

# North West Mental Wellbeing Survey

**Focus on ethnicity**



## Summary

- The *North West Mental Wellbeing Survey 2009*<sup>1</sup> showed there were significant differences in average levels of reported mental wellbeing between respondents from different ethnic groups.
- Respondents from Asian and Asian British backgrounds reported significantly higher levels of mental wellbeing than White respondents.
- Asian and Asian British respondents living in the most deprived quintile score significantly higher on wellbeing than White respondents. There was no significant difference between Black and Black British respondents and White respondents.
- Respondents from an Asian or Asian British background reported higher levels of satisfaction with their personal relationships; in particular they were more likely to have someone to turn to in a time of financial difficulty. Both of these relationship factors have strong associations with positive mental wellbeing.<sup>2</sup>
- The Warwick and Edinburgh Mental Wellbeing Scale itself may account for some of the differences between the wellbeing levels of the White population and some minority ethnic groups. This is due to differences in interpretation of some of the items in the scale by different ethnic groups and the absence of concepts that are relevant to the wellbeing of some ethnic groups within the scale.<sup>5</sup>

## 1. Introduction

The *North West Mental Wellbeing Survey*<sup>1</sup> was carried out in 2009, and was undertaken in response to a growing need to understand more about the positive mental wellbeing of people in the region. The aim of the survey was to collect a consistent and comparable score of positive mental health, as well as a wide range of other factors, such as physical health, lifestyle, perceptions of the local area, relationships, social capital and finance. The regional survey was the largest survey ever undertaken in the UK into mental wellbeing, with a sample size of 18,560.

Analysis of the survey results showed a wide variety of links between levels of mental wellbeing and other factors. For example, strong relationships were found with:

- perceived physical health;
- life satisfaction;
- quality of relationships and having people to rely on financially; and
- employment.<sup>2</sup>

The original survey report found significant differences in wellbeing between White and non-White respondents to the survey and recommended further investigation.

This brief report is part of a series which analyses aspects of the survey in more detail. This analysis looks at relationships between survey respondents' ethnic group and their level of mental wellbeing.

### Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)

The Warwick-Edinburgh Mental Wellbeing Scale is a validated measure of mental wellbeing developed to ascertain levels of positive mental health.<sup>3</sup> The *North West Mental Wellbeing Survey* (NWMWS) used the short version of the scale which consists of a combination of seven questions. The questions ask whether respondents have felt any of the following on a scale between **all of the time** and **none of the time**, over the last two weeks.

- I've been feeling optimistic about the future
- I've been feeling useful
- I've been feeling relaxed
- I've been dealing with problems well
- I've been thinking clearly
- I've been feeling close to other people
- I've been able to make up my own mind about things

The answers are scored and added to give a total out of 35.

