

Mental Health Issues among Separating Marines: Longitudinal Assessment of the Resilience of Deployed Marines

SUPPORTING STATEMENT

A. JUSTIFICATION

1. Circumstances of Information Collection

The Naval Health Research Center (NHRC) is funding a longitudinal study on mental health issues among deployed Marines through RTI International. This longitudinal study will assess the service experiences and well-being of a select group of personnel transitioning from the Service into civilian life, and identify predictors of mental health resilience and changes in mental health, as well as resilience over time.

Through the longitudinal tracking of subjects after their return to civilian life, this will also be the first research effort to examine the prospective value of the Post-Deployment Health Reassessment (PDHRA) Program. Further, with access to the Career History Archival Medical and Personnel System (CHAMPS) database for personnel and medical records, RTI can compare confidential PDHRA responses obtained for research purposes, PDHRA responses obtained for official purposes, and actual health care utilization. This comparison will help to determine the degree of underreporting in this official screening effort. Findings will be used to better inform transition, screening, and Combat Stress Control programs about the mental health needs of active-duty personnel, reservists, and veterans.

Due to the importance of the issues, with Congress asking for information on military/veteran psychological health on an almost weekly basis, and because new methodologies have to be developed to answer these questions, we have launched a unique effort in an area (the transition process) where there is insufficient existing data to fully formulate hypotheses about resilience after military service. An initial pilot study entitled Mental Health Assessment of Transitioning Military Personnel, conducted in 2008, was administered to active-duty Sailors and Marines in the Transition Assistance Program (TAP) during routine mandated separation counseling.

In the pilot, a baseline, paper-and-pencil questionnaire was administered to 3,753 active duty Navy and Marine personnel in the Transition Assistance Program (TAP) during routine mandatory separation counseling via group administration. The baseline survey included selected items from the post-deployment health reassessment (PDHRA), along with additional questions on risk factors for poor civilian readjustment, and other biographical and psychological content. This pilot allowed us to refine our hypotheses as well as our sampling strategy, while also providing useful info on how our measures behave psychometrically. Since we have refined our measures and methodology we are proceeding to provide more definitive answers to DoD, VA, and Congress. Respondents to the baseline survey were contacted approximately 1 year after the baseline survey to complete the pilot follow up

survey. The subsequent mental well-being of this high-risk cohort was assessed after the participants transitioned to civilian life.

Overall, pilot baseline survey prevalence estimates ranged from 5% for suicidal ideation among Navy TAP attendees to 52.5% for substance abuse among Marines. Excluding substance abuse, high rates of any mental health symptoms were found among both transitioning Sailors and Marines with Marine Corps rates significantly higher than those for the Navy (55% and 40%, respectively). As part of the pilot study's findings, the prevalence of depression in transitioning Marines was twice as high as the estimates noted by Hoge and colleagues (14.7%), as was the prevalence of anxiety (33.6% vs. 15.7%). These estimates may support the concern voiced in several recent reports (APA, 2007) that many personnel may be first experiencing or admitting to problems upon their discharge from the military and suggest that the transition process itself may be contributing to the development and/or exacerbation of mental health symptoms. Results from the pilot follow-up survey have been used in estimating the expected response rate for the current longitudinal survey and to make decisions regarding optional design features of the main survey. For example, we offered a subsample of pilot respondents their \$25 incentive with the survey rather than upon receipt of their completed survey and found that the subsample had a higher response rate than those receiving their incentive after completing the survey. We thus adjusted the current design to offer the incentives with the first survey mailout (see below for additional details).

For this current longitudinal study, enlisted Marines attending TAP workshops were invited to participate in the baseline component at 6 installations, and based on the estimated average number of attendees per TAP class and the number of classes conducted during the 3-month data collection period (June-August), we estimate that approximately 4,900 Marines will be eligible for inclusion into the follow-up study, with an approximate response rate of 55%. Respondents with high combat exposure will be assessed through a follow-on survey 3 to 6 months after separation from Military service, when participants have transitioned into civilian life.

NHRC proposes tracking these respondents over time for the longitudinal portion of the study. Data from extant historical personnel and medical data will also be combined with survey data to develop models that demonstrate the influence of combat, and a variety of covariates on mental health symptoms, resilience, and substance abuse. RTI estimates that approximately 1850 of the 2,700 baseline participants will be eligible for and consent to participate in the follow-up survey. In order to ensure that these respondents can be located, the questionnaire included name, relocation plans, names and contact information for two friends or relatives who always know where the respondent is living, and the respondent's date of birth and social security number. The follow-up surveys will be sent to respondents through the mail, but respondents will also have the option of completing this survey via the internet, which will closely simulate the hardcopy version of the instrument.

Through the follow-up component of this longitudinal study, our goals are to (1) to characterize the direct impact of combat exposure on mental health outcomes among Marines in transition from active duty to civilian life, and (2) to examine the interrelationships between combat exposure; a variety of moderators; and subsequent psychological resilience, mental health symptoms, and substance abuse. This research supports important Marine Corps programs, such as TAP and Marine for Life. The results of this study will help inform the development of improved combat stress programs in active-duty personnel and, thus, also support force health protection. The project also

complies with DoD directives requiring that deployment-induced stress casualties be assessed and establishing the requirement to integrate and use medical and personnel information systems to maintain, assess, and protect the physical and mental health of Service members.

2. Purpose and Use of Information

The goal of the proposed information collection is to explore the relationship between combat exposure and mental health outcomes among a select group of Marines in transition from active duty to civilian life, and to examine the interrelationships between combat exposure, a variety of moderators, and subsequent psychological resilience, mental health symptoms, and substance abuse. Data from this longitudinal study will be used to validate the findings from the pilot study, and to further examine a number of specific hypotheses regarding the effects of individual risk and protective factors on the development of resilience and mental health symptoms in Marines. For example, it is hypothesized that trauma exposure will be significantly correlated with a change in resilience scale scores and mental health symptoms during the 6-month period and that this change will be associated with risk and protective factors, controlling for sociodemographic variables. Specifically, we hypothesize that unit cohesion, stress coping skills, in-service health problems, cognitive ability, and social networks are among the variables that will influence the impact of combat experiences on mental well-being.

Since the pilot study, we have developed an improved sampling methodology and have formulated better collection procedures in order to allow for generalization of results to the transitioning Marine Corps population as a whole.

The military services and the Veterans Administration will be briefed on recommendations from the study regarding possible interventions to promote successful reintegration of military personnel (particularly combat veterans) who are leaving active duty.

3. Use of Information Technology

Before follow up data collection, RTI will send all records for eligible sample members to the U.S. Postal Service for comparison with their national change of address (NCOA) files. Based on results from a prior survey, we expect to be able to update approximately 4.1% of the sample addresses using this service. RTI's tracing operations staff (TOPS) will then attempt to contact the selected individual or a member of his or her family using the contact information the respondent provided on the baseline survey and/or the contact information the respondent entered into the project website after relocating. As needed, TOPS tracers will use a variety of other procedures in an effort to obtain the sample member's current address. These include (1) checking numerous forms of directory assistance for telephone listings at various addresses; (2) using electronic criss-cross directories to obtain the names and telephone numbers of current residents or neighbors of the sample members' previous addresses and then calling the current residents or neighbors; (3) calling persons with the same unusual surname in small towns or rural areas to see if they are related to or know the sample member; (4) contacting current or last known residential sources such as landlords and/or accessing tax assessors' records of homeownership; and (5) accessing advanced tracing sources. The tracers are experienced in questioning residential and commercial sources to locate or develop additional leads on a subject's whereabouts.

