Graduate job quality in the UK

Is there a need to look beyond earnings and occupation type?

November 2023

1. An introduction to HESA

Background to HESA

- Formed in 1993.

- Producer of UK-wide official statistics on higher education.

- We adhere to the Code of Practice for Statistics.

- Our research aims to support the evolution of our outputs and assist data users in their decision making.

- Recently merged with Jisc.

2. Aims and roadmap

Aims

- **Main goal:** To convince you of the potential value of a new graduate job quality measure to complement existing indicators.

- Why earnings alone cannot provide sufficient information on graduate outcomes.

- Policy context

- Correlation with wellbeing

- Professional/managerial roles aren't always a suitable proxy for skill use/alignment with career aspirations.

Roadmap

- Begin by talking about policy developments
- Introduce the Graduate Outcomes dataset
- Specify the key research questions
- Methodology
- Results
- Uses of the measure

- Further information
- Questions

3. Policy context

Providing decent work for all

- Historically, analysis of labour market outcomes has focused on earnings and quantity of jobs.

- International Labour Office first introduced decent work as a key objective in 1999.

- This raises the question of what exactly we mean by this concept.

What do we mean by job quality?

- Given the policy ambition of decent work for all, considerable attention has been given to this question.

- Emerging view is that it is;

- A multi-faceted concept consisting of several dimensions.

- Relates to those aspects of work that correlate with wellbeing.

- Ongoing debate about the exact indicators and whether they should be aggregated.

Developments in the UK

- Scotland led the way with the formation of the Fair Work Convention.

- Theresa May launched the Taylor Review in response to the changing nature of the labour market.

- Majority of the recommendations put forward were accepted.

- This included identifying a suitable set of measures and disseminating data on these annually.

Job quality indicators

- **1.** Terms of employment
- **2.** Pay and benefits
- **3.** Health, safety and psychosocial wellbeing

- **4.** Job design and nature of work [use of skills, control, opportunities for progression and sense of purpose]

- **5.** Social support and cohesion
- **6.** Voice and representation
- **7.** Work-life balance

4. Job quality and higher education

Higher education and graduate outcomes

- Graduate outcomes have received growing attention over the last decade.

- This has primarily been assessed based on one job quality indicator - earnings.

- Whether or not graduates move into professional/managerial roles is not a job quality indicator.

Widening the focus

- Recognition by both students and policymakers/funding bodies that benefits of higher education go beyond earnings.

- *All students… can lead **fulfilling lives**, in which their qualifications hold their value over time. (Office for Students)*

- *Education that… equips them to **flourish** in employment, further study and **fulfilling lives**. (Scottish Funding Council)*

What do we mean by 'fulfilment'?

- Fulfilment as a dimension of fair work can be supported in a variety of ways:

- Through forms of job design and work organisation that focus on **effective skills use**.

- Opportunities to problem solve and to **make a difference**.

- Investment in **training and development** and cross learning.

Is there a gap in current statistics?

- Clearly, there is a gap here.

- We have no data that tells us whether graduates find fulfilling work.

- This is despite such a matter being important to both graduates and policymakers (two of our key data users).

- This could therefore be a potentially fruitful area for research.

5. The dataset

Going from DLHE to Graduate Outcomes

- Up until the 2016/17 academic year, annual survey of graduates was known as **Destinations of Leavers from Higher Education (DLHE).**

- Major review of the collection occurred in the mid-2010s.

- Qualifiers from the academic year 2017/18 onwards have been invited to take part in **Graduate Outcomes**.

Key differences

- Questions on topics such as earnings and type of role being undertaken remain.

- However, it now takes place 15 months after graduation, as opposed to 6 months.

- New questions on wellbeing and graduate perceptions of their employment (the 'Graduate Voice').

