to cooperate among groups less-represented or already well-represented in the survey. Using mathematical notation, the non-response bias is represented as the second element of the addition:

$$\bar{y}_n = \bar{y}_r + \left(\frac{m}{n}\right)(\bar{y}_r - \bar{y}_m),$$

where:

n – the total population studied,

r – respondents,

m – non-respondents,

$\bar{y}_i$ – population mean of a variable of interest for respective group i ($i = r, m$).

Non-response bias approaches 0 if either the non-response rate $\left(\frac{m}{n}\right)$ approaches 0 or the difference between respondents and non-respondents $(\bar{y}_r - \bar{y}_m)$ approaches 0. If the incentives are more effective in convincing groups that are already well-represented in a survey, it may have opposite effects on the two elements of non-response bias, which may ultimately increase. In other words, maximising the response rate is not always the best way to secure sample representativeness. Non-response bias, if not corrected, may hamper the generalisation of the sample results to the studied population.

Shettle and Mooney (1999) provide several examples of U.S. studies in which incentives decreased or, on the contrary, increased the non-response bias. Their own study on the use of small monetary incentives in a government mail survey does not provide evidence of their negative impact on non-response bias or on data quality. Ryu et al. (2006) show that incentives (cash) managed to effectively encourage typically underrepresented groups (such as individuals with low income, ethnic minorities, poorly-educated people) and found no proof of lower data quality. Petrolia and Bhattacharjee (2009), on the other hand, found that incentives tended to bias the sample in favour of lower-educated respondents and to attract respondents less familiar with the survey subject (preferences for fuel ethanol). The indirect effect of a change in sample composition brought some deterioration in item non-response indicators, as both groups were less likely to answer all of the questions.

The effects of incentives on non-response bias were also studied based on large-scale German surveys (Martin et al., 2014; Pforr et al., 2015) and the results were either inexplicit or did not prove the differential effect of incentives on the propensity to cooperate with respect to different socio-demographic characteristics. Only the analyses of the 1992 National Adult Literacy Survey showed that better-educated and wealthy people were more likely to cooperate in no-incentive conditions, which could result in the overestimation of population literacy in such a setting. Feskens et al. (2008) described the case of the Netherlands and showed that incentives did increase the response rates in the 2005 Dutch Labour Force Survey in general, but their effect was much smaller on immigrants, a group that was underrepresented from the beginning.

6. Ethical concerns

Survey methodological teams should ensure the ethical use of incentives. Naturally, there are gifts that can be unambiguously regarded as unacceptable or not recommended, e.g. with content related to violence, intolerance, eroticism, etc. or relating to controversial issues like gay rights, political views or belief criticism. However, also the value of gifts may raise doubts. An ethical question arises when the incentive becomes so large that it distorts the perception of the risk-benefit ratio of the contacted individual. Groups of low economic or social power in particular may have difficulty in saying 'no' (Singer, 2012). This can undermine the principle of survey participation being a voluntary act (Fowler, 2008).

Many researches express doubts about whether the regular and long-term use of incentives is able to change the way the public thinks of participating in surveys. Trussell and Lavrakas (2004, p. 364) write: 'if too much cash is given as an incentive, the freely given good will of these respondents may erode to the point where the respondent comes to expect cash'. The long-term use of incentives may also change the interviewers' behaviour: a risk may occur that their performance becomes poorer when incentives are not available. This may be, however, difficult to measure and any attempts made to determine the effect of incentives on interviewer motivation have failed so far (Singer & Ye, 2013).

Another ethical issue concerns the use of differential incentives in cases of refusal conversion, i.e. a situation when uncooperative people are rewarded more than the cooperative ones. Differential incentives, however, may be more economical than prepaid incentives (e.g. Brick et al., 2005) and may be even more effective in reducing non-response bias. Singer (2018, p. 411) provides her personal recommendation on incentive schemes: '(...) best practice in this area is to pay a small incentive upfront to everybody as an acknowledgement of their effort and

our gratitude for it and then to use differential incentives for refusal conversion in order to counteract direct bias.’

