

# Panel Discussion: Data in Conversation

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#YUGradConf23

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# DEMAND SIDE: DIVERSITY IN YORKSHIRE'S LABOUR MARKET AND KEY GROWTH AREAS

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**Peter Glover**

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# Background and purpose

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- Ensuring access to opportunity for all population groups across all occupations and work disciplines is key to equality, diversity and inclusion.
- Some groups are concentrated in certain occupations and poorly represented in others, limiting opportunities for individuals and preventing employers from maximising the potential talent pipeline.
- For example, it is well known that there are distinct patterns of occupational segregation along gender lines, partly driven by stereotyping of roles.
- These employment patterns are often reflected in patterns of student diversity across subjects within higher education, meaning that the issue is perpetuated.
- This presentation:
  - Explores the pattern of diversity across occupations / disciplines within Yorkshire's employment base for higher skilled occupations
  - Aims to provide a basis for comparison with the pattern of diversity within the region's student body to inform future action on promoting diversity.

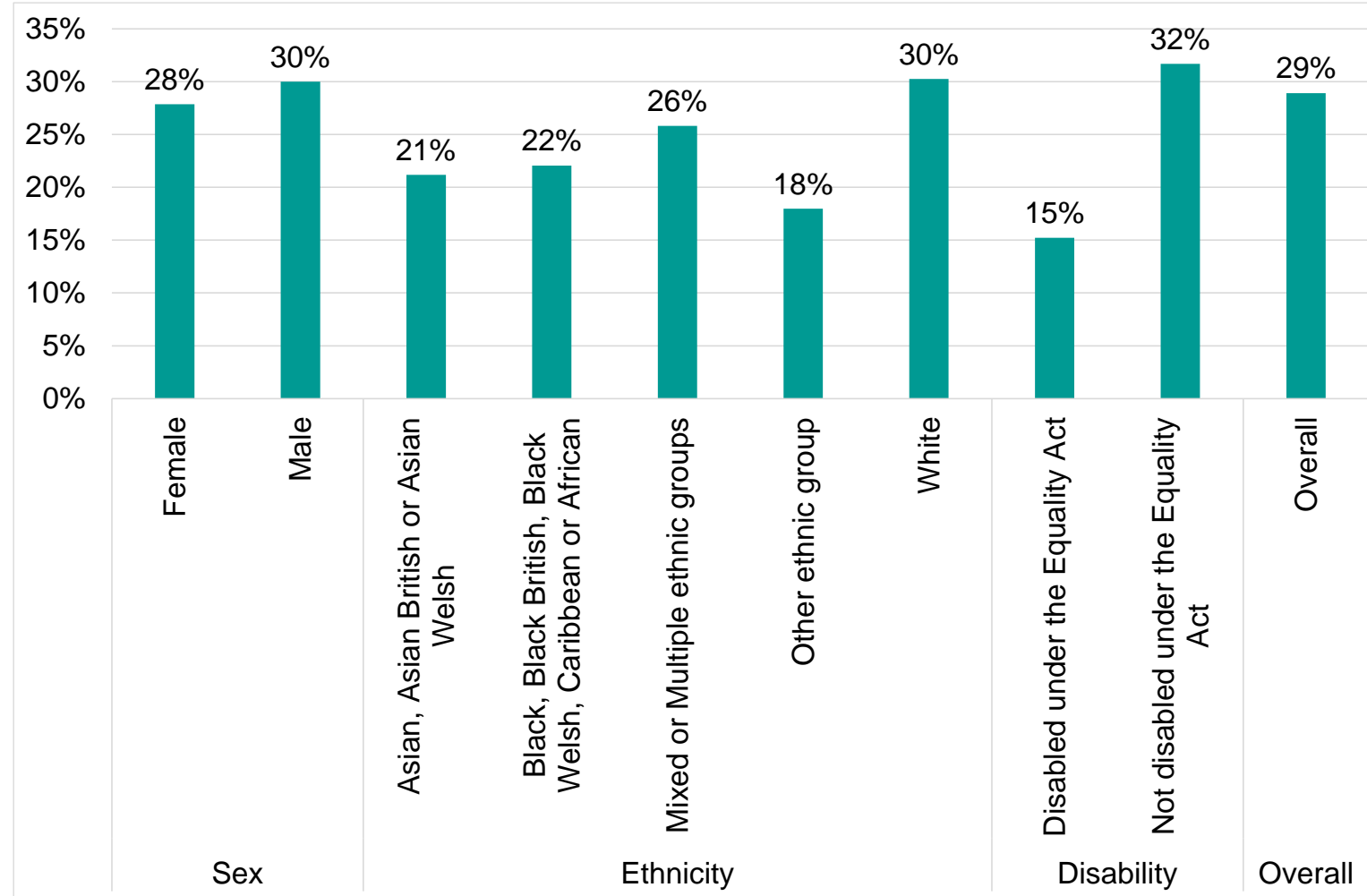
# Approach

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- Data on occupational employment by group of interest sourced from the Census 2021 at Yorkshire and the Humber level (usual residents)
- Scope of analysis limited to occupations at management, professional and associate professional levels – proxy for graduate employment
- Occupation of employment (at SOC 2020 minor group level) has been mapped to related HE subject area to aid supply-demand comparisons (details of mapping provided in appendix)
- Finest level of detail currently available from Census in respect of occupational categories creates issues e.g. scientific roles covered by one occupational category – not possible to split out physical, biological science etc
- Data not currently available from Census for all protected characteristics by occupation.