The 'Graduate Voice' questions

- Those in employment are asked to highlight the extent to which they agree or disagree with the following three statements:

- My current work is meaningful

- My current work fits with my future plans

- I am utilising what I learnt during my studies in my current work

- A Likert scale is used that comprises five options ranging from strongly disagree to strongly agree.
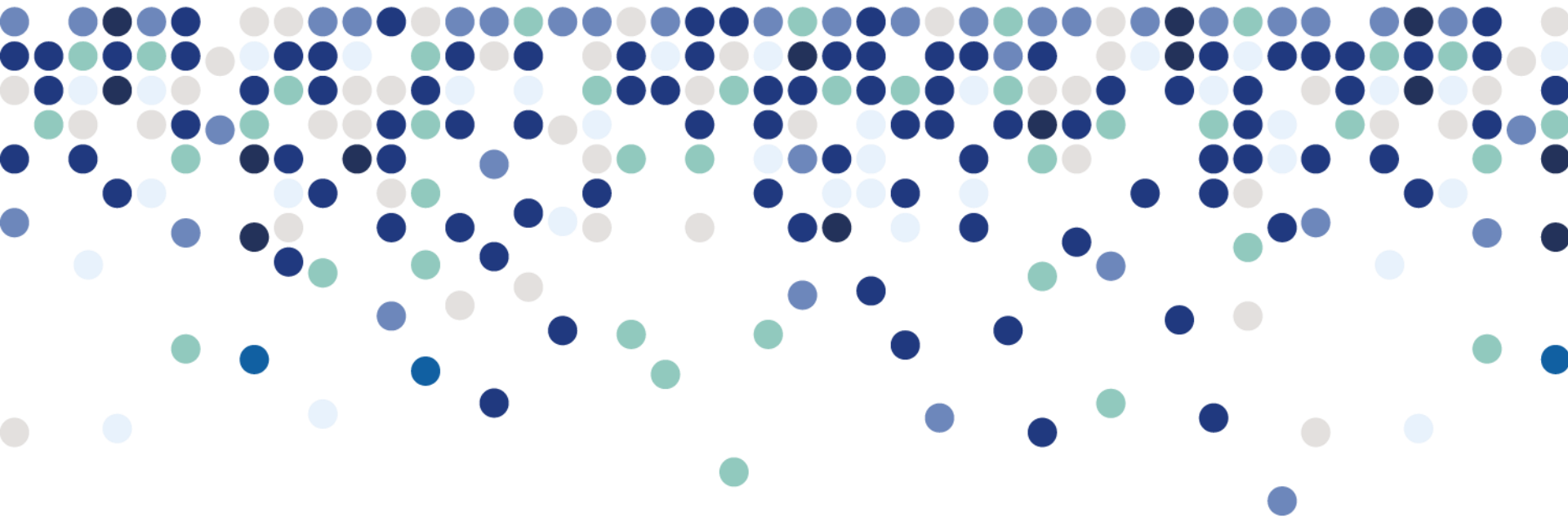
6. The research questions
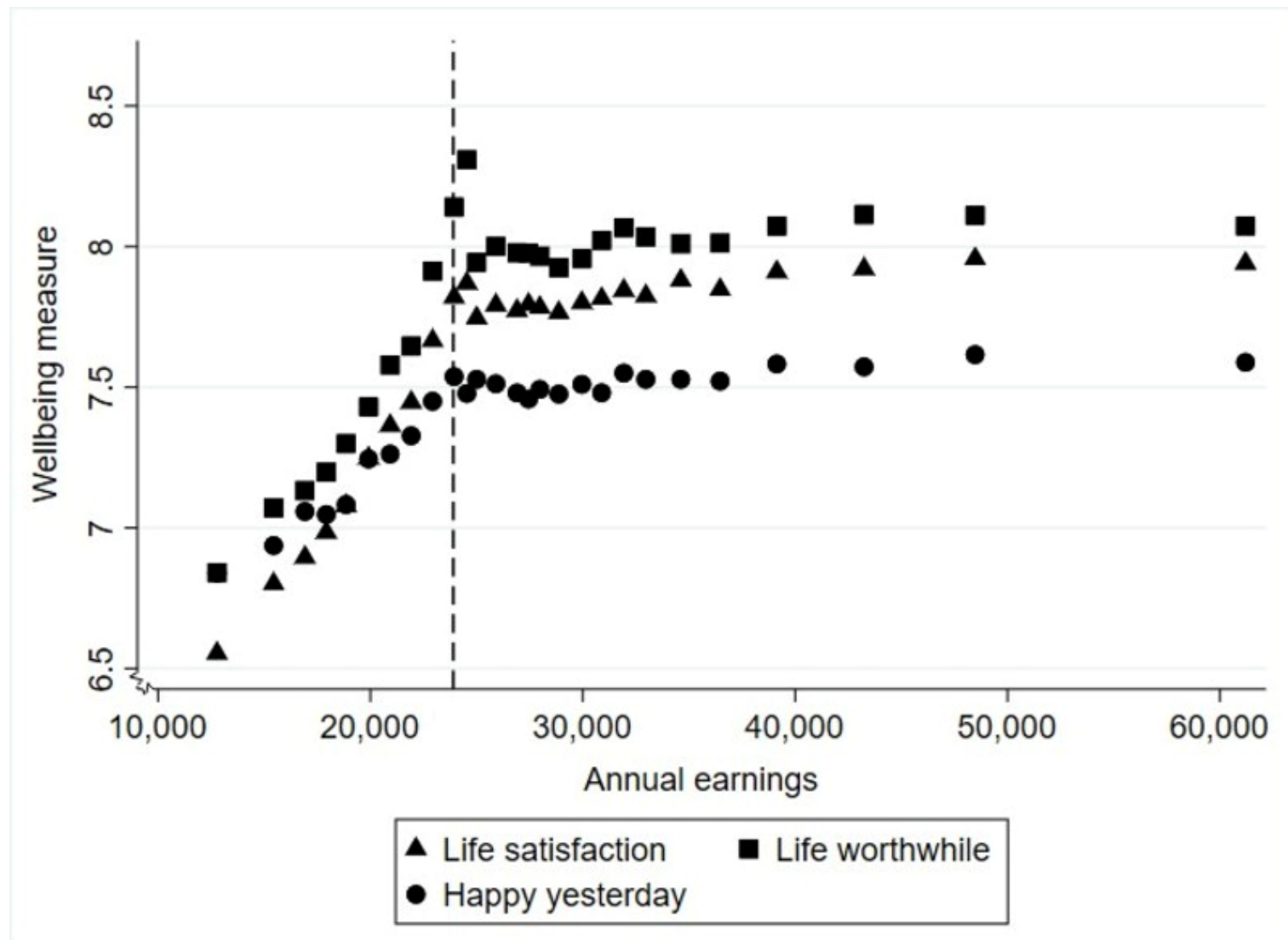
Limitations of earnings and occupation

