



Optical Assumptions: How do our bias' & assumptions affect the way we practice?

C-104418

Look at the
and tell me
see?

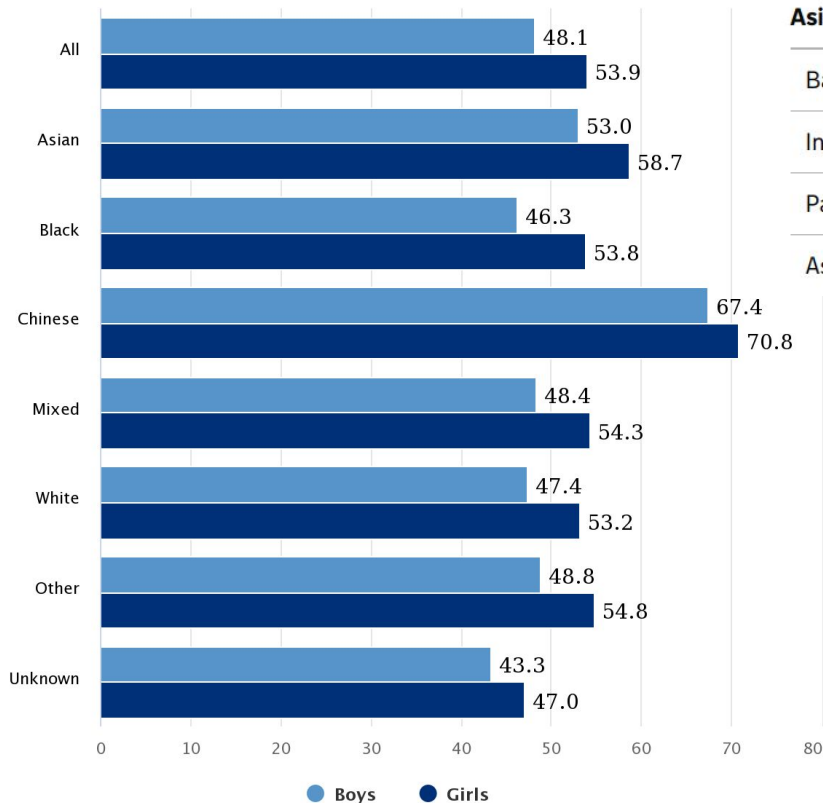
What is ha
Where are



Indian staff from the Indian Space Research Organisation
celebrate after the Mars Orbiter Spacecraft entered Mars's
orbit. **MANJUNATH KIRAN / GETTY**

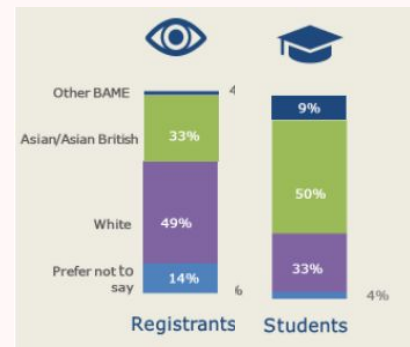
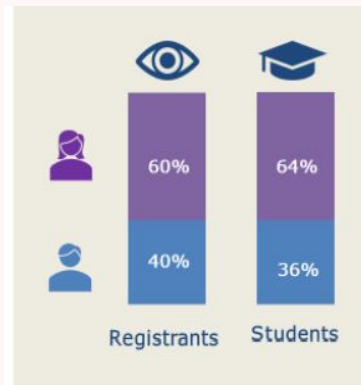


Title: Average Attainment 8 score (out of 90.0) by ethnicity and gender. Location: England. Time period: 2020 to 2021 academic year. Source: Key stage 4 performance: academic year 2020/21 | Ethnicity Facts and Figures GOV.UK



Asian	53.0	32,822	58.7	30,882
Bangladeshi	53.0	5,148	58.3	5,099
Indian	59.2	8,711	65.0	8,190
Pakistani	47.9	13,246	53.4	12,505
Asian other	55.6	5,717	62.0	5,088

Equality and Diversity Data Monitoring Report 2021



Why do we make assumptions?

