

Stakeholder Snapshot | 2024

INDICATORS OF FINANCIAL WELL-BEING AMONG MILITARY SPOUSES



Stakeholder:

DoD Office of Military Community and Family Policy

Request

In November 2021, the Secretary of Defense released a memorandum addressing and acknowledging the economic challenges faced by some of our service members and their families (Secretary of Defense, 2021). The Secretary of Defense ordered immediate action and directed the Department of Defense (DoD) to address the issue of economic security, including the development of a strategy and implementation roadmap dedicated to strengthening food security later published in July 2022 (Office of the Under Secretary for Personnel & Readiness, 2022). In response, the DoD is pursuing several lines of effort to better understand and ameliorate economic insecurity, including food insecurity, in the U.S. military community. These include expanding research efforts to define the scope of the problem, identify at-risk subgroups, and to understand developmental trajectories of economic adjustment. This report summarizes results from the Millennium Cohort Family Study (MCFS) addressing these tasks.

Objectives

1. Describe the current **financial instability** and incidence of **financial problems** among spouses enrolled in MCFS.
2. Determine what demographic, family, and military factors are associated with current **financial instability**.
3. Determine factors associated with the incidence of **financial problems** over time.

MILLENNIUM COHORT PROGRAM (MCP) RESOURCES

The Millennium Cohort Program (MCP) is a DoD program of research supported by the Defense Health Agency, Department of Veterans Affairs, and Military Community and Family Policy including three major research efforts: the Millennium Cohort Study, Millennium Cohort Family Study (MCFS), and Millennium Cohort Study of Adolescent Resilience (SOAR). The overarching goal of the MCP is to evaluate the impact of military service, including deployments and other occupational exposures, on the long-term health and well-being of service members, veterans, and their families. The MCP accomplishes this goal by merging survey data with existing records from multiple sources (e.g., Defense Manpower Data Center [DMDC], Military Health System Data Repository, and Department of Veterans Affairs) with the informed consent of study participants. Study findings inform policy to improve military readiness and protect the health of military personnel, veterans, and their families.

APPROACH

Participant Data

Data were analyzed for military spouses enrolled in MCFS Panel 1 (2011-2013 baseline) who completed at least one follow-up survey (2014 and/or 2019). Spouses were excluded if their military partner had already separated from service at baseline or if they failed to answer survey questions necessary for specific analyses (sample sizes are reported per analysis below).

Financial Instability

Current financial instability was assessed during the most recent follow-up cycle (2019) with the question, “Which best describes the financial condition of you and your family?” Response options ranged from 1 (*very comfortable*) to 5 (*in over our heads*).

Financial Problems

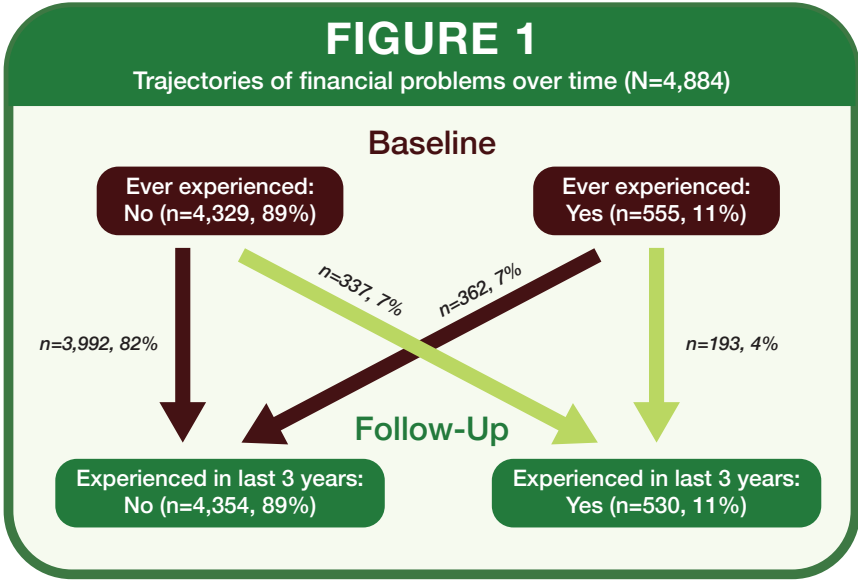
Each time spouses completed a survey, they answered a yes/no question asking whether they had (“ever” at baseline; “past three years” at follow-up) suffered major financial problems, such as bankruptcy.

