Spotlight on Women’s Health Cyberseminar Series

Sponsored by the VA Women’s Health Research Network
Unique Readjustment Concerns for Newly Separated Women Veterans

Dawne Vogt, PhD
Research Health Scientist, Women’s Health Sciences Division, NCPTSD, VA, Boston Health Care System, & Professor of Psychiatry, BU School of Medicine
Plan for Presentation

- Review Gaps in Research on Women Veterans’ Readjustment
- Introduce TVMI Transition Study
- Summarize Findings on Gender Differences
- Discuss Conclusions, Implications, and Future Directions
Limitations of Prior Research

- Increased research on women veterans’ health and well-being
- But little knowledge of how either women or men fare throughout military-to-civilian transition\(^1\)
- Important to attend to this timeframe because:
  - Transition may represent vulnerable period
  - Offers ideal opportunity for early intervention

\(^1\) Mattox & Pollard, 2016
Benefit of Studying Early Transition Outcomes

- Can identify veterans at risk for downward spirals
Limitations of Prior Research

- A good amount of research on health outcomes of women veterans
- Fewer studies of women veterans’ broader well-being after military service¹

¹Vogt et al., 2019
TVMI Study Design

- Longitudinal study of the military-to-civilian transition among approximately 10,000 newly separated U.S. women and men service members.¹

1 Vogt et al., 2018
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population-Based Sample</td>
<td>Transitioning veterans identified through VA/Department of Defense (DoD) Identity Repository (VADIR)</td>
</tr>
<tr>
<td>Web-based data collection</td>
<td>Six 45-minute surveys completed online</td>
</tr>
<tr>
<td>Non-response Weighting</td>
<td>Nonresponse bias weights to adjust for response differences/enhance generalizability</td>
</tr>
</tbody>
</table>
Demographics of Completers

**Gender**
- 82% men (7,823)
- 18% women (1,743)

**Race / Ethnicity**
- 76% White
- 14% Hispanic
- 13% Black
- 5% Asian
- 4% Native American
- 3% Other

**Branch of service**
- 32% Army
- 20% Navy
- 25% Air Force
- 16% Marine Corps

**NGR Participation**
- 13% recently deactivated from NGR active status
- 17% continue to serve in NGR

**Rank**
- 28% E1-E4
- 30% E5-E6
- 18% E7-E9
- 10% W1-W5 O1-O3
- 14% O4-O10
BMJ Open  The Veterans Metrics Initiative study of US veterans’ experiences during their transition from military service

Dawne Vogt,¹,² Daniel F Perkins,³,⁴,⁵ Laurel A Copeland,⁶,⁷,⁸ Erin P Finley,⁹,¹⁰ Christopher S Jamieson,¹¹ Bradford Booth,¹² Suzanne Lederer,¹³ Cynthia L Gilman¹¹
Well-Being Measure – Additional Information

APPLIED PSYCHOLOGY: HEALTH AND WELL-BEING, 2019
doi:10.1111/aphw.12161

Development and Validation of a Tool to Assess Military Veterans’ Status, Functioning, and Satisfaction with Key Aspects of their Lives
Results

1. Health and well-being of women and men veterans during the first year post-separation

2. Change in health and well-being of women and men veterans over first three years post-separation
Health and Well-Being in the First Year after Separation

U.S. Military Veterans’ Health and Well-Being in the First Year After Service

Dawne S. Vogt, PhD, Fanita A. Tyrell, PhD, Emily A. Bramande, BA, Yael I. Nillni, PhD, Emily C. Taverna, BA, Erin P. Finley, PhD, Daniel F. Perkins, PhD, Laurel A. Copeland, PhD
Welcome home to Civilian Life!

Baseline Survey

1st follow-up survey
90 days

2nd follow-up survey
6 mos.

3rd follow-up survey
6 mos.

4th follow-up survey
6 mos.

5th follow-up survey
6 mos.

