CLEARINGHOUSE
FOR MILITARY FAMILY READINESS

# Survey Response Rates:
## Rapid Literature Review

Clearinghouse Technical Assistance Team

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## Executive Summary

The Clearinghouse for Military Family Readiness at Penn State Technical Assistance Team conducted a rapid literature review including resources from both scholarly (i.e., peer reviewed articles and presentations) and professional survey web sites (i.e., expert blogs and articles). The purpose of the rapid literature review was to determine if there was a consensus on acceptable minimum standard for survey response rates. In our review, we found that identifying average survey response rates, let alone a minimum standard, was dependent on a multitude of factors including mode of survey (e.g., web, mail, in person), demographics of survey audience, and whether the survey was internal or external to name a few. Average survey response rates can range from 10-15% for external surveys to 54% for in person surveys. Identifying an average survey response rate all depends on how you categorize the survey. As such, we could not find an agreed upon minimum standard for survey response rates.

The literature found that lower response rates does not mean increased nonresponse bias. There are ways to minimize the effects of nonresponse bias such as mid-fielding adjustments (e.g., targeting an underrepresented part of the population) and post fielding efforts (e.g., weighting). The literature also explained factors that affect survey response rates and ways to increase survey response rates. Primary ways to increase survey response rates include survey design (e.g., length, mode of delivery, purpose), providing incentives, and ensuring to provide multiple contacts (e.g., reminders) for the survey.

## Introduction

The Clearinghouse for Military Family Readiness at Penn State Technical Assistance Team conducted a rapid literature review on the topic of survey response rates. This literature review was not exhaustive of all available literature but rather a preliminary examination of the research on survey response rates. We obtained literature using Google search, Google Scholar, and Penn State University library's online search engines. We used the search term "survey response rates" and excluded materials prior to 2010. We included blogs and articles from professional survey websites. Through our search, we found that survey response rates can be very low. Hendra and Hill (2018) stated "The difficulty attaining high response rates is driven partly by technology shifts, particularly involving cell phone only households, caller ID, privacy concerns, distrust, and stigma of association with a social services agency" (p. 4). We also were unable to find an acceptable standard minimum survey response rate across all fields. From the literature we identified three major themes:

- average survey response rates,
- factors that affect survey response rates, and
- how to improve survey response rates.

## Findings

Websites that facilitate surveys (e.g., surveyanyplace.com, surveymonkey.com, surveygizmo.com) all contain articles and professional blogs that discuss survey response rates. These sources recognize the difficulty in identifying average survey response rates and suggest the difficulty is due to the many factors. In Figure 1, Lindermann (2018) outlines average survey response rates based on survey method.

