

Alcohol Use and Military Performance

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ABSTRACT

An international comparison of armed forces personnel reveals that military use of alcohol exceeds civilian rates. In this perspective, air force personnel do not tend to consume as much alcohol as personnel from other armed services. From a 2006 survey of perceptions of unwanted behaviours it appears that 15% of the Netherlands armed forces personnel reports misuse of alcohol in their units. Misuse of alcohol appears to increase the likelihood of bullying and harassment. It also has a negative relationship with military performance as risks of mistakes increase. In a 2008 sample of this study twenty- seven percent of these respondents agreed or strongly agreed to the item that in their unit too much alcohol was consumed. Respondents who deployed reported less misuse of alcohol, compared to respondents who never deployed. Deployments decrease the use of alcohol, but before and after deployments this use seems to increase. Recommendations are made for further research and more accurate measurements to detect the misuse of alcohol.

1.0 INTRODUCTION AND RESEARCH QUESTIONS

In this paper we describe the use of alcohol by armed forces personnel and its relationship with military performance. Health promoting behaviours can help to prevent ill health and disease and can help improve military performance. Health promoting behaviours, such as a reduction in substance use, maintaining a healthy diet and engaging in physical exercise are strongly associated with morbidity and mortality. Tobacco use was the single most important preventable cause of death and disease in the United States for many years¹. It has also been shown that lifestyle factors involve habitual modes of behaviour and thinking, which are difficult to change². Understanding how specific health behaviours co-vary, possesses implications for designing effective health promotion programs. From a longitudinal study of a United States Navy cohort of $n = 1,019$ active duty military personnel it appeared that there is very little overlap among changes in health behaviours and that health promotion interventions should be behaviour-specific³. Among military personnel, progress has been made in reducing illicit drug use and smoking, although the prevalence of both heavy alcohol use and smoking among those 18 to 25 years of age remains higher than for civilians⁴. From 1998 through 2005 alcohol consumption in the US military increased, most likely induced by the stress of the 9/11 attacks and the 2003 Iraq war⁵. Deployment experience accounts for an increase of alcohol use and alcohol dependence, which has negative implications for military readiness and the safety of personnel⁶. Heavy drinkers among United States Army personnel were 66% more likely to be spouse abusers than were abstainers⁷. Even after three

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decades, combat experiences account for an increase in smoking and a decrease in general life satisfaction of United States Vietnam veterans⁸.

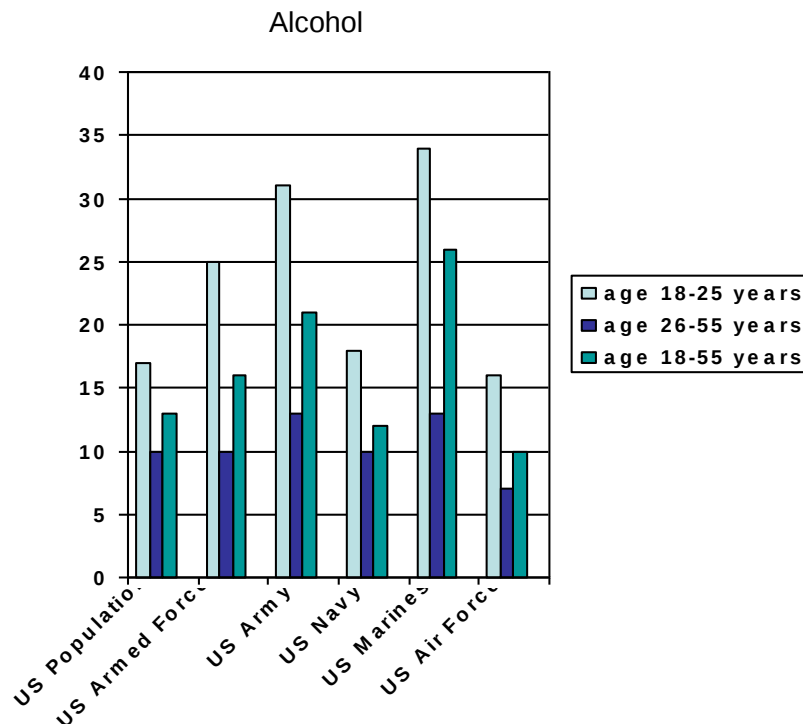


Figure 1: Percentages in US Civil and Military Populations of heavy alcohol users Source: Department of Defense Survey on Health Related Behaviours of Active Duty Military Personnel. Research Triangle Institute International. Research Triangle Park, North Carolina, December 2006, p 87.

