

SAGE meeting paper: Cover sheet

Please complete this cover sheet for each substantive and non-routine paper being discussed at SAGE, unless these details are clearly provided in the paper itself.

SAGE meeting date: 22/10/2020

Paper title: SPI-B: Increasing adherence to Covid-19 preventative behaviours among young people

Paper ID: To be completed by SAGE Secretariat

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Supporting papers: None
(for storage in the repository)

Handling instructions: To be considered with paper SPI-B: Positive strategies for sustaining adherence to infection control behaviours'

Suitable for publication: Immediately
(please include reason if not for immediate publication) Choose an item.
Click or tap here to enter text.

Written on: 21/10/2020

Considered at: SPI-M
SPI-B
NERVTAG
Nosocomial working group
Environmental and Modelling group
Children sub-group x
Evaluation group
[Other]
Click or tap here to enter text.

Word count: 4081

Summary of paper

1. Reason for bringing to SAGE (include links to any commissions from SAGE or elsewhere); how does this build on previous SAGE discussions?

This paper is in response to a commission from Cabinet Office Comms on how best to promote adherence in students and young people, particularly to consider positive messaging encouraging adherence in addition to existing campaigns.

Accompanying this paper at SAGE 63, on the topic of adherence, is the paper 'Positive strategies for sustaining adherence to infection control behaviours', which also complements the key conclusions below.

2. What are the key conclusions of the paper (and confidence in these)?

Recommendations

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- To **increase impact**, communication strategies which are aimed at changing individual behaviours should be complemented by practical interventions in institutions and the surrounding environment e.g., universities should be required to shift to remote learning immediately, and schools should distribute free face coverings. **Communications interventions aiming to change individual behaviour will, on their own, have limited impact.**
- **Wellbeing** in young people may impact their ability to adhere. Online, NHS and settings-based interventions to **support** young people's **mental health and wellbeing** should be increased.
- A greater proportion of young people than adults are members of Black, Asian and Minority Ethnic (BAME) communities, ONS data indicates that members of these communities are more likely to live in multi-generational households and in crowded, poorly ventilated housing (11, 12). Interventions which ensure that employers and educational institutions **support preventive behaviours** and which **address barriers to adherence associated with ethnicity** are therefore likely to be important.
- Young people asked to **isolate** or **stay at home** should be provided with **good financial and other support, as identified in previous SPI-B papers.**

Messaging

- Communications should draw upon social norms of effective adherence by emphasising what other peers are doing (*descriptive* e.g. your peers are switching to socialising online) and approved perceptions of behaviours (*injunctive* e.g. your peers think you should start socialising online)
- Communications should only target young people when generic communications are not sufficient or appropriate. Communication interventions that explicitly target young people risk defining them as the problem and thereby alienating them. When targeted, interventions may not need to refer explicitly to young people.
- Communications targeting young people should where possible be **delivered by trusted**, non-governmental sources e.g. charities, celebrities, sports clubs, commercial brands.
- Interventions should include **online** and **face-to-face** (where possible) **peer education**. Mass and social media campaigns should **use young people's voices** and be **co-produced** and piloted with young people.
- Interventions should provide **clear information** to **educate** and therefore **enable** positive behaviours. e.g. how to wear masks, how to distance in specific situations, how to persuade peers to adhere, how to socialise in smaller groups. These should be **supported by prompts** (e.g. posters, signs) in relevant settings.
- Interventions should provide **accurate information** on short-term and long-term consequences e.g. long Covid, risks to loved ones.
- Communications should **avoid giving visibility to non-adherence** or suggest the ineffectiveness of preventive behaviours.

3. What are the key questions to be considered at SAGE?

Questions for **both** Adherence papers:

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- How can long-term adherence to the most important infection control behaviours be supported?
- What are the important current drivers of non-adherence to infection control ('pandemic fatigue')?
- How can positive messages be used to improve and maintain adherence? What are the risks to this approach?
- Which messaging and enabling approaches are most likely to drive habit-formation and maintenance?

