

# Ethnicity and Equity of Access to a National and Specialist Mental Health Tic Service

Nimmi Parikh,<sup>1</sup> Saam Idelji-Tehrani,<sup>2</sup> Isabel M. G. Archer,<sup>1</sup> Madiha Shoaib,<sup>1</sup> Andrea Stoltenberg,<sup>1</sup> Tara Murphy,<sup>1</sup> Sara Shavel-Jessop,<sup>1</sup>

Ho-Lan Liang,<sup>1</sup>

<sup>1</sup> Great Ormond Street Hospital, UK <sup>2</sup> Sussex Partnership Foundation Trust, UK

## Background

Young people from minoritized ethnic backgrounds are often underrepresented in mental health services (Bansal et al., 2022). Unconscious biases around ethnicity can influence clinical judgements creating inequalities in access (Mui et al., 2022). National specialist services often offer the most expert advice yet are the most difficult to access (Ekanayake et al., 2023). Barriers to access may be higher for minoritized ethnic groups, and we test this within the Tic Service at Great Ormond Street Hospital. Specifically, aims were to determine:

1. If there were unconscious biases within the referral triage process in a specific time period of referrals
2. If there are systemic biases which impact the referral process and/or a patient's pathway through the service.

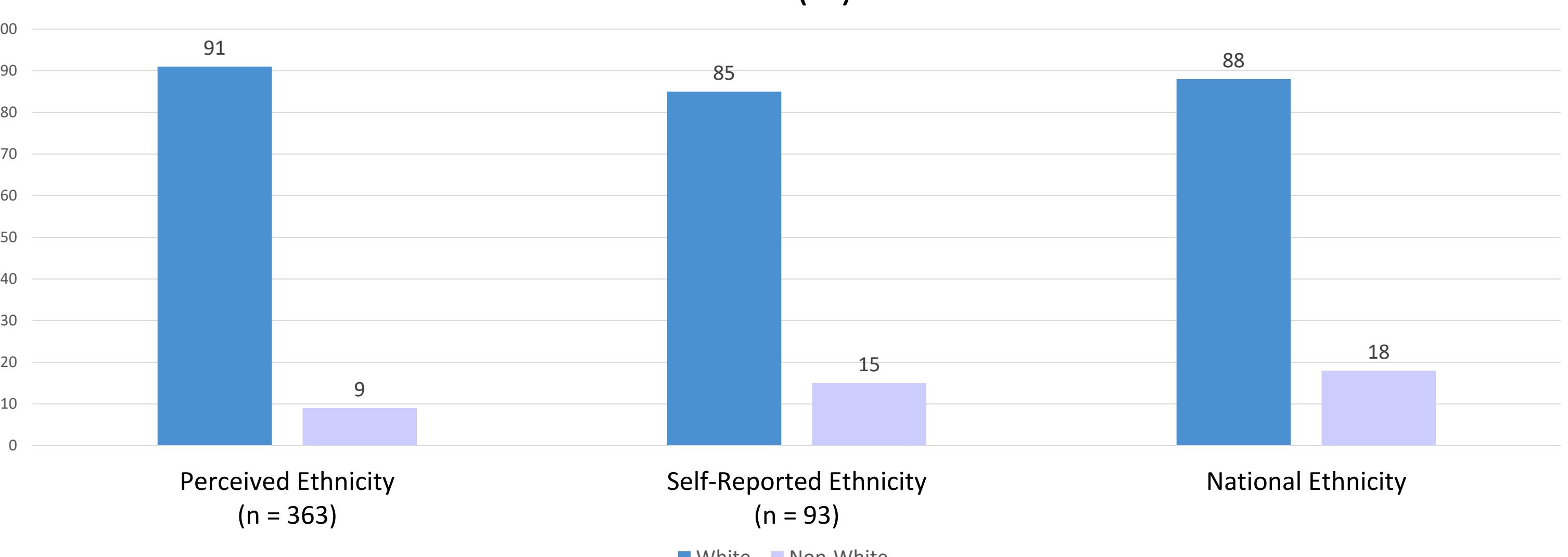
## Methods

We examined the triaged referrals to the Tic Service between May 2021 and November 2022. As ethnicity was not explicitly known by clinicians when triaging, five independent raters predicted ethnicity based on each patient's full name. The modal ethnicity (with >80% interrater consensus) was taken as 'perceived ethnicity' and coded as a binary variable; White vs Non-White, i.e. those perceived to be white presenting vs those perceived to be from a minoritized ethnic background. Chi-squared tests were used to compare acceptance rates between the two groups.