As mentioned previously, an alternative method of completing the 6-month follow-up survey will be a self-administered web version. RTI will expand the capability of the existing project website by including a link to this online version.

To access the web survey participants will be required to log into the secure section of the web site with a unique username and password provided by RTI. To protect privacy and confidential information, participant data will not be displayed on the screen, and the password information requested for login will be masked during entry.

RTI employs Secure Socket Layer (SSL) for encryption of data across the Internet for its web applications. The data itself will be stored in a Microsoft SQL Server database that utilizes a relational database table structure. All data in the databases serving the web site are completely de-identified. A randomly assigned identification number is used in place of the respondent name or any other information which could be used to associate an individual person with data collected through the web site. There are daily incremental backups of all data files, with full weekly backups.

For the paper and pencil mode, address information will be keyed by SC Data in a separate file and transferred to RTI on a weekly basis via email in a password-protected, encrypted file. Once the data are received at RTI, they will be handled with the same high-level security as other data in our possession. Both the questionnaire and the survey data will be stored in a Microsoft SQL Server database utilizing a relational table structure.

The data will be stored on a secure server located at RTI accessible only to the statisticians and analysts assigned to this project. All IP addresses for analysts are registered with SSRI and secure passwords are required before any data are sent in an encrypted form. Other individuals not associated with the project will not be able to access the data without permission from the Principal Investigator. Data will not be released to any individual or organization outside the research team. Data will be archived for five years following the completion of the grant before deletion of all files.

4. Efforts to Identify Duplication

No studies to this point have been conducted that provide information on the issues NHRC needs to address for this study of resilience among separating Marine Corps personnel. No other comprehensive information exists specifically on resilience in similar samples. The baseline study has received approval from Dr. Rosenfeld, Navy Survey Approval Manager, Navy Personnel Research, Studies and Technology and a Report Control Symbol under OPNAV 6500-1.

5. Involvement of Small Entities

This project will not have any significant impact on small entities. The information requested has been held to the absolute minimum required for the intended use.

6. Consequences if Information Collected Less Frequently

This is a one-time collection and will be a single time project.

7. Consistency With the Guidelines in 5 CFR 1320.5(d)(2)

There are no special circumstances that require the data collection to be conducted in a manner inconsistent with 5 CFR 1320.5 (d)(2).

8. Consultation Outside the Agency

The notice required in 5 CFR 1320.8(d) was published in the Federal Register on Friday, July 2, 2010. A copy of the notice is provided. No comments were received.

The following persons were consulted about this project.

Dr. Gerald Larson
Naval Health Research Center

Barbara Lee Figueroa
Office of the Chief of Naval Operations

Paul Rosenfeld
Navy Survey Approval Manager
Bureau of Navy Personnel

9. Payment to Respondents

For this longitudinal study, participants will receive \$10.00 gift cards to be included with the initial follow-up questionnaire mailout, as incentives for completing the follow-up survey.

Survey researchers have found the use of incentives to increase response rates by encouraging respondents to reciprocate and by bringing additional attention of the survey request to the respondent (Dillman, Smyth, & Christian, 2009). Trussel and Lavrakas (2004) noted that in the survey research literature there is “still no consensus on what constitutes an optimal incentive amount for a survey.” However, their research found that providing a \$10 incentive yielded a significantly higher response rate than incentives below \$8. We believe that \$10 is an optimal incentive amount to yield high response but still a small enough amount not to be perceived as possibly being coercive to respondents. The \$10 amount was chosen as an effective, cost-efficient tool for encouraging sample members to participate in the follow-up assessment.

10. Assurance of Confidentiality

All staff involved with data collection will be trained on confidentiality and be required to sign confidentiality pledges. Each survey will contain a serial number, or a confidential identifier (in either lithocode or barcode format) that is entered into the survey control quality tracking system for refreshing the respondent database during the distribution process. Through the use of strict data

collection and processing protocols, RTI has maintained data confidentiality in hundreds of projects involving human subjects and sensitive topics. Appropriate precautions will be taken at all stages of data storage and handling to prevent disclosure or loss. Information will be provided to participants to explain how the data will be used, stored, and protected. Respondents will be informed of the confidentiality agreement in the first contact letter, the second contact letter, the email invitation to participate in the study, the web questionnaire login screen, and the follow-up survey instrument. The relevant text in each mode of contact is highlighted in Appendix 1.

11. Questions of a Sensitive Nature

This survey contains questions of sensitive nature, including information on risk and protective factors. Predictor variables to be incorporated in the modeling procedures are:

Deployment Stressors. Measures of deployment stressors will include *traumatic combat-related exposures* as indicated by scores on the CES, which assesses exposure to stereotypical warfare experiences such as firing a weapon, being fired on (by enemy or friendly fire), witnessing injury and death, and going on special missions and patrols that involve such experiences. Other deployment-related variables will include *unit cohesion*, as indicated by the Griffith Cohesion Scales (Griffith, 2002); *deployment status*, measured by 3 items inquiring about the number of days during the past 12 months the respondent had been away from his/her permanent duty station, the number of times deployed in past 3 years, and time since last deployment; and *service in a combat and/or peace-keeping mission* measured as yes or no to having served in one or more of a list of operational locations (e.g., Persian Gulf; Iraq).

Life Events. The 17-item Post-Deployment Stressors Scale from the DRRI assesses exposure to stressful life events after deployment, including both generally stressful events that are unrelated to the deployment, such as vehicular accidents, physical assaults, and death or serious illness of a relative, and events that may be related to efforts at reintegration (especially for National Guard and Reserves), such as job interruption, difficulties in re-establishing family and community roles, legal or financial difficulties, and divorce.

Stress. Participants will be asked whether they were currently experiencing stress, emotional problems, problems related to the use of alcohol, or family problems and, if so, whether the level of these problems was mild, moderate, or severe; participants will then be asked whether they were interested in receiving help for these problems. Subjects will also be asked about their use of professional mental health services in the past month or the past year and about perceived barriers to mental health treatment, particularly stigmatization as a result of receiving such treatment (Britt, 2000).

Coping behaviors. Respondents will be asked to identify the types of strategies that they used to cope when they “feel pressured, stressed, depressed, or anxious.” The list of response categories included items that tap approach and problem-oriented strategies (e.g., “think of plan to solve problem”; exercise or play sports); emotion-focused strategies, such as seeking social support (“talk to friend or family member”); and avoidance strategies (e.g., “have a drink,” “smoke marijuana or use other illegal drugs,” “think about hurting yourself or killing yourself”).

Receipt of Mental Health Services in the past 6 months, will be measured with three items including the sources of any such services, reasons they sought help, and whether they had been prescribed medication for depression, anxiety, or sleeping problems by a doctor or other health professional in the past 6 months.

Perceived Need For Mental Health Services in the past 6 months (for those meeting criteria for mental health outcomes) will be measured by a yes or no item: at any time in the past 6 months, and whether the respondent felt a need for counseling or therapy from a mental health professional (either military or civilian).

