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2017-01-04

# A Matched Retrospective Cohort Study of Career Outcomes of Sexual Assault Victims

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Monterey, CA; Naval Postgraduate School

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**NAVAL RESEARCH PROGRAM**  
**NAVAL POSTGRADUATE SCHOOL**

**MONTEREY, CALIFORNIA**

**A MATCHED RETROSPECTIVE COHORT STUDY OF CAREER  
OUTCOMES OF SEXUAL ASSAULT VICTIMS**

Report Type: Final Report

Period of Performance: 10/01/2016-04/30/2017

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Prepared for:

Topic Sponsor: HQMC Manpower & Reserve Affairs (M&RA)

Research Sponsor Organization (if different): (e.g. NAVAIR, NAVSUP, 3rd MAW)

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Distribution A: Approved for public release. Distribution is unlimited.

## NPS NRP Executive Summary

A Matched Retrospective Cohort Study of Career Outcomes of Sexual Assault Victims

Report Date: 01/04/2017 Project Number: NPS-17-M057-A

Naval Postgraduate School / School: GSOIS/OR

## EXECUTIVE SUMMARY

### Project Summary

Sexual assault in the United States Marine Corps remains high in the list of priorities and at the forefront of public concern. To better understand and combat the issue, our work examines how career outcomes for Marines who filed a formal unrestricted report of sexual assault, case Marines, differ from those who never filed a report, control Marines. Additionally, we evaluate whether career outcomes for Marines who filed a formal unrestricted report of sexual assault differ based on key demographics. Enlisted Marines of ranks E-1 through E-4 who filed unrestricted reports from 2011 to 2015 are matched by age, rank, gender, Military Occupational Specialty (MOS), and report date to Marines who have never filed an unrestricted report. Using logistic regression analysis, career outcomes are measured by separation status and narrative within one year from the sexual assault report date. Results reveal that in general, case Marines are more likely to separate, and separate for reasons other than end of contract than their control Marine counterparts. Variables such as rank, occupational field, number of dependents, and average professional and conduct scores (PROCONS), class, and change are contributing variables.

**Keywords:** *sexual assault, Marine Corps*

### Background

Sexual assault in the United States military is a widely publicized and highly prioritized issue. Despite the military's "zero tolerance" policy (Downes, 2013), it remains a pervasive and contentious problem. The Marine Corps and the Sexual Assault Prevention and Response Office (SAPRO) sponsored this work (funded and administered by the Naval Postgraduate School (NPS) Naval Research Program (NRP)). We wish to acknowledge and thank Dr. Marcon Zabecki and Mr. Eric Lockmer of SAPRO for facilitating this work and their extensive data collection efforts. SAPRO's aim is to seek a better understanding of career outcomes of sexual assault victims in the Marine Corps. To do this, two questions guide this research.

- How do career outcomes for Marines who filed a formal unrestricted report of sexual assault differ from those who never filed a report?
- Do career outcomes for Marines who filed a formal unrestricted report of sexual assault differ based on key demographics?

Here we provide a summary of our work whose details are found in the NPS Operations Research master's thesis of LTJG Benavides (2017). Benavides (2017) has a literature review, details of experimental design, data collection, data manipulation, analysis, and findings.

Sexual assault affects victims in numerous ways, generally organized into four categories. First, victims often experience mental and psychological disorders such as depression, insomnia, anxiety, or PTSD.

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Second, victims may endure physical consequences such as sexually transmitted illnesses, pregnancy, or increased abdominal, muscular, joint, and sexual pain. Third, victims' personal and social lives may suffer when their relationships and interactions with people change as a result of the assault's violation on personal rights and boundaries. Fourth and lastly, victims may endure career or professional retaliation from coworkers and supervisors for reporting. Additionally, the combination of negative mental, physical, and personal effects could detract from a victim's professional performance and motivation. When considering the literature and previous research regarding military sexual assault, the evidence suggests that Marines who file formal unrestricted reports of sexual assaults will have poorer career outcomes than Marines who do not. Additionally, the literature indicates possible key demographics such as gender, rank, education levels, and relationship to the subject for propensity of sexual assault and its consequences.