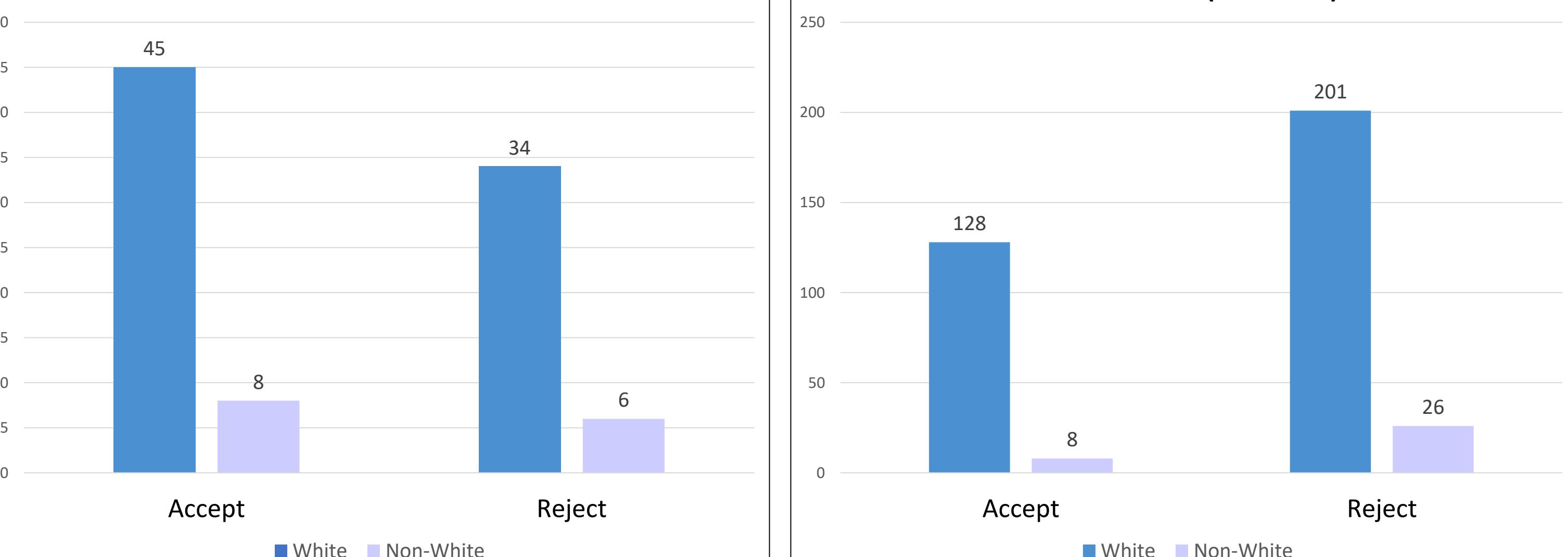
We examined differences in repeat referrals between patients who self-reported as White compared to Non-White. We also explored differences in symptom severity on the Yale Global Tic Severity Scale (YGTSS) and Childrens Global Assessment Scale (CGAS) and appointment attendance rates, based on patient reported ethnicity. Logistic regressions and Chi-squared tests were performed.

