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## **Comparing short versions of the Alcohol Use Disorders Identification Test (AUDIT) in a military cohort**

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### **Introduction and Aims:**

The 10-item Alcohol Use Disorders Identification Test (AUDIT) is widely used for monitoring harmful alcohol consumption among high-risk populations. Short versions of AUDIT have been developed for time-constrained settings, but the optimal combination of AUDIT items is unstudied in military populations. We examined the performance of shortened versions of the AUDIT against the full AUDIT (10 items) in young (18-30 years) naval personnel.

### **Design and Methods:**

952 participants (80% male), recruited for a wider study, completed the AUDIT-10. We systematically assessed all possible combinations of three or four AUDIT items and established variations using Cronbach's alpha (internal consistency), variance explained (R<sup>2</sup>) and Pearson's correlation coefficient (concurrent validity). For our purposes, novel shortened AUDIT versions were required to represent all AUDIT domains and include item 9 on alcohol-related injury.

### **Results:**

The median AUDIT-10 score was 7 for males and 6 for females, and 380 (40%) participants were classified as having a score indicative of harmful or hazardous alcohol use ( $\geq 8$ ). While a novel four-item AUDIT variation (3,4,8 & 9) performed consistently higher than established variations across statistical measures (it explained 85% of variance in AUDIT-10, had a Pearson's correlation of 0.92, and Cronbach's alpha was 0.63), the FAST, an established shortened AUDIT variant, together with several other four-item novel variants of AUDIT-10 performed similarly.

### **Discussions and Conclusions:**

Four-item AUDIT variations performed better than three item versions, but a number of four-item versions performed similarly. Shortened AUDIT variations may be suitable alternatives to the full AUDIT for screening for hazardous alcohol consumption in military populations.

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#### **Disclosure of Interest Statement:**

This study was completed as part of a larger study funded by a Defence Health Foundation Booster grant. JW, AB and JVR have no interests to declare. PD has received investigator initiated funding from Gilead Sciences and an untied educational grant from Indivior for work unrelated to this study. PD is an NHMRC Senior Research Fellow, BG is an ARC Future Fellow and AB is an NHMRC Early Career Fellow.