

# Coronavirus experiences of staff and postgraduate students (PGRs) at Kings College London: Interim Results

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### **Aims**

- To study the impact of the COVID-19 pandemic on health and wellbeing outcomes among KCL staff and PGR students
- To identify unmet needs among KCL staff and PGR students related to the pandemic response at KCL as they emerge

### **Methods**

- Cohort study
- Recruited by “all staff” email to staff and PGRs, underlying population characteristics known
- Qualtrics survey of (mainly) validated scales and space for free-text to be interpreted by qualitative methods and natural language processing
- Antibody test kits mailed to participants

### **This talk**

- Take-up and participation
- Work stress, worries and losses of colleagues at King's
  - as revealed by quantitative and qualitative analysis
- Interim results on baseline mental health
- Impact and next steps



### Baseline Survey

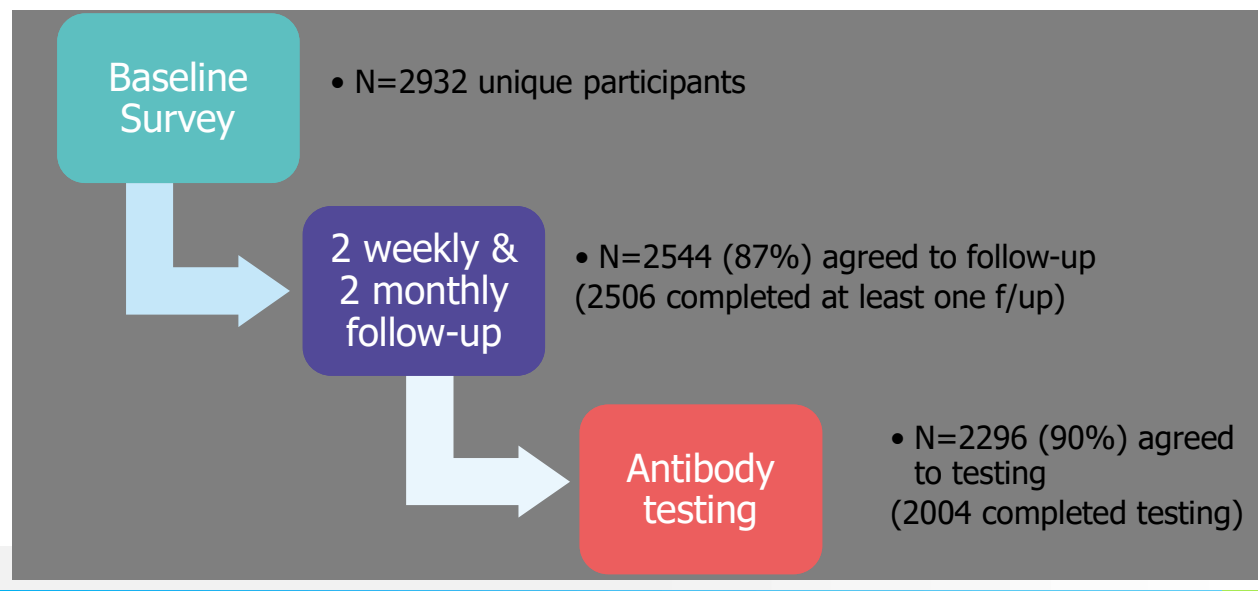
- Cross-sectional data
- Gauge the stressors in this sample
- Feed back to university

### 2 weekly 2 monthly follow-up

- Physical health / virus exposure
- Mental health & wellbeing
- Ongoing stressors and isolation

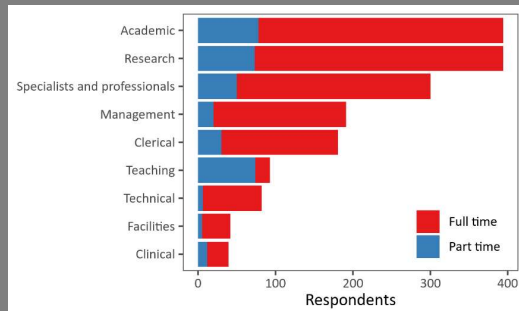
### Antibody testing

- Provide objective exposure for longitudinal data
- Association with symptoms
- Immunity over time



## Who participates in KCL-CHECK?

Response rates of 23% of staff  
and 22% of PGR students.