The economic theory supports the fairness of differential incentives: individuals have different perceptions of survey burden and may have different attitudes towards a survey, so they need different incentives to be convinced and compensated for their effort (e.g. Singer & Ye, 2013). Trussell and Lavrakas (2004) even recommend using differential incentives as being more cost-effective. However, Laurie and Lynn (2009) conclude that this approach is not recommended for longitudinal studies, due to e.g. ethical concerns and unknown long-term effects (e.g. raising respondents’ expectations regarding incentives in subsequent waves). Also, Singer et al. (2001) report that the majority of respondents consider differential refusal conversion payments unfair. In the German experiment described above (Börsch-Supan et al., 2013), communities of fewer than 9,000 inhabitants were excluded from the survey due to a high risk of the respondents learning about each others’ incentives, which would likely limit people’s motivation to take part in the survey. Nevertheless, experts agree that tailoring strategies may be justified when different sample members have different response tasks.

Last but not least, incentives should not jeopardise the promised confidentiality or impose fiscal commitments on the grantees.

7. Polish experiences

The American, Canadian or Western European experiences in encouraging contacted individuals to participate in surveys may be difficult to apply in Poland due to our different socio-political history. The problem is probably less pronounced nowadays due to globalisation and the similarity in consumption patterns of Polish and Western societies. The selection of the optimal type of incentive is related to understanding why Poles cooperate in social surveys. This question was studied by Paweł B. Sztabiński in the mid-1990s and 2000s.

Before the economic transformation in Poland, surveys were usually initiated by the authorities’ initiative and the participation itself was perceived as a verification of a citizen’s loyalty (Sztabiński, 1995). At that time, response rates were rather driven by a negative type of motivation (i.e. the fear of the consequences of refusing to participate in the survey). This changed after 1990. Sztabiński (1995) analysed the 1994 Polish General Social Survey questionnaire in terms of the respondents’ answers as to why they decided to participate. The motivation mostly related to serving social purposes (civic duty, the authorities should know people’s opinion, knowing that public opinion serves the whole of society).

Another study providing insight into the motives of survey participation was conducted in 2004 based on the ESS (Sztabiński, 2006). The number of the answers stating that surveys should benefit the whole society and that the government needs to know public opinion increased over time, indicating the direction of societal changes towards civic society. In both 1994 and 2004, a significant share of the answers regarding the reasons for participation related to the interviewer. This, on the one hand, underlines the important role of the interviewers. On the other hand, 'the interviewer was nice' answers indicate the potential existence of social desirability effects in the process of forming answers to survey items.

If these are the most important motives for Poles to participate, are incentives necessary? They most probably are, as a fall in the response rate in most Polish social surveys and an increase in the refusal rates are observed. Sztabiński et al. (2012) investigated the attitude of Polish ESS respondents and non-respondents towards incentives. Apart from collecting information from the fieldwork on respondents' reaction to gifts, individual in-depth interviews (IDIs) were conducted with non-respondents and converted refusers. Most of them expressed positive views about incentives, which is consistent with the reactions recorded by the interviewers. Meanwhile, the detailed IDI results vary: some IDI respondents mentioned that money is unacceptable as it goes against hospitality, but some preferred being paid. However, the authors stress the differences with respect to monetary incentives between Poland and the United States: in the latter a prepaid monetary incentive helps to build trust and establish social exchange, while in Poland money implies an economic exchange.

There is a large variety of incentives used in Polish surveys. Firstly, to the best of the author's knowledge, Statistics Poland, which coordinates governmental surveys, offers incentives in the form of small gifts (a pen, one-page calendar) conditional on completing the interview. The Household Budget Survey and Time Use Survey are regarded more burdensome and the value of the gifts is higher. The Household Finance and Consumption Survey, coordinated by Narodowy Bank Polski, i.e. the Polish central bank, with Statistics Poland as a fieldwork contractor, provided a set of commemorative coins (two or four coins of the value of PLN 2) as a conditional incentive mentioned in the advance letter. No information, however, on incentive effectiveness or respondents' reaction to them is available for these studies.

A well-documented survey in Poland with respect to incentive policy is the ESS. The survey methodological team, starting from round three, introduced unconditional gifts that are not mentioned in the advance letter and are provided by the interviewer at the doorstep (regardless of the actual participation). These gifts included a calculator with a ruler, a foldable pen, a wall calendar, a pocket calendar, a key ring with a small torch, and a notepad with a pen (Sztabiński et al., 2012).