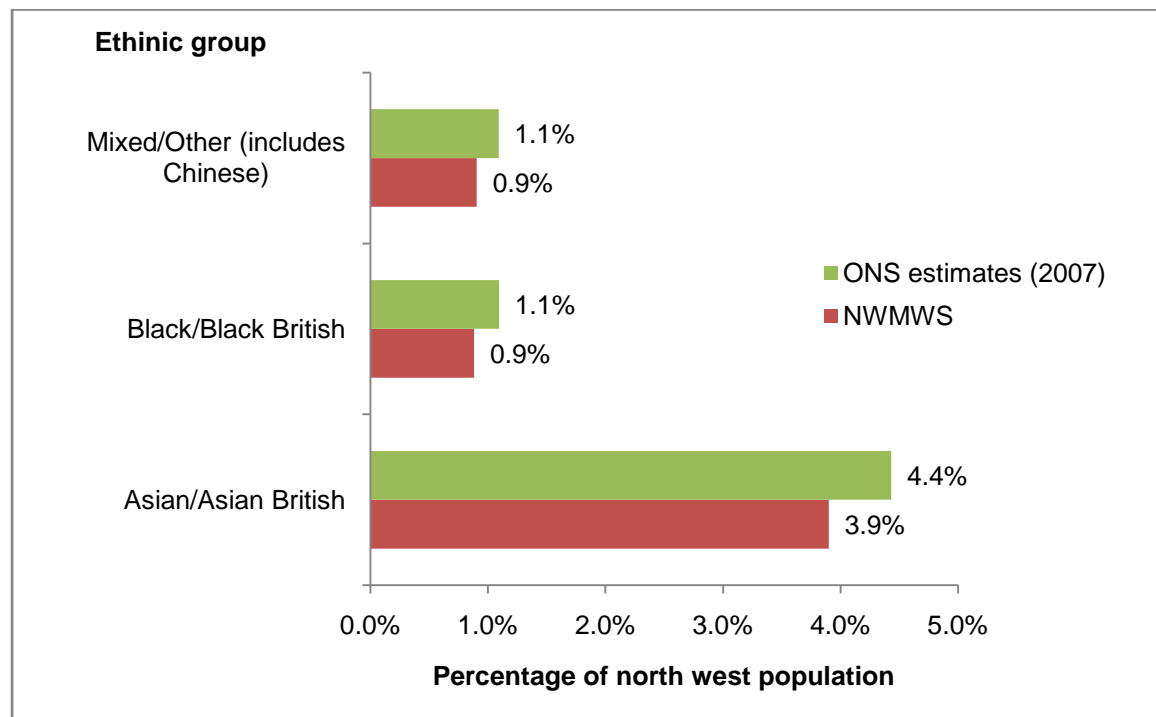
The average score across the North West region was 27.7. High and low levels of mental wellbeing were defined as being one standard deviation above and below the mean. These correspond to groups with the highest 20% and lowest 17% of scores on the survey. This gives two ways of looking at the level of mental wellbeing for a group, either by looking at the mean score for the group, or by looking at the proportions with high and low scores.

## 2. Ethnic Group Analysis

The survey question on ethnic group asked respondents which one of seventeen ethnic groups most closely matched their own. For this analysis, the groups have been combined as outlined in Appendix 1. In total, there were 724 respondents from an Asian or Asian British background, 164 from a Black or Black British background, 126 from a mixed or other ethnic group, and 17,467 White respondents.<sup>i</sup>

Ethnic group was not one of the demographic types the survey was quota recruited to (these were age, gender, deprivation quintile and geographic location). However, as Figure 1 shows, the actual response was similar to the regional estimated figures for the North West, particularly for Asian or Asian British and Black or Black British respondents.

**Figure 1: Proportions of survey respondents from a black or minority ethnic background, compared with the adult population in the North West of England (Census 2001, Office for National Statistics).**



Source: NWPHO from the NWMWS and ONS experimental Population Estimates by Ethnic Group for local authority districts and higher administrative areas in England and Wales for 2007.

<sup>i</sup> There were 79 respondents who did not give an ethnic group.

In order to look into differences by ethnic group more closely, the data was weighted to match Office for National Statistics ethnic group population estimates by age for the North West.<sup>ii</sup> There were noticeable differences in perceived mental wellbeing levels between respondents from different ethnic groups. The mean WEMWBS scores for mental wellbeing varied from 29.0 for respondents from an Asian or Asian British background, to 27.5 for White respondents, a statistically significant difference. Due to the smaller number of respondents and therefore wider confidence intervals<sup>iii</sup>, black or black British and mixed or other ethnic group respondents do not have significantly different scores to other groups. The same significant difference between Asian or Asian British and White respondents were seen when using non-parametric tests,<sup>iv</sup> showing this was not just due to the distribution of data.

However, looking at mean scores does not show the spread of the data. Figure 2 gives the proportions with above and below average levels of mental wellbeing as defined by the survey results overall. Again, the significant differences are between Asian or Asian British and White respondents. White respondents are similarly likely to have scored above average and below average levels of mental wellbeing (20% and 18% respectively).

