

The Coventry Wellbeing Report

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THE UNIVERSITY OF
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Understanding
mental wellbeing
in Coventry:
Inequalities, levels,
and factors
associated

Why address well-being?

“Greater emphasis on psycho-social wellbeing represents an important shift in focus which better recognises...the complex range of social, environmental, and economic factors that promote wellbeing. It requires more of a focus on people’s subjective experience of their lives, which requires that councils think not just about what they do but also the way they do it.”

- The Role of Local Government in Promoting Wellbeing, 2010

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Abbreviations

ACORN: A demographic measure used to describe population characteristics

CAPI: Computer Assisted Interviewing Device

CVD: Cardiovascular Disease

IMD: Index of Multiple Deprivation, 2007

MSEA: Middle Super Output Areas

LSOA: Lower Super Output Areas

PAF: Postal Address File

SES: Socioeconomic status, referred to here as socio-demographic variables

WEMWBS: Warwick-Edinburgh Mental Well-being Scale

Aim

To understand how different aspects of living in Coventry are related to mental wellbeing and to make recommendations to Coventry Partnership and NHS Coventry on improving the health and wellbeing of the population of Coventry; responding to needs; informing services and targeting areas for improvement.

Research Questions

1. How are the levels of wellbeing distributed in this sample of people living in Coventry?
2. What factors are associated with mental wellbeing?
3. Are there potential inequalities between levels of wellbeing and subgroups of the population based on age, gender, ethnicity, socio-demographic variables, disability or marital status?
4. Are there differences between 2010 CHS and 2011 CHS?

A note about this year's data

Out of 3548 surveys conducted, 3072 valid WEMWBS responses were available for analysis (missing=75). At the beginning of analysis, an atypical distribution of WEMWBS scores was observed. There was a higher proportion of 'response set' scores (responding to all of the questions with the same value) than would otherwise be expected for three of the five response categories. Researchers identified 401 cases in which this was the case and removed those cases from the dataset (11.5% of the sample). The removal of these cases resulted in some variation in the proportions of profile characteristics between this report and the report submitted by the consultants BMG, which included the 401 cases. However, additional analysis did not reveal significant changes to factors relevant for the completion of this report, and it was mutually agreed among stakeholders to analyse WEMWBS data excluding these 401 cases. A table is included in appendix A of this report. The table outlines differences in the proportions of socio-demographic characteristics between reports. There are no differences in participant characteristics of greater than a 1 percent point difference between the inclusive (n=3548) and exclusive (n=3147), datasets. Comparing Middle Super Output Area (MSOA) from both datasets also resulted in similarly small differences (not shown as rounded figures would be misleading). The intent and purpose of this report therefore remains consistent with the aim to describe factors associated with mental wellbeing in the population of Coventry from a sample that is representative of Coventry on the basis of age, gender, geographic area (MSOA) and socio-demographic characteristics.

Introduction

The 2011 Coventry Household Survey collected similar information as in previous years. It included seven key aspects of living in Coventry: equalities and communities, housing and environment, community safety, health and general wellbeing, work and training, transport and accessibility, and general profile questions such as age and gender were covered. This year the Survey had a central aim of measuring the levels of mental wellbeing of the people of Coventry using the Warwick-Edinburgh Mental Well-being scale (WEMWBS) which is a 14-question validated scale used to measure levels of mental wellbeing.

Background

Coventry, in the south of the West Midlands has a total population of 312,800 with 74% of the resident working age population in employment in 2009/10 [2] The population is young and diverse; one in ten people in Coventry are 20-24 years old, and a quarter of Coventry residents are from Black and Minority Ethnic (BME) groups[3]. Almost a third of the total population (32%) living in neighborhoods considered 'most deprived' [4]. In 2007, it was estimated that Coventry's population consisted of 74% white British people, this figure excludes the other white communities such as Irish and Polish who form 6% of Coventry's population. People with Indian origins comprise 8% of the population, Pakistani 2% and Bangladeshi 1%.

What is mental wellbeing and why is it important?

