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A Brief Analysis of Pre-service Drug Abuse Waiver Attrition

L. Andrew Jones, Ph.D.
Geoffrey E. Fedak, M.S.

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L. Andrew Jones, Ph.D.
Geoffrey E. Fedak, M.S.

Reviewed by
Jacqueline A. Mottern, Ph.D.
Institute for Selection and Classification

Released by
David L. Alderton, Ph.D.
Director

Navy Personnel Research, Studies, and Technology Division
Bureau of Naval Personnel
5720 Integrity Drive
Millington, TN 38055-1000
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14. ABSTRACT

Drug attrition data acquired by PERS 6 were analyzed at Navy Personnel Research, Studies, and Technology (NPRST/PERS-1). These data were merged with May 2005 Enlisted Master File (EMF) data to determine those applicants for Navy enlistment who had positive drug tests while processing for enlistment at MEPS and were subsequently enlisted with a drug waiver. Additionally, trend analysis of this cohort of Sailors was performed for enlistment years 2000 through 2004. This paper does not advocate acceptance or rejection of any particular position. It does, however, suggest that the statistical findings of PERS-6, while technically accurate, do not afford decision-makers with a comprehensive view of this issue. The 85.6 percent attrition rate reported by PERS-6 is based only on those who entered Naval service with drug waivers and were subsequently attrited for drug reasons (n = 1737). An additional 291 persons with drug waivers attrited for other than drug related reasons (n = 1737 + 291 = 2028 total attrites). Drug attrites (n = 1737) from the total population of those admitted to Naval service with waivers subsequent to positive drug tests at MEPS (N = 4320) is 40.2 percent. However, total attrites (n = 2028) account for 46.9 percent of the entire population; therefore, 53.1 percent of the (N = 4320) Sailors accepted for enlistment with a drug waiver remain on active duty.

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Foreword

Drug attrition data collected by Navy Drug Screening Laboratories (NDSL), Great Lakes, IL were later acquired and analyzed by the Personnel Readiness and Community Support Division (PERS-6), Navy Personnel Command, Millington, TN in an effort to determine drug waiver attrition rates in the Navy. These data were subsequently reevaluated at Navy Personnel Research, Studies, and Technology (NPRST/PERS-1). NPRST merged these data with May 2005 Enlisted Master File (EMF) data to determine those applicants for Navy enlistment who had positive drug tests while processing for enlistment at a Military Entrance Processing Station (MEPS) and enlisted with a drug usage waiver. Additionally, trend analysis of this cohort of Sailors was performed for enlistment years 2000 through 2004.

In an Action Memo to the Chief of Naval Personnel dated 23 June 2005, PERS-6 reports findings and recommends action based on their findings. PERS-6 states:

> CNO Guidance 2004 tasked Navy to reduce drug use, reduce overall attrition, and recruit better quality individuals. From 1 October 1999 to 30 September 2004, Navy enlisted 4,320 individuals who previously tested positive at MEPS. 2,028 attrited before completing first enlistment. Enclosure (1) to TAB A show 1,737 of 2,028 attrites tested positive for illegal drugs on active duty (85.6 percent).

Based on this statement and others reported in this Action Memo, PERS-6 recommends that Commander, Navy Recruiting Command "immediately cease enlisting subject individuals."

The findings of this brief study do not support this PERS-6 recommendation. While the likelihood of successful full-term enlistment is reduced for those with pre-service drug waivers, this report shows that a substantial percentage of this cohort (53.1%) ultimately become productive Sailors.

This paper does not advocate acceptance or rejection of any particular position. It does, however, suggest that the statistical findings of PERS-6, while technically accurate, do not afford decision-makers with a comprehensive view of this issue. The 85.6 percent attrition rate reported by PERS-6 is based only on those who entered Naval service with drug waivers and were later attrited for drug reasons (n = 1737). An additional 291 persons with drug waivers attrited for other than drug related reasons (n = 1737 + 291 = 2028 total attrites). Drug attrites (n = 1737) from the total population of those admitted to Naval service with waivers subsequent to positive drug tests at MEPS (N = 4320) is 40.2 percent. However, total attrites (n = 2028) account for 46.9 percent of the entire population; therefore, 53.1 percent of the (N = 4320) Sailors accepted for enlistment with a drug waiver remain on active duty.

