



Improving the employment chances of engineering graduates

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CRAC

Employment chances amongst engineering graduates: some key messages

- Engineering graduates do well overall in gaining full time paid work within 6 months of graduation...
- ...yet more of them remain unemployed within this timescale...
- ...and there are too few of them overall we are told
- There are some groups in particular who are not doing so well
- As Professor John Perkins put it: *“Engineering is failing to draw on the whole of the talent pool.”* Perkins Review of Engineering Skills, BIS, 2013
- Work experience is a significant issue for all

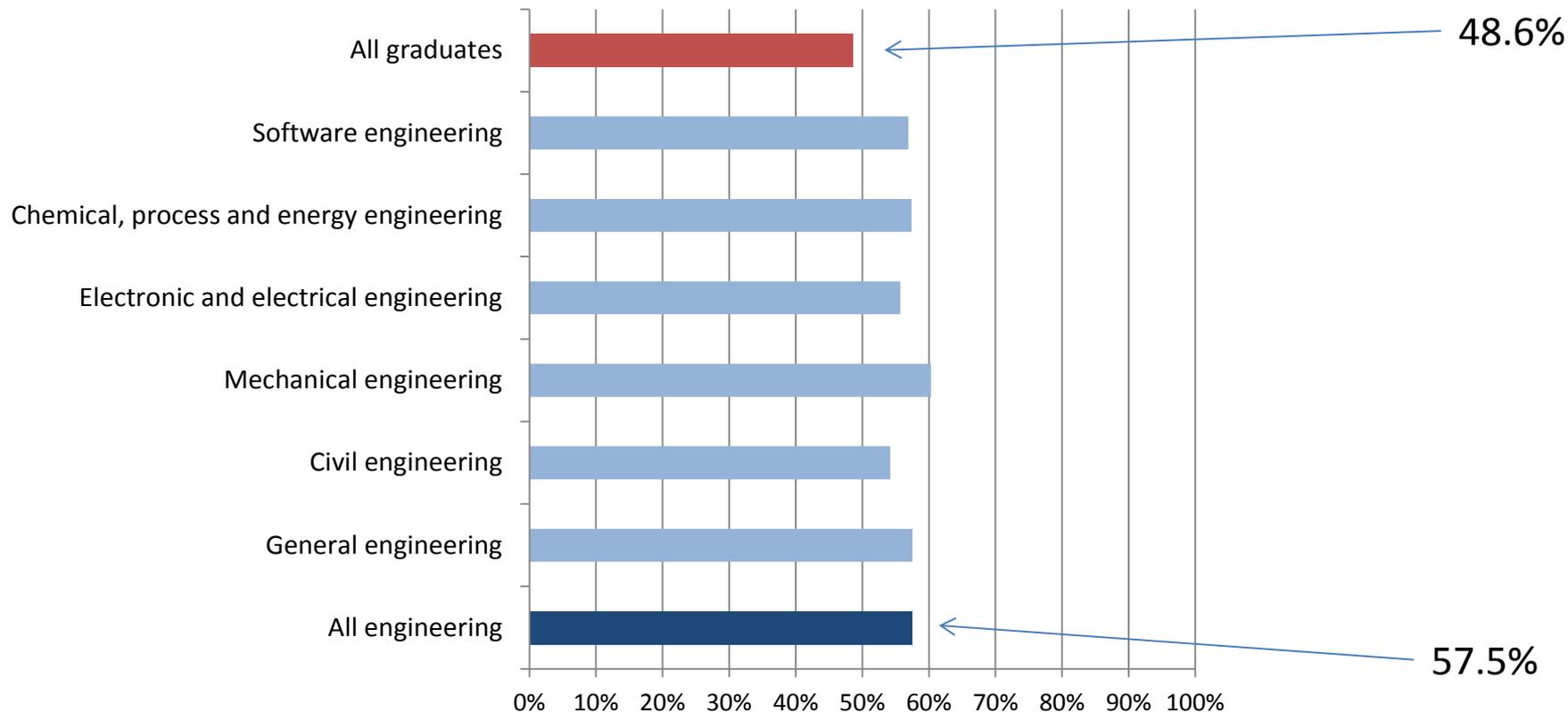
Lots of work carried out over last couple of years to give us an evidence base...

Amongst others...

- **Exploring unemployment amongst recent engineering graduates (2013)**
- **New study of graduate internships, focusing on diversity and engineering graduates (2014)**
- **Unemployment of Engineering Graduates: the Key Issues (National STEM programme: Midlands Case Study) (2012) – reported at Congress 2011**
- **SET to Lead: *“Jobs for the Boys”***

Current picture: proportion of graduates in full time work

Engineering graduates do well (relative to other subjects) in gaining full time employment within 6 months of graduation...