Mental wellbeing is one aspect of wellbeing generally which also includes physical and social wellbeing. Mental wellbeing consists of positive psychological functioning, satisfaction with life, happiness, fulfilment, enjoyment and resilience in the face of hardship [5]. There are gaps in the UK knowledge base for understanding and measurement of overall wellbeing [6], and there is evidence which suggests that mental wellbeing is a very good indicator of how people and populations are able to function and thrive [7,8,9].

Mental wellbeing and mental health are different terms. 'Mental wellbeing' describes positive states of being, whilst 'mental health' is a term often used to incorporate a spectrum of states from excellent mental health to severe mental health problems.

Much research and practice surrounding mental health and wellbeing focus on mental health problems and on prevention of developing a mental disorder rather than on positive mental health [10]. Research and evaluation into more positive aspects of mental health and wellbeing has been gaining momentum, and for the first time has been made a national public health priority, reflecting the importance and relevance of mental wellbeing and mental health as critical for the population's health and potential capacity to thrive [11].

From previous research, we know that higher levels of mental wellbeing have been associated with better physical functioning at older ages, better self-rated health, reductions in cardiovascular reactivity and decreased death rates in populations with renal failure and human immunodeficiency virus (HIV) [12-15].

It is not only health that is related to wellbeing. Social factors such as unemployment not only create a loss of income but also a loss of social status, identity, a sense of purpose, and ultimately result in greater losses to wellbeing than to income [16, 17].

Higher levels of wellbeing are also consistently strongly associated with strong emotional and social support experienced by individuals and communities [18, 19]. These deprived environments are associated with many factors which can have an impact on health and wellbeing including [20, 21] physical hazards, sleep disturbance, violence, greater crowding and exposure to noise [22-23].

An opportunity for Coventry

Using WEMWBS to measure mental wellbeing gives us a unique opportunity to think about positive mental health - to shine a spotlight on the more positive end of the spectrum. In this report we investigate for Coventry how positive mental health is associated with other characteristics of people and their life circumstances.

The levels and factors associated with wellbeing in the population of Coventry were measured last year for the first time. In this, the second in a series of 3 commissioned reports on the state of Coventry's mental wellbeing, we describe levels of mental wellbeing in Coventry and how these are associated with other environmental, physical, social, and health issues. We hope the results of this survey can be taken forward to underpin public health priorities and to help with decisions and policies for the benefit of all the people of Coventry.

Methods

Investigators from the University of Warwick have been granted permission by the Coventry Partnership (a partnership between Coventry City Council and Coventry Teaching Primary Care Trust) to access 2011 Household survey data¹.

The Coventry Household Survey was conducted in the first semester of 2011 by research consultants BMG, appointed by the Coventry Partnership. It was conducted among residents of Coventry city as a personal face-to-face household interview, as well as a smaller proportion of 'on street' interviews in order to capture mobile populations. The cross-sectional dataset is separately identifiable from the longitudinal dataset. The survey contained 50 questions, and was completed on average in 20-25 minutes. There are seven topical sections to the survey: equalities and communities, housing and environment, community safety, health and wellbeing (including the Warwick-Edinburgh Mental Wellbeing Scale (WEMWBS)) work and training, transport and accessibility, and general profile questions. Caldicott Guardian ethics committee approval had been obtained before commencement of the data collection.

Participants of the survey were selected for approach with the aim of obtaining a representative cross-section of Coventry residents on the basis of Middle Super Output Area (MSOA), and to reflect the age and gender distribution of each MSOA. A full description of sampling and collection methods of the research consultant BMG is found in Appendix C. Interviewers used the age sampling method of asking to speak to the 'household member whose birthday is next'. The longitudinal sample were contacted using the same technique, instead using a list of names and addresses of 2010 participants who consented to be re-contacted. The longitudinal findings are not included in this report.

The questionnaire included socio-demographic questions, lifestyle questions, environment and surroundings questions, city satisfaction questions, the WEMWBS, and the EQ-5D- an internationally validated health-related quality of life measure. This report will focus on aspects the survey related to mental wellbeing.

¹ Data collection in 2011 includes one cross-sectional and one longitudinal component (not analysed in this report); participants from the 209/10 survey who consented to be re-contacted by the partnership were contacted for the 2011 Coventry Household Survey. Any comparisons made between these two datasets were made removing the longitudinal subset of respondents from the 2011 dataset.

