

DR WILLIAM COOK - WRITTEN EVIDENCE (FDO0068)

1. Background

This submission draws on the research project 'Assessing whether individual feedback results in improved health outcomes, with a focus on BMI feedback' funded by the British Academy/Leverhulme Trust and conducted at Manchester Metropolitan University from 2016-2019. This project consisted of quantitative analysis the UK Biobank dataset to test the effect of the provision of BMI feedback on weight change and was published in the journal *Health Economics* (i.e. Cook, 2019). The project was led by Dr Will Cook, Reader in Policy Evaluation. This submission is specifically in response to the invitation for evidence on:

- Policy tools that could prove effective in preventing obesity amongst the general population, including those focussed on the role of the food and drink industry in tackling obesity.

2. Weight misperception and personalised weight feedback

A large proportion of UK adults who are overweight misperceive their weight status as being within the healthy weight range (Robinson and Oldham, 2016) and aggregate measures of what is considered a "healthy" weight have shifted upwards over time (Johnson, et al, 2014). This weight misperception may be a barrier to individual level actions to lose weight (Duncan et al., 2011). Population level information campaigns to reduce obesity have typically been found to be ineffective in correcting weight misperception and stimulating behaviour change (e.g. King et al, 2013); personalised weight feedback is a potentially more effective approach.

Cook (2019) tested the causal effect of the provision of personalised BMI feedback on participants in the UK Biobank study. The research found that participants (ages 40-70, no limiting health conditions; n=13,727) who were told that they were 'very overweight' (as a result of being measured as having a BMI of >30) lost an average of 1% of their body weight as a result of the feedback over a follow up period of 2-5 years. Further analysis indicated that this effect was stronger for higher income households and likely due to increased physical activity. Although the estimated effects of the feedback are small, the provision of such feedback is typically low cost yet the benefits may be large: small reductions in average BMI can make a "significant impact on the burden of chronic disease" at the population level (Kearns et al, 2014).

Recommendation: The provision of personalised weight feedback should be considered as part of a programme of measures to reduce population obesity.

3. National Child Measurement Programme – data availability

Personalised weight feedback *is* provided as part of the National Child Measurement Programme (NCMP) – the policy to weigh and measure all reception and year 6 pupils in England. However, despite the NCMP being in existence since 2006, there is no evaluation evidence of the effectiveness of the BMI feedback on weight change (or any potential adverse outcomes) as part of the NCMP. One of the main barriers to this is that, unlike pupil level education data, NCMP data is not easily accessible for the purposes of research. My own experience of attempting to obtain the data is that individual level NCMP data was not accessible at the national level and would only be accessible in a limited form from individual local authorities based on bespoke data sharing agreements. The existence of a national level dataset of millions of individual children with their weight, height, BMI, and personal characteristics should be a gold mine for insights into what causes child obesity and, crucially, what might be effective in reducing child obesity. However due to the data not being made available to researchers there is almost no research being done on this data.

Recommendation: Individual level data from the NCMP should be made available for research in the same way individual level education data (i.e. the National Pupil Database) is, for example by including the NCMP individual level data in the Office for National Statistics' forthcoming Integrated Data Service. Ideally this data would be linkable to other administrative data (e.g. the National Pupil Database; DWP benefits data).

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References

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