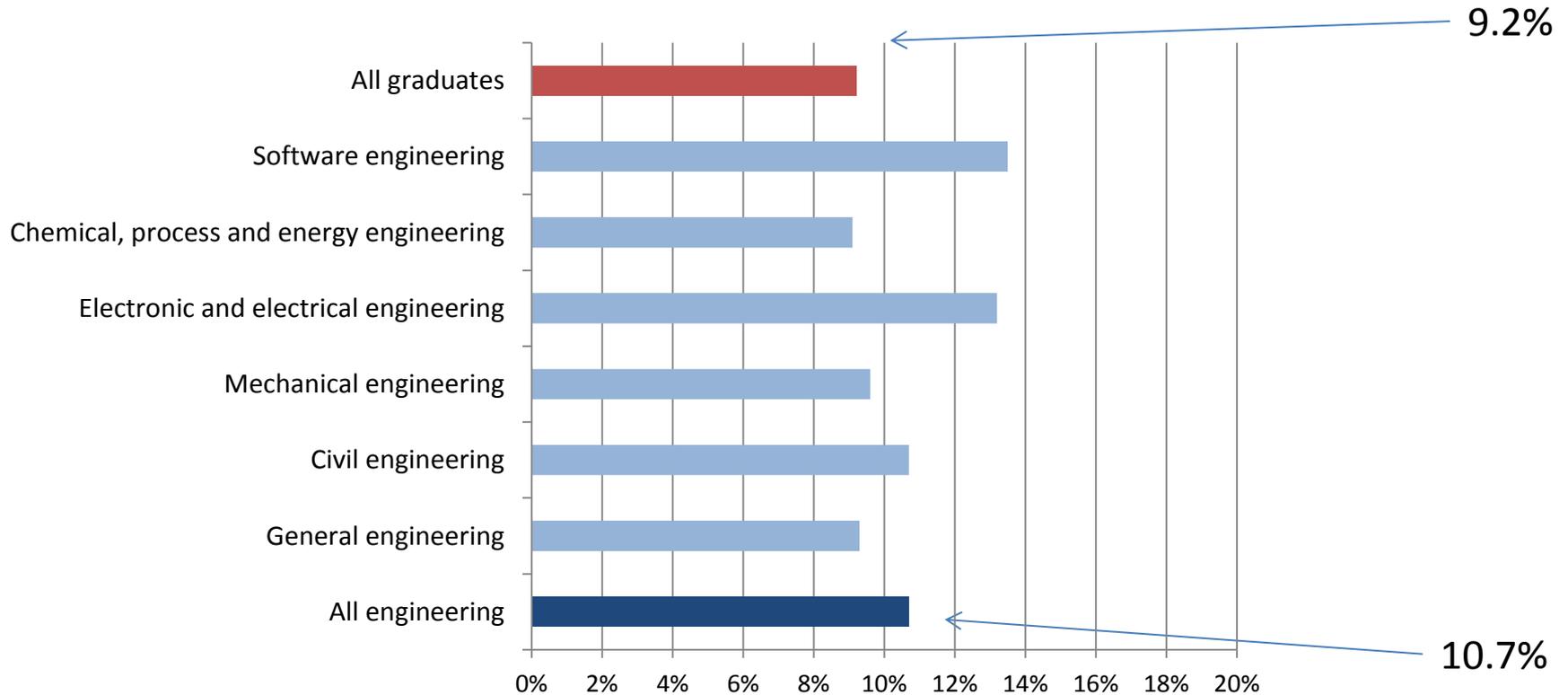


Proportion of graduates in full-time paid work

Source: DLHE 2010/11

Current picture: proportion of graduates unemployed

...yet more of them remain unemployed within this timescale

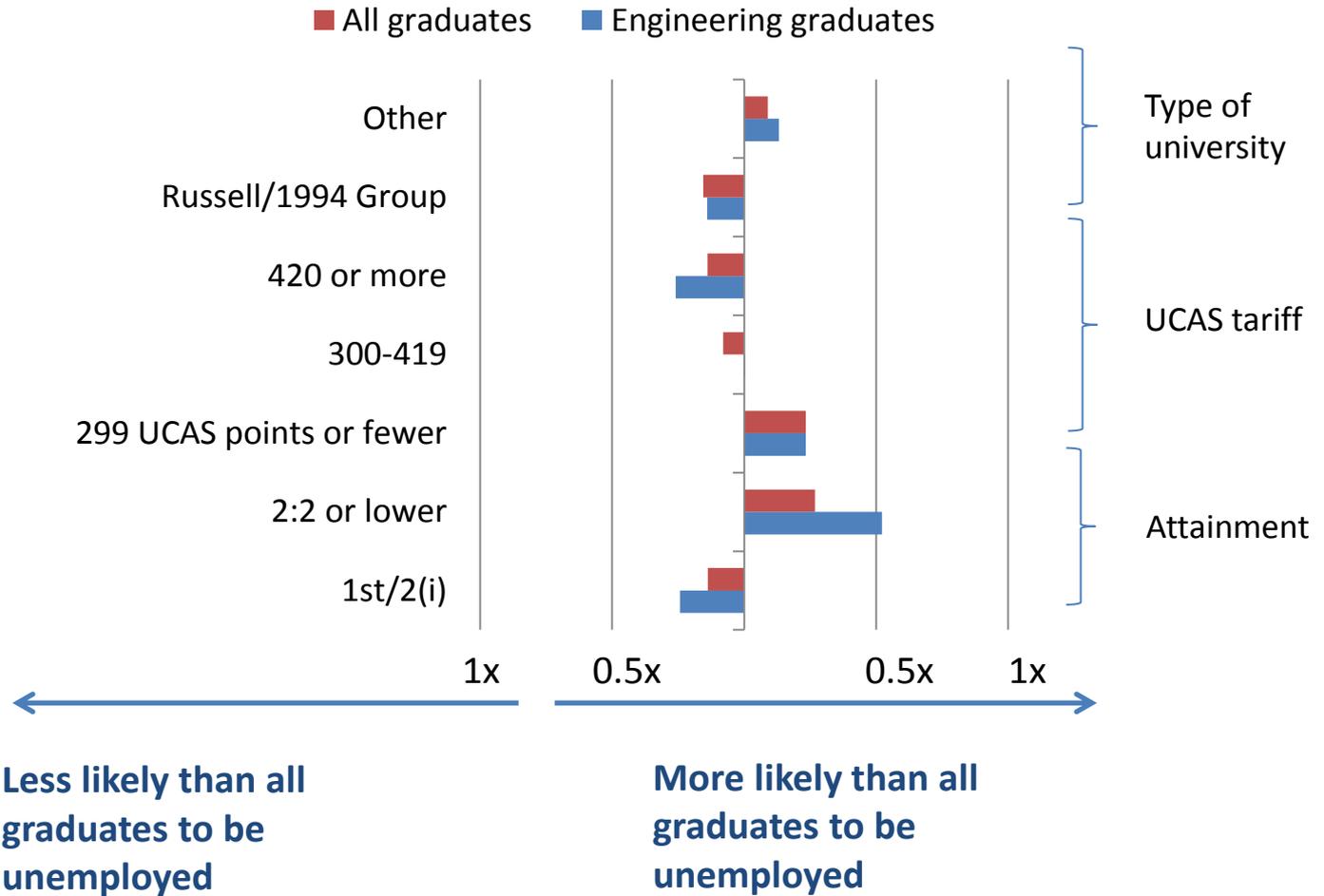


Source: DLHE 2010/11

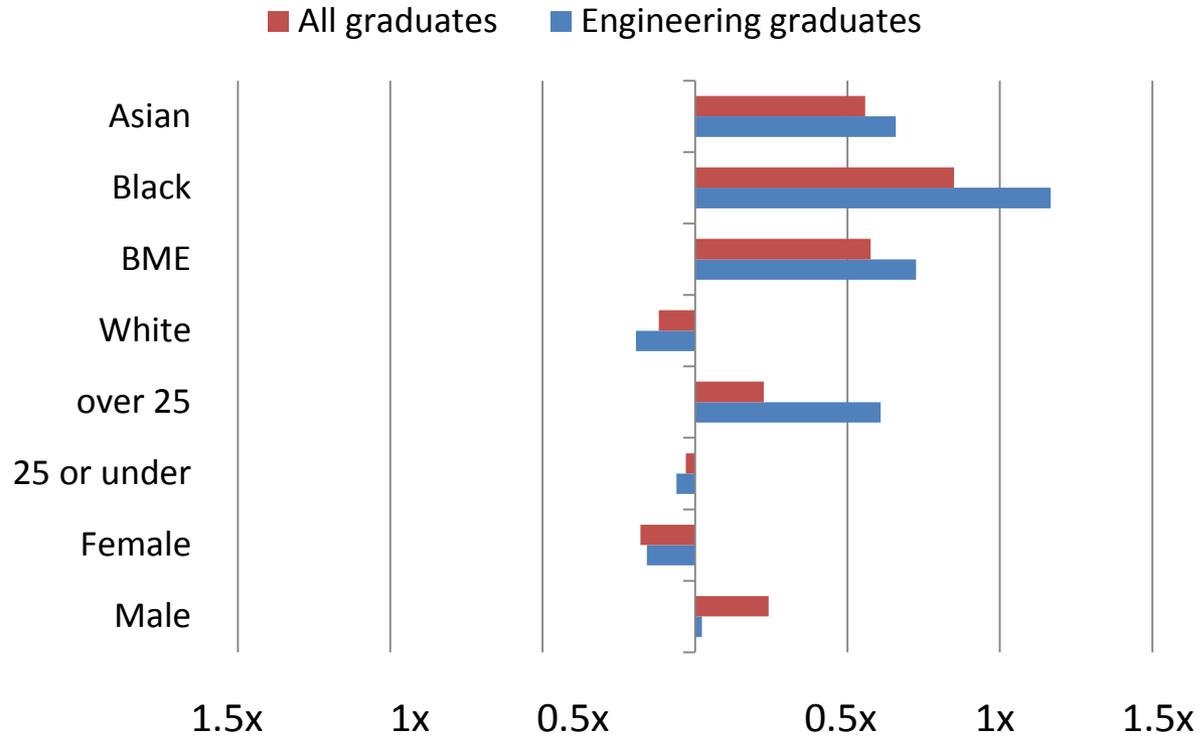
Proportion of graduates unemployed