## Results

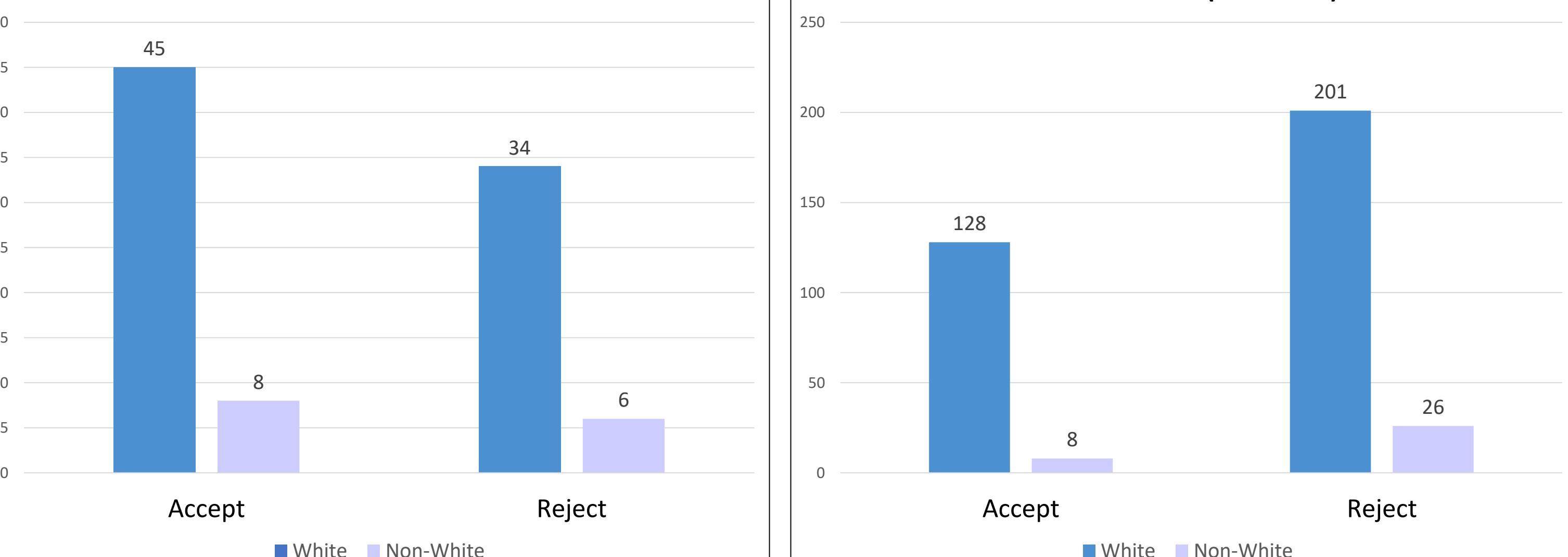
### Distribution of perceived, self-report and nationally reported ethnicity data (%)



