

Witness Name:

Chris Bonell

Dated: 10.10.2022

Ref: M2/SAGE/01/CXB

COVID-19 INQUIRY – MODULE 2

Questionnaire Response – Professor Chris Bonell

1: Overview of qualifications, career history, professional expertise and major publications:

Qualifications

1.1. The following table outlines my qualifications:

Table 1- Qualifications

1999-2000	MSc Epidemiology, London School of Hygiene & Tropical Medicine
1996-1999	PhD Sociology, Institute of Education, University of London
1992-1994	MSc Sociology of Health & Illness (Distinction), South Bank University
1987-1990	MA Hons (2.1) Social & Political Sciences, King's College Cambridge

1.2. My expertise is in the evaluation of public health interventions, epidemiological and social scientific studies of adolescent health and promoting health through individual behaviour change and broader determinants of health.

Employment History

1.3. The following table outlines my employment history:

Table 2 – Employment History

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2016-	Professor of Public Health Sociology, London School of Hygiene and Tropical Medicine
2019-	Associate Dean for Research, Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine
2016-2019	Head of Department of Public Health, Environments and Society, London School of Hygiene and Tropical Medicine
2013-	Professor of Sociology and Social Policy, University College London
2011-13	Professor of Sociology and Social Intervention, University of Oxford
2004-11	Senior Lecturer, London School of Hygiene & Tropical Medicine
2003-2004	Assistant Director, Social Science Research Unit, Institute of Education
2002-2003	Research Team Leader, Social Exclusion Unit, Cabinet Office
1996-2002	Research Officer, Social Science Research Unit, Institute of Education
1995-1996	Senior Research Officer, The HIV Project, North West Thames Regional Health Authority
1993-1995	Research Officer, Lambeth, Southwark & Lewisham Health Authority
1991-1993	Clinical Audit Officer, Guy's Hospital

Publications

- 1.4. Melendez-Torres GJ, Warren E, Viner R, Allen E, Bonell C. Moderated mediation analyses to assess intervention mechanisms for impacts on victimisation, psycho-social problems and mental wellbeing: evidence from the INCLUSIVE realist randomized trial. *Social Science and Medicine* <https://doi.org/10.1016/j.socscimed.2021.113984>.
- 1.5. Viner RM, Mytton OT, Bonell C, Melendez-Torres GJ, Ward J, Hudson L, Waddington C, Thomas J, Russell S, van der Klis F, Koirala A, Ladhani S,

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- Panovska-Griffiths J, Davies NG, Booy R, Eggo RM. Susceptibility to SARS-CoV-2 infection amongst children and adolescents compared with adults: a systematic review and meta-analysis. *JAMA Pediatrics* 2021;175(2):143-156.
- 1.6. Panovska-Griffiths, J. Kerr CC, Stuart RM, Mistry D, Klein DJ, Viner RM, Bonell C. Determining the optimal strategy for reopening schools, work and society in the UK: modelling patterns of reopening, the impact of test and trace strategies and risk of occurrence of a secondary COVID-19 pandemic wave. *Lancet Child and Adolescent Health* 2020; S2352-4642(20):30250-9.
- 1.7. Bonell C, Michie S, Reicher S, West R, Bear L, Yardley L, Curtis V, Amlôt R, Rubin J. Harnessing behavioural science in public health campaigns to maintain 'social distancing' in response to the COVID-19 pandemic: key principles. *Journal of Epidemiology and Community Health* 2020; <http://dx.doi.org/10.1136/jech-2020-214290>
- 1.8. Bonell C, Allen E, Warren E, McGowan J, Bevilacqua L, Jamal F, Legood R, Wiggins M, Opondo C, Mathiot A, Sturgess J, Fletcher A, Sadique Z, Elbourne D, Christie D, Bond L, Scott S, Viner RM. Initiating change in the school environment to reduce bullying and aggression: a cluster randomised controlled trial of the Learning Together (LT) intervention in English secondary schools. *The Lancet* 392 (10163):2452-2464
- 1.9. Bonell C, Fletcher A, Morton M, Lorenc T. 'Realist Randomised Controlled Trials': a new approach to evaluating complex public health interventions. *Social Science and Medicine* 2012;75(12):2299-306.