Veteran Health and Well-Being in First Year Post-Separation
## Health Status

<table>
<thead>
<tr>
<th>Health Status</th>
<th>Time Point</th>
<th>Percent of Women</th>
<th>Percent of Men</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 1 Physical Health Condition</td>
<td>T1</td>
<td>51.1</td>
<td>53.6</td>
<td>1.10</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>54.0</td>
<td>54.7</td>
<td>1.02</td>
</tr>
<tr>
<td>≥ 1 Mental Health Condition</td>
<td>T1</td>
<td>40.5</td>
<td>31.3</td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>46.1</td>
<td>32.7</td>
<td>.57*</td>
</tr>
</tbody>
</table>

*reflect at least a small effect
## Health Conditions

<table>
<thead>
<tr>
<th>Health Condition/ Illness/Disability</th>
<th>Time Point</th>
<th>Percent of Women</th>
<th>Percent of Men</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic Pain</td>
<td>T1</td>
<td>39.2</td>
<td>40.7</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>41.2</td>
<td>41.6</td>
<td>1.02</td>
</tr>
<tr>
<td>Anxiety</td>
<td>T1</td>
<td>31.1</td>
<td>20.8</td>
<td>.58</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>34.1</td>
<td>22.0</td>
<td>.55*</td>
</tr>
<tr>
<td>Depression</td>
<td>T1</td>
<td>29.0</td>
<td>18.1</td>
<td>.54*</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>31.8</td>
<td>20.2</td>
<td>.54*</td>
</tr>
<tr>
<td>Sleep Problems</td>
<td>T1</td>
<td>28.8</td>
<td>31.7</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>28.8</td>
<td>32.1</td>
<td>1.16</td>
</tr>
<tr>
<td>PTSD</td>
<td>T1</td>
<td>12.4</td>
<td>12.3</td>
<td>.99</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>16.8</td>
<td>13.1</td>
<td>.75</td>
</tr>
</tbody>
</table>

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## Health Conditions

<table>
<thead>
<tr>
<th>Health Condition/ Illness/Disability</th>
<th>Time Point</th>
<th>Percent of Women</th>
<th>Percent of Men</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthritis</td>
<td>T1</td>
<td>11.4</td>
<td>14.6</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>13.4</td>
<td>15.3</td>
<td>1.17</td>
</tr>
<tr>
<td>Hearing Condition</td>
<td>T1</td>
<td>6.2</td>
<td>15.2</td>
<td>2.70*</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>5.5</td>
<td>15.3</td>
<td>3.12*</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>T1</td>
<td>5.8</td>
<td>12.8</td>
<td>2.41*</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>7.6</td>
<td>13.0</td>
<td>1.83*</td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>T1</td>
<td>3.5</td>
<td>7.3</td>
<td>2.19*</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>4.9</td>
<td>8.0</td>
<td>1.68*</td>
</tr>
</tbody>
</table>

*reflect at least a small effect
## Health Functioning and Satisfaction

<table>
<thead>
<tr>
<th>Health</th>
<th>Time Point</th>
<th>Percent of Women</th>
<th>Percent of Men</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good Health Functioning</td>
<td>T1</td>
<td>73.3</td>
<td>67.8</td>
<td>.77</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>72.0</td>
<td>66.9</td>
<td>.78</td>
</tr>
<tr>
<td>Satisfied with Health</td>
<td>T1</td>
<td>44.1</td>
<td>48.4</td>
<td>1.19</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>46.3</td>
<td>47.1</td>
<td>1.03</td>
</tr>
</tbody>
</table>

*reflect at least a small effect*
## Work Status, Functioning, and Satisfaction

<table>
<thead>
<tr>
<th>Vocation</th>
<th>Time Point</th>
<th>Percent of Women</th>
<th>Percent of Men</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Working</strong></td>
<td>T1</td>
<td>45.3</td>
<td>59.6</td>
<td>1.78*</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>55.8</td>
<td>70.3</td>
<td>1.87*</td>
</tr>
<tr>
<td><strong>Functioning Well at Work</strong></td>
<td>T1</td>
<td>92.0</td>
<td>93.0</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>85.8</td>
<td>86.9</td>
<td>1.10</td>
</tr>
<tr>
<td><strong>Satisfied with Work</strong></td>
<td>T1</td>
<td>67.4</td>
<td>68.5</td>
<td>1.05</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>64.9</td>
<td>64.5</td>
<td>.98</td>
</tr>
</tbody>
</table>

*reflect at least a small effect
## Financial Status, Functioning, and Satisfaction