### Self-reported ethnicity and triage decision (n=93)

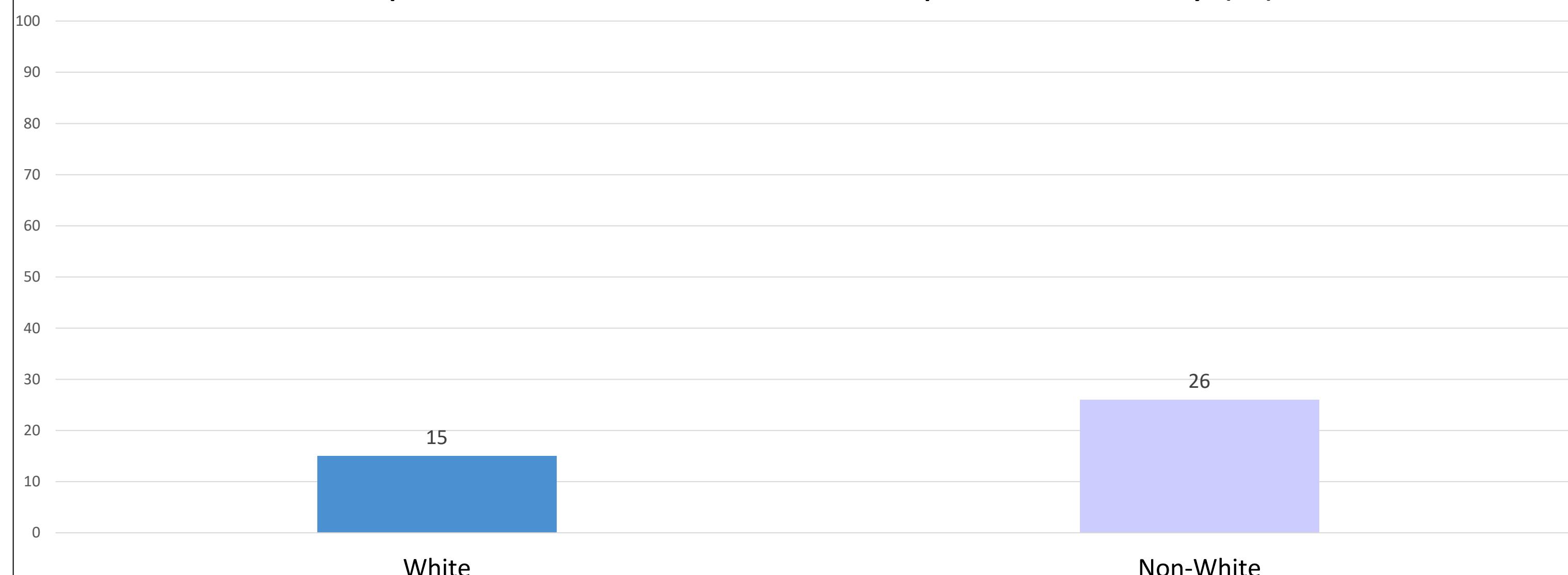


### Perceived ethnicity and triage decision (n=363)

