



NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

MBA PROFESSIONAL PROJECT

CRAFTING A NEW CAREER DEVELOPMENT PATH BY ADDING INCREASED EMPHASIS ON OPERATIONAL TOURS FOR NAVY SUPPLY CORPS OFFICERS AT NAVAL POSTGRADUATE SCHOOL

December 2020

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REPORT DOCUMENTATION PAGE			<i>Form Approved OMB No. 0704-0188</i>
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, 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, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.			
1. AGENCY USE ONLY (Leave blank)	2. REPORT DATE December 2020	3. REPORT TYPE AND DATES COVERED MBA Professional Project	
4. TITLE AND SUBTITLE CRAFTING A NEW CAREER DEVELOPMENT PATH BY ADDING INCREASED EMPHASIS ON OPERATIONAL TOURS FOR NAVY SUPPLY CORPS OFFICERS AT NAVAL POSTGRADUATE SCHOOL			5. FUNDING NUMBERS
6. AUTHOR(S) Kathryn L. Newsom, Michael R. Park, and Michael T. Zamudio			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Naval Postgraduate School Monterey, CA 93943-5000			8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES) N/A			10. SPONSORING / MONITORING AGENCY REPORT NUMBER
11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government.			
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release. Distribution is unlimited.			12b. DISTRIBUTION CODE A
13. ABSTRACT (maximum 200 words) <p>The Navy Supply Corps Office of Personnel (OP) issued a new policy emphasizing that O-4s complete an operational assignment or overseas tour during their time serving as an O-4. This change poses a challenge to career planning by Supply Officers, the nature of which has yet to be investigated. To this end, this research aims to analyze and critically evaluate perspectives of Supply Corps officers enrolled as students at NPS on career development-related issues. An independently developed, web-based, anonymous survey was disseminated to Supply Corps officers at NPS and analyzed through the lens of expectancy theory. The survey consisted of 23 closed-ended questions gauging career development perspectives related to the detailing process, promotion opportunities, incentives, retention, professional certifications, communication, and work-life balance. Forty-one NPS students returned the completed survey to the researchers, which represented a 60.29% response rate. Survey results suggest that operational emphasis could impact retention, family planning, lack of personnel to fill critical acquisition billets, and erosion of trust in leadership. Additionally, survey results identify retention bonuses, acquisition billet guarantee, geographic preference, and expansion of the Training with Industry program as possible incentives for O-4s to complete operational tours.</p>			
14. SUBJECT TERMS Supply Officer, career development, operational commitment			15. NUMBER OF PAGES 111
			16. PRICE CODE
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT UU

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INCREASED EMPHASIS ON OPERATIONAL TOURS FOR NAVY SUPPLY
CORPS OFFICERS AT NAVAL POSTGRADUATE SCHOOL**

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Submitted in partial fulfillment of the
requirements for the degree of

MASTER OF BUSINESS ADMINISTRATION

from the

**NAVAL POSTGRADUATE SCHOOL
December 2020**

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ABSTRACT

The Navy Supply Corps Office of Personnel (OP) issued a new policy emphasizing that O-4s complete an operational assignment or overseas tour during their time serving as an O-4. This change poses a challenge to career planning by Supply Officers, the nature of which has yet to be investigated. To this end, this research aims to analyze and critically evaluate perspectives of Supply Corps officers enrolled as students at NPS on career development-related issues. An independently developed, web-based, anonymous survey was disseminated to Supply Corps officers at NPS and analyzed through the lens of expectancy theory. The survey consisted of 23 closed-ended questions gauging career development perspectives related to the detailing process, promotion opportunities, incentives, retention, professional certifications, communication, and work-life balance. Forty-one NPS students returned the completed survey to the researchers, which represented a 60.29% response rate. Survey results suggest that operational emphasis could impact retention, family planning, lack of personnel to fill critical acquisition billets, and erosion of trust in leadership. Additionally, survey results identify retention bonuses, acquisition billet guarantee, geographic preference, and expansion of the Training with Industry program as possible incentives for O-4s to complete operational tours.

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LIST OF ACRONYMS AND ABBREVIATIONS

APC	academic profile code
APM	Acquisition Corps
AQD	additional qualification designation
AWO	Aviation Warfare Officer
BFM	business and financial management
BQC	Basic Qualification Course
COCOM	Combatant Commands
CONUS	Continental United States
COVID-19	Corona Virus Disease 2019
DAWIA	Defense Acquisition Workforce Improvement Act
DHRB	department head retention bonus
DOD	Department of Defense
GSDM	Graduate School of Defense Management
HCA	Health Care Administration
HCC	Health Care Clinicians
HCS	Health Care Scientists
IRB	Institutional Review Board
IRR	Individual Ready Reserve
JPME	Joint Professional Military Education
JQO	Joint Qualified Officers
MBA	Master of Business Administration
MSC	Medical Service Corps
NAVSUP	Naval Supply Systems Command
NPC	Navy Personnel Command
NPS	Naval Postgraduate School
OCS	Officer Candidate School
OP	Office of Personnel
OR	operational research analysis and assessment
PCS	permanent change of station
PRD	projected rotation date
RL	restricted line
ROTC	Reserve Officers' Training Course
SCM	supply chain management

STA-21	Seaman to Admiral-21
SWO	Surface Warfare Officer
SYSCOM	Systems Command
TYCOM	Type Command
URL	unrestricted line officer
USNA	United States Naval Academy
USNS	United States Naval Ship

ACKNOWLEDGMENTS

We want to express our deepest gratitude to our advisor, Dr. Mitchell Friedman, and our second reader, Dr. Paul Lester. Their guidance, support, and hours of editing were invaluable in developing our completed MBA project. Additionally, we would like to extend our appreciation to the talented Supply Corps Officers at NPS that provided inspiration for and participated in our research.

Katie Newsom

I would like to thank my close group of friends in the Monterey area that were patient with me while working on this project. I would like to thank my fellow outdoor enthusiasts, Brooke and Ernie Smith, for providing positive outlets to the rigors of this program in the form of traveling and hiking. Last, I would like to thank my amazing Supply Corps mentors for the support and advice throughout my career.

Michael Park

I would first like to thank my amazing wife, Shelly, and two beautiful daughters, Emily and Anna. Their patience through this excruciating process was extraordinary as we battled through severe isolation due to COVID-19, wildfires, and homeschooling. Their resilience kept me going when I wanted to quit. I also would like to thank my thesis partners, Tyler Zamudio and Katie Newsom, for putting up with a cranky old man from the island of misfit toys.

Tyler Zamudio

I would like to extend my deepest appreciation and love to my wonderful wife, Christine, and incredible daughter, Emerald. I could not have done this without the love and support from them. My family supported me through wildfires, a world-wide pandemic, and countless hours of academic work. I would also like to thank Mike Park and Katie Newsom for their incredible academic talent that far exceeded mine. I truly could not have accomplished this incredible feat without their guidance through this challenging and dynamic process. Additionally, I would like to thank my parents, Frank and Sherry Zamudio, for raising me to never quit and always pursue my dreams.

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I. INTRODUCTION

The 36th Chief of Supply Corps, retired Rear Admiral Daniel McKinnon, Jr., described seven elements that embody what it means to serve as a Navy Supply Corps officer. In the second element, he stated that Supply officers “are naval officers who recognize that theirs is a career commitment to the support of Navy warfighters and the successful conduct of the Navy mission at sea and around the world” (McKinnon, 2020, p. 21). This quote from a former Chief of Supply Corps was initially published in 1990 and resonates today as demand increases for Supply Corps officers to commit to serving in operational capacities that support the warfighter at sea and in expeditionary domains. McKinnon (2020) also stated in the sixth element that Supply Corps officers “enjoy career paths that uniquely take them horizontally across all warfighting areas and throughout the Navy operating and support environment” (p. 21) This element highlights the need for a balanced career path that, after developing foundational knowledge, provides officers the opportunity to gain diverse experience in acquisition competencies to support the warfighter around the world.

The elements mentioned above form the foundation of what it means to be a Navy Supply Corps officer. Career balance and diversification are core to that identity. Recent career development policy changes within the Navy Supply Corps have brought about swift changes that have a direct effect on the career balance and diversification of Navy Supply Corps officers graduating from the Naval Postgraduate School (NPS). Reflection and study of this impact is crucial to aiding future policy decisions and guiding further research on this topic. We examine the strengths and weaknesses of the policy change and what impacts it has on the personal and professional lives of Navy Supply Corps students graduating from NPS.

A. PURPOSE

This research examines traditional career development models for Navy Supply Corps officers and the potential impacts on how a change in policy has impacted career development models as a result of a change in career development policy. Possible career

policy changes include the potential for additional operational and overseas tours for Supply Corps officers graduating from NPS. The goals of this research are to

- analyze the current career development path that emphasizes increased operational commitment for mid-career Navy Supply Corps officers
- explore relevant impacts that an additional operational tour will have on an officer's personal and professional life immediately after graduation from NPS
- identify driving factors behind promotion, engagement, and motivation in the form of incentives
- provide relevant insight that can be expanded into further research on the topic, which in turn might inform future career development policy regarding naval Supply officers

B. PROBLEM STATEMENT

The career development outlook for Navy Supply Corps officers is changing. The Navy Supply Corps Office of Personnel (OP) has identified shortages in mid-grade officer inventories and communicated the deficiencies to the workforce through a bulletin distributed monthly, *OP Monthly Status Report*. An edition of this publication identified inventory shortfalls for a “multitude of reasons” (Office of Supply Corps Personnel [OP], 2019b, p. 5) primarily in the lieutenant (O-3) to commander (O-5) ranks, and that detailing would commence “in accordance with Navy Personnel Command’s Priority Officer Manning Thresholds” (OP, 2019b p. 5). However, the publication continued to specifically highlight lieutenant commanders (O-4s) as bearing the responsibility to complete an operational assignment or overseas tour during their time serving as an O-4. It stated that “all O-4s have to clear the operational and outside of the continental United States (OCONUS) desk before competing for continental United States (CONUS) shore duty billets” (OP, 2019b, p. 5). Figure 1 depicts a breakdown of O-4 billet opportunities, where 147 of 429 billets, or 34% of all O-4 billets, are overseas—or sea duty billets (OP, 2019b).

FY21 LCDR Billets

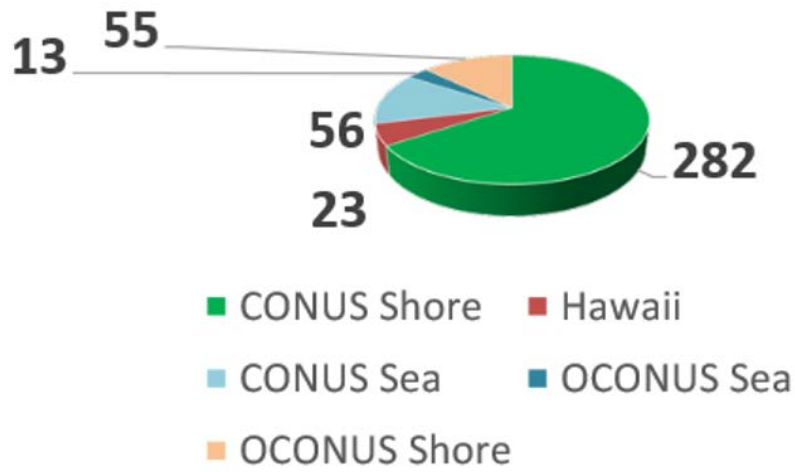


Figure 1. Fiscal Year (FY) 2021 O-4 Billet Distribution.
Source: OP (2019b).

C. RESEARCH QUESTIONS

With the purpose outlined and problem identified, we developed primary and secondary research questions to guide our exploration of Supply Corps career development.

(1) Primary Research Question

- What are the strengths and weaknesses of the current career development path that emphasizes increased operational commitment for mid-career Navy Supply Corps Officers?

(2) Supporting Research Questions

- What are the possible impacts that pertain to the policy shift between Supply Corps Community Managers and Navy Supply Corps Officers at the Naval Postgraduate School?
- What are some possible incentives that could be offered to Supply Corps officers to serve in additional operational commitments?

D. SCOPE AND METHODOLOGY

The intent of this research is to analyze and critically evaluate perspectives of Navy Supply Corps officers enrolled as students at NPS on career development related issues. Researchers conducted a literature review of Navy Supply Systems (NAVSUP) publications, promotion board documents, Supply Corps–specific career development research, and a selection of Navy career development–related research. Additionally, an independently developed survey was deployed to Supply Corps officers enrolled as students at NPS to assess attitudes on career development geared toward mid-grade officers. This study reports our findings, documents reported limits, provides recommendations, and introduces ideas for further research.

(1) Scope

This research effort encompasses the Navy Supply Corps officer career development perspectives for mid-grade officers enrolled as students at NPS, a review of Supply Corps career development documents, and relevant third-party research regarding relevant military career development issues.

(2) Methodology

We independently developed a 23-question, anonymous online survey for Supply Corps officers enrolled as students at NPS. The goal was to gauge attitudes on career development, specifically concerning the detailing process, promotion opportunities, incentives, and retention. The survey also examines the potential impacts that a policy shift in career development guidelines would have on mid-grade Supply Corps officers. Data produced from the survey were explored through the lens of expectancy theory. Additionally, a review of published Supply Corps career development documents and literature was utilized to bridge gaps in survey analysis and to make informed recommendations with respect to mid-grade Supply Corps career development.

E. SUMMARY

This chapter summarized the mission of a Supply Officer to support the warfighter and identified the purpose of the study and the problem that our research aims to address.

Research questions, scope, and methodology were outlined to frame the remainder of the project. Chapter II provides background on Supply Corps career development through a review of career development documents, OP presentations, community updates, promotion statistics. Additionally, a brief summary of career development pathways for Surface Warfare Officers (SWO) and Medical Service Corps (MSC) Officers is provided as a basis for comparison.

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II. BACKGROUND

The Navy Supply Corps has a centuries' long history of serving as the Navy's financial and logistical managers. A Supply officer begins their career after earning a commission from the United States Naval Academy (USNA), Officer Candidate School (OCS), Reserve officers' Training Course (ROTC), or Seaman to Admiral-21 (STA-21) program. Supply officers are indoctrinated into a tight-knit community when they attend the Basic Qualification Course (BQC) to receive their foundational knowledge in disbursing, shipboard services, food service logistics, and other shipboard-specific responsibilities. Additionally, officers are introduced to the less tangible aspects that a career in the Supply Corps entails, including leadership development, mentorship, educational opportunities, community values, and ethics. After receiving six months of comprehensive training, junior officers are "ready for sea" and begin to shape their careers. The selection of an officer's first tour during BQC is primarily determined by academic ranking along with personal preferences and billet availability. The path an officer's career takes after the first tour is defined by past performance, administrative boards, mentor network, career milestones, personal needs, professional needs, and updates to career policy.

After the successful completion of their first tour, a wide range of opportunities are available to junior officers. Rear Admiral David Frost once stated, "Junior officers in the Supply Corps have more responsibility, more personal accountability, and more opportunities than any other young naval officers" (Rodengen, 2015, p. 16). Officers begin to develop acquisition skills valued by the Supply Corps, earn additional qualifications, pursue advanced education, serve in shore-based billets, or return to sea duty. Supply officers are highly encouraged to develop a trusted mentor network early to gain insight into the benefits and drawbacks of career decisions, educational opportunities, achieving rank-specific milestones, and possible implications of career decisions, all of which impact promotion. As Supply officers become more senior and advance in rank, the ability to deviate from their selected career path becomes more difficult, making each career decision more crucial than the last. Officers become progressively more specialized in an area of

acquisition expertise; opportunities are less diverse, personal needs become more complicated, and promotion boards become increasingly more competitive.

A. SUPPLY CORPS COMMUNITY VALUES

The Navy Supply Corps publishes updated community values annually. These values include milestones to attain each rank and guide an officer’s career decisions as they progress to the next rank. Community values are a broad guideline for officers to follow when planning their career trajectory, but there are many paths to success. Common themes are exhibiting sustained superior performance, seeking challenging visible shore tours that build and refine experience, valuing the importance of education, obtaining joint qualifications, and acquiring operational experience (Secretary of the Navy [SECNAV], PowerPoint slides, 2020). When asked in an interview on the secret to success in the Supply Corps, Commander Scott Hoffman responded with the following:

Our community is one of the best at advertising and mentoring what the keys to success are—from Road Show briefs to OP staff engagement and to senior leader access—all are tools to help folks understand what the options are to manage individual careers. Understanding what your career goals are is the hard part as they change over time. Doing the best you can, wherever you are, is what makes the difference between success and mediocrity. (Owens, 2014, para. 12)

The statement provided by Commander Hoffman alludes to the tools available to officers through documents and presentations produced by Supply Corps OP. The following sections review career development documents and highlights of Road Show presentations.

B. IT’S YOUR CAREER PLAYBOOKS

The predominant source for Supply Corps officers to obtain career-related information is a set of six “playbooks” published by the Navy Supply Corps OP: *It’s Your Career*, *It’s Your Board*, *It’s Your Detail*, *It’s Your Education*, *It’s Your Experience*, and *It’s Your Record*. Originally published in 2011 and updated as required, these playbooks have been the gold standard for career development in the Supply Corps for nearly 10 years.

The following subsections provide a brief summary of each career playbook.

1. *It's Your Career*

It's Your Career is a guide for Supply Corps officers to shape professional growth and contains key elements also found in the other five playbooks. Most importantly for the purposes of this thesis, the Supply Corps milestone graphic will be briefly discussed. As seen in Figure 2, it identifies career achievements and provides insight into typical assignments and communities of interest. *It's Your Career* lays out natural stages of career development as officers progress throughout their career, and the complexity increase throughout each stage. No pathway guarantees promotion at any rank, but officers must continually assess risk when making career decisions to achieve prescribed milestones before promotion boards (OP, 2011a). When the Supply Corps OP published the *It's Your Career* playbook in 2011, completion of an operational tour as an O-4 was not considered a milestone assignment.

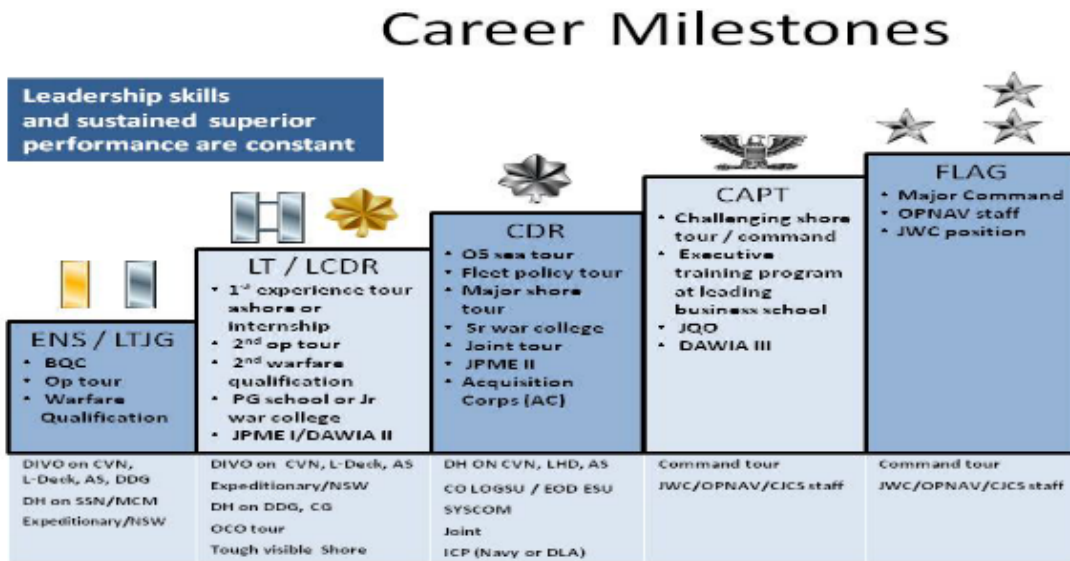


Figure 2. Supply Corps Officer Career Milestones. Source: OP (2011a).

2. *It's Your Board*

It's Your Board provides information on year groups, promotion zones, board convening dates, and other board related material. Year groups are assigned based on when an officer commissioned. Promotion zones are published late in the calendar year prior to the next promotion board and are comprised of all officers eligible for promotion based on seniority (OP, 2015). It also provides insight into the selection board process for statutory and administrative boards encountered in a Supply Corps Officer's career (OP, 2011a).

3. *It's Your Detail*

It's Your Detail provides assistance and guidance in interpreting the detailing process and procedures. Detailing, the assignment of Sailors to different commands, focuses on three important factors: personal desires, individual career development, and mission requirements, these factors are typically combined and evaluated, and referred to as the "detailing triad" (OP, 2014a).

4. *It's Your Education*

It's Your Education provides guidance on education timelines for Supply Corps Officers and the many different education opportunities available. Officers seeking advanced education must obtain an academic profile code (APC), which is an evaluation of past academic performance and is a requirement for all Supply Corps officers requesting screening for graduate education (OP, 2014b). Supply Corps officers most frequently attend one of a number of graduate degrees offered by NPS, one of *Businessweek's* top 30 Master of Business Administration (MBA) programs (810 Program), the University of Kansas petroleum management program (811 Program), or a program offered by the Naval War College.

5. *It's Your Experience*

It's Your Experience stresses that while experiences can vary within the Supply Corps, career paths typically include two sea/operational tours that must be completed prior to promotion to O-4. An assignment as a department head also is encouraged. It also defines competencies that include acquisition contracting, business and financial management

(BFM), supply chain management (SCM), operational logistics, operational research analysis and assessment (OR), and joint operations. Serving in billets coded for a competency affords officers the opportunities to obtain subspecialty codes, Defense Acquisition Workforce Improvement Act (DAWIA) certification, and the opportunity to become a part of the Acquisition Corps (APM) based on level of education and/or experience in a Supply Corps competency. “AC designation places an individual among an elite group of expert acquisition professionals who can fill specific critical acquisition professional billets at the senior officer level” (OP, 2011b).

6. *It's Your Record*

It's Your Record is a guide for Supply Corps officers to track their education and/or experience. It outlines sub-specialty codes and Additional Qualification Designations (AQD) that an officer attains after having met education and/or experience requirements (OP, 2019b).

C. OFFICE OF PERSONNEL ROAD SHOW

Every year the members of Navy Supply Corps OP staff visit areas with a concentration of Supply Corps officers. The purpose of these visits is to offer officers the opportunity to speak with the members of the detailing team regarding follow-on orders, to conduct records reviews, and to network. Additionally, a brief is presented by the Director of Supply Corps Personnel that outlines the detailing process, areas of focus, career progression, educational opportunities, and new developments within the Supply Corps as community values continue to evolve.

The following sections highlight and expand upon elements the Road Show presentation.

1. Detailing Triad

Figure 3, taken from a presentation given by the Director, Supply Corps Personnel CAPT Kerry Pearson, outlines the difference in the detailing process between those in the ranks of O-1, O-2, and O-3 and officers who are O-4, with senior skillset development becomes relevant and increases in importance in the latter group. More junior officers,

typically O-1 through O-3, participate in a straightforward detailing process. These officers rely primarily on their objective record of performance and projected rotation date (PRD) to obtain their billet of interest. In contrast, officers O-4 and senior rely on their objective record of performance, PRD, skillset acquired, professional reputation, and strategic network to compete for billets because the gaining command has decision authority. CAPT Pearson continues to identify the model known as the “detailing triad” that considers an officer’s professional needs, personal desires, and needs of the Navy (K. Pearson, PowerPoint slides, October 23, 2019). Figure 3 identifies the different forces that drive an officer’s career, evolution of experience, and the level of control a Supply officer has in the process.



Figure 3. Supply Corps Detailing Process. Source: K. Pearson (PowerPoint slides, October 23, 2019).

2. Career Focus

Figure 4 illustrates the typical career expected for Supply Corps officers in terms of skills and competencies required. This focus emphasizes fleet concentrated responsibilities for O-3 and junior and skill development for O-4 and other senior officers. Opportunities to serve in an operational assignment significantly decrease by 12% for O-4

and 11% for O-5. After postgraduate education is completed, the expectation is that skill development will produce an officer who is an expert in a competency, or lines of operation (K. Pearson, PowerPoint slides, October 23, 2019).

