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April 2009

Use of Text Messaging by Navy Recruiters

Zannette A. Uriell
Evangeline M. Clewis



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| 14. ABSTRACT In Summer 2008, Navy recruiters were invited to participate in the first known survey conducted through cell phone text message. Recruiters received two text message questions, one about their use of text messaging for contacting potential applicants and a second about the usefulness of text messaging for staying in contact with those in the Delayed Entry Program (DEP). In addition, recruiters received a paper-based survey asking about their weekly use of text messaging on both their Navy-provided and personal cell phones. The paper-based survey also asked their opinions on the text message survey process. Results show that many recruiters use text messaging on their Navy-provided cell phones, with over half using it at least weekly to contact potential applicants. Most respondents use it to keep in contact with their DEPers as well, and find it very useful for doing their Navy jobs. Results also show that surveys by text message are possible; most considered this text message-based survey easy to do and are likely to complete other text message surveys. In addition, text message-based surveys are more convenient yet as secure as other Navy surveys. A number of recommendations are included, about both the use of text messaging by recruiters as well as surveys by text message. | | | | | |
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Foreword

In 2008, the Office of Naval Research (ONR) funded the Personnel Integration of Selection, Classification, Evaluations, and Surveys (PISCES) effort to address three deficiencies: (1) reliance on independent, single use measures for assessing the Navy Total Force; (2) lack of measures to classify and select individuals for team assignments; and (3) lack of integration of tools to measure and predict Navy Total Force performance. To address the first deficiency, a set of data collection alternatives is being developed, one of which is survey by text message.

The Lightning Poll is a text-messaging based option for data collection, adapted from civilian use of text messaging. This report is the second of three to outline the Lightning Poll portion of the Data Collection Alternatives project, and provides results of the first-ever Lightning Poll conducted with Navy Recruiters. The first report (NPRST TN 09-6) discussed the background of, and the mechanics for, a text message survey, and the third report will include results of the second Lightning Poll as well as suggestions for additional data collection alternatives.

The authors thank ONR for their generous sponsorship. Also gratefully acknowledged are the thousands of Navy recruiters who took a few moments to respond to both the Lightning Poll and the follow-up survey described in this report. In addition, the authors thank Mr. John Noble, Mrs. Sheila Johnson, Mr. Michael Evans, and Ms. Sherry Olive, all of Navy Recruiting Command, for their support and enthusiasm for the project.

David L. Alderton, Ph.D.
Director

Executive Summary

Purpose

To assist in their duties, Navy recruiters are assigned cell phones and are authorized 1,000 text messages per month. However, Navy Recruiting Command (NRC) has limited knowledge of how useful those text messages are to recruiters and how to better support recruiters in their use of text messages. The Recruiter Lightning Poll served two purposes: (1) to determine if text messaging is being used by recruiters and, if so, how useful it is to them; and (2) to determine if surveys can be done through text messaging.

Approach

Recruiters with Navy-funded cell phones were sent letters notifying them that they soon would be receiving two questions as text messages. These letters included a Privacy Act statement as well as the phone number from which the questions would be sent. About two weeks later, the initial question was sent by text message. Those who replied automatically received the second question. A follow-up, paper-based survey was sent one week after the initial text messages were sent. The follow-up survey asked a few additional questions about the use of text messaging as a recruiter, as well as questions about the text messaging survey process.

Findings

About half of recruiters replied to the initial text message, although useable data for both survey questions was received from 35 percent of recruiters. Thirty-four percent of respondents completed the follow-up survey, and results were linked to the Lightning Poll results by phone number.

Results show that only 15 percent indicate that they do not use text messaging on their Navy cell phone. Over half of recruiters send text messages to potential applicants at least weekly, while 87 percent use text messaging to keep in contact with their DEPer. Most who use text messaging on their Navy cell phones find it “very useful” for doing their job.

In terms of conducting surveys through text messaging, almost all considered the text-based survey easy to complete, and three-fourths indicated they would be likely to complete other SMS surveys. When compared to other Navy surveys, most considered SMS to be more convenient yet as secure as other surveys.

Recommendations

Based on the results of the survey, a number of general recommendations are offered for NRC:

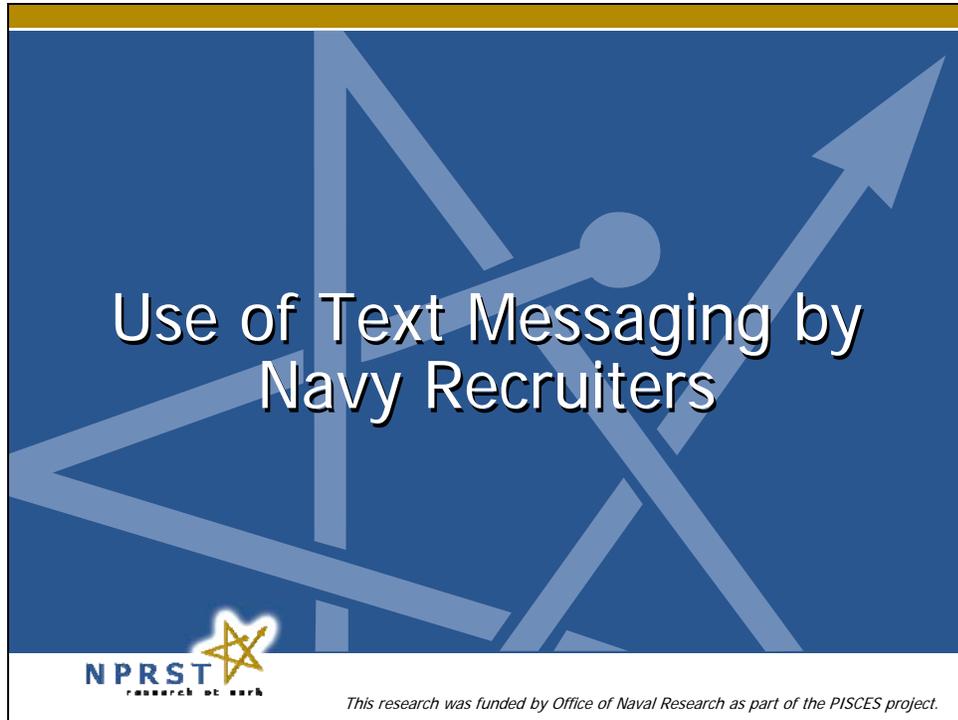
1. Continue allowing text messaging on Navy phones, and consider increasing the limit on the number sent each month
2. Consider utilizing cell phones better designed for text messaging (e.g., those with full keyboard)
3. Create a training module and accompanying pamphlet suggesting ways to use text messaging for marketing purposes (e.g., "The Navy ROTC college scholarship web site is open for applications. Go to www.nrotc.navy.com")
4. Utilize text messaging from NRC for notification of KEY policy updates
5. Consider asking cell phone contractor to preprogram NRC phone number before delivery of the cell phone to recruiters so recruiters automatically know message is from NRC HQ
6. Consider using Lightning Polls for additional data collection efforts, such as creating a panel (series of successive surveys sent to the same group of respondents) of recruiters or conducting surveys of DEPers
7. Provide feedback letter to respondents about results and subsequent changes based upon survey results

In addition, several recommendations are offered for future text message-based surveys:

1. Conduct additional Lightning Polls to answer additional research questions with comparison of results to other survey methods
2. Ensure adequate notification of an impending survey. Alternatively, consider using a panel format, where respondents are selected and notified once but are requested to respond to successive surveys as needed
3. Consider providing an explanation that the system is automated, and therefore unable to respond personally to participants' questions
4. Provide guidelines for completion (using a single letter "a" vs typing "agree" vs longer responses with clarifications)
5. Send initial messages to participants in smaller sets (to avoid overloading system)
6. Vary possible answer choices between questions to avoid confusion about which answer goes to which question (i.e., a/b/c for question 1 and x/y/z for question 2)
7. Contact cell phone companies to allow for caller ID of Lightning Poll number on respondent cell phones

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Surveys of Navy personnel have been conducted since at least the 1960s (see Wilcove, 2006). Through the years, the media for survey administration has changed, starting with paper-and-pencil (i.e., write-in), moving on to Scantron forms, and then to web-based. As cell phones become increasingly sophisticated and more people have personal and sometimes work cell phones, it becomes possible to move short, focused surveys to the cell phone, utilizing text messages. This annotated brief provides the results of the first known text message-based survey of a military population, conducted of Navy recruiters in 2008. Additional, backup briefing slides are provided in Appendix A.

Overview

- What is text messaging?
- NRC Lightning Poll
- Results of NRC Lightning Poll and Follow-up
 - NRC-specific recommendations
- Other Relevant Lightning Poll Results
 - Are Lightning Polls a viable data collection method?
 - Recommendations for future Lightning Polls

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The brief is divided into four key parts, beginning with a basic overview of text messaging and continuing to a discussion of the text-message survey (known as a Lightning Poll) conducted for the Navy Recruiting Command. Results are presented that are specific to the Navy Recruiting Command as well as results related to Lightning Polls as a survey methodology and data collection alternative.



The first section provides a brief overview of how text messaging works from the user's standpoint and includes rates of use of text messaging in both the civilian and Navy population.

Text Messaging

- Text messaging (aka Short Message Service, or SMS) functions like e-mail; messages are sent to your cell phone and stay on the phone until you delete them
- Generally arrive shortly after they are sent (dependent upon cell phone reception)
- Messages are about 140 characters long (actual length dependent upon cell provider)
- Text messaging service plans vary, from unlimited messages, to a limited number free and a cost per message thereafter, to a cost for each incoming and outgoing message

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Text messaging, also known as Short Message Service (SMS), functions similarly to e-mail in that messages stay on a cell phone until the user takes some action to delete them. They generally arrive soon after they are sent, dependent upon the wireless reception at the location of each cell phone. Messages usually are 140 characters long, although some providers allow for 160 characters and some automatically switch to the Multimedia Messaging Service (MMS) protocol for longer messages. The cost of text messaging is dependent upon the service plan that each person has, with the cost for those without a plan currently at about 20 cents per message, incoming and outgoing (Stross, 2008).

Background – US population

- As of December 2007, 84% of US population had cell phones and 48.1 billion messages were sent monthly (source: CTIA)
- Almost $\frac{3}{4}$ of 18-24 year olds who have cell phones use messaging
 - Over half of those 25 and under send or receive a text message daily (source: Pew Research Center)
- Text messaging has a variety of uses
 - Contact friends
 - Coordinate meetings
 - Interact with television (e.g., American Idol)
 - Make purchases (e.g., Pizza Hut, Amazon.com)



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According to The Wireless Association (CTIA, 2008), 84 percent of the U.S. population had cell phones and 48.1 billion messages were sent monthly, as of December 2007; the numbers for June 2008 show the cell phone penetration remains the same, but the number of messages has increased to 75 billion per month (CTIA, 2009).

MessageBuzz (2008) provides mobile statistics showing that almost three-quarters of 18–24 year olds who have cell phones use text messaging. Results from the Pew Research Center For The People & The Press (2007) show that over half of those 25 years old and younger send and/or receive a text message daily.

Individuals, organizations, and businesses are using text messaging for a variety of uses. Individuals may use it simply to contact friends. Organizations may use it to coordinate events; spread the word about political candidates (Graff, 2008); send out notifications of school closures, Amber Alerts, or other emergency notifications (Hodgin, 2009); or gather donations (Kim, 2009). Businesses outside the cell phone industry may use it for voting or prize-winning such as on *American Idol* and other reality shows, advertising (Richtel, 2009), providing coupons and other incentives/discounts (Bowman, 2007), or ordering food (the Daily Green, 2008).