- Economic and societal progress cannot be judged solely through financial measures.

- Graduate earnings are not necessarily a good proxy of their non-monetary outcomes.

- It's always been assumed that professional/managerial roles are those that align with career aspirations/skill use.

- We now have more direct measures of this through the 'Graduate Voice' questions to empirically examine this.

Creating composite measures

- Measuring Job Quality Working Group made a set of recommendations about how data should be presented.

- One of these was that they encouraged the creation of composite measures.

- These should relate to the seven dimensions of job quality they have identified.

Research questions

1. Can we create a composite measure for the 'job design and nature of work' component?

2. If so, how does this correlate with wellbeing?

3. What does this new composite measure tell us about the assumption regarding professional/managerial roles?

[That is, are they positions which align with graduate career aspirations and skills use?]

Sample for analysis

- Linked survey data to the HESA Student Record

- Qualifiers in either 2017/18 or 2018/19

- UK domiciled graduates

- Sole activity paid employment in the UK for which they were paid in pounds sterling

- Responded to all three 'Graduate Voice' statements

- Final sample size: 286,240

7. RQ1: Creating a composite measure

Development stages

The creation of a composite measure using the 'Graduate Voice' questions comprises of three stages.
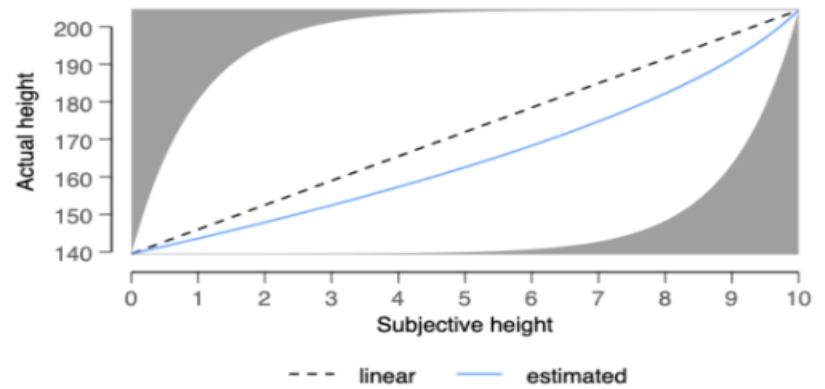
1. How do we treat the three variables in our analysis?