12. Estimates of Annualized Hour Burden

The average annual response burden is estimated at 1850 hours and a total cost burden of \$37,000 (see **Table 1**).

As part of the study, we will contact all participants from the baseline study. Approximately 15% of Military personnel are women, so we estimate this will be the proportion of women completing the survey; the remaining 85% will be male respondents. The annualized hour burden reported in **Table 1** was computed as follows.

- According to the developer, an adult will spend about 60 minutes to answer questions in the follow up survey.
- The most recent average national wage provided by the Bureau of Labor Statistics is \$20 per hour.¹

Table 1. Estimated Annualized Respondent Burden

Form	Number of Participants	Number of Responses per Participant	Hours per Response	Total Response Burden (Hours)	Average Hourly Wage in Dollars	Total Average Wage Burden in Dollars
Follow-up survey	1850	1	1	1850	\$20	\$37,000

13. Estimates of Annualized Cost Burden to Respondents

There are no direct costs to participants other than their time to participate in the study.

14. Estimates of Annualized Cost to the Government

The cost estimate for the completion of this project will be about \$ 472,763 over 12 months.

The cost to the federal government for this effort includes personnel time and contract costs. NHRC personnel hours expended for the project are approximately 2,325 hours when referenced to a base rate of \$40/hour. This results in an estimated \$93,000 in personnel time incurred by the government. The

¹ U.S. Department of Labor, Bureau of Labor Statistics, 2008. Available at: http://www.bls.gov/oes/current/oes_nat.htm. Accessed March 23, 2010)

total annualized cost to the government (including contracts) for this data collection effort is approximately \$ 472,763.

15. Changes in Burden

This is a new project so no changes need to be reflected.

16. Time Schedule, Publication and Analysis Plans

Schedule: Table 2 provides the estimated time schedule for completion of this project.

Table 2. Study Schedule

Task	Start	Finish
1. Finalize questionnaire	2/15/2010	3/31/2010
2. Obtain RTI IRB approval (follow-up)	4/1/2010	4/15/2010
3. Obtain OMB clearance (follow-up)	4/1/2010	7/1/2010
4. Obtain NHRC IRB approval (follow-up)	4/23/2010	5/15/2010
5. Develop website for web-based questionnaire	6/1/2010	7/31/2010
6. Finalize 3 to 6 month data specifications for data entry	8/1/2010	8/31/2010
7. Identify follow-up sample	10/1/2010	10/15/2010
8. Prepare follow-up materials (paper and electronic)	10/23/2010	10/30/2010
9. Conduct field data collection (paper and electronic)	11/1/2010	1/31/2010
10. Conduct data analysis	11/15/2010	3/1/2010
11. Compile final report, briefing slides, and manuscripts for journal publication	1/15/2011	4/15/2011

17. Display of Expiration Date

The OMB expiration date will be displayed on the data collection instrument.

18. Exceptions to Certification Statement

There are no exceptions to the certification statement.

B. SUMMARY FINDINGS OF PILOT STUDY RESPONSE METHODOLOGY

1. Follow-up Survey Response Rates

Table 3 shows the response rates for the follow-up component of the pilot study. As noted, a much higher response rate was observed in Navy compared to Marine Corps personnel.

Table 3 Follow-up Survey Response Rates

	Navy	Marine Corps	Overall
Attending sampled TAP classes	4496	3771	8267
Received BL survey briefing	3798	2974	6772
Complete BL survey	2362	1393	3755
Eligible for Follow-up (Separate from	2200	1292	3492

military during study period.)			
Eligible and Locatable	1996	1133	3129
Eligible and Locatable and Complete FU survey	802	389	1191
Response Rate (FU completers/Eligible & Locatable)	40.2%	34.3%	38.1%

2. Results of Incentive Experiment

Table 4 presents the results from the incentive experiment and the effect on response rates, presented according to Navy or Marine Corps personnel. A random subsample of respondents received their gift card incentive with the survey, rather than receiving the incentive after returning the survey as did the rest of the sample. Results indicate there was not a statistically significant difference in response rates between individuals who received the financial incentive upfront versus those who did not receive the incentive until completing the survey when examined separately by branch. However, as presented in Table 5, when respondents from both Services were combined into one group, there was a statistically significant increase in the response rate among those who received the upfront financial incentive compared to those who did not. This demonstrates the effectiveness of offering an upfront incentive for participants eligible for the follow-up survey.

Table 4 Results of Incentive Experiment on Response Rate by Branch of Service

	Navy		Marine Corp	
	Incentive Yes	No	Incentive Yes	No
1. BL respondents	193	2169	107	1284
2. Ineligible [†]	1	195	0	111
Eligible BL Respondents [‡]	192	1974	107	1173
3. Non-contact				
-Deceased	0	1	0	2
-Physically/mentally Incapable	0	0	0	0
-No Address	0	89	0	56
- Mail returned – no new address	13	131	9	107
- Mail returned, traced, re-sent	53	392	20	259
-Active Refusals	0	5	0	3
4. Non-respondents	116	1300	70	838
5. Respondents	76	674	37	335
Response Rate*	39.6%	34.1%	34.6%	28.6%

Results: In neither service branch, individually, is the response rate difference statistically significant. P-values are .13 and .19 for Navy and MC respectively.

Table 5 Results of Incentive Experiment on Response Rate – Navy & Marine Corp Combined

	Incentive	
	Yes	No
1. BL respondents	300	3453
2. Ineligible [†]	1	306
Eligible BL Respondents [‡]	299	3147
3. Non-contact		
-Deceased	0	3
-Physically/mentally Incapable	0	0

-No Address	0	145
- Mail returned – no new address	22	238
- Mail returned, traced, re-sent	73	651
-Active Refusals	0	8
4. Non-respondents	186	2138
5. Respondents	113	1009
Response Rate*	37.8%	32.1%

* Difference is statistically significant ($\alpha=.05$), $p=.04$.

† Individuals who did not separate from the military or who had inadequate time (<2 months) in civilian life at time of FU survey administration.

‡ Completed BL survey and had separated from the military for at least 2 months at time of their FU survey administration.

3. Analysis of Nonresponse Bias

Tables 6 and 7 below contain information comparing follow-up survey respondents and non-respondents for both Sailors and Marines. These tables contain a wide variety of baseline survey variables including mental and physical health, demographic, service and combat-related, stress, resilience, spirituality and social support indicators. Chi-square tests were conducted, separately within each branch of service, on each variable to see if the distributions of respondents and non-respondents differed. An asterisk marks each variable where a difference was found at a $p<.05$ significance level. Where significant results were found for polytomous response items, follow-up logistic regressions were employed to determine exactly where significant differences existed. These are described below.

Table 6 shows that at baseline, follow-up non-respondent Sailors had higher proportions than respondents of showing signs of depression, showing symptoms of at least one mental health problem, rating themselves “low” on mental health, and of seeking counseling at the time for anger management. Non-respondents relative to respondents had larger proportions who were African American, who were 34 years of age or younger, who were unmarried, or who were enlisted personnel or warrant officers. Non-respondents had smaller proportions who were retiring relative to leaving for ETS or other reasons, had larger proportions with a previous lifetime trauma, had relatively more reporting “High” life event stress relative to “Low,” had larger proportions of current smokers, and had relatively more reporting “a lot” of work stress relative to “a little.” Non-respondents compared to respondents showed smaller proportions of having been deployed for more time—3 or more months in the past 12 months versus those deployed 2 or fewer months—and had a lower sense of unit cohesion and post-deployment social support.

