

List-Assisted Mail as an Alternative to Random Digit Dial in a Survey of the Young Adult Population

Rebecca Medway, Luciano Viera, Scott Turner & Sean Marsh / Fors Marsh Group LLC

INTRODUCTION

It is becoming increasingly difficult to conduct efficient random digit dial (RDD) landline telephone surveys that produce valid and reliable estimates.

- Potential for **noncoverage error**: One-fifth of U.S. households are cell-only, while one-third of young adult households are cell-only (Blumberg & Luke, 2009).
- Potential for **nonresponse error**: Response rates to RDD landline surveys have declined as caller-ID and answering machines have become more prevalent, and as telemarketing calls have increasingly burdened potential survey respondents.

In the face of these challenges, survey practitioners are considering alternatives to RDD surveys (e.g., Link et al., 2006), such as list-assisted mail surveys.

This study addresses the comparability of concurrent RDD and list-assisted mail administrations of a survey of young adults ages 16-24.

THE RDD SURVEY

The Youth Poll is a tracking survey that has been completed by the Department of Defense (DoD) for over thirty years.

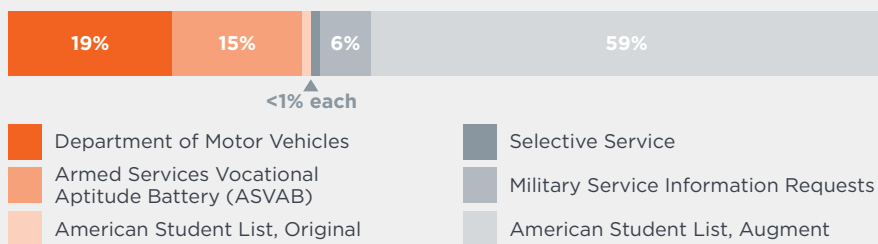
- > **Administration schedule**: biannual
 - Results presented here are from the latest administration, which occurred in fall 2008.
- > **Target population**: English-speaking youth ages 16 to 24 living in the United States
- > **Number of respondents**: 4,242 youth
- > **Survey topic**: youths' career and education plans
- > **Key metric**: military propensity
 - The proportion of youth replying "definitely" or "probably" to the question, "In the next few years, how likely is it that you will be serving in the Military?"

THE MAIL SURVEY

The mail Youth Poll was administered for the first time in fall 2008. It was conducted concurrently with the RDD Youth Poll in order to maximize comparability.

- > **Administration**: Over a two month period, sample members were sent a notification letter, three survey packages (the first of which included a \$2 incentive), and a reminder/thank you postcard.
- > **Sampling frame**: address-based list of 28 million youth developed by the DoD
 - Simple random sample of 10,000 youth
- > **Number of respondents**: 1,905 youth
- > **Survey topic**: instrument contained a subset of the RDD items, including military propensity

Case Sources for Mail Survey Frame



RESEARCH QUESTIONS

How do the RDD and mail surveys compare in terms of:

- Efficiency of survey administration?
- Coverage of the target population?
- Representativeness of the respondent profile?
- Validity of the key metric estimate?

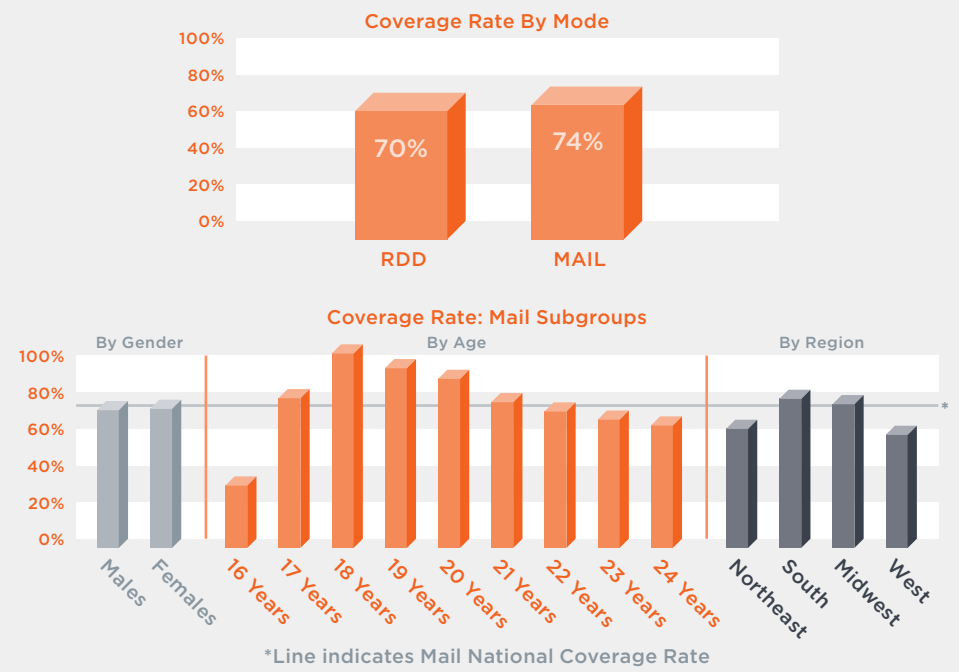
RESULTS: EFFICIENCY

Most of the efficiency measures indicated that the mail survey was more efficient than the RDD survey.