Background – Navy Population

- In 2005, 61% of enlisted and 82% of officers who had text messaging capabilities used them (source: 2005 MWR Survey)
 - In 2006, 43% of DEPers had sent text messages (source: 2006 DEP survey)
- In 2008, 64% of GenY enlisted and 59% of GenY officers had sent or received text messages in the last 24 hours (source: 2008 Retention Quick Poll)
- Cell phones available to the Navy through NMCI and GSA contracts
- Beginning 1 July 2007, NRC authorized 1,000 text messages per month on Navy-funded recruiter cell phones



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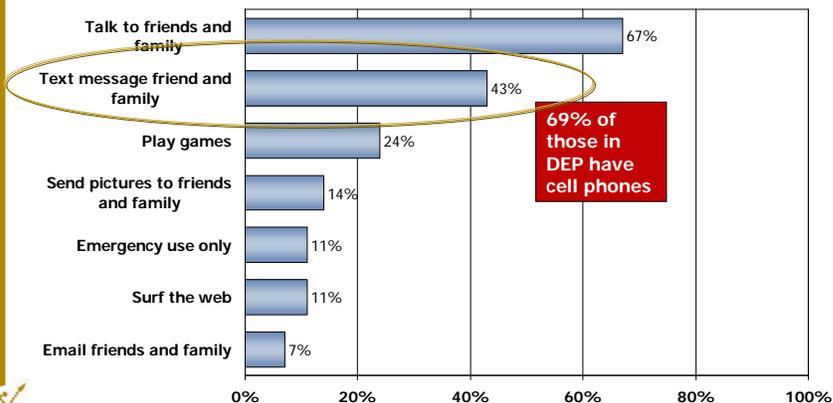
Results from a Navy survey done in 2005 show that the majority of both enlisted and officers who had text messaging capabilities on their phone actually used them (Uriell & Schultz, 2007).

In 2006, the Delayed Entry Program (DEP) Survey showed that 43 percent of those in the DEP had sent text messages. Within the 2008 Navy, about 60 percent of both enlisted and officers who were part of Generation Y had sent or received a text message in the last 24 hours.

Within the Navy, cell phones are available through both Navy Marine Corps Internet (NMCI) and General Services Administration (GSA) contracts. In addition, recruiters were authorized as of 1 July 2007 to use 1,000 text messages per month on their Navy-funded cell phones, with that number increasing to unlimited in late 2008.

Use of Cell Phones by Those in DEP

As of 2005, 45% of teens (ages 12-17) have cell phones, and 33% have used it for text messaging.



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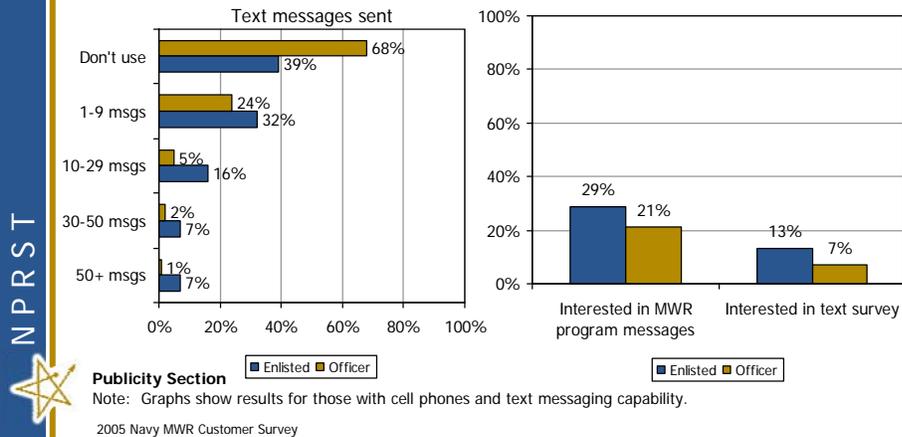
Note: DEP Survey Questions 37 & 38.

2006 NRC Delayed Entry Program (DEP) Survey

The Pew Internet and American Life Project (2005) found that almost half of teens had cell phones and one-third of those are texting. In comparison, about 7 in 10 of those in the DEP have cell phones and 43 percent of those are texting friends and family.

Use of Text Messaging by Enlisted and Officers

In 2005, 93% of officers and 83% of enlisted have a personal or work cell phone (or both). Thirty-five percent of American population uses text messaging, ranging from 65% for 18-29 year-olds to 8% for those 65 and older. Seventy-six percent of enlisted and 64% of officers have text messaging capabilities on their cell phones.



Civilian findings (Pew Research Center, 2006) show that while 35 percent of the American population uses text messaging, younger people are much more likely to use it (65%) than older (8%). The Navy population tends to be younger than the civilian population, so the finding from the 2005 MWR Survey (Uriell & Schultz, 2007) that 61 percent of enlisted use text messaging is not surprising.

Additionally, about one-quarter of the Navy at that time indicated that they would be interested in receiving messages from the Morale, Welfare and Recreation program and about 10 percent would be interested in participating in a short text message survey.

Recent Technology Use*

(% "Yes")

| In last 24 hours, sent/received... | Enlisted | | | Officers | | | Pew Survey | |
|--|----------|-------|---------|----------|-------|---------|------------|------------|
| | Gen Y | Gen X | Boomers | Gen Y | Gen X | Boomers | Gen Y | All Others |
| ...a text message on a cell phone | 64% | 52% | 31% | 59% | 42% | 32% | 51% | 14% |
| ...an e-mail message | 84% | 91% | 94% | 98% | 98% | 99% | 50% | 49% |
| ...an instant message | 38% | 28% | 21% | 26% | 18% | 9% | 29% | 14% |
| ...a personal letter | 23% | 22% | 15% | 28% | 27% | 33% | 14% | 21% |
| ...posted message to a personal online profile | 36% | 27% | 11% | 32% | 9% | 1% | 21% | 7% |

- Among Sailors, older generations are less likely to use newer technologies such as text messaging, instant messaging, and social networks.
- Compared to the general population, Sailors use much more technology, are more positive about its value, and discount the down side.

* Items come from the Pew Research Center, *A PORTRAIT OF GENERATION NEXT*, 9 January 2007. The questions were asked of a national, random sample, in a telephone/cell phone survey.

2007-2008 Retention Quick Poll

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The 2007-2008 Retention Quick Poll found that older Sailors (“Boomers”) are less likely to have used text messaging in the last 24 hours when compared to both Generation X and Generation Y, similar to findings in the civilian population.

Text Message Authorization for Navy Recruiters

Navy Recruiters Get Text Messaging

Week of July 09, 2007

The commander of Navy Recruiting Command (NRC) has authorized Navy recruiters the full use of text messaging. Although text messaging has never been against the rules in recruiting, it has always been "strongly discouraged" due to cost issues. Recent budget approvals have allowed recruiting districts to authorize official cell phones with text messaging plans, typically allowing a recruiter 1,000 text messages a month. However, the messages are not without normal restrictions. Texting falls under normal "official government business" use rules.

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<http://www.military.com/military-report/navy-recruiters-get-text-messaging?ESRC=miltrep.nl>

In 2007, Navy Recruiting Command approved the use of text messaging by Navy recruiters as part of their normal government business. There are a few different providers and many different cell phones provided to recruiters. The majority were on either Verizon (56%) or Nextel (38%) networks, using phones such as those shown below.





A Lightning Poll is a text message-based survey (see Uriell & Clewis [2009] for details on planning, programming, and analyzing a text message-based survey). This section details the particulars of the Lightning Poll conducted for the Navy Recruiting Command.

Objective of Lightning Poll

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- NRC research
 - Are text messages being used by recruiters?
 - Is text messaging useful to recruiters in doing their job?
 - Should NRC invest in the capability to send “alert” messages to recruiters (e.g., notifying them of key policy changes)?
- ONR research, funded through the PISCES (Personnel Integration of Selection, Classification, Evaluations & Surveys) initiative
 - Can surveys (Lightning Poll) be done through text messaging?
 - Do text messaging surveys obtain results comparable to traditional means; are there differences for unique groups?

The current Lightning Poll had both operational and research objectives.

On the operational side, the Navy Recruiting Command was interested in information related to their business processes, including metrics about use of text messaging by recruiters, usefulness of text messaging to recruiters, and opinions from recruiters on whether headquarters should be able to send a mass text message to all recruiters.

On the research side, there were two additional research aspects of the Lightning Poll that were investigated for the Office of Naval Research through the Personnel Integration of Selection, Classification, Evaluations, and Surveys (PISCES) initiative: can surveys be done through this method and are results comparable to traditional assessments for similar groups.

Method

- Recruiters with Navy-funded cell phones were sent letters notifying them that they would soon be receiving two questions on the cell phone about their use of text messaging
 - Privacy Act statement accompanied notification letter, informing recruiters that the survey was voluntary
 - Letter included phone number from which messages would be sent
- Initial text-message survey question was sent by text message about 2 weeks later
 - Second message was only sent if respondent replied to first one



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Recruiters are provided with cell phones by the Navy and given an allowance of text messages (1,000 at the time of the survey administration). A list of all recruiter cell phone numbers was provided along with respondent Social Security Number (SSN), so that current command address could be found for each recruiter. A letter (Appendix B) was sent to all recruiters at their command addresses notifying them that they would soon be receiving two questions from the Lightning Poll cell number about their use of text messaging. The envelope also included a Privacy Act statement, notifying them of their rights as well as the survey's Report Control Symbol, which is the Navy survey license for the project.

About two weeks later, the initial text message question was sent to all cell phone numbers. The second text message containing the second and final survey question was only sent if the respondent replied to the first question.

Method (continued)

- Follow-up survey was sent a week after text-message survey began
 - Paper-based survey asked about text-message survey process and included additional questions about text messaging as a recruiter



The image shows a paper-based survey form titled "SMS Follow-up Survey". The form includes a "PRIVACY ACT STATEMENT" section with text regarding information collection and confidentiality. Below this is an "IMPORTANT MARKING INSTRUCTIONS" section with a list of instructions: "Use black or blue pen or a No. 2 pencil", "Make dark marks that stay within the box", "Make no stray marks", and "Do NOT fold, tear, or mutilate this form." There is a small graphic of a pen and pencil. The form also contains contact information for the Project Director, Zannette Uriel, and the NPRST logo. At the bottom, there is a line for a serial number: "PLEASE DO NOT WRITE IN THIS AREA [SERIAL]".

About a week after the initial text messages were sent, respondents were sent a paper-based follow-up survey (Appendix C). The paper-based survey asked opinions about the survey process as well as additional questions about the use of the text messaging by recruiters. The follow-up survey was paper-based to help ensure that all respondents would be able to participate.

Lightning Poll Technology

- Programmed in Pangolin's IMU Pro software (version 5, build 1328)
 - Similar to sending email in Outlook
 - Used Trivia Task within software to automatically send second question
- First question sent as broadcast to all recruiter cell numbers
 - Subsequent messages only sent if a response received
 - Large number of initial outgoing messages may have delayed delivery of initial messages
- Outgoing and incoming messages exported from IMU into SPSS to determine survey progress for each respondent

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The Lightning Poll conducted for the Navy Recruiting Command used Pangolin's IMU Pro software, specifically version 5, build 1328. The software handles text messaging in a way similar to sending an e-mail in Microsoft Outlook; messages are sent to users and stored within folders. Because the Lightning Polls involve questions in succession, the Trivia Task was used to automatically handle the second question.