In the years 2010–2015, the Educational Research Institute (Pol. Instytut Badań Edukacyjnych – IBE) carried out a systemic project called ‘Quality and effectiveness of education – strengthening of institutional research capabilities’. This project involved also several surveys with different target populations: pupils in schools, teachers, adults, households or schools with the principals, educational counsellors or career counsellors. As the IBE does not have its own interviewer network, all of the interviewer-mediated surveys were contracted to external companies selected in public tenders. The external fieldwork agencies were usually obliged to realise an assumed response rate and it was left to them to decide on the strategy for achieving this goal. In one of the surveys, the contracted company introduced lottery tickets in which the main prize was a car, which attracted some media attention (Instytut Badań Edukacyjnych, 2013). In other cases, the incentives were mainly in the form of gifts (sometimes a respondent could select them from a list) or shopping vouchers (PIAAC) that could be exchanged for an equivalent amount for a charity donation (postPIAAC). These incentives did not give any cause for concern.

SHARE is a longitudinal study conducted in Poland from 2006, and it complies with international standards imposed by the SHARE coordination team. The decisions on the use, type and value of incentives is left, however, to the country teams. In Poland, mainly monetary or shopping vouchers were used as conditional incentives. Also, some small gifts like pens or shopping bags were offered as additional expressions of gratitude. There have already been seven waves of SHARE in Poland and the methodological team also sends some gifts (Christmas cards and calendars) to the respondents at the end of the calendar year in order to maintain a rapport with them between interviews, which is certainly a good practice.

Most of the above-mentioned surveys are conducted (in terms of fieldwork) by external contractors who are usually paid per interview. This is why the interviewers’ main goal is to convince the contacted person to respond to the survey. Therefore, the interviewers are often allowed some flexibility in how to achieve this, also in terms of using incentives.

To the best of the author’s knowledge, no incentive-related experiments have been conducted in Poland so far. Although Poland has now had 30 years of experience in conducting social surveys by private research agencies or statistical offices since the fall of Communism, the documentation of many methodological aspects of the surveys (including the use of incentives) is missing or not publicly available. All these factors hinder drawing causal conclusions, thus selecting the best practices in survey methodology.

8. Conclusions

This article presents a general overview of survey incentives: their types, effectiveness and how they impact various issues associated with survey quality. Incentives are shown to increase response rates, but their effect on other aspects of survey quality is unclear. However, nowadays incentives are widely used to the point where not offering them seems unusual. At the same time, even the same incentives may differ in their effectiveness across various surveys related to different topics, target populations, countries and time. The results described in some studies at the end of the 20th century may not apply to today's social expectations and attitudes and there is little research on the changing aspects of survey incentives over time. This is why there is a need for continuous study of this topic. The most valuable research uses experimental settings in which different incentives (or the non-provision of incentives) are randomly assigned to sampled individuals.

Respondent incentives are one of the numerous methodological elements of a survey, and it would be an overstatement to claim that they are the most efficient in increasing the response rates and ensuring population representativeness. Interviewer training, good interviewer behaviour, advance letters, questions design, mode of data collection, and others, should also be given attention when preparing a survey. In order to ensure good quality of the collected data, we need to make sure that all aspects of survey methodology, including respondent incentives, are optimally designed.

Acknowledgments

The author would like to thank Prof. Franciszek Sztabiński for his valuable comments to the preliminary version of this article and to Monika Oczkowska for the information on the use of incentives when conducting SHARE in Poland. This research was supported by funds from the SGH Warsaw School of Economics (grant no. KAE/BMN18/01/18).

References

- Blohm, M., & Koch, A. (2013). Respondent Incentives in a National Face-to-Face Survey: Effects on Outcome Rates, Sample Composition and Fieldwork Efforts. *Methods, Data, Analyses*, 7(1), 89–122. <https://doi.org/10.12758/mda.2013.004>.
- Börsch-Supan, A., Krieger, U., & Schröder, M. (2013). *Respondent incentives, interviewer training and survey participation* (SHARE Working Paper Series, No 12). https://share-eric.eu/fileadmin/user_upload/SHARE_Working_Paper/WP_Series_12_2013.pdf.