### Staff, n=2271

Good representation:

- contract type (part-time / casual = 34%)

Over-represented:

- female gender (69%)
- White ethnicities (86%)

Under-represented:

- Black ethnicities (1%)
- People at low pay grades (KCL spine 1-4 = 7%).

### PGR students, n=536

Over-represented:

- female gender (72%)
- White ethnicities (76%)



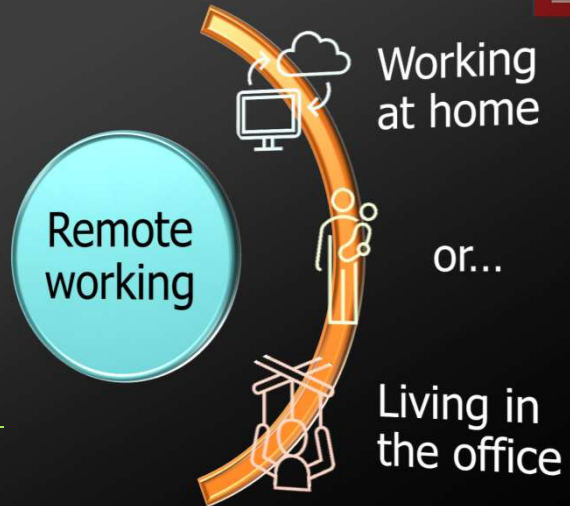
Recruitment by email was good (nearly a quarter of staff), but the under-recruitment of people from BAME (especially Black) backgrounds and low pay grades means we need to be aware that there will be problems with the representativeness of these groups, which could affect the reliability of some breakdowns.

Once (end April)	Every fortnight	Every two months	KCL-specific questions as needed	Virology
<ul style="list-style-type: none"> <li>• Demographics</li> <li>• Mental and physical health hx</li> </ul>	<ul style="list-style-type: none"> <li>• COVID-19 symptoms</li> <li>• Depression (PHQ9)</li> <li>• Anxiety (GAD7)</li> <li>• Alcohol &amp; Loneliness</li> </ul>	<ul style="list-style-type: none"> <li>• Impact of COVID-19 (work challenges, social isolation, etc)</li> <li>• Experiences of COVID-19</li> <li>• Neurological sx</li> <li>• and more...</li> </ul>	<ul style="list-style-type: none"> <li>• Topics included so far:</li> <li>• KCL comms</li> <li>• Furlough</li> <li>• Return to work</li> <li>• Tackling inequality</li> </ul>	<ul style="list-style-type: none"> <li>• Antibody testing every 2/3 months (started July)</li> </ul>

