# North West Mental Wellbeing Survey

What influences wellbeing?







A report commissioned by:



#### **Summary**

- Mental wellbeing is important to both the economy and society.
- Positive mental health is a protective factor in changing circumstances.
- Financial security is a strong determinant of wellbeing.
- Strong personal relationships and financially supportive relationships are important determinants of life satisfaction.
- The economic status of households is more important to wellbeing than that of the status
  of the individual.

#### 1. Introduction

The Foresight Report, Mental Capital and Wellbeing: Making the most of ourselves in the 21st Century<sup>1</sup> is an extensive review of evidence commissioned by the Government Office for Science. It defines positive mental wellbeing, or simply wellbeing, as:

"A dynamic state, in which the individual is able to develop their potential, work productively and creatively, build strong and positive relationships with others, and contribute to their community. It is enhanced when an individual is able to fulfil their personal and social goals and achieve a sense of purpose in society."

The United Kingdom faces significant demographic, economic and social change and positive mental wellbeing can be an important protective factor in this. The Foresight Report identified that globalisation and increasing competition will require workers to develop their mental capital and a disposition to learn throughout life. In addition, the increased use of technology to participate in society and access services will require people to develop their mental capital to maintain social equity. With an ageing population there is a need to maintain the mental wellbeing of older people and their inclusion in society. Families where both parents work put extra demands on people's time and increase the importance of work-life balance. A successful society is one in which people have high levels of wellbeing which is sustained over time. Therefore maintaining and improving wellbeing in the future is important.<sup>2</sup>

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<sup>&</sup>lt;sup>i</sup> Mental capital "encompasses a person's cognitive and emotional resources. It includes their cognitive ability, how flexible and efficient they are at learning, and their 'emotional intelligence', such as their social skills and resilience in the face of stress. It therefore conditions how well an individual is able to contribute effectively to society, and also to experience a high personal quality of life".<sup>1</sup>

The Foresight Report put forward five public messages based on the latest available scientific evidence for improving positive mental wellbeing called the 'Five ways to wellbeing':

Connect with the people around you

Be active, go for a walk or run, cycle, play a game

Take notice, be aware of the world around you

Keep learning, try something new

Give, do something nice for a friend or stranger<sup>1</sup>

It highlighted the need to address the wellbeing needs of specific groups including children and older people and also workplace environments. To do this there is a need to understand what drives wellbeing in our society and monitor how it changes over time.

The North West Mental Wellbeing Survey 2009 (NWMWS)<sup>3</sup> measured wellbeing using the Warwick and Edinburgh Mental Wellbeing Scale (WEMWBS) as a composite measure along with other questions on wellbeing and related factors. There were 18,500 respondents over 16 years of age. The objective of the NWMWS was to provide a population measure of wellbeing rather than to investigate in detail specific aspects of life or the wellbeing of particular groups. It was not exhaustive in capturing information relating to all factors that can contribute to wellbeing. However it does contain significant data on key influencers including proxies for some of the 'Five Ways to Wellbeing'. It also collected data on broad population groups such as older people and gathered information on employment, although not detailed information on people's working lives. There is sufficient information in the survey to make an exploratory analysis of what factors may influence wellbeing worthwhile.

The objective of this report is to apply statistical techniques that look for relationships between all of the questions in the survey so as to understand what factors may have had the most influence on respondent's wellbeing scores. This report presents the results of analysis of the factors that influence life satisfaction and scores on the WEMWBS. This is followed by a discussion of the implications of this analysis.

#### 2. Data and methods

The data used in this report were taken from the North West Mental Wellbeing Survey (NWMWS), a survey of 18,500 persons undertaken in the North West of England in 2009. The survey comprised 44 questions covering a range of indicators, including the seven-item WEMWBS and questions relating to factors which may influence it. From this initial dataset, an Index of Multiple Deprivation (IMD) 2007 score was attached to each respondent based upon their place of residence at the time of the survey. The WEMWBS scores were recoded to allocate each individual to one of three levels of mental wellbeing: above average, average or below average.

Graphical modelling was used to explore the relationships between the questions in the survey. Graphical modelling is an extremely powerful method of obtaining insights into the structure of a particular dataset. It provides information on the relationships between multiple

ii Above and below average wellbeing were defined as one standard deviation above or below the mean.

variables. It does this in a way that is driven by the data, rather than being influenced by a subjective choice of variables, as may happen with a traditional model where variables are selected by the researcher. It does this whilst maintaining statistical rigour.<sup>4</sup>

The process of graphical modelling was undertaken twice, once for the full dataset, and then again to show the relationship between the variables of interest. The analysis was performed on the data using unweighted values. That is before the data had been processed to ensure its representativeness of the population. Crosstabs were used to explore the direction of associations and describe the relationships between variables.