<table>
<thead>
<tr>
<th>Vocation</th>
<th>Time Point</th>
<th>Percent of Women</th>
<th>Percent of Men</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secure Financial Status</td>
<td>T1</td>
<td>35.7</td>
<td>35.8</td>
<td>1.01</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>41.7</td>
<td>41.3</td>
<td>.98</td>
</tr>
<tr>
<td>Good Financial Functioning</td>
<td>T1</td>
<td>56.1</td>
<td>55.4</td>
<td>.97</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>56.3</td>
<td>56.8</td>
<td>1.02</td>
</tr>
<tr>
<td>Satisfied with Finances</td>
<td>T1</td>
<td>44.1</td>
<td>43.9</td>
<td>.99</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>48.7</td>
<td>46.3</td>
<td>.91</td>
</tr>
</tbody>
</table>

*reflect at least a small effect*
## Intimate Relationship Status, Functioning, & Satisfaction

<table>
<thead>
<tr>
<th>Intimate Relationship</th>
<th>Time Point</th>
<th>Percent of Women</th>
<th>Percent of Men</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>In Intimate relationship</td>
<td>T1</td>
<td>76.1</td>
<td>81.9</td>
<td>1.42</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>76.6</td>
<td>81.6</td>
<td>1.35</td>
</tr>
<tr>
<td>Functioning Well in Relationship</td>
<td>T1</td>
<td>69.5</td>
<td>62.4</td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>68.6</td>
<td>61.6</td>
<td>.73</td>
</tr>
<tr>
<td>Satisfied with Relationship</td>
<td>T1</td>
<td>70.6</td>
<td>69.1</td>
<td>.93</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>69.7</td>
<td>67.8</td>
<td>.92</td>
</tr>
</tbody>
</table>

*reflect at least a small effect
<table>
<thead>
<tr>
<th>Broader Social/Community</th>
<th>Time Point</th>
<th>Percent of Women</th>
<th>Percent of Men</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Community Involvement</td>
<td>T1</td>
<td>61.8</td>
<td>59.9</td>
<td>.92</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>61.5</td>
<td>59.7</td>
<td>.93</td>
</tr>
<tr>
<td>Functioning Well in Community</td>
<td>T1</td>
<td>70.6</td>
<td>66.6</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>68.3</td>
<td>61.2</td>
<td>.73</td>
</tr>
<tr>
<td>Satisfied with Community</td>
<td>T1</td>
<td>64.2</td>
<td>66.2</td>
<td>1.09</td>
</tr>
<tr>
<td></td>
<td>T2</td>
<td>64.1</td>
<td>64.6</td>
<td>1.02</td>
</tr>
</tbody>
</table>

*reflect at least a small effect*
Many similarities in initial post-transition outcomes for women and men

Some notable risks for women veterans

- Slightly lower likelihood of working
  - More likely to have caregiving responsibilities?
  - More workplace stigma?

- Poorer initial mental health
  - Consistent with broader civilian population
  - Greater stress burden, trauma histories?
Changes in the health and broader well-being of U.S. veterans in the first three years after leaving military service: Overall trends and group differences

Dawne Vogt a,b,*, Shelby C. Borowski a, Lauren R. Godier-McBard c, Matt J. Fossey c, Laurel A. Copeland d,e, Daniel F. Perkins f,g,h, Erin P. Finley i,j
Change in Veterans’ Health and Well-Being During First Three Years

Welcome home to Civilian Life!

- Baseline Survey
- 1st follow-up survey
- 2nd follow-up survey
- 3rd follow-up survey
- 4th follow-up survey
- 5th follow-up survey

90 days, 6 mos., 6 mos., 6 mos., 6 mos., 6 mos.
Change in Health

HEALTH STATUS
HEALTH FUNCTIONING
HEALTH SATISFACTION
Change in Physical Health Conditions

Physical Health Condition

Percent of Veterans

T1 T2 T3 T4 T5 T6

Women
Men

*
Change in Mental Health Conditions

Mental Health Condition

Percent of Veterans

T1 T2 T3 T4 T5 T6

* Women

Men
Change in Health Conditions

- Significant increase in *depression* and *anxiety* for women over time, greater than for men
Change in Health Functioning and Satisfaction

**Good Health Functioning**

- **Percent of Veterans**
  - T1: 80
  - T2: 75
  - T3: 70
  - T4: 65
  - T5: 60
  - T6: 55