The first question was queued to all recruiter cell phones, although they were dispatched individually. Therefore, there was a long time delay between the first recruiter receiving the first question and the last recruiter receiving that question. This also led to a delay in the second question being sent, because the system is designed to process all messages in the queue before sending out additional messages.

Once the survey period closed, all outgoing and incoming messages were exported from IMU and then imported into SPSS for analysis.

Survey Administration

- Notification letter sent: May 29, 2008
- Initial text message sent: June 9, 2008
- Follow-up survey sent: June 16, 2008
- Text message field closed: June 18, 2008*
- Follow-up survey field closed: October 6, 2008

| Number sent and received | |
|-----------------------------|-------|
| Eligible Sample: | 4,620 |
| Number Who Replied to Text: | 2,317 |
| Undeliverable Surveys: | 273 |
| Returned Follow-up Surveys: | 1,479 |

| Response Rates | |
|-------------------|-------|
| Text Survey: | 49%** |
| Follow-up Survey: | 34% |

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* Field actually left open until the follow-up survey field closed, but included analyses only based on text messages sent and received prior to June 18, 2008.

** Based on those who replied anything to first question.

The initial notification letter was sent in late May of 2008, with the initial text messages being sent about two weeks later. Because Lightning Polls were conceived of as a faster data collection method, it was assumed that the administration time period would only be open for a week. The text message survey was actually allowed to remain open until the follow-up survey was closed, but results of this brief are presented assuming that it was only left open for about a week, or until respondents would likely have received the follow-up survey; only 57 recruiters are not included in results presented here.

Four thousand six hundred twenty phone numbers were sent the initial text message. Of those, 2,317 provided some reply, yielding a return rate of 49 percent. For the follow-up survey, 1,479 replied, yielding a return rate of 34 percent. Typical Navy-wide survey response rates are currently 30% or less.

Sample Demographics

- Results presented overall as well as for 3 subgroups

| Gender | |
|-------------|-----------|
| Male | Female |
| 4,142 (90%) | 475 (10%) |

| Paygrade Group | | | |
|----------------|-------------|-----------|----------|
| PO2 | PO1 | CPO | Officer |
| 1,726 (37%) | 1,870 (40%) | 814 (18%) | 207 (4%) |

| Light-Texter vs Heavy-Texter* | | | | |
|-------------------------------|------------|-----------------------|-------------------|----------------------------------|
| Non-user | Light user | Heavy personal texter | Heavy Navy texter | Heavy texter (personal and Navy) |
| 117 (8%) | 575 (39%) | 325 (22%) | 150 (10%) | 290 (20%) |

* Heavy-texter defined here as someone who sends 30 or more messages weekly, based upon Q1 and Q3 of Follow-up Survey.

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The population of recruiters at the time of the Lightning Poll was predominantly male First or Second Class Petty Officers (PO1 and PO2, respectively). Results are presented overall as well as by gender and paygrade group.

A third demographic category was created based upon the results of two questions on the follow-up survey. Recruiters were defined as a “heavy-texter” if they sent 30 or more messages weekly; about one-third of recruiters did so.

The table below shows the percentage of recruiters with the indicated text messaging behavior on both the Navy-funded and their personal cell phones of recruiters.

Texting habits on personal cell phone (based on average number of text sent weekly)

| | | Don't use text | Light user (1-29) | Heavy texter (30+) |
|--|--------------------|----------------|-------------------|--------------------|
| Texting habits on Navy-funded cell phone (based on average number of text sent weekly) | Don't use text | 8% | 4% | 3% |
| | Light user (1-29) | 12% | 23% | 20% |
| | Heavy texter (30+) | 4% | 7% | 20% |

SMS Analyses

- Some text message replies wrapped into two messages due to character limit, but automated system acted as if it was two separate replies
- Where possible, entire dialog with respondent was used to determine answers to the two text message questions
 - Occasionally, 1st response was “Who is this,” so the order of the remainder of responses was questionable and therefore not included in analyses

| | |
|---|---|
| 3606 How often do you text one of your potential... | 3579 How often do you text one of your potential... |
| 3606 ... Whos this? | 3579 ... Who is this? |
| 3606 Text messaging assists me in keeping in tou... | 3579 Text messaging assists me in keeping in tou... |
| 3606 ... C | 3579 ... How often do you text your potential recr... |
| 3606 Text messaging assists me in keeping in tou... | 3579 Survey complete. Thank you for your time ... |
| 3606 ... AI | 3579 ... A... Daily. |

- If respondent included answer in letter as well as words, but the two disagreed (e.g., “a. Neither” instead of “c. Neither”), the word was used as the answer

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As this was the first text message survey conducted, there were a few unforeseen issues in the responses that needed to be resolved prior to analyzing the results. Some respondents sent back the entire question with their answer, leading to messages that were more than 140 characters. These long messages were divided into multiple messages by the cell phone provider, which confused the automated survey system into thinking that it had received replies to the two questions. The “conversation” with each respondent was read to determine if two actual answers were received.

Occasionally, a respondent would reply to the first question with “Who is this,” perhaps indicating that the respondent did not receive the notification letter or did not remember what the phone number was for this survey effort. Because there was no “correct” answer for each survey question, the automated system assumed that this was the answer and sent the second question. It was then unclear if their first letter answer was in response to the first question they received, or in response to the question they had just received. Coupled with this was a glitch where some respondents inadvertently received multiple text messages with the same question. The slide above provides a visual display of the resulting data. On the left side, it is unclear if the “C” answer is the answer to the first question or the second question, whereas on the right side it is clear that the answer to the first question actually is “A. Daily” since the second question did not have “Daily” as an answer option. As indicated above, all text message conversations were analyzed, and those where there was doubt about the answer were discussed by two analysts; if it was unclear which letter answer was in response to which question, both were marked as blank.

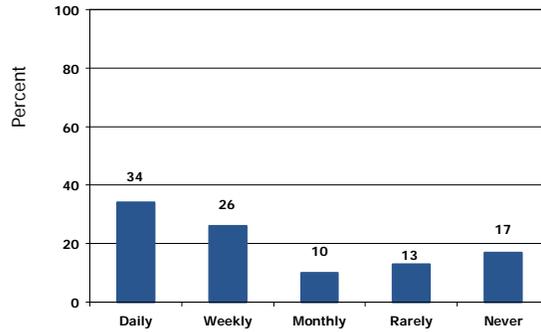
A few respondents opted to include a letter answer as well as the written answer, with the two sometimes not in agreement. In cases such as this, the word was used as the respondent's answer instead of the letter.



The results of both the Lightning Poll and the follow-up are separated based upon the research interest. This section provides results specific to and actionable by the Navy Recruiting Command.

How Often Recruiters Send Text Messages to Potential Applicants

The majority of recruiters indicate that they contact potential applicants at least monthly through text message.

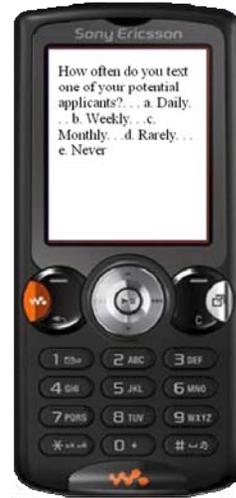


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* Only includes those with answers (1,864) that could be categorized into a single category. An additional 165 provided "Other" comments, said it depends, or selected multiple answers.

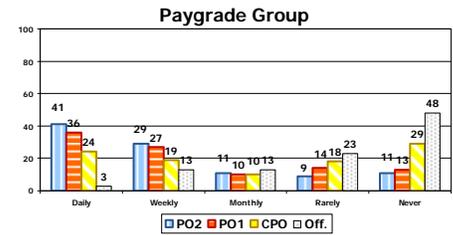
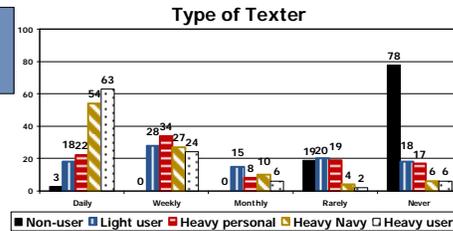
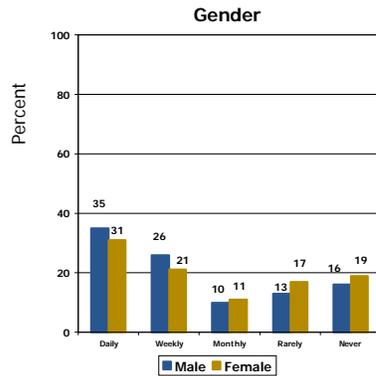
Lightning Poll, Q1



The first text question is shown in the cell phone window displayed above, asking how often recruiters sent text messages to potential applicants. The majority of the 1,864 responses that could be categorized indicated that recruiters contact potential applicants at least monthly through text message. About one-third of recruiters contact potential applicants on a daily basis through text messaging.

How Often Recruiters Send Text Messages to Potential Applicants

Little difference between genders but larger difference between paygroups and type of texter.



* Only includes those with answers that could be categorized into a single category.

Lightning Poll, Q1

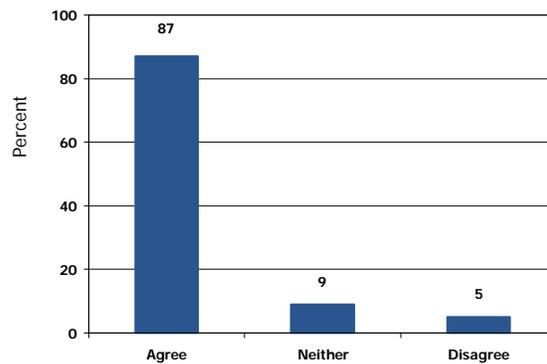
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Results for the first text message question were analyzed by gender, type of texter, and paygrade. There was little difference in responses between men and women. However, there were larger differences by type of texter; not surprisingly, those who are heavy texters on their Navy phones are most likely to indicate they send messages daily to potential applicants while those who do not use text messaging are most likely to never send them messages. Additionally, there are differences by paygrade group; first and second class petty officers are more likely than officers to send text messages to applicants on a daily or weekly basis.

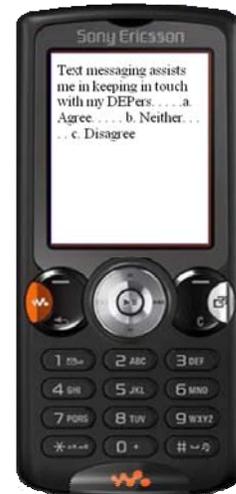
Text Messaging Assists Recruiters to Keep in Touch with DEPer

Almost all agree that text messaging helps to stay in contact with DEPer.



* Only includes those with answers (1, 599) that could be categorized into a single category. An additional 41 responses were "Other."