**What influences
our perceptions?**

01

**How can making
assumptions affect
in practice issues
with staff and
patients?**

03

**How can making
assumptions
affect Px care?**

02

Why do we make assumptions?

Affect: relying on instant emotions

Anchoring: relying on 1st bit of information

Availability: relying on resources or past experiences

Heuristics - rules-of-thumb that can be applied to guide decision-making based on a more limited subset of the available information

Availability Heuristic In Healthcare Study

Effect of Availability Bias and Reflective Reasoning on Diagnostic Accuracy Among Internal Medicine Residents

To investigate whether recent experience with clinical problems provokes availability bias (overestimation of the likelihood of a diagnosis based on the ease with which it comes to mind) resulting in diagnostic errors and whether reflection (structured reanalysis of the case findings) counteracts this bias.

- 8 first-year and 18 second-year internal medicine residents. Participants first evaluated diagnoses of 6 clinical cases (phase 1). Subsequently, they diagnosed 8 different cases through non analytical reasoning, 4 of which had findings similar to previously evaluated cases but different diagnoses (phase 2). These 4 cases were subsequently diagnosed again through reflective reasoning (phase 3).

Mamede S, van Gog T, van den Berge K, et al. Effect of Availability Bias and Reflective Reasoning on Diagnostic Accuracy Among Internal Medicine Residents. *JAMA*. 2010;304(11):1198–1203.

Availability Heuristic In Healthcare Study

**Effect of Availability Bias and Reflective Reasoning on
Diagnostic Accuracy Among Internal Medicine Residents**

Conclusion: When faced with cases similar to previous ones and using non analytic reasoning, residents made errors consistent with the availability bias. Subsequent application of diagnostic reflection tended to counter this bias; it improved diagnostic accuracy.

Mamede S, van Gog T, van den Berge K, et al. Effect of Availability Bias and Reflective Reasoning on Diagnostic Accuracy Among Internal Medicine Residents. *JAMA*. 2010;304(11):1198–1203.

Understanding Different Types Of Bias

Affinity bias

Affinity bias can occur when we prefer people who share similar qualities to ourselves

Attribution bias

Attribution bias can sometimes be involved in the way that we understand and make sense of our own and other's actions

Beauty bias

Beauty bias can exist if we find that we prefer people we perceive as beautiful and if we are making judgements based on appearances and are judging others harshly based on their appearance

Conformity bias

Conformity bias can take place in situations where, in order to be accepted by a social group, people will tend to agree with the views of the majority within the group regardless of what they might think on an individual basis

Confirmation bias

Confirmation bias can happen when we look for, or give greater weight to, evidence that confirms our views and experiences. This can lead to selective observation and us not seeing or valuing evidence that contradicts our beliefs.

Gender bias

Gender bias, as the term suggests, occurs where decisions are based on a preference for a particular gender, often based on stereotypes and deep-seated beliefs about gender roles

The halo effect

The halo effect can introduce bias into decision-making when you focus solely on one great feature about an individual and ignore everything else

The contrast effect

The contrast effect can introduce bias when judgements are made based on a comparison between people rather than assessing people individually on their own merits

Discussion Points:

01

From a leadership perspective, what steps should you put in place to overcome potential bias' when dealing with staff issues or patient complaints?

02

What processes could you put in place to prevent bias' having a negative effect on clinical decision making?

Why diversity training matters...

“Healthcare inequalities within the UK based on patients’ ethnicity have been found over the last five years in a large number of medical specialties. One possible explanation for this lies in ignorance of ethnic minority healthcare needs among professionals. Cultural diversity programmes have been shown to improve patient outcomes including compliance, yet these are not as yet requirements for any UK healthcare professionals with the exception of psychiatrists”

Bentley P, Jovanovic A, Sharma P. Cultural diversity training for UK healthcare professionals: a comprehensive nationwide cross-sectional survey. *Clin Med (Lond)*. 2008 Oct;8(5):493-7. doi: 10.7861/clinmedicine.8-5-493. PMID: 18975480; PMCID: PMC4953930.

