The impact of Covid-19 on doctoral research and the final examination: what can we learn?



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Summary

- Challenges for doctoral researchers during the pandemic
- Practical implications for doctoral supervisors
- The impact on candidate : supervisor interaction
- Access to data in all disciplines
- A few benefits?
- Key issues for assessment
- Doctoral attributes sought by examiners
- Conclusions

Final four slides for you to read later:

2 slides of quotations from research project concerning doctoral attributes in i) STEM and ii) AHSS

2 slides of references

Challenges for doctoral researchers during Covid-19

- Access:
 - to data
 - to supervisors
 - to paid work
- Mental health
 - reduced opportunities for peer discussion/learning
 - limited social interaction
- Accommodation
 - cramped living space
 - difficult to move
 somewhere different

- Feelings of isolation and self-doubt
- Lack of academic
 progress and concerns
 about completion,
 compounding...
- ...financial worries

`The most salient challenge [was] a lack of access to research facilities and equipment during lockdowns and partial curfews' (Cahusac de Caux, 2022)

What was the impact on supervision?

Results of the UKCGE Research Supervisor Survey (2021)

Over half of respondents (n=3,435) suggested that `all aspects of supervision had become more challenging during the pandemic'

Online supervision:

Only 35% said it `caused no difficulty'; 27% said it had been either `challenging' or `extremely challenging'; 38% thought it had been `slightly challenging'

(Gower and Clegg, 2021:67)

And the impact on candidate: supervisor interaction?

- Survey respondents `spoke of "being robbed" of informal meetings with candidates which [would have] helped to keep them motivated and to monitor their progress'
- Some suggested `it is difficult to build trust while working remotely'

(Gower and Clegg, 2021:67)

[`]Casual unscheduled chats with my supervisor are missing greatly' (Social Sciences)

^{&#}x27;Seeing my advisor and cohort much less, changing the dynamic in which I generate ideas and access information' (Biosciences) (Donohue et al, 2021:542)

STEM:AHSS – similar challenges at a general level

 Doctoral researchers in all disciplines experienced restricted access to data during the pandemic.
 Donohue et al (2021) concluded that `overall...access emerged as a challenge more than a benefit' (op cit, Access Impacts:542)



But there were a few positives...



...such as:

- Increased availability of online materials, e.g. wider access to virtual resources in libraries or to interviewees
- Easier access to equipment because of fewer demands
- And the benefit of having the thesis/dissertation online

(Donohue et al, 2021; and see Aydemir and Ulusu, 2020, for insight into medical sciences impacts, including benefits)

Two key issues for assessment

- High quality thesis or equivalent, even if adapted from original expectations
- Essential that examiners' expectations are realistic:

`Examiners shall bear in mind that their judgement of the substantial significance of the work should take into account what may reasonably be expected of a capable and diligent student after three or at most four years of full-time study in the case of a full-time student, or eight years in the case of a part-time student'



What attributes are examiners seeking in candidates?

Originality or a contribution to knowledge

Key criterion for doctoral examination Terminology differs between STEM and AHSS

Mainly evident from: thesis

Research competence

Discipline-specific factors used to evaluate research competence; research integrity important to all, as is candidate's ability to understand the significance of their research and situate it in wider field

Mainly evident from thesis but also viva

Publishability

Almost as important as originality / contribution

Some publish before examination, others publish from thesis; often depends on discipline and thesis format Mainly evident from: thesis

Intellectual rigour

Displayed by attributes such as:
Critical, analytical and reflective thinking
Problem-solving and logic
Independent thought and research
leadership
Thesis style and presentation
Many evident from viva but also thesis

Reference for full table: Houston, G (2021) Doctoral examiners' judgements: do examiners agree on doctoral attributes and how important are professional and personal characteristics? In: A Lee and R Bongaardt (eds.) *The Future of Doctoral Research:* challenges and opportunities. London: Routledge.

Conclusions

- Doctoral candidates experienced myriad challenges during the pandemic, as did their supervisors
- Arguably international candidates were faced with additional challenges, especially if required to return home
- It appears that, despite these challenges, most completed successfully, perhaps developing stronger professional and personal attributes as a result:

`Doctoral candidates exhibited increased resilience in the later stages of the pandemic (i.e. by early 2022)'; on the other hand, some struggled:

`while doctoral candidates were granted thesis deadline extensions, many did not benefit from the extra time due to exacerbated mental health issues and family commitments' (Cahusac de Caux, 2022: 370, 363)

Pertinent quotes from respondents (STEM)

`Deeper critical thinking and understanding of the subject...at the end you should be a researcher who...[has a] holistic understanding and critical thinking about the work you're doing...' (STEM external examiner 2)

`We want to know [if] you realise that...there are always things that...you may not have proved sufficiently [so] what will you do more to prove it?'
(STEM internal examiner 3)

`I like to see that they're logical, that they can work their way through a problem' (STEM ext. examiner 5)

`The extent to which someone is in the driver's seat for the research that they've done...can they ask their own questions, design their own [project] and then take charge of...converging all...this into a final product?' (STEM supervisor 2)

`Are they competent for other things in life? Are they going to bring the skills that they've learned from this doctoral research?' (STEM int. examiner 2)

`Really importantly, are they capable of thinking on their feet?' (STEM ext. examiner5)

`The advantage of the viva is that you're asking them questions on the hoof...however much they've been coached...they wouldn't be able to do that unless they're competent' (STEM ext. examiner3)

Pertinent quotes from respondents (AHSS)

'It's very important...the candidate shows they are able to conduct independent research' (Focus Group, female 3)

`A whole set of things...go...together...they ultimately come down to what might be called intellectual rigour in that the evidence and the argument stands up to challenge, and within that there are...a number of different attributes' (AHSS internal examiner 1)

`Two things are particularly important...the most important really is rigour' (Economics examiner1)

`Willingness to take a position...self-critical and critical' (AHSS int. examiner1)
`If they're doing empirical work...the ability to be reflective is really
important' (AHSS internal examiner3)

'You're looking for...research agility and flexibility and ability to problemsolve, to think on their feet, to think about new problems, new solutions...think divergently, creatively (AHSS supervisor 1)

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