# Likelihood of being in high skilled employment varies by sex, ethnicity and disability

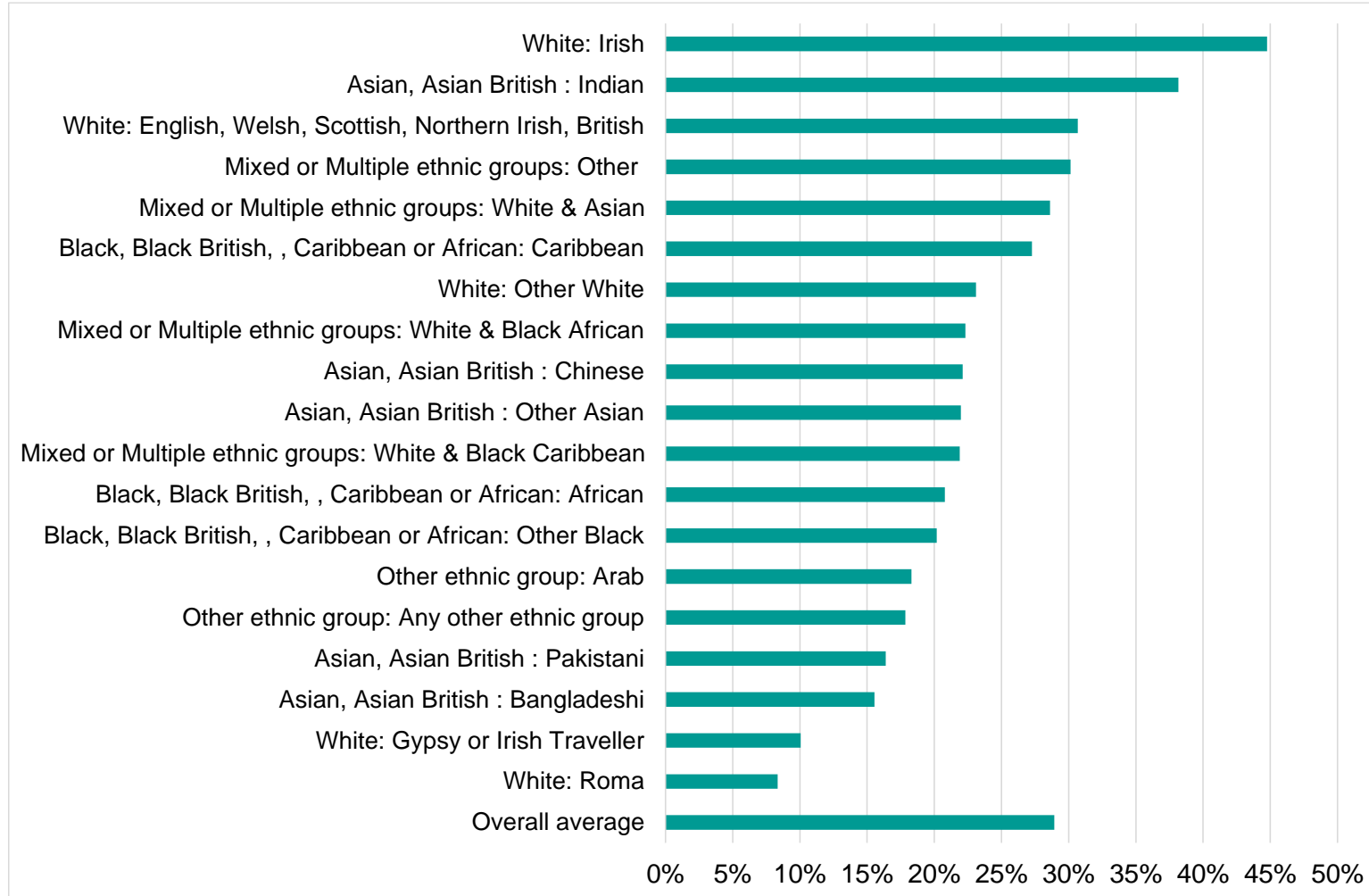
Figure: % of people aged 16-64 employed in higher skilled occupations by selected group, Yorkshire and the Humber



Source: Census 2021

# Broad ethnic categories conceal a more complex pattern of participation in high skilled employment

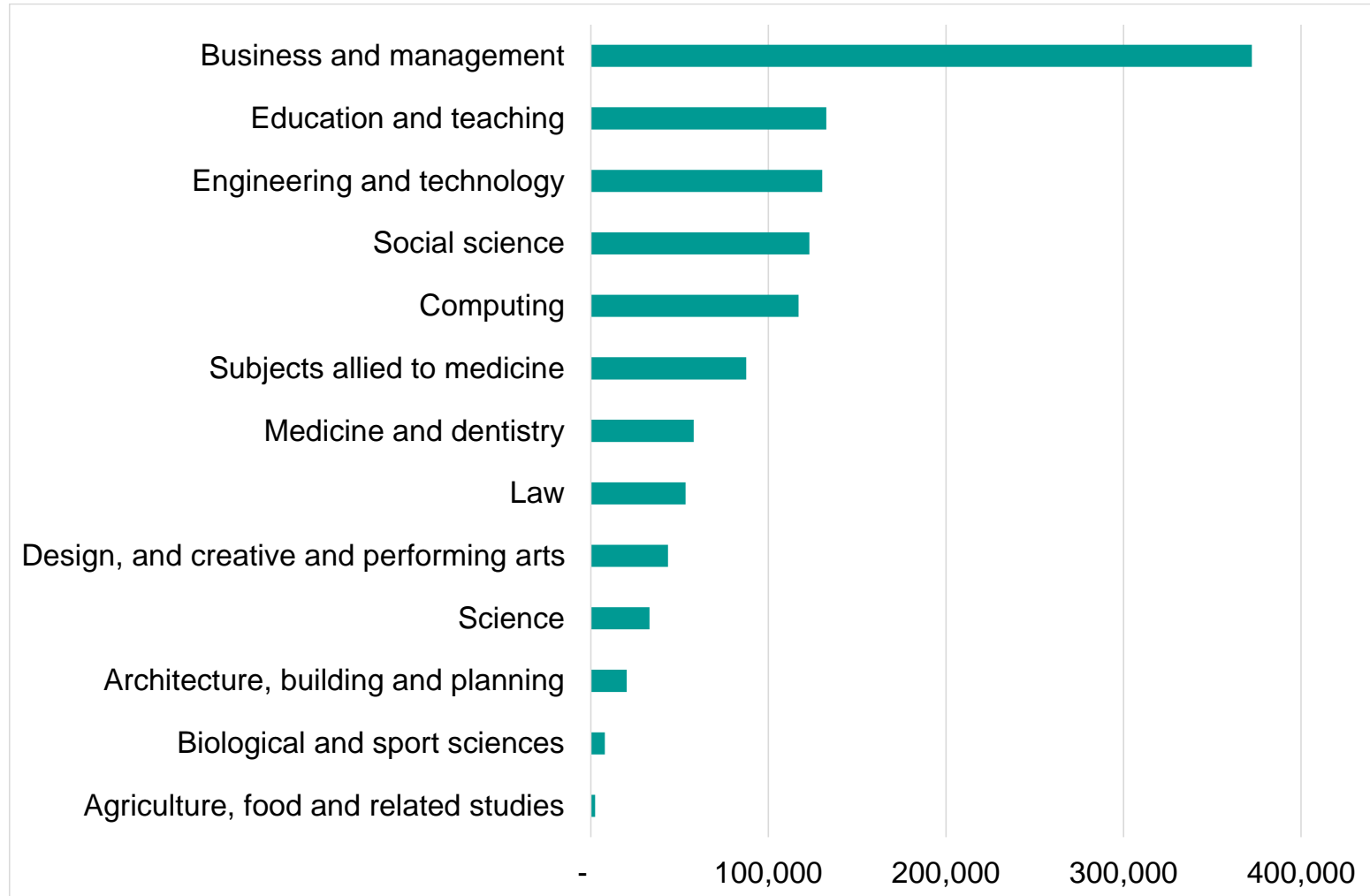
Figure: % of people aged 16-64 employed in higher skilled occupations by ethnic group, Yorkshire and the Humber



Source: Census 2021

# Occupations related to Business and management disciplines account for nearly a third of total employment when occupations are mapped to HE subjects