- Brick, J. M., Montaquila, J., Hagedorn, M. C., Roth, S. B., & Chapman, C. (2005). Implications for RDD Design from an Incentive Experiment. *Journal of Official Statistics*, 21(4), 571–589. <https://www.scb.se/contentassets/ca21efb41fee47d293bbee5bf7be7fb3/implications-for-rdd-design-from-an-incentive-experiment.pdf>.
- Cantor, D., O'Hare, B. C., & O'Connor, K. S. (2007). The Use of Monetary Incentives to Reduce Nonresponse in Random Digit Dial Telephone Surveys. In J. M. Lepkowski, C. Tucker, J. M. Brick, E. D. de Leeuw, L. Japec, P. J. Lavrakas, M. W. Link, & R. L. Sangster (Eds.), *Advances in Telephone Survey Methodology* (pp. 471–498). John Wiley & Sons. <https://doi.org/10.1002/9780470173404.ch22>.
- Castiglioni, L., Pforr, K., & Krieger, U. (2008). The Effect of Incentives on Response Rates and Panel Attrition: Results of a Controlled Experiment. *Survey Research Methods*, 2(3), 151–158. <https://doi.org/10.18148/srm/2008.v2i3.599>.
- Church, A. H. (1993). Estimating the effect of incentives on mail survey response rates: a meta-analysis. *Public Opinion Quarterly*, 57(1), 62–79. <https://doi.org/10.1086/269355>.
- Edwards, P., Roberts, I., Clarke, M., DiGiuseppi, C., Pratap, S., Wentz, R., & Kwan, I. (2002). Increasing response rates to postal questionnaires: systematic review. *BMJ*, 324, 1–9. <https://doi.org/10.1136/bmj.324.7347.1183>.
- Eurostat. (2018). *Quality report of the second wave of the European Health Interview survey*. Publications Office of the European Union. <https://doi.org/10.2785/43982>.
- Eurostat. (2022). *Quality report of the third wave of the European Health Interview survey*. Publications Office of the European Union. <https://data.europa.eu/doi/10.2785/081621>.
- Feskens, R., Hox, J., Schmeets, H., & Wetzels, W. (2008). Incentives and ethnic minorities: Results of a controlled randomized experiment in the Netherlands. *Survey Research Methods*, 2(3), 159–165. <https://doi.org/10.18148/srm/2008.v2i3.71>.
- Fowler, F. J. (2008). *Survey Research Methods* (4th edition). SAGE Publications. <https://doi.org/10.4135/9781452230184>.
- Fricker, S., & Tourangeau, R. (2010). Examining the Relationship Between Nonresponse Propensity and Data Quality in Two National Household Surveys. *Public Opinion Quarterly*, 74(5), 934–955. <https://doi.org/10.1093/poq/nfq064>.
- Główny Urząd Statystyczny. (2009). *Aktywność ekonomiczna ludności Polski. IV kwartał 2008 r.* https://stat.gov.pl/cps/rde/xbcr/gus/aktywnosc_ekonomiczna_ludnosci_Polski_1_4kw_2008.zip.
- Główny Urząd Statystyczny. (2019). *Aktywność ekonomiczna ludności Polski. IV kwartał 2018 r.* https://stat.gov.pl/download/gfx/portalinformacyjny/pl/defaultaktualnosci/5475/4/32/1/aktywnosc_ekonomiczna_ludnosci_polski_iv_kwartal_2018.pdf.
- Goldenberg, K. L., McGrath, D., & Tan, L. (2009). *The Effects of Incentives on the Consumer Expenditure Interview Survey*. U.S. Bureau of Labor Statistics. <https://www.bls.gov/osmr/research-papers/2009/st090100.htm>.
- Groves, R. M., Cialdini, R. B., & Couper, M. P. (1992). Understanding the decision to participate in a survey. *Public Opinion Quarterly*, 56(4), 475–495. <https://doi.org/10.1086/269338>.
- Groves, R. M., Singer, E., & Corning, A. (2000). Leverage-Saliency Theory of Survey Participation: Description and an Illustration. *Public Opinion Quarterly*, 64(3), 299–308. <https://doi.org/10.1086/317990>.