So which groups of students are not doing so well?

All unemployed graduates (2010/11 DLHE)



So which groups of students are not doing so well?



Issues faced by ethnic minority graduates seem more pronounced in engineering than for all subjects...

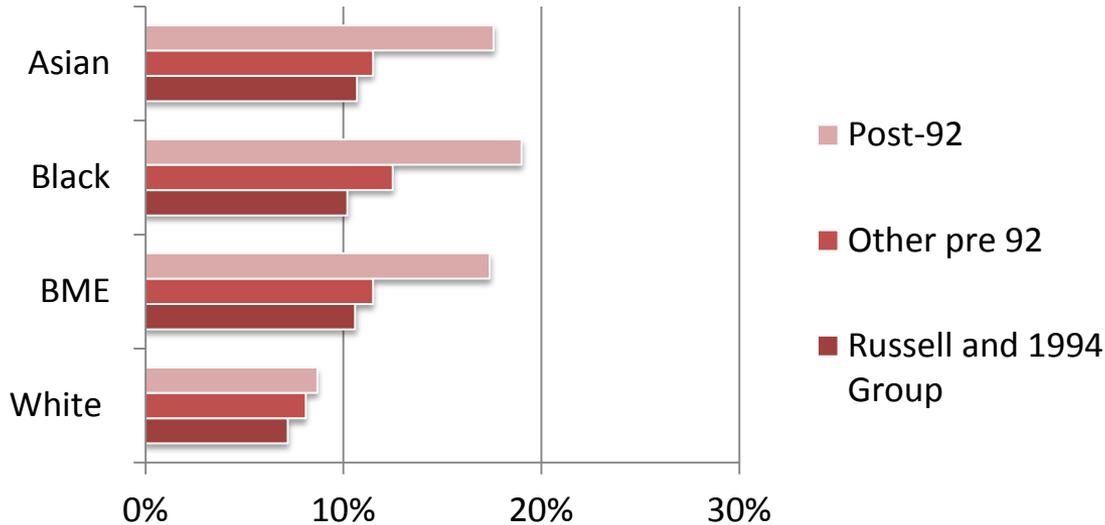


Less likely than all (engineering) graduates to be unemployed