Questions for **this paper** specifically (Increasing adherence to Covid-19 preventative behaviours among young people) to be considered:

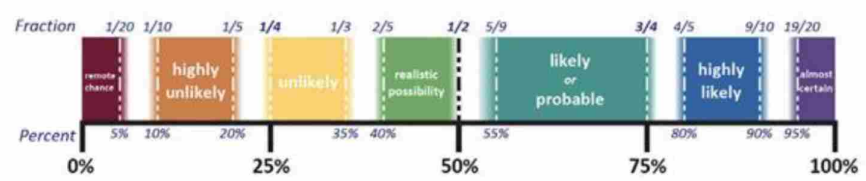
- How representative are the findings we are observing when it comes to young people's adherence?
- How can messaging be used to promote adherence to interventions for students and young people who may live relatively separate lives from the elderly and vulnerable, and are difficult to reach with the existing "protect others" messaging?
- How can we drive positive motivation to adhere for this group, rather than relying on enforcement messaging?

4. Are there any proposed next steps?

SPI-B are preparing a preliminary paper on 'Celebrations' for Cabinet Office which draws upon this paper and the accompanying SPI-B paper on maintaining adherence.

SPI-B have completed work on Community Champions which aligns with the principles outlined in both this paper and paper 'SPI-B Positive strategies for sustaining adherence to infection control behaviours'.

PHIA probability yardstick – to be used when expressing likelihood or confidence



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SPI-B: Increasing adherence to COVID-19 preventative behaviours among young people

Executive summary

This paper was commissioned by CO communications colleagues to focus on how messaging and other techniques can be used to promote adherence in young people.

Background

- Recent data indicates that **'complete' and 'majority' compliance with COVID-19 preventative behaviours, e.g. social distancing and staying at home, is substantially lower and declining** among those aged 18-29 years compared to older groups (1). Data suggest that young people may have **strong motivation to adhere**, but this is undermined by lack of trust in government and lack of clear information.
- Ability to adhere will be affected by employment, education, and housing status. Young people are more likely than adults to work in occupations with high numbers of social contacts, and with less recourse to sick pay, which may undermine their motivation to seek testing and ability to isolate in response to symptoms (9).
- Universities and colleges also expose young people to very large numbers of social contacts. Young people are more likely to live in all-adult, crowded, multi-occupancy housing often with poor ventilation which may further contribute to rapid transmission.

Recommendations

General considerations

- To **increase impact**, communication strategies which are aimed at changing individual behaviours should be complemented by practical interventions in institutions and the surrounding environment e.g., universities should be required to shift to remote learning immediately, and schools should distribute free face coverings. Communications interventions aiming to change individual behaviour will, on their own, have limited impact.
- Young people asked to **isolate or stay at home** should be provided with **good financial and other support** e.g. free mobile phone data, streaming and gaming. For more information please see: <https://www.gov.uk/government/publications/spi-b-impact-of-financial-and-other-targeted-support-on-rates-of-self-isolation-or-quarantine-16-september-2020>
- **Wellbeing** in young people may impact their ability to adhere. Online, NHS and settings-based interventions to **support young people's mental health and wellbeing** should be increased.
- A greater proportion of young people than adults are members of Black, Asian and Minority Ethnic (BAME) communities, ONS data indicates that members of these communities are more likely to live in multi-generational households and in crowded, poorly ventilated housing (11, 12). Interventions which ensure that employers and educational institutions **support preventive behaviours** and which **address barriers to adherence associated with ethnicity** are therefore likely to be important.

How to Message

- All communications interventions, whoever the target, should be **appropriate** and **accessible** for young people.
- Communications should draw upon social norms of effective adherence by emphasising what other peers are doing (*descriptive* e.g. your peers are switching to socialising online) and approved perceptions of behaviours (*injunctive* e.g. your peers think you should start socialising online)
- Communications should only target young people when generic communications are not sufficient or appropriate. Communication interventions that explicitly target young people risk defining them as the problem and thereby alienating them. When targeted, interventions may not need to refer explicitly to young people.
- Targeted communication interventions **may need to segment** audiences by characteristic (e.g. age, gender, region).
- Communications targeting young people should where possible be **delivered by trusted**, non-governmental sources e.g. charities, celebrities, sports clubs, commercial brands.
- Interventions should include **online** and **face-to-face** (where possible) **peer education**. Mass and social media campaigns should **use young people's voices** and be **co-produced** and piloted with young people.

What to message

- Interventions should provide **clear information** to **educate** and therefore **enable** positive behaviours. e.g. how to wear masks, how to distance in specific situations, how to persuade peers to adhere, how to socialise in smaller groups. These should be **supported by prompts** (e.g. posters, signs) in relevant settings.
- Interventions should provide **accurate information** on short-term and long-term consequences e.g. long Covid, risks to loved ones.
- Communications should **avoid giving visibility to non-adherence** or suggest the ineffectiveness of preventive behaviours.