# 3. Results: What influences wellbeing?

The statistically valid relationships are shown in Figure 1 using 23 of the variables from the survey. Each variable has one or more links to other variables, either pointing towards or away from it, and these links indicate a level of association between the two. The direction of the link does not imply causality, but rather indicates that in the presence of all the data, one variable contains information about the other. The directional arrows imply connections between the data but should not be interpreted as representing a casual relationship. Presenting the data in this way provides the basis for further work that could be undertaken using predictive modelling to specify the relationships more precisely.

The key variable of interest is the wellbeing group. This denotes whether an individual has an above average, average or below average level of mental wellbeing. The closest variables in the survey to the wellbeing variable are help with money, money worries and sedentary time and life satisfaction. Closest means that these variables have a stronger link to the wellbeing variable than others. These variables relate to questions in the survey and a summary of these is provided in Table 1.

Table 1: Survey question descriptions.

Variable	Question summary
Help with money	You are in financial difficulty and need to borrow £100, could you tell me
	if you could ask anyone for help?
Money worries	How often would you say you have been worried about money during
	the last few weeks?
Sedentary time	Not including the time you spend sleeping, how much time do you
	usually spend sitting or reclining on a typical day?
Life satisfaction	All things considered, how satisfied are you with your life as a whole
	nowadays on a scale of 1 to 10?

Many more variables seem to influence life satisfaction than wellbeing and these are denoted in the third column of variables working back from wellbeing in Figure 1. These in turn are influenced by the variables in the fourth column back. Points to highlight here include the importance of money to both wellbeing and life satisfaction. For simplification purposes, each of the primary influencing variables, help with money, life satisfaction, money worries and sedentary time have been presented and discussed separately in Figures 2-5.

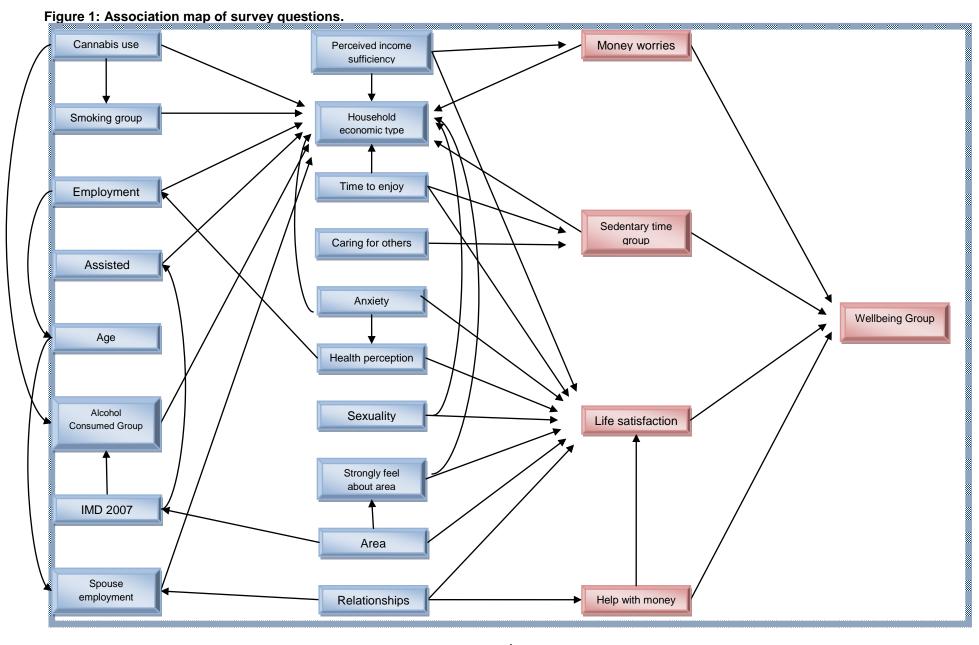


Figure 2 focuses specifically on two of the variables closest to wellbeing from Figure 1 and the factors that influence this. Two of these variables are money related. The first, *money worries*, indicates how frequently people worried about money in the few weeks before the survey. It found that nearly half the people with low mental wellbeing had been worried about money almost all the time or quite often over the last few weeks, 2.4 times the proportion of those with high mental wellbeing. The second, *help with money*, refers to being able to borrow £100 if in financial difficulty. Adults with a high level of mental wellbeing were one-and-a-half times more likely to be able to ask for help from others on this than adults with a low level of mental wellbeing (86.2% compared with 55.9%).<sup>3</sup>