2: List of groups I participated in and the relevant time period:

- 2.1. SPI-B – 22 meetings 30/3/20-9/12/21
- 2.2. SPI-B 'comms cell'- 2 meetings 1/4/20-20/05/20
- 2.3. SPI-B 'children subgroup' – 1 meeting 27/5/20
- 2.4. SPI-B 'community champions commission subgroup' – 3 meetings 6/10/20-19/10/20
- 2.5. SPI-B 'working group on reintroducing protective behaviours' – 1 meeting 15/9/21

- 2.6. SPI-B 'coordination group' – 19 meetings 25/9/20-8/2/22
- 2.7. Task & Finish Group on Children – 7 meetings 20/4/20-5/12/20; 20/1/21
- 2.8. SAGE – 3 meetings 21/4/20-22/10/20
- 2.9. SPI-M – 2 meetings 9/4/20-13/4/20
- 2.10. Environment and Modelling Group – 4 meetings 1/5/20-19/5/20

3: Overview of involvement in groups between January 2020 and February 2022:

How and when I came to be a participant

- 3.1. James Rubin, the SPI-B co-chair, initially invited me to participate on 16/3/20 to advise on 'dismissing' schools (partly closing these but remaining open to vulnerable children and the children of key workers'). I then remained a participant on SPI-B. James Rubin asked me to lead a 'comms cell' of SPI-B about providing advice for Government communications which met a couple of times. There was also one meeting of a 'children's subgroup' of SPI-B, which James Rubin invited me to participate in. SPI-B also convened a subgroup to provide advice about the Government's Community Champions work and it was agreed at a SPI-B meeting that I would participate in this group. There was also a single meeting of a SPI-B subgroup advising on reintroducing protective behaviours. From September 2020, James Rubin asked me to participate in the SPI-B coordinating group, which was the group that then took forward most of the main business of SPI-B. I was also invited to participate in discussions about children and schools within the Task and Finish group on Children. I was also invited to participate in some meetings of SAGE and SPI-M about children and young people. I was also involved in a few meetings of the Environment and Modelling Group, considering how to make environments, and in particular schools, safer.

The number of meetings I attended, and my contributions to those meetings

- 3.2. SPI-B 30/3/20; 6/4/20; 8/4/20 13/4/20; 27/4/20; 4/5/20; 11/5/20; 25/4/20; 29/5/20; 1/6/20; 16/6/20; 22/6/20; 30/6/20; 3/7/20; 7/7/20; 14/7/20; 28/7/20; 15/9/20; 22/1/21; 7/5/21; 22/6/21; 9/12/21 (22 meetings): I contributed to all

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- discussions but in particular to discussions of implementing and removing lockdown restrictions, government behaviour change communications and community champions.
- 3.3. SPI-B 'comms cell' 1/4/20; 20/5/20 (2 meetings): I contributed to discussions of government behaviour change communications and providing advice to government comms teams.
 - 3.4. SPI-B 'children subgroup' 27/5/20 (1 meeting): I contributed to discussion of behavioural aspects of decisions regarding school reopening.
 - 3.5. SPI-B 'community champions commission subgroup' 6/10/20; 13/10/20; 19/10/20 (3 meetings): I contributed to discussions providing social science insights into community champions.
 - 3.6. SPI B 'working group on reintroducing protective behaviours' 15/9/21 (1 meeting): I contributed to discussions of appropriate strategies for reintroducing protective behaviours and comms about this.
 - 3.7. SPI-B 'coordination group' 25/9/20; 30/9/20; 13/10/20; 20/10/20; 17/11/20; 24/11/20; 8/12/20; 15/12/20; 5/12/20; 12/1/21; 19/2/21; 2/2/21; 9/2/21; 9/3/21; 20/4/21; 27/4/21; 13/9/21; 3/1/22; 8/2/22 (19 meetings): I contributed to all discussions, but in particular to discussions of implementing and removing lockdown restrictions, government behaviour change communications and community champions.
 - 3.8. SAGE 21/4/20; 1/5/20; 22/10/20 (3 meetings): I contributed to discussions of reopening schools and promoting behavioural adherence among young people.
 - 3.9. SPI-M 9/4/20; 13/4/20 (2) & Task & Finish Group on Children 20/4/20; 23/4/20; 28/4/20; 19/6/20; 7/7/20; 5/12/20; 20/1/21 (7 meetings): I contributed to discussions of social and behavioural aspects of school closures and reopening. I also contributed to discussion of the results of modelling of school re-openings.
 - 3.10. Environment and Modelling Group 1/5/20; 7/5/20; 12/5/20; 19/5/20 (4 meetings): I contributed to discussions of social science insights into making environments safer, in particular schools.