Changes to this year's CHS from 2010:

- 1) The 2011 survey collection included a longitudinal subsample. In 2010 we requested consent to re-contact participants for future involvement in Coventry Partnership surveys. Approximately 1100 people consented to be re-contacted. Those who consented were followed up and the 2011 survey was administered to those who consented to participate again this year. This data will be analysed in a separate report.
- 2) The second change is the addition of the EQ-5D to the 2011 questionnaire (also analysed in a separate report).
- 3) The approach to collecting the survey data was using computer assisted personal interviewing (CAPI) (Appendix C).

Study sample

A total of 3,548 survey interviews were conducted. All of the interviews took place between January and April 2011. The response rate for the main survey sample was 40%, with 2,935 surveys completed from 7,320 households contacted (doors knocked on). Approximately 33% were refusals. Of the longitudinal sample, a total of 1,119 respondents of the 2009/10 survey were re-contacted up to 4 times, achieving a sample of 404 respondents, a response rate of 36%. There were 209 in-street interviews. Refusals accounted for 10% of contacts made. The sample was representative of the population of Coventry on the basis of gender, ethnicity and Middle Super Output Area (Appendix C).

Out of 3548 surveys conducted, 3072 valid responses were available for analysis of mental wellbeing. Seventy-five cases were missing or had incomplete scores, and 401 cases were removed due to errors in the data collection process.

What was measured?

The measurement of mental wellbeing was undertaken using the WEMWBS, which is a 14-item positively worded scale with five responses from 'none of the time' to 'all of the time' [24]. The minimum score is 14 and the maximum score is 70. The period of assessment covers the previous two weeks up to the completion of the scale. The WEMWBS was completed during face to face interviews using a computer assisted personal interviewing device (CAPI).

Other standardised measures

Self-rated health was measured by asking the widely used question ‘How would you say your health is, in general?’ with five options ranging from ‘very good’ to ‘very bad’. [25] Another measure used for understanding population levels of health is the ‘EQ-5D’, an internationally validated and reliable set of health and functioning questions, most commonly used for assessing quality of life (not reported here) [26]. The 2007 Index of Multiple Deprivation (IMD) was used to gauge levels of deprivation from ‘most deprived’ to ‘least deprived’ on a scale of 1 through 5. Limiting long standing illness/disability, marital status and educational qualifications (slightly modified) and ethnicity were assessed using the 2011 census questions [27]. The full questionnaire can be viewed in Appendix B.

Data collection and sampling

Data collection was undertaken in the first quarter 2011 of by the Birmingham research firm BMG using a trained interviewing team. The sample was structured by using sample quotas for gender and age to accurately reflect the adult population profile of each Middle Super Output Area (MSOA) including economic status (BMG, 2011). Approximately 200 surveys were also conducted around Coventry city centre to ensure the participation of ‘mobile populations’.

Data processing

Data entry, checking, cleaning, quality assurance and primary coding were undertaken by BMG, The cleaned dataset was submitted to the Coventry Partnership and University of Warwick Medical School for analysis. At all times all answers were kept confidential and anonymous, meeting the requirements of the Data Protection Act legislation.

Statistical methods

We noted frequencies of responses for all the questions. We then adjusted for age and gender and evaluated the associations between the WEMWBS scores and the other variables (factors) [28]. We used simple linear regression to test for associations between factors and WEMWBS score (which can range from 14 to 70).² Factors that were found to be significantly associated with mental wellbeing in this process (or that have been consistently reported as important for wellbeing in

² All WEMWBS score differences which are statistically significant between different levels of other variables (at the 5% significance level) are reported as such. This is expressed based on the ‘p-value’. If a difference is significant at the 5% level, the p-value will be less than 0.05. The smaller the p-value, the stronger the evidence that the observed difference is not due to chance.

previous research) were included in multiple regression analyses.³ Multiple Regression is used to identify those factors which collectively explain the variation of WEMWBS scores best. Individual factor levels are reported in terms of regression coefficients (B). A regression coefficient can be reported as a positive or negative number. The larger 'B' is, the stronger the association is with mental wellbeing for that particular factor.⁴

³ The analysis yields a set of factors which predicts an individual's mental wellbeing best according to a statistical scoring criterion (adjusted R2).