Table 7 shows that at baseline, follow-up non-respondent Marines were more likely than respondents of showing signs of depression, showing signs of PTSD, reporting substance abuse problems, seeking counseling at the time for substance abuse, showing signs of at least one mental health issue, and of having more “low” resilience scores relative to “medium.” Non-respondents relative to respondents had larger proportions of males, of 25 years olds or younger, and of being enlisted personnel or warrant officers. Non-respondents had smaller proportions who were retiring and larger proportions leaving for ETS or other reasons. This group also reported in relative larger numbers having a physical/mental condition that interfered with military service, and being current smokers. Non-respondents compared to respondents had larger proportions of never having had a combat deployment and smaller proportions of experiencing 3 or more combat deployments. They

also were more likely to report using avoidant coping strategies, and larger proportions of scoring in the middle spirituality category, while smaller proportions scoring in the high spirituality category.

Overall, the respondents reported fewer signs of baseline mental health and substance abuse problems, were of older age, and were more likely to be retirees who have seen more lifetime combat deployments. These results are troublesome in that they indicate that many individuals who are already showing signs of mental health and other difficulties at baseline are not responding to the follow-up survey, and are thus not being accounted for in our follow-up descriptive and modeling analysis.

Table 6. Non-response Analysis - Navy Sample

Measure	Navy	
	Respondents	Non-respondents
Sample size ¹	750	1416
Anxiety		
Yes	16.4	18.6
Depression*		
Yes	31.2	36.9
PTSD		
Yes	11.4	13.8
Substance Abuse Indicator (TICS)		
Yes	39.2	40.7
Suicidal Ideation *		
Yes	7.1	4.9
Any Mental Health Problem* ²		
Yes	36.9	42.6
Resilience		
Low	21.5	23.9
Medium	50.9	49.2
High	27.6	27
MOS Mental Health scale*		
Low	15.2	21.8
Medium	52.2	49.8
High	32.6	28.4
Any activity restriction due to poor mental health past 30 days		
Yes	26.7	27.4
Any Receipt of Mental Health Services in the past 12 months		
Yes	26.3	27.6
Concerns for which counseling was sought		
Depression	10.1	10.8
Anxiety	8	9.2
Family problems	8.2	9.7
Substance use problems	2.4	3.3
Anger management*	3.1	5.1
Stress management	6	8
Combat/operational stress	2.7	1.8
Other (specify)	5	5.7
I did not seek help from a mental health	77.9	75.6

professional in the past 12 months			
Feel the need for counseling	Yes	23.8	24.6
Prescribed Medication for Mental Health Issue in past 12 months	Yes	9.3	11.1
Gender	Male	80.5	81.8
	Female	19.5	18.2
Race/Ethnicity*	White, Non-Hispanic	60.1	55.2
	African American, non-Hispanic	13.4	17.3
	Hispanic	14.6	17
	Other	12	10.5
Age*	25 or younger	29.6	43
	26–34	25.1	31.3
	35 or older	45.3	25.7
Family Status*	Not married	41.7	48.9
	Married	58.3	51.1
Pay Grade*	E1–E9, W1–W5	86.9	94.4
	O1–O6	13.1	5.6
Disability or Separation for a Physical/Mental Condition that Interferes with Military Service	Yes	5.4	6.4
Reason for Leaving Military*	Retirement	41.1	22.5
	Expiration of Term of Service (ETS)	40.3	54
	Other	18.6	23.5
Current Smoker*	Yes	31.5	37
Previous Lifetime Trauma*	Yes	46.8	52.9
Life Event Stress	Low	33.7	30.3
	Medium	42.2	41.2
	High	24.1	28.5
DRRI Post-Deployment Stressors Index	Low	30.6	27.9
	Medium	44.9	43.4
	High	24.4	28.6
Work Stress Indicator	A lot	36.2	41.4
	Some	34.6	33.5
	A little	22	19
	None	7.2	6.1
Family Stress Indicator	A lot	23.8	24.8
	Some	30	29.1

	A little	31.2	27.9
	None	15.1	18.1
Spouse Stress Indicator*			
	A lot	24.6	20.1
	Some	23.5	23.7
	A little	17.2	15.3
	None	4.7	4
	I do not have a spouse	30	36.9
MOS Pain Indicator (past 4 weeks)			
	Very Severe/Severe	7	8.5
	Moderate	27.8	25.3
	Mild	20.9	20.9
	Very Mild	21	19.6
	None	23.4	25.7
MOS Current Health Perception			
	Low	16.9	17.7
	Medium	46.8	45.2
	High	36.4	37.1
Combat Exposure Scale score			
	Low	65.1	65.6
	Medium	24	24.1
	High	10.9	10.3
Number of career combat deployments			
	0	17.3	19
	1	22.1	23.7
	2	24.8	26.3
	3 or 4	21.6	17.8
	5 or more	14.2	13.3
Number of Months in Past Year on Combat Deployments			
	0 months	58.3	55.1
	1 to 6 months	26	26.6
	7 to 12 months	15.7	18.3
Number of months in Past Year on Non-Combat Deployment*			
	0 months	52.5	51
	1 or 2 months	18.9	15.5
	3 or 4 months	15.3	16.7
	5 to 12 months	13.3	16.8
Deployment Extension—ever in Career			
	Yes	32.7	33.9
Place of Deployment			
	Iraq/Afghanistan	64.7	66.5
	Other, Not Iraq or Afghanistan	22.6	19.1
	None	12.6	14.4
Avoidant Coping Strategy			
	Yes	73.8	73.9
Problem-Oriented Coping Strategy			
	Yes	97.7	96.4
Spirituality Indicator			
	Low	23.5	26.3
	Medium	55.1	52.2

DRRI Deployment Social Support Scale (Unit Cohesion)*	High	21.4	21.4
	Low	11.5	15.9
	Medium	55.9	57.2
	High	32.5	26.9
DRRI Post-Deployment Social Support Scale (Personal Social Support)*	Low	6.6	9.1
	Medium	54.1	58.6
	High	39.3	32.3
Physically Active, moderate or vigorous at least 3 days/week	Yes	63.9	66.3
Total Sample		34.6	65.4

**Non-Respondents include all those eligible baseline respondents who we either failed to track or who failed to return a follow-up survey.

¹ Sample includes all BL respondents who are eligible for FU survey at the time of FU survey administration.