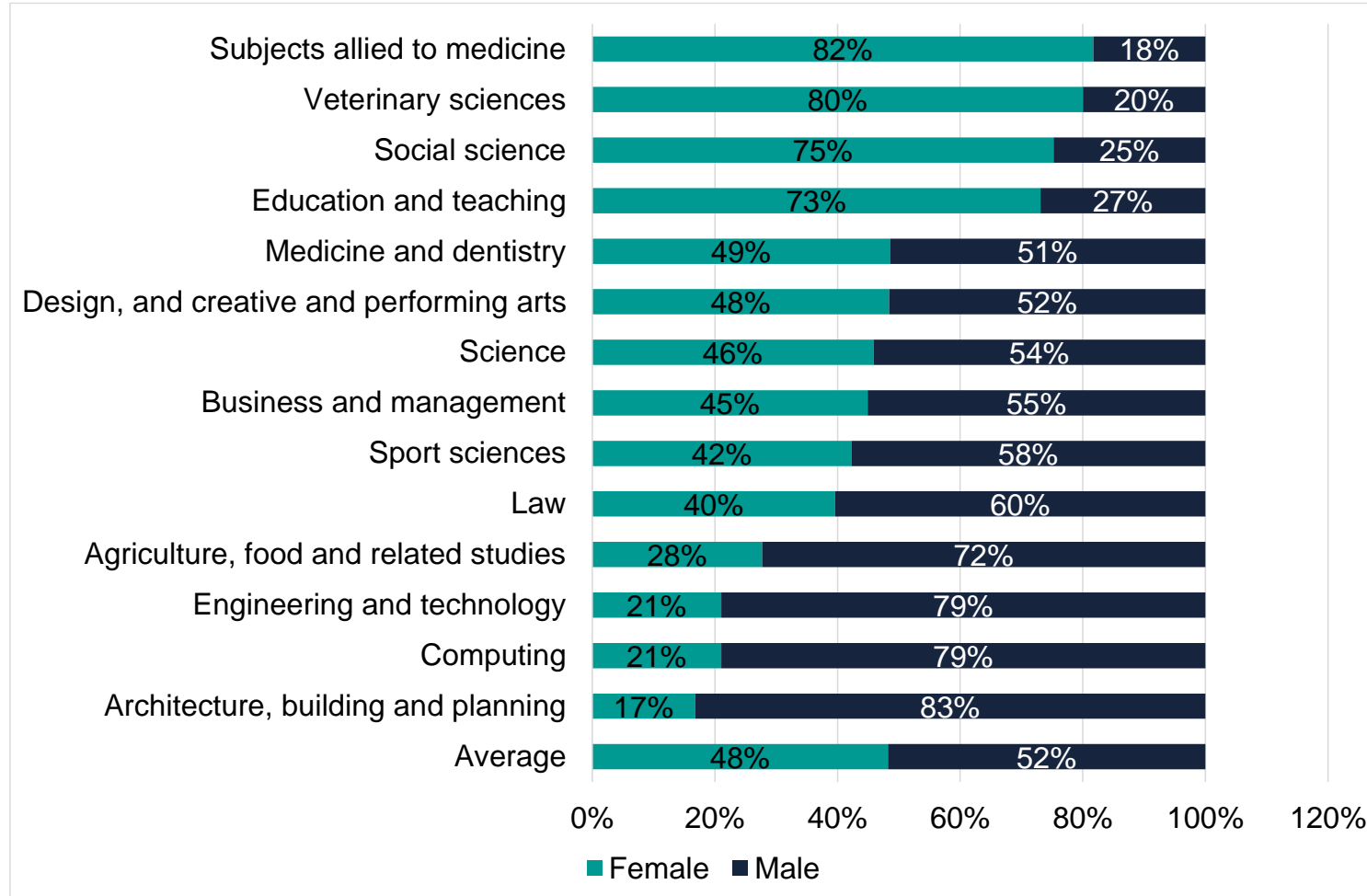
Figure: Employment mapped to related HE subject areas (CAH 1), Yorkshire and the Humber



Source: Census 2021

# Employment in occupations related to Subjects allied to medicine Veterinary sciences and Social science have highest female representation

Figure: Profile of employment in Yorkshire and Humber by sex and by discipline related to employment



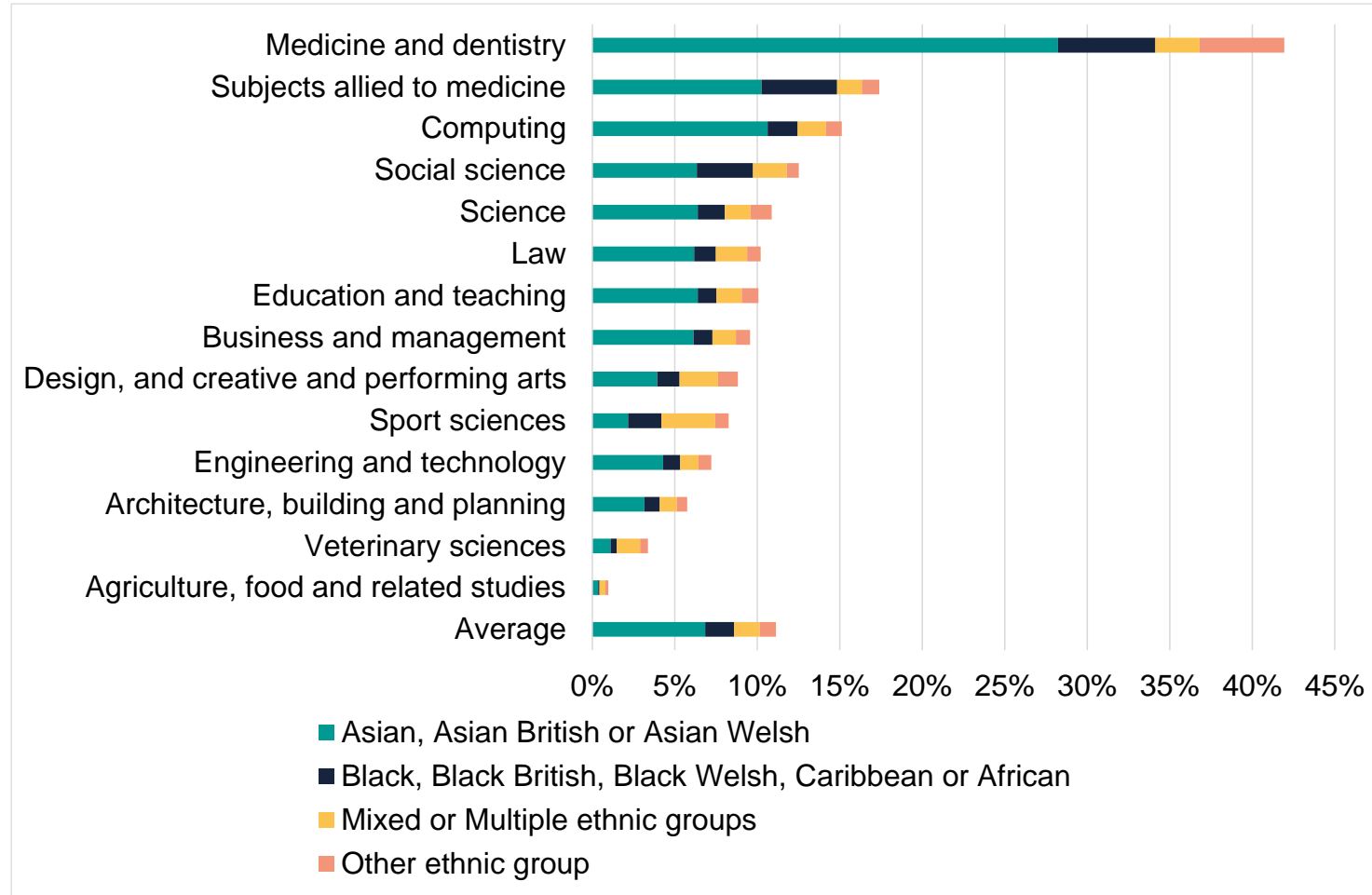
Note: occupational employment is mapped to HE subject of study (CAH1)