Lightning Poll, Q2



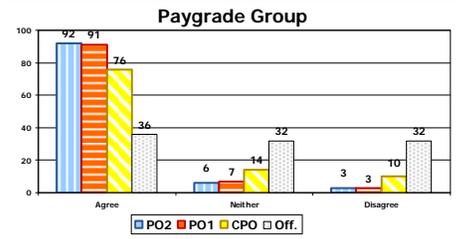
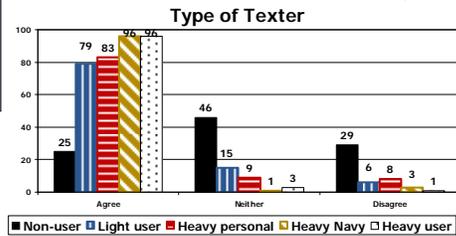
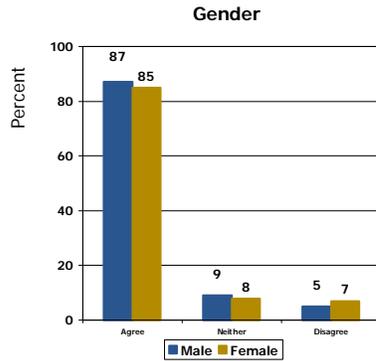
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The second text message question asked recruiters if they felt that text messaging assisted them in keeping in touch with those in the Delayed Entry Program (DEPer). The large majority (87%) of the 1,599 categorizable responses indicated agreement.

Text Messaging Assists Recruiters to Keep in Touch with DEPers

Heavy texters on Navy cell phones are more likely to agree that text messaging helps maintain contact with DEPers.

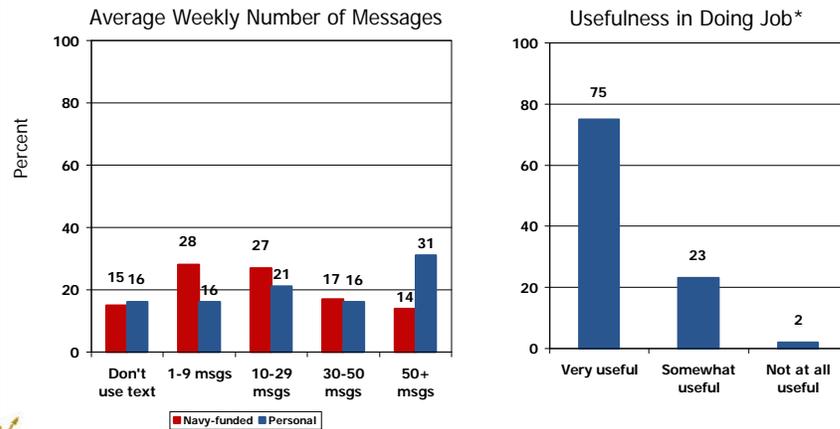


* Only includes those with answers that could be categorized into a single category.
Lightning Poll, Q2

Again, there were few differences in opinions between men and women, but large differences based upon type of texter and the paygrade group. Only non-users were noticeably different in their responses; they were more likely to indicate “Neither” or “Disagree” when compared to the other four texting groups. As seen for the previous question, officers are less likely to endorse this than the First and Second Class Petty Officers.

Use and Usefulness of Navy-funded Text Messages

Recruiters more likely to use 1-29 Navy-funded text message, but most feel the messages are useful in doing their job as a recruiter.



* Only includes those who indicated they used Navy-funded text messaging.

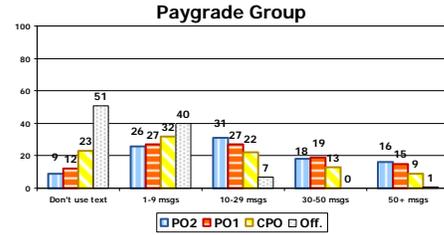
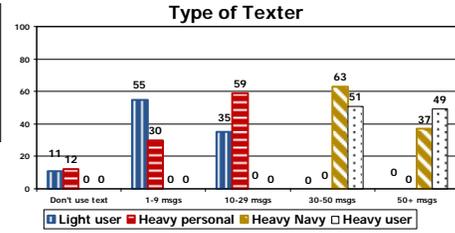
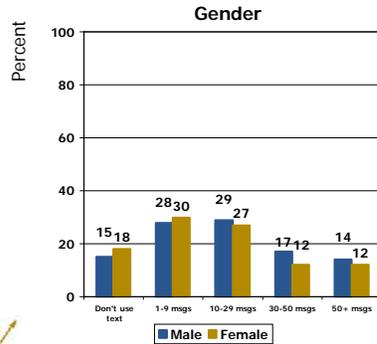
Follow-up Survey, Q1-3

On the follow-up survey, recruiters were asked about the average number of messages they send on both their personal and Navy-funded cell phones; results of these two questions were used to determine categorization of each recruiter by type of texter. About 15 percent of recruiters do not use text messaging on any cell phone. Texting is more common on personal phones; over half of recruiters send between 1 and 29 messages on their Navy cell phones while almost half of recruiters send 30 or more messages (including 31 percent who send 50 or more messages) weekly on their personal cell phones.

Respondents who used Navy-funded text messaging were asked how useful it is in doing their Navy job. Three-quarters said it was very useful while most of the remaining quarter said it was somewhat useful; only 2 percent indicated that text messaging was not at all useful for their Navy job.

Use of Navy Cell Phone

Little difference between genders in using the Navy-funded messages but PO2/PO1 use messages more than CPO and Officers.

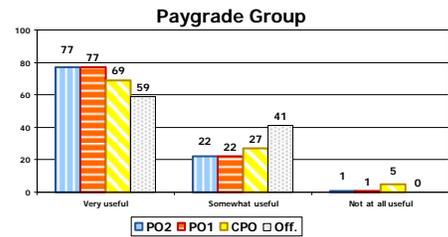
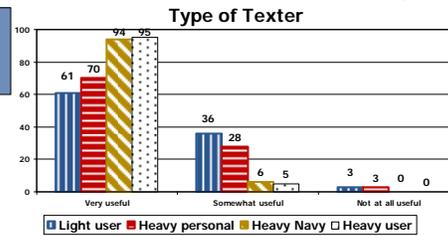
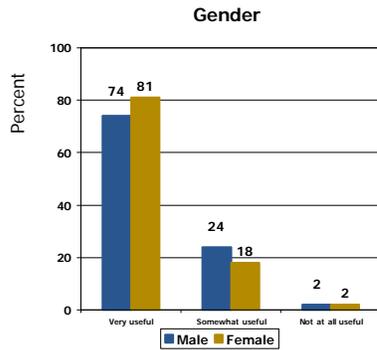


Follow-up Survey, Q1

Again, there was little difference between men and women in their use of the Navy cell phone while there were larger differences between officer and enlisted recruiters; over half of officer recruiters do not use text messaging on their Navy-funded cell phones, compared to 23 percent of CPOs, 12 percent of PO1s, and 9 percent of PO2s.

Usefulness of Navy-funded Text Messages

Heavy texters on Navy cell phones most likely to find Navy-funded messages useful.



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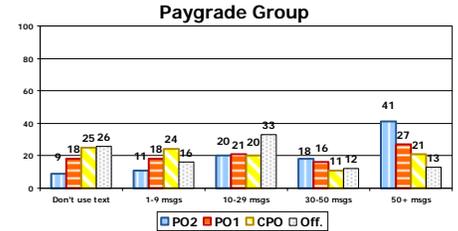
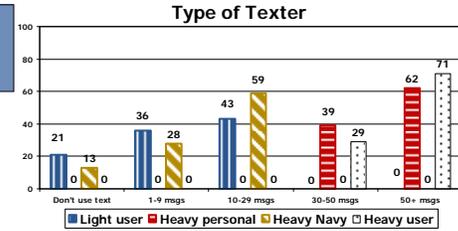
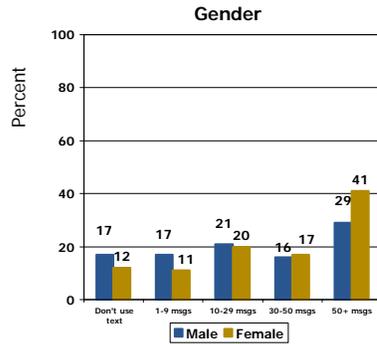
* Only includes those who indicated they used Navy-funded text messaging.

Follow-up Survey, Q2

Among the 85 percent who use their Navy cell phone, there is a slight difference between men and women in their perceptions of usefulness of text messaging in doing their job, with more women feeling it is very useful than men. Almost all of those who are heavy Navy texters feel text messaging is very useful. As with prior results, findings for paygrades show that officers are less likely than enlisted to feel texting on their Navy cell phone is very useful to their job, although they do still feel it is somewhat useful.

Use of Personal Cell Phone

Females more likely to send many text messages on personal cell phones.



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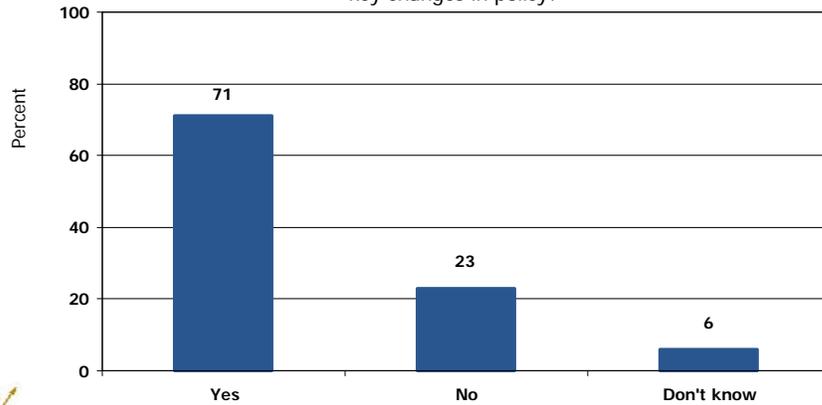
Follow-up Survey, Q3

There were larger differences between men and women on weekly use of their personal cell phone than on use of their Navy cell phone. Women are more likely than men to send 50 or more messages on their personal cell phones while men are more likely to either not use personal texting or to only send a few (9 or less) messages. Second class petty officers are the most likely to send 50 or more messages.

NRC Text Messages for Policy Changes

Most believe HQ should send text messages for important policy changes.

Should NRC send text messages to recruiters to inform them of key changes in policy?



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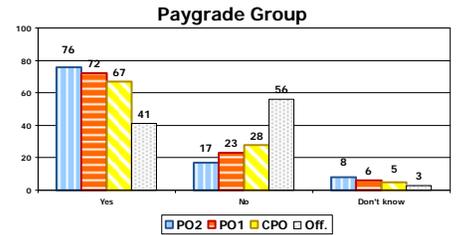
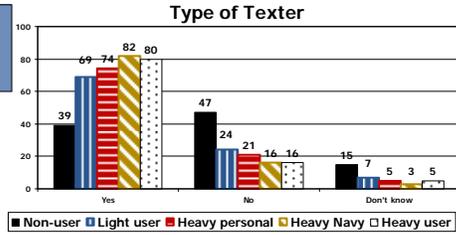
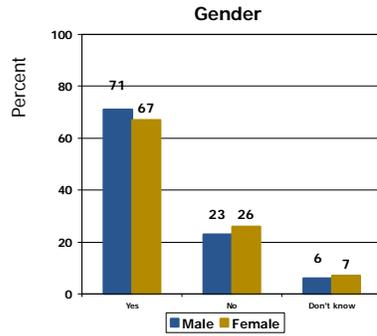


Follow-up Survey, Q10

The follow-up survey asked respondent opinions on whether Navy Recruiting Command should send text messages directly to recruiters to inform them of key policy changes. Almost two-thirds indicated that they should. Some write-in responses suggested that it should be only for key policy changes while others indicated that it should be used as a supplement to existing notification methods.

NRC Text Messages for Policy Changes

Enlisted more likely to believe NRC should send policy-related text messages than officers.



