

Studying Veterans' Post-Service Transition Experiences in an Era of Declining Survey Participation

Designing and Fielding The Veterans Metric Initiative (TVMI)– A Longitudinal Study

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About the TVMI Study

- Since 2001, roughly 3 million service members have separated from the U.S. military. In the next 4 to 5 years over 1,000,000 individuals are expected to leave military service.
- Some individuals may find it difficult to transition from the highly structured military environment to an environment in which they must independently navigate the challenges of securing civilian employment, managing finances, maintaining wellness, and finding their place in the larger community.
- The process of returning to civilian role functions can be particularly complex for veterans with mental and physical health problems, such as post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), or extremity trauma, which often impose additional burdens on coping skills and daily functioning.
- Research indicates that some veterans contend with a multitude of complex health problems that hinder readjustment and present life-long challenges.

Unique Aspects of TVMI

- The TVMI study brings together best practices from the broader literature and introduces several novel strategies that can be implemented to address existing gaps:
 - Data sharing among public and private collaborators,
 - A longitudinal design that initiates assessment as veterans' transition from military service,
 - Reassesses the same veterans at six-month intervals for the next three years to evaluate how veterans' well-being and program use changes throughout the transition and reintegration process, and
 - Allows for the construction of naturally occurring experimental and control groups that will facilitate examination of how program participation impacts outcomes over time.

Three Research Aims

| AIM | PURPOSE |
|-----|---|
| 1 | Document Veteran well-being in four key domains – mental and physical health, vocation, finances, and social relationships – over the first three years of the transition from military service to civilian life. Identify factors associated with better and worse well-being. |
| 2 | Describe programs used by Veterans as they reintegrate into civilian life and distill them into their components, identifying common components across programs. |
| 3 | Identify program components that are associated with changes in well-being following separation from military service. |

Study Methodology

- Study website to provide information and update contact information
- Longitudinal Web survey – every 6 months for 3 years
- Sample list drawn by VADIR of Active Duty (Army, Navy, Air Force, Marines and Reserves/National Guard/Reserves separating from Active Duty May-August 2016)
- > 40 minutes to complete on average
- Robust incentives provided immediately after survey completion (on-screen and sent by follow-up email or text)

| | |
|--------------|--|
| October 2016 | \$5 pre-paid incentive and \$20 post-paid instant Amazon gift code |
| May 2017 | \$30 post-paid instant Amazon gift code |
| October 2017 | \$35 post-paid instant Amazon gift code |
| May 2018 | \$40 post-paid instant Amazon gift code |
| October 2018 | \$45 post-paid instant Amazon gift code |
| May 2019 | \$50 post-paid instant Amazon gift code |

Data Collection Strategy

- Sample representative of population
 - Nonresponse bias weights will be applied
- Soft roll-out (Sept. 2016) - 2,000 randomly selected Veterans invited by mail
- Full-wave (Oct. 2016) was a Census – all 48,965 Veterans who separated were invited to participate:
- Follow-up web surveys every six months for 3 years
- Instant Amazon gift codes provided at end of web survey on screen and by follow-up email or text
- Participants could skip any question, but were shown a red warning message that they had missed a question on the page

Initial Panel Recruitment

- Recruitment experiment to test best mail invitation strategy
- Sample Batch 1 experiment (n=2,000) with 3 mail protocols
- Web data collection 9/6/2016 - 11/20/2016 (11 weeks).

| | Pre-alert mailing | Invitation mailing with ID and \$5 cash | 1st reminder card (5.5" x 8.5") | 1st reminder card (5.5" x 8.5") |
|-------------------|-------------------|---|---------------------------------|---------------------------------|
| Invite type 1 - Z | Letter | Letter | Sealed card | Sealed card |
| Invite type 2 - X | None | Letter | Sealed card | Sealed card |
| Invite type 3 - E | Sealed card | Letter | Sealed card | Sealed card |

Recruitment results by mailing experiment

- The completion of 414 surveys from the sample of 2,000 resulted in a response rate of 25.2% (AAPOR RR4). This exceeded the goal of 15% by approximately 10%.
- Mailing experiment 3 - E had the best response rate and was chosen for the release of Batch 2 of 46,976.

| | RESPONSE RATE (AAPOR RR4) | Total Invitations mailed | Postal Non-Delivery | Discarded | Refused | Opt-Out Postcard Received | Other Opt-Out | Refused at beginning | Other incomplete | Complete | Partial complete |
|----------------------|---------------------------|--------------------------|---------------------|-----------|----------|---------------------------|---------------|----------------------|------------------|------------|------------------|
| Invite type 1 - Z | 24.56% | 667 | 93 | 0 | 0 | 8 | 0 | 3 | 2 | 127 | 14 |
| Invite type 2 - X | 25.08% | 667 | 68 | 1 | 0 | 9 | 0 | 1 | 1 | 142 | 8 |
| Invite type 3 - E | 25.97% | 666 | 73 | 0 | 0 | 8 | 0 | 0 | 1 | 145 | 9 |
| TOTAL BATCH 1 | 25.21% | 2000 | 234 | 1 | 0 | 25 | 0 | 4 | 4 | 414 | 31 |

