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Title: The importance of source credibility for recruiting underrepresented groups in health research: insights from the Covid-19 coping survey.

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Background

The impact of Covid-19 on health and well-being is not yet fully understood. Behavioural and social sciences can make a substantial contribution to this understanding. Online surveys present as a quick, cost saving and wide-reaching method to capture anonymous data on behavioural responses to this novel health threat in real-time¹. However, surveys are vulnerable to sampling bias². Health psychology could benefit from and inform strategies to improve recruitment from those typically underrepresented in health research, including younger people, men and people from Black, Asian and Minority Ethnic (BAME) groups³. Engaging these groups with Covid-19 research is important as representatives of these groups are more likely to continue working and not adhere to guidance⁴. Especially relevant to this is the elevated risk of mortality from Covid-19 among BAME populations⁵.

We surveyed people's thoughts, feelings and behaviours towards Covid-19 in real-time to better understand coping with the present and future health crises. Here we focus on the implications for recruiting underrepresented populations in health research and illustrate with a few of the group differences.

Method

An online survey informed by the Transactional Model of Stress and Coping⁶ and the Common-Sense, Self-Regulatory Model⁷ assessed questions around thoughts, feelings and actions related to Covid-19 with Likert scale plus free-text responses. Snowball sampling was adopted; adults (18+) were recruited from a research database in Wales and via email and social media. Quantitative data were analysed using appropriate non-parametric statistical analyses¹.

Results

9111 people completed the survey; only 1.6% of participants were young men and 4.6% were from BAME groups. This underrepresentation was more pronounced where participants were recruited via the research database compared to email and social media. Young men were significantly less anxious and reported more difficulty creating structure and concentrating than others. BAME groups were significantly less likely to believe that politicians would get us through the threat and reported less drug and alcohol use but reported greater difficulty creating structure than white participants.

Discussion

The response rate to this online survey was much lower among younger males and BAME people compared to older, female and non-BAME individuals. This is of concern as reports suggest that younger men are less likely to comply with behavioural measures to control the

¹ Quantitative and qualitative analyses are ongoing. The results will be published elsewhere.

Covid-19 pandemic⁴. These findings contradict previous research demonstrating an association between general internet use and age⁸, as well as the suggestion that delivering online surveys via social networking platforms could facilitate recruitment of underrepresented groups¹. The use of unsolicited email invitations during the present pandemic could explain this finding² and we will examine other similar study response patterns to compare. Earlier qualitative research advocates good engagement with minority participants they wish to sample prior to using online recruitment methods to build trust and credibility⁹. Furthermore, studies on weight loss among men have noted the importance of engaging the target population with recruitment because of their shared experiences¹⁰ and preferences¹¹.

Health psychologists using online survey methods need to be more reflexive when developing recruitment strategies and methods of use in subsequent communication. In the context of Covid-19 research, we are reminded of key messaging factors: simplicity, consistency and credibility. Credibility is dependent on message givers being familiar with their target population and engaged with individuals from underrepresented groups in health research to be effective.

References

1. Coulson, N. S. 2015. *Online Research Methods for Psychologists*. Palgrave.
2. Coulson, N. S. 2012. *Methodological Choices: Online Research*. Oxford University Press.
3. Bonevski B, Randell M, Paul C *et al*. Reaching the hard-to-reach: a systematic review of strategies for improving health and medical research with socially disadvantaged groups. *BMC Med Res Methodol* 2014; 14(42).
4. Weinberg J. *Coronavirus lockdown: fresh data on compliance and public opinion*. Retrieved on 09.07.20 from: <https://theconversation.com/coronavirus-lockdown-fresh-data-on-compliance-and-public-opinion-135872>.
5. Razaq A, Harrison D, Karunanithi S *et al*. *BAME Covid-19 deaths - What do we know? Rapid data & evidence review*. Accessed on 06.07.20 from: <https://www.cebm.net/covid-19/bame-covid-19-deaths-what-do-we-know-rapid-data-evidence-review/>.
6. Lazarus RS, Folkman S. *Stress, appraisal, and coping*. New York: Springer; 1984.
7. Leventhal H, Nerenz DR, Steele DJ. *Illness Representations and Coping with Health Threats*. Hillsdale, NJ; 1984.
8. Office for National Statistics. *ONS Opinions Survey 2011*. Retrieved on 08/07/20 from <http://www.statistics.gov.uk>.
9. James DCS, Harville C, Efunbumi O *et al*. "You have to approach us right": A qualitative framework analysis for recruiting African Americans into mHealth research. *Health Edu Behav* 2017; 1-10.
10. Grey CM, Hunt K, Mutrie N *et al*. Football fans in training: the development and optimization of an intervention delivered through professional sports clubs to help men lose weight, become more active and adopt healthier eating habits. *BMC Pub Health* 2013; 13:232.
11. Elliot M, Gillison F, Barnett J. Exploring the influences on men's engagement with weight loss services: a qualitative study. *BMC Pub Health* 2020; 20:249.