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A National RDD Smartphone Web Survey: Can the Reminders Hit a Higher Completion Rate than the Invitation?

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In face-to-face (CAPI), telephone (CATI), or even web surveys, researchers often experience lower completion rates for subsequent call attempts or reminders rather than a first call attempt or initial invitation. For instance, in a study by Park et al. (2012), a dual-frame (landline and cell phone) random-digit-dialing (RDD) CATI survey was conducted from November 1 to December 27, 2010, at the national level in South Korea. Incentives were not offered for survey participation. The survey obtained completed interviews from 1,508 participants (899 via landline, 609 via cell phone) out of 15,279 landline sample numbers and 11,493 cell phone sample numbers. Completion rates by call attempts are depicted in Figure 1. The figure illustrates a significant decrease in completion rates for landlines and cell phones with increased call attempts to a maximum of 17. The decrease rates are notably high from the first to the second call and from the second to the third call.

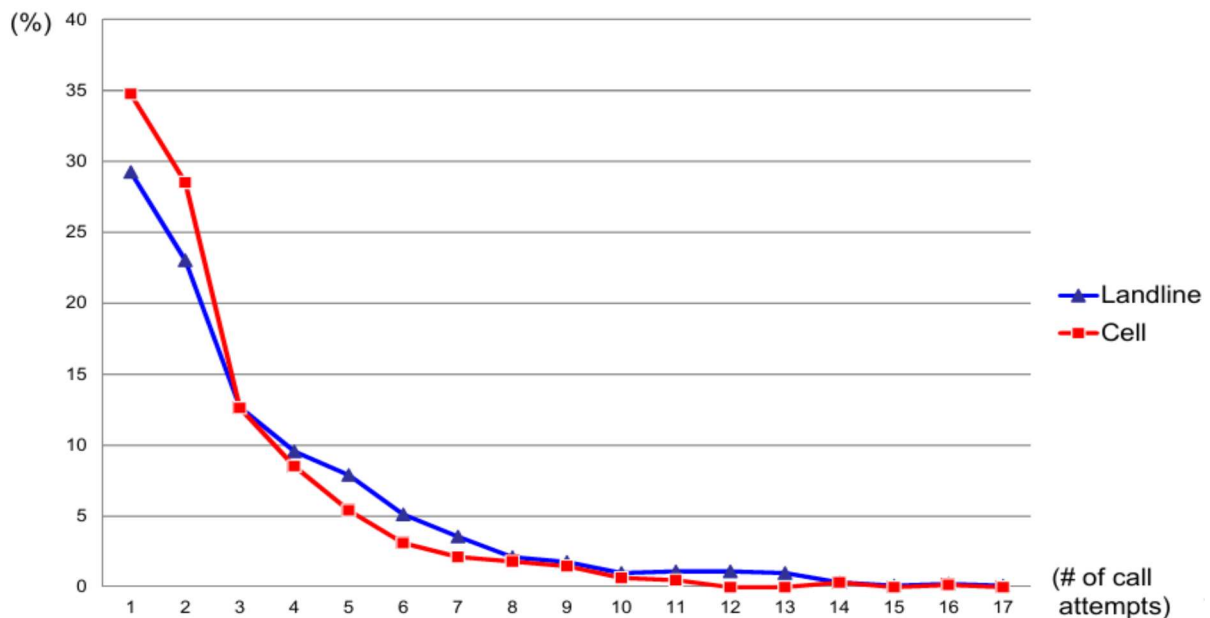


Figure 1. Completion rates by call attempts in a dual-frame RDD CATI survey using 15,279 landline sample numbers and 11,493 cell phone sample numbers

In a study by Andreadis (2020), a complete enumeration web survey, in which all invitations and reminders were sent as text messages via short message service (SMS) to 12,582 cell phone numbers of clients of the National Theatre of Northern Greece (NTNG), was conducted in July 2017 in Greece. The invitations were sent in the period between July 19 and 26. A first reminder was sent on July 27, and the second (final) was sent on July 31. The online questionnaire included 36 questions/pages asking opinions about various NTNG services. There were no incentives for survey participation. Out of the 12,582 (100%) numbers, 2,139 (17.1%) clicked on the survey link and 1,612 (12.9%) completed the survey. The percentage of people who clicked on the survey link on their smartphones, not tablets or PCs, was 74.8%. The median time to complete the survey was 10 minutes. As presented in Table 1, completion rates for two reminders (28.0%, 27.8%) were much lower than for the initial invitation (44.2%).

Table 1. Completed interviews after sending the invitation and reminders using SMS to 12,582 clients of the National Theatre of Northern Greece

Administration	Completed Interviews	%
Invitation	713	44.2
First reminder	451	28.0
Second reminder	448	27.8
Total	1,612	100.0

Unlike this survey, can the reminders in a web survey hit a higher completion rate than the initial invitation? The National Survey of Life and Health (NSLH) found such a result. The NSLH is a cell phone RDD sample-based web survey conducted for a study by Kim and Couper (2023). As shown in Table 2, the NSLH had a higher completion rate (32.6%) for the first reminder than for the initial invitation (26.4%), and that for the second reminder (23.4%) was similar to that for the initial invitation (26.4%).

Table 2. Completed interviews after sending the invitation and reminders using SMS to cell phone RDD sample numbers

Administration	Completed Interviews	%
Invitation	405	26.4
First reminder	500	32.6
Second reminder	358	23.4
Third reminder	269	17.6
Total	1,532	100.0

It is not clear why these results happened. However, the NSLH can be treated as a package of features in data collection to bring these results. Some features are as follows. It is a university-based national RDD smartphone survey conducted for 7 weeks, from October 12 to November 28, 2020 in South Korea. The initial invitation and three follow-up reminders were sent using a commercial SMS text messaging service to cell phone RDD sample numbers, whose initial size

was 30,000. Reminders were sent once a week for three weeks. The questionnaire consisted of 50 questions. Incentives were offered. 93.9% of respondents answered on their smartphones. The median time to complete the survey was 8.2 minutes.

In another study, similar results were found in an email-based web survey. Christof (2017) reported an experimental test conducted with a complete enumeration web survey via email with an individual link to the questionnaire, which was sent to the full population of 15,651 higher education students of the University of Antwerp, Belgium, between October and December 2013. The main aim of the questionnaire was to explore students' attitudes and opinions about internationalization initiatives at the university. There were three reminders after the initial invitation. Reminders were sent within the subsequent week, not for several weeks. Incentives were not offered. The total number of completed interviews was 4,880 (31.2% of 15,651). Table 3 shows that the completion rate after the first or second reminder (33.0%, 27.6%) is higher than after the initial invitation (19.9%).

Table 3. Completed interviews
after sending the invitation and
reminders using email to students
in a university

Administration	%
Invitation	19.9
First reminder	33.0
Second reminder	27.6
Third reminder	19.5
Total	100.0

Considering the results in Table 3, there would be no suspicion that the reminders in a web survey may lead to a higher completion rate than the initial invitation. This indicates that the reminders could present a valuable opportunity to enhance the completion rate and, consequently, the response rate. Therefore, sending thoughtful and timely reminders in a national RDD smartphone web survey is crucial when using a commercial SMS text messaging service like the NSLH.

References

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