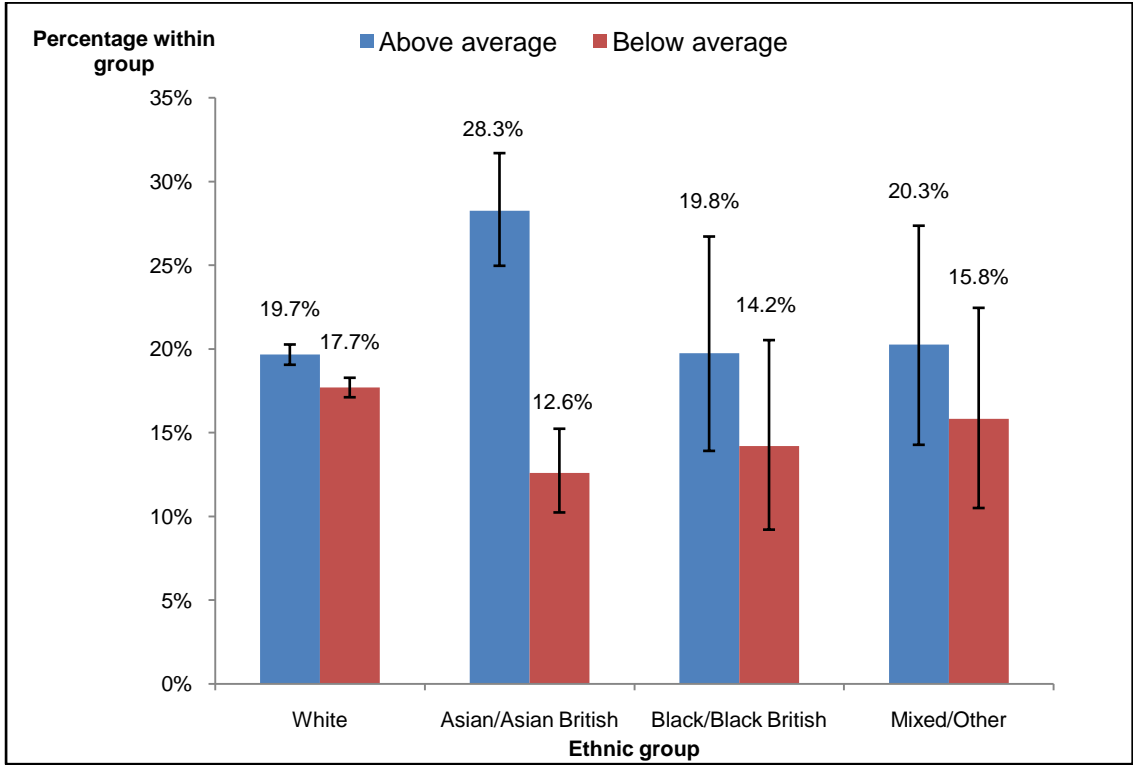
In contrast, Asian or Asian British respondents were twice as likely to have scored above average as below average (28% and 13% respectively). It is because Asian and Asian British respondents have significantly more people scoring above average and significantly less below average, compared with White respondents, that gives them a higher mean score than White respondents.

<sup>ii</sup> This only provides estimates by ethnic group for the adult age ranges 18 years to 64 and 65 and above for men and women respectively, and 65 and 60 years and above.

<sup>iii</sup> Confidence intervals indicate the reliability of the survey results. Sample surveys are always subject to some error, but it is possible to be 95% confident that the true result for the particular population segment in question is within the confidence limits calculated. In other words, where one measure is 'significantly' higher or lower than another, we are 95% confident that this is not due to random error or chance.

<sup>iv</sup> Wilcoxon signed rank tests were used with a Benjamini-Hochberg correction for multiple testing.

**Figure 2: Proportions with above and below average levels of mental wellbeing by ethnic group.<sup>v</sup>**



### Demographics

Respondents from a minority ethnic group were more likely to be younger and live in relatively deprived areas. Detailed figures are not available for the North West to allow comparison. However, comparisons in mental wellbeing can be made between ethnic groups for the same age and deprivation.

### Age

Respondents from an Asian or Asian British background have significantly higher mean WEMWBS scores than White respondents for the age ranges 16 to 24 years, 25 to 39 years and 40 to 54 years.