2. Is there any evidence to suggest they form part of the same underlying concept?

3. Can the statements be reduced into a single dimension?
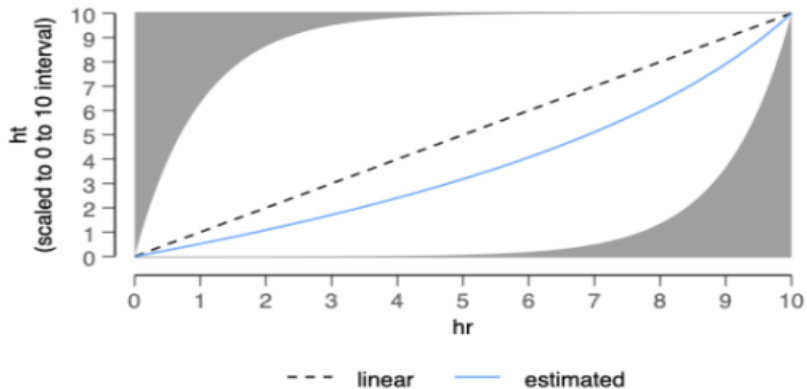
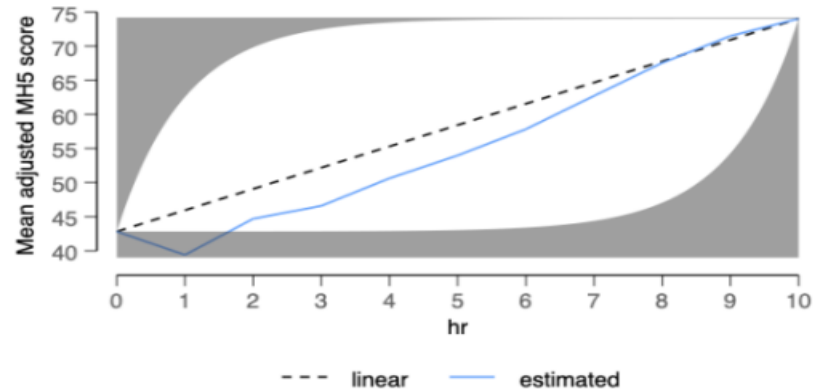# What type of data are the 'Graduate Voice' questions?
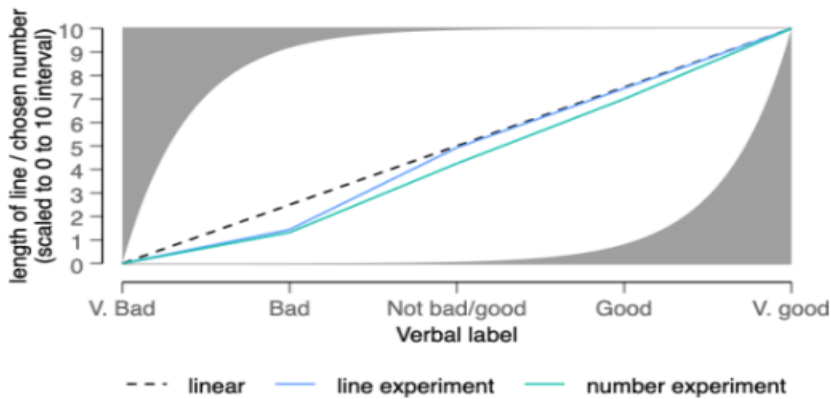
Are they part of the same concept?

- Cronbach's alpha typically used to understand whether variables are part of same underlying concept.

- Generally, a value of 0.70 or above is indicative of this being the case.

- The statistic for our sample is 0.83, with little change if we carry out the analysis separately by academic year.

Can we form a single composite measure?

- Each statement assigned a value from 1 (strongly disagree) to 5 (strongly agree).

- Employed exploratory factor analysis (EFA).

- Confirmed three statements could be reduced into a single dimension (each given very similar weights).