DAVID L. ALDERTON, Ph.D.
Director

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A Brief Analysis of Pre-service Drug Abuse Waiver Attrition

The Department of Defense (DOD) central management site for all drug screening (prior service and post-enlistment) is located at the United States Army Medical Information Technology Center (USAMITC), San Antonio, TX. Subordinate drug testing laboratories include the Navy Drug Screening Laboratories (NDSL), Great Lakes, IL; Jacksonville, FL; and San Diego, CA. The Army maintains laboratories at Trippler Army Medical Center, Honolulu, HI and at Ft. Meade, MD. The Air Force has a single drug-testing laboratory at Randolph Air Force Base, TX. Drug test results are maintained in the Forensic Toxicology Drug Testing Laboratory Information Management System (FTDTLIMS).

Military Entrance Processing Command (MEPCOM) contracted with NDSL Great Lakes to perform pre-service drug testing for all branches of the military. As such, they are the single drug testing facility for over 70 MEP Stations throughout the world. In 2005, the Navy Alcohol and Drug Abuse Prevention Branch (PERS-671), Navy Personnel Command, requested and received over 100,000 drug test records (positive and negative) for all military service applicants spanning the period 1999 to present. These data contain, amongst other identifiers, social security numbers and drug test results. Positive only drug test data were also provided for this same group dating back to the early 1990s. From this database, the Personnel Readiness and Community Support Division (PERS 6), Navy Personnel Command identified those Navy individuals who had pre-service positive drug tests while at MEPS. The Alcohol and Drug Management Information Tracking System (ADMITS) manager in PERS-6 currently maintains these data in an Oracle™ database.

Drug attrition data collected by NDSL Great Lakes, IL, which were later acquired and analyzed by PERS-6 were reevaluated at Navy Personnel Research, Studies, and Technology (NPRST/PERS-1). NPRST merged these data with May 2005 Enlisted Master File (EMF) data to determine those applicants for Navy enlistment who had positive drug tests while processing for enlistment at a Military Entrance Processing Station (MEPS) and were subsequently enlisted with a drug waiver. Frequency distributions and descriptive statistics, including means (*M*) and standard deviations (*SD*) were developed on this single merged data set. Results of these data analyses are provided below. Additionally, trend analysis of this cohort of Sailors was performed for enlistment years 2000 through 2004.

Data Analysis

Table 1 shows that of the total number of pre-service drug waiver individuals remaining on active duty (n = 2720), 92.6 percent are male.

Table 1
Frequency distribution of individuals on active duty with pre-service drug waivers by sex

Sex	Frequency	Percent
Female	199	7.4
Male	2521	92.6
Total	2720	100.0

Table 2 is a frequency distribution of individuals with pre-service drug waivers who are still in active naval service by years of formal education. Those with less than the traditional 12 years of elementary and secondary education account for 11.8 percent (n = 322) of the total (N = 2720) group; whereas, 4.6 percent (n = 125) have 13 or more years of education.

Table 2
Individuals remaining in active naval service with pre-service drug waivers by years of education

	Years of Education	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.0	1	.0	.0	.0
	4.0	1	.0	.0	.1
	8.0	23	.8	.9	1.0
	9.0	68	2.5	2.6	3.6
	10.0	106	3.9	4.1	7.7
	11.0	123	4.5	4.7	12.4
	12.0	2153	79.2	82.8	95.2
	13.0	56	2.1	2.2	97.3
	14.0	47	1.7	1.8	99.2
	15.0	4	.1	.2	99.3
	16.0	18	.7	.7	100.0
	Total	**2600**	**95.6**	**100.0**	
Missing		**120**	**4.4**		
Total		**2720**	**100.0**		

Data were analyzed to depict differences in education level. Years of education suggest time in an education system, but do not necessarily provide an indication of education success. It is possible that someone with only 10 years of education might be a high school graduate conversely; it is also possible that someone with over 13 years of education might not be a high school graduate. Table 3 displays education level attainment for individuals with pre-service drug waivers still on active duty.

Table 3
Education level of individuals on active duty with pre-service drug waivers

Education Level	Frequency	Percent	Valid Percent	Cumulative Percent
Less than high school	82	3.0	3.0	7.8
Correspondence school	3	.1	.1	7.9
One semester of college	118	4.3	4.3	12.2
Adult education diploma	103	3.8	3.8	16.0
Associate's degree	16	.6	.6	16.6
General Education Diploma	155	5.7	5.7	22.6
HS grad/failed exit exam	3	.1	.1	22.7
Home study diploma	9	.3	.3	23.0
HS certificate attendance	1	.0	.0	23.0
Baccalaureate degree	17	.6	.6	23.6
HS diploma	2080	76.5	76.5	100.0
Total	**2720**	**100.0**	**100.0**	

Armed Forces Qualification Test (AFQT) scores of individuals on active duty with prior service drug waivers were examined. These results indicate a mean score of 59.9 (*SD* = 17.2), which suggests that the typical drug waiver individual is above average intellectually (as measured by the Armed Services Vocational Aptitude Battery [ASVAB]) and is categorized in AFQT category IIIA.