Note: *To study incidence of financial problems over time, participants were excluded if they reported major financial problems at baseline. Participants who did not report major problems at baseline but did at either follow-up were identified as having new-onset financial problems.*

Procedure

This snapshot presents overall information regarding the current financial well-being of MCFS Panel 1 participants. Differences in financial instability were compared across demographic groups using an adjusted linear regression model (cross-sectional). This snapshot also estimates the incidence rate of new financial problems between baseline and follow-up and identifies predictors of this outcome using a hazard model (see snapshot endnotes for additional information).

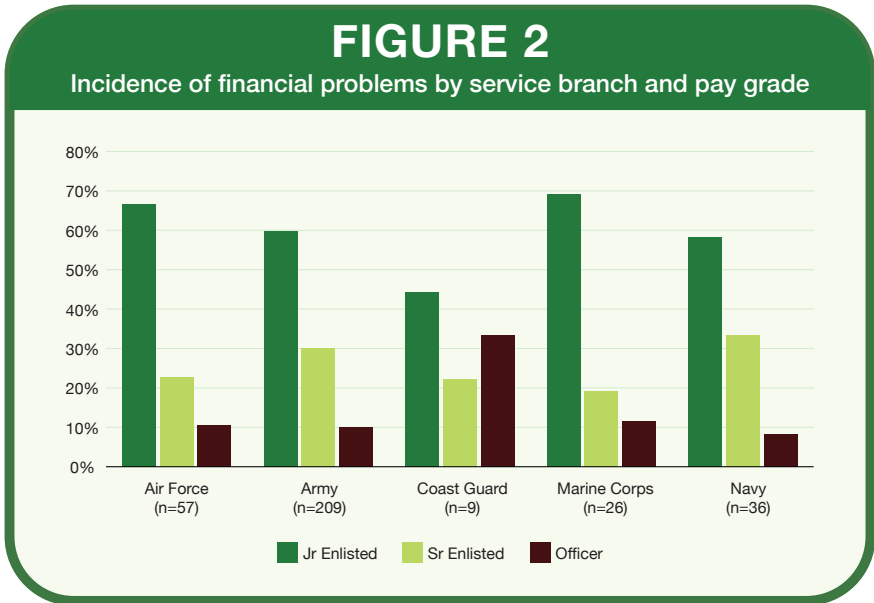
SNAPSHOT RESULTS



Note: Figure 1 includes all Panel 1 participants who completed at least one follow-up survey. For follow-up, spouses who reported financial problems on the 2014 and/or the 2019 survey were included in the “yes” box.

Objective 1: Describe current financial instability and incidence of financial problems as reported by Family Study Panel 1 spouse participants.

- At the time of the most recent survey (2019), most spouses reported being able to make ends meet without much difficulty (92%). However, there was a substantial group (8%) reporting they were having difficulty.
- Of spouses who had never experienced any major financial problems at baseline, about 8% reported they had experienced a major financial problem on at least one follow-up survey (2014 or 2019).



Objective 2: Determine what demographic, family, and military factors are associated with **current financial instability** (2019).

Current financial instability was (adjusted linear regression model, n=3,325):

- More likely for spouses who were no longer married, less educated (associate degree or lower), or unemployed but looking for work.
- More likely when service members were enlisted or in the Reserves or National Guard.
- Less likely when spouses reported better mental and physical health or were dual military.

Objective 3: Determine what demographic, family, and military factors are **longitudinally** associated with incidence of **financial problems**.

Reporting new financial problems at follow-up was (adjusted hazard models; n=4,329):

- More likely for spouses who were older, non-Hispanic Black, no longer married, less educated (bachelor's degree or lower), unemployed but looking for work, or veterans.
- More likely when service members were enlisted, had a history of deployment, or separated from service during the study period.
- Less likely when spouses reported better mental and physical health, and among spouses of Air Force or Navy (reference Army) service members.