From Figure 1 it appears that in the United States, the age group 18-25 years has more heavy alcohol users than the age group 26-55 years. Among US armed forces personnel heavy use of alcohol are more frequent than among US civil populations. Within the US Armed Forces the Marines Corps and Army personnel have more heavy drinkers than the Navy and Air Force.

In the United Kingdom, excessive alcohol consumption in the Armed Forces is more common than in the general population. This alcohol use is strongly related to smoking and being single⁹. In addition to the previous review of alcohol use in the United States and United Kingdom Armed Forces the questions raised is **how do military personnel in the Netherlands Armed Forces perceive the use alcohol in their unit and how does their alcohol use relate to their deployment experiences?**

2.0 METHOD AND SUBJECTS

In 2006 a study was conducted by a research and investigation team (RIT), which was tasked by the State Secretary of Defence to study the extent to which unwanted behaviours take place in the Netherlands Armed Forces. The trigger for this study was a case of sexual harassment in the Royal Netherlands Navy¹⁰. The RIT expanded their survey to all military personnel of the Netherlands armed services. In the military total force of 46,259 military personnel, 13,000 received a questionnaire, of which 3,800 completed and returned the questionnaire, which is a response percentage of 29%. The survey contained one item on the perceptions of alcohol misuse, by measuring the compliance with the statement 'in our

unit too much alcohol is used'. In the RIT report (2006) 15% of the respondents reported that they agreed or strongly agreed with this statement. Those respondents also reported a higher degree of bullying and harassment in their units. However, the RIT did not analyse the data in terms of the personal or professional career of the respondents, e.g. like being deployed or not being deployed. In our study we used the same item on the perception of alcohol misuse, but combined this with questions on the personal and professional career of the respondents. Subjects completed the questionnaire from across a variety of situations, such as initial officer training, officer career training, pre-deployment training or re-deployment decompression. The overall compliance to complete the questionnaire was good, which resulted in a response rate of 94%. Table 1 presents an overview of the personal data and career data of the respondents.

Table 1: Career data and personal background of respondents (n=636) in a survey on unwanted behaviours in the Netherlands Armed Forces 2008/2009.

Armed Service	280 army, 224 navy, 101 air force, 31 military police Army (<i>n</i> = 280) Navy (<i>n</i> = 224) Air Force (<i>n</i> = 101) Military Police (<i>n</i> = 31)
Sex	Male (<i>n</i> = 542) Female (<i>n</i> = 94)
Mean Age	30
Mean years of Service	10
Number of Deployments	0 (<i>n</i> = 323) 1 (<i>n</i> = 109) 2 (<i>n</i> = 83) 3 (<i>n</i> = 50) ≥4 (<i>n</i> = 65)
Marital status	Single, unmarried (<i>n</i> = 396) Married (<i>n</i> = 214) Divorced (<i>n</i> = 26)

From table 1 it appears that the majority of respondents originate from the Army, which is the largest armed service on the Netherlands Forces. As the Navy and the air force are half as large as the army in the Netherlands Armed Forces, it appears that the navy is overrepresented in this sample. Most likely this is due to the fact that all members of two marine corps companies, which deployed to Chad in Africa, participated in this survey in their downtime before their deployment. All other subjects were recruited from various units, in which all armed services personnel were represented. More than half of the respondents never deployed, a third had deployed once or twice and the remainder had deployed three times or more. As the Netherlands Armed Forces consist of almost 12% female personnel, female respondents are slightly overrepresented in this sample. The average age of the respondents was 30 years and their average time of service was ten years. Almost 400 respondents were single, over 200 were

married and 26 were divorced. Compared to the 33% average divorce rate in the Netherlands national population, military marriages in this sample appear to last longer.

3.0 RESULTS

Figure 2 represents the sample's scores, and to which extent the respondents in our survey agreed to the item 'in our unit too much alcohol is used'. Respondents are grouped by sex and by career history, e.g. ever deployed versus never deployed.