My role in providing research, information and advice

- 3.11. My main contributions centred on: using behavioural and social science to inform strategies to maintain protective behaviours, and the implications of this for government policies and communications, and considering behavioural and social aspects of possible approaches to reopening schools and reviewing modelling results in the light of these.

4: Summary of documents to which I contributed for the purposes of advising groups:

- 4.1. I contacted Go-Science on 5 September 2022 and requested a complete record of all the documents to which I contributed to for the purpose of advising the relevant groups. Unfortunately, Go-Science do not hold these records, and were only able to provide a list of documents featured at each SAGE meeting with links to their published versions on GOV.UK, for me to search and cross-check against my records. Therefore, the documents referred to in this question are, to the best of my knowledge, and the material available to me, the documents to which I significantly contributed.

I led on the following papers:

- 4.2. Implementation and communications: harnessing behavioural science to maintain social distancing: This paper reviewed behaviour change theories and whether these might be appropriate to inform communications to support adherence to restrictions. Discussed at SPI-B 6/4/20. A revised version of this paper was published in a scientific journal: <https://jech.bmj.com/content/74/8/617>
- 4.3. Help for communications teams on COVID-19 from SPI-B members: This arose from discussion at SPI-B about how to help Government comms teams apply the learning from the above paper in a practical manner. Discussed at SPI-B 4/4/20 and forwarded to various departmental comms teams. No link available. My version available on request.
- 4.4. Suggestions for messaging about preventive behaviours in the next phases of the UK's response to the Covid-19 pandemic: This arose from a discussion at SPI-B about how recent Government communications might be improved. Discussed at SPI 29/5/20. No link available. My version available on request.

- 4.5. Increasing adherence to COVID-19 preventive behaviours among young people. This was, I believe, a commission from SAGE to SPI-B which I then coordinated. Presented to SAGE 22/10/20: [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933228/S0829_SPI-B -
Increasing adherence to Covid-19 preventative behaviours among young people.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933228/S0829_SPI-B_-_Increasing_adherence_to_Covid-19_preventative_behaviours_among_young_people.pdf)

I recall that I made more minor contributions to drafting the following papers:

- 4.6. SPI-B: Easing restrictions on activity and social distancing - comments and suggestions, 1 April 2020: This made suggestions as to how communications about the eventual easing of restrictions should be communicated to the public. My recollection is that this was commissioned by SAGE of SPI-B: <https://www.gov.uk/government/publications/spi-b-easing-restrictions-on-activity-and-social-distancing-comments-and-suggestions-1-april-2020>
- 4.7. SPI-B: Behavioural principles for updating guidance to minimise population transmission - background paper: This made suggestions as to how additional measures to prevent transmission should be communicated to the public. My recollection is that this was commissioned by SAGE of SPI-B. Presented to SAGE 20/4/20: <https://www.gov.uk/government/publications/spi-b-behavioural-principles-for-updating-guidance-to-minimise-population-transmission-background-paper-20-april-2020>
- 4.8. Theory and evidence base for initial SPI-B recommendations for phased changes in activity restrictions - SPI-B background paper: This made suggestions as to how the eventual easing of restrictions should be communicated to the public. My recollection is that this was commissioned by SAGE of SPI-B. Presented to SAGE April 2020: <https://www.gov.uk/government/publications/theory-and-evidence-base-for-initial-spi-b-recommendations-for-phased-changes-in-activity-restrictions-april-2020>
- 4.9. SPI-B - Well-being and Household Connection: the behavioural considerations of 'Bubbles': This made suggestions as to how bubbles might be implemented so as to promote wellbeing while minimising transmission. My recollection is