Source: Census 2021



# People from ethnic minorities have highest representation in occupations related to Medicine/dentistry, Subjects allied to medicine and Computing

Figure: % of people in employment from an ethnic minority group by discipline related to their employment

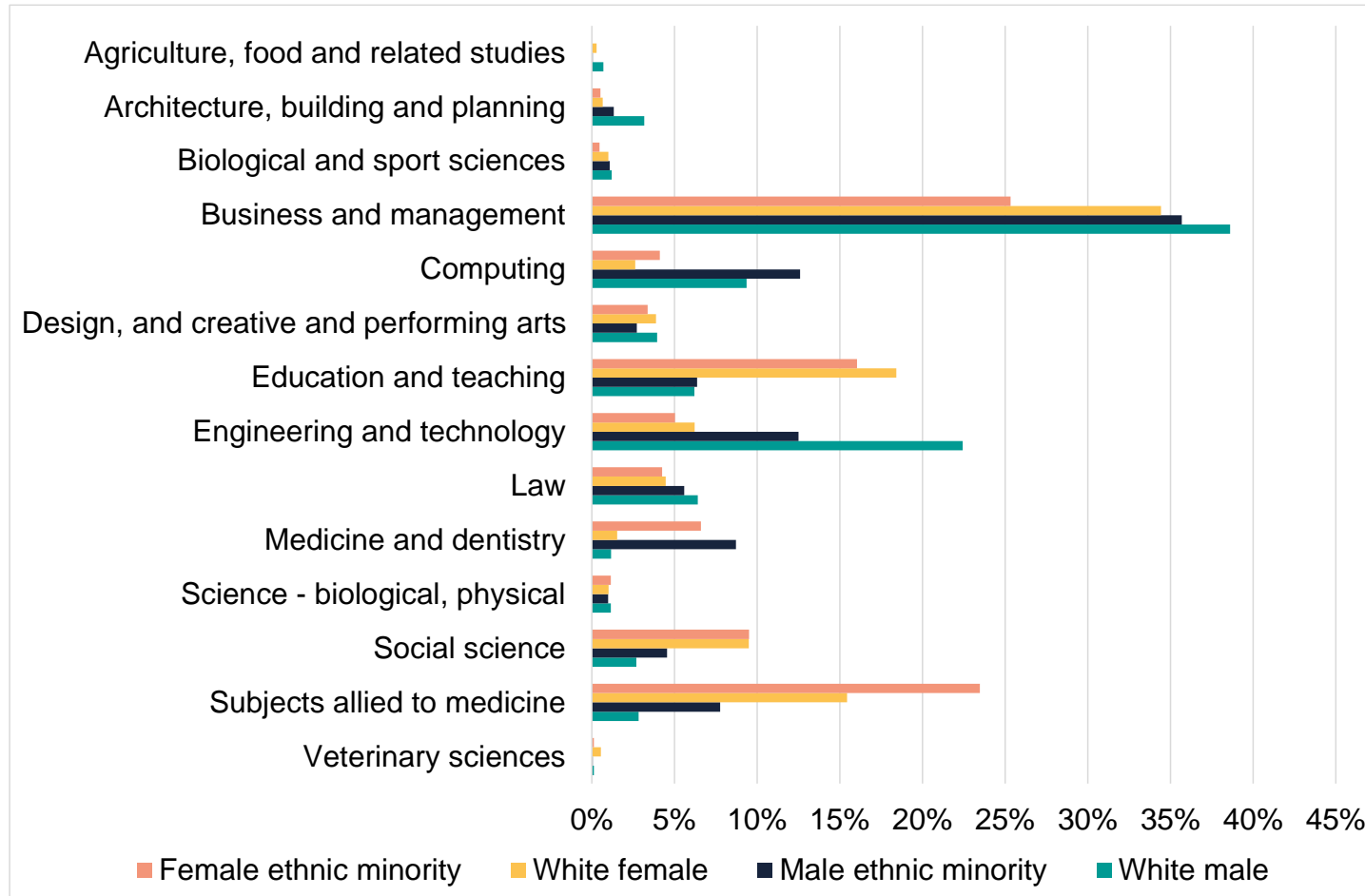


Note: occupational employment is mapped to HE subject of study (CAH1)

Source: Census 2021

# Profile of employment differs for groups defined by combination of sex and ethnicity

**Figure: Profile of employment in Yorkshire and Humber by sex / ethnicity and related subject area (% of total employment in each population group)**