- Instytut Badań Edukacyjnych. (2013). *Kulisy badania 6- i 7-latków*. Retrieved March 10, 2019, from http://www.ibe.edu.pl/pl/?option=com_content&view=article&id=187:yci..
- Jäckle, A., & Lynn, P. (2008). Respondent incentives in a multi-mode panel survey: Cumulative effects on nonresponse and bias. *Survey Methodology*, 34(1), 105–117. <https://www150.statcan.gc.ca/n1/en/pub/12-001-x/2008001/article/10607-eng.pdf?st=2rmKi0bi>.
- Krosnick, J. A. (1991). Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied Cognitive Psychology*, 5(3), 213–236. <https://doi.org/10.1002/acp.2350050305>.
- Laurie, H., & Lynn, P. (2009). The Use of Respondent Incentives on Longitudinal Surveys. In P. Lynn (Ed.), *Methodology of Longitudinal Surveys* (pp. 205–233). John Wiley & Sons. <https://doi.org/10.1002/9780470743874.ch12>.
- de Leeuw, E. D., & Hox, J. (2012). Self-Administered Questionnaires. In E. D. de Leeuw, J. Hox & D. Dillman (Eds.), *International Handbook of Survey Methodology* (pp. 239–263). Routledge. <https://doi.org/10.4324/9780203843123>.
- Lengacher, J. E., Sullivan, C. M., Couper, M. P., & Groves, R. M. (1995). Once reluctant, always reluctant? Effects of differential incentives on later survey participation in a longitudinal study. In *Proceedings of Survey Research Methods Section of the American Statistical Association* (pp. 1029–1034). http://www.asasrms.org/Proceedings/papers/1995_179.pdf.
- Martin, E., Abreau, D., & Winters, F. (2001). Money and motive: effects of incentives on panel attrition in the survey of income and program participation. *Journal of Official Statistics*, 17(2), 267–284.
- Martin, S., Helmschrott, S., & Rammstedt, B. (2014). The Use of Respondent Incentives in PIAAC: The Field Test Experiment in Germany. *Methods, Data, Analyses*, 8(2), 223–242. <https://doi.org/10.12758/mda.2014.009>.
- Medway, R. L., & Tourangeau, R. (2015). Response Quality in Telephone Surveys: Do Prepaid Cash Incentives Make a Difference?. *Public Opinion Quarterly*, 79(2), 524–543. <https://doi.org/10.1093/poq/nfv011>.
- National Center for Health Statistics. (2017). *Survey Description, National Health Interview Survey 2016*. Retrieved September 2024, from <https://www.cdc.gov/nchs/nhis/data-questionnaires-documentation.htm>.
- National Center for Health Statistics. (2023). *National Health Interview Survey 2022. Survey Description*. https://ftp.cdc.gov/pub/Health_Statistics/NCHS/Dataset_Documentation/NHIS/2022/srvydesc-508.pdf.
- National Opinion Research Center. (2019). *GSS 1972–2018 Cross-Section Codebook Sections. Appendix A – Sampling Design and Weighting*. https://gss.norc.umd.edu/documents/codebook/GSS_Codebook_AppendixA.pdf.
- National Opinion Research Center. (2022). *The General Social Survey*. <https://gss.norc.umd.edu/Documents/codebook/GSS%202022%20Codebook.pdf>.
- Norwegian Centre for Research Data. (2018a). *ESS2 – 2004 Documentation Report* (edition 3.7). <https://ess-search.nsd.no/en/study/c7f5d299-6bb6-4d4b-b9b5-f52b3026a9a4>.
- Norwegian Centre for Research Data. (2018b). *ESS5 – 2010 Documentation Report* (edition 4.2). <https://ess.sikt.no/en/study/fd0dc7b6-3d5a-42d4-ad46-7a78e44e3963/143>.