More likely than all (engineering) graduates to be unemployed

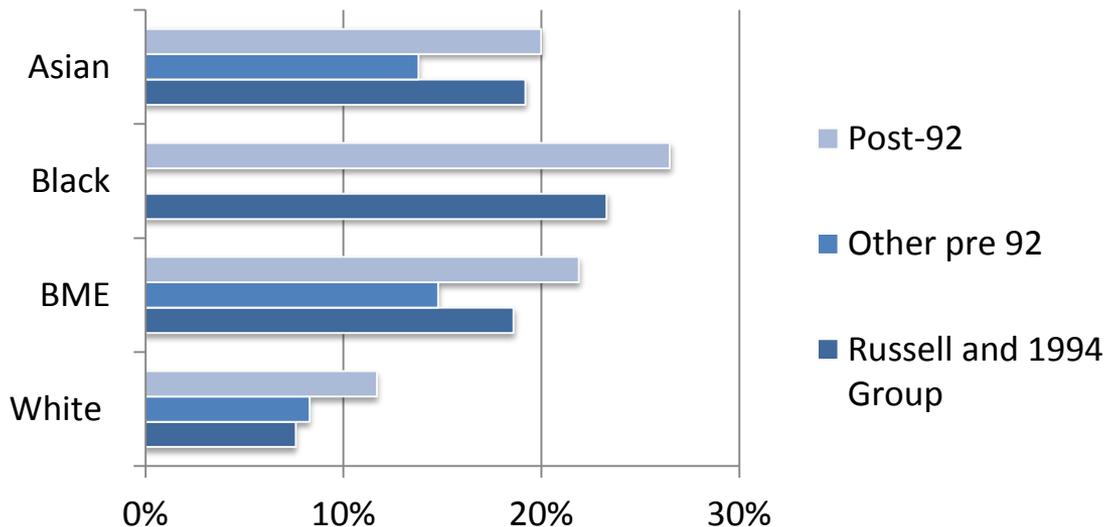
Focusing on ethnicity

Proportion unemployed: all graduates



Unemployment for engineering graduates is particularly acute for those of black/BME heritage, across most university types including the Russell and 1994 Groups, but most acute in the post-92 institutions.