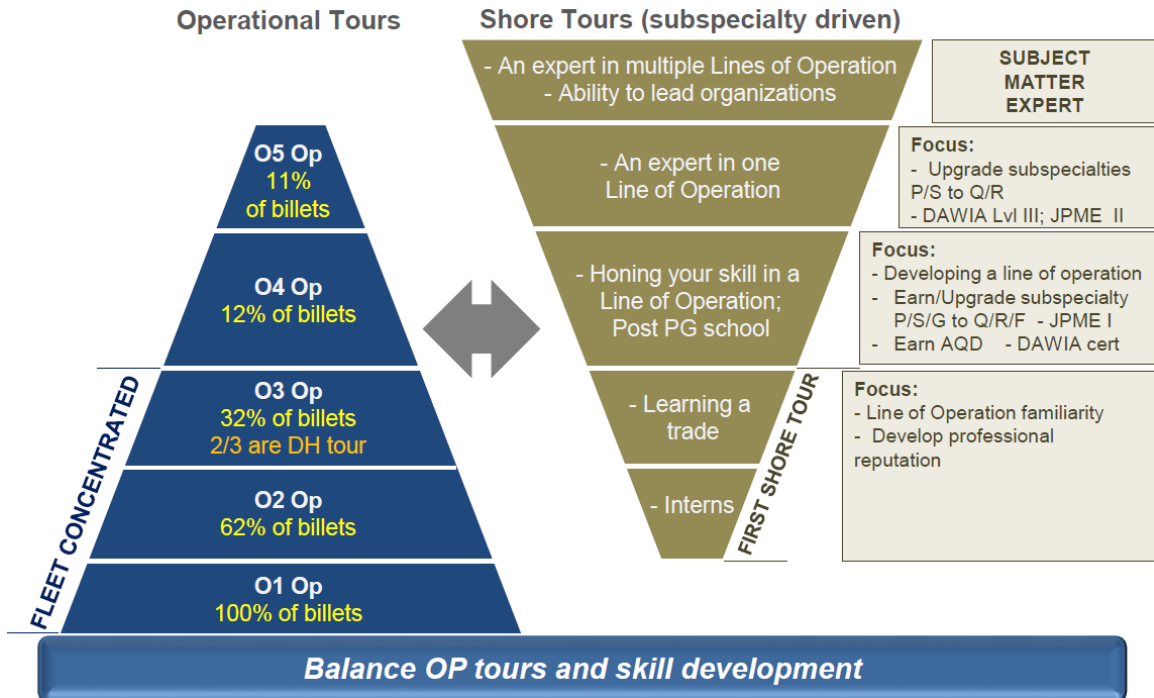


Figure 4. Supply Corps Career Focus Areas. Source: K. Pearson (PowerPoint slides, October 23, 2019).

3. Career Path

The standard career path for traditional Supply Corps officers with a 3100 designator is depicted in Figure 5 and outlines in detail the typical billets expectations and timeline for officers at each rank. It also details lines of operation (or competency) that are available for officers to obtain subspecialty, education, and experience codes as assignments become progressively more specialized (K. Pearson, PowerPoint slides, October 23, 2019). An important theme of the career development pathway in Figure 5 is the increased proficiency required of mid-grade officers compared to their junior officer counterparts. As seen in Figure 5, there are a number of decisions that an officer can make

during the course of their career with clear expectations for proficiency and timelines for expected milestones to ensure continued progression.

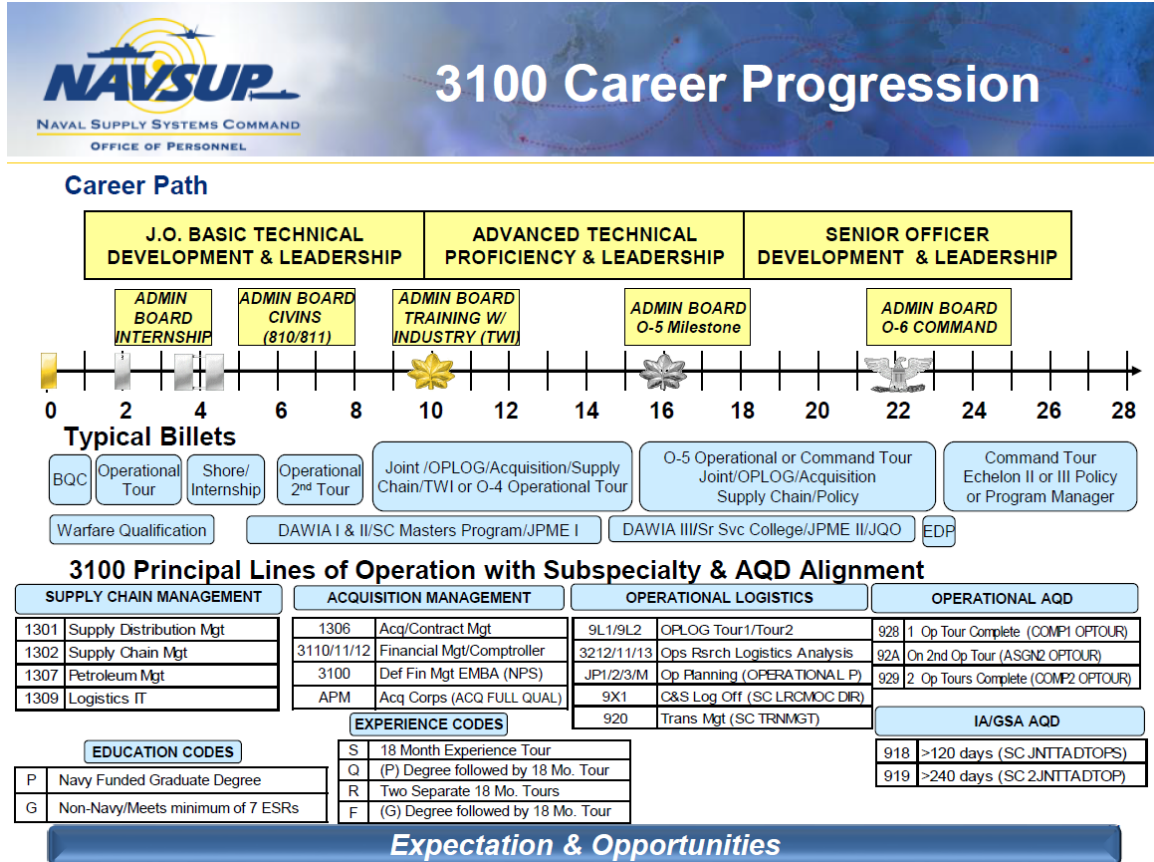


Figure 5. Supply Corps Career Progression. Source: K. Pearson (PowerPoint slides, October 23, 2019).

4. Educational Opportunities

The Supply Corps provides opportunities for officers traditionally at the ranks of O-3 and O-4 to pursue graduate education and joint professional military education (JPME). Officers typically matriculate between the eight and tenth year of commissioned service as seen in Figure 6. Civilian postgraduate educational opportunities include degrees from top 30 business school programs (810) and attaining an MBA from the University of Kansas (811) where graduates also earn a subspecialty in petroleum management. Neither of these programs integrate JPME into their curriculums. Earning a MBA at NPS provides

officers with a traditional MBA curriculum and allows them to develop a relevant Supply Corps skillset in contracting, supply chain management, financial management, information technology systems management, and operational research. In addition, students can complete JPME requirements concurrently with earning their MBA. A “payback” tour immediately following the completion of their education at NPS is expected to utilize its specialized education. Additional opportunities for officers to continue education are through junior service colleges and the highly competitive Olmstead Scholar Program (K. Pearson, PowerPoint slides, October 23, 2019).

Now that the highlights of the Road Show have been discussed, we will briefly discuss Supply Corps career development updates.

D. CAREER DEVELOPMENT UPDATES

Periodically updates to career development policy will occur. Notifications are disseminated to Supply Corps personnel through monthly bulletins, direct communication from senior leadership, and Road Shows. Recent career development policy updates are below.

1. Merit Reorder Incentive

In an effort to recruit and retain the most talented personnel, the Navy recently established a merit reorder incentive to provide officers from all communities with the opportunity to advance ahead of their peers based on superior performance for up to 15% of authorized selections. That is, a certain number of officers that have been selected for promotion will be further evaluated by board members to promote ahead of traditional timelines based on merit reorder considerations. (Assistant Secretary of the Navy [ASN], 2019). The Fiscal Year (FY) 2021 active-duty merit reorder considerations for O-4s seen in Figure 6 illustrate what must be achieved to be considered for the merit reorder incentive prior to O-5 (SECNAV, 2020). What stands out as most important (see Figure 6) include superior performance in an O-4 operational tour and being assigned duties that progress towards subspecialty development.

- **Valued achievements prior to COMMANDER**
 - Top recognized performer in tough visible tours which balance operational experience and skillset development
 - Must include superior performance in O-4 operational tour
 - Top recognized performer in at least one Supply Corps competency
 - Documented accomplishments in leadership and expertise commensurate of a Commander highly valued
 - A subspecialty in at least one Supply Corps competency
 - Completed JPME Phase I
 - Progress toward Acquisition Corps membership highly valued

Figure 6. O-4 Merit Reorder Considerations. Source: SECNAV (2020).

2. Priority Manning Threshold

To address Supply Corps inventory shortages, Supply Corps OP announced that they would be detailing officers in accordance with Navy Personnel Command (NPC) priority manning thresholds (OP, 2019b). The monthly bulletin identified eight priorities, ranked highest to lowest, are operational assignments, fleets (geo/numbered), combatant commands (COCOMs), overseas shore duty, joint staff, service school staffs, type commands (TYCOM)/systems commands (SYSCOM)/headquarter (HQ) staff, and other continental United States (CONUS) based shore duty. Lastly, the bulletin stated that each of these priorities has a respective manning target and a minimum target, with operational assignments as the only priority with a 100% manning and minimum target.

3. Priority-Based Detailing

A policy of priority-based detailing dictates that officers are only afforded the opportunity to discuss billets highlighted in green as seen in Figure 7. “Priority 1” is operational duty with a 100% fill rate. The priorities are partitioned into required fill rates based on manning posture of listed commands and does not consider the individual officer’s career needs (subspecialty development, joint experience), personal desires, or career timing (OP, 2020a). An example of priority-based detailing is displayed in Figure 7 and shows that while all billets are listed for transparency purposes, not all billets will be available unless they meet prioritization guidelines established by OP.

PRIORITY 1 100% FILL												
	PRD	UIC	BSC	BN	RANK	DESIG	COMMAND	TITLE	AQD	SUBSPEC	LOCATION	NOTES
CONUS SEA	202007	46990	00930		LCDR	3100	PRESINSURV S D	INSP TECH/QSL			NORVA	
CONUS SEA	202010	21247	31300		LCDR	3100	CVN 71 ROOSEVELT	SUP PA	LAB/BCB		SDGO	
CONUS SEA	202010	40458	40005		LCDR	3100	DEVGRU	SUP LOG DEP HEAD	93E		D NECK	
PRIORITY 1A												
OVS SHORE	202010	40335	61100		LCDR	3100	NAVSUP FLC NPLS	LOG PLAN/ADDU TO 40030/00061	JP3		NAPLES	
CONUS SHORE	202101	00060	41210		LCDR	3100	COMUSFLTFORCOM	SUP LOG/SPARES POLICY/N412	ALN/JOM	13025	NORVA	
CONUS SHORE	202101	64591	08150		LCDR	3100	US STRATCOM	LOGISTICS/LOC READINESS CELL	JD1		OMAHA	
PRIORITY 2												
DUTY TYPE	PRD	UIC	BSC	BN	RANK	DESIG	COMMAND	TITLE	AQD	SUBSPEC	LOCATION	NOTES
CONUS SHORE	202001	3290A	05010		LCDR	3100	NORTHCOM/JF-CS	LOGISTICS OFFICER	JD1		FT ELUS	
CONUS SHORE	202006	36561	00700		LCDR	3100	JPSE	LOG PLAN/SUSTAINMENT PLNR	JD1		NORVA	
CONUS SHORE	202008	4356A	04200		LCDR	3100	MSDDC 597TH TWCF	OPERATIONS OFFICER	JD1		FT ELUS	
PRIORITY 3												
DUTY TYPE	PRD	UIC	BSC	BN	RANK	DESIG	COMMAND	TITLE	AQD	SUBSPEC	LOCATION	NOTES
CONUS SHORE	202001	00161	26182		LCDR	3100	NAVAL ACAD	INST SOC SCI/ECONOMICS		3000P	ANNAP	
CONUS SHORE	202001	62271	28600		LCDR	3100	PG SCH MONTEREY	INST TECH/ RESOURCE MANAGEMENT		3100Q	MONTEREY	
CONUS SHORE	202006	3103A	00105		LCDR	3100	NAVSUP FLC ALBNY	ADP/PRJ OFF			ALBAGA	
CONUS SHORE	202006	95699	14500		LCDR	3100	DLA TROOP SUPT	STX CTL RQMT/EXEC AGT CH SUBSIS	JD1		PHLA	
CONUS SHORE	202006	57067	00590		LCDR	3100	COMINBEACHGRU 2	STF SUP			L CRK	
CONUS SHORE	202006	62741	73110		LCDR	3100	NAVSCSCOL NWPT	INST GEN/ F FLT TRNG SHRT CRS DIV HD			NEWPRT	
CONUS SHORE	202007	4365A	00660		LCDR	3100	CORIVGRU 2	SUP LOG			L CRK	
CONUS SHORE	202007	3598A	31180		LCDR	3100	CNSSC FLD NWCF	LOG PLANS/LOC FUTURE PLANS N311	JPM		MECH	

Figure 7. Priority-Based Detailing Example. Source: OP (2020a).

E. SUPPLY CORPS INVENTORY: THEN AND NOW

Supply Corps OP cites a lack of officers at the ranks of O-4 and below as a driver behind their emphasis on O-4s completing a third operational tour. That state of affairs serves as the basis for a policy of detailing officers through priority-based detailing. Priority-based detailing force-distributes officers into operational duty and other higher priority billets. Because operational and higher priority billets will be filled first, priority-based detailing potentially limits opportunities for officers to compete for billets that ensure that acquisition competencies are developed prior to promotion to O-5 (OP, 2019a).

1. Active-Duty Supply Corps Inventory, June 2017

Total authorized active-duty O-4 officers were 494 with an inventory of 480 in June 2017, as seen in Figure 8. Authorized officers less actual inventory resulted in a gross inventory of 14 officers under the authorized number of officers. Additionally, there were 11 officers not filling Supply Corps billets, filling global service assignment and individual augmentee billets, increasing the shortage to 25 under the authorized inventory (OP, 2017).

3100 Active Component

Paygrade	Authorized	Inventory	Gross Over/Under	3100s in non 3100 billets	GSA/IA Fills	Delta
O-6	164	155	-9	5	0	-14
O-5	328	315	-13	11	3	-27
O-4	494	480	-14	7	4	-25
O-3	625	804	179	8	2	169
O-2	299	291	-8	1	2	-11
O-1	247	209	-38	1	0	-39
Totals	2157	2254	97	33	11	53

** Source: Officer Personnel Information System (OPINS) data as of 30 June 2017. Online Distribution Information System (ODIS) data query. 3100 Supply Corps Fall 2016, FY-17 Officer Program Authorization.*

Figure 8. Active-Duty Inventory, June 2017. Source: OP (2017).

2. Active-Duty Supply Corps Inventory, June 2020

Total authorized active-duty O-4 officers were 495 with an inventory of 480 in June 2020, as seen in Figure 9. Authorized officers less actual inventory resulted in a gross inventory of 15 officers under the authorized number of officers. Additionally, there were 11 officers not filling Supply Corps billets, filling global service assignment and individual augmentee billets, increasing the shortage to 19 under the authorized inventory (OP, 2020b).

3100 Active Component

Paygrade	Authorized	Inventory	Gross Over/Under	3100s in non 3100 billets	GSA/IA Fills	Delta
O-6	171	167	-4	3	0	-7
O-5	339	308	-31	2	2	-35
O-4	495	480	-15	4	0	-19
O-3	675	740	65	1	1	63
O-2	287	284	-3	0	2	-5
O-1	270	188	-82	0	0	-82
Totals	2237	2167	-70	10	5	-85

** Source: Officer Personnel Information System (OPINS) data as of 30 June 20. Online Distribution Information System (ODIS) data query. 3100 Supply Corps Fall 2019, FY-20 Officer Program Authorization.*

Figure 9. Active-Duty Inventory, June 2020. Source: OP (2020a).

F. PROMOTION STATISTICS

At the time this research was conducted, no O-5 promotion board results had been released for FY2021 because of Corona Virus Disease 2019 (COVID-19) restrictions. Therefore, we relied on the last published promotion statistics released for FY2020 to quantitatively visualize breakdown for promotion to O-5. For purposes of this research, we did not break down above zone, in zone, or below zone selections as such analysis lies beyond the scope of this project. However, we will review selections versus non-selections. As seen in Figure 10, total overall promotion was 75.31% for promotion to O-5.

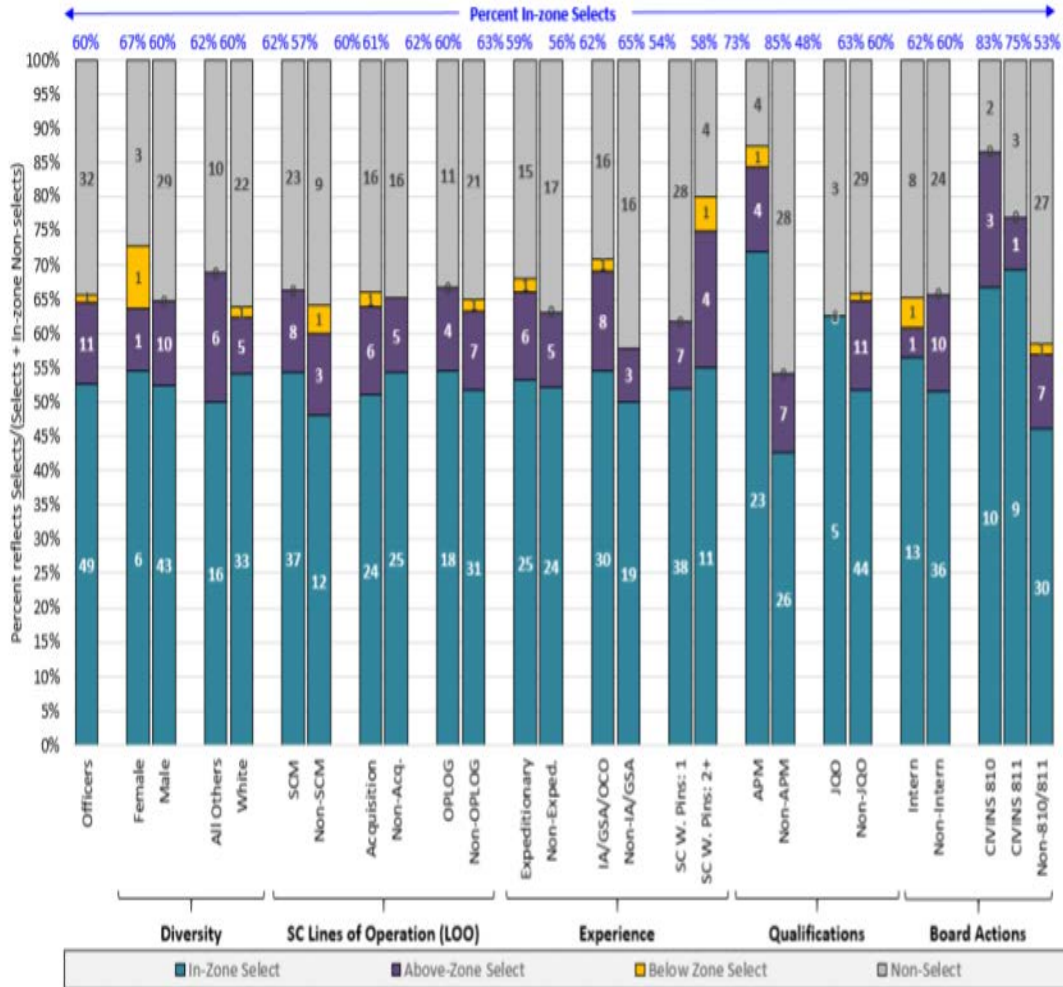
Desig	Above Zone			In Zone			Below Zone			Total	
	Elg	Sel	Pct	Elg	Sel	Pct	Elg	Sel	Pct	Sel	Pct
3100	64	11	17.19	81	49	60.49	157	1	0.64	61	75.31
Total	64	11	17.19	81	49	60.49	157	1	0.64	61	75.31

Figure 10. FY2020 Active-Duty O-5 Supply Corps Promotion Board Results.
Source: ASN (2019).

Promotion statistics are further broken down by community managers and published in an *OP Monthly* shortly following the official release of promotion statistics. A more detailed analysis of recent promotion boards highlights factors such as competency, experience, and qualifications that board members potentially value over others, and is therefore a valuable career development artifact for officers to determine probability of promotion based on their own career pathway. If a large disparity exists that differentiates categories, it may signal the value of some traits relative to others, therefore impacting an officer’s future career decisions.

Figure 11 shows that the board members valued officers that have completed civilian education (CIVINS 810/811) with a 82.1% selection rate over those who completed their education at NPS or Naval War College, or those who pursued graduate education on their own—with a 58.5% selection rate. Additionally, officers with acquisition experience, education, and certification levels to earn APM designation had a

selection rate of 87.5% compared to those who did not, and were selected at a rate of 54% (OP, 2019a).



* The SCM LOO includes SOM(1301X), SCM(1302X), Fuels (1307X), Log IT (1309X, 6201X), and LCL (ALX)

Figure 11. FY2020 Supply Corps O-5 Promotion Statistics Summary by Category. Source: OP (2019a)

As seen in Figure 12, qualifications and career field certification are also shown to be important attributes for promotion. Joint qualified officers (JQO) are officers that have served in qualifying joint service billets and have completed required JPME courses. As stated earlier, officers who have completed the required educational requirements and have served in qualifying acquisition billets will achieve APM designation. Officers in the

FY2020 O-5 active-duty Supply Corps board with APM designation were promoted at a rate of 86.2%, and those with APM and JQO designation promoted at a rate of 100%. In contrast, officers who only achieved joint qualified officer JQO designation promoted at rate of 40%, and officers with neither qualification were promoted at a rate of just 55.4%. Additionally, if an officer had achieved higher levels of career field certification, they were more likely to be selected for promotion (OP, 2019a).

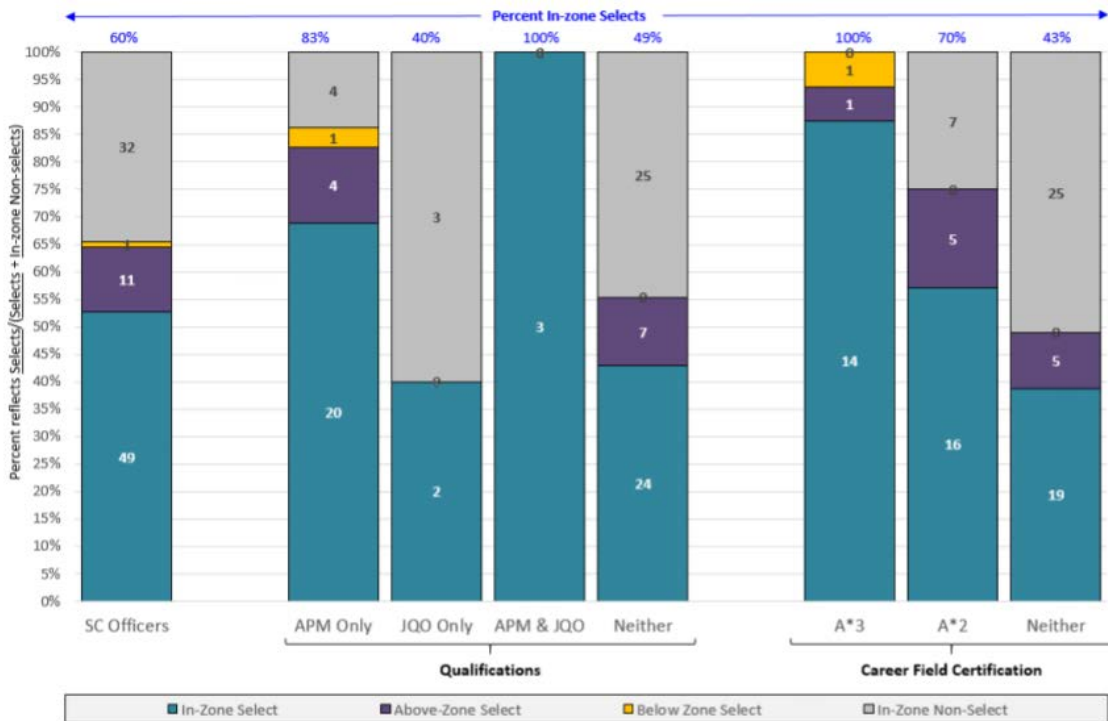


Figure 12. FY2020 Supply Corps O-5 Promotion Statistics by Qualification and Certification. Source: OP (2019a).

G. CAREER PATHWAY COMPARISON

Career paths for two other officer communities are briefly reviewed to compare them to the Supply Corps Officer experiences. First, SWOs are unrestricted line officer (URL) counterparts to Supply Corps officers. Second, MSC officers are staff officers, similar to Supply Corps Officers.

1. Surface Warfare Officers (SWO)

The Surface Warfare Community consists of naval officers that are unrestricted line (URL) officers eligible for command at sea who spend a disproportionate amount of their commitment serving aboard afloat units. SWOs work closely with Supply Corps officers in the fleet. Representing the typical career path of SWOs, Figure 13 was taken from the FY2021 SECNAV SWO community brief. Parallels can be drawn between SWO and Supply Corps officers regarding the increased competence required to be an effective mid-grade officer and the well-defined milestones and required timeline for milestones to be achieved. SWOs also follow similar career pathways through the first 10 years of commissioned service, are subject to administrative screening boards, and have specific milestones that must be achieved to continue service. Lastly, SWOs have the opportunity to attend a graduate school program several years earlier than Supply Corps officers (SECNAV, 2020).