² Yes indicates a "yes" on any of the mental health (anxiety, depression, PTSD or suicidal ideation)

*Significant differences found between respondent and non-respondent distributions ($\alpha=.05$)

Table 7. Non-response Analysis - Marine Corp Sample

Measure	Marine Corp		
	Respondents	Non-respondents	
Sample size ¹	372	908	
Anxiety			
Depression*	Yes	29.1	32.6
PTSD*	Yes	44.6	52.3
Substance Abuse Indicator (TICS) *	Yes	20.7	27.6
Suicidal Ideation	Yes	45.7	55.8
Any Mental Health Problem ²	Yes	9	10.3
Resilience*	Yes	52.2	58.3
	Low	22.9	30.6
	Medium	56.1	48.6
	High	21	20.8
MOS Mental Health scale			
	Low	28.4	32.5
	Medium	54.1	54.4
	High	17.6	13.1
Any activity restriction due to poor mental health past 30 days	Yes	36.6	41.2
Any Receipt of Mental Health Services in the past 12 months			

	Yes	32.2	37.5
Concerns for which counseling was sought			
	Depression	14.2	17.7
	Anxiety	10.6	13.8
	Family problems	10.1	13.1
	Substance use problems*	2.8	7.2
	Anger management	9.5	11.9
	Stress management	10.3	13
	Combat/operational stress	10.1	10.7
	Other (specify)	5.3	4.9
I did not seek help from a mental health professional in the past 12 months*			
		73.7	67.4
Feel the need for counseling*			
	Yes	27.8	35
Prescribed Medication for Mental Health Issue in past 12 months			
	Yes	13.1	14.4
Gender*			
	Male	88.1	93.4
	Female	11.9	6.6
Race/Ethnicity			
	White, Non-Hispanic	69.3	66.5
	African American, non-Hispanic	6.3	8.7
	Hispanic	16.6	19.4
	Other	7.9	5.3
Age*			
	25 or younger	59.1	71.1
	26–34	29.6	22
	35 or older	11.3	7
Family Status			
	Not married	53.4	54.9
	Married	46.6	45.1
Pay Grade*			
	E1–E9, W1–W5	93.5	96.9
	O1–O6	6.5	3.1
Disability or Separation for a Physical/Mental Condition that Interferes with Military Service*			
	Yes	8.7	13.3
Reason for Leaving Military*			
	Retirement	10.4	5.2
	Expiration of Term of Service (ETS)	64.9	64.7
	Other	24.8	30.1
Current Smoker*			
	Yes	40.9	55.2
Previous Lifetime Trauma			
	Yes	50.8	54.4
Life Event Stress			
	Low	26.4	24.9
	Medium	43.7	43.2
	High	29.9	31.9

DRRI Post-Deployment Stressors Index			
	Low	13.4	11.7
		41.1	
	Medium		39
	High	45.5	49.3
Work Stress Indicator			
	A lot	52	50.8
	Some	28.3	30.1
	A little	14.8	15.7
	None	4.9	3.4
Family Stress Indicator*			
	A lot	26.1	34.3
	Some	30.1	26.2
	A little	27.4	24.3
	None	16.4	15.2
Spouse Stress Indicator			
	A lot	24.9	25.1
	Some	19	19.8
	A little	8.9	12
	None	1.6	2.6
	I do not have a spouse	45.5	40.6
MOS Pain Indicator (past 4 weeks)			
	Very Severe/Severe	10.5	13.4
	Moderate	39.2	36.5
	Mild	23.4	23.2
	Very Mild	15.1	16.4
	None	11.8	10.5
MOS Current Health Perception			
	Low	24.9	25.8
	Medium	47.4	51.7
	High	27.7	22.5
Combat Exposure Scale score			
	Low	14	16.8
	Medium	26.6	27.2
	High	59.5	56
Number of career combat deployments*			
	0	14.4	19.9
	1	28.3	28.8
	2	31.3	32.7
	3 or 4	22.3	16.7
	5 or more	3.8	1.9
Number of Months in Past Year on Combat Deployments			
	0 months	37.3	40.9
	1 to 6 months	14.2	16.9
	7 to 12 months	48.5	42.2
Number of months in Past Year on Non-Combat Deployment			
	0 months	66.7	62.5
	1 or 2 months	12.8	16.3
	3 or 4 months	10.1	8.9
	5 to 12 months	10.4	12.3

Deployment Extension—ever in Career			
	Yes	25.3	20.4
Place of Deployment			
	Iraq/Afghanistan	81.9	75.5
	Other, Not Iraq or Afghanistan	5.6	7.2
	None	12.5	17.3
Avoidant Coping Strategy *			
	Yes	73	81.2
Problem-Oriented Coping Strategy			
	Yes	94.1	95.3
Spirituality Indicator			
	Low	33	32.6
	Medium	49.3	54.6
	High	17.7	12.9
DRRI Deployment Social Support Scale (Unit Cohesion)			
	Low	12.5	11.4
	Medium	52.2	57.8
	High	35.3	30.7
DRRI Post-Deployment Social Support Scale (Personal Social Support)			
	Low	9.1	8.5
	Medium	59	66
	High	31.9	25.5
Physically Active, moderate or vigorous at least 3 days/week			
	Yes	68.2	68.7
Total Sample		29.1	70.9

**Non-Respondents include all those eligible baseline respondents who we either failed to track or who failed to return a follow-up survey.

¹ Sample includes all BL respondents who are eligible for FU survey at the time of FU survey administration.

² Yes indicates a "yes" on any of the mental health (anxiety, depression, PTSD or suicidal ideation)

*Significant differences found between respondent and non-respondent distributions ($\alpha=.05$)

A similar set of items as in the table above will be examined to see if we have a mode effect given the data we are collecting from two different survey modes.

C. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

1. Respondent Universe and Sampling Methods

As requested by OMB after the conclusion of the pilot study, NHRC has developed more effective methods targeted at improving response rates. The sample design consists of a stratified random sample of the Marine Corps bases with TAP classes, and a 100 percent sample of Marines attending a TAP class. Installations were stratified based on the estimated size of attendees. Strata were defined as installations with: (1) more than 1,000 attendees, (2) 250-999 attendees, and (3) less than 250 attendees. Because base size is likely associated with the military occupation, and thus combat

experience, we feel that such a design will facilitate estimation for the Marine Corps. Two bases were randomly selected per stratum to ensure variance estimation. To date we have 3089 respondents who provided baseline survey responses. We expect to have around 667 responses from these at follow-up. This accounts for the number who did not consent for follow-up, the number who do not end up completing their separation from the military, the number we can't trace contact information on to mail the follow-up survey, and the number who will fail to respond to the follow-up survey. **Exhibit 1** shows, by sampled installation, the actual class numbers and baseline survey respondents along with the estimated sample size.

Exhibit 1. Sampled Bases for Study

Stratum	Base	State	Actual Class Attendance Numbers	Actual Baseline Survey Respondents (includes ineligible)	Expected Follow-up Survey Respondents ¹
1	MCB Camp Pendleton	CA	2468	1024	221
1	Camp Lejeune	NC	1956	1336	289
2	MCAS Cherry Point	NC	503	314	68
2	MCB Kaneohe Bay	HI	342	231	50
3	MCAS Iwakuni	Japan	74	63	14
3	Henderson Hall	VA	143	121	26
Total	----	---	5476	3,089	667

¹ Calculated to account for the expected number who actually transition, whose contact information for the follow-up survey can be obtained, and who provide a response.

Baseline sampling weights will be assigned to each sample member and consist of an initial sampling weight and a factor to adjust for nonresponse. The initial sampling weight for each sample member is simply the inverse of the inclusion probability of the Marine Corps base because we are soliciting participation from all TAP attendees at the base. The adjustment factor is applied to the initial sampling weight to compensate for the potential biasing effects of systematic nonsampling errors caused by differential nonresponse. We will use the Generalized Exponential Model (GEM; Folsom and Singh, 2000) to calibrate for nonresponse at baseline and again at follow-up for a variety of characteristics included in the model.