Spouse employment

Household economic type

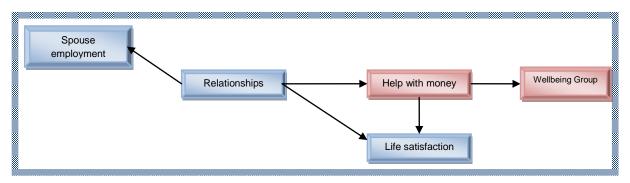
Cannabis use

Money worries

Wellbeing Group

Perceived income sufficiency

Figure 2: The influence of money related factors on wellbeing.



The *money worries* variable is related to people's perceived income sufficiency and the household economic type (i.e. whether the household is classified as employed, unemployed, retired or in education). Around two-thirds of those who are finding it very difficult on their present income are worried about money all of the time. Within unemployed households, 49% of people are finding it difficult to manage on their current income. The *money worries* variable is also related to household economic type suggesting that there is some association between wellbeing and people's sense of financial security not just at the individual level, but at the household level. In turn, household economic type is influenced by the employment group of the individual and also that of their spouse. Other factors that are

linked to household economic type include cannabis use, smoking status and living in assisted housing. This is likely to be because these factors are associated with unemployment.<sup>6</sup>

In addition to a sufficiency of income influencing wellbeing, having someone to turn to when in financial difficulty is also a significant influencing factor (*help with money*). In turn this is influenced by having higher levels of satisfaction with personal relationships. Those who are satisfied with their relationships are more likely to have someone to turn to if they need to borrow money (78.6% of those who are satisfied or very satisfied have someone to turn to compared with 46.0% of those who are dissatisfied or very dissatisfied). Relationships are also related to spouse's employment group.

The analysis suggests that financial security is very important in determining levels of wellbeing. This depends not just on the individual feeling they have a sufficiency of income, but having a good, close relationship with another person who is able to provide financial support is also important.

Sedentary time gives the number of hours that people are sedentary over the day. Responses were classified into:

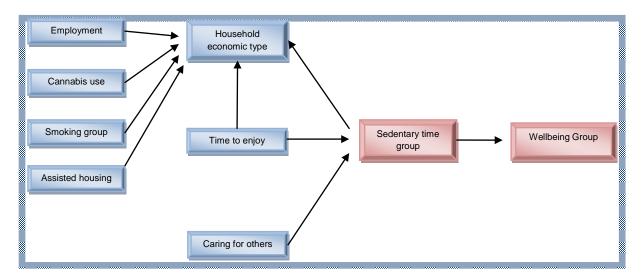
- 2 hours or less;
- Over 2 hours and up to and including 4 hours;
- Over 4 hours and up to and including 8 hours; and
- Over 8 hours.

The survey found that in general, *sedentary time* decreased as mental wellbeing increased. Adults with above average levels of mental wellbeing were significantly less likely to spend over 8 hours (2.7%) or between 4 and 8 hours (25.4%) sitting or reclining during a typical day compared with adults with average (7.0% and 33.5% respectively) and below average (14.4% and 35.0% respectively) levels of mental wellbeing.

Sedentary time is one of the closest variables to wellbeing and Figure 3 shows the factors that influence this. Sedentary time seems to be related to having enough time to do enjoyable things. It is also related to whether people have responsibility for caring for somebody. Again, it is not possible to specify this relationship given the small number of carers in the sample. Care needs to be taken in interpreting this as sedentary activity is related to age, that is people tend to become less active as they get older and age is also related to household economic type, having time to do enjoyable things and caring for someone. iii

The age group with the largest number of carers is of those aged 55 to 64, 14.9% of the sample. This then falls to 10.5% for the 65+ age group.<sup>3</sup>

Figure 3: The influence of sedentary time on wellbeing.



Spouse Relationships employment group Health perception Anxiety Help with money Sexuality Life satisfaction Wellbeing Group Strongly feel about area Time to enjoy IMD 2007 quintile Area satisfaction Perceived sufficiency of income

Figure 4: The influence of life satisfaction on wellbeing.