that this was commissioned by SAGE of SPI-B. Presented to SAGE 14/5/20:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/892048/S0356_SPI-B_Well-being_and_Household_Connection.pdf

- 4.10. SPI-B: Communicating behaviours to reduce transmissions between social networks: summary: This made suggestions about how to communicate about behaviours to reduce transmission between different social networks (for example, relating to work, family etc.) and how these might best be minimised. My recollection is that this was commissioned by SAGE of SPI-B. Presented to SAGE 27/5/20:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/895855/S0446_Communicating_behaviours_to_reduce_transmissions_between_social_networks.pdf
- 4.11. Role of Community Champions networks to increase engagement in context of COVID-19: evidence and best practice: This made suggestions as to how the Community Champions programme should be organised to best enable communities to support adherence. My recollection is that this was commissioned by SAGE of SPI-B. Presented to SAGE 22/10/20:
<https://www.gov.uk/government/publications/role-of-community-champions-networks-to-increase-engagement-in-context-of-covid-19-evidence-and-best-practice-22-october-2020>
- 4.12. SPI-B: Return to campus for Spring term: risk of increased transmission from student migration: This considered the behavioural aspects of the return to campus and how this might contribute to transmission. My recollection is that this was commissioned by SAGE of SPI-B. Presented to SAGE 13/1/21:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/963377/S1027_SPI-B_-_Return_to_campus_for_Spring_term_-_risk_of_increased_transmission_from_student_migration.pdf
- 4.13. SPI-B: Sustaining behaviours to reduce SARS-CoV-2 transmission: This made suggestions as to how communications could contribute to sustaining behavioural adherence to contribute to reducing transmission. My recollection

is that this was commissioned by SAGE of SPI-B. Presented to SAGE 30/4/21:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/999175/S1215_SPI-B_Sustaining_behaviours_to_reduce_SARS-CoV-2_transmission.pdf

- 4.14. SPI-B: Behavioural and social considerations when reducing restrictions: This made suggestions as to how the eventual easing of restrictions should be communicated to the public. My recollection is that this was commissioned by SAGE of SPI-B. Presented to SAGE 10/2/21:
<https://www.gov.uk/government/publications/spi-b-behavioural-and-social-considerations-when-reducing-restrictions-10-february-2021>
- 4.15. UCL: Impacts of school closures on physical and mental health of children and young people – a systematic review: This was a systematic review led by UCL to which I contributed, which reviewed the evidence on potential impacts of school closures (from a variety of causes) contributed to students' wider health. I do not recall how this was commissioned. Presented to SAGE 11/2/21:
<https://www.gov.uk/government/publications/ucl-impacts-of-school-closures-on-physical-and-mental-health-of-children-and-young-people-a-systematic-review-11-february-2021>

5: Summary of articles, interviews and/or evidence:

- 5.1. I was interviewed for a Radio 4 documentary about the UK response to the pandemic; this referred to the general approach recommended by scientific advisors (emphasising solidarity with and care for others as a basis for communications to support adherence) but did not discuss specific meetings:
<https://www.bbc.co.uk/programmes/m00127zc>
- 5.2. I was interviewed for an oral history of the UK's response to Covid:
<https://www.nhs70.org.uk/covid> and discussed the general approach recommended by scientific advisors (as above, emphasising solidarity with and care for others as a basis for communications to support adherence) but did not discuss specific meetings.
- 5.3. I also did various media interviews for a modelling paper:
<https://pubmed.ncbi.nlm.nih.gov/32758453/> but these did not comment on the above-mentioned groups or the UK response. The paper modelled what level

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of test-trace-isolate coverage would be needed to prevent an increase in infections as schools reopened. This modelling was not commissioned but rather was academic led.