**KCL-CHECK surveys**  
 Protocol medRxiv preprint  
<https://doi.org/10.1101/2020.06.16.20132456>

## KCL-CHECK

Coronavirus experiences of staff and  
PGRs at Kings College London

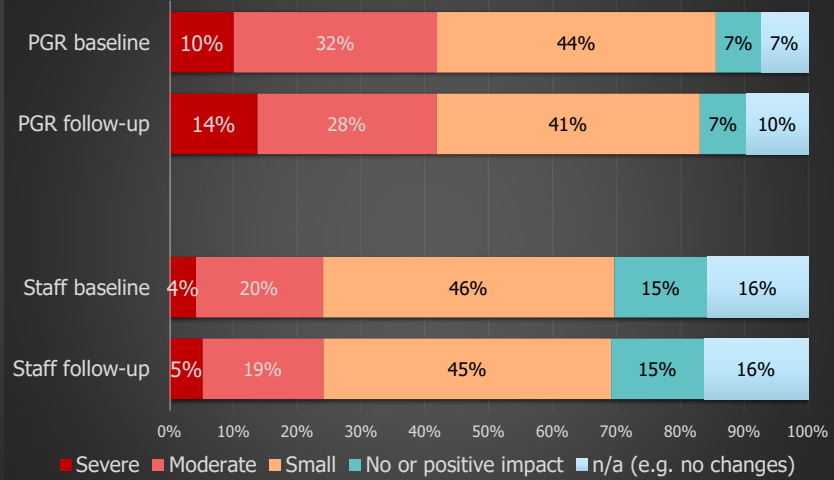






Coronavirus: Health & Experiences of Colleagues at King's

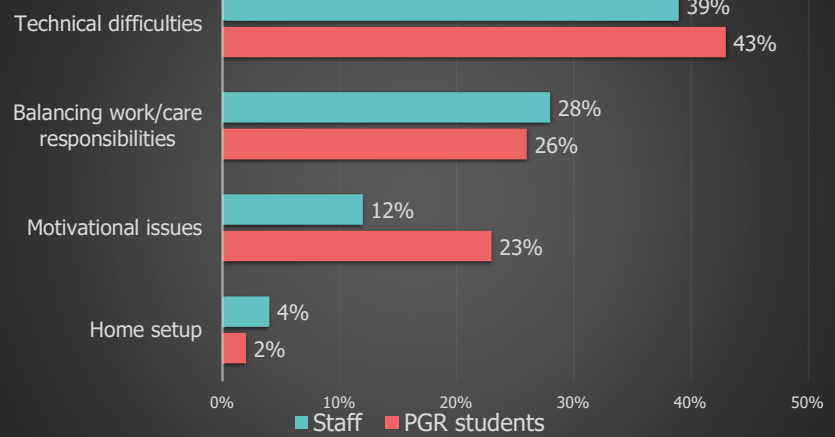
**Impact of changes  
on ability to work:**  
**(i) At baseline (end  
April)**  
**(ii) At follow-up  
(end June)**



86% staff and 93% of students reported moving to working remotely since the COVID-19 pandemic. Most of them reported some negative impact on work, which has remained stable over time.



Coronavirus: Health & Experiences of Colleagues at King's



**What problems have been experienced?**

1

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## Work Stress

Feeling guilty over not being productive enough (and thinking everyone else coping better)

Struggling to work from home while managing competing responsibilities such as childcare/home-schooling

Inappropriate ergonomic setup at home leading to pain

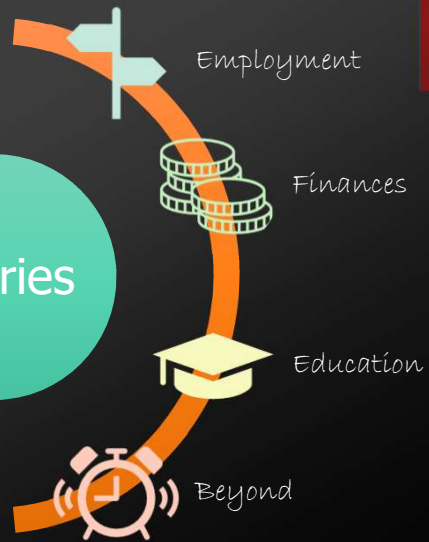
"I have found it very difficult to 'carry on as normal' while working at home... I feel really guilty..."

"Managing the balance of work, caring for our child is quite difficult and draining"

"I have shoulder pain from repetitive strain injury due to my home-work station. It is very painful."