Figure 4 focuses on one of the variables from Figure 1 that is closest to wellbeing. The *life* satisfaction variable and the factors associated with this. More factors influence this than any other variable. Around three-fifths of adults were satisfied with their life as a whole. In total, 71.1% of those who rate their life satisfaction as 8 or more out of 10 are very satisfied with their relationships compared with only 36.4% of those who are dissatisfied with their life (scoring life as 3 out of 10 or less). Health and wellbeing has a strong influence on life satisfaction with 79.6% of those who are satisfied with life having very good or good health, compared with 31.5% of those who are dissatisfied. Only 9.4% of those who are satisfied with life are anxious or depressed compared with 71.3% of those who are dissatisfied.

Those who described themselves as gay/lesbian or bisexual tend to score lower on life satisfaction, but numbers here are small and should be treated with caution. Those who are satisfied with life are more likely to feel satisfied with their local area and feel strongly about it compared with those who are not. They are also more likely to have time to do things they enjoy. Those who are living comfortably or coping on present income are much more likely to be satisfied with life than those who are finding it difficult to get by on their current income. People living in the least deprived areas have higher levels of satisfaction with their local area as a place to live than those in the most deprived areas.

#### 4. Conclusions

The data visualisation has shown the important factors within the *North West Mental Wellbeing Survey 2009* that impact on wellbeing and life satisfaction. The analysis shows how interrelated so many of the variables are and that there are some very strong influencing factors. Notably people's perception of their financial situation is very important in determining wellbeing. The economic status of households in particular is more important than that of individuals. Having at least one person employed in a household is associated with the wellbeing of those not employed.

There is a strong association between having enough money to live on and money worries and this is associated with the economic status of households. Having somebody to turn to for financial support is connected to having good personal relationships and this is related to spouse's employment status. Having a source of financial support and some degree of financial security is associated with positive wellbeing and life satisfaction. The Foresight report has highlighted debt as being a strong risk factor for mental health problems and this seems to fit with the results presented here.<sup>5</sup>

Life satisfaction is a significant determinant of wellbeing, but is determined itself by a much wider range of factors. Those who have good personal relationships tend to be more satisfied with life. Satisfaction with and a sense of belonging to an area are important too amongst other factors. People's satisfaction with the area where they live is also associated with the level of deprivation within it. Both health and anxiety are associated with life satisfaction rather than directly on wellbeing.

The analysis has provided an understanding of some of the important drivers of wellbeing. However from this analysis it would appear to be important to also consider life satisfaction given the wider range of factors that seem to impact on it. The scope of the work has been to understand the factors that influence wellbeing and it prepares the way for further analysis that could be done on the relative importance of these factors using multivariate techniques.

#### 5. Recommendations

# 1. Family approaches

The analysis has highlighted the importance of financial security and financially supportive relationships. Within working age households, it would be beneficial to wellbeing to ensure at least one member of a household is working. Considering household and whole-family approaches to supporting work and wellbeing might be beneficial. The relationship between employment and wellbeing is discussed further in a separate paper *North West Mental Wellbeing Survey: Employment and resilience*.<sup>6</sup>

#### 2. Financial Support

The model suggests that perceptions of financial security are a significant driver of wellbeing. Support for debt advice and money management would appear to be strong candidates for interventions to support it, given the impact the *money worries* variable has on wellbeing. In addition, managing the psychological stress and insecurity created by debt and job loss would be valuable.

#### 3. Being Active

Being active is an important contributor to wellbeing and interventions that support people, particularly those facing financially difficulty may be beneficial. This may include those who have become unemployed, but also those who have retired in poor financial circumstances and are at risk of becoming less active. Equally it is important that workplaces consider the amount of sedentary time within working days and seek to balance this with active tasks.

### 4. Addressing wellbeing

As can be seen from the analysis there are many variables that influence wellbeing and life satisfaction and many inter-connections between them. Interventions and policies should therefore consider the wide range of influences. When working with individuals and communities adopting a holistic approach would therefore be more beneficial than focusing on one factor in isolation. This supports the development of integrated wellness services and multi-sector health and wellbeing strategies.

#### 6. References

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<sup>&</sup>lt;sup>1</sup> Foresight Mental Capital and Wellbeing Project (2008). Final Project report – Executive Summary. The Government Office for Science: London.

<sup>&</sup>lt;sup>2</sup> New Economics Foundation (2011). *Measuring our Progress. The Power of Wellbeing.* London: NEF.

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<sup>&</sup>lt;sup>6</sup> Carlin H, Chambers S, Knuckey S, Perkins C and Bellis MA (2011). *North West Mental Wellbeing Survey: Employment and resilience*. Liverpool: North West Public Health Observatory, Liverpool John Moores University.

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