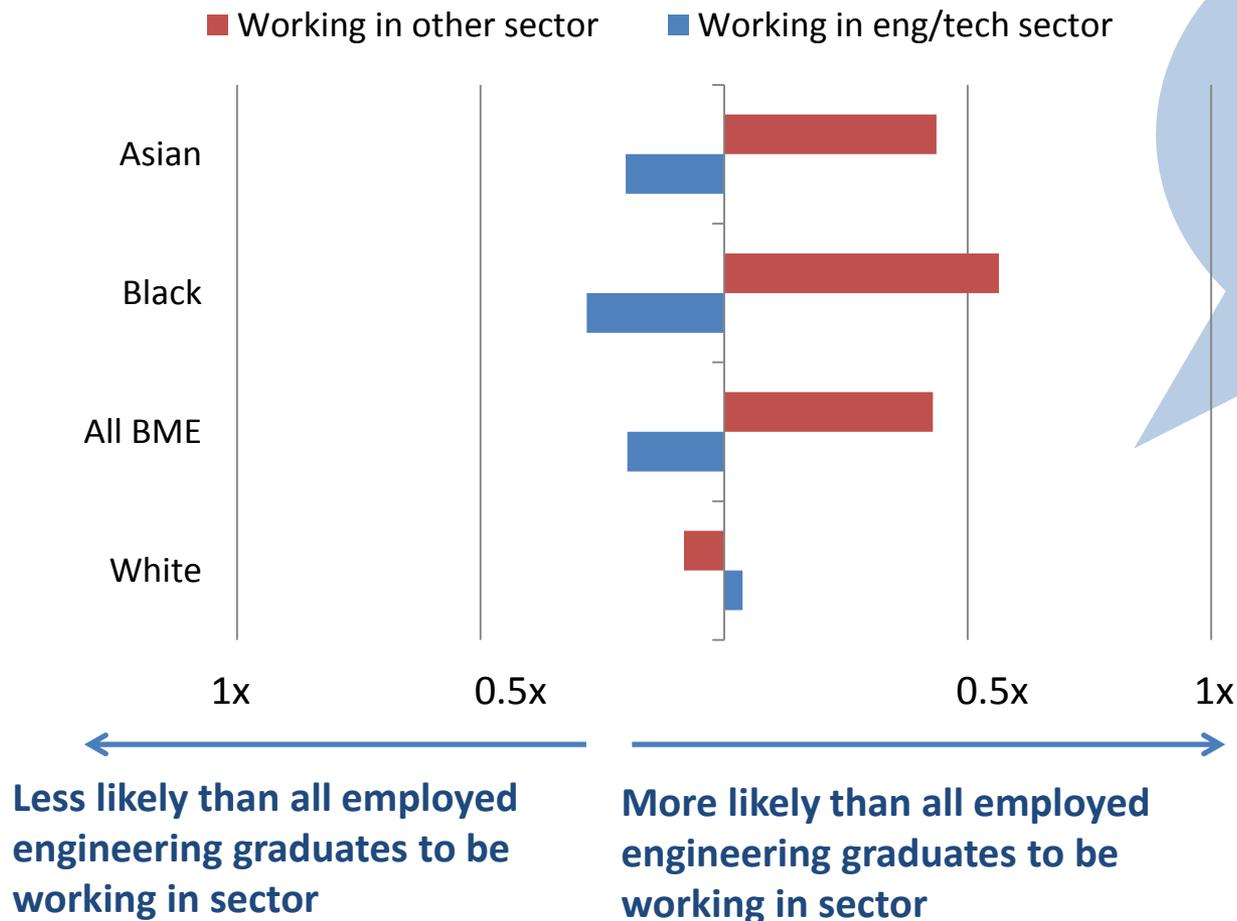
Proportion unemployed: all engineering graduates