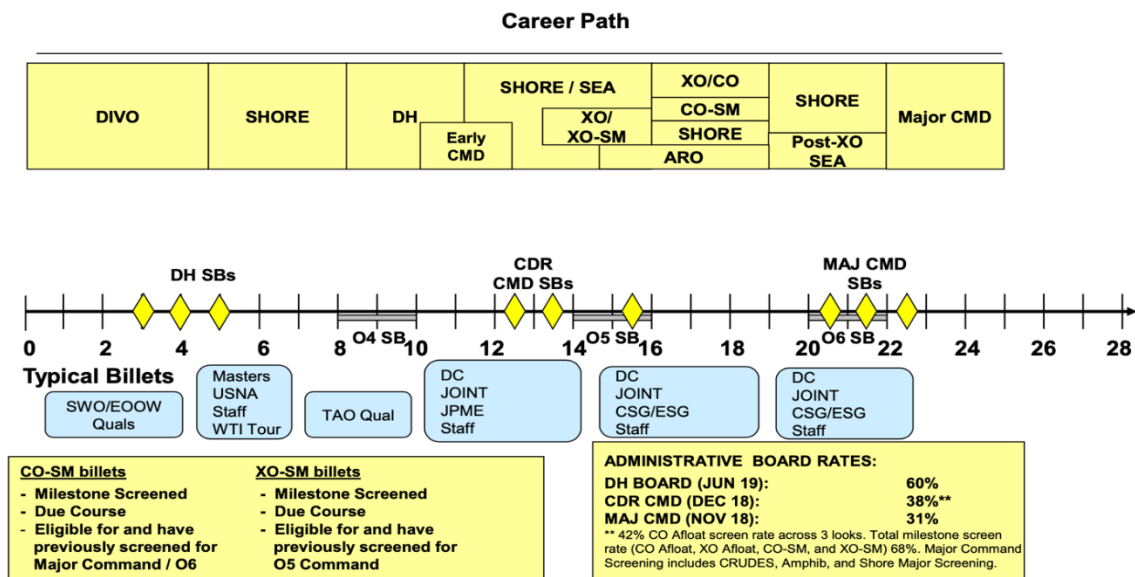


Figure 13. Surface Warfare Officer Career Path. Source: SECNAV (2020).

2. Medical Service Corps (MSC) Officers

MSC officers are designated as a staff corps community that consists of three unique specialties. They are health care administration (HCA), health care scientists (HCS), and health care clinicians (HCC). These unique career paths within the MSC allow for any officer to serve in clinical, operational, academic, research, and/or administrative roles (SECNAV, 2020).

As found in a community brief for MSC officers, Figure 14 represents the typical career path and various assignments completed at a given rank. Sharing similarities with the Supply Corps career path, MSC officers are expected to demonstrate increased competence by attaining subspecialties to be competitive for promotion, have opportunities for advanced education, are expected to achieve specific milestones, and encourages mentorship throughout their careers. However, in contrast to both Supply Corps officers and SWOs, MSC officers have more specific position titles within their career development path and serve fewer operational tours. The omission of advanced education for MSC officers is likely a result of their positions that required higher education as a requirement for commission.

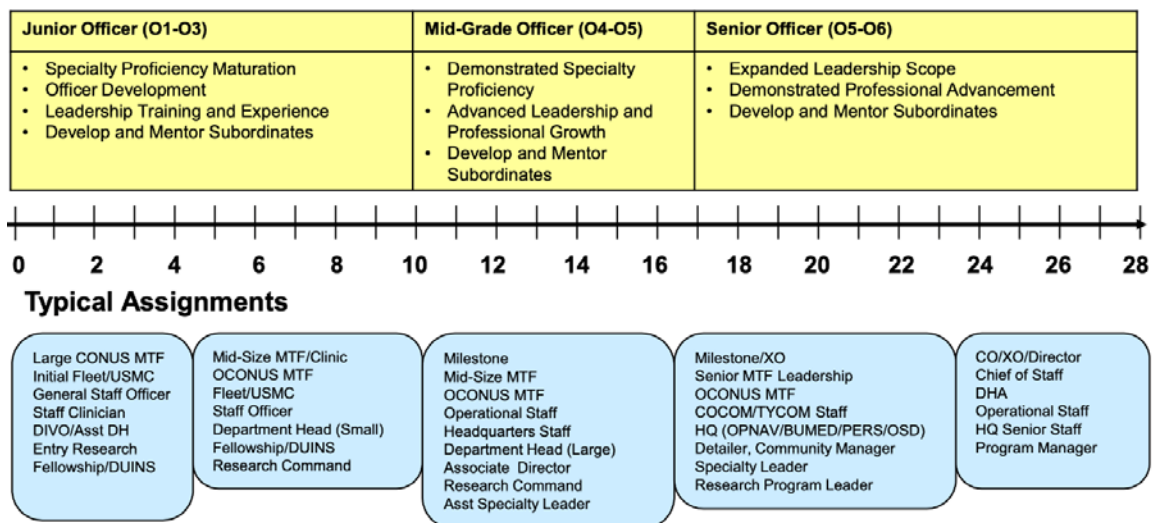


Figure 14. Medical Service Corps Career Path. Source: SECNAV (2020).

H. SUMMARY

This chapter provided a thorough overview of Supply Corps career development through a review of community values, published playbooks, presentations, and monthly publications that offer clear guidance on requirements to achieve continued success within the Supply Corps. Additionally, career development updates, officer inventory comparison, and promotion statistics were discussed. Chapter III focuses on literature that assists in defining career development, with a review of Supply Corps-specific literature on career development. Additionally, we review our theoretical framework of expectancy theory, retention in the Navy, graduate education in the Navy, and career development in other naval officer communities.

III. LITERATURE REVIEW

Navy Supply Corps OP recently restructured the career development path of Navy Supply Corps officers to reflect the overarching priorities of NPC. Additionally, mandatory screening of O-4s to serve on operational and overseas duty prior to accepting orders for CONUS duty stations was added as a requirement. To better understand the potential impact of this change, a review of literature on Supply Corps career development, expectancy theory, retention of naval officers, utilization of graduate education, naval officer career development was conducted. Lastly, our review will conclude with a brief discussion on career development, retention, and education within specific communities in the Navy. The exploration of these topics from the perspective of officer communities inside the Navy and academic research on career development provides meaningful insight related to our research questions.

Hall (1986) defined career development as “a sequence of related work experiences and activities, directed at personal and organizational goals, through which a person passes during his or her lifetime, that are partly under their control and partly under that of others” (p. 13). Hedge et al. (2006) argued that the responsibility for career development is a shared responsibility between the employee and organization and addressed career development from two perspectives. The first is an individual perspective where a person

is attempting to plan his or her career in a productive and rewarding manner. This career planning process involves becoming aware of opportunities, constraints, choices, and consequences; identifying career related goals; and engaging in work, education, and related developmental experiences aimed at attaining specific career goals. (Hedge et al., 2006, p. 341)

The second is an organizational perspective

that will effectively select and develop employees to meet future organizational needs. This organizational-level career management is an ongoing process of preparing, implementing, and monitoring career plans undertaken by the individual alone or in concert with the organization’s career systems. (Hedge et. al., 2006, p. 341)

A review of literature revealed that research specific to Supply Corps career development research is limited and antiquated. Gerhardt (1949) and Giuli (1950)

conducted survey-based research specific to Navy Supply Corps career development over 70 years ago. In a thesis that examined the alignment of Supply Corps strategic publications with career guidance, Smith (2014) argued that career guidance was weakly aligned with the mission outlined by Naval Supply Systems Command (NAVSUP). The thesis referenced a connection to the Supply Corps organization through mentor relationships as a driver for a successful career and also noted that while the current career guidance offered exceptional models that laid out milestones required to advance in rank, it did little to measure functional competency (Sturges, 2006), which enables officers to perform well in their job (Smith, 2014).

The following sections review expectancy theory and elements related to retention and graduate education that could potentially impact aspects of expectancy theory.

A. EXPECTANCY THEORY

Vroom (1964) first proposed expectancy theory as a force that influences choices. That is, people make choices based on the likelihood that the behavior will lead to favorable outcomes. In this instance, Supply Corps officers are routinely provided with career development material designed to encourage behavior that will facilitate successful careers through information readily available. This material covers keys to success, and is distributed through monthly bulletins, playbooks, newsletters, direct communication from senior leadership, strategic guidance, and the eSUPPO (House et al., 2017). Further, Supply Corps Road Show presentations provide officers with clear guidance on updates, expectations, milestones, incentives, and promotion opportunities.

Supply Corps officers are members of a community with a unique set of community values, traditions, and artifacts (DiProspero et al., 2017) that create a culture of professionals that are deeply committed to and identify as members of the Supply Corps. As Scholl (1981) suggests when discussing factors contributing to commitment on behavior, it possible that, despite lowered expectancy levels, employees may continue working with an organization based on investments made by employees, an understanding of the reciprocal relationship between employees and organizations, specialization within an organization, and the degree that an employee personally identifies with an organization.

Commitment between Supply Corps officers and the Supply Corps Community is being regularly reinforced through communication with community managers, affiliation, mentorship, and a general sense of feeling valued (Owens, 2014).

The following two subsections discuss expectancy theory, commitment as a potential mitigating force to low expectancy levels, and review of expectancy theory literature among naval officers.

1. Expectancy Theory and Commitment Integration

Scholl (1981) asserts that expectancy and commitment are the two primary forces that personnel are exposed to in organizations. A review of expectancy theory as an exchange concept explains the behavior behind decisions individuals will make within their organization, but Scholl also argues that commitment has a role in the exchange with an organization. The author states that “expectancy theory predicts that individuals will engage in behavior that they perceive as eventually leading to valued rewards” (Scholl, 1981, p. 591). Scholl (1981) outlines the three components to expectancy theory—valence, instrumentality, and expectancy—where valence is the relationship between behavior and outcomes, instrumentality is how a person feels about the connection between their performance and desired rewards, and expectancy is the perception that employee behaviors will yield specific outcomes. He offers an alternative to expectancy theory by asserting that an employees’ commitment to an organization could potentially mitigate deficiencies in expectancy. That is, if an employee has a high level of commitment to an organization, impacts of lowered expectancy levels could be reduced.

In short, Scholl (1981) concluded that a favorable exchange between employees and organizations results in high levels of expectancy. Additionally, he noted that there should be an alignment of an employee’s needs, requirements of the organization, and tangible rewards in the future. Two propositions were presented as fundamentals of stability of behavior:

Expectancy Proposition: The propensity to remain in a particular organization increases as the individuals perceived probability of continued equitable rewards associated with continued membership increases. (Scholl, 1981, p. 596)

Commitment Proposition: The propensity to retain in a particular organization increases as an individual's investment to that organization increases, the individual's debt to that organization increases, alternative opportunities become blocked through the acquisition of skills specific to that organization, and the individual's societal identity becomes tied to that organization. (Scholl, 1981, p. 596)

The expectancy and commitment propositions are independent elements but can be helpful in explaining behavior holistically when either commitment or expectancy fail. After a review of expectation theory and commitment within an organization, a 2 × 2 matrix was developed to visualize the relationship, as seen in Figure 15 (Scholl, 1981). As the author explains, high turnover would be expected for people in cell 1, people in cell 2 would stay primarily for commitment to the organization, people in cell 3 would remain with an organization for the anticipated rewards, and the people in cell 4 have a high level of organizational commitment with high anticipated rewards. It is likely that the level of attachment to an organization is indistinguishable between people in cells 2, 3, and 4 unless an event occurred to change expectations to produce a reconsideration of commitment (Scholl, 1981).

		Commitment	
		Low	High
Expectancy	Low	1	2
	High	3	4

Figure 15. Expectancy, Commitment, and Employee Membership Decisions.
Source: Scholl (1981).

2. Expectancy Theory and Naval Officers

Our search of the literature indicates that the Supply Corps population has not been studied through the lens of expectancy theory, and expectancy theory has been applied to analyze the naval officer population in a few instances. A review of literature yielded one case examining naval aviators (Mitchell & Albright, 1972) and one case featuring retirement-eligible, active-duty naval officers and retired naval officers (Parker, 1974).

Mitchell and Albright (1972) discuss declining retention rates of naval aviators utilizing the expectancy theory framework as a guide to predict job satisfaction, job effort, job performance, and retention. The authors used supervisor ratings and attitude questionnaires for 51 naval aviation officers from two squadrons and applied “expectancy, instrumentality, and path-goal theories” to test their hypotheses (Mitchell & Albright, 1972, p. 2) They concluded that

a person’s preference toward an outcome (like successful performance) depends upon the perceived probability that the effort will lead to successful performance (expectancy), his perception of the relationship (instrumentality) between successful performance and attainment of various job-related outcomes, and his differing degrees of liking and disliking these various job-related outcomes. (Mitchell & Albright, 1972, p. 2)

Two models under the expectancy theory framework were used in this study. The job satisfaction model hypothesizes that “the attraction of a work role for an individual depends on the perceived attraction of various role outcomes and the perceived instrumentality of that work role for the attainment of these various roles outcome” (Mitchell & Albright, 1972, p. 3).

The job effort model in this study was used to assess both effort and performance and hypothesizes that

a person will be motivated to work hard if he believes that his effort will lead to successful performance, that successful performance is instrumental for the attainment of various work role outcomes, and the various work role outcomes are attractive. Job performance (as distinct from effort) is theoretically dependent upon both effort and ability. (Mitchell & Albright, 1972, p. 5)

Outcomes selected for the study were broken up between two groups, intrinsic and extrinsic. Intrinsic outcomes included “feeling of self-esteem, opportunity for independent thought and action, opportunity for personal growth and development, feeling of self-fulfillment, and feeling worthwhile accomplishment” (Mitchell & Albright, 1972, p. 7). Extrinsic outcomes included “authority, prestige, security, opportunity to develop close friendships, salary, promotion, and recognition” (Mitchell & Albright, 1972, p. 7).

In short, evidence exists to support both models tested, with the job satisfaction model garnering stronger support than the job effort model as predictors for satisfaction and retention of naval aviators that were sampled. However, the study highlights potential improvements to be made on each of the models to refine predictive capabilities. Regarding the job satisfaction model, the authors discuss that, while a person may be generally satisfied with the rewards of their job, outside forces may be responsible for a lower level of overall satisfaction. They proposed expanding the outcomes measured to include less favorable elements that incorporate “punishment-type” to include “policies and regulations, extended deployments, living conditions, transfers, etc.” in order to strengthen the validity of the job satisfaction model (Mitchell & Albright, 1972, p. 19). Regarding the job effort model, it was noted that motivation may be more predictive than performance and that there was a disparity between self-ratings and ratings from superiors. The study concludes

that satisfaction and retention can be predicted very well from the job satisfaction model derived from expectancy theory. Moreover, these satisfaction and retention estimates seem to be related more strongly to intrinsic outcomes than extrinsic ones. To increase retention, we would suggest that the Navy increase the degree to which these intrinsic outcomes can be obtained. (Mitchell & Albright, 1972, p. 21)

In a report that analyzes retirement versus separation decisions of 812 retirement-eligible, active-duty and retired naval officers, Parker (1974) states that

expectancy theory of work-motivation believed by its proponents to be especially suited for understanding the choices people make in their jobs. The theory assumes hedonistic rationality—that people behave in ways which, as far as they can surmise, will maximize pleasurable occurrences and minimize unpleasant ones. (Parker, 1974, p. 2)

Parker (1974) agrees with Mitchell and Albright (1972) that intrinsic outcomes yield greater motivational power than extrinsic outcomes, while admitting that literature regarding outcomes is ambiguous. Results of the study indicate that when asked for factors affecting the decision to retire from the Navy, the most frequent response was “little or no opportunity for future promotion” (p. 92), and the second most frequent response recorded was “dissatisfaction with job or working conditions” (p. 92). The study cites their own model and summarizes research that held the notion

that when instrumentality shows little variance, expectancy will be the most useful component; when expectancy is uniformly high but instrumentality shows considerable variance, instrumentality will predominate. Finally, where expectancy is high and instrumentality is largely unknown or uncertain, valance may play an important role. (Parker, 1974, p. 147)

The following two sections focus on literature related to retention and utilization of graduate education within the Navy. Factors affecting retention and attainment of graduate education potentially influence elements of expectancy theory and therefore warrant review.

B. RETENTION OF NAVAL OFFICERS

A discussion of career development strategy as it relates to mid-grade Navy Supply Corps officers at NPS must consider two related topics: incentives offered to Naval officers and their overall impact on retention.

1. Cultural and Policy Trends

Literature discussing trends across all naval officer communities affecting retention was reviewed. It provides insight into what past research has identified as the biggest strengths and areas of concern for retention of naval officers.

Snodgrass (2014) identified trends in the Navy’s policies and cultural environment that have affected retention of naval officers. He noted the following:

- The Navy has the right number of officers in most cases but not the best officers to fill the billets.

- By only being able to fill senior officer billets from within the Navy has created a system where low performers can get rewarded for poor performance.
- The Navy remains unwilling to forgive mistakes at the senior officer level. One wrong move or perceived wrong move could kill a career.
- Independent decision-making is being taken away from senior officers. The corresponding lack of trust leads to weak officers who are incapable of handling complex strategic operations.
- The state of the U.S. economy impacts officer retention rates.
- Increases in operational tempo and time away from family negatively impact officer retention (Snodgrass, 2014).

While Snodgrass highlights relevant cultural and policy issues, further review was conducted to explore factors in retention. A retention study that evaluated the SWO and MSC communities.

Alday and Whitfield (2019) conducted a study on retention in the MSC and SWO communities. It concluded that the top three reasons for leaving the military were negative impact on the family, inadequate work-life balance, and civilian job opportunities. The top three reasons to stay were medical/dental benefits, monetary compensation/retirement, and current job satisfaction. Figures 16 and 17 provide a visual display of their findings and was taken from the 2018 OPNAV N1 Navy milestone survey (Alday & Whitfield, 2019).

Navy Community	Freq	% Indicating Impact on Family is a Strong Influencer to Leave	% Indicating Civilian Job Opportunities is a Strong Influencer to Leave	% Indicating Work-Life Balance is a Strong Influencer to Leave
DC	587	29.98	31.86	12.95
MC	1789	33.65	44.83	19.96
MSC	1531	22.21	24.89	14.50
NC	1331	26.37	24.94	20.59
SWO	2129	35.89	23.30	35.70
Overall	100	30.31	29.84	22.93
Total Observations				7,376

Figure 16. Top Three Influencers to Leave by Community. Source: Alday and Whitfield (2019).

Navy Community	Freq	% Indicating Medical/Dental Benefits is a Strong Influencer to Stay	% Indicating Monetary Compensation & Retirement is a Strong Influencer to Stay	% Indicating Current Job Satisfaction is a Strong Influencer to Stay
DC	587	62.52	47.19	48.72
MC	1789	61.43	38.01	49.13
MSC	1531	73.48	62.18	55.78
NC	1331	75.06	65.82	52.37
SWO	2129	61.16	58.76	45.33
Overall	100	66.40	54.78	49.97
Total Observations				7,367

Figure 17. Top Three Influencers to Stay by Community. Source: Alday and Whitfield (2019).

Recognizing the potential relationship between commitment and retention, we reviewed literature concerning prior enlisted officers to assess differences in retention between officers who were previously enlisted and officers with no prior enlisted experience.

Bernard (2002) looked at prior enlisted officers to determine what effect being prior enlisted had on retention rates up to the rank of O-4. His study included prior enlisted officers in the URL and restricted line (RL) communities across various commissioning sources from 1983 to 1990. As stated previously, URL officers are eligible to command at sea where RL are not. He concluded that prior enlisted URL officers are 22% more likely to stay to the rank of O-4 compared to non-prior enlisted officers. For RL officers, the percentage dropped to 5% (Bernard, 2002).

2. Monetary and Non-monetary Incentives

Due to the Navy being an all-volunteer force, it is in continuous competition with civilian employers and other military services for talent. To maintain pay and benefits comparable with the civilian sector and ensure proper retention across all its officer communities, the Navy has created a mix of monetary and nonmonetary incentives. These retention incentives vary between each officer community. Rather than cover incentives for all communities, only literature concerning retention incentives for Supply Corps officers, MSC officers and SWOs were reviewed.

a. Monetary Incentives

Despite claimed manning shortages outlined in the NAVSUP *OP Monthly* seen in Figure 18 (OP, 2020b), the Supply Corps currently does not provide any type of monetary incentive for retention. There is no literature our team could find discussing any future monetary incentive for retention in the Supply Corps.

3100 Active Component

Paygrade	Authorized	Inventory	Gross Over/Under	3100s in non 3100 billets	GSA/IA Fills	Delta
O-6	171	167	-4	3	0	-7
O-5	339	308	-31	2	2	-35
O-4	495	480	-15	4	0	-19
O-3	675	740	65	1	1	63
O-2	287	284	-3	0	2	-5
O-1	270	188	-82	0	0	-82
Totals	2237	2167	-70	10	5	-85

* Source: Officer Personnel Information System (OPINS) data as of 30 June 20. Online Distribution Information System (ODIS) data query. 3100 Supply Corps Fall 2019, FY-20 Officer Program Authorization.

Figure 18. Supply Corps Inventory, June 2020. Source: OP (2020a).

The MSC community offers monetary incentives in the form of retention bonuses and incentive pay for designated specialties. The amounts and specialties that qualify can change each fiscal year depending on the needs of the Navy. Figure 19 shows the rates by specialty for FY2019 (Department of the Navy [DON], 2018).

SPECIALTY	Amount Paid Per Year or a:				
	Fully Qualified IP Rate/Year (with and without RB)	RB 2-Year Rate	RB 3-Year Rate	RB 4-Year Rate	RB 6-Year Rate
Optometrist	\$1,200	\$5,000	\$8,000	-	-
Pharmacist	-	\$15,000	\$15,000	-	-
Physician Assistant	\$5,000	\$10,000	\$15,000	\$20,000	\$35,000
Clinical Psychologist	\$5,000	\$10,000	\$15,000	\$20,000	\$35,000
Licensed Clinical Social Worker	-	\$5,000	\$8,000	\$10,000	-

Figure 19. Incentive Pay Rates By Specialty. Source: DON (2018).

To qualify for a retention bonus, MSC officers must be below the paygrade of rear admiral, must have less than 22 years of active commissioned service, must have completed the active-duty service obligation from their commissioning program, and must have completed qualifications for the specialty (Department of the Navy [DON], 2018).

SWOs in year group 12 or below selected for department head positions by administrative boards are eligible to receive the SWO department head retention bonus (DHRB). This monetary bonus is structured so that the highest performing SWOs who get selected for department head on their first board receive the highest compensation—up to \$105,000. SWOs who fail to select on their first look and select on their second look can receive up to \$95,000. SWOs who do not select until their third look can receive up to \$75,000. DHRB participants must sign a contract to complete two back-to-back department head tours at sea to receive the full retention bonus (Department of the Navy [DON], 2016).

b. Nonmonetary Incentives

The Navy has developed three nonmonetary incentive programs to enhance retention. The first is sponsored by the secretary of the Navy (SECNAV). SECNAV Tours with Industry gives all officer communities the chance to work with civilian industry partners while remaining on active duty. The program lasts 10 to 12 months and incurs a service extension of 30 to 36 months. Selectees are placed with companies such as Apple, Space X, and Boeing to gain insight into innovative ideas and proven practices they can bring back to the Navy. For a SWO to be eligible for this program, they must already be selected for department head at sea by an administrative screening board (Office of the Secretary of the Navy, 2019).

The Supply Corps has its own Training with Industry program. O-3 and O-4 Supply Corps Officers who have completed two operational tours and completed a master's degree program are eligible. An administrative board chaired by a flag officer selects four Supply Corps officers each year. Similar to the SECNAV Tours with Industry, it places selectees with Fortune 500 companies to gain insight into innovative ideas and proven practices they can bring back to the Navy. Once the tour is completed, officers will owe a 36-month payback tour (Naval Supply Systems Command, 2017).

The Navy Career Intermission Program is available to all officers. This program allows officers with established good conduct and performance a one-time temporary pathway to the Individual Ready Reserve (IRR) to pursue their interests outside of the Navy for up to three years. Participants and their dependents maintain all health care and

commissary privileges while utilizing the program. Participants incur a 2- to 6-year payback upon return to active duty, dependent on how long they participate in the program (Office of the Chief of Naval Operations, 2018).

C. UTILIZATION OF GRADUATE EDUCATION

Graduate education is recommended for all naval officers to attain the rank of commander. Participation in a Navy-funded graduate education is not mandatory, but for most officers it is built into their career progression to afford them the opportunity to attend a graduate program full time without being tied to a competitive billet. Utilization of funded graduate education is expected by the Navy upon completion of degree requirements.