Enlisted performance evaluation scores are maintained in the EMF for individuals E-5 and above. The Performance Mark Average (PMA) of individuals E-5 and above with pre-service drug waivers and still on active duty is 3.57 (*SD* = 1.0). This suggests that Sailors with pre-service drug waivers E-5 and above who are on active duty meet acceptable performance standards as compared with their peers.

Advancement recommendations as recorded on the most recent enlisted evaluations for E-5 and above show that 79.0 percent of all Sailors who entered naval service with pre-service drug waivers and are still on active duty have recommendations for

advancement in the top two advancement categories of Must Promote (*n* = 100) (50.0%) and Early Promote (*n* = 58) (29.0%). Given current enlisted evaluation guidelines allowing for an unlimited number of Sailors assigned these two categories and given a noted evaluation leniency effect among Navy supervisors, these numbers are unremarkable. Table 4 provides a distribution.

Table 4
Advancement recommendations of individuals E-5 and above remaining on active duty with pre-service drug waivers

Advancement Recommendation	Frequency	Valid Percent	Cumulative Percent
NOB	13	.5	6.5
SP	1	.0	7.0
PR	1	.0	7.5
P	27	1.0	21.0
MP	100	3.7	71.0
EP	58	2.1	100.0
Total	**200**	**100.0**	

Note. Not observed (NOB), significant problems (SP), Progressing (PR), Promotable (P), Must Promote (MP), and Early Promote (EP).

Table 5 displays those rates and ratings were the highest incidences of positive pre-service drug related attrition occur. It is important to highlight that the most significant rates of attrition occur with general detail Sailors (GENDETS).

Table 5
Rates and ratings where the highest incidences of pre-service drug related attrition occur

Ratings	Frequency	Percent
AN	155	5.7
AA	91	3.3
AR	71	2.6
Airman Total	317	11.6
AE2	15	.6
AE3	33	1.2
AEAA	9	.3
AEAN	45	1.7
AEAR	4	.1
AE Total	106	3.9
AM2	17	.6
AM3	58	2.1
AMAA	3	.1
AMAN	47	1.7
AMAR	7	.3
AM Total	137	4.8
AT2	16	.6
AT3	69	2.5
ATAA	8	.3
ATAN	42	1.5
ATAR	5	.2
AT Total	140	5.1
CS3	20	.7
CSSA	13	.5
CSSN	33	1.2
CSSR	11	.4
CS Total	77	2.8
FN	39	1.4
FA	14	.5
FR	29	1.1
Fireman Total	82	3.0
FC2	3	.1
FC3	26	1.0
FC Total	29	1.1

Table 5
Rates and ratings where the highest incidences of pre-service drug related attrition occur

HM3	22	.8
HN	46	1.7
HM Total	66	2.5
MA3	28	1.0
MASA	3	.1
MASN	20	.7
MASR	2	.1
MA Total	53	1.9
MM2	20	.7
MM3	67	2.5
MMFA	8	.3
MMFN	30	1.1
MMFR	7	.3
MM Total	132	4.9
OS3	15	.6
OSSA	1	.0
OSSN	21	.8
OS Total	37	1.4
SN	112	4.1
SA	45	1.7
SR	61	2.2
Seaman Total	218	8.0
SK2	15	.6
SK3	28	1.0
SKSA	7	.3
SKSN	24	.9
SKSR	3	.1
SK Total	77	2.9
BM3	26	1.0
EM3	25	.9
EN3	22	.8
ET3	24	.9

Note. Only rates and ratings with significant levels of pre-service drug waiver attrition shown. (*N*=4320)

Of those with positive pre-service drug test waivers and later separated before completing their entire first enlistment, eight disposition codes dominate the EMF data file. These codes and the corresponding descriptions are reported in Table 6.