Source: 2009/10 and 2010/11 DLHE datasets combined

Focusing on those who *are* employed: sector

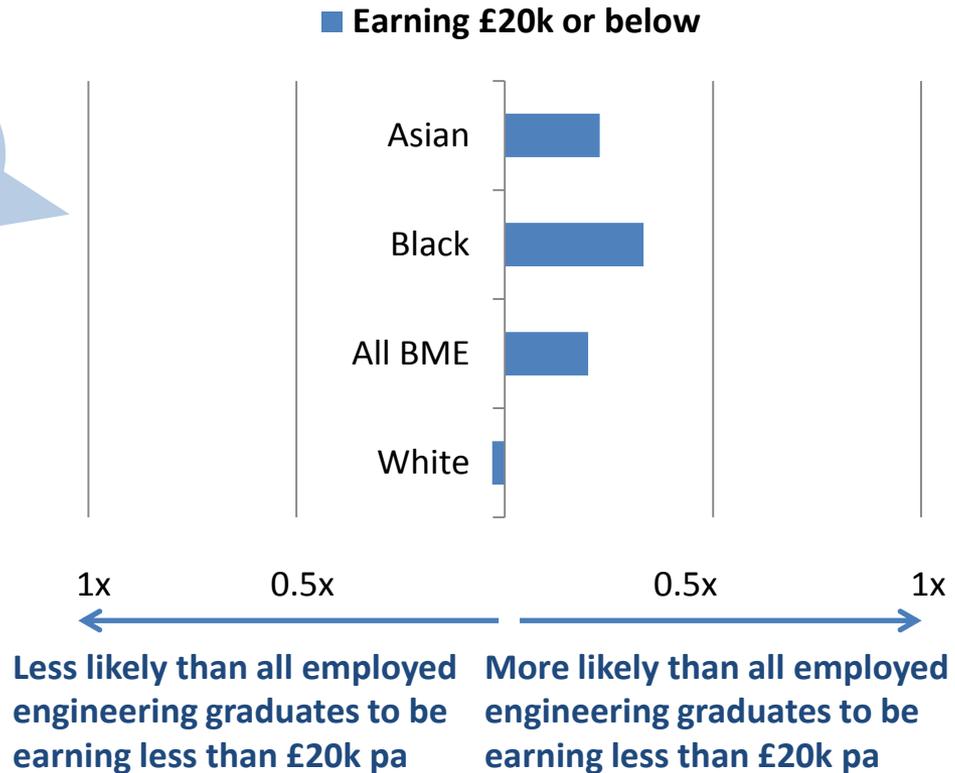
All engineering graduates



...and of those who are employed, BME engineering graduates are less likely than their white counterparts to be working in the engineering/technology sector

Focusing on those who *are* employed: earnings

...they are much more likely than all employed engineering graduate to be earning less than £20k pa



Source: 2009/10 and 2010/11 DLHE datasets combined

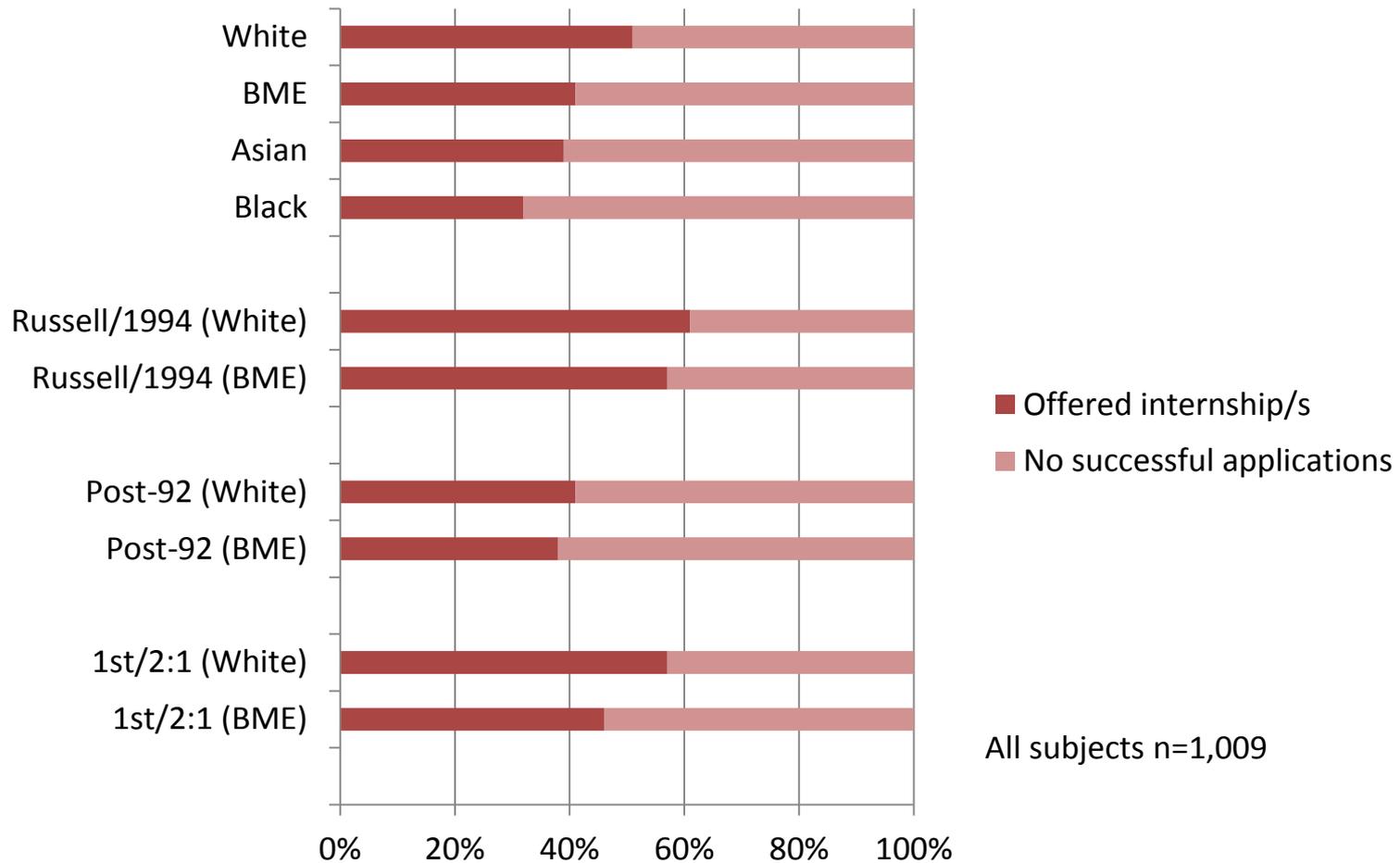
Some key issues...

