

The SOM Institute's Notes on Survey Methodology – 2025:4

I want YOU for this survey! Text interventions in email reminders to increase response rates in web surveys

Freja Wessman

The SOM Institute, University of Gothenburg
Freja.wessman@gu.se

Klara Jagers

The SOM Institute, University of Gothenburg
Klara.jagers@gu.se

ABSTRACT

This note presents results from an experiment conducted in the Swedish Citizen Panel testing if text interventions in email reminders can increase the response rates in web-surveys. Applying psychological theories of social identity (Tajfel & Turner, 1979) and social influence through descriptive norms (Cialdini et al., 1990), it was investigated whether text cues can trigger participation and thus decrease non-response bias. A 2x2 factorial design was implemented, consisting of four groups: a control group, a group who received a social identity intervention, a group who received a descriptive norm intervention and finally a group receiving a combination of both social identity and descriptive norm. Results indicated a positive pattern across all experimental groups. The response rate after the first reminder was significantly higher in both the group who received the descriptive norm intervention and in the group that received a combination of social identity and descriptive norm intervention.

INTRODUCTION

Declining response rates are an increasing issue within survey research and a threat to the level of validity. This may not only affect data quality in academic research but poses a growing challenge for government agencies seeking reliable information about citizens' opinions and service needs (Groves, 2006; Jabkowski & Cichocki, 2025; Kreuter, 2013). Previous research shows that reminders have been found to increase the response rate in web-surveys (Sammut et al., 2021) but few studies have focused on the content of these reminders (Pedersen & Nielsen, 2016). While both the social norm and descriptive norm theory are well-known and have been used in previous research (Goldstein et al., 2008), there are few, to none, examples of them being used for text interventions in reminders to increase response rates in web-surveys. Therefore, this study applied specific text interventions in reminders to increase the response rate for web-surveys, using the theories of social identity and social influence through descriptive norm. The aim of this study is thus to improve our understanding regarding what mechanisms work best to increase the response rates in online surveys, which can hopefully lead to higher participation rates in the future.

SOCIAL IDENTITY THEORY

The social identity theory was developed in the late 1970's by Tajfel & Turner (1979). The theory suggests that we create our social identity and sense of self through the groups we are a part of. The feeling of affiliation and belonging with these same groups is what explains a positive social identity. To maintain a positive self-identity, it's important that you obtain the feeling of identification with your ingroup. Otherwise, you must either adjust to the norms within the group or change group if you cannot conform to the norms (Brown, 2000).

A cue that activates or reminds you of your group belonging or identity may give a sense of purpose or responsibility towards others in the group. One example of this is a study by Dolinski et al. (2024) in which respondents were asked to complete a survey because as they stated, they needed more answers from people “just like them”. The results from the study showed that the social norm activation led to an increased response rate in some cases. While this study was performed in a real life setting and not an online one, it still highlights the effect social norms can have on one’s behavior.

DESCRIPTIVE NORM THEORY

Rather than following norms within a particular social group, the descriptive norm theory suggests that people will act accordingly to what is most commonly done by others or the norm within the majority (Cialdini et al., 1990; Cialdini et al., 1991). Further, people will have the tendency to change their behavior if they are made aware that their behavior is an exception to the norm. Several studies have previously used the descriptive norm theory to inflict a specific behavior, for example regarding pro-environmental behavior (Cialdini et al., 1990; Hornik et al., 1995; Nigbur et al., 2010). However, it is rare that this particular behavior includes increasing the response rates in surveys (Misra et al., 2012). One study used cues in invitations letters to increase the response rate for an online survey regarding a conference. The treatment group in the study received a descriptive norm cue in their invitation letter which focused on the norm among the other respondents in their group. The norm in this case was to answer the survey. The results showed that individuals who received treatment, the descriptive norm cue, were more inclined to complete the survey than those who did not receive treatment (Misra et al., 2012).

METHOD

SAMPLE AND PROCEDURE

Data was collected through three different surveys in the Swedish Citizen Panel with different subsamples. The first sample was a non-probability sample of 4,200 respondents stratified by age, gender and education. The second sample was a non-stratified probability sample of 1,183 respondents and the final sample was a non-stratified non-probability sample of 4,500 respondents. The data was collected between December 2024 and January 2025. Two reminders were sent out, the first one a week after the start of the field period and the second after two weeks. The two reminders are identical with the only difference that the last reminder stating that it is the final reminder.

The experiment had a 2x2 factorial design to understand the effect of two independent variables (Social Identity and Descriptive Norm Theory). Main outcome was the participation rates between the control and treatment groups, to be able to determine whether text interventions in email-reminders could increase the participation rates.