- Yet, this means the resulting variable created from EFA is very similar to one based on a mean of the three questions.
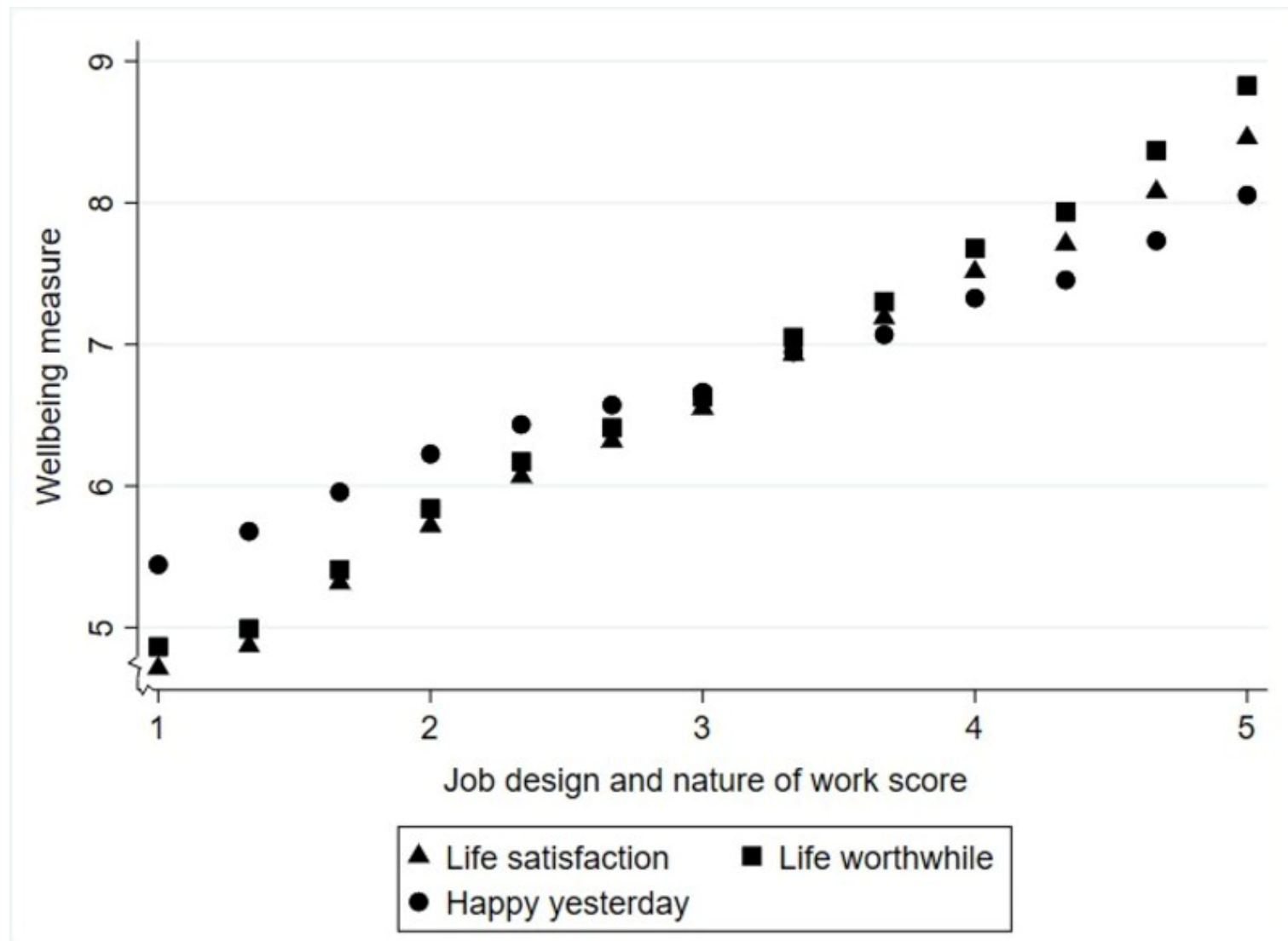
Summary

- It is possible to create a single composite measure for the 'job design and nature of work' component.

- This can be done by taking an average of the three statements.

- The final variable is therefore continuous in nature and ranges from 1 to 5.

