

What is the Best Way to Detect Alcohol Problems Among Transgender and Gender Diverse Folks?

Who are we? 👤

The Research Team

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Who helped us? 👤

As the research team consisted primarily of cisgender researchers and clinicians, we recruited three community members to further guide us:
Cam Marsengil, MPH (they/them)
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What do we mean by Transgender and Gender Diverse?

Gender Identity: Describes someone's inner sense of self about being a man, woman, both, or neither.

Transgender: An individual who has a gender identity different from their assigned sex at birth, which is often based on a person's external reproductive anatomy.

Gender diverse: A range of identities that fall outside the traditional male/female dichotomies.

Genderqueer/non-conforming: An individual whose identity and expression differ from gender norms.

Cisgender: An individual whose current gender identity aligns with their sex assigned at birth.

What is the problem?

- Alcohol screening tests (screeners) assess if someone is engaged in harmful drinking behaviors, also known as alcohol misuse.
- Screening for alcohol misuse is important, as it can detect a problem early on and lead to helpful interventions, like counseling or referral to treatment.
- Existing screeners were developed in cisgender populations, and none of the widely used screeners have ever been validated with transgender and gender diverse (TGD) people.
- We conducted a study to find out which alcohol screeners most accurately measured alcohol/misuse in TGD populations, especially since research suggests that TGD people may be at higher risk of alcohol misuse than cisgender people.
- We believe that heavier drinking and alcohol-related problems in TGD populations are likely due to transphobia, stigma, and experiences of discrimination.

What did we do?

- We distributed recruitment fliers at LGBTQ+ medical clinics and community organizations in the Midwest US, as well as on social media.
- 116 TGD individuals who were current drinkers completed an online survey that assessed if they had alcohol use disorder, as well as seven established brief alcohol screeners:
 - CAGE and T-ACE questions (CAGE and T-ACE are mnemonics to remember the questions)
 - Alcohol Use Disorders Identification Test (AUDIT), including the shorter consumption version (AUDIT-C)
 - Rapid Alcohol Problem Screen (RAPS), including the shorter quantity-frequency version (RAPS-QF)
 - Short Michigan Alcoholism Screening Test (SMAST)
- After participants completed the surveys, we checked each screener's performance by calculating statistical strengths and weaknesses and then compared the performance of the screeners to each other.

What did we learn?

Screeners' performance varied considerably. For example, sensitivity ranged from 0.631 for the SMAST to 0.917 for the CAGE questions (see chart on right; higher scores indicate better performance). For brevity, other characteristics (specificity, positive predictive value, and negative predictive value) are not shown here but are available upon request.

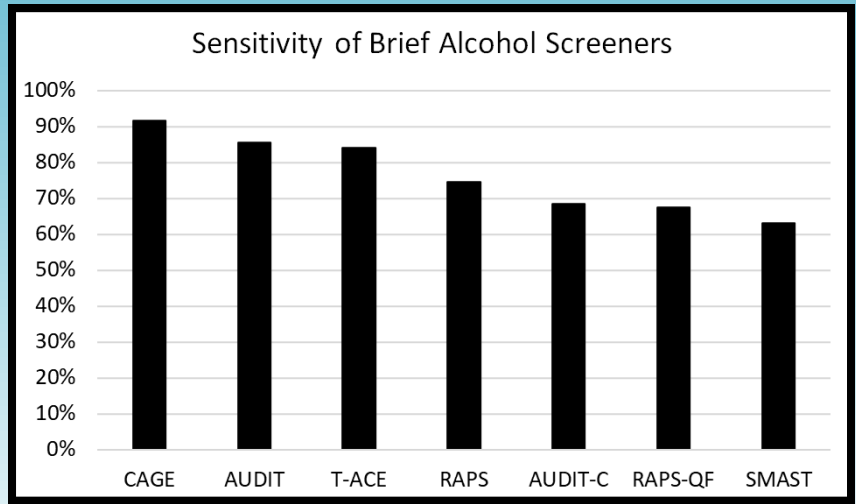
What do we mean by sensitivity, specificity, positive predictive value, & negative predictive value?

Sensitivity: Probability of getting a positive result when a drinking problem is present.

Specificity: Probability of getting a negative result when a drinking problem is not present.

Positive Predictive Value: Percent of positive tests that truly detect any problem drinking.

Negative Predictive Value: Percent of negative tests that truly do not detect any problem drinking.



CAGE Screener

1. Have you ever felt you should **C**ut down on your drinking?
2. Have people **A**nnoyed you by criticizing your drinking?
3. Have you felt bad or **G**uilty about your drinking?
4. Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (**E**ye opener)?

Answering “yes” to two or more questions could mean an alcohol problem. If you’re concerned about your drinking, scan the QR code below under “Do you want to learn more?”

What do our results mean?

The CAGE screener achieved a very good balance of performance characteristics, maximizing the probability of a positive screening result when problem drinking exists (sensitivity) and a very high percent of negative screening results when a person does not meet alcohol use disorder criteria (negative predictive value). In addition, the AUDIT and T-ACE screeners performed nearly as well, offering two additional screeners that could be used with confidence.

Support

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How can we use what we’ve learned?

Based on our results, we recommend that healthcare providers use the CAGE alcohol screener when asking TGD people about their alcohol use. The AUDIT and T-ACE screeners could also be used, as they performed nearly as well as the CAGE questions. To further build upon this study, we need to think about what to do when an alcohol problem is detected. Future work is needed to develop inclusive and affirming interventions and treatments for TGD people who have alcohol problems.

Do you want to learn more?

Contact Dr. Gilbert by phone (319-384-1478) or email (paul-gilbert@uiowa.edu)