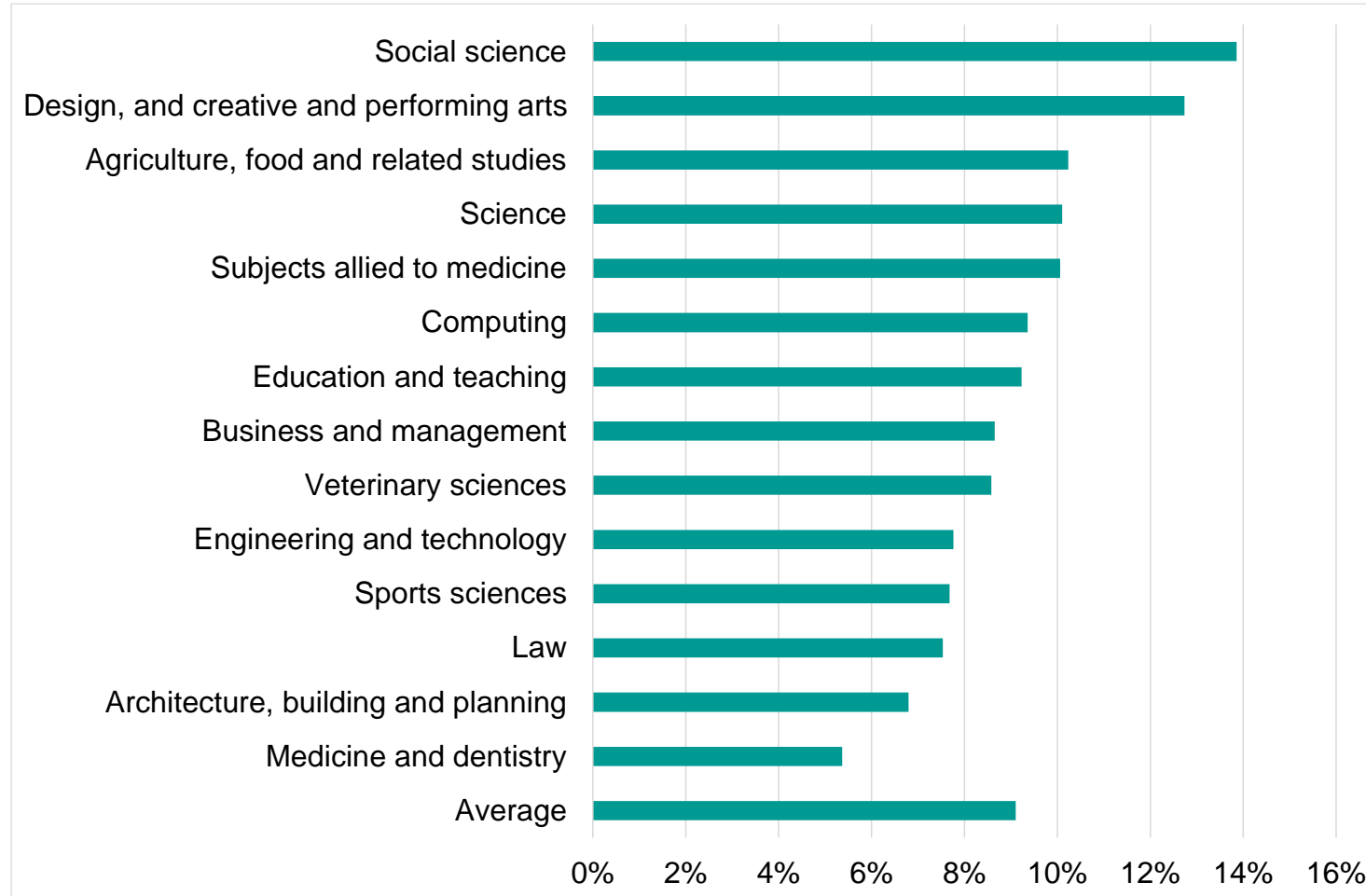


*Note: occupational employment is mapped to HE subject of study (CAH1)*

*Source: Census 2021*

# Disabled people strongly represented in jobs related to Social science and Design/creative disciplines

Figure: % of people in employment in each subject area category who are disabled under equality act



Note: occupational employment is mapped to HE subject of study (CAH1)

Source: Census 2021

# Conclusions

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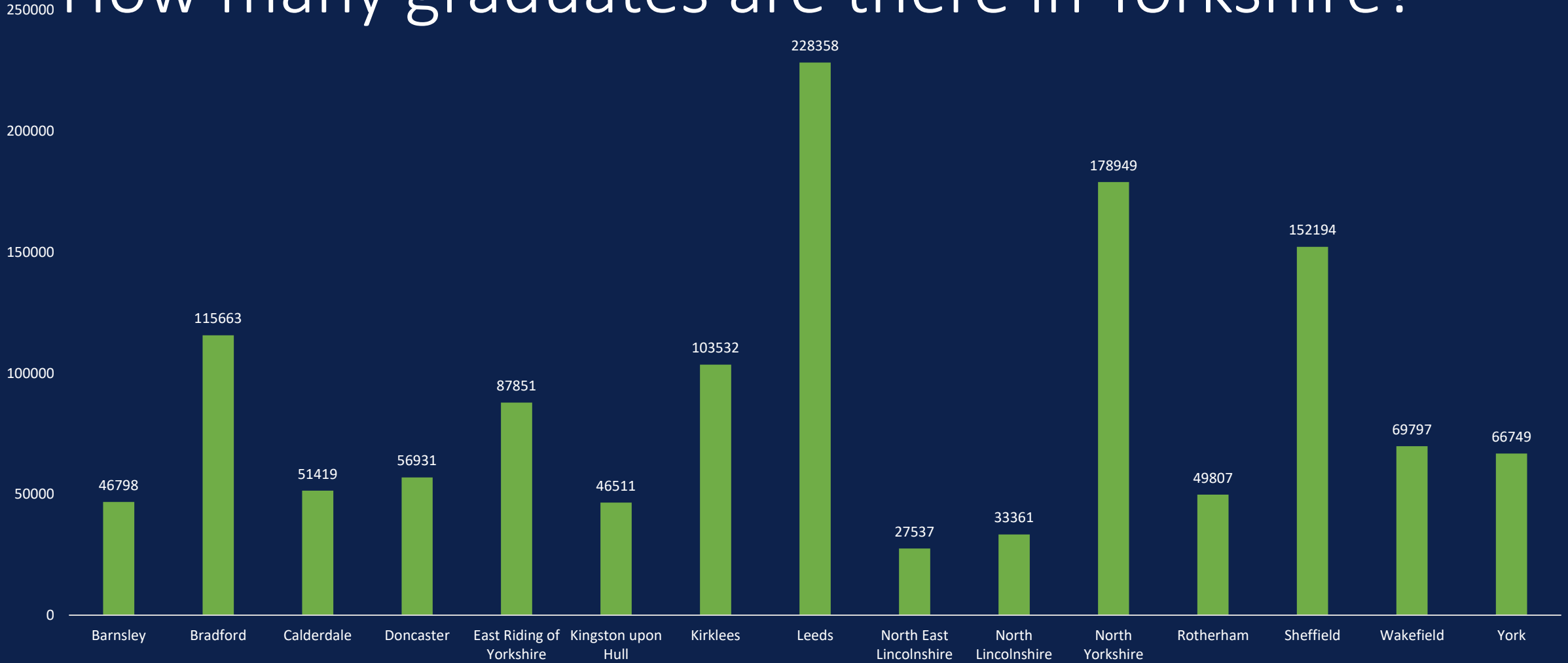
- Participation in higher skilled employment varies by sex, ethnicity and disability
- People from ethnic minority groups are strongly represented in some groups (e.g. Medicine and dentistry) but with minimal representation in others (Agriculture, food)
- Employment is highly segregated by sex with approx. 80:20 split in a number of categories.
- Intersectional groups have distinctive employment patterns e.g. white males are approx. twice as likely to work in Engineering and technology fields than males from an ethnic minority group.
- Pattern of employment for disabled people is less strongly skewed but this group is strongly represented in jobs related to Social science and Design / creative disciplines