Utilization, as defined by DOD, is the assignment of officers who have received fully or partially funded graduate education to validated positions that require that education. By Navy guidelines any officer who attends graduate school full time for a period of 26 weeks or more under any partially or fully funded program is considered funded. Funded graduate education thus represents the Navy's investment and utilization is the measure of return. (Blaisdell, 1996, p. 1910)

The Navy's Officer Subspecialty System is one way in which the utilization of funded graduate education can be tracked and measured. As outlined in Volume I, Part B of the *Navy Officer Occupational Classification System (NOOCS) Manual* (DON, 2020), subspecialty codes consist of four numerals and an alphabetic suffix.

- (1) The 1st digit indicates the subspecialty Major Area:
 - (a) 1 = Staff Corps
 - (b) 2 = National Security Studies
 - (c) 3 = Resource Management and Analysis
 - (d) 4 = Applied Disciplines
 - (e) 5 = Engineering and Technology
 - (f) 6 = Operations.

- (2) The 2nd digit indicates Concentration Area.
- (3) The 3rd and 4th digits provide specificity (further specialization as required).
- (4) The suffix (5th character) indicates the level of education or experience. (DON, 2020, p. B-2)

For Navy Supply Corps officers, increased emphasis is placed on gaining education and experience in subspecialties that are labeled as the Supply Corps “core competencies.” The focus of our research will be centered on these subspecialties as nearly all Graduate School of Defense Management (GSDM) graduates from NPS receive subspecialties in those core competencies upon graduation. The core competencies as laid out in OP’s *It’s Your Record* guide are supply chain management (1302), acquisition and contract management (1306), and financial management (3111). The fifth character in the subspecialty code we focus on in this study will contain the alphabetic suffix of P, meaning a Navy-funded graduate degree, and Q, meaning a Navy-funded graduate degree followed by an experience tour of at least 18 months.

To highlight the importance of utilizing funded graduate education, DOD Directive 1322.10 lays out policy guidance requiring “officers who receive a fully- or partially-funded graduate education to serve in a validated position (which requires that education) not later than the second assignment following completion of that education (Department of Defense, 1990, p. 3).

Utilization of funded graduate education also has a direct link to promotion. The *Fiscal Year 2020 Convening Order for Navy Active-Duty O-5 Staff Corps Promotion Board* (ASN, 2019) provides additional guidance on what the board consider for when selecting Navy staff corps officers for promotion. Specifically mentioned as the number one professional competency under the skill requirements section for the Supply Corps is membership in the Acquisition Corps. The Acquisition Corps is comprised of officers who through graduate education and experience have been certified to fill critical acquisition billets in the Supply Corps core competencies. Also listed in the memo are Supply Corps community considerations. The considerations listed below showcase the importance to NPS graduates of utilizing their graduate education for future promotion to O-5:

Officers who have a master's degree, associated sub-specialty code, and/or AQD with a Supply Corps line of operation such as supply chain management, operational logistics, and acquisition (e.g., contracting or financial) management indicate an officer's potential to grasp complex business management concepts and provide analytical rigor as a senior leader and policy maker in the Supply Corps community. (ASN, 2019)

Furthermore, "officers who have successfully proven their ability to perform on a senior staff/challenging shore tour that balances skillset development and operational experience indicate a potential to succeed at the level of commander" (ASN, 2019).

D. COMMUNITY COMPARISON

A technical report exploring naval officer career development problems of Aviation Warfare Officers (AWO), SWO, and other general line officers found that there were common responses to a career development questionnaire. Similarities included a continued sense of pride and desire to continue a long-term career plan despite current issues with their careers, a feeling that their careers were satisfying, and displeasure with an assignment process that lacked consideration for individual preferences. Both SWO and AWO were concerned about promotion opportunity, lack of geographic stability, and separation from family as concerns (Wilcove et al., 1988).

The following subsections review literature specific to retention issues and advanced education within the MSC and SWO communities.

1. Medical Service Corps

According to research conducted by Finley (1993), the success of a MSC officer is largely dependent on a defined career path. At the time of the study, no clear path was outlined, and resulted in an examination of prior duty station locations and to evaluate tour quality among senior MSC officers. Finley offered that this evaluation could assist the Bureau of Medicine and Surgery with better manpower planning and could lead to better informed decisions by MSC officers when selecting tours (Finley, 1993). After assessing senior MSC officers' careers, the author offered conclusions that include:

- (1) Key tours for success were high visibility training command tours, USN clinic/hospital tours, and Sea tours.
- (2) With the exception of Sea and overseas tours, similar tours were completed by males and females fairly evenly.
- (3) A high number of Senior HCA officers have completed United States Naval Ship (USNS) hospital tours as they advance in seniority.
- (4) Training school attendance of MSC officers generally validates current training requirements and goals (Finley, 1993).

2. Surface Warfare

A simulated analysis was conducted by Amirault (1985) that outlined SWO career paths using an interactive computer model, SWOPATH. The model provided insight into certain career paths by manipulating key characteristics within a given tour such as tour length, new accessions, and number of transfers between assignments. This model was further predicted to be able to forecast a variety of results based on shifts in career development policies (Amirault, 1985). The creation of a system like this one could prove useful in identifying a variety of outcomes for officers and provide insight into their career progression and retention.

Clark (2016) assessed graduation timing for SWOs and the impact on retention. This study examined SWOs prior to completing five years of service, those between five and 10 years of service, and beyond 10 years of service. The study attempted to assess whether timing of a master's degree had any impact on promotion to lieutenant commander. The results concluded that master's degrees that were attained after the fifth year of commissioned service significantly increased the likelihood of retention. Additionally, SWOs that serve as Department Heads that earn master's degrees at any point in their career are more likely to continue service. Clark (2016) further stressed that modifying the career path as it is now would create problems with shore tour timing and could potentially result in retention problems following graduate education.

E. SUMMARY

This chapter reviewed literature that defined career development and reviewed the limited Supply Corps–specific literature on career development, retention in the Navy, utilizing graduate education in the Navy, and career development in other naval officer communities. A review was also conducted on expectancy theory as a theoretical framework and its applications in the Navy. Chapter IV presents the research approach used to evaluate results from a web-based survey through the lens of expectancy theory. Last, assumptions and limitations of the research are also discussed.

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IV. METHODOLOGY

This research aims to analyze the current Navy Supply Corps career development policy that emphasizes increased operational commitment at the paygrade of O-4. We chose to focus our research on Navy Supply Corps officers currently enrolled at NPS because of the school's high concentration of mid-career officers. That is, the population identified represents a key demographic that is directly impacted by current NAVSUP OP policy. Included in this research is an examination of the potential effects an additional operational tour would have on the potential for promotion, the achievement of professional certifications, incentives, and retention. The insight obtained from this study aims to provide opportunities for further research and provide essential data points for future career development policy decisions in the Navy Supply Corps.

A. THEORETICAL FRAMEWORK

The theoretical framework for this study was expectancy theory, a theory of motivation that argues that a tendency's way (in this instance, an employee in a workplace) to act in a specific way depends on the strength of expectation of a given outcome and its attractiveness (Robbins & Judge, 2012). As previously described, expectancy theory focuses on relationships between employee choice, effort, and outcome, expressed in three concepts: valence, instrumentality, and expectancy. More broadly, the theory helps to analyze commitment in an organization by probing desirability of workplace outcomes and whether and to what extent employees expect that their behaviors will lead to specific outcomes (Hiray, 2000).

B. RESEARCH APPROACH

Based on the limited research on Supply Corps career development and recent shifts in career policy, we have chosen to pursue a mixed methods approach that includes a combination of qualitative and quantitative methods to assist in answering primary and secondary research questions. This research will employ an inductive research approach to conceptualize the effect of a shift in career development policy on Navy Supply Corps

officers currently attending NPS. Dudovskiy (n.d) describes inductive research approach as involving a

search for pattern from observation and the development of explanations theories—for those patterns through series of hypotheses. No theories or hypotheses would apply in inductive studies at the beginning of the research and the researcher is free in terms of altering the direction for the study after the research process had commenced. It is important to stress that inductive approach does not imply disregarding theories when formulating research questions and objectives. This approach aims to generate meanings from the data set collected in order to identify patterns and relationships to build a theory; however, inductive approach does not prevent the researcher from using existing theory to formulate the research question to be explored (Dudovskiy, n.d).

An inductive research approach is appropriate for this research as it provides the flexibility to explore the collected data while offering recommendations for updates to existing Supply Corps career guidance geared toward mid-grade officers. We aim to evaluate relationships between survey results to aspects of expectancy theory. This focus, in addition to a review of literature and Supply Corps career development documents, will assist us in drawing conclusions regarding the perceptions of the population primarily affected by the current shift in Supply Corps officer career development policy. These conceptualized ideas will form the basis for subsequent analysis of the current career development policy.

C. DATA SOURCES AND COMPILATION

To gather substantial relevant data, the researchers constructed an online survey (via Lime Survey) exclusively for current Navy Supply Corps officers enrolled at NPS. The survey included 23 closed-ended questions gauging career development perspectives related to the detailing process, promotion opportunities, incentives, retention, professional certifications, communication, and work-life balance. Twenty-one questions asked respondents to rate their level of agreement or disagreement with a statement using a five-point Likert Scale. Sixty-eight Supply Corps officers were identified as potential respondents through email distribution lists obtained from NPS Program Officers and the Secretary of the Navy Supply Corps Foundation in Monterey. Potential survey respondents

were emailed the survey through their NPS email accounts. All were advised that the survey was voluntary, anonymous, and had a nominal estimated completion time of 10 to 20 minutes. Cookies were applied to the survey to prevent repeat survey submissions and preserve the integrity of the data. The survey was opened on July 13, 2020 and closed on July 27, 2020. No compensation was provided for survey respondents. The NPS Institutional Review Board (IRB) reviewed a human subjects research protocol and deemed it exempt from obtaining informed consent, recruitment script approval, scientific review, and continuing review.

Forty-one NPS students returned the completed survey to the researchers, which yielded a 60.29% participation rate. The raw data from Lime Survey was extracted and imported to Microsoft Excel for further analysis. Questions using the Likert scale were broken down using the qualitative ordinal data and are also displayed as quantitative results by frequency and percentage reflecting respondents' level of agreement or disagreement with the statement in the survey. Bar charts and descriptive statistics were developed and calculated within Excel to represent the Likert scale level of disagreement or agreement. Data from each response utilizing the Likert scale was coded from 1 to 5 in Excel. "Strong disagree" is represented by 1, "disagree" represented by 2, "neutral" represented by 3, "agree" represented by 4, and "strongly agree" represented by 5. Median and mode are used to measure of central tendency for ordinal data collected. A composite ranking was also developed to break down one survey question that had respondents rank alternative vice using the Likert scale. Due to the survey's sensitive nature, interviews, focus groups, and demographic information were explicitly excluded from the research design to protect the anonymity of respondents.

Because expectancy theory will be the framework used to explore the results of the survey, responses to survey questions were analyzed for their relevance to expectancy, instrumentality, and valance (positive and negative). At the conclusion of individual analysis, we evaluated the responses holistically for patterns related to elements of expectancy theory.

D. SURVEY QUESTIONS

The following 23 questions constituted the web-based survey disseminated to Supply Corps officers attending NPS. Participants were encouraged to participate, but were reminded during recruitment that the survey was voluntary and anonymous.

1. Rank the order of importance of the following experience attributes for promotion to O5 (Highest to Lowest, 1–7)

	Rank
O-4 Operational Tour, Large Afloat	
O-4 Operational Tour, Expeditionary	
Overseas Experience	
Advanced Education (JPME, Professional Certifications, etc.)	
Joint Qualification Opportunities	
APM	
Training With Industry	

2. The Supply Corps career path encourages Officers in the community to develop competencies that parallel the skills of their civilian counterparts.
3. O-4 operational billets are considered valued and highly competitive.
4. Serving in an operational billet as a O-4 will make a Supply Officer more competitive for promotion.
5. The Supply Corps’ Office of Personnel is concerned about detailing officers to professionally rewarding billets.
6. Supply Corps detailing is a fair and transparent process.
7. Being “Ready for Sea” is just as important as developing a competency within the Supply Corps.
8. The prospect of merit reorder is an important factor when making the decision to serve in an operational billet following NPS.

9. Educational opportunities offered by the Supply Corps are a motivation to stay in the Navy.
10. Supply Officers with a strong mentorship network receive preference for acquisition coded billets vice operational tours.
11. The prospect of developing a strong mentor network during a O-4 operational tour will motivate Officers to actively pursue operational opportunities after graduating from NPS.
12. The Supply Corps' Office of Personnel practice robust and consistent communication with Supply Corps Officers at NPS regarding career advancement, progression, and development.
13. Senior leadership in the Supply Corps have adequately communicated the importance and rationale behind updating career path objectives for O-4s to complete operational tours.
14. Supply Corps "roadshows" held by Navy Office of Personnel are effective in promoting the understanding of the career development process and community values.
15. The "OP Monthly" published by Supply Corps' Office of Personnel provides valuable and relevant information on career development.
16. The Supply Corps values the Officers within their community.
17. An increased emphasis on Supply Corps Officers going back to sea as O-4s will have an impact on family planning (marriage, children, etc.).
18. A Supply Corps career path that includes an increased emphasis on O-4 operational tours is appealing.
19. A Supply Corps career path that includes an increased emphasis on O-4 operational tours will have an adverse impact on retention.
20. A spouse's career aspirations considerably limit options available to Supply Corps Officers when making career decisions.

21. Volunteering for a O-4 operational tour following NPS would be incentivized if guaranteed an acquisition coded billet after completing the operational tour.
22. Adding the importance of an operational tour as a O-4 into promotion board precepts will motivate Supply Corps Officers to actively pursue operational opportunities.
23. What incentive can the Navy offer Supply Corps Officers that would effectively attract and retain the best talent to serve operationally at the O-4 paygrade? “Out of the box” answers are encouraged and accepted if adequate incentive is not listed.

	Merit Reorder
	Retention Bonus
	Acquisition Billet Guarantee
	Granting Location Preference
	Other (please specify):

E. ASSUMPTIONS AND LIMITATIONS

1. Promotion Is Valued

The study targeted a population of mid-grade Supply officers with significant time investment in the Supply Corps. We made assumptions that promotion and career advancement were valued by survey respondents. Promotion is required to advance in rank, and ultimately earn a military retirement with a pension and benefits.

2. Comprehensiveness

We made several assumptions to collect and evaluate data using various methods and calculated metrics. As a result, this study and the collected data is by no means fully comprehensive, but results can be generalized based on calculated confidence levels and margin of error levels. There are currently 1,220 Supply Corps officers serving at O-3 and O-4 ranks, 480 officers are O-4, and 740 are O-3. (OP, 2020b). There is no published metric

on the commissioned service on the total inventory of O-3 and O-4. The primary population affected by current shifts in career development policy are Supply Corps officers with 7–10 years of commissioned service, the primary demographic of Supply Corps officers at NPS.

3. COVID-19

A significant limitation was that the survey was administered during the COVID-19 world-wide pandemic and had a potential impact on our survey response rate. Newly reported students had to be added manually to the roster as participants because they transferred under permanent change of station (PCS) restrictions set forth by the Department of Defense (DOD). Data collection from the survey was completely online, anonymous, and no physical contact was available during recruitment. Our sample size selection was chosen to provide useful and meaningful data and was allowed relative ease of information collection in a highly restricted environment. The population was limited to Navy Supply Corps officers currently attending NPS. We determined the ideal sample size given population, confidence levels (significance), and margin of error desired.

4. Honesty and Cognitive Bias

The survey conducted was administered under the assumption that all participants were truthful in their responses. Participants were informed that the data collection would be collected anonymously without fear of ramifications and that their responses would not correspond to any individual. The selected 23 questions were identified as a limitation in our research and may have been a product of confirmation bias. As part of the first cohort of Supply Corps officers at NPS negotiating orders under new business rules, we have been directly impacted by the changes in career development policy. While we made every effort to ensure that the questions were unbiased, we cannot guarantee that confirmation bias was not present in the survey published.

5. Survey Design

The Supply Corps' career development policy has not experienced significant changes in timelines or expectations in nearly a decade. Further, there have been limited

surveys administered to the Supply Corps Community regarding career progression and development. We could not find surveys directly related to Navy Supply Corps career development or those relevant to research questions published within the last 70 years. The authors of this research relied on their combined experience to develop survey questions to address specific research questions. Therefore, the survey questions have not undergone traditional academic validation.

6. Survey Fatigue

Requests to participate in research inundate student's email accounts at NPS. Therefore, a limitation of this study is the reluctance for students to participate because there is significant competition for student's time. Students are constantly getting requests for research, including school surveys on distance learning, online general military training, and online coursework. We deliberately designed the survey to be straightforward and require a minimal time commitment from respondents. Lastly, we executed our recruitment strategy through an initial email and one follow-up email to limit fatigue impacts.

F. SUMMARY

This chapter provided a detailed look behind the methodology of our research. It explored the selection of expectancy theory as our framework and the use of a mixed research approach using qualitative and quantitative analysis. A description of our survey was discussed as were assumptions and limitations with our research. Chapter V will focus on analysis of the survey data through the lens of the expectancy theory.

V. ANALYSIS

In this chapter, we will provide and interpret the data we collected from our web-based survey that was disseminated to Supply Corps officers enrolled at NPS. Our research on Supply Corps career development is intended to gauge the perspectives of mid-grade Supply officers through the lens of expectancy theory.

A. INTRODUCTION

To provide an informed analysis of our survey data we first broke down the tenets of expectancy theory in relation to our research. A visual interpretation of the expectancy theory was developed to serve as a guideline for our analysis. Figure 20 is representative of the type of analysis used to break down the data derived from our 23 survey questions. Questions were interpreted and measured based on their impact to expectancy, instrumentality, and valence.

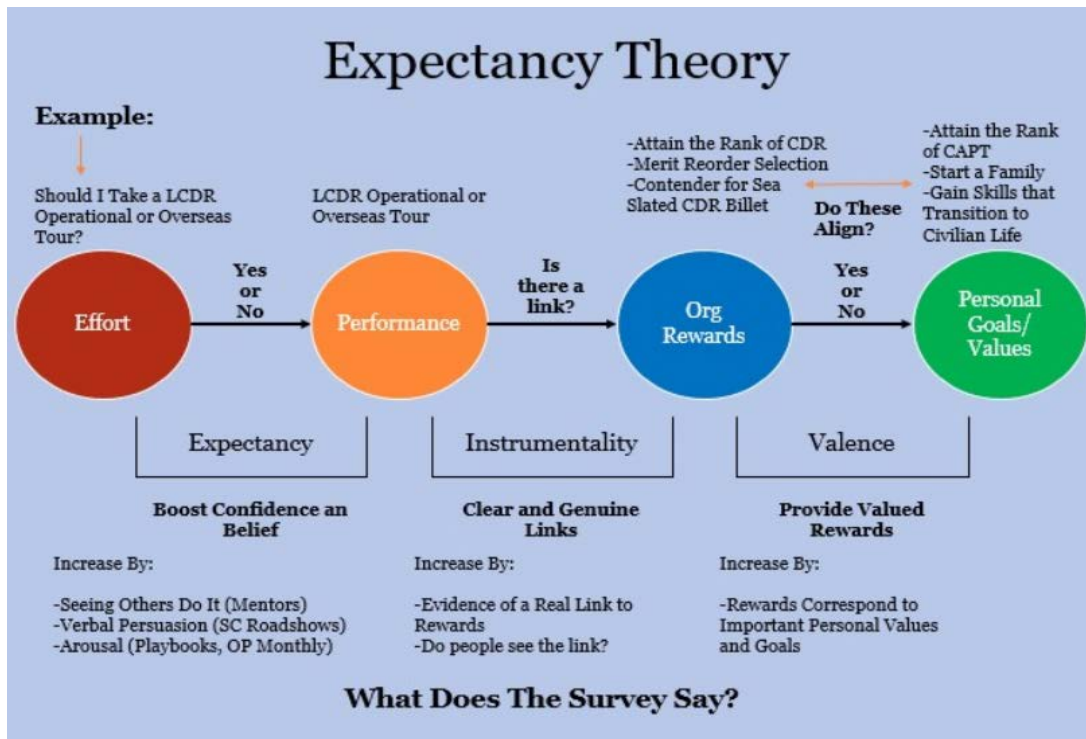


Figure 20. Supply Corps Expectancy Theory

Expectancy is driven by the confidence and belief that performing an action is worth the effort. Mentors in the Supply Corps provide the critical link for junior officers to have confidence that specific career decisions have resulted in successful outcomes in the past. Verbal persuasion is another tool used by the community in Supply Corps Road Shows. The briefs given at the Road Shows reinforce community values and belief in the career development process. Career playbooks and OP Monthly are the final pieces in the expectancy equation. These electronic documents invoke arousal within the community to adhere to the guidance published within them.

Instrumentality is increased when Navy Supply Corps Officers are able to identify clear and genuine links to organizational rewards. Formal policy guidance and promotion statistics are good examples of those links. They provide guidance backed up by hard evidence that the rewards promised are received or will be received in the future. Transparency is a pillar of the Supply Corps community and often touted as one of its greatest strengths.

Increasing valence requires alignment of the organizational reward with the individual Supply Corps officer's personal values and goals. NPS students in our survey provided insightful responses that allowed us to identify multiple instances of positive and negative valence.

B. WEB-BASED SURVEY ANALYSIS

Forty-one Supply officers responded to the web-based survey and each responded to all survey questions. Demographics and any identifying information were intentionally excluded from the survey to promote anonymity and increase participation. For 21 of 23 questions, the Likert scale was used to assess level of agreement or disagreement. Median and mode were determined to be the most appropriate measurements of central tendency of the ordinal data collected. Results for questions 2 through 23 are displayed graphically with bar charts that include raw data, providing a frequency distribution of responses. Each question will be individually analyzed for relationship to expectancy theory and are provided below.

The first question asked participants to rank the level of importance each experience or education element would have on promotion to O-5. As a closed-ended question, responses were limited to the following options: APM, operational large afloat, expeditionary tour, advanced education, overseas experience, joint qualifications, and training with industry. As seen in Figure 21, a composite ranking was developed to capture the rankings from the survey. The percentages correlate to the responses that each attribute received for their respective ranking. APM was ranked first overall by 36.59% of respondents, advanced education was ranked second by 39.02% of respondents, large afloat operational tour ranked third with 26.83%, expeditionary operational tour ranked fourth with 31.71%, overseas experience ranked fifth with 29.27%, joint qualification opportunities ranked sixth with 21.95%, and training with industry ranked seventh with 60.98%. Responses to this question are especially relevant regarding instrumentality because it indicates what career element officers believe they can do to achieve the desired result of promotion to O-5. Obtaining the APM designation and achieving advanced education were perceived to be more important than either operational tours or overseas experience when approaching promotion to O-5. This sentiment likely reflects the historical promotional statistics that placed value on competency development and advanced education. Additionally, results from this question raise concern over the perceived value of completing an operational tour as an O-4.

Composite Ranking			
Rank	Experience/Education	Count	Percentage
1	APM	15	36.59%
2	Advanced Education (JPME, Professional Certifications, etc.)	16	39.02%
3	LCDR Operational Tour, Large Afloat	11	26.83%
4	LCDR Operational Tour, Expeditionary	13	31.71%
5	Overseas Experience	12	29.27%
6	Joint Qualification Opportunities	9	21.95%
7	Training With Industry	25	60.98%

Figure 21. Web-Based Survey Question 1 Results

Question 2, as seen in Figure 22, asked whether the Supply Corps career path encourages competency development that aligns with skills of civilian counterparts. A median of 3 and mode of 4 show that there was a split between agreement and disagreement. Mixed results could be indicative of difference in personal experience or lack of experience with civilians in respondents' career paths. Some respondents may have already acquired acquisition experience and therefore have a better understanding of the link between competency development and successful performance required at the O-5 level.