⁴ The regression coefficient (B) illustrates the strength of the association between a given factor and mental wellbeing, measured in WEMWBS score units. The larger B is (either positive or negative), the stronger the association for that particular factor with mental wellbeing.

Results

A total of 3548 survey interviews were conducted, with 3147 of those interviews identified as valid for the purposes of this report. This leaves 3072 cases that include completed WEMWBS scales. The focus of this report is on aspects of the survey related to mental wellbeing, and the number of respondents (N) will be indicated where appropriate throughout this report.

This section describes the distribution of WEMWBS scores in the sample and factors associated with wellbeing, answering the research questions set out:

1. How are the levels of wellbeing distributed in this sample of people living in Coventry?
2. What factors are associated with mental wellbeing?
3. Are mental wellbeing levels different compared to 2009/10 survey data?

Participant characteristics

Figures 1, 2 and 3 show the characteristics of those participating in the survey and their responses to questions about their health, sleep, neighbourhoods and environment.

Age: Age bands were fairly evenly distributed with about one sixth of the sample in each ten year age band and one sixth in the over 80s.

Gender: 48% of the sample were male and 52% female.

- **Deprivation:** Using the government's quintile categories, nearly 40% of the sample were in the most deprived category and 19% were in the two least deprived categories. 42% of the sample were in the two middle categories of deprivation.
- **Marital status:** 54% of the sample were married or cohabiting and 46% of the sample were single or divorced, widowed or separated.
- **Education:** under a third of the sample had no formal qualifications, one third had level one or two qualifications (equivalent to GCSEs) and 37% had higher level qualifications.
- **Employment:** 52% of the sample were in work and 21% of the sample were retired. Of the remainder, 9% were students or in training and 18% were unemployed or in unpaid work.