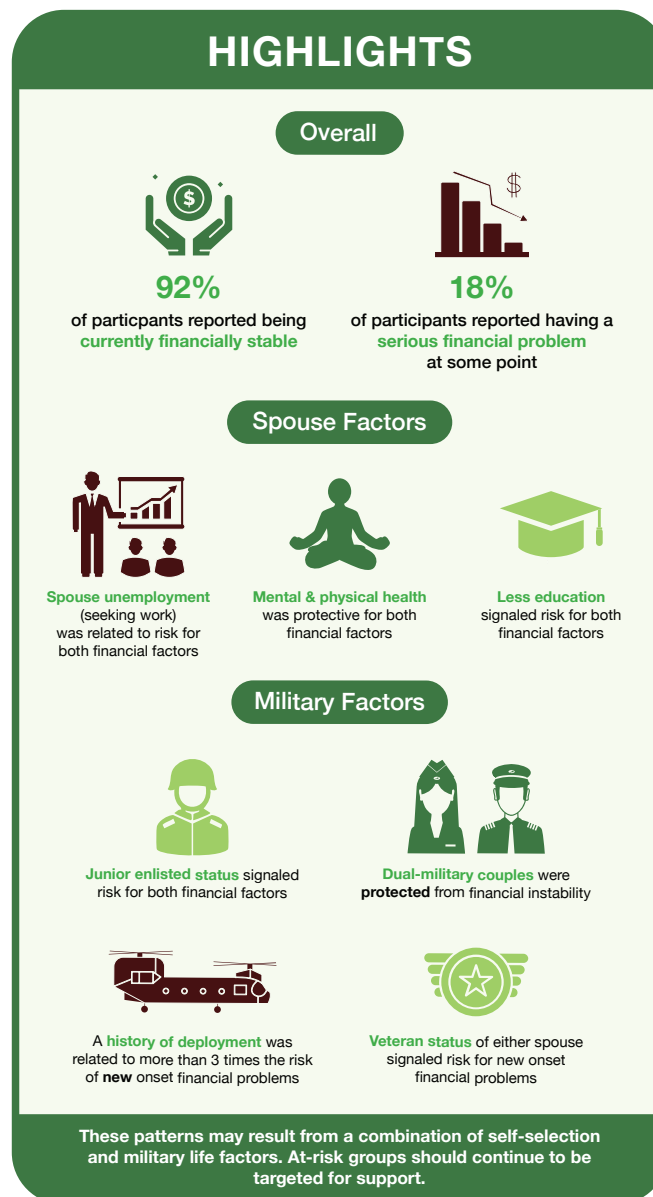


TABLE 1

Demographic, family, and military factors associated with current financial instability (N=3,325; 2019) and the incidence of financial problems (N=4,329; 2011-2019)

Demographic	Financial Outcome	
	Current Instability 2019	Incidence of Problems 2011-2019
Sex (SP)	Female*	
	Male	
Age (years) (SP)		✓
Race and ethnicity (SP)	White, non-Hispanic*	
	Black, non-Hispanic	✓
	Hispanic	
	Asian/Pacific Islander	
	Other	
Marital status (SP)	Married*	
	Not married	✓
Children (<18 years old) (SP)	No*	
	Yes	
Education (SP)	High school or less	✓
	Some college/associate degree	✓
	Bachelor's degree	✓
	Master's or higher degree*	✓
Employment (SP)	Full-time*	
	Part-time	
	Not employed, looking for work	✓
	Not employed, not looking	✓
Mental component (SP)		✓
Physical component (SP)		✓
Service branch (SM)	Air Force	
	Army	
	Coast Guard	
	Marine Corps	
	Navy	✓
Component (SM)	Active duty*	
	Reserve or National Guard	✓
Pay grade (SM)	Junior enlisted	✓
	Senior enlisted	✓
	Officer	
Separated (SM)	No*	
	Yes	✓
Deployment history (SM)	No*	
	Yes	✓
Dual military (SM)	Civilian*	
	Veteran	✓
	Dual	✓

Note: Fully adjusted models are reported in the table. Significant risk factors are indicated by a red check mark, while significant protective factors are in green. All analyses were weighted for non-response bias.

SP = spouse; SM = service member.

*Reference category.

References

Office of the Under Secretary for Personnel & Readiness. (2022). *Strengthening food security in the Force: Strategy and roadmap*. U.S. Department of Defense. <https://media.defense.gov/2022/Jul/14/2003035423/-1/-1/1/STRENGTHENINGFOOD-SECURITY-IN-THE-FORCE-STRATEGY-AND-ROADMAP.PDF>

Secretary of Defense. (2021). *Strengthening economic security in the Force*. <https://media.defense.gov/2021/Nov/17/2002894808/-1/-1/1/STRENGTHENINGECONOMIC-SECURITY-IN-THE-FORCE.PDF>

Acknowledgments

The participants in this study have contributed many hours responding to questions in the Millennium Cohort Study surveys about their health status over the years and now have contributed even more by participating in the Millennium Cohort Study of Adolescent Resilience (SOAR). The success of this study is due to their dedication and contribution of time and effort. We thank the participants for their commitment. The valuable information participants provide on a regular basis helps us understand the health concerns and needs of service members and Veterans and their children. This information is critical to shape future DoD, VA, and other organizational policies and initiatives. We would like to extend our sincerest gratitude to participants for your time spent completing the SOAR survey.