In the HE STEM study: Unemployment of Engineering Graduates in a group of Midlands universities led by Professor Atkinson and reported in 2012, two of the key issues identified were:

- A strong correlation between graduates' **work experience**, particularly in engineering, and their employability. Employers rate the former highly and about two-thirds of the unemployed graduates either had unrelated experience or in the case of about a quarter, none at all; all of the employed graduates had some work experience.
- **Location of employment and mobility** for both unemployed graduates and employers. Whilst many employers, especially larger ones, stressed the need for mobility, about half of the unemployed graduates preferred to work in a more specific location, mainly in order to be closer to family and/or friends.

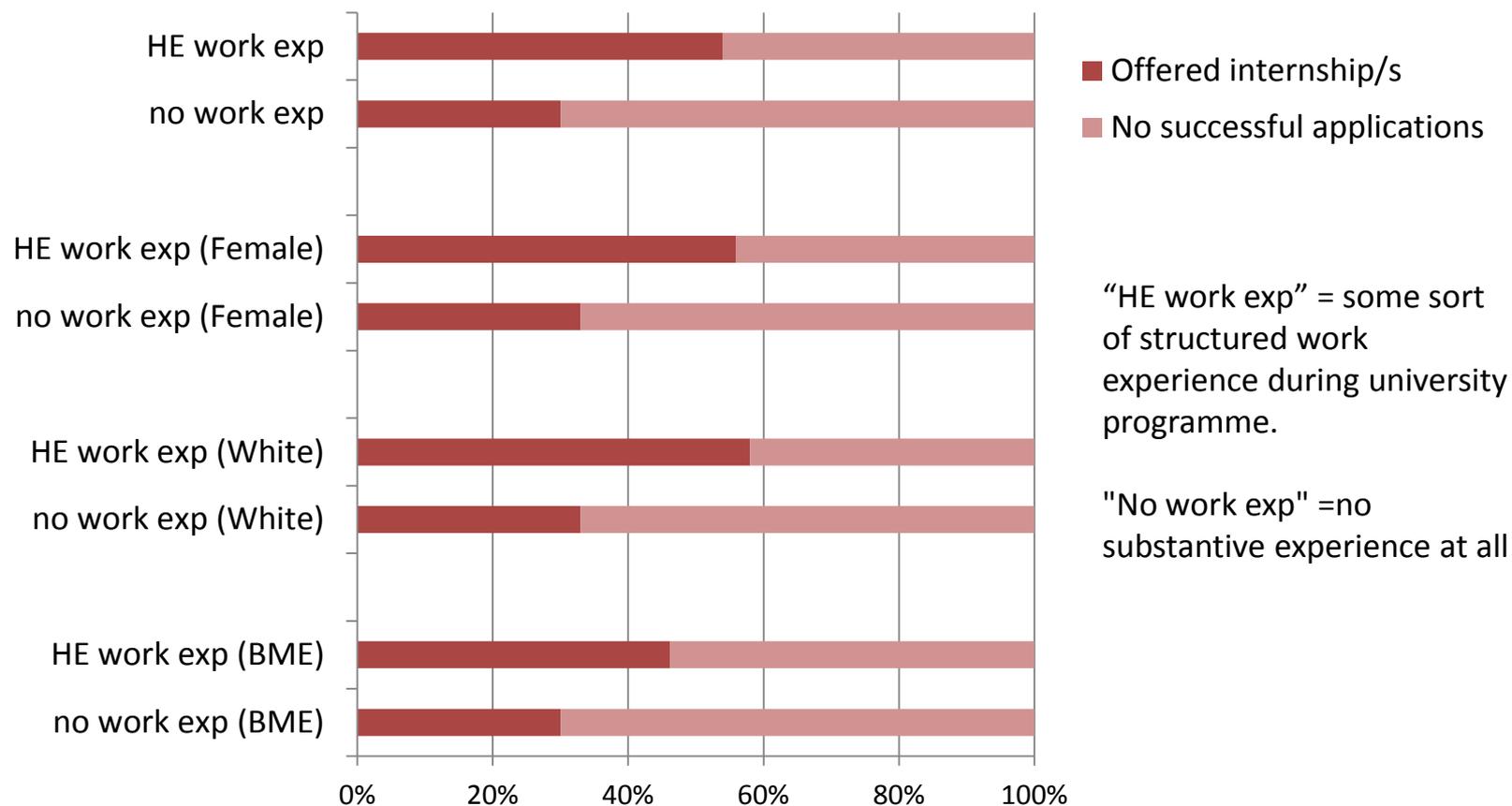
And from the recent study of graduate internships...

