Results

August 17, 2024

**Table 1: Sample Demographics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Category** | ***n*** | **%** |
| Age | 18 to 34 years old | 13 | 5.3 % |
|  | 35 to 44 years old | 33 | 13.6 % |
|  | 45 to 54 years old | 29 | 11.9 % |
|  | 55 to 64 years old | 47 | 19.3 % |
|  | 65 to 74 years old | 57 | 23.5 % |
|  | 75 years and older | 64 | 26.3 % |
| Gender | Male | 176 | 72.4 % |
|  | Female | 67 | 27.6 % |
| Sexuality | Straight/Heterosexual | 225 | 92.6 % |
|  | Other sexuality | 18 | 7.4 % |
| Education | High school diploma or equivalent | 36 | 14.8 % |
|  | Some college | 66 | 27.2 % |
|  | Associates degree | 42 | 17.3 % |
|  | Bachelors degree | 58 | 23.9 % |
|  | Masters degree | 36 | 14.8 % |
|  | Applied or professional doctorate | 3 | 1.2 % |
|  | Doctorate | 2 | 0.8 % |
| Race/Ethnicity | White | 194 | 79.8 % |
|  | Black or African American | 24 | 9.9 % |
|  | Multiple | 11 | 4.5 % |
|  | Hispanic, Latino, or Spanish origin | 8 | 3.3 % |
|  | Some other race, ethnicity, or origin | 3 | 1.2 % |
|  | Asian | 2 | 0.8 % |
|  | American Indian or Alaska Native | 1 | 0.4 % |
| Current employment status | Retired | 131 | 53.9 % |
| Full Time | 70 | 28.8 % |
| Unemployed | 20 | 8.2 % |
|  | Part Time | 15 | 6.2 % |
|  | Other | 7 | 2.9 % |
| Marital Status | Married | 154 | 63.4 % |
|  | Divorced | 41 | 16.9 % |
|  | Never married | 31 | 12.8 % |
|  | Widowed | 17 | 7.0 % |

**Table 2: Table 1: Sample Demographics**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Category** | ***n*** | **%** |
| Service Branch | Army | 118 | 48.6 % |
|  | Navy | 60 | 24.7 % |
|  | Air Force | 42 | 17.3 % |
|  | Marines | 17 | 7.0 % |
|  | Multiple | 4 | 1.6 % |
|  | Public Health Service | 2 | 0.8 % |
| Military pay grade | E-1 to E-3 | 38 | 15.6 % |
|  | E-4 to E-6 | 151 | 62.1 % |
|  | E-7 to E-9 | 26 | 10.7 % |
|  | W-1 to CW-5 | 2 | 0.8 % |
|  | O-1 to O-3 | 16 | 6.6 % |
|  | O-4 to O-6 | 10 | 4.1 % |
| Service era | Korea | 1 | 0.2 % |
|  | Cold War (Pre-Vietnam) | 17 | 2.8 % |
|  | Vietnam | 83 | 13.8 % |
|  | Cold War (Post-Vietnam) | 67 | 11.2 % |
|  | Persian Gulf | 31 | 5.2 % |
|  | Post 9-11 | 44 | 7.3 % |
| Discharge | Service Completed | 157 | 64.6 % |
|  | Voluntary Discharge | 49 | 20.2 % |
|  | Medical Discharge | 24 | 9.9 % |
|  | Other Discharge | 11 | 4.5 % |
|  | Not yet discharged | 2 | 0.8 % |
| Military experiences | Prior combat deployment | 69 | 28.4 % |
| Prior non-combat deployment | 119 | 49.0 % |
|  | Prior peacekeeping deployment | 35 | 14.4 % |
|  | Supported combat operations | 57 | 23.5 % |
| VA Disability Status | Does not receive VA Disability | 177 | 72.8 % |
| Receives VA Disability | 66 | 27.2 % |
| Years of service | 0 to 4 years of service | 98 | 40.3 % |
|  | 5 to 9 years of service | 90 | 37.0 % |
|  | 10 to 15 years of service | 17 | 7.0 % |
|  | 15 to 20 years of service | 3 | 1.2 % |
|  | 20+ years of service | 35 | 14.4 % |
| Years since separation | 0 to 9 years since separation | 28 | 11.5 % |
| 10 to 19 years since separation | 38 | 15.6 % |
|  | 20 to 29 years since separation | 35 | 14.4 % |
|  | 30 to 39 years since separation | 51 | 21.0 % |
|  | 40 to 49 years since separation | 42 | 17.3 % |
|  | 50+ years since separation | 49 | 20.2 % |

**Table 3: Psychometric Properties of Measures**

|  |  |  |
| --- | --- | --- |
| **Variable** | **Measure** | **α** |
| Moral Injury Symptoms | Moral Injury Outcomes Scale | .92 |
| Military Identity Attachment | Warrior Identity Scale: Interdependence Subscale | .82 |
| Regard for the Military | Warrior Identity Scale: Private Regard Subscale | .88 |