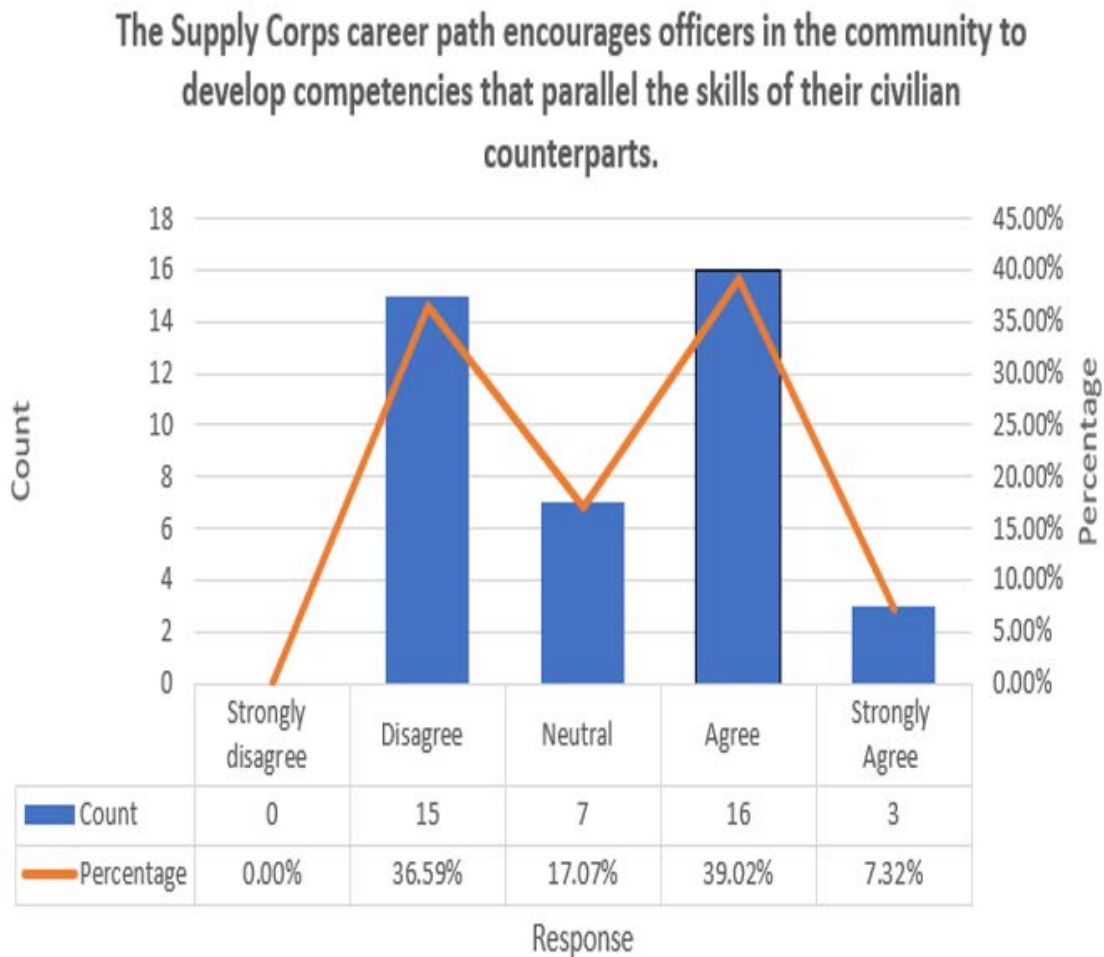


Figure 22. Web-Based Survey Question 2 Results

Question 3, seen in Figure 23, was designed to gauge the desirability and value of operational tours completed as an O-4. A bimodal finding of 1 and 2 and a median of 2, signify that there was a strong level of disagreement, with 58.54% of participants selecting *strongly disagree* or *disagree*. A strong level of disagreement in this metric suggests low levels of expectancy because there is lack of confidence that completing an O-4 operational tour will have impact any greater than any other non-operational tour on positive outcomes.

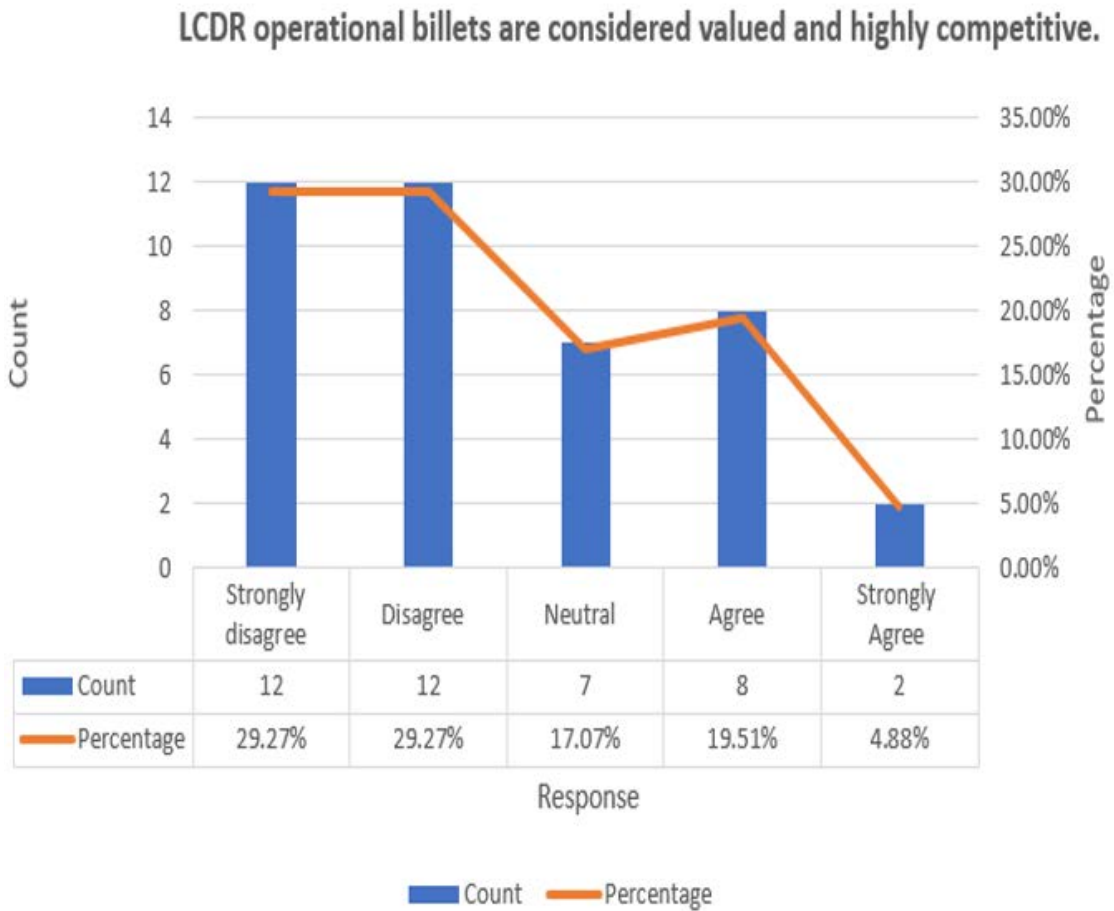


Figure 23. Web-Based Survey Question 3 Results

Question 4, seen in Figure 24, asked participants if they felt that serving in an operational tour as an O-4 would make officers more competitive for promotion. Median and mode were both calculated at 2 or *disagree*. 51.22% answered either *strongly disagree* or *disagree* while only 26.83% either *agreed* or *strongly agreed*. A strong level of disagreement suggests that Supply Officers at NPS do not see a clear link, or instrumentality, between serving in an operational tour and promotion to O-5.

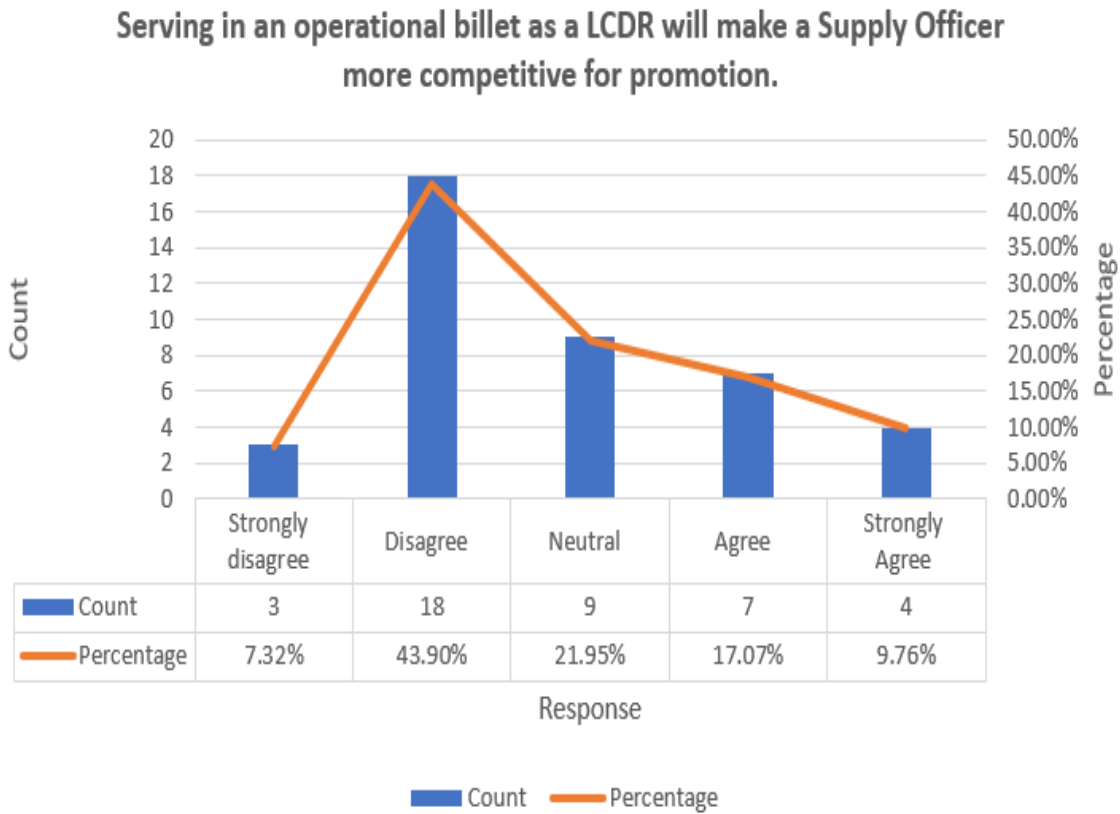


Figure 24. Web-Based Survey Question 4 Results

Question 5, seen in Figure 25, asked participants whether they felt that Supply Corps OP is concerned about detailing officers to professionally rewarding billets. With a median of 3 and a mode of 4, results to this question were mixed, but showed slight favorability toward agree. 43.91% of respondents indicated either *agree* or *strongly agree*, while 34.15% selected *disagree* or *strongly disagree*. This metric suggests that there is a disconnect between what billets officers believe are professionally rewarding and what billets are actually available and offered to them by Supply Corps OP. Lack of confidence in OP contribute to low expectancy among respondents.

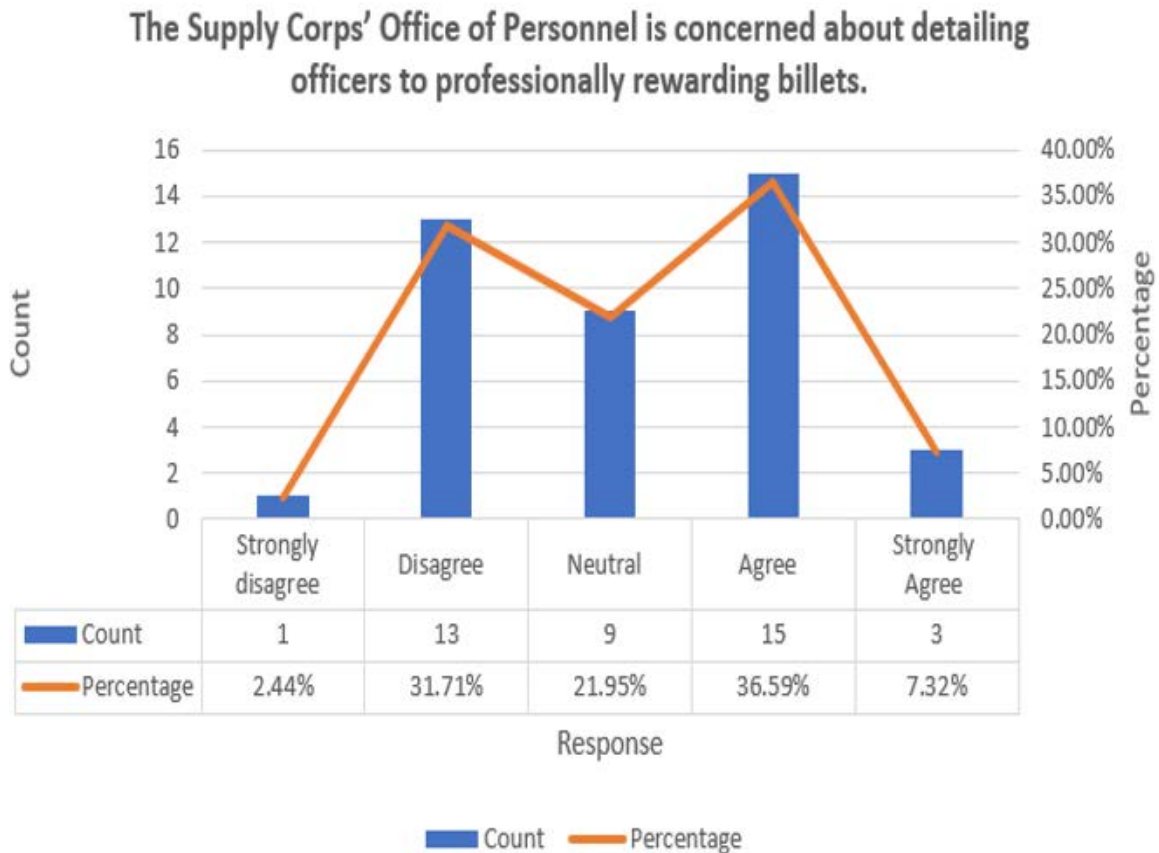


Figure 25. Web-Based Survey Question 5 Results

Question 6, seen in Figure 26, gauged participants' attitudes on the fairness and transparency of Supply Corps detailing. Median and mode are both equal to 2, indicating disagreement that Supply Corps detailing is fair and transparent. 65.86% responded either *disagree* or *strongly disagree* while only 12.2% selected *agree* or *strongly agree*. Similar to question 5, lack of confidence in the detailing process between respondents and OP contributes to low expectancy.

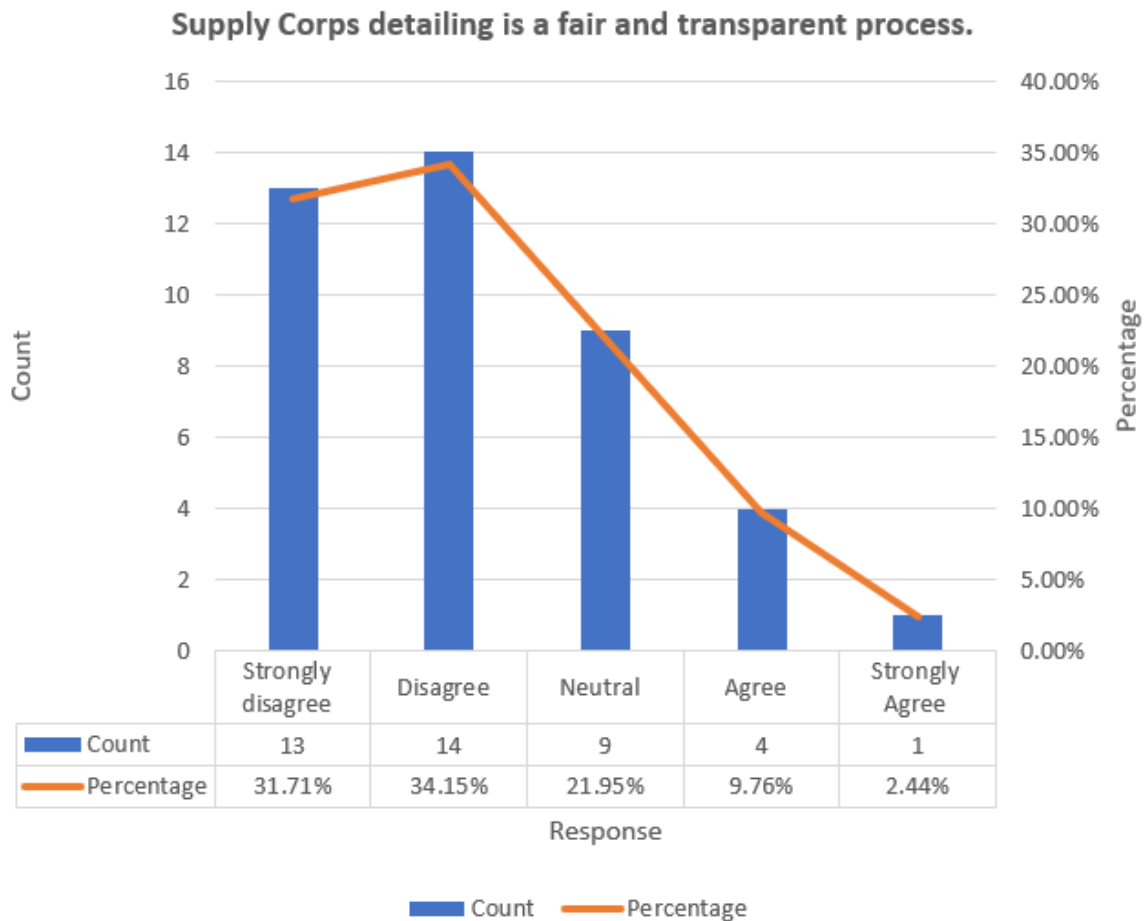


Figure 26. Web-Based Survey Question 6 Results

Question 7, seen in Figure 27, asked participants if being “Ready for Sea” is as important as developing a competency within the Supply Corps. Results were mixed, with a median of 3 and a mode of 4. The results are close to being bimodal between *disagree* and *agree*. 46.35% participants selected *agree* or *strongly agree* while 43.91% selected *disagree* or *strongly disagree*. Similar to question 2, results are mixed regarding the instrumentality of developing a competency with the Supply Corps and achieving desirable outcomes.

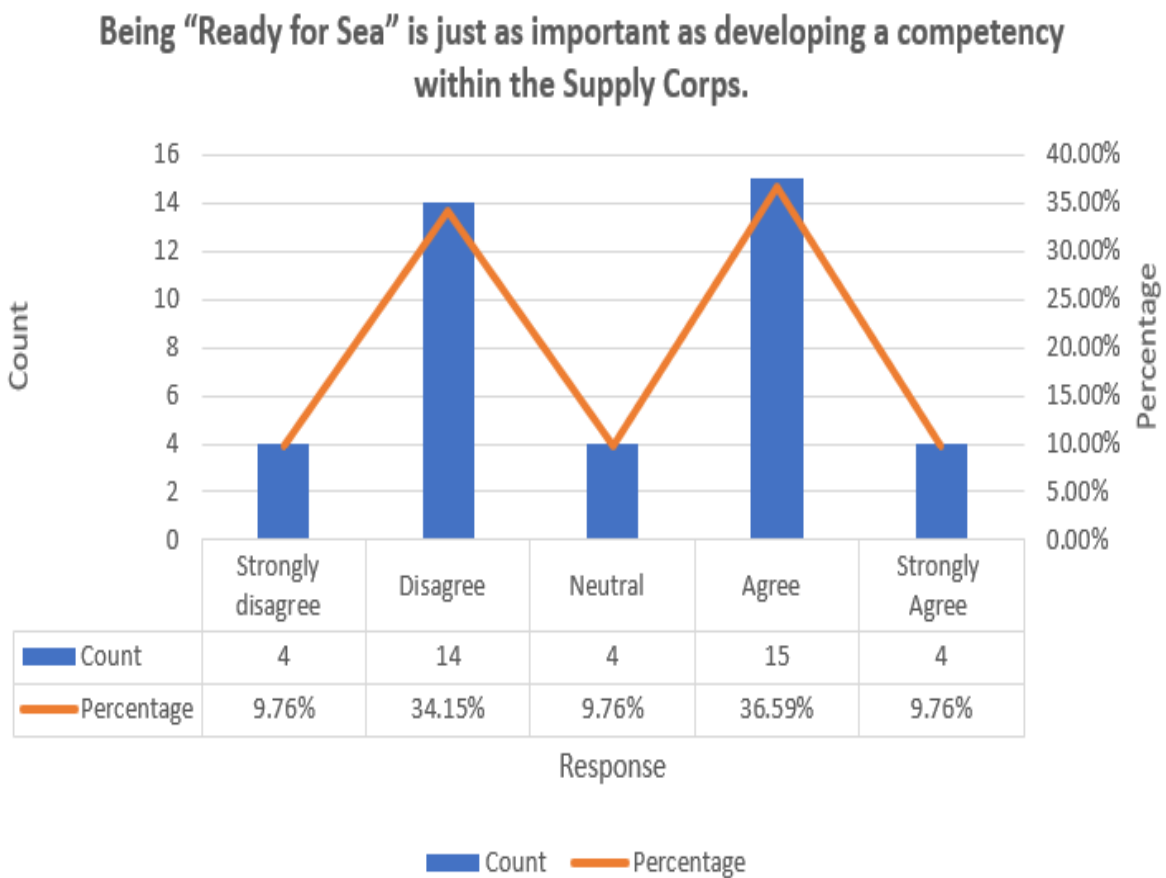


Figure 27. Web-Based Survey Question 7 Results

Question 8, seen in Figure 28, asked participants whether the prospect of a merit reorder incentive would be an important factor when making the decision to serve in an operational tour after graduating from NPS. Median and mode both equal 2, indicating disagreement that merit reorder would be an adequate incentive to serve in an O-4 operational tour. 53.66% selected *disagree* or *strongly disagree* and 21.95% selected *agree* or *strongly agree*. A negative valance would be indicated in this metric because respondents do not recognize merit reorder as a valued reward. This suggests a disconnect between published Supply Corps career development guidance that advertises merit reorder a valued reward for completing an O-4 operational tour. It is possible that Supply Community Managers have miscalculated what Supply Corps Officers value, resulting in potential motivation implications.

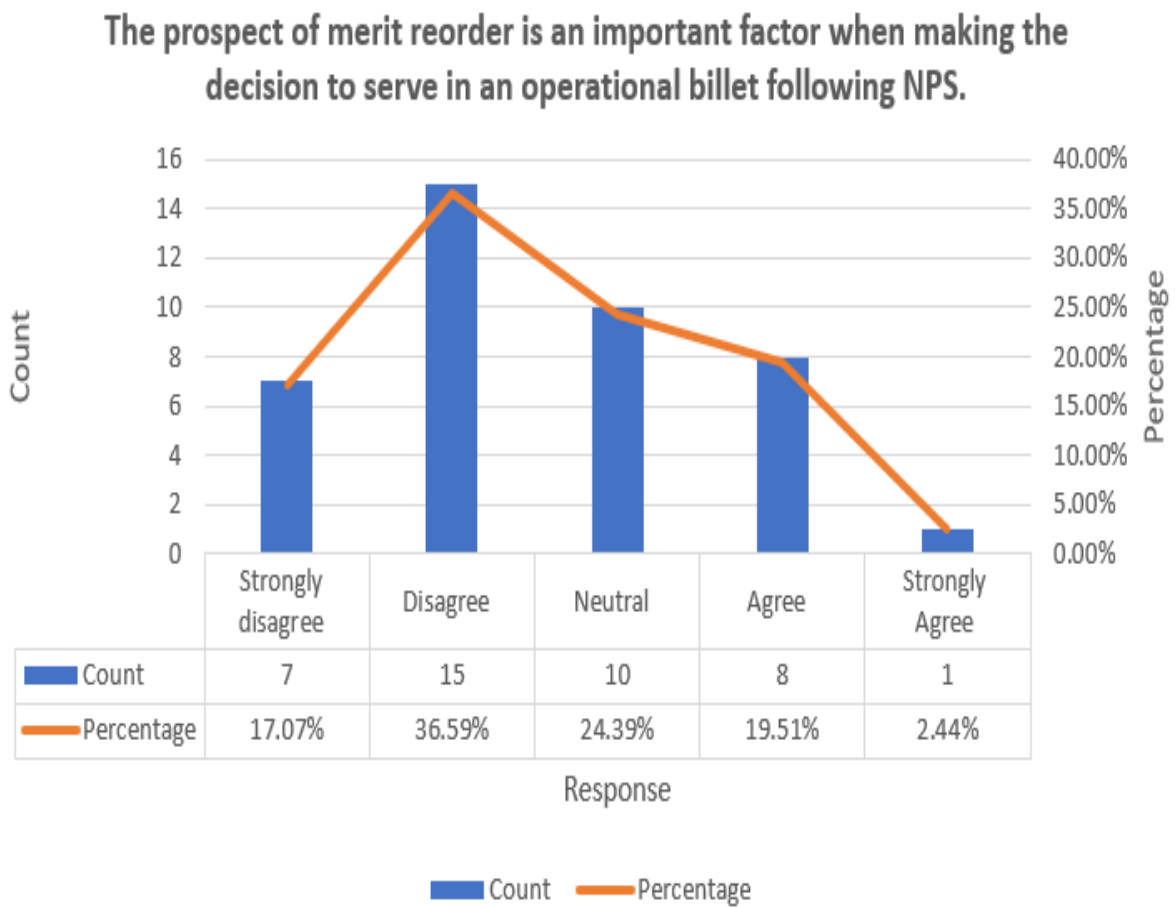


Figure 28. Web-Based Survey Question 8 Results

Question 9, seen in Figure 29, asked participants if educational opportunities offered by the Supply Corps are a motivation to stay in the Navy. Median and mode both equal 4, indicating agreement that educational opportunities are a factor in retention. 82.93% selected *agree* or *strongly agree* while only 12.2% selected *disagree*. A strong level of agreement in this metric represents that a positive valence is suggested for educational opportunities for respondents of the survey.