	RDD	MAIL
Length of Time to Field	2.5 Months	2.5 Months
Cost Per Completed Survey	\$259	\$118
Sample Members	332,725	10,000
Unverifiable Phone Number / Undeliverable	49%	11%
Not 16-24 Years Old	18%	<1%
Language Barrier / Death / Disability	1%	<1%
Explicit Refusal	<1%	<1%
Completed Surveys	1% (4,242)	19% (1,905)

RESULTS: COVERAGE

Coverage was slightly higher for the mail survey than it was for the RDD survey.

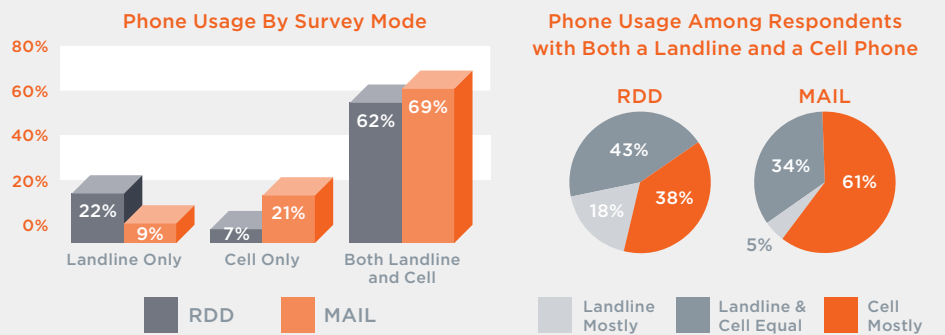


RESULTS: RESPONDENT PROFILE

Generally, the RDD and mail survey respondents had similar demographic characteristics to one another and to December 2008 Current Population Survey estimates. However, educational enrollment and educational attainment were considerably higher among mail survey respondents. The demographic differences that arose were accounted for in the weighting scheme of each survey.

Respondents to the two surveys differed in their phone usage.

- RDD respondents were considerably more likely than mail respondents to only use a landline, while mail respondents were more likely to only use a cell phone.
- Among respondents reporting to have both a landline and cell phone, mail respondents were significantly more likely to report using their cell phone to make all or almost all of their calls.

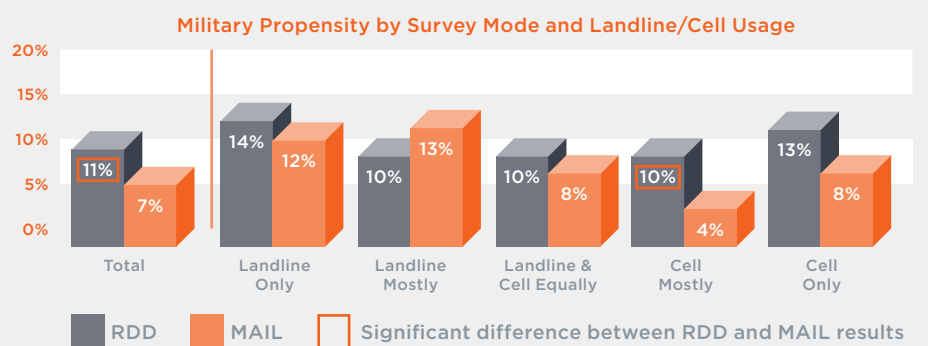


RESULTS: KEY METRIC

The weighted estimate of military propensity resulting from the RDD survey was significantly higher than that resulting from the mail survey.

Results support that this difference is due to the increased representation of cell-only and cell-mostly youth in the mail survey;

- In the mail survey, youth who were frequent cell phone users were less likely to be propensed than were youth in other landline/cell usage subgroups.
- Propensity was statistically equivalent in the two surveys when each landline/cell usage subgroup was analyzed individually. The only significant difference between the two surveys was among cell-mostly youth.



FUTURE RESEARCH

Three additional iterations of concurrent RDD/mail surveys will be conducted in spring 2009, fall 2009 and fall 2010. These administrations will focus on confirming existing findings, as well as improving the mail survey methodology.

The mail frame has been improved through increased participation of state DMV's; the spring 2009 frame has a coverage rate of 90%.