# Yorkshire graduate supply

Dr Charlie Ball

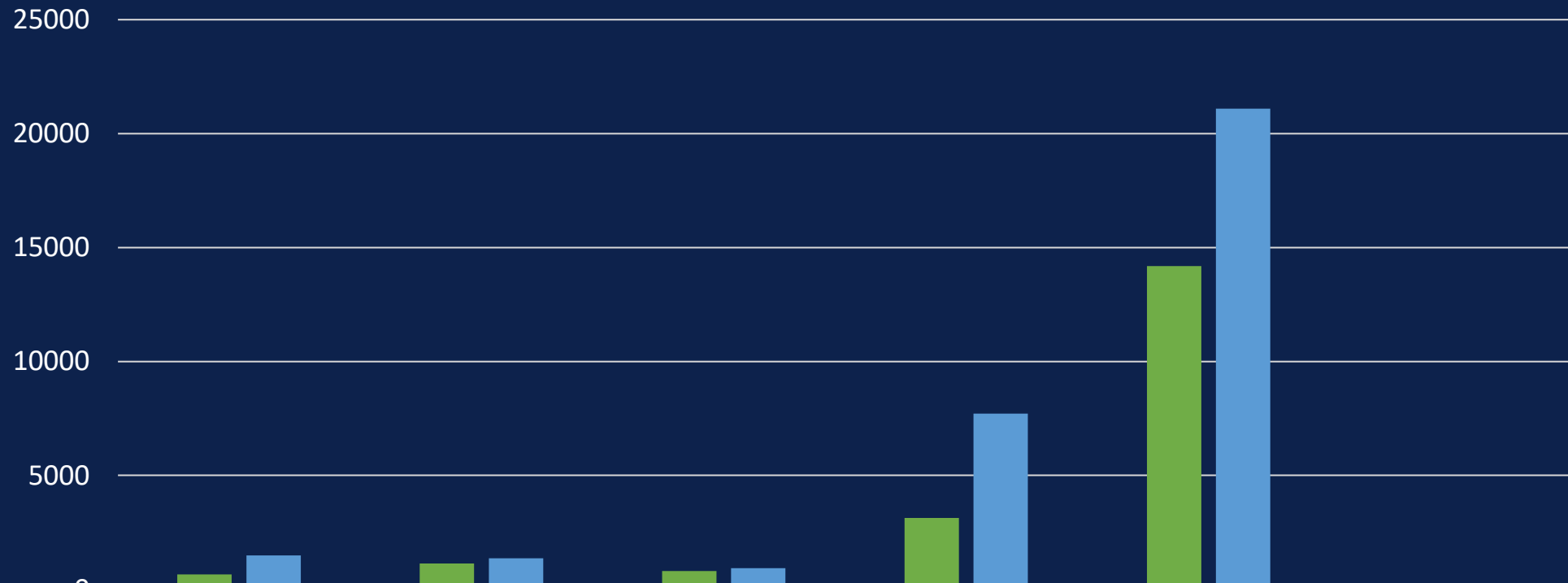
Head of Labour Market Intelligence, Jisc

# How many graduates are there in Yorkshire?



Data comes from the 2021 Census, total number of graduates is 1,315,457

# Graduates in one year (2020)

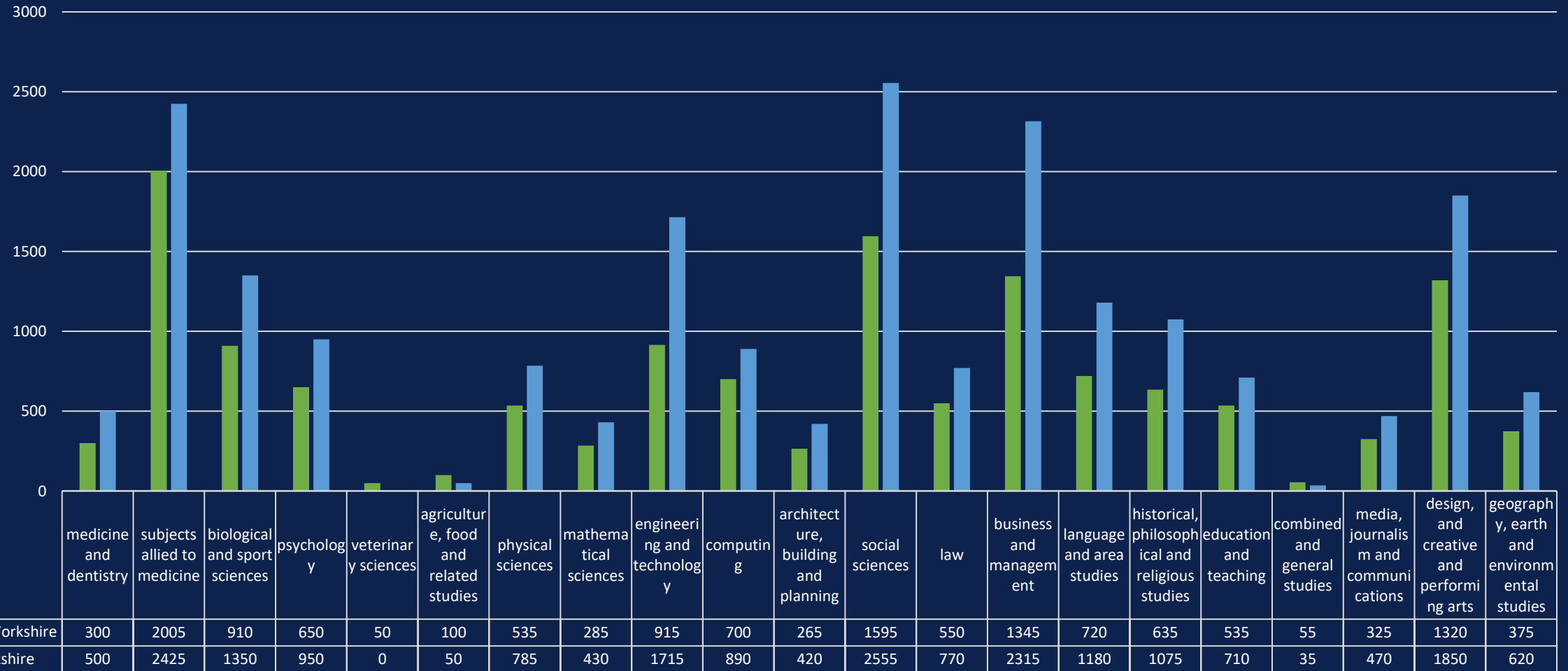


■ From Yorkshire   ■ Studying in Yorkshire

■ From Yorkshire	650	1140	800	3135	14180	275
■ Studying in Yorkshire	1485	1365	935	7710	21090	235