### Findings and Conclusions

In response to the guiding research questions, our work compares the career outcomes between Marines who filed unrestricted reports of sexual assault from 2011 to 2015 to similar Marines who have no history of filing a report. Career outcomes are measured in two ways: first, whether a Marine separated within one year of the report date, and second, if a Marine chose to separate, whether the separation was for end of contract or any other narrative. Data regarding the sexual assault was extracted from the Defense Sexual Assault Incident Database (DSAID); data regarding the Marine was extracted from the Total Force Data Warehouse (TFDW). Marines who filed unrestricted reports are referred to as case Marines. They are matched to their control Marines by age, rank, MOS code, and gender at the sexual assault report date. By definition, control Marines do not have a history of filing unrestricted reports of sexual assault, and it is assumed they have never filed a restricted report. As a result, all data for control Marines originates from TFDW only. Two sequential sets of two logistic regression models are applied to the data, for a total of four models.

The first set of logistic regression models is applied to all case Marines, including those who failed to match. The dependent variable for the first model, Model 1, is whether a Marine separated or stayed active duty one year from report date. The dependent variable for the second model, Model 2, is whether a Marine who separated within the year separated for end of contract or any other separation narrative. Independent variables describe the sexual assault, such as the involvement of alcohol, drugs, or weapons and whether a military protection order was issued, and the Marine, such as number of dependents or change in PROCONS from pre to post-incident.

The results of Model 1 and 2 analysis indicate predicated probabilities for staying active duty one year from report date are highest for case Marines with positive change in PROCONS and lowest for unknown change, regardless of rank, involvement of alcohol, drugs, or alcohol, number of dependents, or average pre-incident PROCONS class. Furthermore, predicted probabilities for separated case Marines having end of contract separation narratives are highest for no change in PROCONS and lowest for negative or

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unknown change, regardless of rank, report year, race, or Marine Air-Ground Task Force (MAGTF) element.

The second set of logistic regression models is applied to both case Marines, excluding those who failed to match, and their control Marines. Model 3 is analogous to Model 1 and Model 4 to Model 2 in regards to the dependent variable. The independent variables remain the same as well, excluding variables that describe the sexual assault since control Marines by definition do not have data for such variables. A binary variable differentiating case from control Marines is also added. The analysis results indicate there is a significant difference between case and control Marines' career outcomes. Marines who reported a sexual assault are much less likely to remain active duty one year after report date than Marines who did not report sexual assault. Similarly, Marines who separate within one year from their sexual assault report date are more likely to separate for reasons other than end of contract than comparable Marines who have not filed a report of sexual assault.

### **Recommendations for Further Research**

There are opportunities for future work regarding career outcomes of sexual assault victims in the Marine Corps. Future work could incorporate restricted reports, match on additional variables, or pursue a survival analysis model. Further, matching cases with non-cases is a promising approach to studies of this type, but the data extraction burden is quite complex and time-consuming, thus we recommend that the matching be done by the researchers and not by SAPRO.

### **References**

- Benavides, A. (2017). "Career Outcomes of Sexual Assault Victims in the Marine Corps", Master's Thesis in Operations Research, Naval Postgraduate School, Monterey, CA.
- Downes, L. (2013, May 26). How the Military Talks About Sexual Assault. Retrieved from <http://takingnote.blogs.nytimes.com/2013/05/26/how-the-military-talks-about-sexual-assault/>

### **Acronyms**

DSAID - Defense Sexual Assault Incident Database  
MOS - Military Occupational Specialty  
NPS - Naval Postgraduate School  
NRP - Naval Research Program  
PROCONS – professional and conduct scores  
SAPRO - Sexual Assault Prevention and Response Office  
TFDW - Total Force Data Warehouse  
Marine Air-Ground Task Force (MAGTF)