- **Women** (red line)
- **Men** (gray line)

**Satisfied with Health**

- **Percent of Veterans**
  - T1: 50
  - T2: 45
  - T3: 40
  - T4: 35
  - T5: 30
  - T6: 25

- **Women** (red line)
- **Men** (gray line)
Changes in Vocational Well-Being

WORKING

WORK FUNCTIONING

WORK SATISFACTION
Change in Work Status

![Graph showing the change in work status over time for veterans. The graph plots the percent of veterans working against time (T1 to T6). There are two lines: one for women and one for men. The graph indicates an increasing trend in the percentage of veterans working over time.](image-url)
Change in Work Functioning & Satisfaction

**Functioning Well at Work**

<table>
<thead>
<tr>
<th>Percent of Veterans</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Satisfied with Work**

<table>
<thead>
<tr>
<th>Percent of Veterans</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
</tr>
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<tbody>
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</tbody>
</table>
Changes in Financial Well-Being

FINANCIAL STATUS

FINANCIAL FUNCTIONING

FINANCIAL SATISFACTION
Change in Financial Status

Secure Financial Status

Percent of Veterans

T1 T2 T3 T4 T5 T6

Women
Men
Change in Financial Functioning and Satisfaction

**Good Financial Functioning**

- **Percent of Veterans**
  - Women: Red line
  - Men: Gray line
  - T1: 60%
  - T2: 60%
  - T3: 55%
  - T4: 50%
  - T5: 55%
  - T6: 60%

**Satisfied with Finances**

- **Percent of Veterans**
  - Women: Red line
  - Men: Gray line
  - T1: 50%
  - T2: 45%
  - T3: 45%
  - T4: 50%
  - T5: 45%
  - T6: 40%
Changes in Social Well-Being

**Intimate Relationship Status**

**Intimate Relationship Functioning**

**Intimate Relationship Satisfaction**

**Broader Community Involvement**

**Broader Social Functioning**

**Broader Social Satisfaction**
Change in Intimate Relationship Status

In Intimate Relationship

Percent of Veterans

Women
Men

T1 T2 T3 T4 T5 T6
Change in Intimate Relationship Functioning and Satisfaction

Functioning Well in Relationship

Satisfied with Relationship

* Women
* Men

Percent of Veterans
Change in Broader Community Involvement

Higher Community Involvement

Percent of Veterans

T1 T2 T3 T4 T5 T6

* Women
   Men
Change in Broader Community Functioning and Satisfaction

Functioning Well in Broader Community

<table>
<thead>
<tr>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

Percent of Veterans

Satisfied with Broader Community

<table>
<thead>
<tr>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>T4</th>
<th>T5</th>
<th>T6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Percent of Veterans

Red line represents Women, and gray line represents Men.
Discussion

KEY TAKEAWAY, IMPLICATIONS, AND FUTURE DIRECTIONS
Decline in Women’s Well-Being over Time

Greater Decline for Women

Health
- Mental Health (Depression, Anxiety)
- Health Functioning

Vocation
- Work Satisfaction

Finances
- Financial functioning
- Financial satisfaction

Social
- Intimate Relationship Functioning
- Intimate Relationship Satisfaction
Why Greater Declines for Women?

- Greater toll of mental health conditions?
- More post-military stress?
- Less social support?
- Need for additional research!
Clinical, Research & Public Health Implications

- More emphasis on mental health treatment for women veterans

- Enhance support for women veterans
- Reduce barriers to women’s program use

- Additional research on why decline greater for women veterans
## Acknowledgements

### TVMI Study Team
- John Boyle (ICF International)
- Laurel Copeland (VA)
- Erin Finley (VA)
- Daniel Perkins (Penn State)
- Dawne Vogt (VA)

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- Jackie Vandermeersch

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- Shelby Borowski
- Emily Bramande
- Matt Fossey
- Lauren Goldier-McBard
- Yael Nillni
- Emily Taverna
- Fanita Tyrell
References


Questions?

Please contact:

Dawne.Vogt@va.gov
Contact Us!

✓ Subscribe to the VA WHRN Listserv at https://www.research.va.gov/programs/womens_health/listserv.cfm

✓ Contact Adriana Rodriguez, Ph.D., WHRN Consortium Program Manager for more information about our network and services (Adriana.Rodriguez3@va.gov)