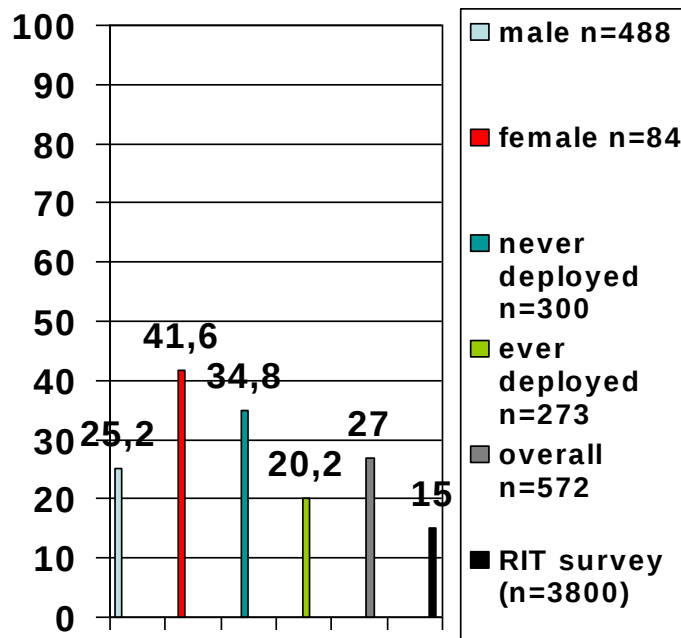


Figure 2: Percentages of respondents who agreed or strongly agreed on the item 'in our unit, too much alcohol is used' (N=573).

From Figure 2 it appears that 27% of the respondents in our survey agreed or strongly agreed to the item 'in our unit too much alcohol is used'. In the 2006 RIT survey, only 15% of the respondents agreed or strongly agreed to this item. Among the male respondents in our sample, 25% agreed or strongly agreed to this item. Among the female respondents 42% agreed or strongly agreed to this item. Thirty-five percent of the respondents who have never been deployed agreed or strongly agreed to this item, whereas 20% who have been deployed once or more agreed or strongly agreed to the item.

4.0 DISCUSSION

Compared to the 2006 RIT survey results, in our survey more respondents agreed or strongly agreed to the item 'in our unit too much alcohol is used'. This increase can be interpreted in at least three different ways. Firstly, the increase of respondents who perceive too much use of alcohol in their unit might be explained by higher levels of alcohol consumption in their particular unit. However, this explanation is not very likely, as a code of conduct was established in 2007 for all military personnel, which strictly forbids the use of alcohol when it might affect military performance. Secondly, their perception on what is too much can vary, which directly influences their answers. This explanation is more likely, as the 2007 code of conduct might have raised the awareness and judgement concerning the use of alcohol. Thirdly, the

group of respondents in our survey could differ from the respondents in the 2006 RIT survey. The fact that a much better response was established in our survey (94%), compared to the 29% response rate in the 2006 survey, adds to the likelihood of this explanation, especially when we assume that a low response on a socially undesirable item adds to an underestimation of the problem.

The result finding that female respondents in our survey perceive more alcohol misuse than male respondents might have similar explanations. Considering the three aforementioned explanations, again the second explanation appears to be most likely, in which the perception of alcohol use and misuse by females differs from the male perception of the same amount of alcohol.

Our result that military personnel who have previously deployed perceive less misuse of alcohol in their units than those who have never before deployed may be due to the fact that previously deployed personnel have undergone alcohol prohibition at some stage, therefore alcohol misuse is less important as they have been familiar with no alcohol situations; whereas the never deployed group have most likely always been in situations where alcohol is available and therefore open to continued use and abuse. Assuming that previously deployed personnel have served for longer and are older than non-deployed personnel, this might help explain the results, especially when one considers that younger personnel appear to use more alcohol than older personnel, as shown in figure 1.

A clearer interpretation of the results of our survey will be possible when more light is shed on the actual amounts of alcohol used, in addition to our results on the perception of this use. From the item 'in our unit too much alcohol is used' it is not possible to make a difference between respondents thinking that their consumption might not be too much and their perception that others in their units are consuming too much. This is called optimistic bias, or a bias in their reporting. So another study is needed in which questions on their own consumption level allows an equation with their unit members' consumption rates.

Last but not least it is worth mentioning that a considerable percentage of the Netherlands armed forces personnel perceive the use of alcohol in their unit as too much. This group, or their unit members are a target group for interventions, which aim to reduce this misuse of alcohol.

5.0 CONCLUSIONS AND RECOMMENDATION

Military populations in some countries appear to consume more alcohol than their civil population. In the United States military, deployments experiences seem to increase the consumption of alcohol, although during deployments this use is strictly forbidden.. From studies among military personnel of the Netherlands Armed Forces it can be concluded that a considerable percentage of these personnel agree or strongly agree that too much alcohol is consumed in their unit. Female personnel and deployed personnel perceive higher usage than male personnel and non-deployed personnel. From this study it cannot be concluded that this perception reflects their own alcohol consumption, so the actual use of alcohol by all personnel remains unknown. Therefore it is recommended to include items of actual use of alcohol by deployed personnel in future research on the relationship between alcohol use and deployment experiences.

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