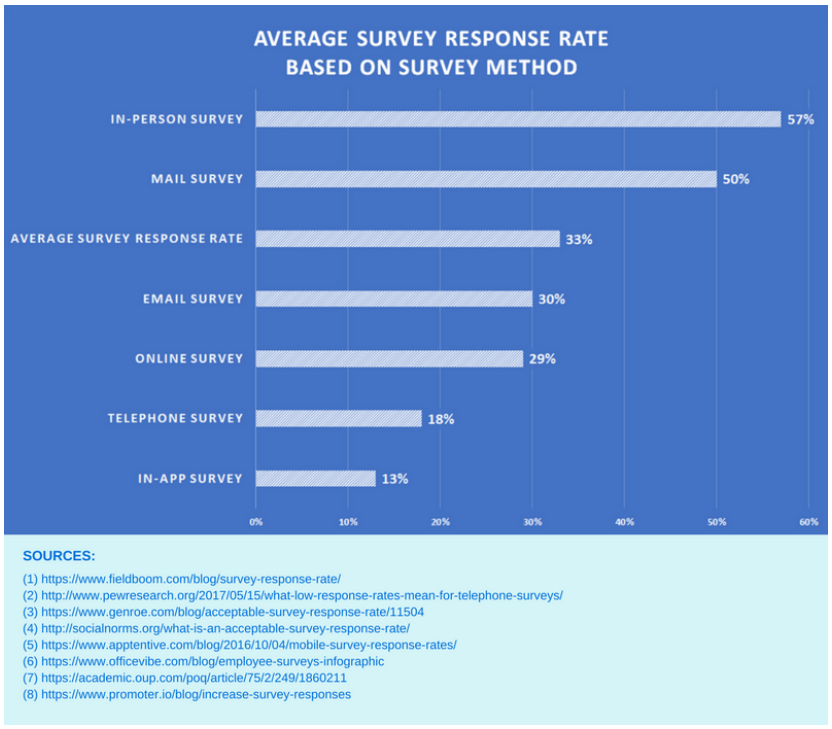


*Figure 1.* SurveyAnyplace.com, 2019, Average response rate infographic

Fryrear (2015) explains that internal surveys have an average of a 30-40% response rate, while external surveys have a 10-15% response rate. While Porter (2019) states that for online surveys "response rates can be as high as 20% to 30%" ("What is the typical response rate for a survey," para. 1), meaning that 20% to 30% is the high end. Wengrzik, Bosnjak, and Manfreda (2016) looked at 108 studies to determine variances in response rates between methods (e.g., telephone, web, mail). Their findings indicated that web surveys yielded smaller response rates than other methods. Additionally, the difference in response rates have grown over the past years from -11% in 2008 to -13% in 2016. They also determined that using incentives were less effective when conducting web surveys. Weigold, Weigold, and Natera (2018) also determined that paper-and-pencil surveys had higher response rates than web-based computer surveys. Both scholarly and professional survey sites agree that response rates vary based on many conditions, however computer or web surveys produce lower response rates. There is no clear standard for "acceptable" minimum response rates which can range from 10% to 75% depending on which study or expert you want to cite (Keller, 2014). Hendra and Hill (2018) noted that other "survey research –

notably public opinion polls - have coped with low and declining survey response rates and have been remarkably successful in obtaining highly accurate results" (p. 17).

Another area scholarly and professional sites agree upon is that, generally, it is preferred to have a small, random sample with an 80% or higher response rate than a low response rate from a large sample. Federally funded research projects have a requirement for 80% response rate from the Office of Management and Budget (Hendra & Hill, 2018). Of note, when considering federally funded research standards, one must keep in mind the nature of these studies and not automatically adopt such a standard without determining if they are conducting research with the same rigor that is required for federally funded research projects. Other considerations are the money, time, and personnel dedicated to conducting the survey. Johnson and Owens (2013) searched professional literature (18 journals) to determine what standards were being used with regards to survey response rates. Of the 18 journals reviewed, only three had standards for reporting response rates in published papers, some indicated that there was not a need for one, others reported moving towards or considering establishing a standard, however none of the journals had a minimum response rate standard. They concluded that many journals did not have policies "regarding the full disclosure of response rate information" (Johnson & Owens, 2013, p. 132). The American Association for Public Opinion Research states:

> *Calculating response rates - the number of eligible sample units that cooperate in a survey -- has historically been central to survey research in the United States because of the assumption that the larger the proportion of participating sample units, the more accurate the survey estimates. Formulas for calculating rates are now standardized, but the relationship between response rates and survey quality has become much less clear.* (Response Rates, para. 1)

Hendra and Hill (2018) found no significant relationship between survey rates and nonresponse bias. This is significant due to the belief that low response rates would produce nonresponse bias. Hendra and Hill (2018) also state that any survey that produces less than an 100% survey response rate, can present nonresponse bias into the results. They also highlight ways to address nonresponse bias by using mid-fielding adjustments (e.g., identifying gaps in population representation and targeting the gaps) and post-fielding efforts, such as weighting.

As stated before, there are a multitude of factors that affect survey response rates. Fan and Yan (2010) identified such factors as content of web questionnaire, presentation of web questionnaire, sampling methods, contact delivery modes, design of invitations, use of pre-notifications and reminders, incentives, participation, theories, survey software, and data safety. A study conducted by Suzer-Gurtekin et al. (2016) found that response rates increased from 17.4% to 34.5% when incentives were used. They also found that using multiple contacts with the respondents increased the response rate by an average of 34 percentage points (17.4% to 50.3% and 34.5% to 70.1%, respectively). Millar and Dillman (2011) highlight that incentives increased web survey

responses by 17 percentage points. They also mention that advance cash incentives worked better than all others (e.g., advance gift cards, random prize winners) and a mixed modal approach (i.e., web and email) increased survey response rates as well.

Professional survey web sites outlined various methods to increase survey response rates. Lindermann (2018) described five main impacts;

- survey purpose,
- survey experience,
- survey length,
- survey audience, and
- survey incentives.

PeoplePulse (2018) and Porter (2019) mentioned the same factors and included follow-ups/reminders. Fryrear (2015) summed up factors as survey design, survey value, and reminders.

## Conclusion

Attempting to identify what a standard minimum survey response rate would require consideration of multiple factors. Some would include delivery mode, incentives, internal or external, and demographics to name a few. The literature indicates that identifying a general standard minimum response rate may not be reasonable. Instead, focusing on the design of the survey would provide a better use of time and efforts. The literature also shows us that low survey response rates do not necessarily invalidate the survey. There are ways to account for nonresponse bias and use the results accordingly.

Primary ways to increase survey response rates include:

- survey design (e.g., length, purpose, target audience),
- incentives, and
- providing multiple contacts.

Web or computer surveys have shown to have lower survey response rates than other modes. Additionally, internal verses external survey response rates (external are lower) should be considered when evaluating your survey response rates. Keep in mind, that even if a survey is delivered within an organization, it may be better to classify it as an external survey (e.g., a survey sent to all members of the United States Army asking about health benefits).

## Suggested Citation

Clearinghouse for Military Family Readiness. (2016). *Survey response rates: Rapid literature review*. University Park, PA: Clearinghouse for Military Family Readiness.

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