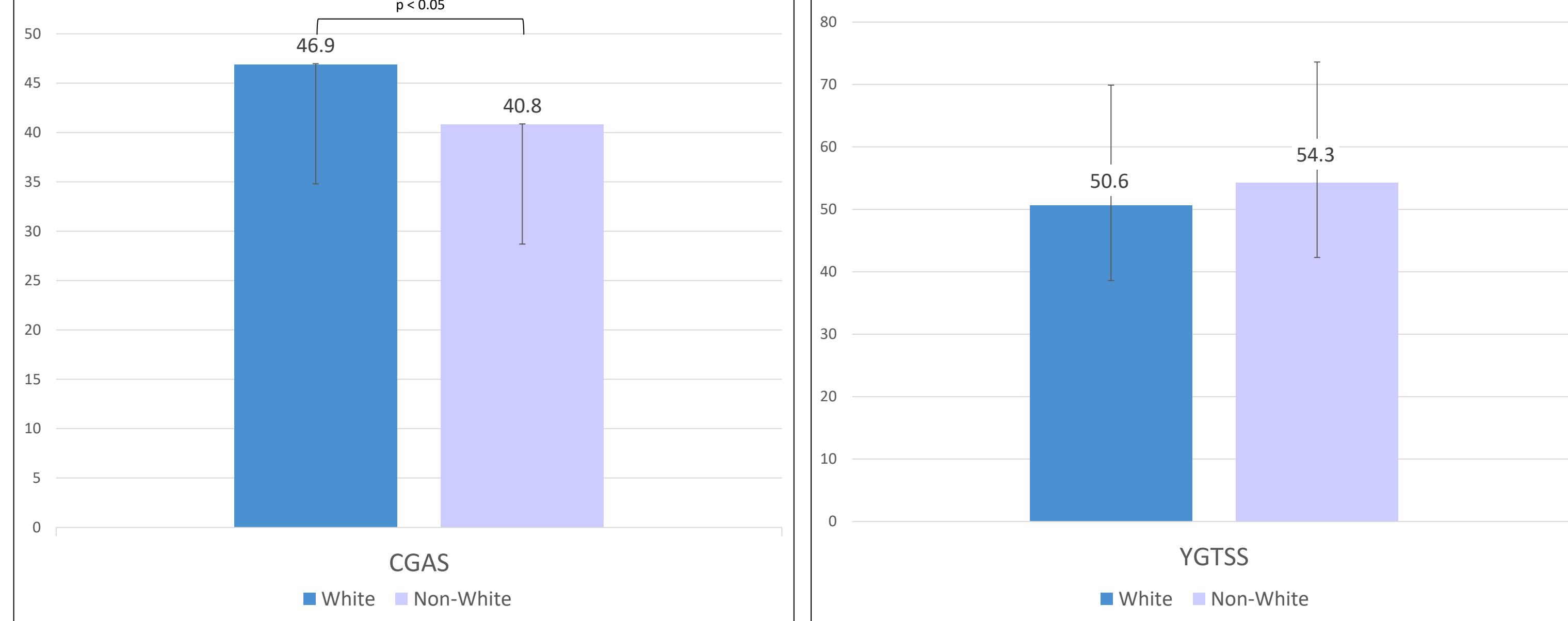


## Results cont.

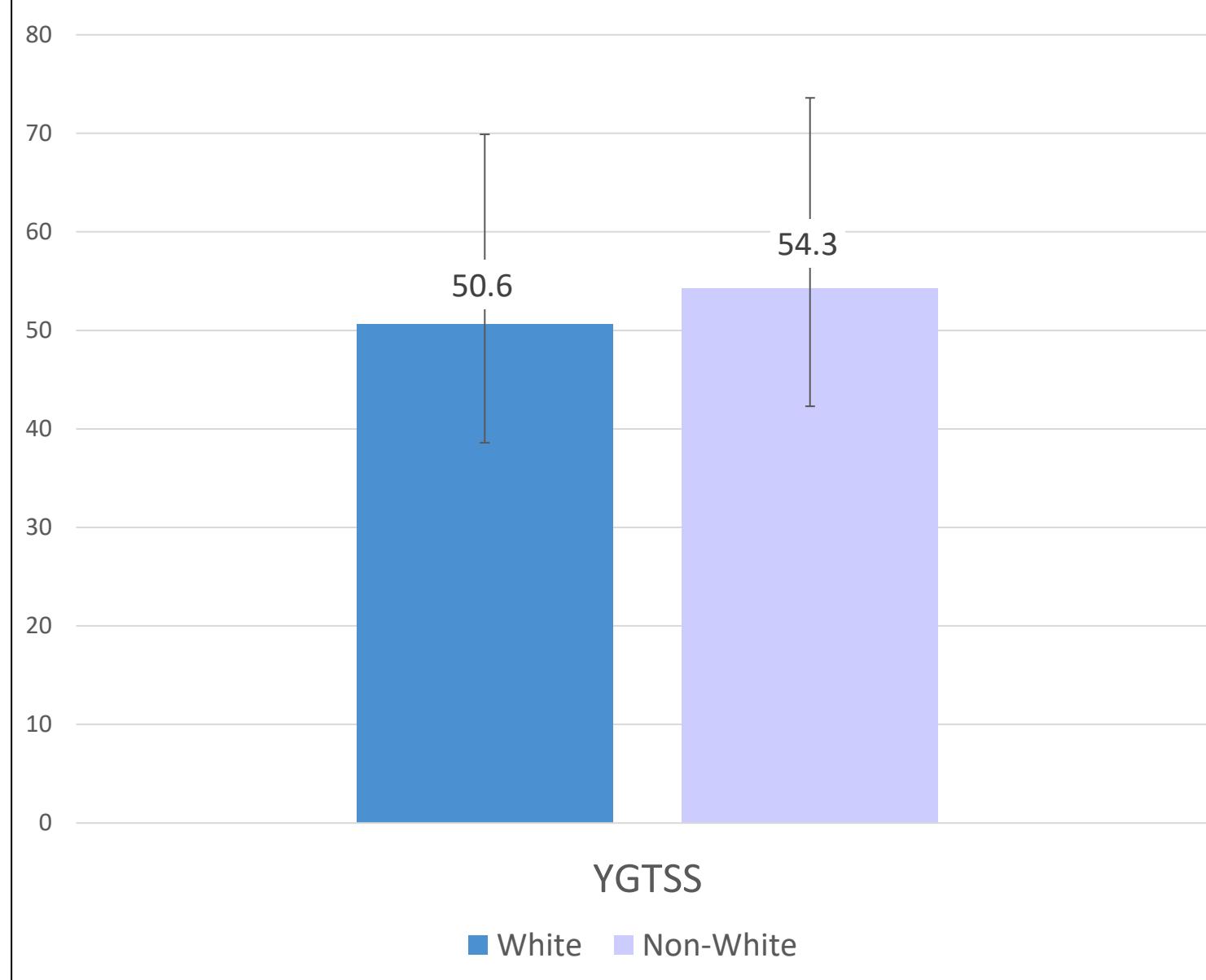
### Repeat referrals based on self-reported ethnicity (%)