- Norwegian Centre for Research Data. (2018c). *ESS7 – 2014 Documentation Report* (edition 3.2). <https://ess.sikt.no/en/study/ccd56840-e949-4320-945a-927c49e1dc4f/118>.
- Norwegian Centre for Research Data. (2020). *ESS8 – 2016 Documentation Report* (edition 2.2). <https://ess.sikt.no/en/study/f8e11f55-0c14-4ab3-abde-96d3f14d3c76/162>.
- Norwegian Centre for Research Data. (2021). *ESS9 – 2018 Documentation Report* (edition 3.1). <https://ess-search.nsd.no/en/study/bdc7c350-1029-4cb3-9d5e-53f668b8fa74>.
- Petrolia, D. R., & Bhattacharjee, S. (2009). Revisiting Incentive Effects: Evidence from a Random-Sample Mail Survey on Consumer Preferences for Fuel Ethanol. *Public Opinion Quarterly*, 73(3), 537–550. <https://doi.org/10.1093/poq/nfp038>.
- Pffor, K., Blohm, M., Blom, A. G., Erdel, B., Felderer, B., Frässdorf, M., Hajek, K., Helmschrott, S., Kleinert, C., Koch, A., Krieger, U., Kroh, M., Martin, S., Sassenroth, D., Schmiedeberg, C., Trüdinger, E. M., & Rammstedt, B. (2015). Are Incentive Effects on Response Rates and Nonresponse Bias in Large-scale, Face-to-face Surveys Generalizable to Germany? Evidence from Ten Experiments. *Public Opinion Quarterly*, 79(3), 740–768. <https://doi.org/10.1093/poq/nfv014>.
- Ryu, E., Couper, M. P., & Marans, R. W. (2006). Survey Incentives: Cash vs. In-Kind; Face-to-Face vs. Mail; Response Rate vs. Nonresponse Error. *International Journal of Public Opinion Research*, 18(1), 89–106. <https://doi.org/10.1093/ijpor/edh089>.
- Scherpenzeel, A., & Toepoel, V. (2012). Recruiting a probability sample for an online panel: Effects of contact mode, incentives, and information. *Public Opinion Quarterly*, 76(3), 470–490. <https://doi.org/10.1093/poq/nfs037>.
- Shettle, C., & Mooney, G. (1999). Monetary Incentives in U.S. Government Surveys. *Journal of Official Statistics*, 15(2), 231–250.
- Sikt. (2023). *ESS10 Headline Indicators* (edition 3.0). <https://ess.sikt.no/en/study/172ac431-2a06-41df-9dab-c1fd8f3877e7/440>.
- Singer, E. (2012). Ethical Issues in Surveys. In E. D. de Leeuw, J. J. Hox & D. A. Dillman (Eds.), *International Handbook of Survey Methodology* (pp. 78–96). Routledge. <https://doi.org/10.4324/9780203843123>.
- Singer, E. (2018). Survey incentives. In D. L. Vannette & J. A. Krosnick (Eds.), *The Palgrave Handbook of Survey Research* (pp. 405–415). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-54395-6_50.
- Singer, E., Groves, R. M., & Corning, A. D. (2001). Differential incentives: Beliefs about practices, perceptions of equity, and effects on survey participation. *Public Opinion Quarterly*, 63(2), 251–260. <https://doi.org/10.1086/297714>.
- Singer, E., Van Hoewyk, J., Gebler, N., Raghunathan, T., & McGonagle, K. (1999). The Effect of Incentives on Response Rates in Interviewer-Mediated Surveys. *Journal of Official Statistics*, 15(2), 217–230. <https://www.scb.se/contentassets/ff271eeeca694f47ae99b942de61df83/the-effect-of-incentives-on-response-rates-in-interviewer-mediated-surveys.pdf>.
- Singer, E., Van Hoewyk, J., & Maher, M. P. (2000). Experiments with Incentives in Telephone Surveys. *Public Opinion Quarterly*, 64(2), 171–188. <https://doi.org/10.1086/317761>.
- Singer, E., & Ye, C. (2013). The Use and Effects of Incentives in Surveys. *The Annals of the American Academy of Political and Social Science*, 645(1), 112–141. <https://doi.org/10.1177/0002716212458082>.

- Stoop, I., Billiet, J., Koch, A., & Fitzgerald, R. (2010). *Improving Survey Response: Lessons learned from the European Social Survey*. John Wiley & Sons. <https://doi.org/10.1002/9780470688335>.
- Sztabiński, P. B. (1995). Dlaczego respondenci zgadzają się na wywiad? Problemy aranżacji wywiadu w badaniach surveyowych. *Ask: Research & Methods*, 2(1), 21–35. <https://kb.osu.edu/handle/1811/69463>.
- Sztabiński, P. B. (2006). Dlaczego respondenci uczestniczą lub nie uczestniczą w badaniach? Porównanie 1994–2004. *Ask: Research & Methods*, 15(1), 7–28. <https://kb.osu.edu/handle/1811/69543>.
- Sztabiński, P. B., Sztabiński, F., & Przybysz, D. (2012). What do respondents and non-respondents think of incentives and how do they react to them? The ESS Experience in Poland. *Ask: Research & Methods*, 21(1), 87–122. <https://kb.osu.edu/handle/1811/69582>.
- Trussell, N., & Lavrakas, P. J. (2004). The Influence of Incremental Increases in Token Cash Incentives on Mail Survey Response: Is There an Optimal Amount?. *Public Opinion Quarterly*, 68(3), 349–367. <https://doi.org/10.1093/poq/nfh022>.
- Warriner, K., Goyder, J., Gjertsen, H., Hohner, P., & McSpurren, K. (1996). Charities, no; lotteries, no; cash, yes: Main effects and interactions in a Canadian incentives experiment. *Public Opinion Quarterly*, 60(4), 542–562. <https://doi.org/10.1086/297772>.
- Zagorsky, J. L., & Rhoton, P. (2008). The Effects of Promised Monetary Incentives on Attrition in a Long-Term Panel Survey. *Public Opinion Quarterly*, 72(3), 502–513. <https://doi.org/10.1093/poq/nfn025>.