Research (Grey et al. 2013; Wallace et al. 2016) shows that many Black and Minority Ethnic (BME) groups experience significant variation when accessing mental health care pathways in the UK. This is reflected in some BME groups being less likely to be referred to mental health services through their General Practitioner (GP) and more likely to be arrested by the police following a crisis

Why diversity training matters...

Compared to White women, women from minority ethnic groups were more likely to be younger, tended to access antenatal care later in pregnancy, have fewer antenatal checks, fewer ultrasound scans and less screening. They were less likely to receive pain relief in labour and, Black African women in particular, were more likely to deliver by emergency caesarean section.

Postnatally, women from minority ethnic groups had longer lengths of hospital stay and were more likely to breastfeed but they had fewer home visits from midwives. Throughout their maternity care, women from minority ethnic groups were less likely to feel spoken to so they could understand, to be treated with kindness, to be sufficiently involved in decisions and to have confidence and trust in the staff.

Henderson, J., Gao, H. & Redshaw, M. Experiencing maternity care: the care received and perceptions of women from different ethnic groups. *BMC Pregnancy Childbirth* 13, 196 (2013). <https://doi.org/10.1186/1471-2393-13-196>

Why diversity training matters...

Our study illustrates the higher risk of DR and STDR in people with T2DM from ethnic minority groups. These groups also have a higher prevalence of T2DM, further increasing their risk of DR and STDR compared to the White population. Retinopathy is another adverse health outcome therefore that is more common in people with T2DM from ethnic minority groups. Our findings illustrate the importance of improving the prevention, early diagnosis and management of T2DM in the UK to reduce the burden of ill-health from retinopathy and the other adverse outcomes of T2DM, particularly in people from ethnic minority groups

Nugawela, M.D.; Gurudas, S.; Prevost, A.T.; Mathur, R.; Robson, J.; Hanif, W.; Majeed, A.; Sivaprasad, S. Ethnic Disparities in the Development of Sight-Threatening Diabetic Retinopathy in a UK Multi-Ethnic Population with Diabetes: An Observational Cohort Study. *J. Pers. Med.* 2021, *11*, 740. <https://doi.org/10.3390/jpm11080740>

The 5 Point Plan:

Based on the previous discussion points, let's put together a 5 point plan that can be implemented in practice to overcome the issues that arise from bias and heuristics and improve staff and patient welfare.

How do we feel about our industry?

The concept of trust is important in healthcare because health and healthcare in general involve an element of uncertainty and risk for the vulnerable patient who is reliant on the competence and intentions of the healthcare professional

High levels of trust have been associated with many benefits, including a perception of better care, greater acceptance to recommended treatment and adherence to that treatment

Alaszewski A. Risk, trust and health. *Health Risk Soc* 2003;5(3):235–239.

Caterinicchio RP. Testing plausible path models of interpersonal trust in patient–physician treatment relationships. *Soc Sci Med* 1979;13:81–99

How do we feel about our industry?

Trust between healthcare workers is a fundamental component of effective, interprofessional collaboration and teamwork. However, little is known about how this trust is built

Bryn L. Sutherland, Kristin Pecanac, Taylor M. LaBorde, Christie M. Bartels & Meghan B. Brennan (2022) Good working relationships: how healthcare system proximity influences trust between healthcare workers, *Journal of Interprofessional Care*, 36:3, 331-339



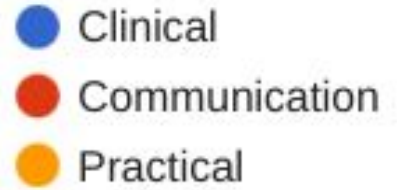
How do we feel about our industry?

Do you trust your colleagues?