### Mean CGAS scores based on self-reported ethnicity (n=41)

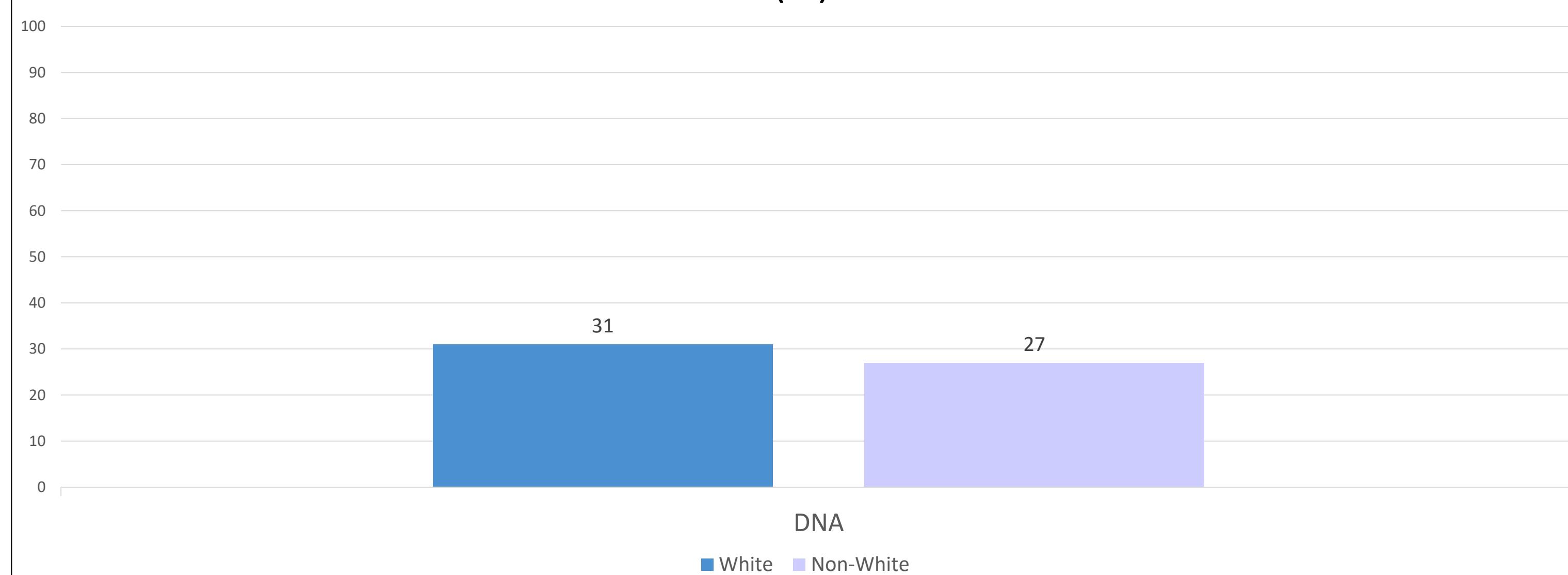


### Mean YGTSS scores based on self-reported ethnicity (n=54)



CGAS scores were found to be 6.1 points lower for Non-White CYP compared to White CYP (95% CI -12.1 to 0.07; p-value = 0.0475). Lower CGAS scores indicate greater impairment in functioning. Despite mean YGTSS scores being higher (indicating a greater burden of tic symptoms) for Non-White CYP compared to White CYP, no statistical association was found between YGTSS scores and binary ethnicity (mean difference 3.7; 95% CI -12.0 to 19.3; p-value = 0.6325).

### Differences in appointment non attendance rates between ethnicities (%)



## Conclusions

While there were no statistically significant differences between perceived ethnicity and referral acceptance, results indicate young people from Non-White backgrounds are likely to face more barriers to being referred into the service. Accepted patients who were from Non-White ethnic groups exhibit greater overall impairment, although not specifically related to tics. Finally, there were no differences in appointment attendance rates, although the sample size of available data was small.

Limitations include not looking at other factors that are known to impact equity of access such as socio-economic status and not collecting qualitative data. Finally, the distinction between the two groups does not capture the burden faced by white-presenting minoritized ethnic groups (e.g. Irish traveller or Jewish communities).

Findings call for greater awareness of challenges faced by patients from minoritized ethnic backgrounds and a more nuanced understanding.

## References

Bansal, N., Karlsen, S., Sashidharan, S. P., Cohen, R., Chew-Graham, C. A., & Malpass, A. (2022). Understanding ethnic inequalities in mental healthcare in the UK: a meta-ethnography. *PLoS Medicine*, 19(12), e1004139.

Miu, K., Ranford, D., Hopkins, C., Karagama, Y., & Surda, P. (2022). Exploring subconscious bias. *The Journal of Laryngology & Otology*, 136(10), 961-963.

Ekanayake, Siyaguna Kosgamage Dilum Manthinda, Ward, A. E., Heart, D., Valery, P., & Soar, J. (2023). Improving primary care referral to specialist services: A protocol for a 10-year global systematic review in the australian context. *BMJ Open*, 13(8), e068927-e068927.