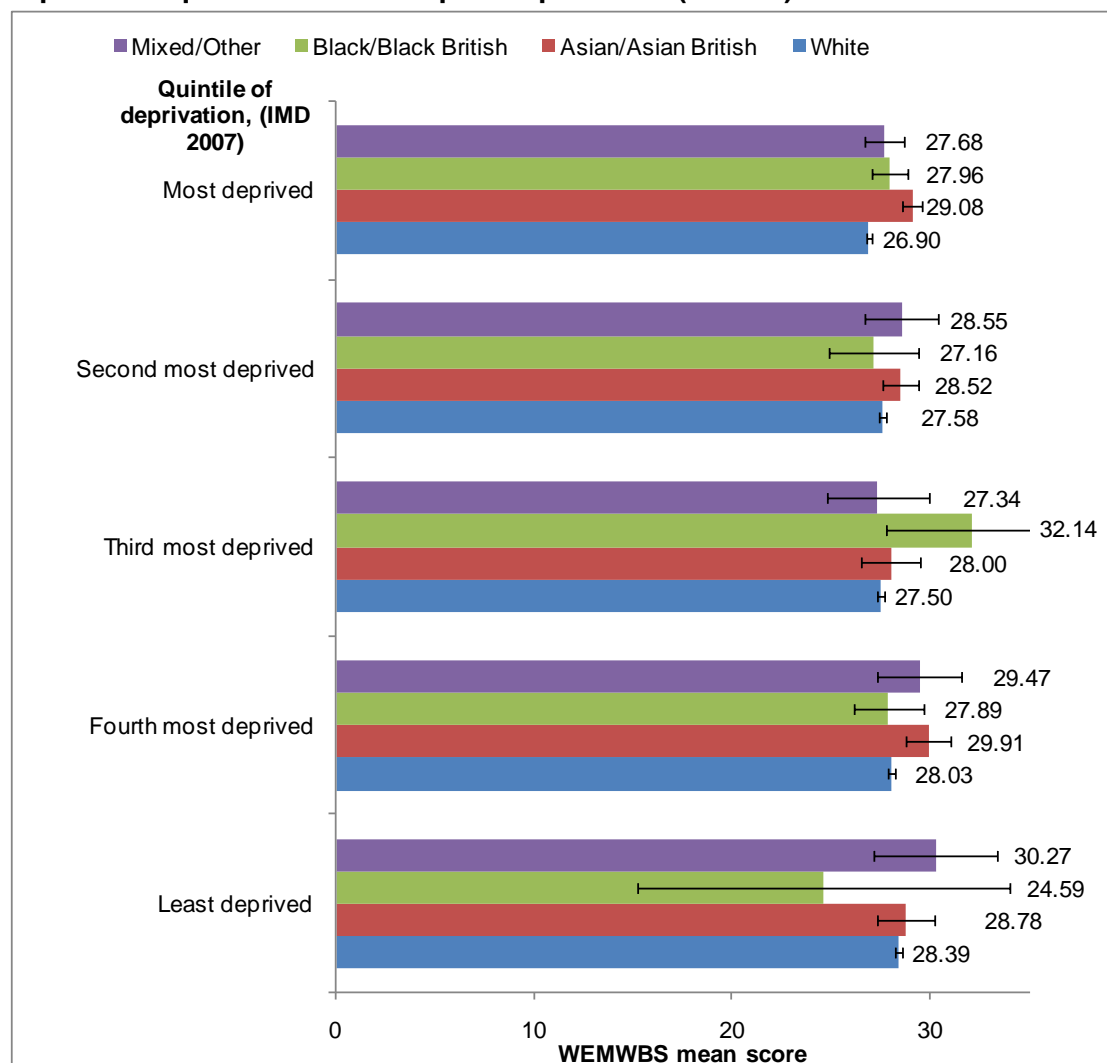
### Deprivation

The majority of respondents to the survey from a Black or minority ethnic background lived in the most deprived areas. Close to two-thirds of respondents from an Asian or Asian British background (62%), and three-quarters of respondents from a Black or Black British background (76%) lived in the most deprived quintile of lower super output areas in England. Overall, deprivation is negatively linked to mental wellbeing, with WEMWBS scores tending to decrease as the level of local deprivation increases.

<sup>v</sup> All error bars are set at 95% confidence intervals.

Figure 3 shows mean WEMWBS scores by ethnic group and deprivation quintile. In the most deprived quintile, both Asian or Asian British and Black or Black British respondents scored significantly higher for mental wellbeing than White respondents. Indeed, Asian or Asian British respondents in the most deprived quintile score significantly higher than White respondents in the least deprived quintile. This suggests different ethnic groups may have different levels of resistance to the negative effects of deprivation on wellbeing, or different perspectives on deprivation which lowers the overall effect.