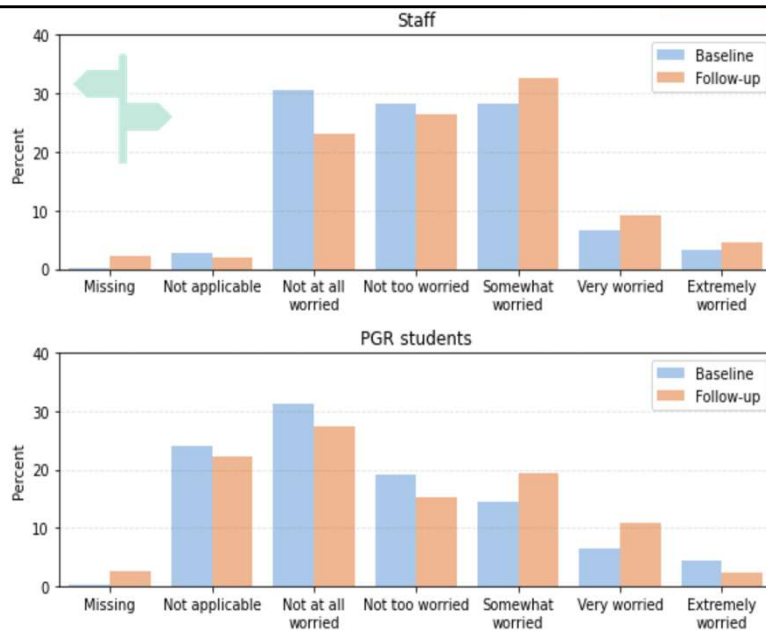
## KCL-CHECK

Coronavirus experiences of staff and  
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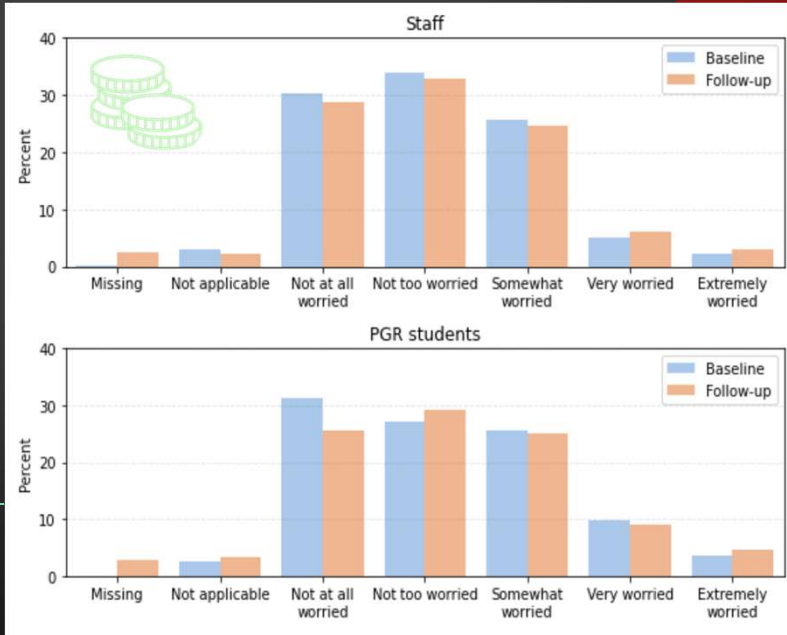
# How worried about employment status?

Comparing baseline (end April) with follow-up (end June)



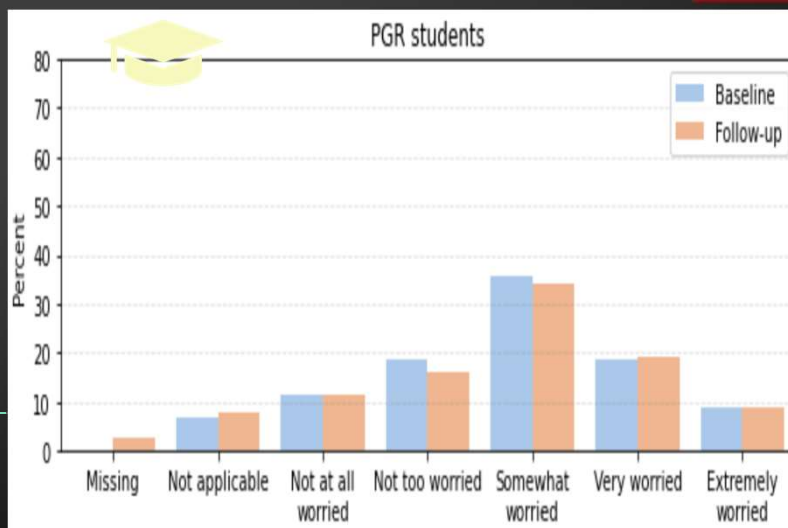
## How worried about finances?

Comparing baseline (end April) with follow-up (end June)



## How worried about education? (PGRs only)

Comparing baseline (end April) with follow-up (end June)



## Worries

Worry about own health and financial security, and the financial situation of the university

Concern about uncertain long-term consequences for self and the world in general (on the economy, future austerity measures, unemployment)

Worry about family members' physical and mental health

"I've worked very hard to prepare myself for a good career and that now feels at risk."

"Constant medium level anxiety about my elderly parents getting it and dying."

"I am very afraid there will be a terrible economic meltdown..."



## Losses

Participants found it difficult to lose daily routines and have coping strategies for dealing with stressors compromised

The pandemic and the protective isolation has led to personal losses, from the loss of time and experiences for PGRs, to deaths and prevention of normal grieving

There was anger towards the government's response and how earlier testing and interventions might have prevented loss of lives.

"I am still struggling with eating and "earning" my food as my usual routine with gym and work etc has been destroyed."

"My nephew died... this is devastating and made more surreal by the fact we cannot visit."

"The pandemic has revealed a dimension of British [politics] I find distressing and abhorrent."