# Graduates in one year (2020)

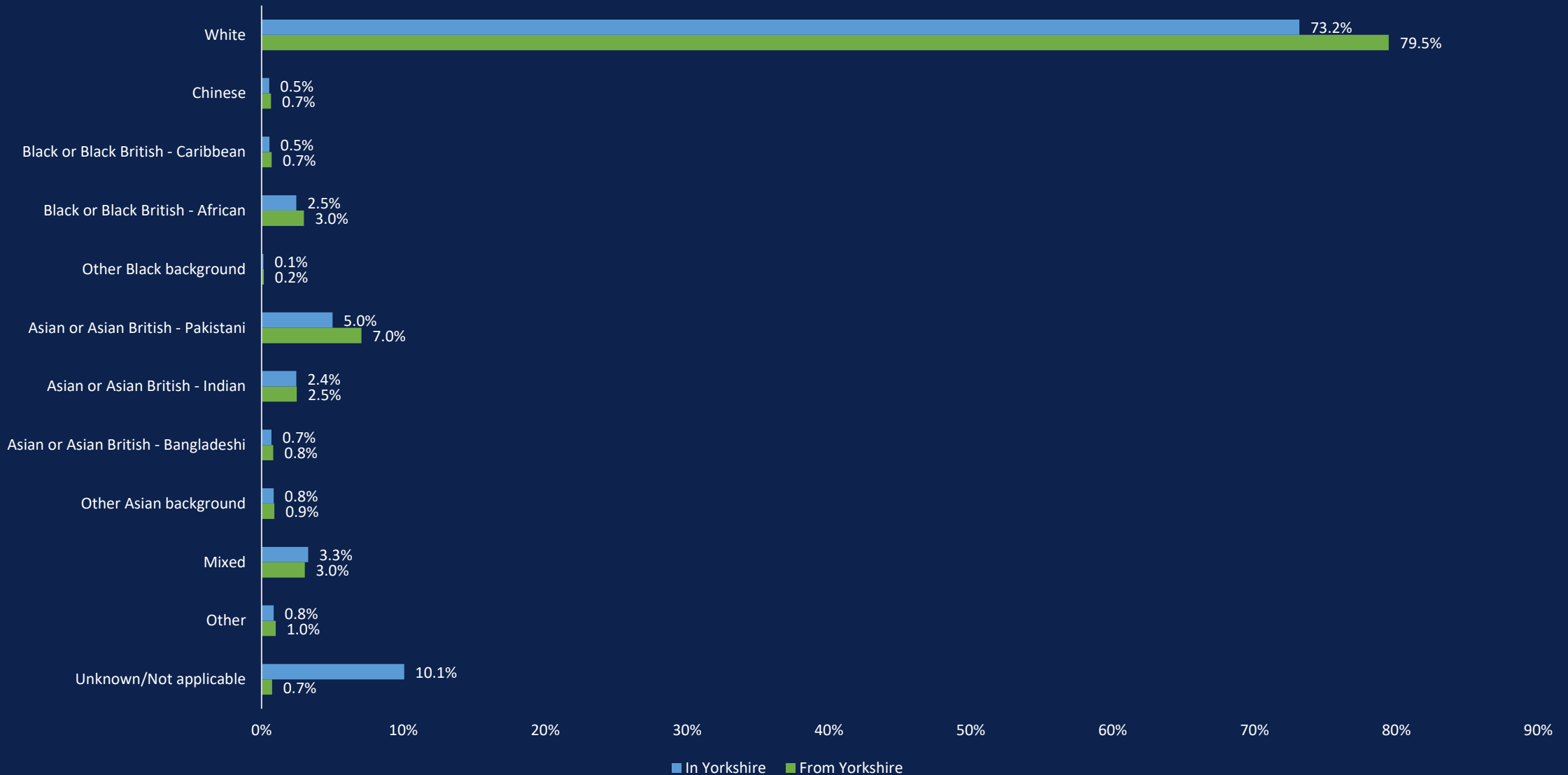
First degrees only



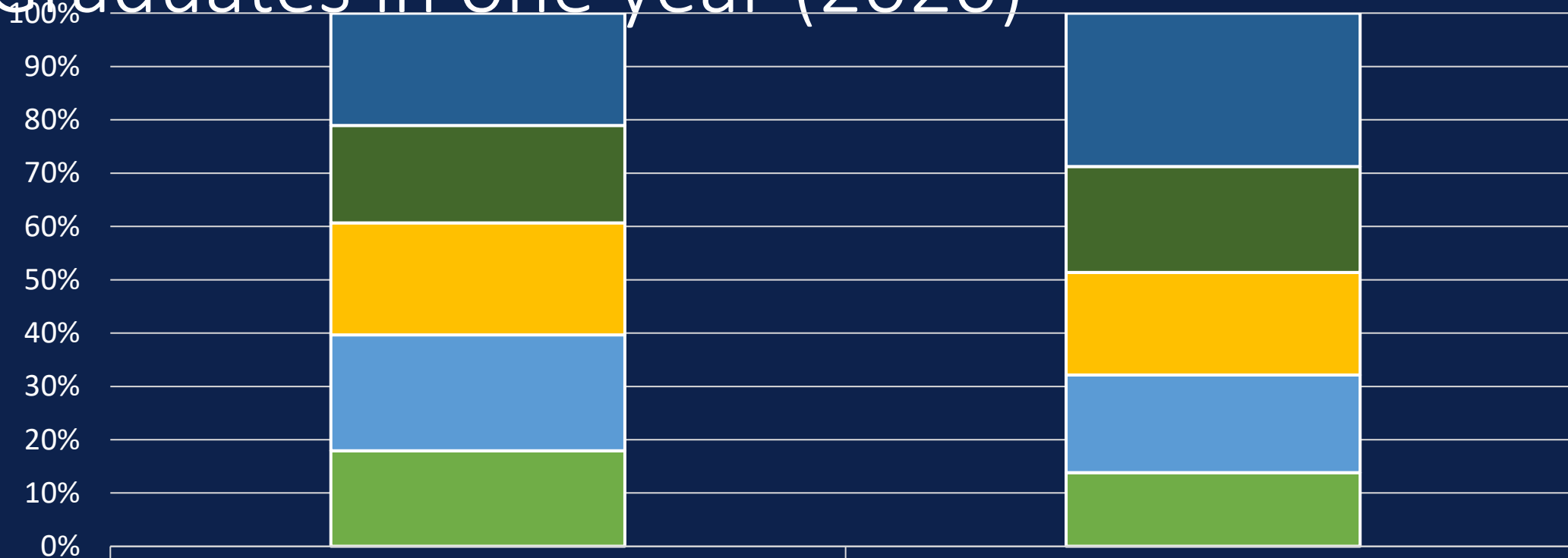
From Yorkshire In Yorkshire



# Graduates in one year (2020)



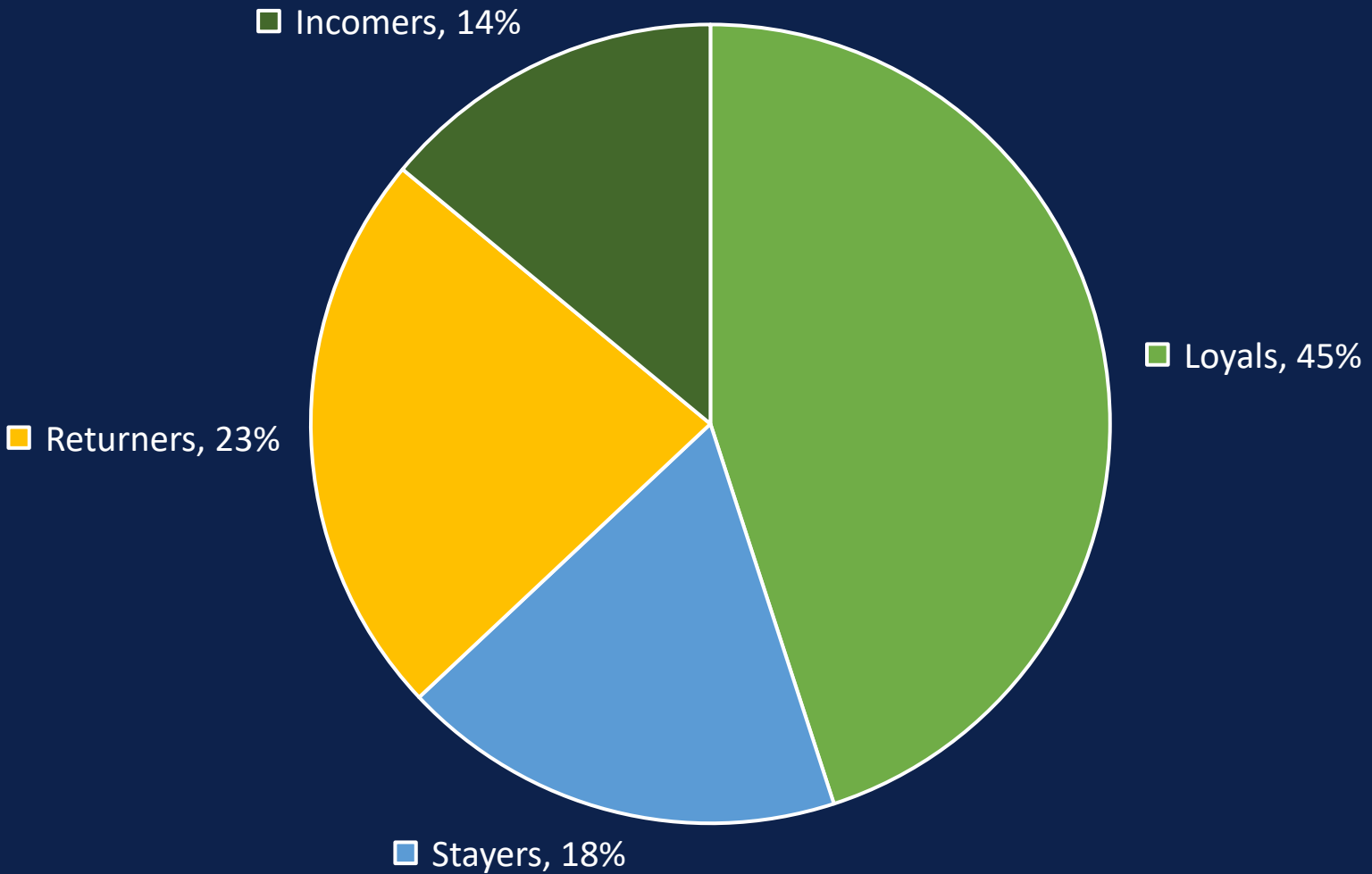
# Graduates in one year (2020)



POLAR  
Quintiles

	From Yorkshire	In Yorkshire
5	21.1%	28.8%
4	18.3%	19.9%
3	21.0%	19.2%
2	21.7%	18.3%
1	17.9%	13.8%

# Graduate migration



Loyals: from Yorkshire, studied in Yorkshire, work in Yorkshire

Stayers: not from Yorkshire, studied in Yorkshire, stayed in Yorkshire to work

Returners: from Yorkshire, went elsewhere to study, came back to Yorkshire to work

Incomers: not from Yorkshire, didn't study in Yorkshire, work in Yorkshire

- Introduction and background by Dr Bob Gilworth
- Careers Registration
- Learning from national/international projects
- Ideas for the Yorkshire region.

- RBG- Huddersfield-Leeds-London-Huddersfield.
- Currently in the Career Development and Employability Studies group in the School of Education and Professional Development and member of HudCRES.
- 2023 is a milestone year for us.
- Key points of relevance for today are: Instigating Careers Registration at the University of Leeds in 2012, leadership of the UK CR Learning Gain project 2015-19 and current international work on CR.

- Briefly: Understanding the career starting points and journeys of HE students through collecting data on career thinking and work experience via institutional enrolment systems. ALL students EVERY year. Cross-sectional and longitudinal. Linked to the main student record system.
- Instigated at the University of Leeds in 2012, so the university with the most data and experience is in this region
- “Starting Points and Journeys” on HudCRES blog.



- CR has been implemented in the majority of UK HEIs (we think c90) including the majority in Yorkshire and in universities in Ireland, Portugal, Australia and New Zealand. Implementation is a matter of *choice* not compliance.
- Not public data. Institutional data for doing the job. There are benefits from voluntary collaborative approaches: The UK Careers Registration Learning Gain project, the Australian version and CR+ international project.

- CR1: Career thinking. One of ten statements. Responses grouped into headline categories-Decide, Plan, Compete, Sorted or similar. Universal. Readily comparable.
- CR2: Employability enhancing experiences. As many as apply within a time frame. Almost universal. Agreed typology used for comparison.
- CR1 + CR2 = CR common core. Used in the UK and Australian LG projects.