SPI-B: Increasing adherence to COVID-19 preventative behaviours among young people

Evidence on adherence and influences on this

In terms of behaviour, recent data from the Covid-19 Social Study indicate that 'complete' and 'majority' compliance (categories reflecting adherence across behaviours such as social distancing, staying at home) is substantially lower and declining among those aged 18-29 years compared to older groups.⁽¹⁾ Polling by Ipsos Mori and the Health Foundation in July reported that young people aged 18-24 were more likely than older groups to agree that people were not following the guidance on: staying at home and self-isolating when they have symptoms; staying safe outside the home, for example social distancing; visiting places such as pubs, shops other public gatherings; and who and how many people they can meet with. However, a survey by YouGov in May indicated that young people age 18-24 with Covid19 symptoms were more likely to report not going out and reported fewer outings than older people.⁽²⁾ Young people generally report higher numbers of contacts than older adults.⁽³⁾ Although we do not have data on this, we think they are also likely to socialise in larger groups, potentially facilitating super spreader events. Young people may also be more likely to engage in physical contact in social interaction than do adults.

Adherence may be affected by trust in government.⁽⁴⁾ Polling by YouGov in September indicates that around 60% of young people (age 18-24) support the government's measures for handling the pandemic, the lowest of any age group.⁽⁵⁾ Recent data from the COVID-19 Social Study also suggest that young people age 18-24 have the lowest levels of confidence in the government's response.⁽¹⁾ YouGov polling in September suggests that young people were more likely than older people to oppose reopening pubs, shops, universities and schools, to oppose relaxation of rules on different households meeting, and to oppose Eat Help to Help Out and encouraging people to return to work.⁽⁶⁾ Polling by Ipsos Mori and the Health Foundation in July reported that there were some topics for which younger people were less likely than older participants to agree that official guidance was clear such as staying safe outside the home, social distancing, visiting places such as pubs and shops, and attending public gatherings. These data suggest young people may have strong motivation to adhere but this is undermined by lack of trust in government and lack of clear information.

Young people's capability and motivation to adhere might also be affected by their wellbeing. ONS data indicate that those aged 16-39 years are more likely than older people to be experiencing depression during the pandemic, with around a third reporting moderate to severe depressive symptoms.⁽⁷⁾ However, young people report lower levels of anxiety than older adults.⁽⁸⁾ The Covid-19 Social Study reports that those age 18-24 are more likely to report loneliness, self-harm or financial stress, and less likely to report happiness or life satisfaction than older groups.⁽¹⁾ Interventions might more successfully promote adherence if there are also interventions to address these issues and promote mental wellbeing.

Ability to adhere will also be affected by employment, education and housing status. Young people are more likely than adults to work in occupations with high social contacts, and with less recourse to sick pay, which may undermine their motivation to seek testing and ability to isolate in response to symptoms.⁽⁹⁾ Universities and colleges also expose young people to very large numbers of social contacts. Young people are more likely to live in all-adult, crowded, multi-occupancy housing often with poor ventilation which may further contribute to rapid transmission.⁽¹⁰⁾ A greater proportion of young people than adults are members of Black, Asian and Minority Ethnic (BAME) communities who are more likely to live in multi-generational households and in crowded, poorly ventilated

housing.(11, 12) Interventions ensuring that employers and educational institutions support preventive behaviours and which address barriers to adherence associated with ethnicity are therefore likely to be important.

Evidence on interventions to promote COVID-19 preventive behaviours

We sought articles or reports fitting the following inclusion criteria:

- Population: young people including adolescents age 10-19 years and youth age 15-24.
- Intervention: communications campaigns and other interventions addressing COVID-19 preventive behaviours.
- Comparator: external comparators, before/after baselines or non-exposed individuals.
- Outcomes: capabilities, opportunities, motivations and behaviours in relation to distancing, hygiene, mask wearing, engagement with test-trace-isolate (TTI) systems, reporting contacts, and adherence to quarantine or isolation.
- Design: RCT, controlled before/after, interrupted time series, before/after, cross sectional, qualitative.