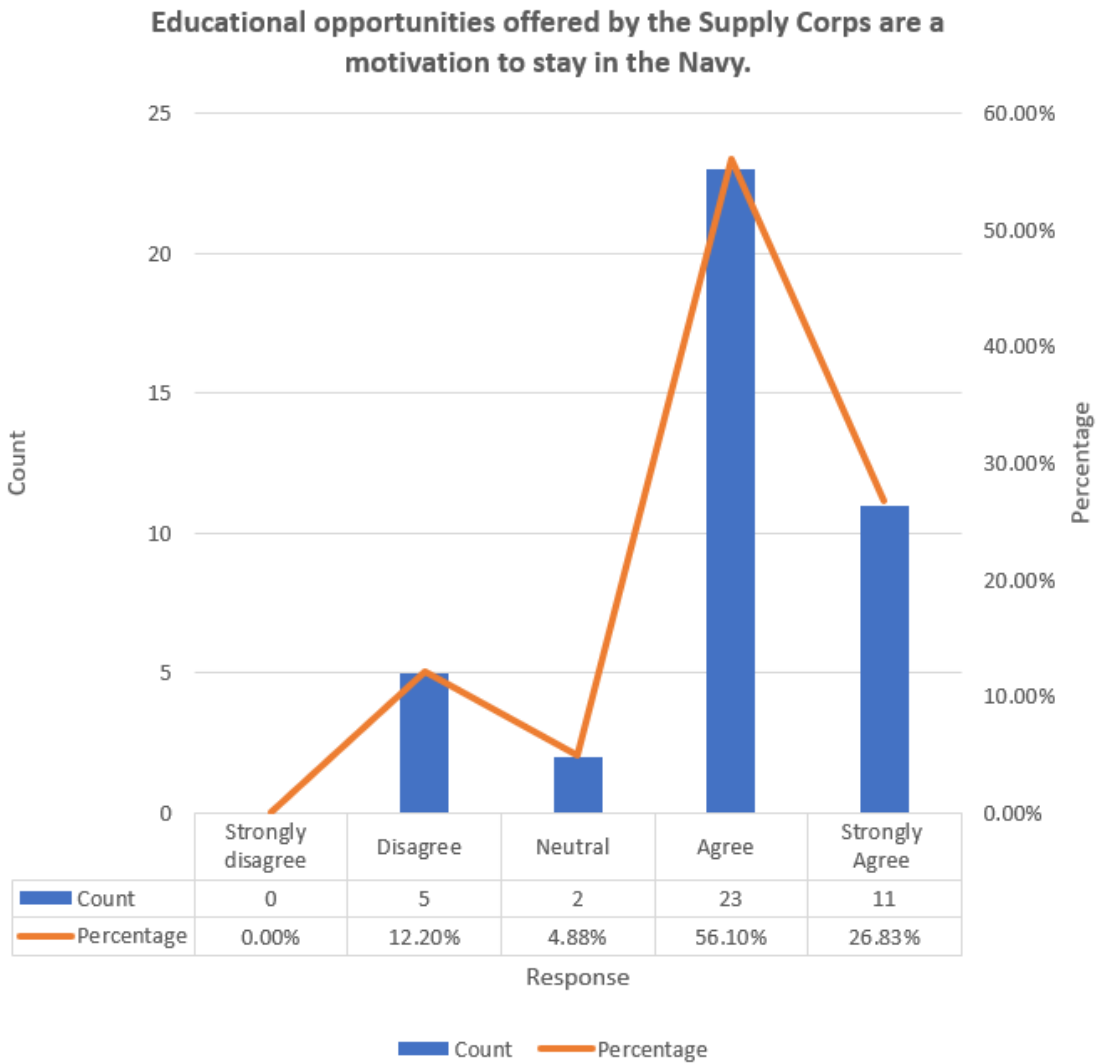


Figure 29. Web-Based Survey Question 9 Results

Question 10, seen in Figure 30, asked participants if officers with a strong mentorship network would receive preference for acquisition coded billets instead of serving on operational tours. A median of 4 and a mode of 5 indicates a strong agreement that a quality mentor network can be influence an officer’s career path. 87.8% selected either *agree* or *strongly agree* while only 2.44% selected *disagree*. A strong level of agreement in this metric suggests high instrumentality because having a strong mentor network is perceived to lead to greater promotion opportunities at the O-5 level.

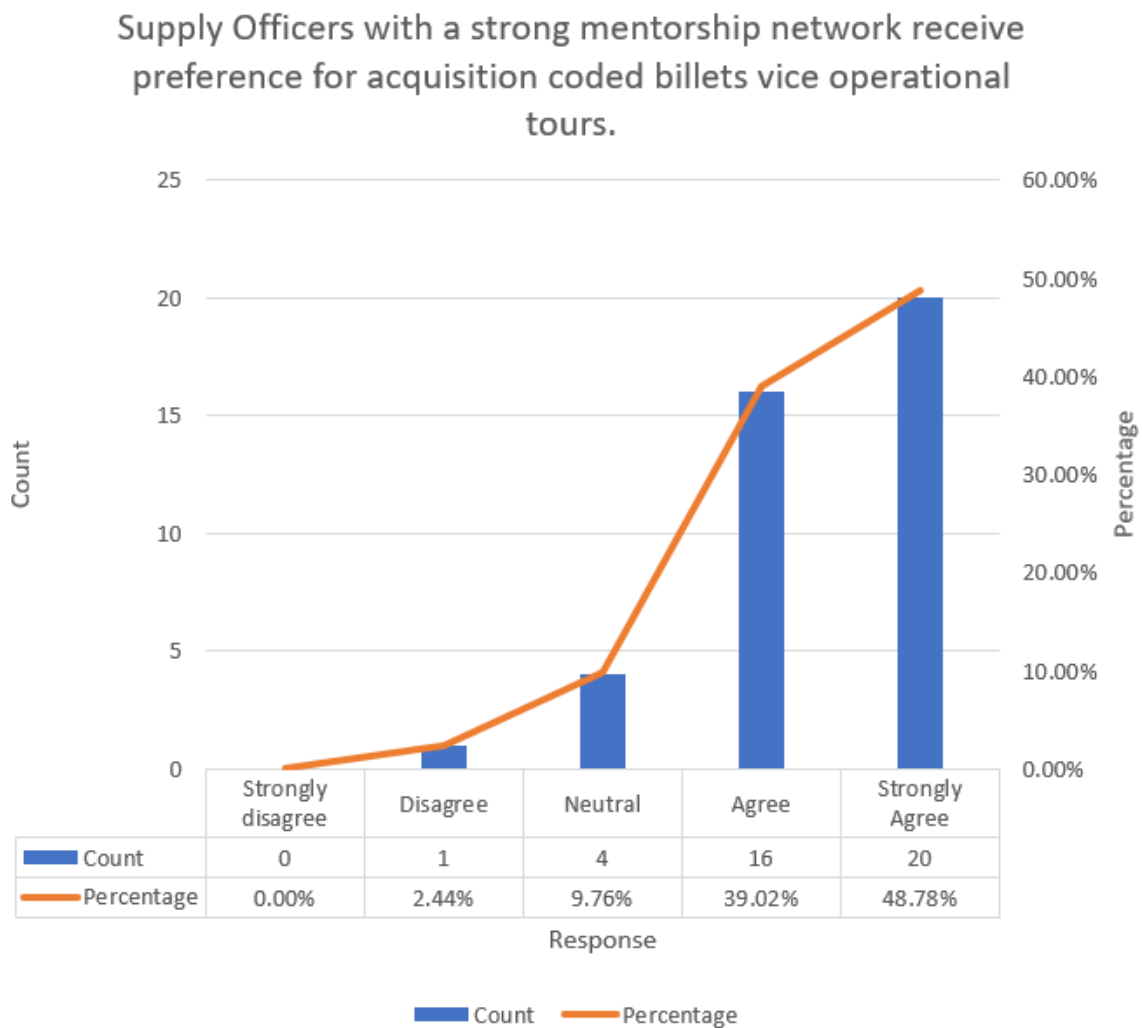


Figure 30. Web-Based Survey Question 10 Results

Question 11, seen in Figure 31, asked participants if the prospect of developing a strong mentorship network would be an incentive to actively pursue operational opportunities after graduating from NPS. A median and mode both equal to 2 indicate disagreement. 58.54% indicated *disagree* or *strongly disagree* while only 19.51% selected *agree*. A strong level of disagreement in this metric suggests low levels of expectancy, because respondents do not believe that the effort required to perform in O-4 operational capacity will result in the development of a strong mentor network that will eventually aid in achieving promotion.

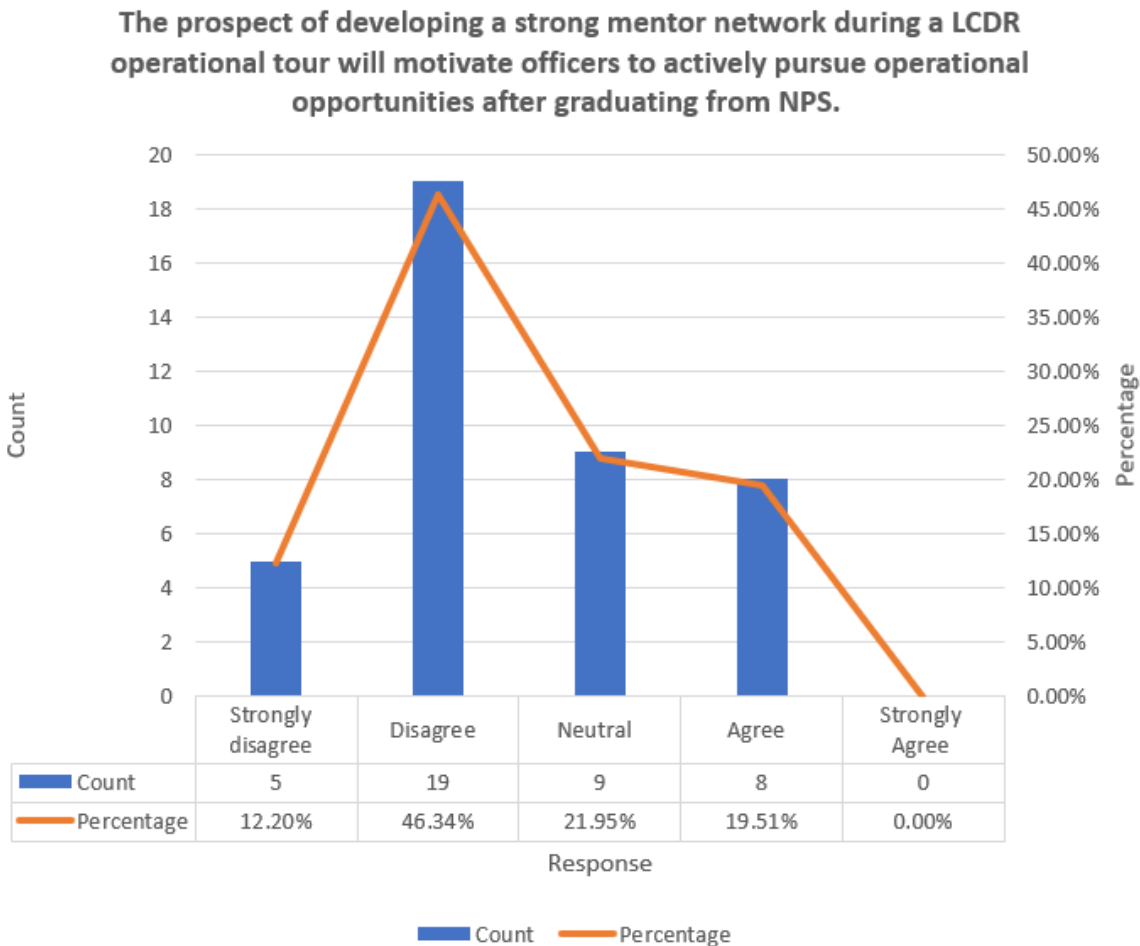


Figure 31. Web-Based Survey Question 11 Results

Question 12, seen in Figure 32, asked participants if OP practices robust and consistent communication with NPS Supply Corps officers regarding career related information. Median and mode were both equal to 3, indicating mixed results. However, 48.78% respondents selected either *disagree* or *strongly disagree* while only 10.2% selected *agree* or *strongly agree*. While results are mixed, there is very little defined agreement among respondents. Low levels of instrumentality can be explained due to limited direct interaction between OP and Supply Corps officers who attend NPS. Responses from this question possibly related to the lack of transparency seen in question 6.

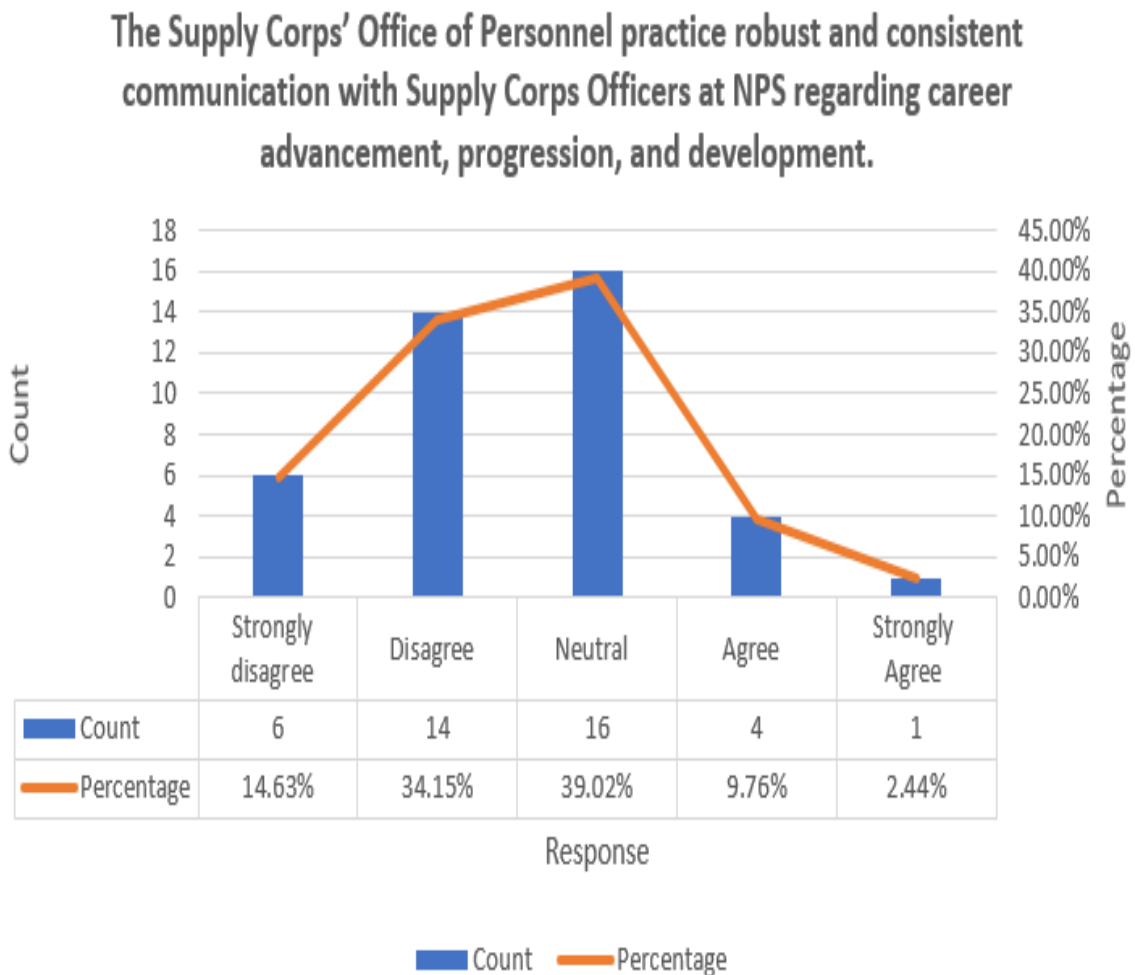


Figure 32. Web-Based Survey Question 12 Results

Question 13, seen Figure 33, asked participants whether senior leadership had communicated the rationale behind career development updates that impact O-4 career paths. Both median and mode equal 2, and 73.17% responded *strongly disagree* or *disagree*. A strong level of disagreement suggests low levels of instrumentality because Supply officers at NPS do not appear to see the clear link between what is being communicated by senior leadership and the rationale behind completing an O-4 operational tour.

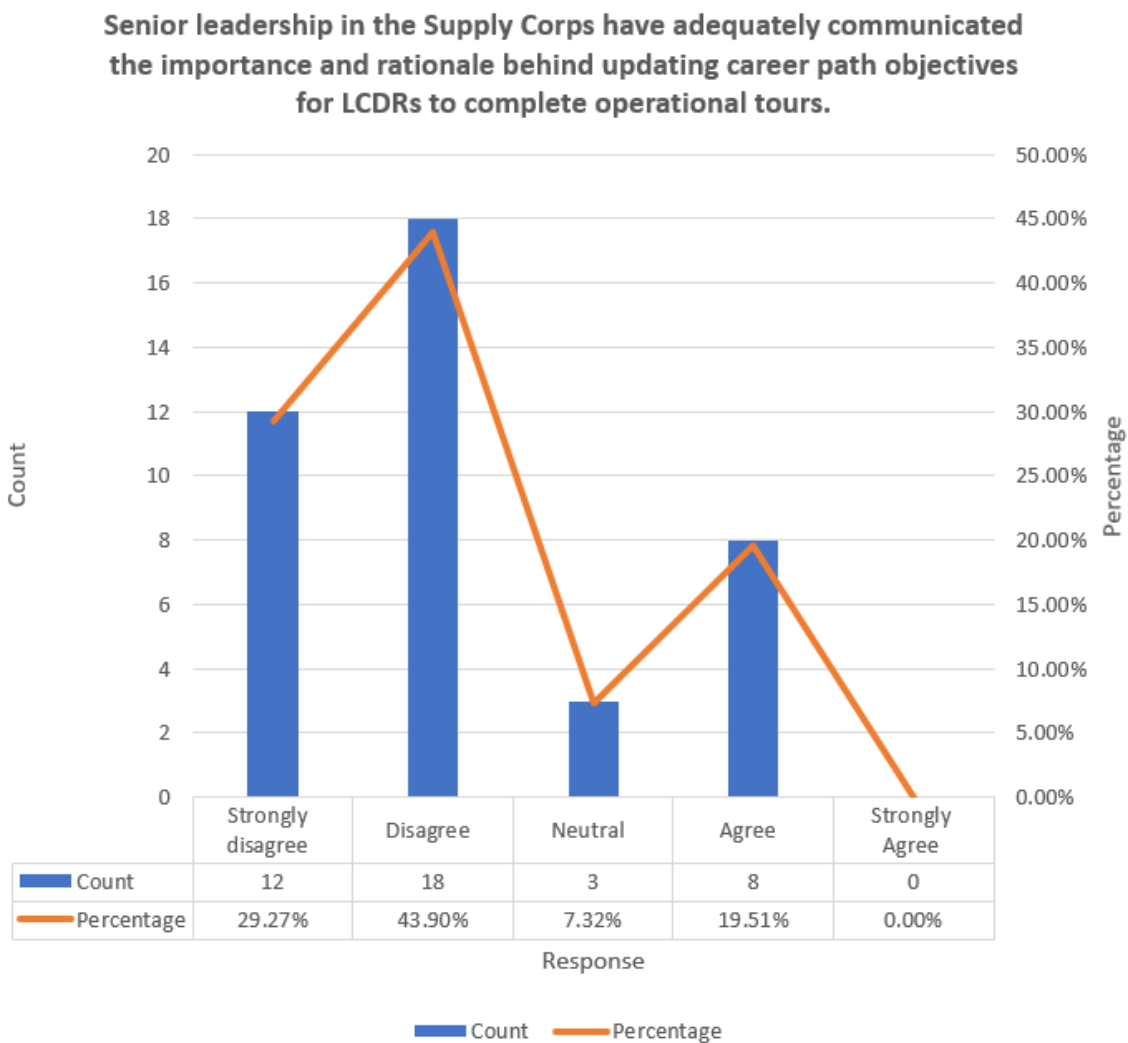


Figure 33. Web-Based Survey Question 13 Results

Question 14, with results displayed in Figure 34, asked participants if they believed that Supply Corps “Road Shows” were effective to promoting community values and career development process. Both median and mode equal 4, indicating significant agreement among responses. 80.48% of responses were either *agree* or *strongly agree*. Strong level of agreement suggests high levels of expectancy because Road Shows boost the confidence through persuasion that completing an O-4 operational tour with sustained superior performance will result in positive outcomes. Positive attributes in this question item are likely a result of the understanding of the shared responsibility to progress through the career development process.

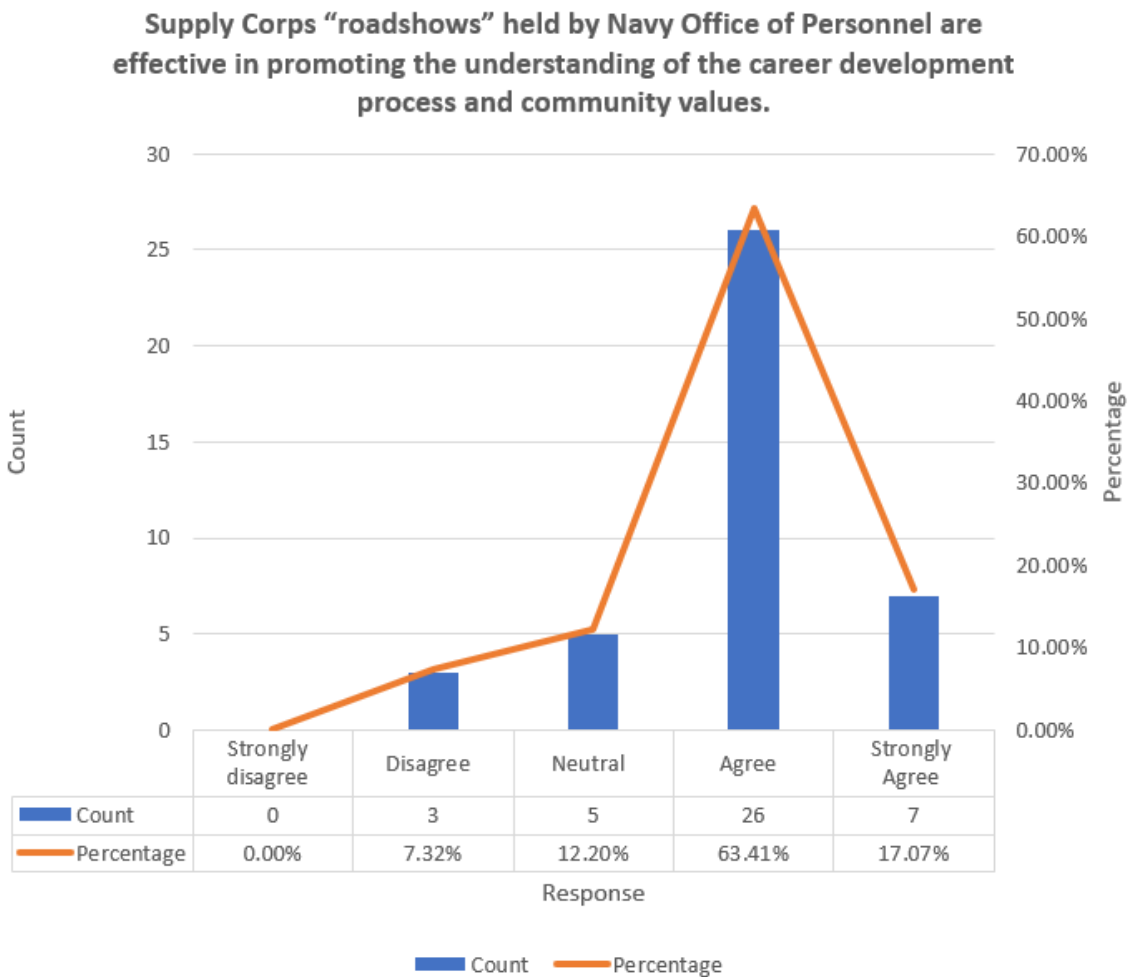


Figure 34. Web-Based Survey Question 14 Results

Question 15, as displayed in Figure 35, asked participants if they felt the *OP Monthly* bulletins provided valuable and relevant career related information. Both median and mode equal 4, indicating significant agreement among respondents. 82.93% of responses were either *agree* or *strongly agree*. Strong level agreement suggest high level of expectancy because *OP Monthly* boosts confidence that performing in an O-4 operational tour will result in positive outcomes.