# Categorisation: additions

- CR3: The most common is Occupational sector preferences. AGCAS/Prospects classification in common use so should be comparable.
- CR4? Place. Along the lines of “where do you expect to work when you graduate?” Devil in the detail here.

# Key points from collaborative work

- Consistency of student responses across diverse and widely distributed HEIs.
- “The golden thread” linking career thinking to graduate outcomes.
- Occupational sector preferences for opportunity awareness and employer engagement.

# Ideas for the region 1

- The proposed approach is results sharing, rather than raw data sharing, so the regional pictures would be built from entirely anonymised secondary data.
- 1. Snapshot of career thinking at the point of UG entry to HE. All participants have this data in generally comparable format. “Splits” would be key added value to be agreed by the group. Proof of concept for regional data sharing.

# Ideas for the region 2 and 3

- Most closely related to the “graduate talent/supply side” title.
- 2. A regional picture of Occupational sector preferences: what do the regions UG students aspire to do?
- 3. Adding in place preferences: where do the region’s students aspire to be?
- Leading indicators of potential graduate talent supply amongst broadly subject agnostic graduate markets and options for PG conversion.

# Practicalities and next steps

- CR1 is universal. The career thinking at point of UG entry to HE phase could be delivered fairly quickly.
- CR 3 Occupational sector is growing but not universal. A full regional picture would depend on widespread uptake (always bearing mind that CR itself is optional). Partial coverage could be started with early adopters and added to incrementally. Some qualitative testing with students.
- CR place is at an early stage nationally, but there are several early adopters in the region.

# Some useful CR items

- Cobb, Gilworth and Winter (2019) *The Careers Registration Practical Guide*. University of London. Available through NAGCAS <https://www.nagcas.org.au/documents/item/365> or UoL
- Gilworth R B (2021) *Starting Points and Journeys*. University of Huddersfield. Available online at <http://blogs.hud.ac.uk/hudcres/20-21/feb/careers-registration/>
- Gilworth R B (2022) *Careers and Employability in a data-rich environment* in Broadley, Y. Cai, M. Firth, E. Hunt, & J. Neugebauer (Eds.), *SAGE Handbook of Graduate Employability*. Sage.

# Thanks and any questions?

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- <https://courses.hud.ac.uk/full-time/postgraduate/career-development-and-employability-ma>