We searched PubMed on 7/10/20 using the following terms: (Covid* OR SARS-CoV2 OR Corona* OR 2019-nCoV) AND (adolescent OR youth OR young OR teenage*) AND (communication* OR messag* OR campaign* OR distancing OR hygien* OR wash* OR mask OR face cover* OR quarantin* OR isolat* OR adher* OR contact trac*) AND (evaluat* OR effective* OR impact). We also contacted members of WHO-coordinated Maternal, Newborn, Child and Adolescent Health COVID-19 Research Network for suggested literature. This combined strategy retrieved 1,821 references of which all but 11 were excluded on title/abstract, of which all but two were excluded on full report.(4, 13) These two papers did not report on the effectiveness of interventions but did provide information, respectively, on how young people perceived communications interventions, and how adherence was associated with views on measures.

The first study involved qualitative research with a young people's health forum in London comprising 15 adolescents age 11-18 years.(13) It explored their experience of the pandemic and accompanying interventions. Participants reported that young people should receive the same comprehensive information as everyone else but messages should avoid complicated wording, and lengthy and confusing content. They commented that many interventions provided overwhelming and confusing information, with inconsistencies between official information and that available on social media, the latter often including fake news. Participants said that young people wanted to be involved in co-producing, rather than being passive recipients of, messages. Many were keen for young people to play a more active role in responses and rebuilding for the future.

The second study examined whether secondary school students in Oslo reported adherence to infection control rules and what factors influenced this.(4) The study was undertaken from 23 April to 8 May 2020. At the start of the study, the schools had been closed for six weeks and had switched to home teaching. Strong restrictions had been placed on social interaction. Most young people reported that they always or to a large extent adhered to the rules for hand washing (84%), not shaking hands/hugging (74%) and avoided large groups (73%). Fewer reported adhering to guidance on physical distance (50%). Trust in the government (80%) and health authorities (92%) was high and this was associated with adherence, as was being female and of immigrant background.

The search also identified two commentaries which, though not meeting our criteria, provided useful insights. Efuribe et al(14) argued for young people to be involved in co-producing and implementing preventive measures, citing evidence that youth engagement can benefit health and well-being.(15) Abbot et al(16) argued that interventions targeting young people should motivate adherence by emphasising the severe consequences of passing on COVID-19 to vulnerable loved ones, citing evidence that adherence is associated with sense of social responsibility.(17) The paper also suggested that there has been insufficient emphasis on the self-efficacy and skills needed to implement preventive behaviours such as social distancing. Abbott et al argue that interventions should depict and describe how to maintain distancing in different settings frequented by young people. Finally, the authors recommend that interventions should meet young people “where they are” in terms of what information they need, preferred visual style and language, and appropriate communication media, and to achieve this via formative research and co-production.

Insights from broader theory and evidence

Given the paucity of evidence on what works to promote adherence to COVID-19 preventive behaviours, we should also learn from broader evidence and theory on young people’s behaviour and interventions to change this.

Insights	Implications	Examples
Young people choose how to behave but in a context of structural constraint and inequality.(18)	Interventions should address structural barriers to adherence to preventive measures.	Better financial support provided to those asked to isolate who do not have recourse to sick pay. Face coverings provided free of charge in settings relevant to young people e.g. schools.
	Interventions should be delivered equitably.	Interventions ensure that language, technology etc. are not barriers to adherence among the most disadvantaged or marginalised.
Young people are more oriented towards immediate experiences and rewards than long term consequences.(19)	Interventions should provide short-term rewards for adherence.	Streaming and gaming services provided free to those asked to isolate. Young people thanked for their contribution to preventing transmission.
	Interventions should provide accurate information on short-term risks.	Interventions provide accurate information on potential short-term consequences for young people e.g. harm to loved ones, long COVID.
Young people engage in risk behaviours not merely	Interventions should present adherence as something	Formative research explores the meaning of adherence and non-