Table 6
Enlisted Master File final disposition codes for individuals with positive pre-service drug tests and later separated prior to completing their entire first enlistment

Narrative Description	Disposition Code	Frequency	Percent
Pattern of Misconduct	HKA/JKA	29	1.1
Misconduct	HKQ	12	.4
Disability with Severance Pay	JFL	12	.4
Personality Disorder	JFX	11	.4
Court Martial	JJE	24	.9
Completion of Service	MBK	107	3.9
Reduction in Force	MCC	21	.8

Note. Does not total 100%. Insignificant cases not shown. (*N*=4320)

Data relating to the Perform to Serve (PTS) process are not available in the EMF and therefore, not reflected in this report.

Enlisted master file data were extracted for the five years that attrition statistics were available (i.e., 2000 through 2004). These data were used to develop trend analyses of those who entered the Navy with a pre-service drug waiver while processing at MEPS to show attrition trends and statistics over time. These data reflect the number of Sailors who entered Naval service with pre-service drug waivers while processing at MEPS and remained on active duty as of the time indicated. Figure 1 offers a graphical display and Tables A-1-a and A-1-b (Appendix A) provide raw data.

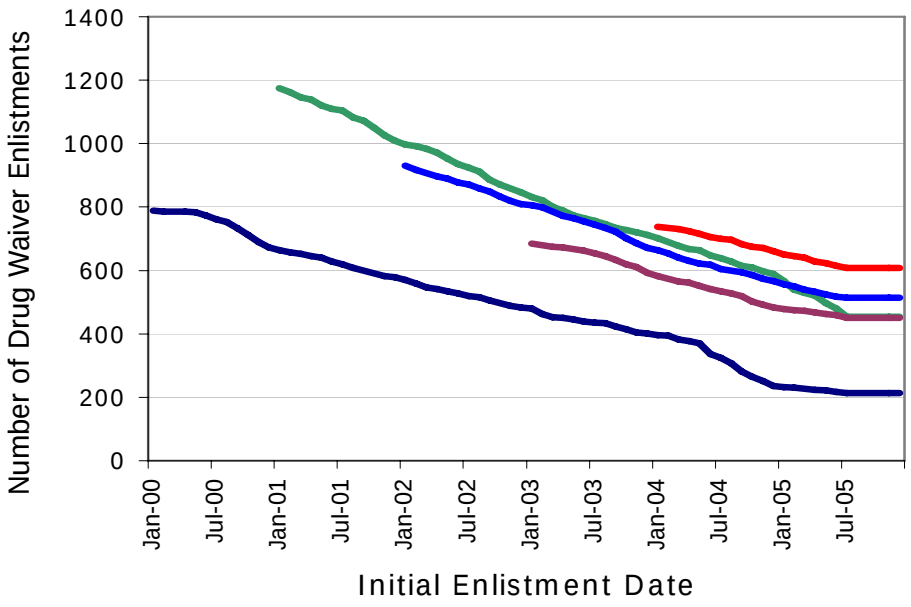

Figure 1. Pre-service drug waiver attrition while processing at MEPS by year of enlistment.

Chief of Naval Personnel Action Memorandum

In an Action Memo to the Chief of Naval Personnel dated 23 June 2005, the Personnel Readiness and Community Support Division (PERS-6), Navy Personnel Command, Millington, TN reports findings and recommends action based on those findings. PERS-6 states:

> CNO Guidance 2004 tasked Navy to reduce drug use, reduce overall attrition, and recruit better quality individuals. From 1 October 1999 to 30 September 2004, Navy enlisted 4,320 individuals who previously tested positive at MEPS. 2,028 attrited before completing first enlistment. Enclosure (1) to TAB A show 1,737 of 2,028 attrites tested positive for illegal drugs on active duty (85.6 percent).

Based on this statement and others reported in this Action Memo, PERS-6 recommends that Commander, Navy Recruiting Command "immediately cease enlisting subject individuals."

However, it should be noted that the 85.6 percent attrition rate reported by PERS-6 is limited to those persons who entered Naval service with drug waivers and were subsequently attrited for drug reasons (n = 1737). An additional 291 persons with drug waivers attrited for other than drug related reasons (n = 1737 + 291 = 2028 total attrites). Drug attrites (n = 1737) from the total population of those admitted to Naval service with waivers subsequent to positive drug tests at MEPS (N = 4320) is 40.2 percent. Total attrites (n = 2028) account for 46.9 percent of the entire population; therefore, it is determined that (n = 2292) 53.1 percent of the original (N = 4320) Sailors identified by PERS-6 as being accepted for enlistment with a drug waiver remain on active duty.