2. Information Collection Procedures

As part of the Wave 1 baseline portion of the study, data were collected via group administration of a self-completed paper and pencil questionnaire. Wave 2, consisting of the follow-up component of the study, will involve administering the survey to all the consenting Wave 1 respondents. The follow-up surveys will be sent to respondents through the mail; respondents will also have the option of completing the Wave 2 survey via the Web.

Before fielding Wave 2, RTI will verify the appropriate mailing address for all individuals. First, we will examine the quality of the home address and unit address information. Before data

collection, RTI will send all records for eligible sample members to the U.S. Postal Service for comparison with their national change of address (NCOA) files. As mentioned before, we expect to be able to update approximately 4.1% of the sample addresses using this service.

3. Methods to Maximize Response Rates

Budgetary constraints limit the number of experimental conditions available to test methods of increasing response rates and reducing potential bias, however a number of well-established methods of maximizing survey participation and generalizability will be implemented. For example, a first questionnaire packet will be sent to eligible study participants. Within approximately 1 week of mailing the first questionnaire packet, we will mail a first “Thank you/reminder” letter to all of the sample members. This mailing will thank respondents for returning their completed questionnaires and prompt participation from nonrespondents. It will also remind nonrespondents of the online survey URL and their personal login ID. Eligible participants will receive a \$10 gift card.

We will send the second mailing to all eligible sample members who have not submitted a completed questionnaire either by mail or by the Web. Based on response rates received from other mail surveys, we estimate this will be about 55% of the original sample. The second mailing will consist of a more urgently worded cover letter stressing the importance of the study, a replacement questionnaire, and a return postage-paid envelope. The cover letter will again provide a login ID and password for respondents to use with the Web survey. This mailing will be timed to occur when the daily rate of returns indicates that this next mailing is needed.

Within approximately 1 week of the second questionnaire packet, we will mail a second “Thank you/reminder” letter to all of the sample members who were sent the second questionnaire mailing. It will also prompt participation from nonrespondents and remind respondent’s of the online survey URL and their personal login ID.

Those who (1) have completed the survey, (2) are ineligible, (3) are non-locatable (no good address is available, or all addresses found are non-deliverable) and (4) have requested not to be contacted again, will be eliminated from subsequent contacts.

A Web option will be offered for the convenience of those subjects who have Internet access. For this option, we will develop program specifications for the Web-based survey that closely simulates the hardcopy version of the instrument which will be concurrently mailed to the sample. Because this survey will be self-administered, it will implement extensive range checks, verification screens, and cross-item consistency checks to ensure that the data collected are of the highest quality possible.

Help Desk Hotline. RTI will maintain a Help Desk Hotline for the duration of the follow-up survey. The hotline will be accessible via both a toll-free number as well as a non-toll-free option. This helpdesk will be manned by trained project staff who will be available to answer questions about the study, update contact information, reissue passwords, assist respondents in accessing the Web site, or assist in completing the Web survey. Questions regarding IRB concerns will be forwarded to RTI’s ORPE.

Telephone calls or e-mails received after hours will be routed to a voice messaging system (for telephone calls) or will receive an automated e-mail response (for e-mail requests) and will be handled at the start of business the following day. Messages will be returned within 24 hours.

4. **Data Analysis**

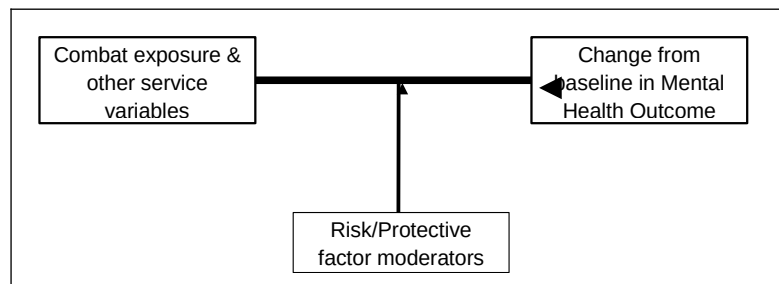
Apart from the two data collections (baseline and follow-up by mail or web survey), data from two other military databases will also be obtained and merged in with the survey data. There will be four separate but related analyses of these data: (1) a nonresponse analysis, (2) a descriptive comparative analysis using merged baseline and follow-up data, (3) multivariate longitudinal modeling of the merged dataset, and (4) a PDHRA reliability assessment. Analyses will focus on mental health outcomes; generalized anxiety, depression, PTSD, suicidal ideation, and resilience. Important predictors that will be explored include combat and service-related variables, risk factors, and protective factors. Basic demographic variables will also be included. Specifically these may include combat exposure, combat deployment, length of deployment, deployment extension, substance abuse, previous life trauma, physical pain, health perception, coping style, physical activity, spirituality, social support, rank, mission, gender, age, race/ethnicity, marital status, and personal and environmental stress levels.

Nonresponse analysis. Baseline nonresponse will be assessed and an analysis weight developed to remove potential nonresponse bias from our analysis. Characteristics of responders and nonresponders (TAP class members who choose not to fill out the survey) will be compared and evaluated. This comparison will be over three demographic variables collected on all class participants: age, gender, and rank. Nonresponse to follow-up will also be assessed and reported by comparing responders to the baseline survey and nonresponders to follow-up on available demographic and service variables. Analysis weights, previously adjusted to account for baseline attrition, will be adjusted to minimize the effects in our subsequent analysis of any nonresponse bias.

Descriptive analysis. Baseline and follow-up data will be cleaned and merged to form a complete analysis data set. Ineligible cases (Marines who don't separate within our data collection window, or who are found to be deceased or incarcerated) will be removed from the data set. Contingency tables will describe the analytic database, all who responded to the baseline and follow-up surveys. The incidence levels of mental health outcomes of interest will be reported by various subgroups of the sample defined by many of the variables listed above (e.g., PTSD categories by gender).

Multivariate modeling. We will model the changes in mental health status across time using appropriate weighted longitudinal models. These models (see *Exhibit 2*) will aim to understand and try to account for the incidence in mental health issues (or change from baseline) at follow-up using a range of combat and service-related variables available in our survey data. Our data will include Marines with between zero and high combat exposure. These models may include risk and protective factors as moderators, or mediators, in attempting to explain the incidence

Exhibit 2. Longitudinal Model



of mental health troubles in separated Marines. Path models (e.g., moderators and mediators) will be specified by the relationships suggested by the research literature on these variables. This will not be an exploratory analysis.

PDHRA reliability assessment. A separate comparative analysis will be conducted between the mandated PDHRA data and the PDHRA items included in the survey data. Although the portion available from military-administered questionnaires is expected to be insufficient to draw any conclusions about the validity of that PDHRA data, we can nonetheless examine the reliability of this subset of the mandated PDHRA data for those baseline survey responders whose data we obtain. This could give indications of possible response suppression on the military-administered PDHRA. Statistics, such as kappas, describing the agreement between the item responses from these two administrations will be reported along with comparative overall proportions.