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Follow-up Survey, Q10

Again, the difference between men and women is small while the difference between officers and enlisted is much larger. Almost 70 percent or more of those who text at all, regardless of how much they text or which cell phone they use to text, indicated that headquarters should send text messages with policy changes.

Other Cell Phone-Related Suggestions

- Over 600 respondents provided suggestions to increase cell phone usefulness to recruiters
- The large majority of comments (73%) focused on updating the phones, particularly providing:
 - Bluetooth/hands-free capabilities, since many states require it when driving
 - Blackberries or PDA, to better enable scheduling and e-mail
 - QWERTY keyboard, for easier texting
 - Camera, for photographing tattoos
 - GPS/mapping functions, for turn-by-turn directions to recruit homes

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Follow-up Survey, Q11

The follow-up survey included an open-ended question for respondents to write in any other cell phone-related suggestions they may have to increase their usefulness to recruiters. Over 600 (46%) provided some comment, with the majority talking about key components/upgrades to phones. The most common upgrades were Bluetooth or other hands-free capabilities, Blackberry or PDA capabilities, full keyboard, camera, and GPS or mapping functions.

Summary of NRC-specific Findings

- Over half of recruiters text potential applicants at least weekly
- 87% use text messages to keep in touch with DEPers
- Only 15% do not use text messaging on their Navy phones
 - 75% of those who use indicate it is “very useful” for their job
- 71% believe NRC should send recruiters messages about key policy changes

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In terms of findings specific to the Navy Recruiting Command, four key points stand out. Clearly, text messaging is being used by recruiters, with over half texting potential applicants at least weekly and 87 percent using text messages to keep in contact with DEPers; only 15 percent do not use text messaging on their Navy phones. Of those who do, 75 percent find it to be “very useful” and only 2 percent indicate it is not useful to them. The large majority of respondents believe that headquarters should send messages directly to recruiters about key policy changes.

NRC-Specific Recommendations (1 of 2)

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- Continue allowing text messaging on Navy phones
 - Evaluate possibility of increasing limit, especially if institutionalizing use of text messaging to market to Millennials
- Consider upgrading phones, using those better designed for text messaging (e.g., those with full keyboard) if continuing to allow text messaging
- Create training module and accompanying guidebook/pamphlet on appropriate use of text messaging for recruiting
 - Provide suggestions of how to use for marketing (e.g., “The Navy ROTC college scholarship web site is open for applications. Go to www.nrotc.navy.com”)

Considering the key findings, the primary recommendation to NRC is to continue allowing text messaging on Navy phones and supporting their use for recruiting purposes. Prior to the survey results being briefed, the limit was lifted and most recruiters now receive an unlimited allowance of messages.

Another consideration would be to upgrade recruiter cell phones, perhaps selecting phones better designed for text messaging. Navy Recruiting Command has been having discussions with other Navy stakeholders about a hand-held tool (such as a cell phone) that could be better used by recruiters for a number of purposes.

In embracing text messaging for recruiting purposes, a training module and accompanying guidebook/pamphlet should be created to provide recruiters with suggestions on how to best use text messages for marketing. The example provided above regarding the Navy ROTC college scholarship web site was actually sent from a recruiter in response to one of the cell phone questions as an example of how he/she uses it to market Navy programs.

NRC-Specific Recommendations (2 of 2)

- Utilize text messaging from NRC for KEY policy updates
 - Consider asking cell phone contractor to preprogram NRC phone number so recruiters automatically know message is from NRC HQ
- Consider utilizing text messaging for additional data collection
 - Recruiter Lightning Poll Panel – representative group of recruiters who could be pulsed several times a year on key issues
 - Extend Lightning Poll to DEPers
- Provide feedback letter to respondents about changes based upon survey results

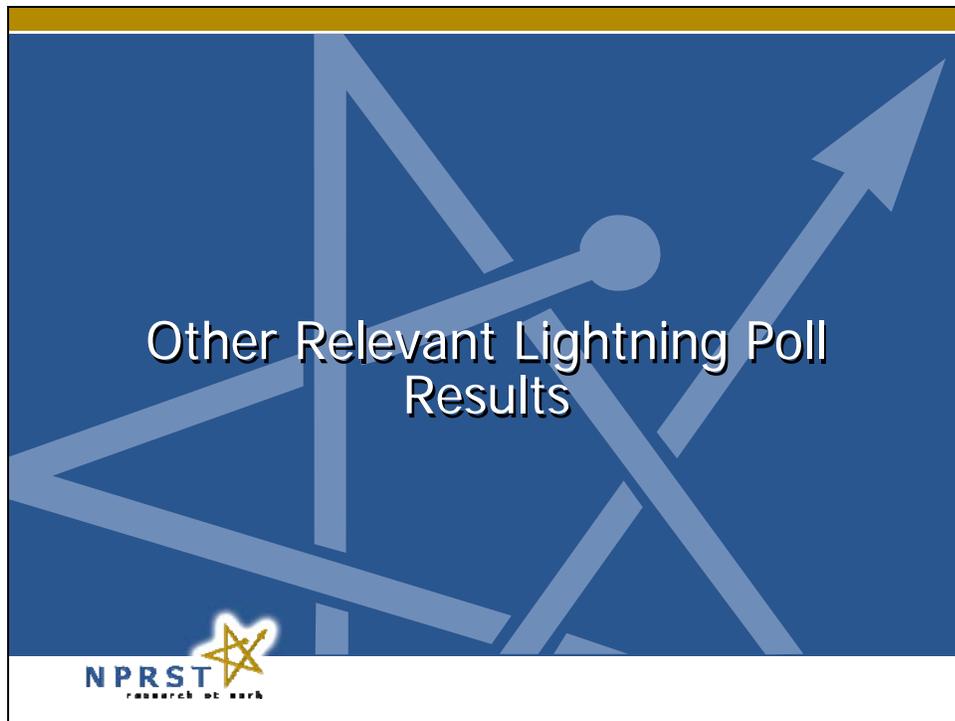
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Since the majority of respondents indicated that text messaging should be used for key policy updates, NRC should consider investing more in doing this. To ensure that recruiters know that the message is from headquarters, the cell phone contractor should preprogram the NRC number into each phone before issuing it to the recruiter.

If making the investment in text messaging at NRC, there are additional data collection options that might be considered. For example, a recruiter panel might be possible, allowing headquarters to periodically question recruiters on key issues throughout the year while only having to train them once on how to do a text message survey. Additionally, surveys of DEPers might be possible through this technique.

A reason respondents do not complete surveys is because of a perceived lack of impact of the results on policies and programs. A suggestion to increase response rates is to provide survey feedback of the compiled results and any planned changes in policies and programs (Uriell & Schultz, 2008). One recommendation for the Lightning Poll would be to provide a feedback letter to respondents to let them know about any changes being considered or made based upon the survey results.



In addition to the findings specific to the Navy Recruiting Command, the current survey effort provides results relevant to Lightning Polls and other text message-based surveys.

Specific Issues to Research about Data Collection by Lightning Poll

- Are there age differences in access to and use of cell phones?
- How do results compare to larger Navy-wide surveys?
- Can SMS be used aboard ship or overseas, or is it just for shore CONUS units?
- Are there age/gender differences in responses? Completion rates (especially for juniors, who are least likely to complete traditional surveys)?
- How long does it take for first answer? To complete survey?
- How should it be done (programming issues, across cell company issues, etc)?
- What are attitudes towards cell phone survey (length, desire to do again, etc.)?

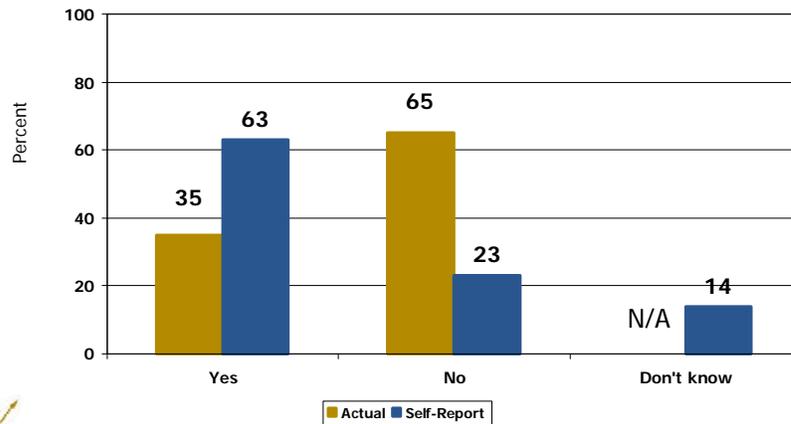
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Because the Lightning Poll is a research effort, a number of methodological issues are being investigated including those mentioned above. The NRC poll addressed some of those questions, as shown above by checkmarks, with grey checks indicating a partial answer and black indicating a complete answer. An additional Lightning Poll was conducted to answer the remaining questions.

Percent Who Completed Lightning Poll

While 49% responded to the first message, only 35% provided answers to both questions on the Lightning Poll.



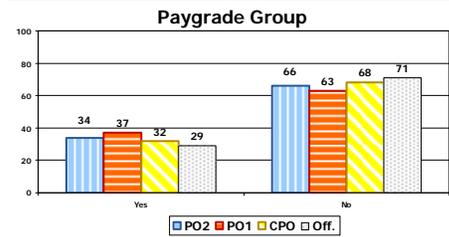
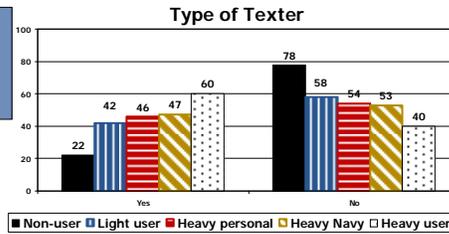
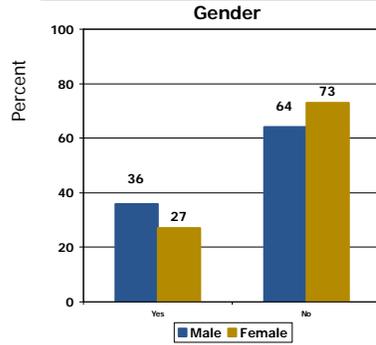
* Actual numbers based upon those who provided two answers. "Don't know" option not possible.

Follow-up Survey, Q4

Forty-nine percent of recruiters responded to the first text message question; however, some of the initial responses were “Who is this.” Only 35 percent provided interpretable answers to both questions, which is in line with response rates of other surveys (e.g., Whittam, 2008; Newell, Whittam, & Uriell, 2008). On the follow-up survey, respondents were asked if they had completed the text message survey. Sixty-three percent indicated that they had, inconsistent with both the 49 percent rate of those who responded in some way to the first question and the 35 percent rate of those who completed the entire survey. This inconsistency is similar to findings from other non-response follow-up surveys, where more people reported they had responded to the initial survey than actually had (Uriell & Schultz, 2008).

Percent Who Completed Lightning Poll - Actual

Males and those who are heavy texters on both personal and Navy cell phones were most likely to complete Lightning Poll.