## Mental Health

### **KCL-CHECK**

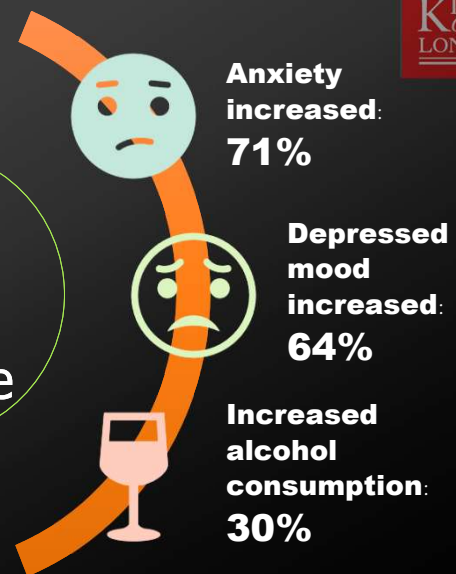
Coronavirus experiences of staff and  
PGRs at Kings College London



Have symptoms of common mental health conditions increased from pre-pandemic to late April ?

At baseline, participants were asked how items had changed from prior to pandemic: GAD-7 items = "anxiety", PHQ-9 items = "depressed mood", and subjective alcohol consumption

## Mental Health at baseline



- GAD-7 "anxiety", positive= 10+
- PHQ-9 "depression", positive= 10+
- AUDIT positive = 8+

**Anxiety  
positive:  
23%**

**Anxiety  
increased:  
71%**

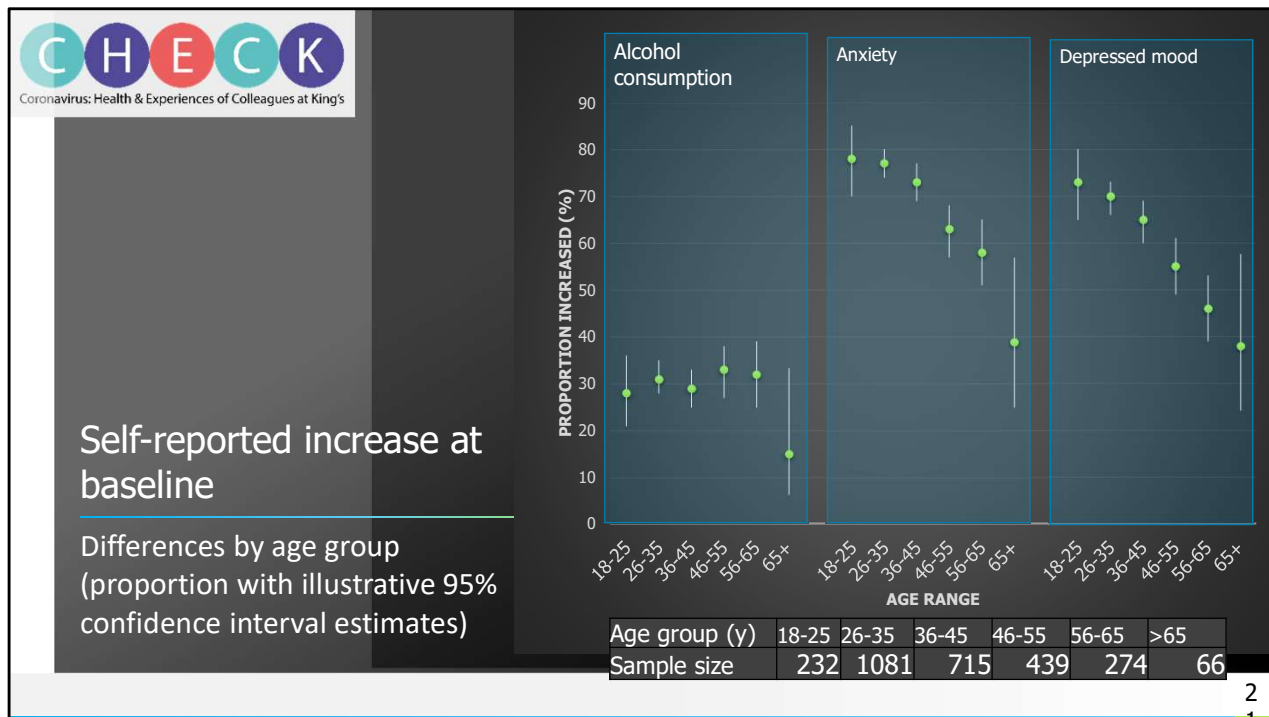
**Depression  
positive:  
21%**

**Depressed  
mood  
increased:  
64%**

**AUDIT  
positive:  
17%**

**Increased  
alcohol  
consumption:  
30%**

Although we have not tested, there is likely to be extensive overlap between GAD positive and PHQ positive and, to a lesser extent, AUDIT positive. Therefore it is not possible to add these together to get numbers positive for any of the above.