**Do you trust the other practices and professionals
in your area?**

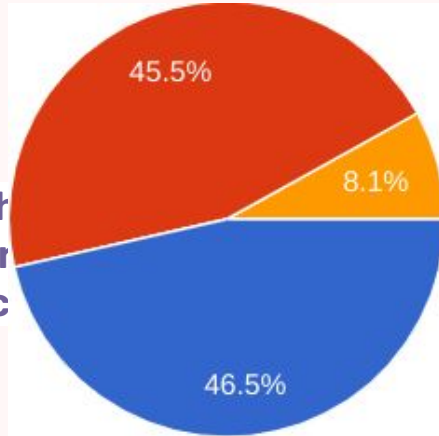
Lets see what our perceptions of our industry are...

We asked 100 ECP's the following questions:



01

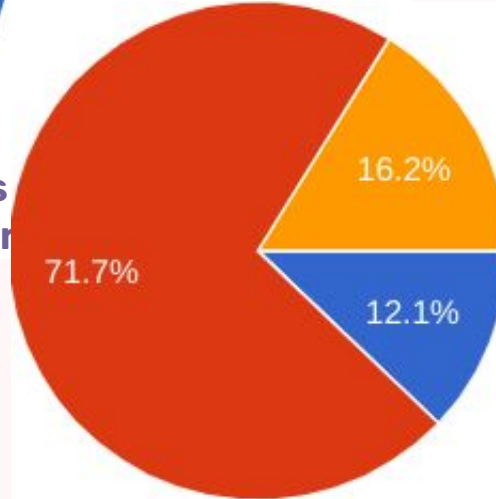
Which
important
Clinic



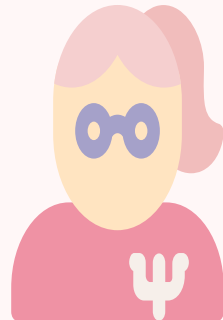
do you feel is the most
important skill for an
eyecare practitioner? Practical,

02

Which of the following skills
lacking amongst eyecare pr
Clinical or Communication



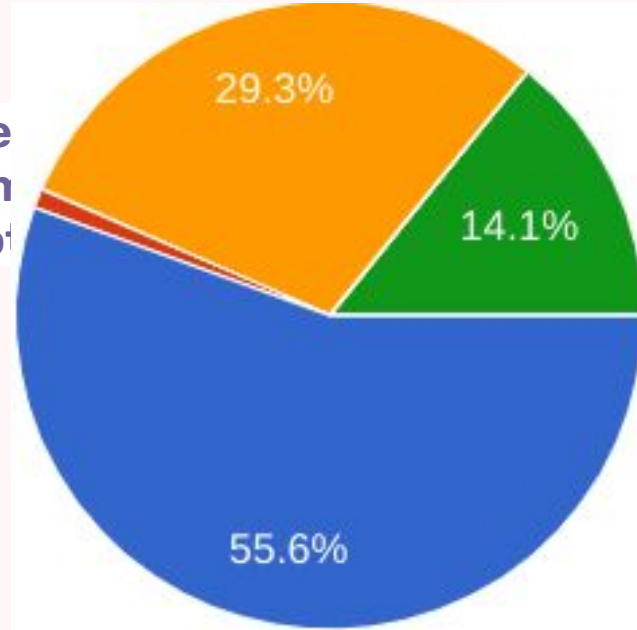
What do you think the results were?



We asked 100 ECP's the following questions:

03

In which se
level of con
Same in bo

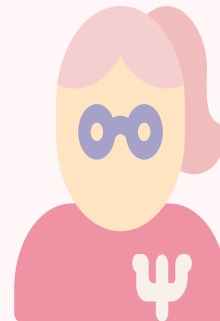
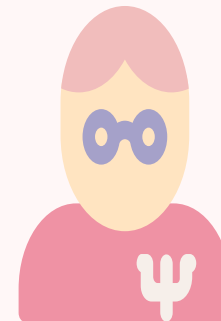