because of deficits in knowledge or attitudes, but because these risk behaviours are imbued with meaning important for one's identity.(20)	important in terms of one's sense of meaning and identity.	adherence to people, and uses this to make interventions more focused on the key motivations.
		Interventions emphasise collective identity, building back better, fairness and care for others as key motivators.
Young people are strongly oriented towards maintaining status and belonging in their peer group.(21)	Interventions need to enable safe engagement with peers.	Mobile phone data provided free to those asked to isolate to enable social media interaction.
	Interventions should promote care for one's peers.	Interventions recommend safe ways of staying connected. Interventions provide accurate information about risks to young people and motivation to care for one's peers.
Young people are more influenced by peers (19, 22) than other age groups and take more risks when they are with peers.(19, 22, 23)	Interventions should encourage young people to help their peer group adhere.	Interventions present examples of young people positively influencing peers' decisions to adhere to specific local measures.
	Interventions should help young people make plans for maintaining adherence when among peers.	Planning guides address refusal and own judgment when peers engage, or suggest engaging, in risk behaviours.
Young people will tend to assume those with shared identities present less risk of infection(24)	Interventions should raise awareness of risk of infection among friends.	Interventions provide accurate information about examples of clusters of infections among friends and intergenerational household members.
Interventions which aim to change young people's behaviour generally have small effects; interventions may be more sustainable and effective when they also address structural, environmental and financial factors.(25-27)	Interventions should aim to modify environments, institutions and distribution of resources not merely change individual behaviour.	Interventions mandate universities to switch to remote learning, and provide and mandate face coverings in schools.
Interventions may be more acceptable and effective when they appropriately segment their audience rather than treating this as monolithic.(28)	Interventions should use appropriate segmentation while avoiding divisiveness and not eroding overall sense of collective identity.	Interventions do not make generalisations about the behaviours and circumstances of groups such as university students.
		Interventions define who is the target group for each intervention (e.g. school children, young workers) and whether there is a need to segment by gender, region etc. within this, considering what are the target behaviours and messages for each segment.

Interventions targeting young people may have harmful paradoxical effects when they reinforce group stigma or negative behaviours.(29)	Interventions should avoid presenting young people as the problem.	Interventions and spokespeople avoid presentation of young people as the problem, instead presenting cases of young people's adherence and care for others.
		Interventions are not presented as targeting young people if a generic approach is appropriate.
		Even when interventions are targeting young people, they may not need to refer explicitly to young people.
	Interventions should avoid increasing the visibility of risk behaviours and normalising them.	Press teams work to ensure media avoid presentation of unrepresentative non-adherence.
	Communications and interventions should avoid implying that preventive behaviours are ineffective.	Spokespeople emphasis the success of the population's behaviours even if more is needed.
Interventions may be more appealing and effective when they promote positive behaviours rather than avoidance of negative ones.(30)	Interventions should focus on behaviours to enact rather than avoid.	Interventions focus on correct mask wearing, hygiene etc.
Interventions delivered by peers and/or addressing peer influences are effective across a range of risk behaviours such as smoking, sexual health and drug use.(31-33)	Interventions should include those delivered by peers and addressing peer influences on behaviour.	Interventions train young people to be peer educators in schools, colleges, work, informal settings and social media.
Interventions co-produced with young people are likely to be more acceptable, feasible and effective.(34)	Interventions should be co-produced with young people	Agencies such as National Children's Bureau or Association for Young People's Health are engaged with to co-produce interventions.
Interventions which enable young people to act as change agents can be particularly acceptable and effective.(35, 36)	Interventions should empower young people to be change agents in their peer groups and communities	Interventions recruit young people as community champions and as family educators.

Recommendations

1. Communications interventions aiming to change individual behaviour will, on their own, have limited impact. These must be complemented by interventions that ensure institutions, environments and provision of financial and other support can enable preventive behaviours. For example, universities should be required to shift to remote learning immediately, and schools should distribute free face coverings.

2. Communications interventions that explicitly target young people risk defining them as the problem and thereby alienating them. Spokespeople should thank young people for their sacrifices and contributions. Communications should only target young people when generic communications are not sufficient or appropriate. Even if targeted, interventions may not need to refer explicitly to young people e.g. they can refer to the importance of protecting peers without indicating that this is only an issue for young people. Where interventions do target young people, they may need to segment audiences by characteristics (e.g. age, gender, region). All communications interventions, whether generic, whole-population or targeted to young people, should be appropriate and accessible for young people. Communications should emphasise descriptive (e.g. your peers are switching to socialising online) and injunctive (your peers think you should start socialising online) social norms of effective adherence. Communications should avoid giving visibility to non-adherence or suggest the ineffectiveness of preventive behaviours.

3. Communications targeting young people should where possible be delivered by trusted, non-governmental sources e.g. charities, celebrities, sports clubs, commercial brands. Interventions should include online and face-to-face peer education. Mass and social media campaigns should use young people's voices and be co-produced and piloted with young people.