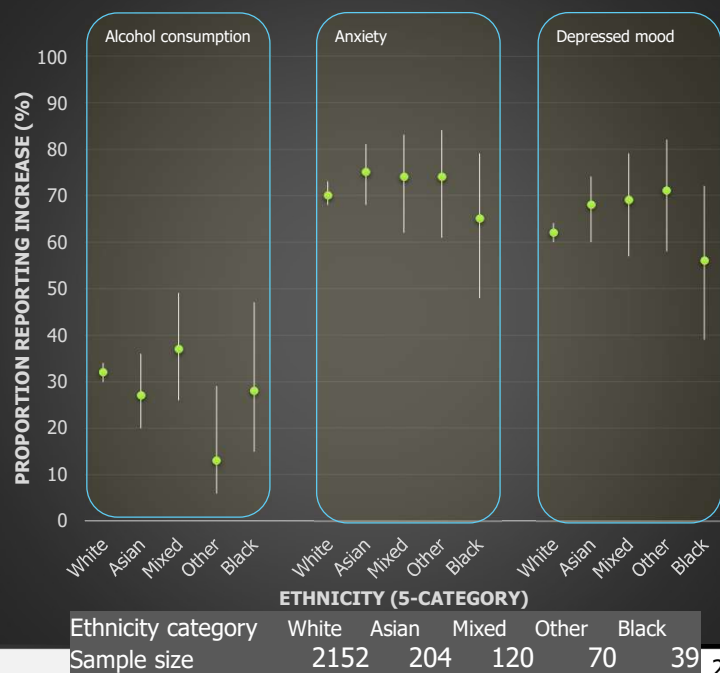
Clear trend for age in reporting worse anxiety or depression since pandemic



Women seem more likely to report worse anxiety or depression, with no gender split for drinking. No clear relationship for PGRs, although suggestion of worse depressive changes. Note that this is not corrected for age.

## Self-reported increase at baseline

Differences by ethnicity  
(proportion with illustrative 95% confidence interval estimates)



This is shown for illustration, but any interpretation needs to be limited by the poor representativeness of the survey in the non-white categories due to limited recruitment of people from BAME backgrounds.

## KCL-CHECK

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### Outputs

**Informal  
feedback to  
KCL  
management**

**Formal  
internal  
reports**

**Scientific  
outputs**

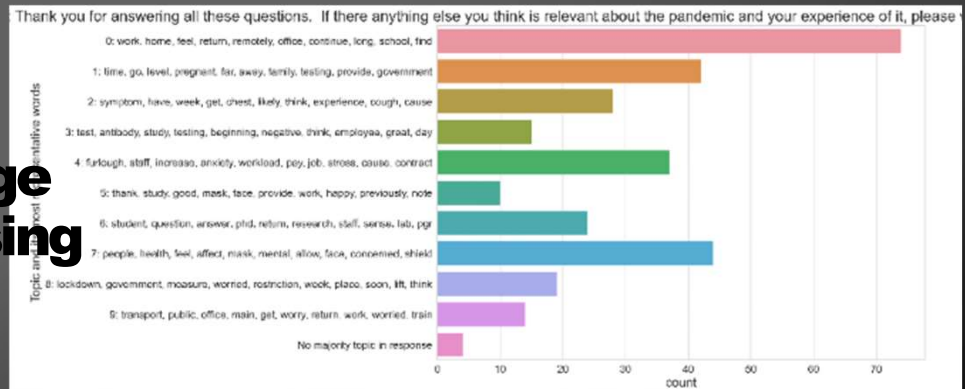


## Impact

- These results have been shared with the KCL management and contributed to
  - policies such as regular Q&A sessions for all staff
  - guidance for discussions in appraisal meetings.
- They have been shared with the equality, diversity and inclusion team and post-graduate research deans for planning targeted support.
- And comms team have received feedback and made changes.
- They will be incorporated into future publications.



# Natural Language Processing



Experimenting with how to use topic recognition from NLP to complement traditional free-text analysis



# Thank you

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