**Table 4: Descriptive Statistics for Categorical Variables**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Category** | ***n*** | **%** |
| Moral injury event | Yes | 149 | 61.3 % |
| No | 94 | 38.7 % |
| Moral injury event type1 | Betrayal | 54 | 57.4 % |
| Other Person | 55 | 58.5 % |
| Self | 20 | 21.3 % |
| Multiple Types | 27 | 28.7 % |
| Criterion A event | No | 179 | 73.7 % |
|  | Yes | 64 | 26.3 % |
| Probable PTSD | Not detected | 222 | 91.4 % |
| Detected | 21 | 8.6 % |

*Note*. PTSD = Posttraumatic Stress Disorder

1 Percentages of event type over those endorsing a moral injury event

**Table 5: Descriptive Statistics of Continuous Variables**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Mean** | **SD** | **Min** | **Max** | **1** | **2** |
| 1. Moral Injury Symptoms | 14.9 | 11.0 | 0 | 55 |  |  |
| 2. Interdependence | 18.7 | 3.8 | 8 | 28 | .23 |  |
| 3. Regard | 24.7 | 3.5 | 8 | 28 | -.39 | .37 |

**Table 6: Indirect Effects**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Mediator** | **ab** | ***SE*** | ***z*** | ***p*** | **PCI Lower** | **PCI Upper** |
| Interdependence | 0.026 | 0.014 | 1.936 | .026 | 0.003 | 0.055 |
| Regard | -0.038 | 0.020 | 1.904 | .028 | -0.079 | 0.000 |

**Table 7: Model Fit**

|  |  |  |
| --- | --- | --- |
| **Model** | ***R2*** | **AIC** |
| Interdependence | .45 | 248.04 |
| Moral Injury *∼*  Interdependence | .45 | 248.04 |
| Regard | .25 | 321.57 |
| Moral Injury ~ Regard | .48 | 234.07 |

Table 8: Regression Coefficients: Interdependence

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Term** | ***β*** | ***SE*** | ***z*** | ***p*** |
| (Intercept) | 0.000 | 0.000 | 2.171 | .015 |
| Military Identity: Interdependence | 0.137 | 0.057 | 2.384 | .009 |
| Moral Injury Event | 0.367 | 0.060 | 6.062 | .000 |
| Criterion A Event | 0.203 | 0.074 | 2.730 | .003 |
| Prior Combat Deployment | 0.061 | 0.069 | 0.885 | .188 |
| Race/Ethnicity: Black or African American | -0.051 | 0.129 | 0.397 | .346 |
| Race/Ethnicity: White or Caucasian | -0.030 | 0.123 | 0.241 | .405 |
| Branch: Air Force | 0.036 | 0.075 | 0.481 | .315 |
| Branch: Marines | -0.135 | 0.106 | 1.273 | .101 |
| Branch: Navy | -0.008 | 0.065 | 0.124 | .451 |
| Gender: Male | 0.023 | 0.065 | 0.356 | .361 |
| Service Era: Pre-Vietnam | -0.405 | 0.109 | 3.707 | .000 |
| Service Era: Vietnam | -0.359 | 0.086 | 4.197 | .000 |
| Service Era: Post-Vietnam | -0.303 | 0.080 | 3.789 | .000 |
| Service Era: Persian Gulf | -0.171 | 0.108 | 1.580 | .057 |
| Occupational Specialty: Combat | 0.048 | 0.064 | 0.740 | .230 |
| Years of Service | 0.060 | 0.070 | 0.867 | .193 |
| Highest Pay Grade: E-1 to E-3 | 0.117 | 0.126 | 0.930 | .176 |
| Highest Pay Grade: E-4 to E-6 | 0.040 | 0.105 | 0.379 | .352 |
| Highest Pay Grade: E-7 to E-9 | -0.137 | 0.125 | 1.097 | .136 |