I co-authored the following papers which comment on the UK response:

- 5.4. Sundaram N, Bonell C, Ladhani S, Langan SM, Baawuah F, Okike I, Ahmad S, Beckmann J, Garstang J, Brent BE, Brent AJ, Amin-Chowdhury Z, Aiano F, Hargreaves J. Implementation of health-promotion measures to prevent COVID-19: a national study of English primary schools in summer 2020. *Health Education Research* 2021 cyab016-. ISSN 0268-1153 DOI: <https://doi.org/10.1093/her/cyab016>: This paper evaluated the level of implementation within a sample of schools of measures to prevent Covid19 transmission. This paper was not commissioned but rather was academic led.
- 5.5. Viner R, Bonell C, Blakemore SJ, Hargreaves J, Panovska-Griffiths J. Schools should still be the last to close and first to open in any future lockdown. *British Medical Journal* 2022;376:o21. <https://www.bmj.com/content/376/bmj.o21> :This paper made the case that because of their benefits for students, schools should be prioritised for remaining open. This paper was not commissioned but rather was academic led.
- 5.6. Viner R, Bonell C, Drake L, Jourdan D, Davies N, Baltag V, Jerrim J, Proimos J, Darzi A. Reopening schools during the COVID-19 pandemic: governments must balance the uncertainty and risks of reopening schools against the clear harms associated with prolonged closure. *Archives of Diseases of Childhood* 2021 Feb;106(2):111-113. doi: 10.1136/archdischild-2020-319963 . Epub 2020 Aug 3. <https://adc.bmj.com/content/106/2/111> : This paper also made the case that because of their benefits for students, schools should be prioritised for remaining open. This paper was not commissioned but rather was academic led.
- 5.7. I have co-authored other empirical papers on Covid-19 but these do not comment on the UK response (available on request).

6: Views as to whether the work of the groups in responding to the Covid-19 pandemic succeeded in its aims.

6.1. My view is that the above-mentioned groups worked well in terms of composition, commissioning, resources and support, advice and recommendations and working between groups. My view is that the above-mentioned groups developed so that over time they took on board appropriate, diverse sources of expertise and were broadly representative of the UK population. The groups were commissioned to focus on requests from SAGE and through this the government. This ensured that they generated the needed evidence and advice. The groups were supported principally by GO Science as well as other civil servants and this support was at all times exemplary. The advice given and recommendations made was to my knowledge, and in my experience, sound given the evidence available at that time. The groups worked extremely effectively and collegially with participants giving their time for free while continuing with their normal work. Applicable structures and policies were to the best of my knowledge used appropriately and were effective.

7: Lessons that can be learned

7.1. In my opinion, there could have been a more systematic process for reviewing emerging behavioural evidence and producing recommendations based on this. This did become a part of SPI-B processes but was perhaps not initially a priority given both the lack of evidence, but also the emphasis on responding to policy requests rather than proactively raising issues and making recommendations. I believe SPI-B was initially insufficiently representative of behavioural and social scientists working in public health, but this was rectified relatively quickly.

8: Documents that I hold

8.1. Document titled 'Help for communications teams on COVID-19' from SPI-B members. Discussed at SPI-B 4/4/20. My version available on request.

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- 8.2. Document titled 'Suggestions for messaging about preventive behaviours in the next phases of the UK's response to the Covid-19 pandemic'. Discussed at SPI 29/5/20. My version available on request.
- 8.3. The list of academic led papers reported under question 5 are also available from me on request.
- 8.4. I also have a set of emails, some meeting agenda and some early drafts of papers on my password-protected laptop computer and these are also available on request.