gher
iple,



- Independent
- Multiple
- Same in both
- Not sure

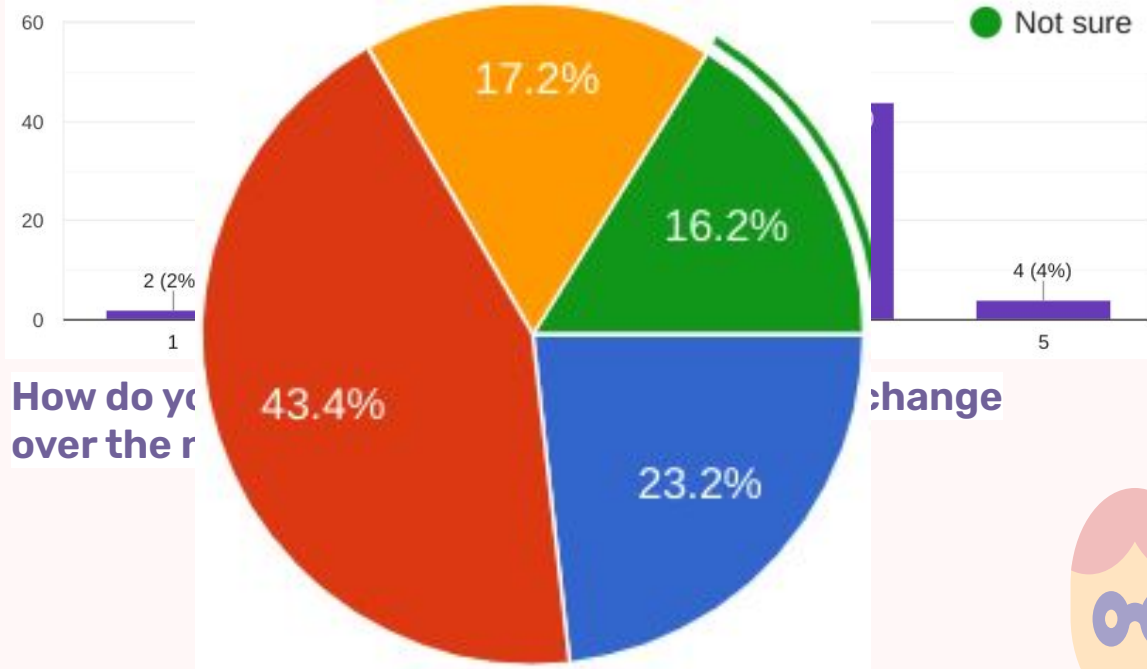
What do you think the results were?



We asked 100 ECP's the following questions:

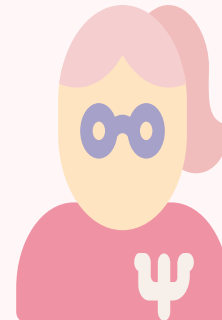
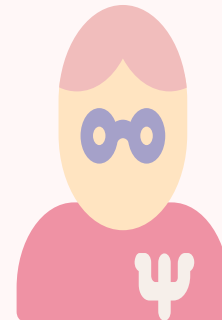
04

05



- Standards will improve
- Standards will decline
- Standards will remain at the current level
- Not sure

What do you think the results were?



Discussion Points:

01

Do you feel the results of the survey represent your initial thoughts?

02

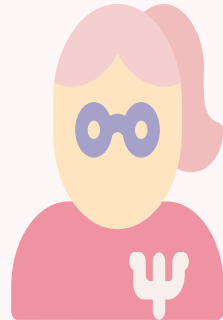
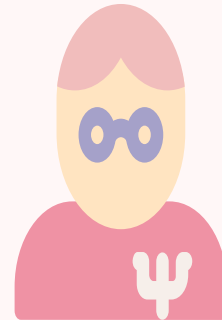
If communication is such a key skill, why do so many people feel it's the skill most lacking?

03

Why do such strong perceptions about the level of competency exist in our industry and what steps could we take to rectify that?

04

What kind of bias' may have influenced your choices or the choices of the ECPs who answered the survey?





**Scan the QR
code to
download your
certificate**