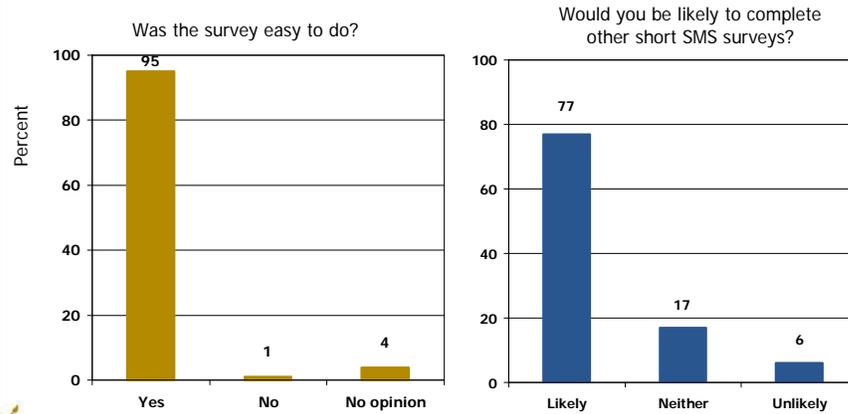


* Actual numbers based upon those who provided two answers. "Don't know" option not possible.

Actual completion rates for the Lightning Poll were slightly different between men and women, with men slightly more likely to complete both questions than women. Not surprisingly, those who are most proficient with text messaging, both on personal and Navy cell phones, were more likely to complete the Lightning Poll than those who indicated that they do not use text messaging. Contrary to some of the findings discussed earlier that show officers as less likely to use text messaging, completion rates across paygrades did not substantially differ.

Survey Ease and Likelihood to Do Other Surveys

Almost all of those who completed the Lightning Poll thought it was easy and would be likely to do other short SMS surveys.

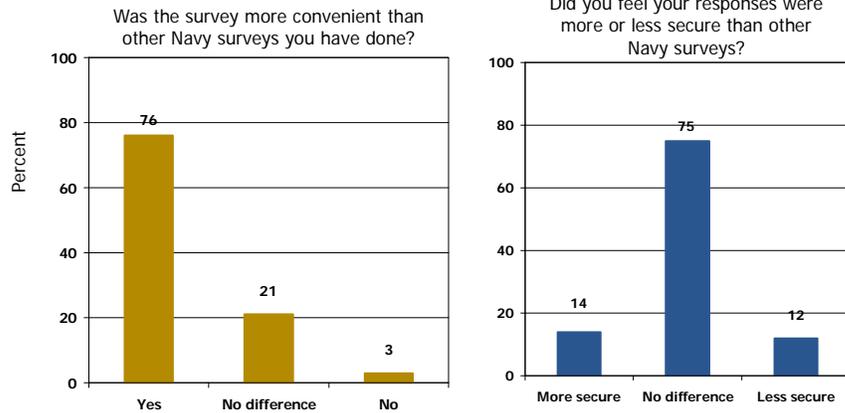


* Results only for those who provided two answers to the Lightning Poll.
Follow-up Survey, Q5 & Q8

Several questions on the follow-up survey asked about opinions of the Lightning Poll process. Two questions related to the ease of doing the survey and likelihood of doing other text message surveys. Results are presented only for those who actually completed the Lightning Poll by answering both questions. Ninety-five percent indicated that they felt the survey was easy to do; only 1 percent indicated that it was not. Over three-fourths indicated that they would be likely to do another text message survey, while only 6 percent said they were unlikely to do another.

Lightning Poll Compared to Other Navy Surveys

Lightning Polls more convenient and as secure as other Navy surveys.



* Results only for those who provided two answers to the Lightning Poll and had participated in other Navy surveys.

Follow-up Survey, Q6 & Q7

Because Lightning Polls are being researched as a possible tool in the Data Collection Alternatives toolbox, two questions on the follow-up survey asked how the Lightning Poll compared to other Navy surveys, in terms of both convenience and the perceived security of responses. Again, responses are only displayed for those who had replied to the Lightning Poll while narrowing further to only those who reported that they had completed other Navy surveys. Three-quarters felt that the survey was more convenient than other Navy surveys, while 21 percent felt it was no different. Responses were perceived to be as secure as other Navy surveys; about the same percentage indicated it was more secure as indicated it was less secure.

Response Times

- Response times should be interpreted cautiously
 - Seeming overload due to number of initial messages led to multiple transmissions of same message; time of first answer used in analyses
 - Software saved message creation time instead of message sending time, and some messages were not sent until 3 days after they were created

| Response Time for All Respondents (in minutes) | | | | |
|--|-------|--------------|----------|---------|
| Group | N | Average | Shortest | Longest |
| Any response to first question | 2,259 | 2,940 (~ 2d) | 2 | 12,363 |
| Answer to first question | 2,028 | 2,978 (~ 2d) | 2 | 12,363 |
| Answer to second question | 1,639 | 1,569 (~ 1d) | 0* | 8,259 |
| Survey Completion (2 answers) | 1,602 | 4,587 (~ 3d) | 53 | 12,378 |

* Half responded within one minute, with additional 40% responding within 10 minutes of receiving second question.

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One of the features of a Lightning Poll that makes it attractive is the potential for rapid turnaround of responses. Analyses were done of response times, but results should be interpreted cautiously because: (1) the system was overloaded with 4,620 initial messages, which caused a delay in sending the second question for some; and (2) the software downloaded the time the message was added to the queue, as opposed to the time it was actually sent from the computer, which may lead to long response times for the first question.

The table shows response times in minutes for all respondents. The response time to answer anything to the first question ranged from 2 minutes to 12,363 minutes, with an average of about 2 days. The response time to answer the second question was much shorter, with over half of respondents answering within one minute and a total of 90 percent answering within 10 minutes of the second question being queued.

Time for survey completion (defined as two useable answers) ranged from 53 minutes to 12,378 minutes, with the average being about 3 days.

Types of Useable Responses

Respondents were given no guidelines of how to respond (just the letter, the written answer, etc.), but most opted to provide a single letter response.

| Type of Response | | |
|--|--------------------------|--------------------------|
| | 1 st Question | 2 nd Question |
| Single letter | 47% | 59% |
| Single letter plus question | 12% | 12% |
| Answer letter and written answer | 8% | 8% |
| Written answer | 7% | 5% |
| Answer letter plus additional (signature, etc) | 7% | 8% |
| Modified answer (e.g., "mostly agree") | 6% | 3% |

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* Sorted by response type for 1st question.

Respondents were given no guidance in the notification letter of how to complete the survey. The largest percentage of respondents provided a single letter answer, more so for the second question (59%) than the first (47%). The next most common (12% for both questions 1 and 2) answer type was providing a letter either before or after the entire question, with non-texters more likely to do this (24%) than those who were heavy texters (4%). Another 8 percent provided the answer letter as well as a written answer. Six percent of those who responded to the first question (3% of those responding to the second) opted to provide a modified type of answer, similar to having a write-in option.

Suggestions to Improve the SMS Survey Process

- 254 respondents provided comments relating to the SMS survey process
- The largest group of responses (35%) indicated that the process worked great as it was
- Some (18%) indicated that advance notification was key
- 12% indicated that they had technical problems, such as getting multiple of the same message

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Follow-up Survey, Q9

Respondents were given the opportunity to provide input about how to improve the SMS survey process. The largest group of responses indicated that recruiters thought that the process worked well as it was. Another 18 percent indicated that advance notification was important, an issue made clear by recruiters whose first response was “Who is this?” An additional 12 percent talked about technical problems they experienced such as getting multiple copies of the same message.

Lightning Poll-Specific Summary

- Text survey considered easy to do by 95% of follow-up respondents who did the Lightning Poll
 - Over $\frac{3}{4}$ indicated they would be likely to complete other short SMS surveys
- Lightning Poll considered more convenient than other Navy surveys
- 75% feel responses on SMS surveys are as secure as other Navy surveys

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In summary, results from the Navy Recruiting Command Lightning Poll show that most feel that the Lightning Poll was easy to do and most would be likely to complete other short SMS surveys. Lightning Polls are considered to be more convenient, while still as secure as other Navy surveys.

These findings expand the paradigm of Navy personnel surveys to an administration medium that the military had never before used for this purpose . Based on this initial study, it appears that Lightning Polls are a viable data collection alternative for use with select Navy populations. Future research efforts will be needed to further investigate the reliability and validity of Lightning Polls as an assessment tool in other operational Navy settings.

Recommendations for Future Lightning Polls (1 of 2)

- Conduct additional Lightning Polls to answer additional research questions
 - Difference in demographics of respondents
 - Comparison to other survey methods
- Ensure adequate notification
 - Consider using panel format, where respondents are selected and notified once but are requested to respond to successive surveys as needed
- Consider explanation that system is automated
 - Some respondents may not have received initial notification in time so thought that the messages they received were from potential applicants

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Results specific to Lightning Polls suggest some areas for improvement. First, additional research needs to be completed to determine if there are other demographic differences (e.g., by age, by marital status) and if results are comparable to other survey methods currently in place in the Navy. Second, additional steps are necessary to ensure adequate notification, with one option being to utilize a panel format that allows for successive surveys of the same person while only needing to explain the details the first time. Third, the notification should perhaps indicate that the system is automated to minimize the number of answer responses that are modified (i.e., write-in answers).

Recommendations for Future Lightning Polls (2 of 2)

- Provide guidelines for completion ("a" vs "agree" vs long clarifying responses)
- Send initial messages in smaller sets (to avoid overloading system)
- Vary answers between questions to avoid confusion about which answer goes to which question (i.e., a/b/c for question 1 and x/y/z for question 2)
- Contact cell phone companies to allow for caller ID of Lightning Poll number

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Additionally, guidelines for completing the survey would ease analyses. Because the system sends each message separately and messages are processed First-In-First-Out, smaller groups of initial messages would potentially have avoided overloading the system and allowed faster response times. Problems with notification led to mistiming of responses and thereby difficulties in determining which answer was for what question, an issue that could have been avoided if answer letters varied from question to question. Notification problems also led to confusion regarding who was sending the questions; allowing caller ID of the survey phone number might have alleviated some of the confusion.

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Appendix A: Backup Slides

Use of Text Messaging by Navy Recruiters

Briefing for CNRC N5 Department

Zannette Uriell & Evangeline Clewis
Navy Personnel Research, Studies, and Technology

13 November 2008



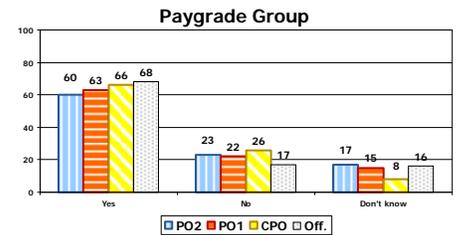
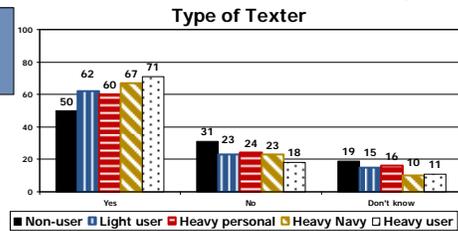
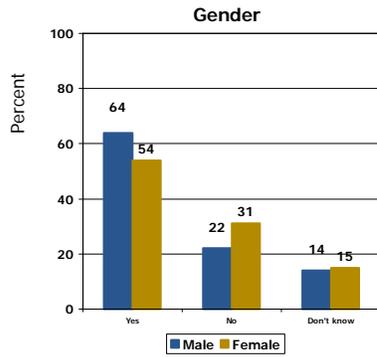
This research was funded by Office of Naval Research as part of the PISCES project.

Backup



Percent Who Completed Lightning Poll – Self-Report

Males and heavy texters are more likely to believe they completed the Lightning Poll.