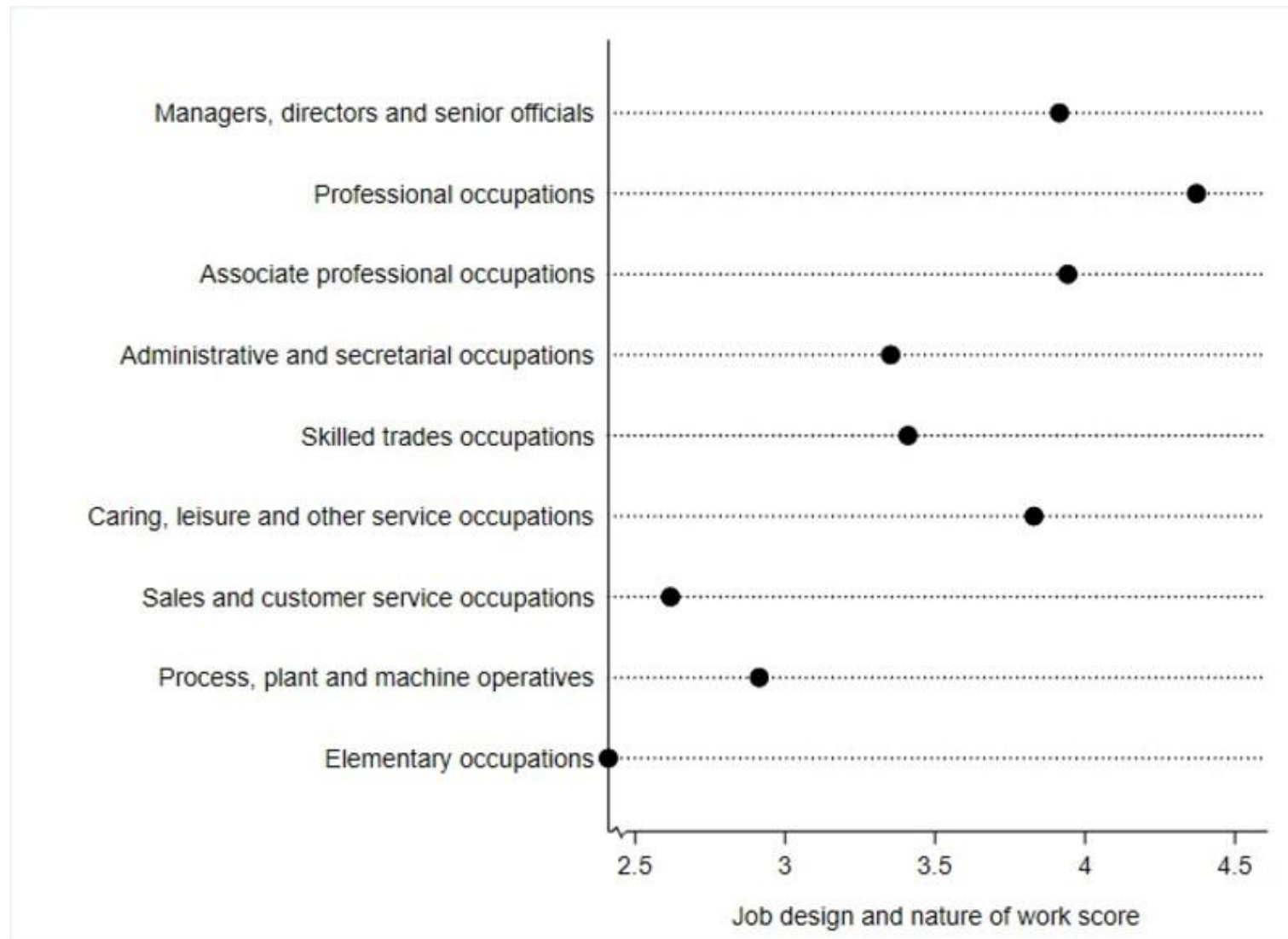# 8. RQ2: How does the composite measure correlate with wellbeing?

RQ3: How does the composite measure correlate with occupation type?