The findings of this brief study do not support the PERS-6 recommendation to immediately cease enlisting individuals with pre-service drug waivers. While the likelihood of successful full-term enlistment is reduced for those with pre-service drug waivers, this report shows that a substantial percentage of this cohort (53.1%) ultimately became productive Sailors. Overall, 87.6 percent of this group has over 12 years of formal education. A total of 77.7 percent of this group has successfully attained a high school diploma, associate's degree, or bachelor's degree. This cohort is above average intellectually with an average AFQT of 59.9. This same group has an average PMA of 3.57 and 75 percent of this group (E-5 and above) (N = 200) have received either a Must Promote (MP) or Early Promote (EP) on their performance evaluations. While it is unclear exactly which ratings this cohort tends to fill, it is apparent that several of the more technical fields (e.g., AE, AT, FC, HM, etc.) do benefit from admittance of these individuals.

Conclusion

This paper does not advocate acceptance or rejection of any particular position. It does suggest that the statistical findings of PERS-6, while technically accurate, do not afford decision-makers with a comprehensive view of this issue and potentially offer misleading data to support their position. It is clear that individuals who require pre-service drug waivers as a result of positive drug tests at MEPS are at a substantially higher risk of attrition and are less likely to complete full-term first enlistments. The risks of increased attrition associated with enlisting this cohort must be weighed carefully against the potential negative impacts to the Navy's ability to recruit these individuals and any political fallout that might occur resulting from non-acceptance of these individuals to military service.

Appendix

Table A-1-a
Number of Sailors on active duty after subtracting attrites by year of entry

Date	Year 2000 entrants	Year 2001 entrants	Year 2002 entrants	Year 2003 entrants	Year 2004 entrants
Jan-00	788				
Feb-00	786				
Mar-00	786				
Apr-00	786				
May-00	784				
Jun-00	774				
Jul-00	762				
Aug-00	753				
Sep-00	732				
Oct-00	712				
Nov-00	690				
Dec-00	672				
Jan-01	665	1174			
Feb-01	658	1162			
Mar-01	652	1146			
Apr-01	645	1139			
May-01	640	1120			
Jun-01	628	1110			
Jul-01	619	1104			
Aug-01	607	1083			
Sep-01	599	1072			
Oct-01	591	1050			
Nov-01	582	1026			
Dec-01	578	1009			
Jan-02	570	997	931		
Feb-02	558	992	917		
Mar-02	547	983	906		
Apr-02	542	972	896		
May-02	534	952	890		
Jun-02	527	935	878		
Jul-02	519	924	870		
Aug-02	516	911	859		
Sep-02	505	886	848		
Oct-02	496	871	834		
Nov-02	488	859	820		
Dec-02	484	847	810		

Table A-1-b
Number of Sailors on active duty after subtracting attrites by year of entry

Date	Year 2000 entrants	Year 2001 entrants	Year 2002 entrants	Year 2003 entrants	Year 2004 entrants
Jan-03	479	832	806	684	
Feb-03	463	821	799	679	
Mar-03	453	801	785	674	
Apr-03	451	788	772	673	
May-03	446	774	765	667	
Jun-03	438	765	754	663	
Jul-03	435	756	744	654	
Aug-03	434	746	735	645	
Sep-03	424	734	723	633	
Oct-03	415	727	702	620	
Nov-03	405	720	687	611	
Dec-03	401	712	671	592	
Jan-04	396	702	665	583	738
Feb-04	394	690	654	574	734
Mar-04	383	678	640	565	730
Apr-04	377	668	630	562	724
May-04	371	664	621	552	715
Jun-04	337	647	618	542	705
Jul-04	324	638	605	535	700
Aug-04	307	629	600	527	697
Sep-04	281	614	595	519	683
Oct-04	265	610	585	502	675
Nov-04	251	597	573	491	671
Dec-04	236	589	567	484	660
Jan-05	233	566	557	478	651
Feb-05	231	540	549	475	646
Mar-05	227	530	539	473	640
Apr-05	224	520	533	468	629
May-05	222	497	524	463	623
Jun-05	217	479	518	459	615
Jul-05	214	455	514	451	608
Aug-05	213	455	514	451	607
Sep-05	213	455	514	451	607
Oct-05	213	455	514	451	607
Nov-05	213	455	514	450	607
Dec-05	213	455	514	450	607

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