Table 9: Regression Coefficients: Moral Injury ~ Interdependence

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Term** | ***β*** | ***SE*** | ***z*** | ***p*** |
| (Intercept) | 0.000 | 0.000 | 2.171 | 0.015 |
| Military Identity: Interdependence | 0.137 | 0.057 | 2.384 | .009 |
| Moral Injury Event | 0.367 | 0.060 | 6.062 | .000 |
| Criterion A Event | 0.203 | 0.074 | 2.730 | .003 |
| Prior Combat Deployment | 0.061 | 0.069 | 0.885 | .188 |
| Race/Ethnicity: Black or African American | -0.051 | 0.129 | 0.397 | .346 |
| Race/Ethnicity: White or Caucasian | -0.030 | 0.123 | 0.241 | .405 |
| Branch: Air Force | 0.036 | 0.075 | 0.481 | .315 |
| Branch: Marines | -0.135 | 0.106 | 1.273 | .101 |
| Branch: Navy | -0.008 | 0.065 | 0.124 | .451 |
| Gender: Male | 0.023 | 0.065 | 0.356 | .361 |
| Service Era: Pre-Vietnam | -0.405 | 0.109 | 3.707 | ¡.001 |
| Service Era: Vietnam | -0.359 | 0.086 | 4.197 | ¡.001 |
| Service Era: Post-Vietnam | -0.303 | 0.080 | 3.789 | ¡.001 |
| Service Era: Persian Gulf | -0.171 | 0.108 | 1.580 | .057 |
| Occupational Specialty: Combat | 0.048 | 0.064 | 0.740 | .230 |
| Years of Service | 0.060 | 0.070 | 0.867 | .193 |
| Highest Pay Grade: E-1 to E-3 | 0.117 | 0.126 | 0.930 | .176 |
| Highest Pay Grade: E-4 to E-6 | 0.040 | 0.105 | 0.379 | .352 |
| Highest Pay Grade: E-7 to E-9 | -0.137 | 0.125 | 1.097 | .136 |

Table 10: Regression Coefficients: Regard

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Term** | ***β*** | ***SE*** | ***z*** | ***p*** |
| (Intercept) | 0.000 | 0.000 | 0.939 | .174 |
| Moral Injury Event | -0.120 | 0.075 | 1.589 | .056 |
| Criterion A Event | -0.209 | 0.085 | 2.474 | .007 |
| Prior Combat Deployment | -0.018 | 0.081 | 0.224 | .411 |
| Race/Ethnicity: Black or African American | -0.017 | 0.159 | 0.109 | .456 |
| Race/Ethnicity: White or Caucasian | 0.038 | 0.144 | 0.265 | .395 |
| Branch: Air Force | -0.056 | 0.098 | 0.572 | .284 |
| Branch: Marines | 0.293 | 0.098 | 3.002 | .001 |
| Branch: Navy | -0.029 | 0.070 | 0.420 | .337 |
| Gender: Male | 0.013 | 0.079 | 0.160 | .436 |
| Service Era: Pre-Vietnam | 0.043 | 0.134 | 0.321 | .374 |
| Service Era: Vietnam | 0.241 | 0.106 | 2.270 | .012 |
| Service Era: Post-Vietnam | 0.113 | 0.118 | 0.955 | .170 |
| Service Era: Persian Gulf | 0.200 | 0.130 | 1.541 | .062 |
| Occupational Specialty: Combat | 0.000 | 0.078 | 0.003 | .499 |
| Years of Service | 0.132 | 0.071 | 1.852 | .032 |
| Highest Pay Grade: E-1 to E-3 | -0.333 | 0.135 | 2.467 | .007 |
| Highest Pay Grade: E-4 to E-6 | 0.032 | 0.099 | 0.320 | .374 |
| Highest Pay Grade: E-7 to E-9 | 0.123 | 0.121 | 1.016 | .155 |

Table 11: Regression Coefficients: Moral Injury ~Regard

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Term** | ***β*** | ***SE*** | ***z*** | ***p*** |
| (Intercept) | 0.000 | 0.000 | 1.981 | 0.024 |
| Military Identity: Regard | -0.246 | 0.065 | 3.782 | ¡.001 |
| Moral Injury Event | 0.335 | 0.057 | 5.818 | ¡.001 |
| Criterion A Event | 0.163 | 0.079 | 2.076 | .019 |
| Prior Combat Deployment | 0.067 | 0.065 | 1.032 | .151 |
| Race/Ethnicity: Black or African American | -0.059 | 0.118 | 0.502 | .308 |
| Race/Ethnicity: White or Caucasian | -0.035 | 0.106 | 0.330 | .371 |
| Branch: Air Force | 0.017 | 0.072 | 0.235 | .407 |
| Branch: Marines | 0.004 | 0.117 | 0.032 | .487 |
| Branch: Navy | -0.024 | 0.061 | 0.393 | .347 |
| Gender: Male | 0.032 | 0.067 | 0.475 | .317 |
| Service Era: Pre-Vietnam | -0.440 | 0.111 | 3.959 | .000 |
| Service Era: Vietnam | -0.315 | 0.085 | 3.689 | ¡.001 |
| Service Era: Post-Vietnam | -0.287 | 0.078 | 3.678 | ¡.001 |
| Service Era: Persian Gulf | -0.127 | 0.102 | 1.238 | .108 |
| Occupational Specialty: Combat | 0.036 | 0.063 | 0.570 | .284 |
| Years of Service | 0.120 | 0.073 | 1.642 | .050 |
| Highest Pay Grade: E-1 to E-3 | 0.035 | 0.125 | 0.281 | .389 |
| Highest Pay Grade: E-4 to E-6 | 0.079 | 0.098 | 0.813 | .208 |
| Highest Pay Grade: E-7 to E-9 | -0.071 | 0.122 | 0.582 | .280 |