5. Statistical Consultants

RTI Statistical Task Leader:
Randall Bender, PhD
Statistics and Epidemiology Division
RTI International
Research Triangle Park, NC 27709

Appendix 1

FIRST COVER LETTER

Date

Address1

Dear [SAMPLE MEMBER]:

In Fall 2009, while attending Marine Corps TAP classes, you completed a survey conducted by RTI International and the Naval Health Research Center regarding combat/operational stress issues among deployed personnel. First, we want to thank you for your participation in helping us to gather this critical information about Marines' health. At the baseline survey, you agreed to let us contact you about the next phase of this research. This letter is to invite you to participate in an important follow-up survey.

The questionnaire will take about 30 minutes to complete and you may do so either on the paper-and-pencil version that is enclosed or via a web survey. As a token of our appreciation for your completed questionnaire, we are including a \$10 Visa gift card. Only individuals who have separated from military service since completion of the baseline survey are eligible to participate in the follow-up survey. Your answers on this questionnaire will be kept **strictly confidential and will be seen only by civilian researchers**. Your name will not be associated with your individual answers and the results of the survey will be reported as group averages only.

Directions for marking your answer choices on the enclosed hardcopy survey are given on the cover page. Please read the instructions carefully. When you have finished, seal the questionnaire in the enclosed pre-paid envelope and place it in a U.S. Postal System mailbox. If you prefer to complete the web survey option, please complete the survey by visiting the following web site: <https://transition.rti.org/>. You will need an ID and password in order to log in to this website. If you log on to the website but do not finish the survey, you can use your ID and password to log back in and complete the survey.

Your unique ID and password are: ID: XXXXXX Password: XXXXXXXX

Just like the initial survey, taking part in this follow-up is voluntary. You do not have to participate even if you previously said you would be willing to be contacted for the follow-up. You may stop participating in this study at any time without any problems. If you choose not to participate, there will be no penalty to you and you will not lose any benefit to which you are otherwise entitled. Your responses will be protected via the latest Internet technology and your password and user ID will not be stored with your responses. If you agree to participate, we ask you to answer all of the questions as honestly as you can; but you do not have to answer any questions that you do not want to answer. If you do not want to answer a specific question, please skip it and go on to the next question. If someone comes into the room while you are taking the survey and you wish to keep your responses from being seen, there is a logout button on each screen which allows you to exit the survey temporarily. If you click on this button the survey will close and terminate the session. You can return to the system and log back in to continue the survey where you left off. If you complete the web survey, it will indicate that you are still a voluntary participant.

We are hopeful that you will take the time to provide us with the information needed to allow the Marine Corps to better serve the health needs of personnel who are transitioning out of the Service. Your participation in this study is greatly appreciated. If you have any questions about this research, contact one of the Principal Investigators, Dr. Laurel Hourani, at 1-800-647-9657 or Dr. Jerry Larson at (619) 553-8402. Or, if you have any questions about your rights as a study participant, you can call RTI's Office of Research Protection at 1-866-214-2043 (a toll-free number) or you can e-mail the Navy's research subject protection office overseeing this research at NHRC-IRB@MED.NAVY.MIL. Thank you for your assistance on this important project.

Sincerely,

Dr. Laurel Hourani
Principal Investigator

Dr. Jerry Larson
Principal Investigator

SECOND COVER LETTER

Date

Address1

Dear _____:

Recently you were requested to participate in a follow-up interview for a survey in which you participated in Fall 2009 while attending Marine Corps TAP classes. This survey, conducted by RTI International and the Naval Health Research Center, gathers important information regarding combat/operational stress issues among deployed personnel. If you have already completed the questionnaire and returned it, thank you for your help and please discard this notification. If, however, you have not, we would like to encourage you to take the time to do so now.

The questionnaire will take about 30 minutes to complete and you may do so either on the paper-and-pencil version that is enclosed or via a web survey. As a token of our appreciation for your completed questionnaire, we included a \$10 Visa gift card with the original mailed materials. Only individuals who have separated from military service since completion of the baseline survey are eligible to participate in the follow-up survey. Your answers for this questionnaire will be kept **strictly confidential and will be seen only by civilian researchers**. Your name will not be associated with your individual answers and the results of the survey will be reported as group averages only.

If you choose to complete the enclosed hardcopy survey, directions for marking your answer choices are given on the cover page. Please read the instructions carefully. When you have finished, seal the questionnaire in the enclosed pre-paid envelope and place it in U.S. Postal System mailbox. If you prefer to complete the web survey option, please complete the survey by visiting the following web site: <https://transition.rti.org/>. You will need an ID and password in order to log in to this website. If you log on to the website but do not finish the survey, you can use your ID and password to log back in and complete the survey.

Your unique ID and password are: ID: XXXXXX Password: XXXXXXXX

Just like the initial survey, taking part in this follow-up is voluntary. You do not have to participate even if you previously said you would be willing to be contacted for the follow-up. You may stop participating in this study at any time without any problems. If you choose not to participate, there will be no penalty to you and you will not lose any benefit to which you are otherwise entitled. If you agree to participate, we ask you to answer all of the questions as honestly as you can; but you do not have to answer any questions that you do not want to answer. If you do not want to answer a specific question, please skip it and go on to the next question. If someone comes into the room while you are taking the survey and you wish to keep your responses from being seen, there is a logout button on each screen which allows you to exit the survey temporarily. If you click on this button the survey will close and terminate the session. You can return to the system and log back in to continue the survey where you left off. If you complete the web survey, it will indicate that you are still a voluntary participant.

We are hopeful that you will take the time to provide us with this much needed information. Although there are no direct benefits to your participation, our hope is that this information will allow the Marine Corps to better serve the health needs of enlisted personnel. Your participation in this study is greatly appreciated. Completing this questionnaire presents minimal psychological, social, or legal risk. Your responses will be protected via the latest Internet technology and your password and user ID will not be stored with your responses. Some of the questions in the instrument are sensitive in nature, and it is possible that some respondents may feel discomfort in answering one or more of these items. If requested, institutional review boards may access the data as part of their responsibility to protect human subjects in research.

If you have any questions about this research, contact one of the Principal Investigators, Dr. Laurel Hourani, at 1-800-647-9657 or Dr. Jerry Larson at (619) 553-8402. Or, if you have any questions about your rights as a study participant, you can call RTI's Office of Research Protection at 1-866-214-2043 (a toll-free number) or you can e-mail the Navy's research subject protection office overseeing this research at NHRC-IRB@MED.NAVY.MIL. Thank you for your assistance on this important project.

Sincerely,

Dr. Laurel Hourani
Principal Investigator, RTI International

Dr. Jerry Larson
Principal Investigator, Naval Health Research Center

EMAIL INVITATION

Dear _____:

In Fall 2009, while attending a Marine Corps TAP class, you completed a survey conducted by RTI International and the Naval Health Research Center regarding combat/operational stress issues among deployed personnel. First, we want to thank you for your participation in helping us to gather this critical information about Marines' health. At the baseline survey, you agreed to let us contact you about the next phase of this research. This email is to invite you to participate in an important follow-up survey.