Overall Results

- Sample Batch 1 was open from 9/6/16-11/20/16 (11 weeks)
- Sample Batch 2 was open from 10/28/16-11/20/16 (4 weeks)
 - Closed because we had a budget cap at 9,600 incentives
- The completion of 9,566 surveys from the sample of 48,965
 - Overall response rate of 22.9% exceeded the goal of 15% by approximately 8%

| | RESPONSE RATE (AAPOR RR4) | Total Invitations mailed | Postal Non-Delivery | Discarded | Refused | Opt-Out Postcard Received | Other Opt-Out | Refused at beginning | Other incomplete | Complete | Partial complete at Q1 |
|--------------------------------------|---------------------------|--------------------------|---------------------|-----------|----------|---------------------------|---------------|----------------------|------------------|--------------|------------------------|
| Total (Batch 1 & Batch 2) | 22.92% | 48,965 | 4,682 | 2 | 0 | 533 | 12 | 91 | 51 | 9,566 | 581 |

Results: Sample representativeness – Wave 1

| | Unweighted Completes % n=9,566 | Population % N=48,965 | Diff. |
|----------------------------------|-----------------------------------|--------------------------|--------|
| GENDER | | | |
| Male | 81.78 | 84.08 | -2.3 |
| Female | 18.22 | 15.92 | 2.3 |
| AGE | | | |
| 18-24 | 19.36 | 28.6 | -9.24 |
| 25-29 | 22.31 | 25.15 | -2.82 |
| 30-34 | 35.02 | 33.76 | 1.26 |
| 35-39 | 13.08 | 10.8 | 2.28 |
| 40-44 | 13.38 | 10.48 | 2.9 |
| 45-49 | 10.05 | 6.97 | 3.08 |
| 50+ | 6.77 | 4.23 | 2.54 |
| BRANCH/COMPONENT | | | |
| Army | 33.1 | 32.1 | 1.0 |
| Navy | 19.1 | 18.8 | 0.3 |
| Air Force | 18.8 | 13.5 | 5.3 |
| Marines | 15.8 | 17.2 | -1.4 |
| National Guard/Reserves | 12.6 | 18.4 | -5.8 |
| PAYGRADE | | | |
| E1-E4 Junior Enlisted | 28.26 | 41.43 | -13.17 |
| E5-E6 MidGrade Enlisted | 30.02 | 29.53 | 0.49 |
| E7-E9 Senior Enlisted | 17.85 | 13.42 | 4.43 |
| O1-O3/W1-W5 Junior Officers/WO | 9.93 | 7.49 | 2.44 |
| O4-O10 Senior Officer | 13.92 | 8.13 | 5.79 |
| RACE | | | |
| Not a minority race or ethnicity | 64.45 | 60.42 | 4.03 |
| Minority race or ethnicity | 35.55 | 39.2 | -3.65 |

*Sample will be weighted by Gender, Branch/Component and Paygrade to adjust for non-response bias

Recruitment Schedule for TVMI Longitudinal Surveys

| Contact schedule | Wave 1 (Batch 1 - 2,000) | Wave 1 (Batch 2 - 46,965) | Wave 2 (9,566) | Wave 3 (9,566) | Wave 4 (9,566) | Wave 5 (9,566) | Wave 6 (9,566) |
|------------------------------------|--------------------------|--|----------------|----------------|----------------|----------------|----------------|
| 1 st Email invitation | Week 1 | Wave 1 started with Pre-alert mailing | 5/1/17 | 11/6/17 | 5/1/18 | 11/5/18 | 5/6/19 |
| 1 st Text invitation | Week 1.5 | because we didn't have email addresses or mobile numbers | 5/3/17 | 11/8/17 | 5/3/18 | 11/7/18 | 5/8/19 |
| 2 nd Email invitation | Week 2 | | 5/8/17 | 11/13/17 | 5/8/18 | 11/12/18 | 5/13/19 |
| 2 nd Text invitation | Week 2.5 | | 5/10/17 | 11/15/17 | 5/10/18 | 11/14/18 | 5/15/19 |
| 3 rd Email invitation | Week 3 | | 5/15/17 | 11/20/17 | 5/15/18 | 11/19/18 | 5/20/19 |
| Pre-alert mailing | Week 4 | | 9/6/16 | 10/19/16 | | | |
| Invitation mailing | Week 6 | | 9/12/16 | 10/26/16 | 6/5/17 | 12/11/17 | 6/5/18 |
| 1 st Reminder Postcard | Week 7 | | 9/19/16 | 11/2/16 | 6/12/17 | 12/18/17 | 6/12/18 |
| *2 nd Reminder Postcard | Week 8 | | 9/26/16 | 11/9/16 | | | |
| | Week 9 | | | | | | |
| Paper Questionnaire | Week 10 | | | 7/3/17 | 1/8/18 | 7/3/18 | 1/7/19 |
| 2 nd Reminder Postcard | Week 11 | | | 7/10/17 | 1/15/18 | 7/10/18 | 1/14/19 |
| CLOSE SURVEY | Week 14 | | 11/19/16 | 11/19/16 | 7/31/17 | 2/5/18 | 7/31/18 |
| | | | | | | 2/4/19 | 8/5/19 |

Additional information about the Web survey

- Mean survey length (time to complete the web survey) was 36.7 minutes
- Few breakoffs (7.5%) despite a long survey (robust incentive at end was helpful)
- > 17.3% completed on mobile phones or tablets vs. 82.1% on larger computers
 - Breakoff rate (8.8%) for mobile devices was only slightly higher than computers (6.6%)
- Few questions skipped/blank (warning showed if question was left blank) < 0.2%
- Few calls/emails to the Help Desk (83 total)
- All Wave 1 participants (9,566) will be invited to complete each follow-up web survey

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