Job design and nature of work score

Educational mismatch by occupation type

SOC 2020 group	Not required (%)	Required/Advantage (%)	Not known (%)	Sample size
Managers, directors and senior officials	37.4	61.9	0.8	10,295
Professional occupations	9.1	90.2	0.7	159,115
Associate professional occupations	21.1	77.8	1.1	54,315
Administrative and secretarial occupations	44.5	54.1	1.4	18,820
Skilled trades occupations	55.0	44.2	0.8	3,240
Caring, leisure and other service occupations	48.6	50.2	1.2	14,015
Sales and customer service occupations	77.6	21.4	1.0	14,405
Process, plant and machine operatives	71.0	27.8	1.2	1,350
Elementary occupations	89.0	10.4	0.6	10,180
Not known	42.9	49.4	7.7	505

Job design and nature of work score
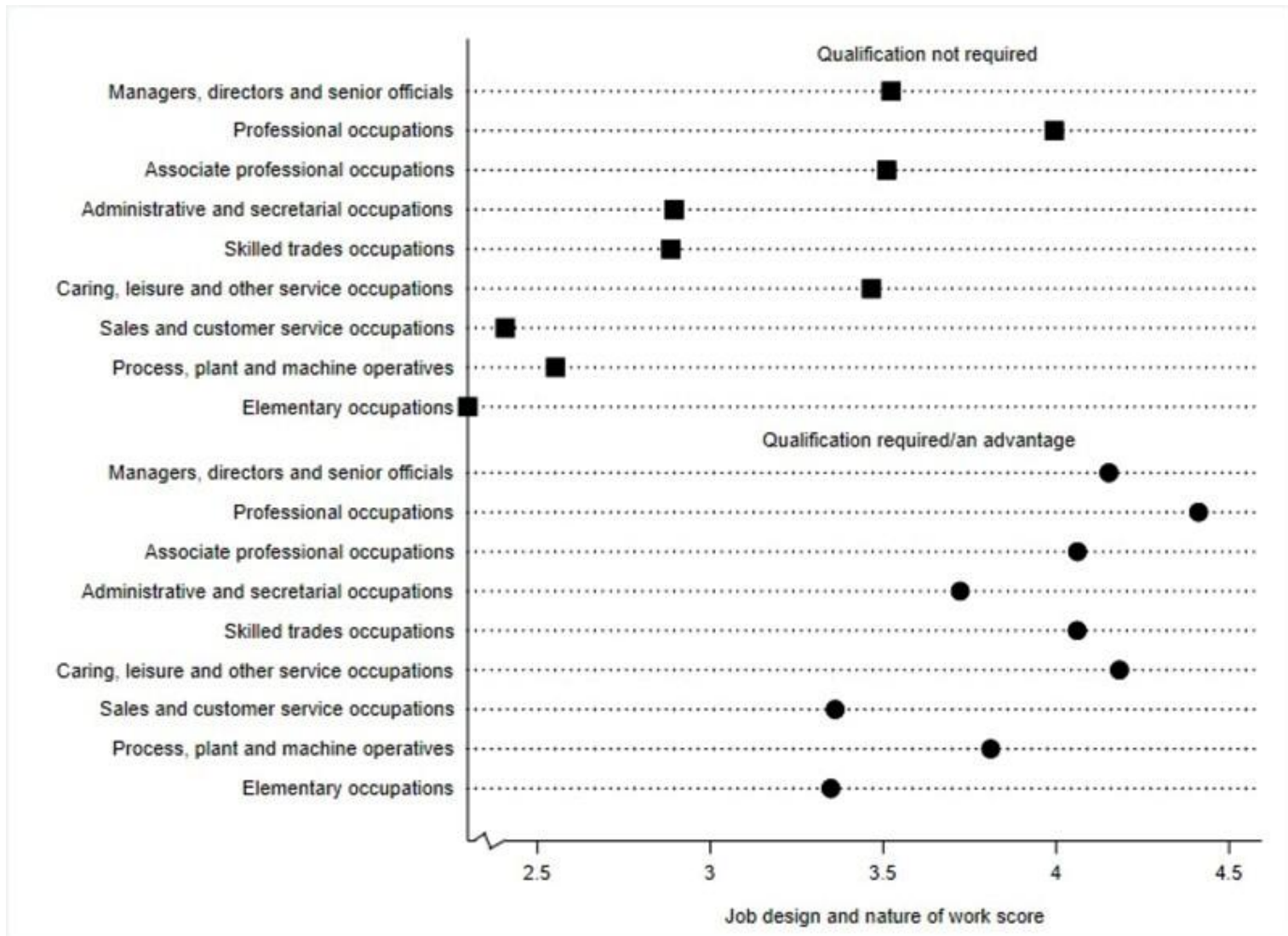
10. How might the composite measure be used?