4. Interventions should provide clear, authoritative information, and build self-efficacy and skills to plan and enact specific positive behaviours e.g. how to wear masks, how to distance in specific situations, how to persuade peers to adhere, how to socialise in smaller groups. These should be supported by prompts (e.g. posters, signs) in relevant settings. Interventions should provide accurate information on short-term consequences e.g. long Covid, risks to loved ones. Formative research should be conducted about the meanings and motivations of adherence and non-adherence among young people, to inform communications e.g. building back better, equity and fairness.

5. Online, NHS and settings-based interventions to support young people's mental health and wellbeing should be ramped up.

6. Young people asked to isolate or stay at home should be provided with good financial and other support e.g. free mobile phone data, streaming and gaming.

References

1. Fancourt D, Bu F, Mak HW, Steptoe A. Covid-19 Social Study Results Release 22. London: UCL Department of Behavioural Science & Health; 2020.
2. Smith LE, Amlot R, Lambert H, Oliver I, Robin C, Yardley L, et al. Factors associated with adherence to self-isolation and lockdown measures in the UK; a cross-sectional survey medRxiv preprint doi: <https://doi.org/10.1101/20200601201190>. 2020.
3. Gimma A, Jarvis CI, van Zandvoort K, Klepac P, Edmunds WJ. CoMix study - Social contact survey in the UK. CMMID Repository <https://cmmid.github.io/topics/covid19/comix-reports.html>. 2020.
4. Soest TV, Pedersen W, Bakken A, Sletten MA. Compliance with infection control rules among adolescents in Oslo during the COVID-19 pandemic. Tidsskr Nor Laegeforen. 2020;140.
5. YouGov. YouGov Health Survey Results <https://yougov.co.uk/topics/health/survey-results/daily/2020/09/22/ffff7/12020>.
6. YouGov. YouGov - COVID hindsight <https://docs.cdn.yougov.com/tvz2twi07j/YouGov%20-%20COVID%20hindsight.pdf2020>.
7. ONS. Coronavirus and depression in adults, Great Britain: June 2020 <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/coronavirusanddepressioninadultsgreatbritain/june2020#symptoms-of-depression-before-and-during-the-coronavirus-pandemic>. 2020.