Figure 1. 2x2 factorial experiment design

Group	Social identity	Descriptive norm
1. Control	Absent	Absent
2. Social Identity	Present	Absent
3. Descriptive norm	Absent	Present
4. Combo	Present	Present

INTERVENTIONS

The experiment included four different groups, and every group was assigned a different text cue in their reminder email. Besides the intervention everything was the same in the reminder between the groups. Figure 2 illustrates the difference in text intervention for each group.

The control group only had a general reminder text and the link to the survey positioned at the same place in the letter as in the treatment group's letters.

For the second group, the social identity cue, the aim was to evoke a sense of the respondent's social identity by using the phrase "We need more responses from people like you" in the reminder letter. By phrasing it this way the goal was to trigger a feeling of belonging to a certain group without targeting a respondent individually.

For the third group, which was given the descriptive norm, the cue in the reminder was phrased "Most people have already responded but we still need your answer" to show the respondent that the norm among the majority was to answer the survey.

In the last group, both treatments were combined and the cue in the reminder was phrased "Most people have already responded but we still need more responses from people like you" with the aim to activate both the social identity and descriptive norms within the respondent. See Appendix 1 for how each intervention looked in the email reminder.

Figure 2. *Text intervention for each experiment group in email reminder*

Group	Cue/letter wording
Control	You still have the opportunity to participate
Social norm	We need more responses from people like you
Descriptive norm	Most people have already responded but we still need your answer
Combination	Most people have already responded but we still need more responses from people like you

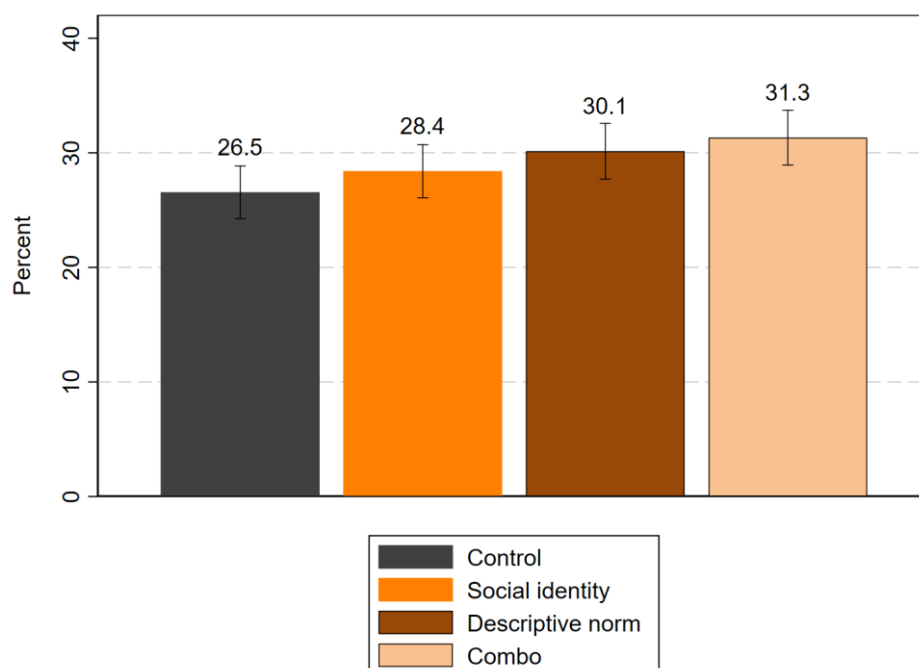
RESULTS

PARTICIPATION RATES – ALL THREE SURVEYS COMBINED

As the intervention happened during the first reminder, respondents who had answered before the first reminders were excluded from the analysis.

Approximately 40 percent of the total respondents had answered before the reminders were sent out. In Figure 3 the participation rates for each experiment group across all three studies are presented among those left to answer after the first reminder was sent out. Participation rates are based on those who answered 80% or more of the questions in each survey. There was a significant increase in participation rates for both the group Descriptive norm ($p = .07$) and the Combo group ($p = .01$) compared to the control group. The increase is not significant for the Social identity group (Figure 3).

Figure 3. *Participation rates among respondents who had not responded before first reminder (percent)*



Note. Participation rates among respondents in all three subsamples of the experiment. Those who had responded before the first reminder were excluded from the analysis. control $n=1420$, Social identity $n=1458$, Descriptive norm $n=1367$, Combo $n=1443$. Total $n=5688$.

Compared to the control group, the participation rates were 3.6 percentage points higher for the Descriptive norm group and 4.8 percentage points higher for the Combo group among the respondents who answered after the first reminder. In addition, a meta-analysis indicated that the effects were homogenous across subsamples. These findings are promising and demonstrate that tailored email interventions can increase participation rates in the Swedish Citizen panel.