The survey will take about 30 minutes to complete. You may complete the survey either on the paper-and-pencil version that has been mailed to you and should arrive within the next few days, or via a web version of the survey. As a token of our appreciation for your completed survey, we included a \$10 Visa gift card with the mailed materials. Only individuals who have separated from military service since completion of the baseline survey are eligible to participate in the follow-up survey. Your answers on this survey will be kept **strictly confidential and will be seen only by civilian researchers**. Your name will not be associated with your individual answers and the results of the survey will be reported as group averages only.

If you would like to complete the survey via the web, please click on the link below to access the survey website:

<http://>

You will need an ID and password in order to log in to this website. If you log on to the website but do not finish the survey, you can use your ID and password to log back in and complete the survey.

Your unique ID and password are: ID: **XXXXXX** Password: **XXXXXX**

Just like the initial survey, taking part in this follow-up is voluntary. You do not have to participate even if you previously said you would be willing to be contacted for the follow-up. You may stop participating in this study at any time without any problems. If you choose not to participate, there will be no penalty to you and you will not lose any benefit to which you are otherwise entitled. Your responses will be protected via the latest Internet technology and your password and user ID will not be stored with your responses. If you agree to participate, we ask you to answer all of the questions as honestly as you can; but you do not have to answer any questions that you do not want to answer. If you do not want to answer a specific question, please skip it and go on to the next question. If someone comes into the room while you are taking the survey and you wish to keep your responses from being seen, there is a logout button on each screen which allows you to exit the survey temporarily. If you click on this button the survey will close and terminate the session. You can return to the system and log back in to continue the survey where you left off. If you complete the web survey, it will indicate that you are still a voluntary participant.

We are hopeful that you will take the time to provide us with the information needed to allow the Marine Corps to better serve the health needs of personnel who are transitioning out of the Service. Your participation in this study is greatly appreciated. If you have any questions about this research, contact one of the Principal Investigators, Dr. Laurel Hourani, at 1-800-647-9657 or Dr. Jerry Larson at 619-553-8402. Or, if you have any questions about your rights as a study participant, you can call RTI's Office of Research Protection at 1-866-214-2043 (a toll-free number) or you can e-mail the Navy's research subject protection office overseeing this research at NHRC-IRB@MED.NAVY.MIL. Thank you for your assistance on this important project.

Sincerely,

Dr. Laurel Hourani
Principal Investigator, RTI International

Dr. Jerry Larson
Principal Investigator, Naval Health Research Center

Web Login Screen

The content of this survey is sensitive and should be taken in a private location.

The purpose of the study is to help the military understand how separating Marines readjust to civilian life and to identify ways to enhance the transition process. You are being asked to fill out a questionnaire about your health behaviors, medical history, military history, and life events. The information gathered will be used to help inform military decision makers about current policies and practices.

The questionnaire will take about 30 minutes to complete. Only individuals who have separated from military service since completion of the baseline survey are eligible to participate in the follow-up survey and to receive a gift card for completing the survey. Your answers on this survey will be kept **strictly confidential and will be seen only by civilian researchers** . Your name will not be associated with your individual answers and the results of the survey will be reported as group averages only.

There are minimal risks involved in participating in this survey. For instance, a small number of people may feel uncomfortable answering some questions about sensitive topics. If you choose to participate, you will be free to leave any survey questions blank. In the unlikely event of your individual responses becoming known to others outside the research study, potential risks could be personal embarrassment as well as risks to your military career. **To minimize these risks and lessen threats to confidentiality, we will maintain the confidentiality of the survey responses by not including identifying information with your responses.**

If someone comes into the room while you are taking the survey and you wish to keep your responses from being seen, there is a "Quick Exit" button on each screen which will allow you to exit the survey temporarily. If you click on this button the survey will close and terminate the session. You can return to the system and log back in to continue the survey where you left off.

Your participation in this survey is voluntary. If you decide not to participate, no negative consequences will result and there will be no effect on your pay, benefits, or duty assignments. Because the information gathered by the survey is so important, however, we do hope you will consider participating.

There are no direct benefits to you for participating, however by doing so you may learn more about a number of your own behaviors, and military decision-makers may be better able to meet the needs of other junior personnel.

This questionnaire has been reviewed the Naval Health Research Center's Institutional Review Board and was approved on November 3rd, 2010. This approval expires on October 15th, 2011.

For questions about this research, contact the Principal Investigator, Dr. Laurel Hourani at hourani@rti.org or call the toll-free survey hotline at 1-800-647-9657.

If you have any questions about your rights as a study participant, you can call RTI's Office of Research Protection at 1-866-214-2043 (a toll-free number) or can e-mail the Navy's research subject protection office overseeing this research at NHRC-IRB@MED.NAVY.MIL.

Please select the appropriate button below.

FOLLOW-UP SURVEY

HEALTH OF TRANSITIONING MARINES

INSTRUCTIONS FOR COMPLETING THE QUESTIONNAIRE

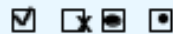
All questions on this survey provide a set of possible answers. Please read all the answers before marking your choice. If none of the printed answers exactly apply to you, place an "X" on the square for the one answer that best fits your situation.

- Use a pencil or pen to complete the survey. Erase cleanly or cross out clearly any answer you wish to change.
- Put an "X" on the center of the square to indicate your answer. Do not use other marks.

CORRECT MARK



INCORRECT MARK



- If you are asked to give numbers or write letters in boxes, please enter your responses as shown below. Please enter one number or letter to a box.

Telephone number

5	5	5	—	5	5	5	—	5	5	5	5
---	---	---	---	---	---	---	---	---	---	---	---

- For many questions, you should place an "X" in only one square for your answer in the column below the question. However, some questions ask you to mark all the choices that apply. When asked to "mark all that apply," please do so as shown here:

EXAMPLE: Have you ever had any of the following conditions? (Mark all that apply.)

- Back pain
- Ringing in the ears
- Difficulty remembering
- Trouble sleeping
- Chronic headaches
- Skin rashes
- Difficulty breathing

PRIVACY ACT STATEMENT

Authority. 5 U.S.C. 301

Purpose. Medical research information will be collected in an experimental research project #NHRC.2007.0011, titled Status of Transitioning Marine Corps Personnel, to enhance basic medical knowledge, or to develop tests, procedures, and equipment to improve the diagnosis, treatment, or prevention of illness, injury, or performance impairment.

Routine Uses. Medical research information will be used for analysis and reports by the Departments of the Navy and Defense, and other U.S. Government agencies, provided this use is compatible with the purpose for which the information was collected. Use of the information may be granted to non-Government agencies or individuals by the Navy Surgeon General following the provisions of the Freedom of Information Act or as may be indicated in the accompanying Informed Consent Form.

Disclosure. Completion of this questionnaire constitutes consent to participate in this survey. Provision of information is voluntary. There are no penalties for not providing the requested information, but failure to provide the requested information may result in failure to be accepted as a research volunteer in an experiment, or in removal from the program. **Your answers on this survey will be kept strictly confidential and will be seen only by civilian researchers.** The Freedom of Information Act (FOIA) statute excludes personnel and medical files from disclosure; in the unlikely event the investigators on this study received a FOIA request for your data, we would honor the confidentiality provisions stated in the Informed Consent Document that you signed and would not provide any of your identifiable data to any entity or person not affiliated with this study.

PUBLIC REPORTING BURDEN STATEMENT

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.