- 8.ONS. Coronavirus and anxiety, Great Britain: 3 April 2020 to 10 May 2020 <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/articles/coronavirusand anxietygreatbritain/3april2020to10may2020#most-important-factors-affecting-anxiety-during-the-coronavirus-pandemic>. 2020.
- 9.ONS. Employment by detailed occupation and industry by sex and age for Great Britain, UK and constituent countries 2018 <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemploy eetypes/adhocs/009974employmentbydetailedoccupationandindustrybysexandageforgreatbritainuk andconstituentcountries2018>. 2018.
- 10.ONS. CT0732_2011 Census - Age by tenure by household size - England and Wales <https://www.ons.gov.uk/peoplepopulationandcommunity/housing/adhocs/007434ct0732201 1censusagebytenurebyhouseholdsizeenglandandwales>. 2017.
- 11.ONS. UK Population by Age <https://www.ethnicity-facts-figures.service.gov.uk/uk-population-by- ethnicity/demographics/age-groups/latest>. 2018.
- 12.HM Government. Ethnicity and Housing <https://www.ethnicity-facts- figures.service.gov.uk/housing>. 2020.
- 13.Larcher V, Dittborn M, Linthicum J, Sutton A, Brierley J, Payne C, et al. Young people's views on their role in the COVID-19 pandemic and society's recovery from it. *Arch Dis Child*. 2020;Epub ahead of print. PMID: 32868266; PMCID: PMC7462044.
- 14.Efuribe C, Barre-Hemingway M, Vaghefi E, Ballonoff Suleiman A. Coping With the COVID-19 Crisis: A Call for Youth Engagement and the Inclusion of Young People in Matters That Affect Their Lives. *Journal of Adolescent Health*. 2020;67(16):e17.
- 15.Anyon Y, Bender K, Kennedy H, Dechants J. A systematic review of YPAR in the United States_ methodologies, youth outcomes, and future directions. *Health Educ Behav*. 2018;45:865e78.
- 16.Abbott A, Askelson N, Scherer AM, Afifi RA. Critical Reflections on COVID-19 Communication Efforts Targeting Adolescents and Young Adults. *Journal of Adolescent Health*. 2020;67(159):e160.
- 17.Alvis L, Shook N, Oosterhoff B. Adolescents' prosocial experiences during the covid-19 pandemic: Associations with mental health and community attachments. *PsyArXiv Preprints* 2020 <https://doiorg/1031234/osfio/2s73n>. 2020.
- 18.Fletcher A, Bonell C, Rhodes T. New counter-school cultures: female students' drug use at a high-achieving secondary school. *British Journal of Sociology of Education*. 2009;30(5):549-62.
- 19.Blakemore SJ. Avoiding social risk in adolescence. *Current Directions in Psychological Science*. 2018;27(2):116–22.
- 20.Blue S, Shove E, Carmona C, Kelly MP. Theories of practice and public health: understanding (un)healthy practices. *Critical Public Health* DOI101080/0958159620161191619. 2016;26(1):36-50.
- 21.Sebastian C, Viding E, Williams KD, Blakemore SJ. Social brain development and the affective consequences of ostracism in adolescence. *Brain and Cognition*. 2010;72(1):134-45.
- 22.Chein J, Albert D, O'Brien L, Uckert K, Steinberg L. Peers increase adolescent risk taking by enhancing activity in the brain's reward circuitry. *Developmental Science*. 2011;14:F1-10.
- 23.Gardner M, Steinberg L. Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: an experimental study. *Developmental Psychology*. 2005;41(4):625-35.
- 24.Cruwys T, Stevens M, Greenaway KH. A social identity perspective on COVID-19: Health risk is affected by shared group membership. *British Journal of Social Psychology*. 2020;59:584–93.
- 25.Langford R, Bonell CP, Jones HE, Poulidou T, Murphy SM, Waters E, et al. The WHO Health Promoting School framework for improving the health and well-being of students and staff. *Cochrane Database of Systematic Reviews* 2011, Issue 1 Art No: CD008958. 2014.
- 26.Strategic Review of Health Inequalities in England post-2010. *Fair society, healthier lives: The Marmot review*. London: Instiute of Health Equity; 2010.
- 27.Oliver S, Kavanagh J, Caird J, Lorenc T, Oliver K, Harden A, et al. *Health promotion, inequalities and young people's health: a systematic review of research*. London: EPPI-Centre; 2008.

28. Gomez A, Loar R, England Kramer A. The impact of market segmentation and social marketing on uptake of preventive programmes: the example of voluntary medical male circumcision. A literature review. *Gates Open Res.* 2018;2(68).
29. Dishion TJ, McCord J, Poulin F. When interventions harm. *American Psychologist.* 1999;54(9):755-64.
30. Bonell C, Dickson K, Hinds K, Melendez-Torres GJ, Stansfield C, Fletcher A, et al. The effects of Positive Youth Development interventions on substance use, violence and inequalities: systematic review of theories of change, processes and outcomes. *Public Health Research.* 2016;4(5).
31. Campbell R, Starkey F, Holliday J, Audrey S, Bloor M, Parry- Langdon N, et al. An informal school-based peer-led intervention for smoking prevention in adolescence (ASSIST): a cluster randomised trial. *Lancet.* 2008;371:1595-602.
32. Coyle K, Basen-Engquist K, Kirby D, Parcel G, Banspach S, Collins J, et al. Safer choices: reducing teen pregnancy, HIV, and STDs. *Public Health Reports.* 2001;116(Suppl 1):82-93.
33. MacArthur G, Harrison S, Caldwell D, Hickman M, Campbell R. Peer-led interventions to prevent tobacco, alcohol and/or drug use among young people aged 11–21 years: a systematic review and meta-analysis. *Addiction.* 2016;111(3):391–407.
34. Hawkins J, Madden K, Fletcher A, Midgley L, Grant A, Cox G, et al. Development of a framework for the co-production and prototyping of public health interventions. *BMC Public Health* 2017;17:689.
35. Patton G, Bond L, Carlin JB, Thomas L, Butler H, Glover S, et al. Promoting social inclusion in schools: group-randomized trial of effects on student health risk behaviour and well-being. *American Journal of Public Health.* 2006;96(9):1582-7.
36. Bonell C, Allen E, Warren E, McGowan J, Bevilacqua L, Jamal F, et al. 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.* 2018;392(10163):2452-64.