

Comparing short versions of the Alcohol Use Disorders Identification Test (AUDIT) in the military

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Background: The Alcohol Use Disorders Identification Test (AUDIT) is a 10-item screening tool used for monitoring hazardous harmful alcohol consumption (Table 1). Shortened versions exist, but their performance largely untested in military settings. We sought to determine the optimal short version of the AUDIT for use in a military setting

Methods: A total of 952 naval recruits (80% male) completed the AUDIT-10.

- We required novel shortened versions to represent all three AUDIT domains and include item 9 on alcohol-related injury.
- We systematically analysed the performance of all three or four AUDIT item combinations in relation to the full 10 items using: (1) Cronbach's alpha (internal consistency), (2) variance explained (R^2) and (3) Pearson's correlation coefficient (concurrent validity).

Results: Median AUDIT-10 score was 7 for males and 6 for females.

A novel four-item AUDIT variation (3,4,8 & 9) performed consistently higher than established variations across statistical measures.

The FAST, together with several other four-item novel AUDIT variants performed similarly. The AUDIT-C performed consistently low on all measures, but with a satisfactory level of internal consistency (75%). (Table 2)

Conclusion: Shortened AUDIT variations may be suitable alternatives to the full AUDIT for screening for hazardous/harmful alcohol consumption in military populations.

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Table 1: AUDIT-10 and Established short versions – Domains

Item no.	The AUDIT question	AUDIT Domain ¹	Established AUDIT Variations				
			AUDIT-10	AUDIT-C	AUDI T-3	FAST	AUDIT -4
1	How often do you have a drink containing alcohol?	C	•	•			•
2	How many drinks containing alcohol do you have on a typical day when you are drinking?	C	•	•			•
3	How often do you have 6 or more drinks on one occasion?	C	•	•	•	•	•
4	How often during the last year have you found that you were not able to stop drinking once you had started?	D	•				
5	How often during the last year have you failed to do what was expected of you because of alcohol?	D	•				•
6	How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	D	•				
7	How often during the last year have you had a feeling of guilt and remorse after drinking?	H	•				
8	How often during the last year have you been unable to remember what happened the night before because of your drinking?	H	•				•
9	Have you or someone else been injured because of your drinking?	H	•				
10	Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	H	•				•
Score range:			0-40	1-12	0-4	0-16	1-16

¹ AUDIT domains are: C, alcohol consumption; D, alcohol dependence; H, harmful alcohol use. (5)

Table 2: Top 10 Novel and established short versions

Overall rank	Selected novel & established combinations	Explained variance of total AUDIT-10 score (R^2)	Cronbach's alpha	Pearson's correlations (r)
1	3,4,8 & 9	0.85	0.63	0.92
2	3,5,8 & 9	0.84	0.63	0.92
3	2,3,4 & 9	0.84	0.62	0.92
4	FAST (3,5,8 & 10)	0.83	0.61	0.91
5	2,3,5 & 9	0.83	0.61	0.91
6	2,4,8 & 9	0.82	0.61	0.91
7	3,4,7 & 9	0.83	0.60	0.91
8	3,6,8 & 9	0.81	0.63	0.90
9	2,5,8 & 9	0.82	0.60	0.91
10	2,3,6 & 9	0.81	0.60	0.90