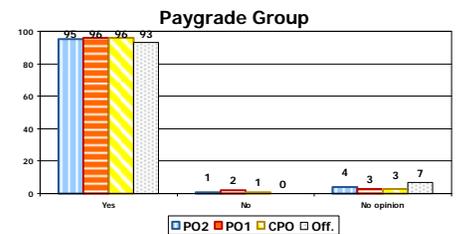
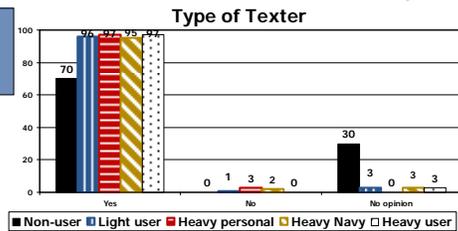
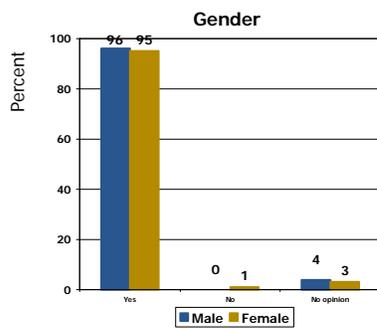
NPRST



Follow-up Survey, Q4

Survey Ease

No difference between subgroup on perceived ease of Lightning Poll.



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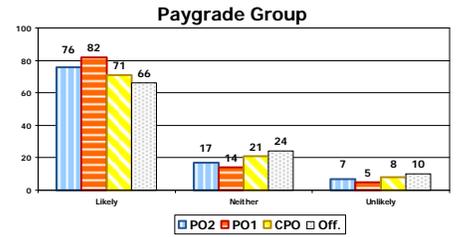
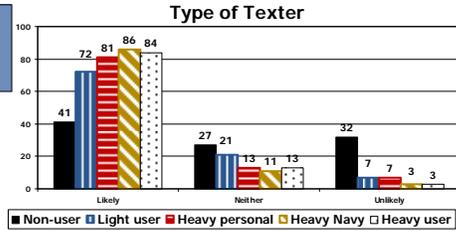
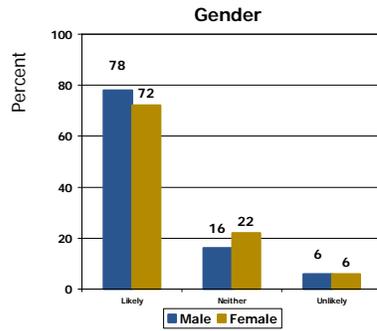


* Results only for those who provided two answers to the Lightning Poll.

Follow-up Survey, Q5

Likelihood to Do Other Surveys

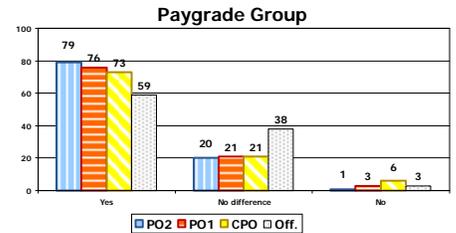
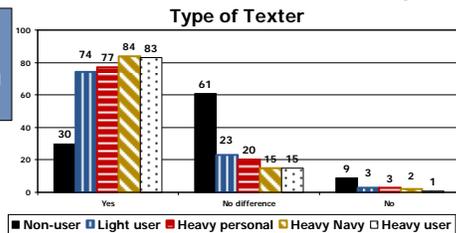
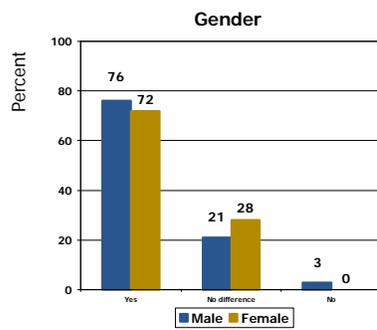
Males, heavy users, and junior personnel likely to do other Lightning Polls.



* Results only for those who provided two answers to the Lightning Poll.
Follow-up Survey, Q8

Convenience of Lightning Poll Compared to Other Navy Surveys

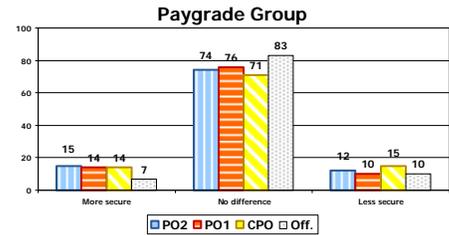
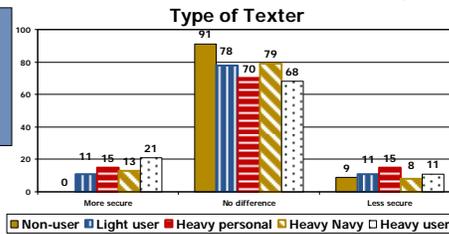
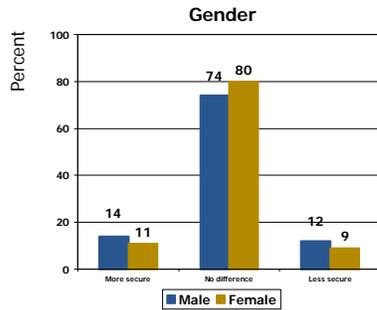
Females and officers more likely to say that there is no difference in convenience between Lightning Poll and other Navy surveys.



* Results only for those who provided two answers to the Lightning Poll and had participated in other Navy surveys.
Caution due to low numbers in subgroups.
Follow-up Survey, Q6

Security of Lightning Poll Compared to Other Navy Surveys

Heavy texters overall and heavy personal-phone texters most likely to indicate no difference in security of Lightning Polls as compared to other surveys.



* Results only for those who provided two answers to the Lightning Poll and had participated in other Navy surveys. Caution due to low numbers in subgroups.
Follow-up Survey, Q7

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Other Observations

- Advance notice key
 - Some responded to first question with "Who is this and are you interested in the Navy?"
- Some left cell phones on overnight so received early wakeup from arriving text messages
 - Clearly an issue for Hawaii personnel

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Response Time Analyses

- Software saved message creation time instead of message sending time
 - System seemingly became overloaded, so some messages were not sent until 3 days after they were created
- Seeming overload also led to multiple transmissions of same message
 - Time of initial transmission of question used in analyses
- Response times to initial question and overall survey time should be considered with caution due to overload situation



Time for First Response

Men, heavy texters, and PO2/PO1 had shortest response times to initial question.

Response Time to First Question (in minutes)

| Group | N | Average | Shortest | Longest |
|----------------|------|---------------|----------|---------|
| Overall | 2317 | 3489 (~ 2.5d) | 2 | 73666 |
| Male | 2085 | 3455 | 2 | 73666 |
| Female | 232 | 3801 | 12 | 56594 |
| Non-user | 44 | 3325 | 386 | 14447 |
| Light user | 338 | 4673 | 8 | 73666 |
| Heavy personal | 203 | 3190 | 7 | 31797 |
| Heavy Navy | 106 | 2934 | 6 | 20445 |
| Heavy user | 215 | 3158 | 10 | 21763 |
| PO2 | 856 | 3406 | 2 | 47697 |
| PO1 | 971 | 3387 | 2 | 56594 |
| CPO | 389 | 3759 | 2 | 73666 |
| Officer | 101 | 4144 | 8 | 66246 |

* Results for all responses through October 2008.



Time for First Answer

For those who actually provided an answer to the first question (i.e., not "Who is this?"), Men, heavy texters, and PO2/PO1 still have shortest response times to initial question.

Response Time to First Question – Actual Answer (in minutes)

| Group | N | Average | Shortest | Longest |
|----------------|------|---------------|----------|---------|
| Overall | 2085 | 3586 (~ 2.5d) | 2 | 73666 |
| Male | 1885 | 3547 | 2 | 73666 |
| Female | 200 | 3948 | 22 | 56594 |
| Non-user | 43 | 3393 | 386 | 14447 |
| Light user | 312 | 4781 | 8 | 73666 |
| Heavy personal | 185 | 3306 | 7 | 31797 |
| Heavy Navy | 91 | 3004 | 6 | 20445 |
| Heavy user | 194 | 3206 | 10 | 21763 |
| PO2 | 761 | 3532 | 8 | 47697 |
| PO1 | 874 | 3458 | 5 | 56594 |
| CPO | 357 | 3818 | 2 | 73666 |
| Officer | 93 | 4329 | 8 | 66246 |

* Results for all responses through October 2008.

NPRST



Time for Second Answer

Response times are shorter for second question, with 90% responding within 10 minutes of receiving second question, and half in one minute or less.

Response Time to Second Question – Actual Answer (in minutes)

| Group | N | Average | Shortest | Longest |
|----------------|------|-------------|----------|---------|
| Overall | 1700 | 1590 (~ 1d) | 0 | 33896 |
| Male | 1559 | 1588 | 0 | 33896 |
| Female | 141 | 1610 | 0 | 14096 |
| Non-user | 29 | 1727 | 1 | 13272 |
| Light user | 265 | 1471 | 0 | 6690 |
| Heavy personal | 159 | 1748 | 0 | 19853 |
| Heavy Navy | 76 | 1530 | 0 | 4300 |
| Heavy user | 181 | 1403 | 0 | 6351 |
| PO2 | 623 | 1591 | 0 | 12892 |
| PO1 | 727 | 1561 | 0 | 19853 |
| CPO | 286 | 1668 | 0 | 33896 |
| Officer | 64 | 1565 | 0 | 14096 |

* Results for all responses through October 2008.

NPRST



Time to Respond to Both Questions (Complete survey)

Total survey time (to receive two answers) heavily determined by time to answer first question, which was subject to delays due to the large number of initial outgoing messages.

| Time for Survey Completion (in minutes) | | | | |
|---|------|---------------|----------|---------|
| Group | N | Average | Shortest | Longest |
| Overall | 1661 | 5274 (~ 3.5d) | 53 | 73666 |
| Male | 1524 | 5211 | 53 | 73666 |
| Female | 137 | 5970 | 388 | 56595 |
| Non-user | 29 | 5461 | 393 | 15074 |
| Light user | 260 | 6399 | 388 | 73666 |
| Heavy personal | 155 | 5196 | 390 | 34576 |
| Heavy Navy | 72 | 4744 | 62 | 20446 |
| Heavy user | 175 | 4604 | 388 | 21764 |
| PO2 | 610 | 5151 | 59 | 47697 |
| PO1 | 709 | 5113 | 53 | 56595 |
| CPO | 278 | 5765 | 389 | 73666 |
| Officer | 64 | 6093 | 388 | 66341 |

* Results for all responses through October 2008.

NPRST



Time to Respond for Survey Completion (5 messages, 2 answers)

Time for Survey Completion (5 messages, 2 answers) (in minutes)

| Group | N | Average | Shortest | Longest |
|----------------|-----|-------------|----------|---------|
| Overall | 189 | 9807 (~ 7d) | 2 | 73666 |
| Male | 170 | 9434 | 2 | 73666 |
| Female | 19 | 13143 | 388 | 56596 |
| Non-user | 6 | 7972 | 394 | 14449 |
| Light user | 40 | 15656 | 389 | 73666 |
| Heavy personal | 19 | 7339 | 391 | 29116 |
| Heavy Navy | 8 | 6738 | 389 | 20446 |
| Heavy user | 19 | 5735 | 388 | 21764 |
| PO2 | 74 | 8929 | 2 | 47698 |
| PO1 | 76 | 8745 | 54 | 56596 |
| CPO | 26 | 14886 | 434 | 73666 |
| Officer | 13 | 10849 | 389 | 66342 |

* Results for all responses through October 2008.