**Figure 3: Warwick-Edinburgh Mental Wellbeing Scores by ethnic group and deprivation quintile of lower super output areas (LSOAs).**



## Personal Situation

The survey included a number of questions relating to respondents' personal situations. These showed some differences by wellbeing but not always by ethnicity. Those that did not vary by ethnicity included:

- life satisfaction;
- feeling of belonging to the local area and local area satisfaction;
- frequency of speaking to neighbours; and
- having someone to rely on for:
  - help when ill;
  - an urgent lift; and
  - comfort and support in a time of personal crisis.

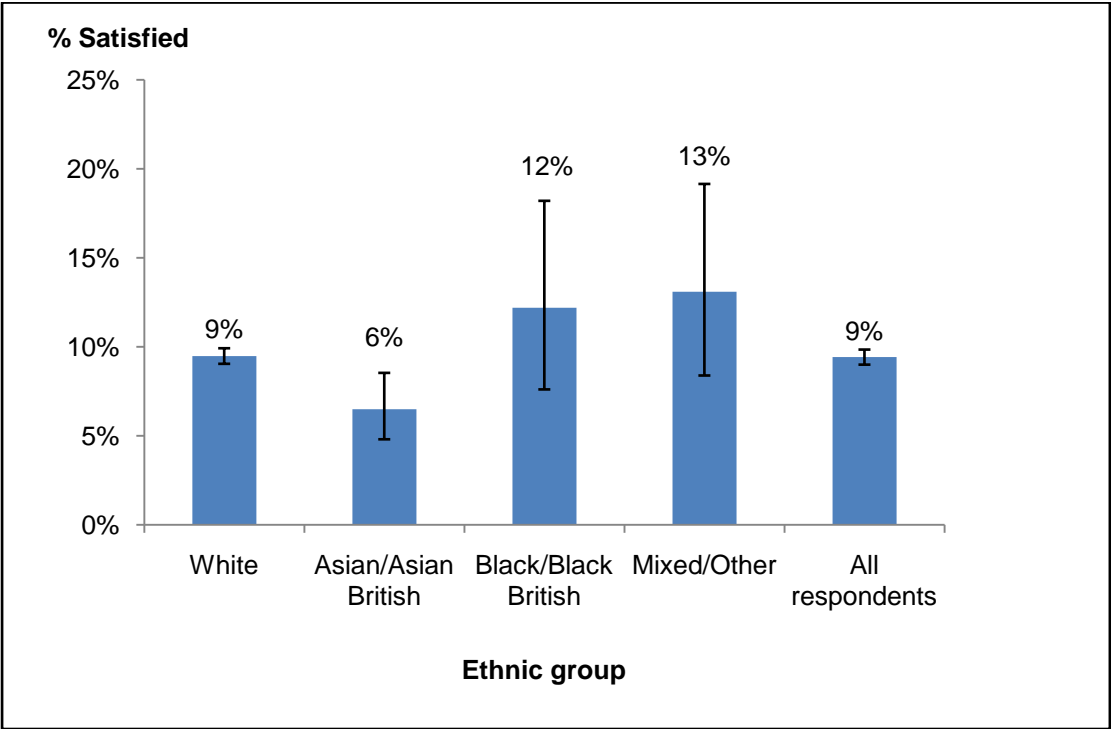
There are, however, some significant differences by ethnic group, with respondents from an Asian or Asian British background less likely than White respondents to describe their health as 'not good' (5% and 9% respectively), though this is likely to be due to these groups having different age distributions.

Two factors that may explain the statistically significantly higher WEMWBS scores of Asian and Asian British groups include the higher proportion of respondents from an Asian or Asian British background answering firstly, that they were satisfied with their personal relationships and secondly, they would have someone to turn to if they needed to borrow £100 (84% of Asian and Asian British agreeing against 72% overall).