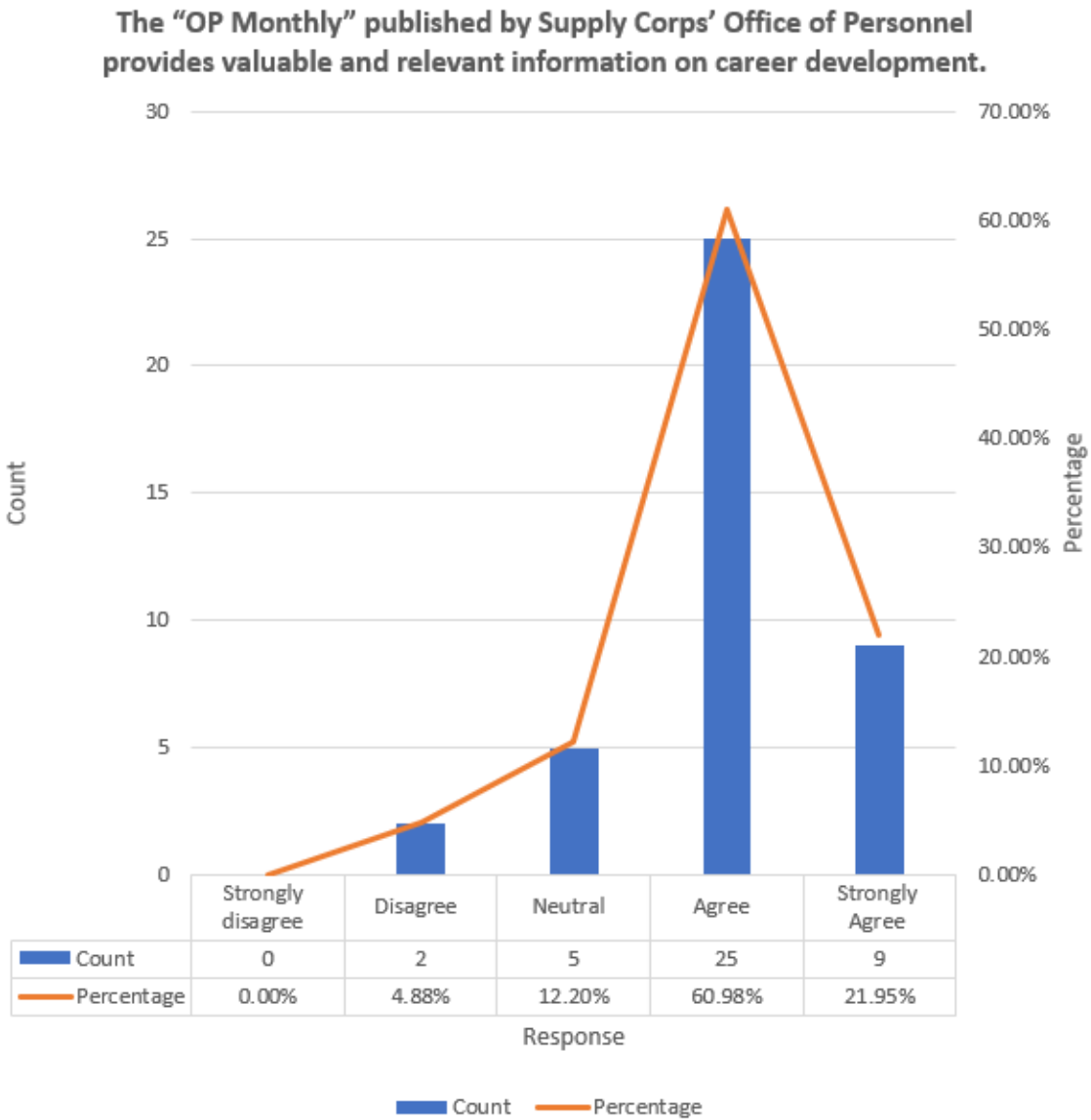


Figure 35. Web-Based Survey Question 15 Results

Question 16, seen in Figure 36, asked participants if they felt the Supply Corps valued officers within their community. A median and mode equal to 4, significant agreement exists that officers feel valued within the community. 65.85% responded *agree* or *strongly agree*. Strong levels of agreement in this metric suggests positive valence because being a valued member of the community could provide intrinsic value both personally and professionally if the individual values community connection as a reward. Additionally, a sense of being valued by an organization bolsters commitment levels and a desire for intrinsic outcomes.

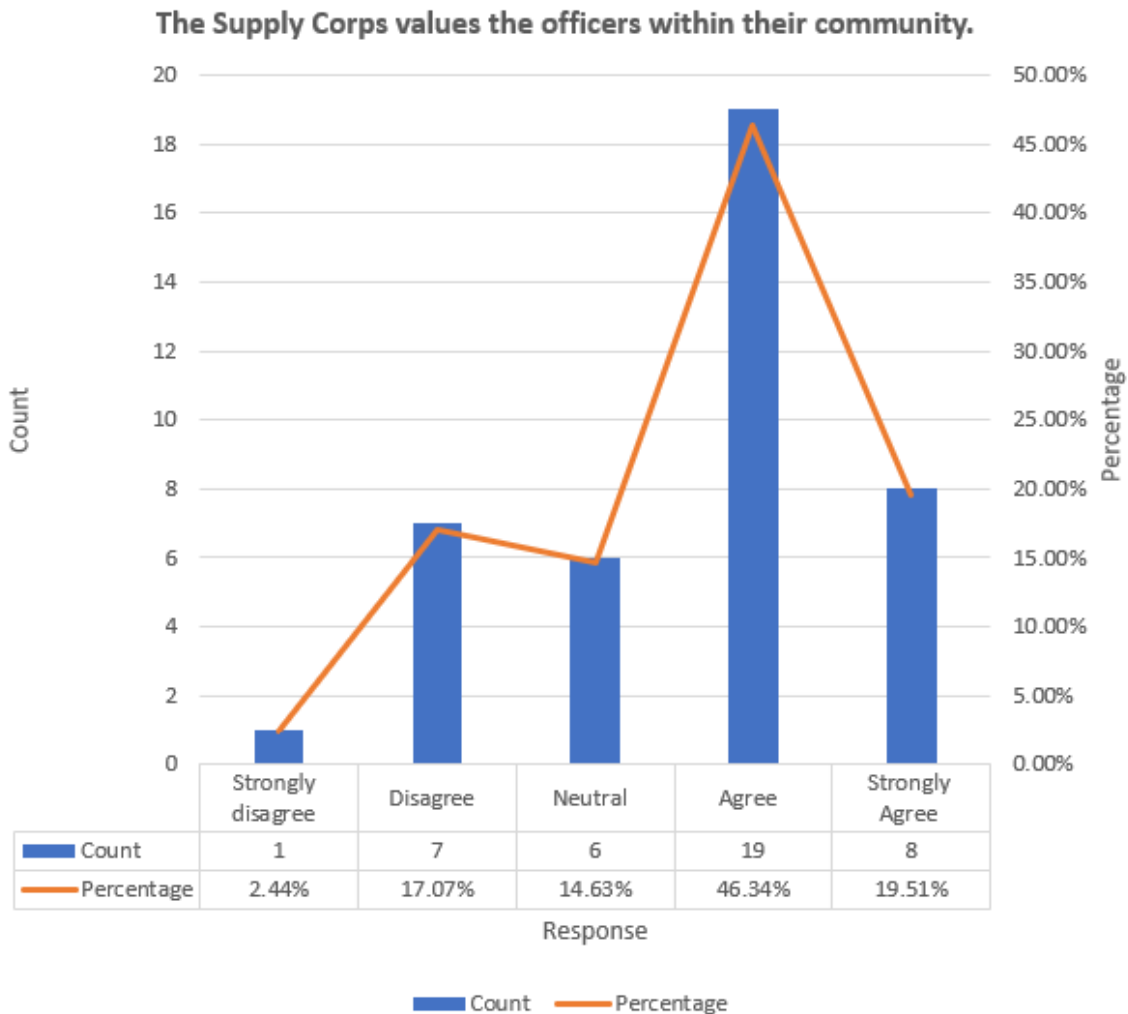


Figure 36. Web-Based Survey Question 16 Results

Question 17, seen in Figure 37, participants were asked if serving additional sea tours as an O-4 would have an impact on family planning matters such as marriage, having children, etc. A median and mode of 5 indicate strong agreement that family planning would be impacted by a shift in policy that would require O-4s to complete additional time at sea. 87.8% of respondents selected *agree* or *strongly agree*. A strong level of agreement in this metric point to a negative valance associated with completing an O-4 operational tour that would result in impacts to an individual’s family plan.

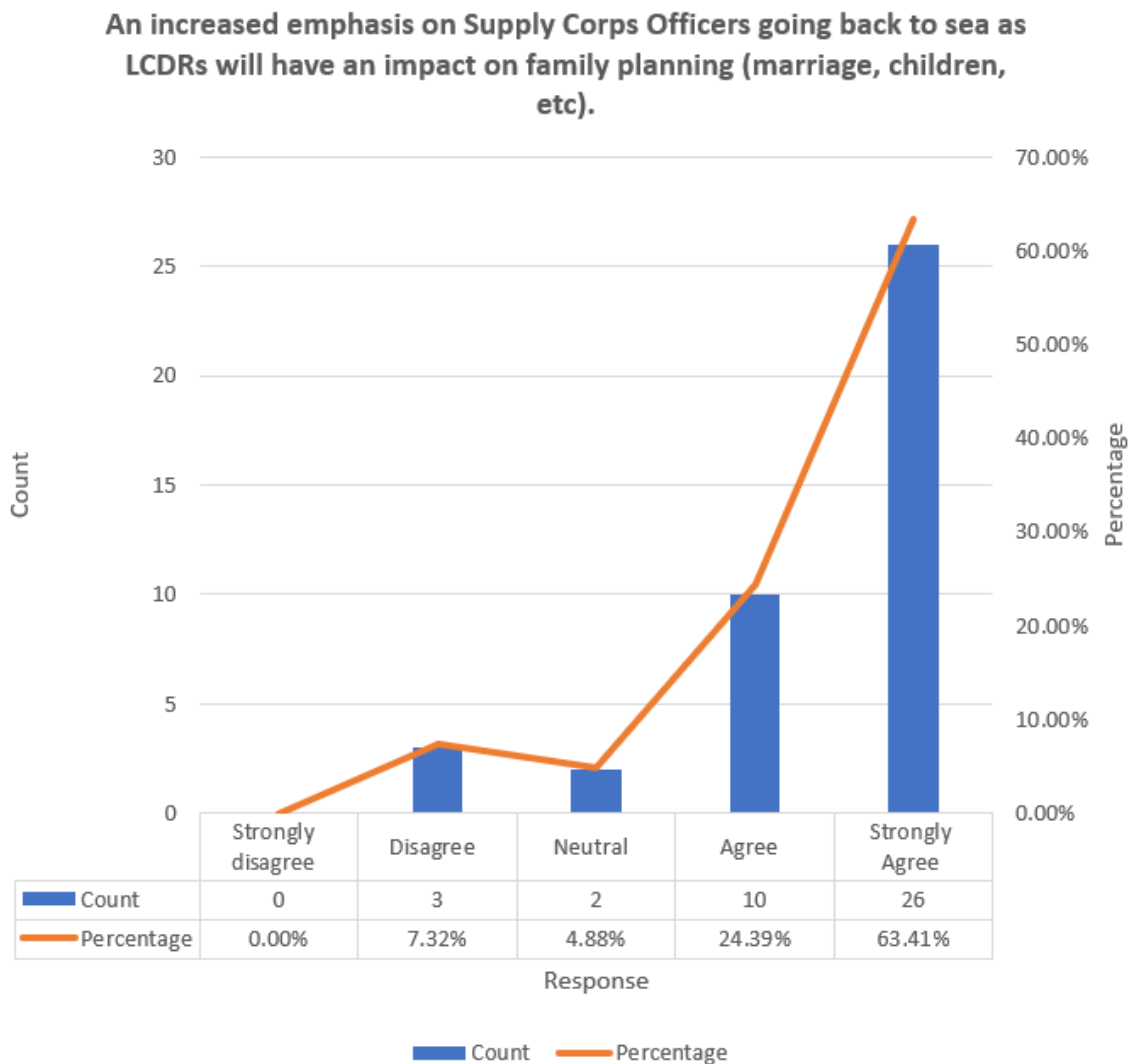


Figure 37. Web-Based Survey Question 17 Results

Question 18, which results displayed in Figure 38, asked respondents to rate whether O-4 operational tours are appealing. A median of 2 and a mode of 1 indicates strong disagreement that operational tours are appealing. 65.85% of participants selected either *disagree* or *strongly disagree*. A strong level of disagreement suggest a lower level of expectancy because respondents do not link effort and performance with the appeal of an O-4 operational tour.

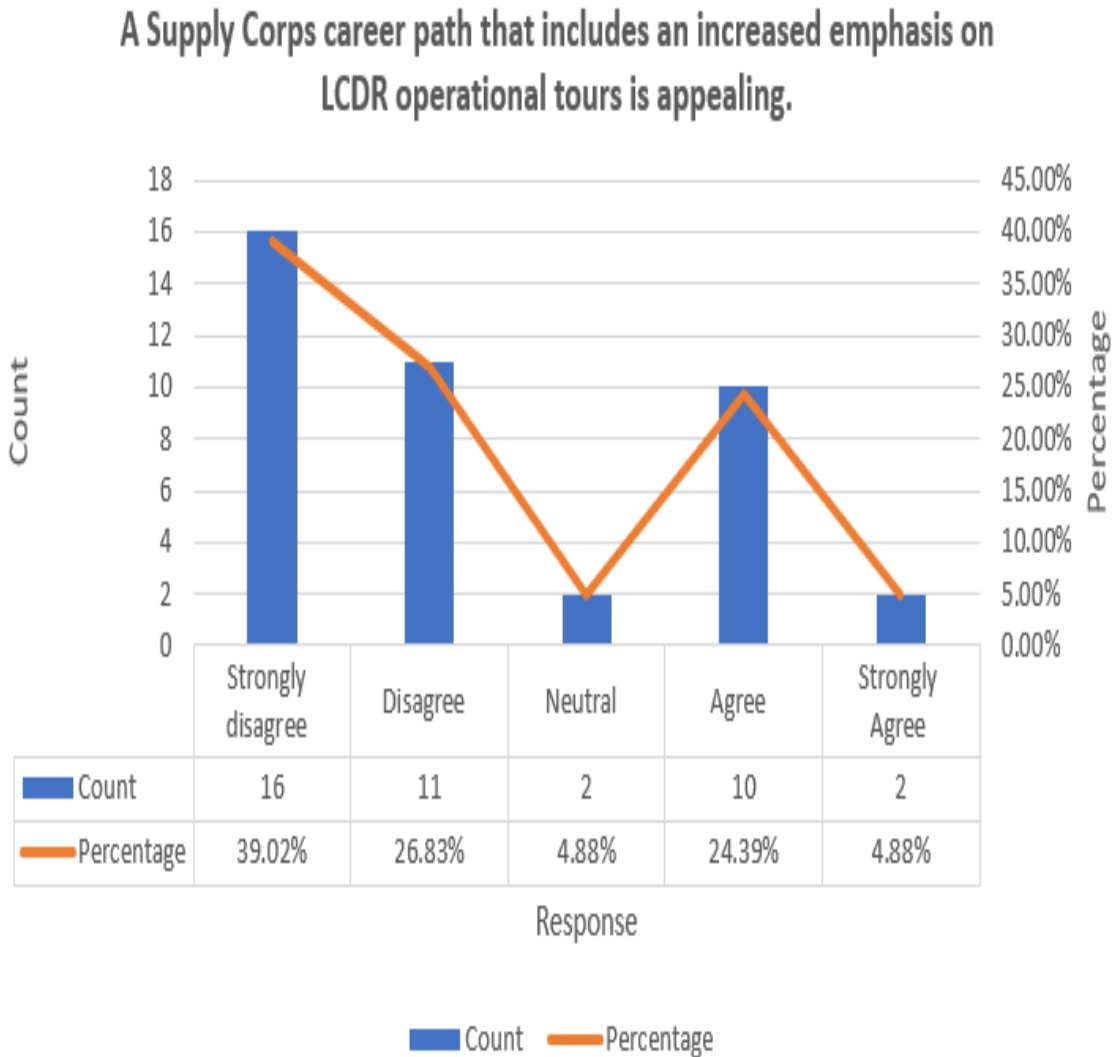


Figure 38. Web-Based Survey Question 18 Results

Question 19, seen in Figure 39, asked participants if the increased emphasis for O-4s to return to sea would have an adverse impact on retention. Results yielded a median and mode equal to 4, indicating agreement that emphasizing operational tours for O-4s would likely have an impact on retention. 70.74% of participants selected *agree* or *strongly agree*. A strong level of agreement is associated with negative valence because the requirement to complete an O-4 operational tour is linked to the perception of adverse retention.

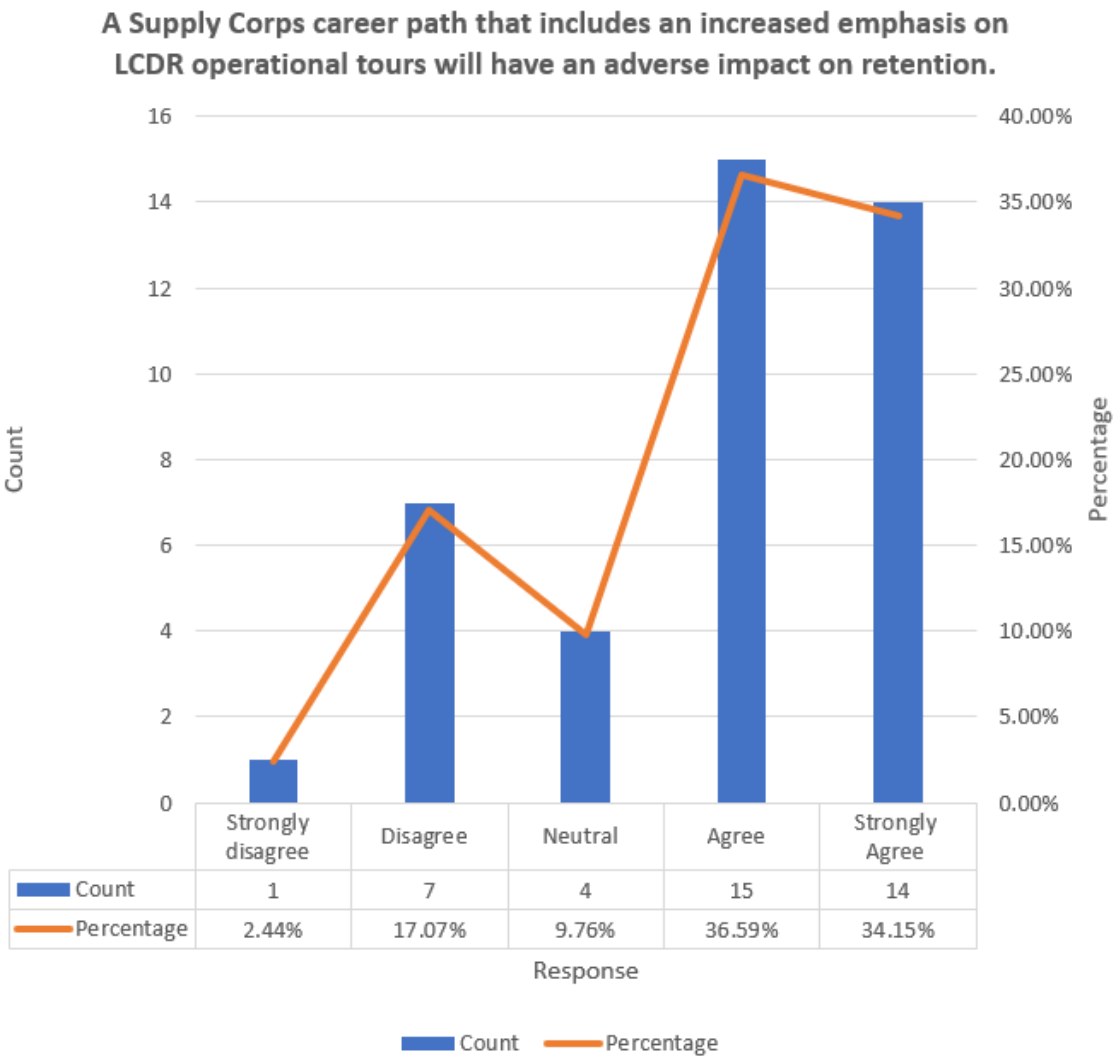


Figure 39. Web-Based Survey Question 19 Results

Question 20, seen in Figure 40, asked participants whether a spouse’s career aspirations would influence career making decisions. Results yielded a median and mode equal to 4, indicating agreement that a spouse’s career is a consideration that may potentially limit available career options to officers. 70.73% of participants selected *agree* or *strongly agree*. Strong level of agreement is associated with negative valance because the requirement to complete an O-4 operational tour is linked to the perception that a spouse’s career will limit available options when making career decisions.

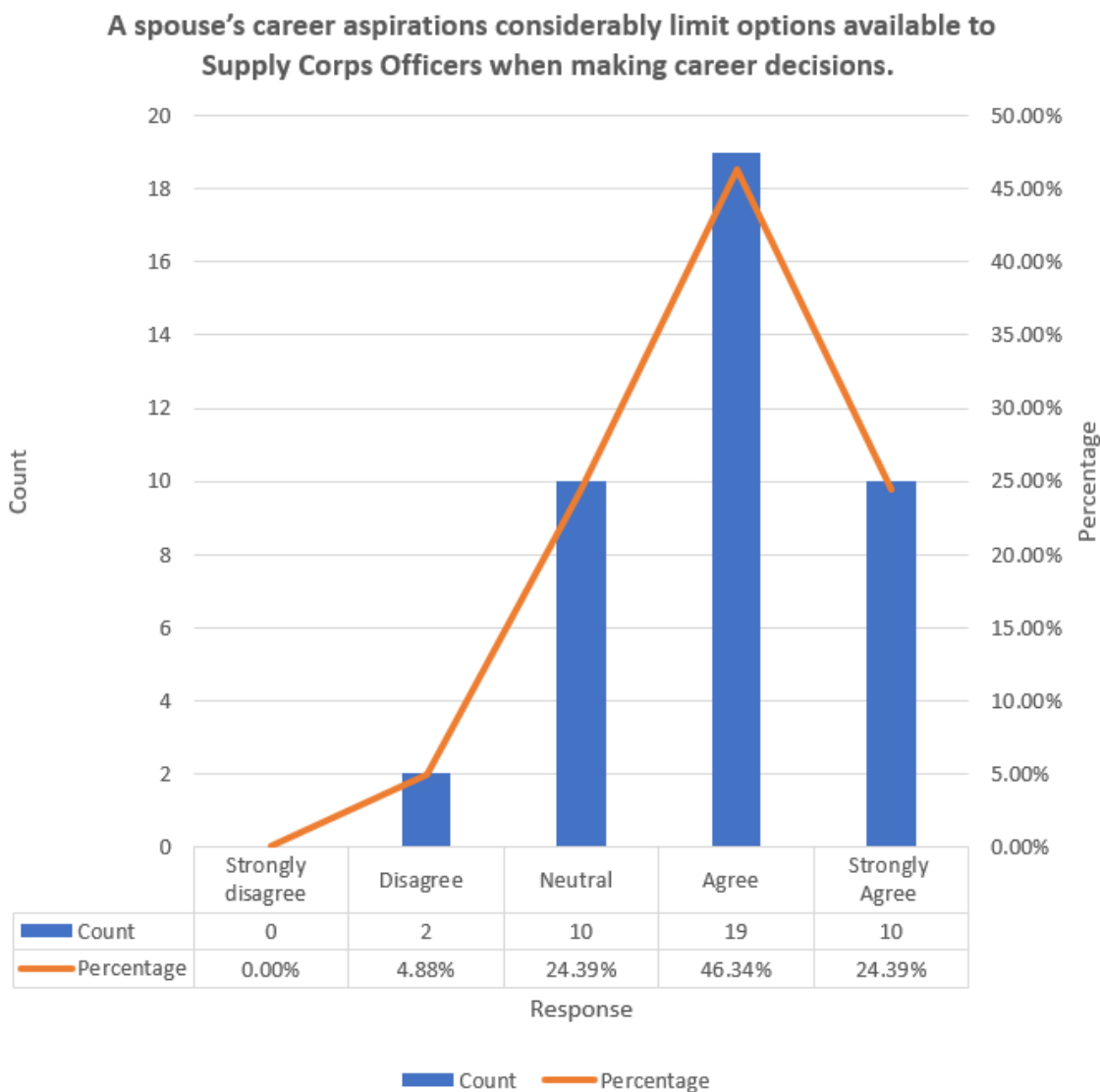


Figure 40. Web-Based Survey Question 20 Results

Question 21, seen in Figure 41, asked participants if an acquisition billet guarantee would be an adequate incentive to serve in an operational billet after graduating from NPS. Results yielded a median and mode of 5, indicating strong agreement with the incentive program that would ensure competency development. 82.93% selected *agree* or *strongly agree*. A strong level of agreement is associated with positive valence if the goal is to develop expertise in a Supply Corps competency. Additionally, instrumentality is suggested because respondents can identify the clear link between achieving APM designation and promotion to O-5.