Ethnicity: significant amongst most groups when applying for an internship



Source: study of graduate internships, 2014

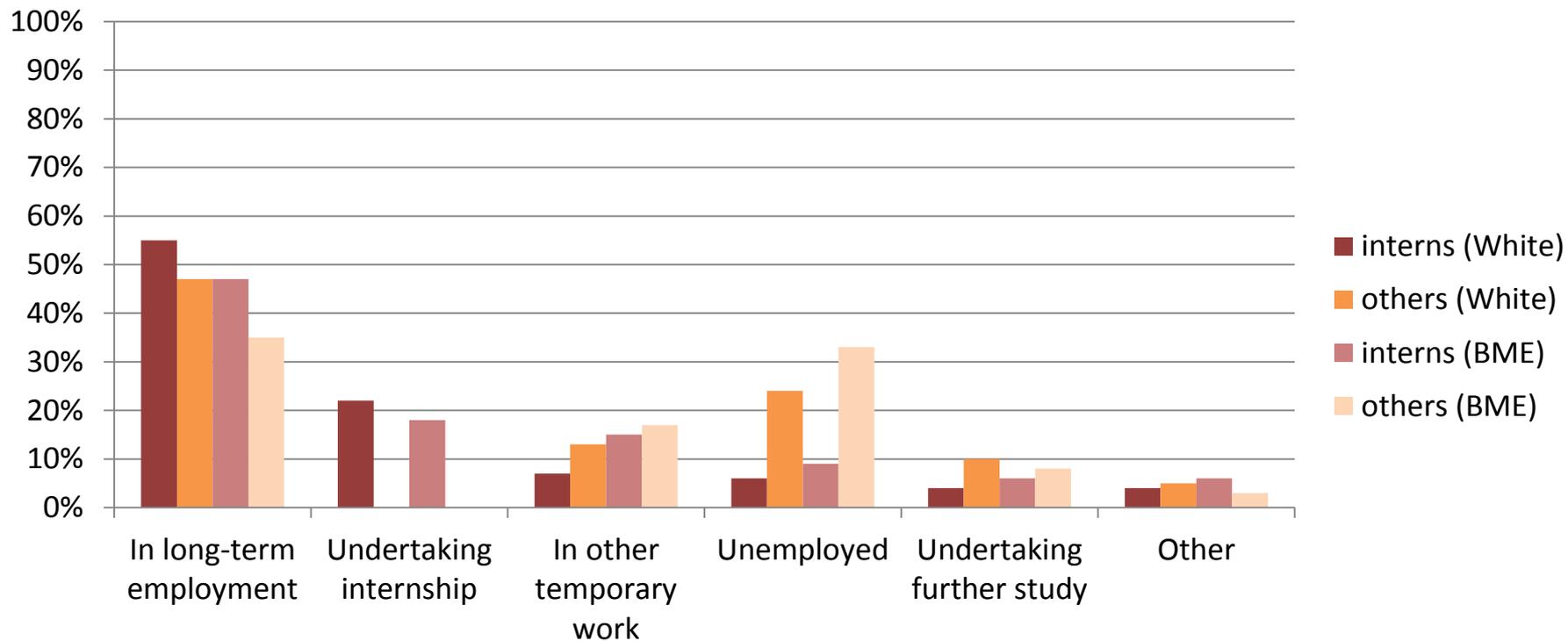
Impact of HE work experience



Source: study of graduate internships, 2014

The employment impact of an internship by ethnicity

Proportion of study participants



Source: study of graduate internships, 2014

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...panel discussion