

# Unconscious racial bias may affect dentists' clinical decision on tooth restorability

<b>Submission date</b> 04/06/2018	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 20/06/2018	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 25/09/2020	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Bias is an inclination for or against a person or a group, as it allows for one's personal opinions to influence judgement. It is defined in the Oxford dictionary as an 'inclination or prejudice, for or against one person or group, especially in a way considered unfair.' There are many forms of bias, which are generally one sided and have the ability to affect everyday social interactions. The aims of this study are to determine whether explicit and implicit racial bias predicts the recommendation of root canal therapy or extraction for White and Black patients suffering from irreversible pulpitis (inflammation of dental pulp tissue), and to determine whether different treatment decisions are made for Black vs White patients and to determine whether such differences (if any) are related to the presence of explicit or implicit racial bias.

### Who can participate?

Qualified dentists

### What does the study involve?

Participating dentists are given a clinical scenario in combination with a patient's relevant clinical photographs and radiographs depicting either a Black or White patient presenting with a decayed tooth and the associated symptoms of irreversible pulpitis. Explicit bias is measured through a questionnaire, which evaluates the recommended course of treatment, the strength of the recommendation and their perception of the patient's dental cooperativeness. Implicit bias is evaluated through brief implicit association tests.

### What are the possible benefits and risks of participating?

The possible benefits are to create early awareness and active prevention. Although it might not be likely to completely eliminate the effects impact biases can have upon decision making, a reduction in the occurrence is a worthy result. Ultimately by creating awareness, bias can be recognised and reduced. The risks of participation are that during the tests participants may feel uncomfortable and may not want to continue further.

### Where is the study run from?

The University of Cagliari (Italy)

When is the study starting and how long is it expected to run for?  
January 2017 to November 2017

Who is funding the study?  
Investigator initiated and funded

Who is the main contact?  
Dr Neha Patel

## Contact information

**Type(s)**  
Public

**Contact name**  
Dr Neha Patel

**Contact details**  
Flat 1, Holmefield Court  
Belsize Grove  
London  
United Kingdom  
nw3 4tt

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
BCAG2017

## Study information

**Scientific Title**  
Unconscious racial bias may affect dentists' clinical decision on tooth restorability

**Study objectives**  
The race of a patient does not affect dental clinicians recommendation for root canal treatment.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Azienda Ospedaliero Universitaria Di Cagliari, 12/12/2017, ref: PG/2017/7126

**Study design**

Single-center cross sectional survey

**Primary study design**

Observational

**Secondary study design**

Cross sectional study

**Study setting(s)**

Hospital

**Study type(s)**

Other

**Participant information sheet**

Not available in web format, please use the contact details to request a patient information sheet

**Health condition(s) or problem(s) studied**

Implicit and explicit bias and its influence on clinical treatment planning decisions

**Interventions**

Dentists were given a clinical scenario in combination with a patient's relevant clinical photographs and radiographs depicting either a Black or White patient presenting with a decayed tooth and associated symptoms of irreversible pulpitis.

Explicit bias was measured through a questionnaire, which evaluated participants' course of treatment, strength of recommendation and their perception of patient's dental cooperativeness.

Implicit bias was evaluated through brief implicit association tests.

**Intervention Type**

Other

**Primary outcome measure**

Recommendation for root canal treatment (RCT) is measured using a dichotomous scale (yes or no)

**Secondary outcome measures**

Recommendation for extraction is measured using a dichotomous scale (yes or no)

**Overall study start date**

01/01/2017

**Completion date**

01/11/2017

**Eligibility**

**Key inclusion criteria**

Qualified dentist

**Participant type(s)**

Health professional

**Age group**

Adult

**Sex**

Both

**Target number of participants**

60

**Total final enrolment**

57

**Key exclusion criteria**

1. Dental student or nurse
2. Any health professional without a BDS

**Date of first enrolment**

01/10/2017

**Date of final enrolment**

01/11/2017

**Locations****Countries of recruitment**

Italy

**Study participating centre**

The University of Cagliari

Italy

09124

**Sponsor information****Organisation**

Guy's and King's College London

**Sponsor details**

Great Maze Pond  
London  
England  
United Kingdom  
SE1 9RT

**Sponsor type**

University/education

**ROR**

<https://ror.org/0220mzb33>

## Funder(s)

**Funder type**

Other

**Funder Name**

Investigator initiated and funded

## Results and Publications

**Publication and dissemination plan**

The trialists intend to publish the results of the study in a high-impact peer reviewed journal, and intend on publishing around 6 months to 1 year after the overall trial end date.

**Intention to publish date**

01/11/2018

**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study are/will be available upon request from Dr Neha Patel. Type of data - questionnaire responses and IAT results (raw, tabulated), accessed over email (.doc).

Consent was provided by each individual participant, and all data was anonymised

**IPD sharing plan summary**

Available on request

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Basic results</a>	results	13/11/2018	13/11/2018	No	No
<a href="#">Results article</a>		01/01/2019	25/09/2020	Yes	No