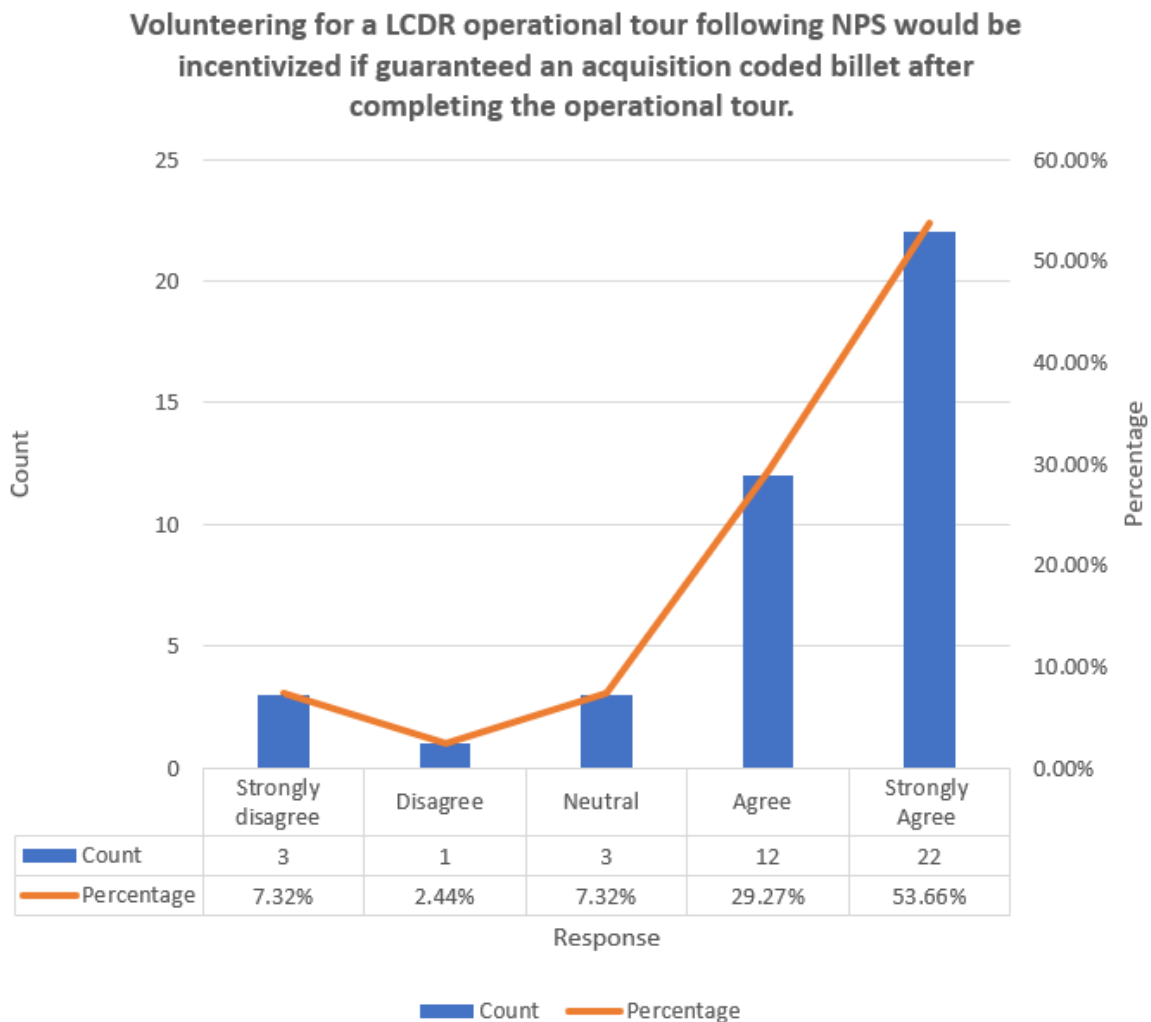


Figure 41. Web-Based Survey Question 21 Results

Question 22, seen in Figure 42, asked participants if the inclusion of an operational tour in promotion board precepts would motivate officers to serve in an operational billet as an O-4. Results yielded a median and mode of 4, indicating an agreement among respondents. 78.05% selected *agree* or *strongly agree*. A strong level of agreement is associated with instrumentality because it would provide a clear signal from policy makers that would recognize O-4 operational tours as critical billets within the Navy.

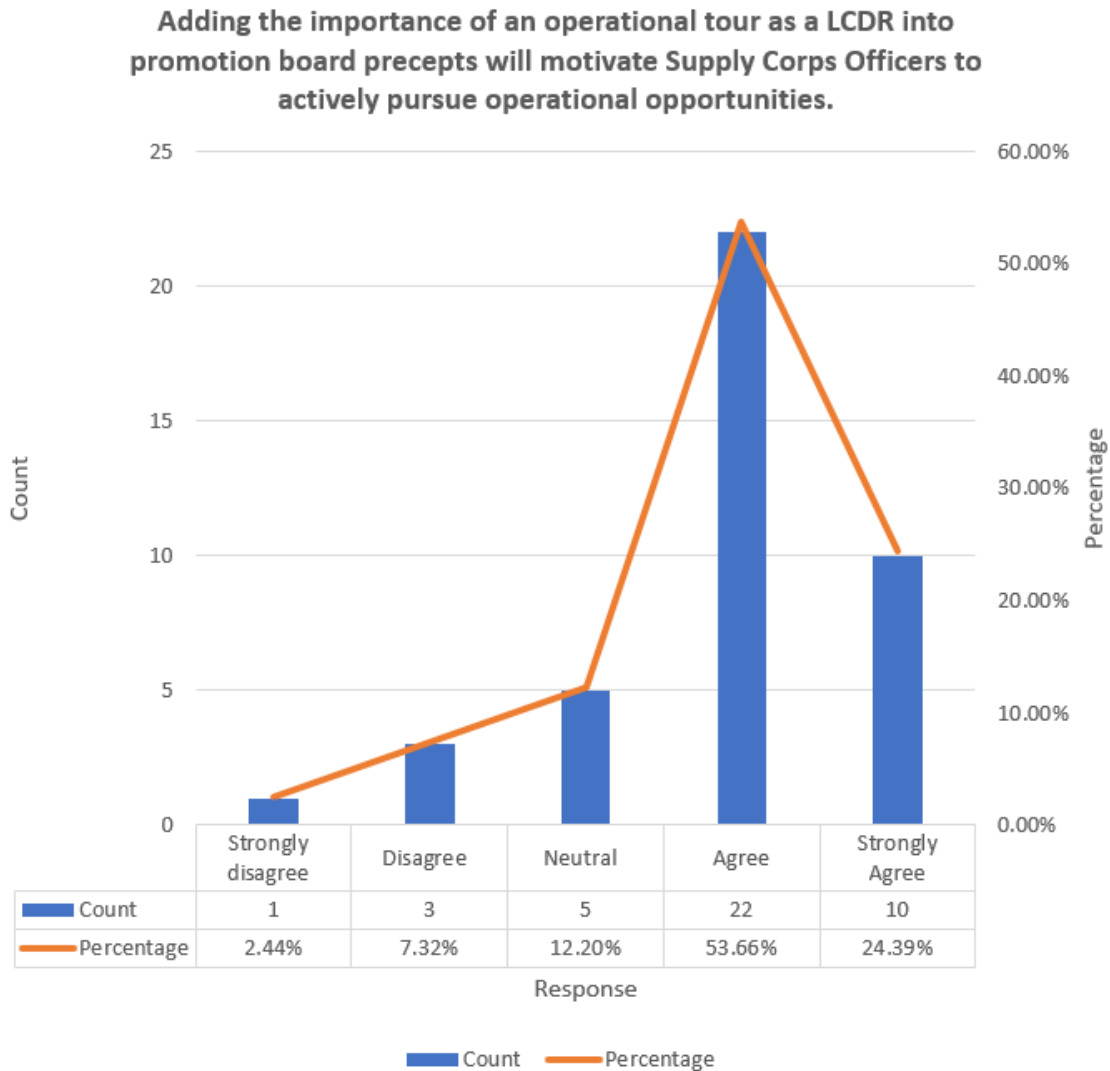


Figure 42. Web-Based Survey Question 22 Results

Question 23, seen in Figure 43, asked participants to select an incentive that would encourage the most talented O-4s to serve in operational tours. Significant support was indicated for acquisition billet guarantee with 39.2%, followed by retention bonus at 31.71%. Participants were encouraged to include comments if an incentive was not listed. Valence among respondents is clearly indicated in acquisition billet guarantee and retention bonuses. Additionally, other comments provided had themes that focused on using education as an incentive, restructuring of O-3 career pathways, and specific retention bonus amounts.

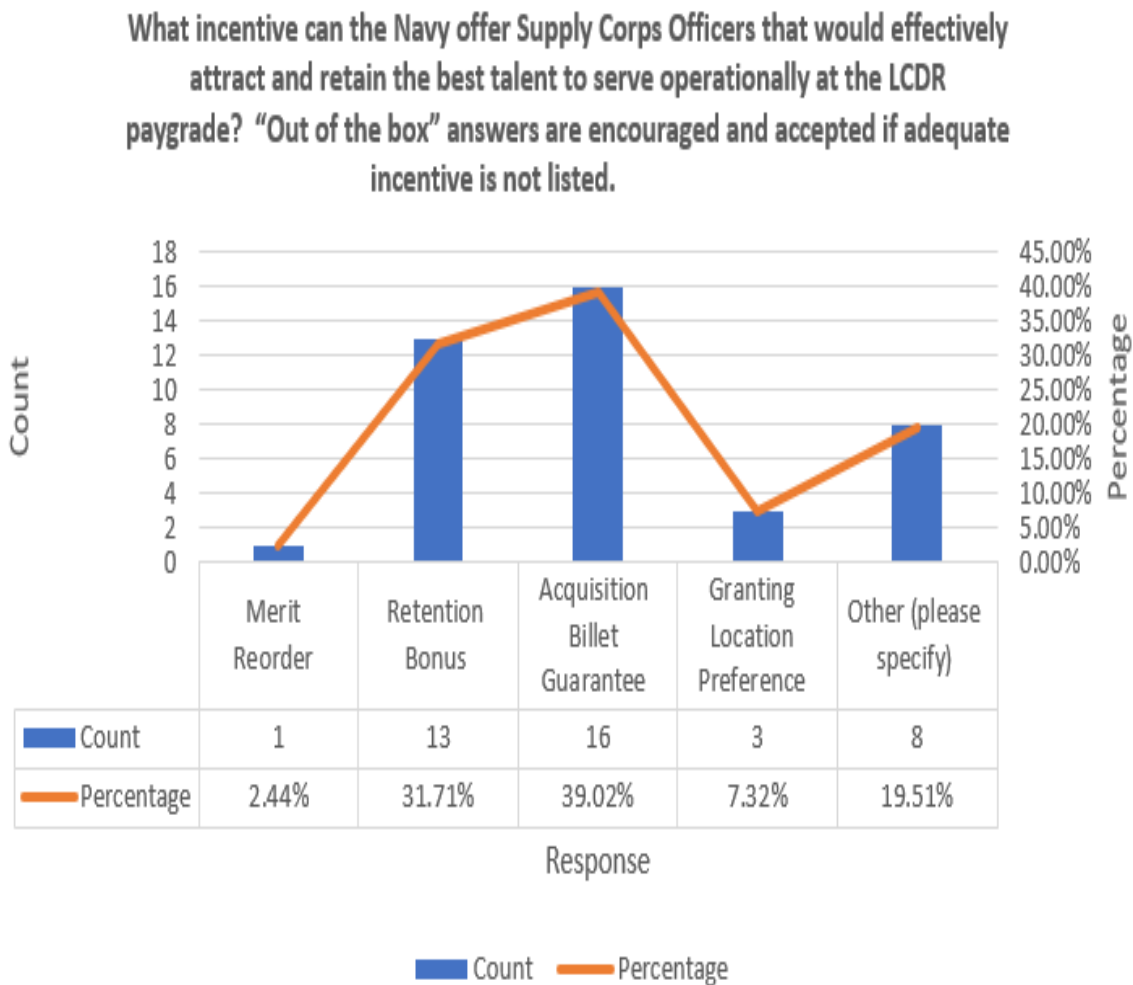


Figure 43. Web-Based Survey Question 23 Results

C. EXPECTANCY THEORY PATTERNS

After individual analysis of survey questions, we evaluated the results to identify patterns related to the application of expectancy theory.

1. Expectancy

The expectancy category contained seven question items. Two questions were related to high expectancy and five questions were related to low levels of expectancy. The two results that showed indications of high expectancy were related to communication, specifically written communication and in person presentations by the Supply Corps OP. The questions that yielded results with low levels of expectancy were related to the perceived value of O-4 operational tours and lack of transparency in the detailing process. One question regarding the development of a mentor network development also displayed traits of low expectancy levels.

2. Instrumentality

The instrumentality category contained eight question items. Two of the questions yielded mixed results and could not be identified as high or low instrumentality. Results with high instrumentality included questions regarding mentorship networks that yield preference for competency development, and the inclusion of operational tour value into the precepts for O-5 promotion boards. Low instrumentality was indicated in career development communication from OP and senior leadership. Additionally, there was no genuine link that serving in an operational tour will lead to promotion to O-5. Further, the composite ranking revealed that APM designation and advance education out ranked both O-4 operational tours and overseas assignments.

3. Valence

The valence category contained eight related question items. Positive valence was mostly associated with incentives regarding education, Supply Corps values, and acquisition billet guarantees. Negative valence was associated with family concerns, general retention, and merit reorder incentives. One question item was related to

identifying the most favorable incentives and could be categorized as either positive or negative.

D. STATISTICAL ACCURACY

Forty-one of the 68 Supply Corps Officers attending NPS completed the online survey. As seen in Figure 44 (and highlighted in yellow), the margin of error for 41 participants is approximately between 14–16%. Larger sample sizes ranging from 200 and greater participants is ideal. Margin of error needs to be calculated to determine the effectiveness of the survey conducted. The following table utilizes the $1/\sqrt{N}$ and is an appropriate method to analyze the sample size available at NPS.

Sample Size	$1/\sqrt{N}$	Margin of Error (%)
10	0.31623	31.623
20	0.22361	22.361
30	0.18257	18.257
40	0.15811	15.811
41	0.15617	15.617
50	0.14142	14.142
60	0.1291	12.910
100	0.1	10.000
200	0.07071	7.071
500	0.04472	4.472
1000	0.03162	3.162
2000	0.02236	2.236

Figure 44. Sample Size Margin of Error

The authors of this study computed an ideal sample size from a standard confidence level of 95% (confidence level score of 1.96) to validate statistical confidence of the sample size given the NPS population size (68), and a margin of error (15.617) %. The following calculation concluded that the ideal sample size from the population at NPS given a 95%

confidence level and a margin of error of 15.617% was 25. Additionally, increasing the confidence level to 99% without changing the margin of error or population yielded an ideal sample size of 34.

$$\text{Sample Size} = \frac{(.5 * (1 - .5))}{((\text{margin of error} \div \text{confidence level score})^2)}$$

Figure 45. Computation of an Ideal Sample Size. Adapted from Fluid Surveys Team (2014)

A confidence level of 95% that resulted in an ideal sample size of 25 and 99% confidence level that resulted in an ideal sample size of 34 demonstrated that the actual participation of 41 out of 68 students exceeded ideal sample size requirements for significance. Quantitative method of research findings is justified because actual sample size exceeded ideal sample size with a margin of error of 15.811% and a confidence level of 99%. Based on accuracy analysis, Supply Corps officer population at NPS would most likely mirror the larger Navy Supply Corps population with similar progression on the career timeline.

E. SUMMARY

This chapter provided a thorough analysis of our survey data through the lens of expectancy theory. We developed visual interpretations coupled with individual analysis followed by a systematic assessment of themes derived from the survey. Results from the survey revealed areas where levels of expectancy, instrumentality, and valence were lowered. However, as Scholl (1981) noted, deficiencies in expectancy theory's elements could be mitigated by stabilizing behavior generated by an employee's commitment to an organization. Chapter VI focuses on answering our research questions, providing recommendations, and suggestions for future research on the career development in the Supply Corps.

VI. CONCLUSION AND RECOMMENDATIONS

At the outset of this project, we identified four goals that included analysis of the career development path with an emphasis on operational commitment for mid-grade officers; impacts of shifts in career development policy; identification of factors behind promotion and motivation in the form of incentives, and career development recommendations and suggestions for future research. After a review of Supply Corps career development documents, literature review, and analysis of web-based survey deployed to Supply Officers at NPS, we present our conclusions and recommendations below.

A. RESEARCH QUESTIONS REVISITED

We will begin this chapter by answering our primary and secondary research questions posed in Chapter I.

- (1) What are the strengths and weaknesses of the current career development path that emphasizes increased operational commitment for mid-career Navy Supply Corps Officers?

Results from the survey reveal that strengths in the career development path include educational opportunities offered to Supply Corps officers. Additionally, there is some evidence that Supply officers have been afforded an opportunity to develop an acquisition competency that parallels civilian counterparts prior attending NPS. In contrast, results from the survey indicate weaknesses in the career development path that emphasizes an increase in operational commitment for mid-career Supply Corps officers. These weaknesses include a disconnect between the merit reorder incentive and perceived value, the fact that officers within the community do not appear to value O-4 operational tours, and that the timing of educational opportunities does not allow for competency development and operational commitment prior to O-5 promotion board.

- (2) What are the possible impacts that pertain to the policy shift between Supply Corps Community Managers and Navy Supply Corps Officers at Naval Postgraduate School?

Our survey results suggest possible community wide impacts could result due the policy shift that increases emphasis on O-4s completing operational tours. These impacts include possible adverse implications on long-term retention, family planning, and a lack qualified personnel to fill critical acquisition billets. Additionally, a potential erosion of trust with community managers and senior leadership due lack of transparency is also a concern.

- (3) What are some possible incentives that could be offered to Supply Corps Officers to serve in additional operational commitments?

Survey results reveal that possible incentives for Supply officers to serve in additional operational tours include retention bonuses, acquisition billet follow-on guarantee, geographic location preference, and possible expansion of the Training with Industry program. Merit reorder is a current incentive offered by the Navy and Supply Corps for completing an O-4 operational tour. However, there was only marginal support among mid-grade officers for this incentive within the survey.

B. RECOMMENDATIONS

After a thorough review of Supply Corps career development documents, literature review, and analysis of the web-based survey, the following actions are recommended.

1. Conduct Supply Corps Climate Surveys

Research on Supply Corps is limited, and a climate survey of the entire community has not been conducted in over 70 years. We recommend an annual Supply Corps climate survey be conducted and debriefed to the community to critically assess career development and possible impacts that career development policy has on retention. Additionally, the climate survey will be able to assess the entire community, including demographics, and thus will provide insight on diversity, motivating forces, and hidden problems throughout all ranks of the community. An annual survey will be able to timely

address community updates to assess whether incentives, like merit reorder, are effective in attracting and retaining the most talented Supply Corps Officers.

2. Align Education with Acquisition Billet Guarantee

Based on survey results that indicate a desire to become proficient in an acquisition competency, we recommend that upon being selected for advanced education that a follow-on tour is guaranteed upon graduation in a coded acquisition billet. Currently, most Supply Corps officers that graduate from advanced education have no guarantee of receiving orders for a follow-on tour, allowing for the detailing process to be left up to needs of the Navy and Supply Corps upon graduation. Our recommendation can be accomplished through advanced planning and coded billet forecasting, potentially mitigating transparency concerns when detailing officers after receiving advanced education.

3. Publish Promotion Statistics for O-4 Operational Tours

Promotion statistics are published by Supply Corps OP relating to whether an officer has achieved specific qualifications and affiliations. We recommend publishing promotion statistics that represent O-4 operational tours and merit reorder selections to send a signal to the community the potential value selecting a tour at sea will have on promotion to O-5. Providing officers with statistics relevant to O-4 operational metrics will assist officers to make informed career decisions based on probability of outcomes.

4. Operational and Milestone Retention Bonus

We recommend that the Supply Corps consider offering a retention bonus, similar to other Navy communities, to officers who complete O-4 operational tours or achieve specific milestones. As an officer progresses through their career, it becomes increasingly difficult to juggle operational commitments with family planning and impact long-term retention. Another factor in retention is the economy. Without a monetary incentive to entice the officer to remain in the Supply Corps despite opportunities offered in the civilian sector, the Supply Corps could potentially face a shortage in officers at higher ranks. As a result, the Supply Corps could potentially face a lack of competent military support to complement civilian employees. To determine an appropriate figure, we recommend that

senior leadership within the Supply Corps parallel bonus structures that other communities have developed as a guide.

5. Shorten Tour Lengths

Prescribed tour lengths are currently 24 months for sea duty and 36 months for shore duty. We recommend shortening the O-4 tour lengths for the sea duty requirement to 18 months and shore duty tour length to 24 months. Reducing tour lengths would serve multiple purposes. By reducing the sea duty requirement to 18 months, officers would have their personal lives less disrupted and would likely have a positive impact on the overall quality of life. Reducing shore duty tour length to 24 months would result in an increase in officers available to serve in operational tours by over 30%. Lastly, a change in tour lengths for mid-grade officers would ultimately result in a career development model that would produce Supply Officers that would have the opportunity to develop a competency and provide global logistics support to the warfighter.

6. Utilization of O-3 Supply Corps Officers

Supply Corps OP has identified inventory at the O-4 level as a driving factor in adapting the current career development model to emphasize O-4 operational tours. While actual inventory of O-4s has remained constant from 2017 to 2020, there is still a surplus of 65 O-3 Supply Corps officers (OP, 2020b). We recommend that OP consider utilizing exceptional officers at the rank of O-3 to fill gaps in capability at the O-4 operational level. We further recommend that O-3 officers are properly incentivized and have their records reflect the increased responsibility that was assumed during a on operational tour typically assigned to an O-4.

7. Earlier Educational Opportunities

One of the most valued career attributes identified from the survey was the importance of attaining advanced education before promoting O-5. Our recommendation is to shift educational opportunities for all Supply Corps officers so that postgraduate education would be completed three years earlier than the current career development model. Under this model, Supply Corps O-3s would attend postgraduate education as

opposed to O-4s or O-4 selects. Under this model, O-4s would be afforded more time to develop a Supply Corps competency via a coded billet before promoting to O-5. Additionally, our recommended shift in the career development model would provide more observed tours as an O-4 as opposed to a non-observed tour at NPS, which is critical to achieving a record of sustained superior performance prior to promotion to O-5 as highlighted in Supply Corps community doctrine.

8. Include Operational Tour in Precepts

We recommend that Supply Corps senior leadership take action to ensure that written guidance for all policy changes is documented in the promotion board precepts issued by the Secretary of the Navy before each promotion board. Promotion board precepts serve as general and community-specific guidance that states which criteria will be valued for promotion determination. If an O-4 operational tour is to be considered valued, that requirement must be documented into the precepts providing transparency across all ranks within the Supply Corps. Furthermore, this addition to the precepts will act as an official policy change and significantly reduce ambiguity.

9. Expand Acquisition Billet Opportunity

Based on the results of our survey, we found that Supply Corps officers would be more inclined to volunteer for an O-4 operational tour if guaranteed an acquisition coded billet as a follow-on tour. This is largely due to the competition for scarce O-4 acquisition coded billets available to NPS graduates. Our recommendation is to expand the number of acquisition billets available for Supply Corps Officers. Expanding acquisition billets would require senior leadership to engage the different entities that own acquisition billets to either commit to funding additional billets or re-code gapped civilian billets. By coding civilian acquisition billets to Supply Corps acquisition coded billets, it would provide greater access to Supply officers who desire to become proficient in an acquisition competency, and achieve APM designation.

C. RECOMMENDATIONS FOR FUTURE RESEARCH

During the survey, a significant amount of data was collected and analyzed on incentives, motivation, communication, and mentorship. Future research is needed to assess the Supply Corps as an entire community and should include a broader range of career development concerns. Promoting research community-wide will allow for demographics to be collected without fear of reprisal. Further research is needed to determine what outcomes Supply Corps at various ranks value most. Research geared toward the retention of women and minorities would provide insight on the inclusiveness of the community, thereby refining community values. Additionally, research on female Supply Corps officers could yield valuable data on impacts that career development models have on family planning. Research on the promotion board process and the validity of promotion statistics, to include potential discriminatory practices, could provide awareness regarding bias and favoritism within the community. Lastly, research on the detailing process itself could offer insight on the transparency indications identified in this project.

D. SUMMARY

This chapter focused on answering our primary and secondary research questions. Each question was answered based off data from survey results analyzed through the lens of expectancy theory. We developed recommendations that include: conducting climate surveys, aligning education with acquisition billets, publishing promotion statistics, including a retention bonus, shortened tour lengths, maximum utilization of O-3 Supply Corps officers, earlier education opportunities, operational tour requirement included in precepts and expanding acquisition billet opportunities. Lastly, it was determined that further research on Supply Corps career development is necessary across the entire spectrum of Supply Corps Officers.

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