Satisfaction with personal relationships and having people to rely on financially are both strongly linked to mental wellbeing scores across the survey overall. Furthermore, there is evidence to suggest the importance of social relationships not just to mental wellbeing, but to mortality and morbidity.<sup>4</sup> However, as most people overall are satisfied with their relationships, the difference (while significant) is less than 4% between White and Asian or Asian British respondents. Respondents from a mixed or other, or Black or Black British background do not score significantly differently to White respondents on relationship satisfaction (Figure 4).



**Figure 4: Proportion of respondents not satisfied with their personal relationships by ethnic group.**



### **3. Discussion and Conclusions**

This analysis has shown a range of apparent differences in mental wellbeing by ethnic group, particularly between respondents from a White and Asian or Asian British background. This is especially apparent for the most deprived quintile of lower super output areas (LSOAs). However, the differences in the factors that contribute to wellbeing do not appear to be as strong, factors such as life satisfaction or frequency of talking to neighbours, for example. There is a significant difference, however, in satisfaction with personal relationships and having someone to turn to for financial support between White and Asian or Asian British<sup>5</sup> respondents. Given other research using the NWMWS has indicated the importance of financially supportive relationships to wellbeing, this may contribute to the explanation in difference.<sup>2</sup>

It is worth noting that mental wellbeing is a complicated feature to measure and this is compounded by differences in the concept of wellbeing across different ethnic groups.

Assessment of the performance of the WEMWBS tool with Pakistani, Muslim and Chinese communities shows that there are some limitations in using it to measure wellbeing.<sup>5</sup>

WEMWBS does not capture some aspects of wellbeing that are important, for example, in the Pakistani community, peace of mind and contentment are understood more than wellbeing, while fulfilling family obligations is seen as a protective factor to this. For the Chinese, endurance and hard work were seen as protective factors. Social harmony in the family and community are also seen as important, but are not adequately represented in WEMWBS. This qualitative research also suggested that the WEMWBS items may be interpreted differently to what was intended by some minority ethnic groups.

These differences in interpretation could explain differences in wellbeing scores. Perhaps as the wellbeing agenda develops in public health there will be scope to improve the wording of some of the items in WEMWBS to reduce such misinterpretation, and also to allow for some of the missing concepts that are so important to the wellbeing of some groups to be recorded.

## 4. References

<sup>1</sup> Deacon L, Carlin H, Spalding J, Giles S, Stansfield J, Hughes S, Perkins C, Bellis MA (2010). *North West Mental Wellbeing Survey 2009*. North West Public Health Observatory: Liverpool John Moores University.

<sup>2</sup> Carlin H, Chambers S, Knuckey S, Perkins C and Bellis MA (2011). *North West Mental Wellbeing Survey: Employment and resilience*, North West Public Health Observatory: Liverpool John Moores University.

<sup>3</sup> Tennant R, Fishwick R, Platt S, Joseph S and Stewart-Brown S (2006). Monitoring positive mental health in Scotland: validating the Affectometer 2 scale and developing the Warwick-Edinburgh Mental Well-Being Scale for the UK [Online]. Available at: [www.healthscotland.com/uploads/documents/5758-affectometer%20WEMWBS%20Final%20Report.pdf](http://www.healthscotland.com/uploads/documents/5758-affectometer%20WEMWBS%20Final%20Report.pdf) [Accessed 22-3-2011].

<sup>4</sup> Holt-Lunstad, J, Smith T and Bradley Layton J (2010). Social Relationships and Mortality Risk: A meta-analytical Review. *PLOS Medicine*, 7 (7).

<sup>5</sup> Stewart Brown S (2011). *The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): performance in different cultural and geographical groups*. Volume on Mental Wellbeing, Springer Publishing (pending publication).

## 5. Appendix 1: Combined ethnic groups

Which of the following best describes your ethnicity?	
Ethnic Group	Combined Group
White - British White – Irish White – Eastern European White – Other White Background	White
Asian or Asian British – Indian Asian or Asian British – Pakistani Asian or Asian British – Bangladeshi Asian or Asian British – Other Asian Background	Asian or Asian British
Black or Black British – Caribbean Black or Black British – African Black or Black British – Other Black Background	Black or Black British
Mixed – White and Black Caribbean Mixed – White and Black African Mixed – White and Asian Mixed – Any Other Mixed Background Chinese Other	Mixed / Other
Don't know Refused	Excluded

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