How can the measure help students?

Subject area of study	Mean 'job design and nature of work' score	Sample size
Medicine & dentistry	4.60	8,740
Veterinary science	4.54	875
Education	4.43	35,300
Subjects allied to medicine	4.42	40,725
Architecture, building and planning	4.17	6,730
Computer science	3.98	10,970
Engineering & technology	3.97	17,025
Law	3.97	10,285
Agriculture & related subjects	3.96	2,710
Social studies	3.88	21,470
Business & administrative studies	3.85	30,790
Mathematical sciences	3.83	4,290
Biological sciences	3.80	25,900
Physical sciences	3.79	11,805
Economics	3.78	3,800

How could the measure support employers and policymakers?

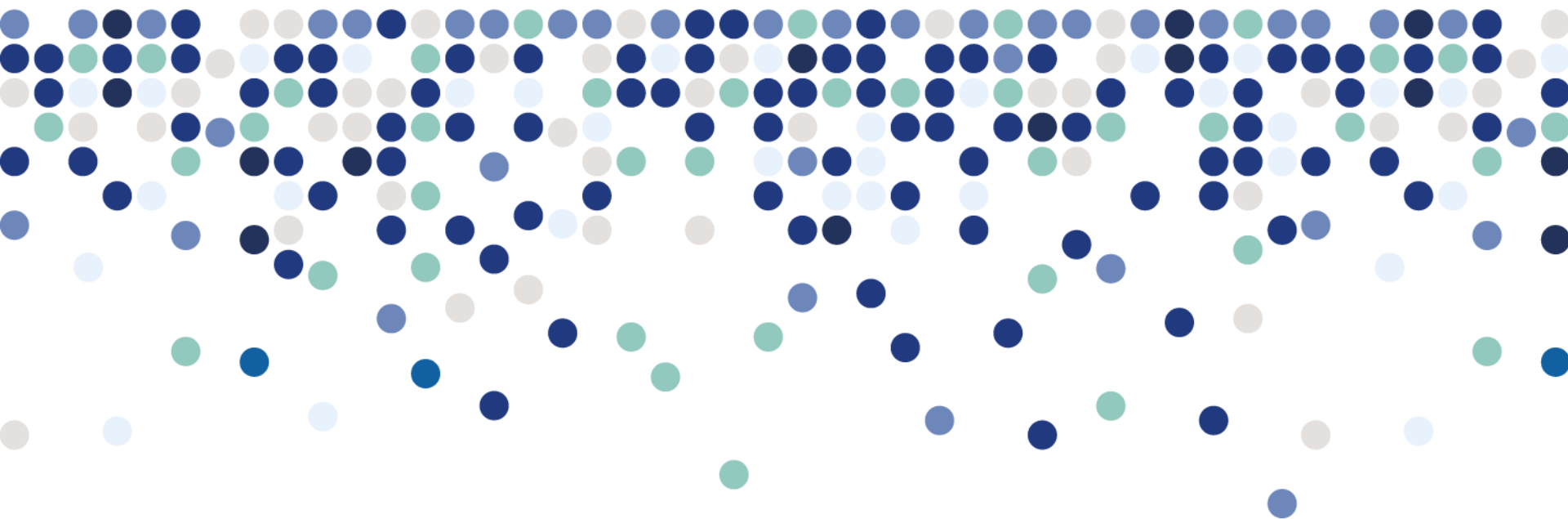| Ethnicity	Mean 'job design and nature of work' score	Sample size
White	4.02	228,570
Indian	3.98	9,470
Pakistani	3.92	6,585
Bangladeshi	3.81	3,410
Chinese	3.90	2,200
Black African	3.91	11,650
Black Caribbean	3.84	3,370
Other	3.90	17,140

11. Further information

Feedback

- Would value your feedback on what statistics on graduates you would like to us to collect/produce.

- We are always looking at ways we might be able to modify/improve the Graduate Outcomes survey.

- One of our key customers/users include academics/researchers.

- Submit your views at official.statistics@hesa.ac.uk.

Further information

- Find out more at https://www.hesa.ac.uk/data-and-analysis/research

- Stay informed of future HESA research publications by signing-up to our mailing list at the following link:

- https://communications.hesa.ac.uk/hesa-research-releases

12. Questions?