NPRST



Time to Respond to First Response

- Time to respond impacted by time it takes to send messages

| Response Time to First Question (in minutes) | | | | |
|--|------|-------------|----------|---------|
| Group | N | Average | Shortest | Longest |
| Overall | 1602 | 3006 (~ 2d) | 2 | 12363 |
| Male | 1476 | 3013 | 2 | 12363 |
| Female | 126 | 2929 | 29 | 12097 |
| Non-user | 26 | 3360 | 386 | 8865 |
| Light user | 241 | 3074 | 8 | 11512 |
| Heavy personal | 149 | 2864 | 7 | 11534 |
| Heavy Navy | 71 | 3056 | 30 | 7638 |
| Heavy user | 173 | 2997 | 10 | 10099 |
| PO2 | 589 | 2915 | 8 | 12363 |
| PO1 | 690 | 3073 | 5 | 11534 |
| CPO | 264 | 3027 | 2 | 11826 |
| Officer | 59 | 3035 | 8 | 11672 |

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Time to Respond to First Question

| Response Time to First Question – Actual Answer (in minutes) | | | | |
|--|------|-------------|----------|---------|
| Group | N | Average | Shortest | Longest |
| Overall | 2028 | 2978 (~ 2d) | 2 | 12363 |
| Male | 1839 | 2982 | 2 | 12363 |
| Female | 189 | 2944 | 22 | 12097 |
| Non-user | 42 | 3130 | 386 | 8865 |
| Light user | 291 | 3058 | 8 | 11512 |
| Heavy personal | 180 | 2824 | 7 | 11534 |
| Heavy Navy | 90 | 2810 | 6 | 7638 |
| Heavy user | 192 | 3035 | 10 | 10099 |
| PO2 | 740 | 2940 | 8 | 12363 |
| PO1 | 856 | 3011 | 5 | 11534 |
| CPO | 344 | 2976 | 2 | 11826 |
| Officer | 88 | 2993 | 8 | 11672 |

NPRST



Time to Respond to Second Question

NPRST



| Response Time to Second Question – Actual Answer (in minutes) | | | | |
|---|------|-------------|----------|---------|
| Group | N | Average | Shortest | Longest |
| Overall | 1639 | 1569 (~ 1d) | 0 | 8259 |
| Male | 1510 | 1562 | 0 | 8259 |
| Female | 129 | 1650 | 0 | 5901 |
| Non-user | 26 | 1089 | 1 | 2555 |
| Light user | 246 | 1585 | 0 | 6690 |
| Heavy personal | 153 | 1668 | 0 | 5810 |
| Heavy Navy | 75 | 1550 | 0 | 4300 |
| Heavy user | 179 | 1418 | 0 | 6351 |
| PO2 | 602 | 1603 | 0 | 7349 |
| PO1 | 707 | 1537 | 0 | 6690 |
| CPO | 271 | 1600 | 0 | 7047 |
| Officer | 59 | 1456 | 0 | 8259 |

Time to Respond to Both Questions (Complete survey)

NPRST



| Time for Survey Completion (in minutes) | | | | |
|---|------|-------------|----------|---------|
| Group | N | Average | Shortest | Longest |
| Overall | 1602 | 4587 (~ 3d) | 53 | 12378 |
| Male | 1476 | 4584 | 53 | 12378 |
| Female | 126 | 4620 | 388 | 12098 |
| Non-user | 26 | 4448 | 393 | 8914 |
| Light user | 241 | 4699 | 388 | 11513 |
| Heavy personal | 149 | 4537 | 390 | 11535 |
| Heavy Navy | 71 | 4522 | 62 | 7640 |
| Heavy user | 173 | 4431 | 388 | 10100 |
| PO2 | 589 | 4524 | 59 | 12378 |
| PO1 | 690 | 4612 | 53 | 11672 |
| CPO | 264 | 4682 | 389 | 11826 |
| Officer | 59 | 4491 | 388 | 11672 |

Time to Respond for Survey Completion (5 messages, 2 answers)

NPRST



| Time for Survey Completion (in minutes) | | | | |
|---|-----|-------------|----------|---------|
| Group | N | Average | Shortest | Longest |
| Overall | 142 | 4813 (~ 3d) | 2 | 12378 |
| Male | 132 | 4850 | 2 | 12378 |
| Female | 10 | 4323 | 388 | 12098 |
| Non-user | 4 | 5050 | 394 | 8914 |
| Light user | 22 | 5367 | 389 | 11513 |
| Heavy personal | 15 | 4525 | 391 | 11535 |
| Heavy Navy | 7 | 4780 | 389 | 7641 |
| Heavy user | 17 | 4108 | 388 | 10100 |
| PO2 | 56 | 4406 | 2 | 12378 |
| PO1 | 62 | 5019 | 54 | 11535 |
| CPO | 15 | 6227 | 434 | 11827 |
| Officer | 9 | 3560 | 389 | 11673 |

**Appendix B:
Notification Letter and Privacy Act**

CNRC LETTERHEAD

<<name>>
<<address1>>
<<address2>>
<<address3>>
<<address4>>

Dear <<name>>,

As a recruiter, you have the unique opportunity to participate in the first-ever Navy survey conducted using text messaging. The survey will consist of only two questions about your use of text messaging. The questions will be sent one at a time from (901) 451-1522. To respond, simply reply to the text message with the letter of your answer choice.

Shortly after the text messaging survey is conducted, you will receive a follow-up survey asking your opinion of the usefulness of text messaging surveys. This survey should take about 10 minutes of your time.

While participation is voluntary, your feedback is vital in providing accurate data about text messaging by recruiters. Be assured that the information you give will not be attributed to you personally, nor will it have a direct impact on your Navy career. The Navy Personnel Research, Studies, and Technology (NPRST) Department will only provide me with numerical results; no personal identifiers will be included to maintain your anonymity. Please see the enclosed Privacy Notice for more details.

Thank you in advance for all you do for the Fleet. If you have any questions, please contact the Project Director, Zannette Uriell, at DSN 882-4641, (901) 874-4641, zannette.uriell@navy.mil.

Sincerely,

R. R. BRAUN
Rear Admiral, U.S. Navy
Deputy Commander
Navy Recruiting Command

PRIVACY NOTICE

Authority to request this information is granted under Title 5, U.S. Code 301, and Department of the Navy Regulations. License to administer this survey is granted under OPNAV Report Control Symbol 1100-2, which expires on 31 March 2010.

PURPOSE: The purpose of this questionnaire is to collect data to evaluate existing and proposed Navy personnel policies, procedures, and programs.

ROUTINE USES: The information provided in the short message service (SMS) questionnaire will be analyzed by the Navy Personnel Research, Studies, and Technology Department. The data files will be maintained by the Navy Personnel Research, Studies, and Technology Department where they may be used for determining changing trends in the Navy.

ANONYMITY: All responses will be held in confidence by the Navy Personnel Research, Studies, and Technology Department. Information you provide will be considered only when statistically summarized with the responses of others, and will not be attributable to any single individual.

PARTICIPATION: Completion of this questionnaire is entirely voluntary. Failure to respond to any of the questions will NOT result in any penalties except possible lack of representation of your views in the final results and outcomes.

Appendix C: SMS Follow-on Survey

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SMS Follow-up Survey



PRIVACY ACT STATEMENT

Authority to request this information is granted under Title 5, U.S.C. 301, and Department of the Navy Regulations. License to administer this survey is granted per OPNAVINST 5300.8B under OPNAV Report Control Symbol 1100-2, which expires on 31 March 2010.

PURPOSE: The purpose of this questionnaire is to collect information to evaluate existing and proposed Navy personnel policies, procedures, and programs.

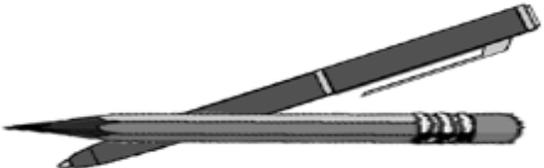
ROUTINE USES: The information provided in the Short Message Service (SMS) questionnaire will be analyzed by the Navy Personnel Research, Studies, and Technology Department. The data files will be maintained by the Navy Personnel Research, Studies, and Technology Department where they may be used to determining changing trends in the Navy.

ANONYMITY: All responses will be held in confidence by the Navy Personnel Research, Studies, and Technology Department. Information you provide will be statistically summarized with the responses of others, and will not be attributable to any single individual.

PARTICIPATION: Completion of this questionnaire is entirely voluntary. Failure to respond to any of the questions will NOT result in any penalties except for lack of representation of your views in the final results and outcomes.

IMPORTANT MARKING INSTRUCTIONS

- Use black or blue pen or a No. 2 pencil
- Make dark marks that stay within the box
- Make no stray marks
- Do NOT fold, tear, or mutilate this form.



CORRECT:

If you have any questions, please contact the Project Director, Zannette Uriell, at DSN 882-4641, (901) 874-4641, zannette.uriell@navy.mil.

Department of the Navy
Bureau of Naval Personnel
Navy Personnel Research, Studies and Technology (NPRST/PERS-1)
5720 Integrity Drive
Millington, TN 38055-1000



PLEASE DO NOT WRITE IN THIS AREA

SMS Follow-up Survey

1. On average, how many text messages do you send on your NAVY cell phone per week?

- My phone has text-message capability but I don't use it
- 1-9 messages
- 10-29 messages
- 30-50 messages
- More than 50 messages.

2. How useful are those Navy-funded text messages in doing your job?

- N/A; I don't use text messaging
- Very useful
- Somewhat useful
- Not at all useful

3. On average, how many text messages do you send on your PERSONAL cell phone per week?

- I don't have a personal cell phone
- My phone has text-messaging capability but I don't use it
- 1-9 messages
- 10-29 messages
- 30-50 messages
- More than 50 messages

4. Did you complete the recent CNRC SMS Survey?

- Yes
 - No
 - Don't know
- Skip to question 10

5. Was the survey easy to do?

- Yes
- No
- No opinion

6. Was the survey more convenient than other Navy surveys you have done?

- N/A, have never participated in a Navy survey
- Yes, more convenient
- No difference from other Navy surveys
- No, less convenient

7. Did you feel your responses were more or less secure than other Navy surveys?

- N/A, have never participated in a Navy survey
- More secure
- No difference in security
- Less secure

8. Would you be likely to complete other short (5 questions or less) SMS surveys?

- Yes, likely to complete other SMS surveys
- Neither likely nor unlikely to complete other SMS surveys
- No, unlikely to complete other SMS survey

9. How do you think the SMS survey process can be improved?

10. Should CNRC send text messages to recruiters to inform them of key changes in policy?

- Yes
- No
- Don't know

11. Do you have any cell phone-related suggestions to increase their usefulness to you as a recruiter?

THANK YOU!

Please complete the survey as soon as possible, and return in the enclosed envelope to:

Survey Operations Center (SOC)
Navy Personnel Research, Studies, and Technology
(PERS-14)
5720 Integrity Drive
Millington, TN 38055-1400

Socform: EMC0801

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NAVY PERSONNEL RESEARCH, STUDIES, AND TECHNOLOGY SPISHOCK
LIBRARY (3)
NAVY RECRUITING COMMAND (N5)
PENTAGON LIBRARY
USAF ACADEMY LIBRARY
US COAST GUARD ACADEMY LIBRARY
US MERCHANT MARINE ACADEMY BLAND LIBRARY
US MILITARY ACADEMY AT WEST POINT LIBRARY
US NAVAL ACADEMY NIMITZ LIBRARY