Disclaimer

HM and VS are employees of the U.S. Government. This work was prepared as part of our official duties. Title 17, U.S.C. §105 provides that copyright protection under this title is not available for any work of the U.S. Government. Title 17, U.S.C. §101 defines a U.S. Government work as work prepared by a military service member or employee of the U.S. Government as part of that person's official duties. Report No. 24-109 was supported by the Defense Health Agency under work unit no. N1240. The views expressed in this presentation are those of the authors and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, nor the U.S. Government.

The study protocol was approved by the Naval Health Research Center Institutional Review Board in compliance with all applicable Federal regulations governing the protection of human subjects. Research data were derived from an approved Naval Health Research Center Institutional Review Board protocol, number NHRC.2015.0019.

Citation

Woodall, K., Richardson, S., Esquivel, A., Roesch, S., Stander, V., McMaster, H., & the Millennium Cohort Family Study Team. (2024). *Indicators of financial well-being among military spouses*. Naval Health Research Center.

Supplementary information

Sample: Participants were restricted to spouses of service members enrolled in the 2011 survey cycle of MCFS (N=9,872). Participants included in objectives 1 and 3 (longitudinal) completed the baseline survey (2011) and at least 1 follow-up survey (2014 or 2019 survey cycles), reported never experiencing a major financial problem at baseline, reported the service member was not separated from the military prior to baseline, and completed all survey responses related to these analyses (n=4,329). Objectives 1 and 2 (cross-sectional) included participants who were not separated from the military prior to baseline, completed the second follow-up survey (2019), and answered all variables included in the analytic model (n=3,325).

Measures: Spouse demographics were self-reported on the MCFS baseline survey. Service member demographic and military background were obtained from archival records (DMDC). Self-reported responses to the Veterans RAND 36-Item Health Survey (VR-36), were used to measure how often participants experienced feelings related to vitality and mental and physical health over the past 4 weeks. Normed *t*-scores were computed based on standard scoring procedures for the VR-36 that reflect the health of the U.S. population. Higher scores are indicative of better mental and physical health and functioning.

In evaluating objective 2, several variables were allowed to vary and were either tracked from baseline up until the first follow-up report of financial problems or were censored at the end of the study period (31 Aug 2021), whichever occurred first. Specifically, the following measures were considered time dependent for objective 2: spouse's marital status, employment status, currently have children, dual military status, mental and physical health, and service member's deployment status, separation status, and pay grade. Military separation was measured as ever separated prior to report of financial problems or at the end of the survey period, whichever occurred first. Person time was also included, which was calculated using the number of days between baseline and endorsement of financial problems or the end of the study period, whichever occurred first.

Analyses: To address objective 1, descriptive analyses were initially conducted estimating rates of financial instability and financial problems across the study period. Next, bivariate analyses were performed to compare demographic, family, and military characteristics by spouse report of new incidence of major financial problems and current financial instability. Preliminary analyses were conducted to assess multicollinearity (variance inflation factor cutoff >4) and proportionality of all time-dependent covariates. Potential confounders were evaluated if they changed the measures of association by more than 10%.

Objective 2 was accomplished using linear regression to cross-sectionally examine the influence of the predictors on the spouse's report of current financial instability. These analyses were weighted for non-response bias. A sensitivity analysis was performed excluding spouses who did not remain married over the study period.

For objective 3, Cox proportional hazards modeling was performed to estimate univariate and multivariable associations (adjusted for person-time and weighted for non-response bias) between each of the predictors and financial problems. An event was the first incidence of major financial problem, and a non-event was no incidence of major financial problems. This analysis was conducted with all eligible spouses, regardless of changes in marital status over the study period. However, a sensitivity analysis was performed re-estimating the model while excluding spouses who were divorced, separated, or widowed by the end of the 2019 survey cycle. Hazard models controlled for person-time measured in the number of days between the baseline survey and incidence of major financial problem or end of the study period, whichever occurred first.