CONCLUSION

This study aimed to test text interventions in the email-reminders of the Swedish Citizen panel to see if this could increase the participation rates, a relatively unexplored part of survey research. The results show that by applying the psychological mechanism of social identity and descriptive norm in a combination a significant increase in participation rates could be achieved, with a 4.8 percentage points increase of participation from the reminders. This was a completely free intervention that only involved changing the text in the email-reminder.

Due to the successful results from this first experiment across three subsamples, the aim is to conduct future replications of the experiment with the most successful email reminder, combo, for the possibility to conduct sub-group analyses of hard-to-reach groups.

REFERENCES

- Brown, R. (2000). Social identity theory: Past achievements, current problems and future challenges. *European journal of social psychology*, 30(6), 745-778.
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1991). A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior. In *Advances in experimental social psychology* (Vol. 24, pp. 201-234). Academic Press.
- Cialdini, R. B., Reno, R. R., & Kallgren, C. A. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015–1026.
- Dolinski, D., Grzyb, T., Kulesza, W., Błaszczuk, P., Laska, D., Liebersbach, F., Redkiewicz, D & Strzelczyk, Ł. (2024). 'We are looking for people like you' – new technique of social influence as a tool of improving response rate in surveys. *Social Influence*, 19(1).
- Goldstein, N. J., Cialdini, R. B., & Griskevicius, V. (2008). A room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research*, 35(3), 472–482.
- Groves, R. M. (2006). Nonresponse rates and nonresponse bias in household surveys. *International Journal of Public Opinion Quarterly*, 70(5), 646-675.
- Hornik, J., Cherian, J., & Madansky, M. (1995). Determinants of recycling behavior: A synthesis of research results. *the Journal of Socio-economics*, 24(1), 105-127.
- Jabkowski, P., & Cichocki, P. (2025). Survey response rates in European comparative surveys: a 20-year decline irrespective of sampling frames or survey modes. *Quality & Quantity*, 59(Suppl 1), 635–655. <https://doi.org/10.1007/s11135-024-01993-9>

- Kreuter, F. (2013) Facing the nonresponse challenge. *The Annals of the American Academy of Political and Social Science* 645(1), 23-35.
- Misra, S., Stokols, D., & Marino, A. H. (2012). Using Norm-Based Appeals to Increase Response Rates in Evaluation Research: A Field Experiment. *American Journal of Evaluation*, 33(1), 88-98.
- Nigbur, D., Lyons, E., & Uzzell, D. (2010). Attitudes, norms, identity and environmental behaviour: Using an expanded theory of planned behaviour to predict participation in a kerbside recycling programme. *British journal of social psychology*, 49(2), 259-284.
- Pedersen, M. J., & Nielsen, C. V. (2016). Improving Survey Response Rates in Online Panels: Effects of Low-Cost Incentives and Cost-Free Text Appeal Interventions. *Social Science Computer Review*, 34(2), 229-243.
- Sammut, R., Griscti, O., & Norman, I. J. (2021). Strategies to improve response rates to web surveys: a literature review. *International Journal of Nursing Studies*, 123, 104058.
- Tajfel H., Turner J. C., (1979). An integrative theory of intergroup conflict. In: Austin W G, Worchel S (eds.) *The Social Psychology of Intergroup Relations*. Brooks-Cole, Monterey

APPENDIX

Figure 5. *First part of email reminder for group Control (translated into English)*

Hello!

A while ago you received an invitation to the next stage of the Swedish Citizen Panel. You still have the opportunity to participate.

You can access the survey via the following link:

[Till Medborgarpanelen](#)

Figure 6. *First part of email reminder for group Social identity (translated into English)*

Hello!

A while ago, you received an invitation to the next stage of the Swedish Citizen Panel from the University of Gothenburg. We need more responses from people like you.

You can access the survey via the following link:

[Till Medborgarpanelen](#)

Figure 7. *First part of email reminder for group Descriptive norm (translated into English)*

Hello!

A while ago, you received an invitation to the next stage of the Swedish Citizen Panel from the University of Gothenburg. Most people have already responded, but we still need your answer.

You can access the survey via the following link:

[Till Medborgarpanelen](#)

Figure 8. *First part of email reminder for group Combo (translated into English)*

Hello!

A while ago, you received an invitation to the next stage of the Swedish Citizen Panel from the University of Gothenburg. Most people have already responded, but we need more answers from people like you.

You can access the survey via the following link:

[Till Medborgarpanelen](#)



The SOM Institute is an academic organization located at the University of Gothenburg, Sweden. Since 1986 the SOM Institute conducts annual cross-sectional surveys among the Swedish population with a focus on Society, Opinion, and Media, as well as administering the web panel called the Swedish Citizen Panel. The annual surveys and the web panel both function as infrastructures, enabling researchers and public organizations to effectively collect research and opinion data in collaboration with researchers at the SOM Institute.

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