Figure 1: Participants' characteristics

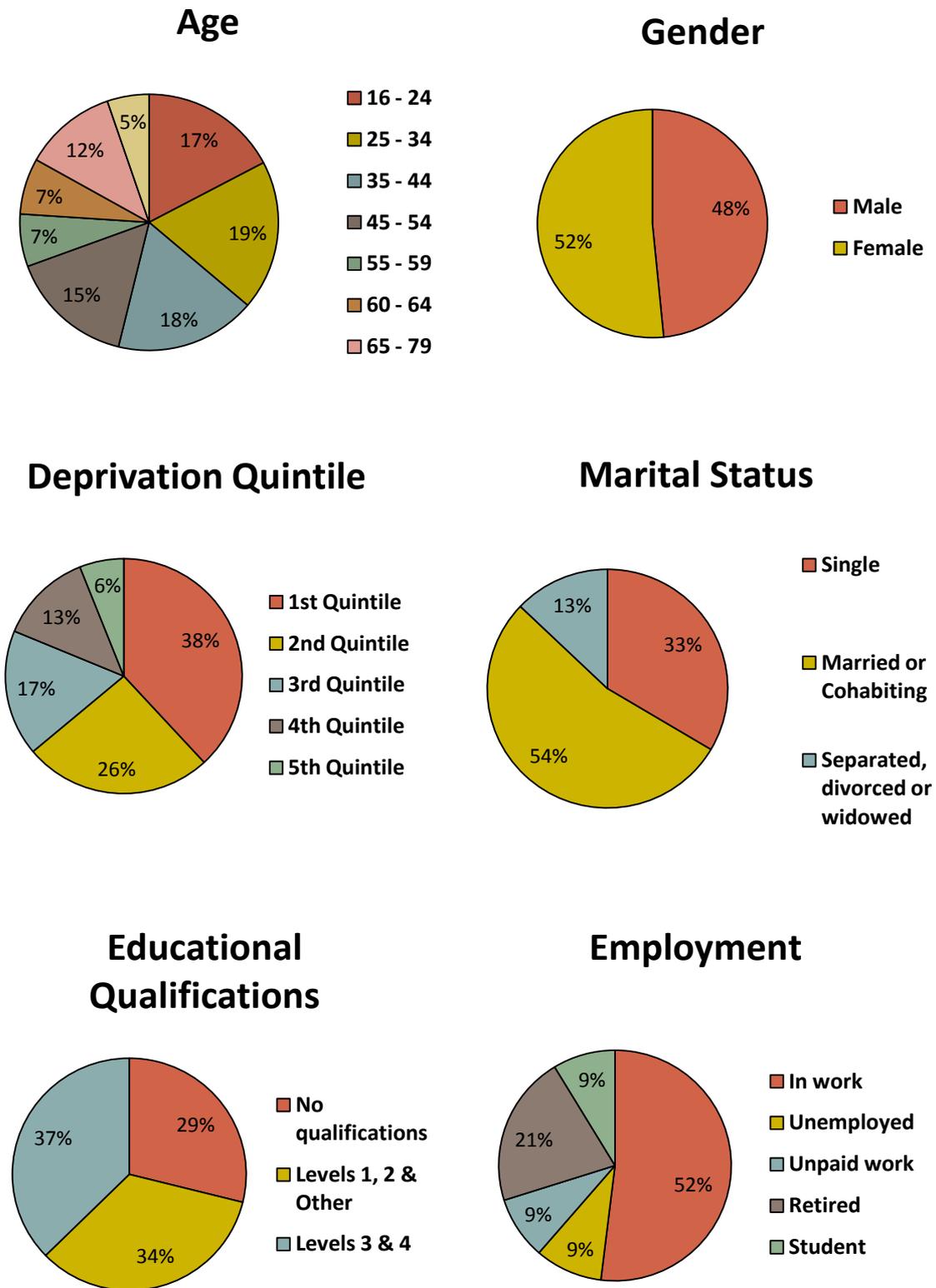
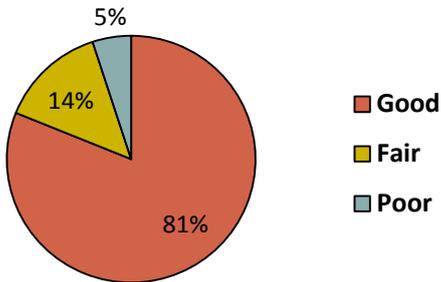


Figure 2 shows responses of those participating in the survey to questions about their health, habits and sleep.

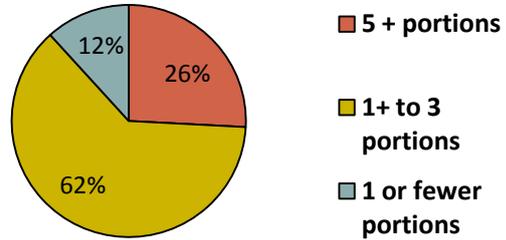
- Self-rated health status: Eight out of ten people rated their health as good; with one seventh reporting fair health and only 5% reporting poor health. 86% of the sample reported they had no limiting or longstanding illness, 8% said that they had an illness which limited them a little and 6% had an illness which limited them a lot. (Pie chart not shown for this).
- Fruit and vegetables: A quarter of the sample said that they ate the daily recommended 5-a-day portions of fruit and vegetables a day, the majority ate between 1 and 4 portions (62%) and 12% ate 1 or fewer portions.
- Sleep: 54% said that they had good quality sleep whilst a third had average sleep and 13% said that they had poor quality of sleep. As far as quantity of sleep was concerned, nearly 60% had about 7 hours a night, and just under a third had fewer than 6 hours a night. Twelve percent said that they had 9 hours or more of sleep a night.
- Physical activity and sports: A lower proportion of respondents reported frequent physical activity than last year, with just under a third doing any kind of physical activity 5 or more times per week. However, over half of respondents still report being physically active between 1 and 4 times a week. One in six of the sample said that they never took moderate physical activity. A greater proportion than last year report playing sport weekly, about 4 in 10 respondents (2009/10=32%). Almost 60% report never playing sports on a weekly basis.
- Smoking: Two thirds of respondents have never smoked, with 24% reporting themselves as current smokers and 1 in 10 having quit smoking.
- Alcohol: This remains an area of concern with over half the sample of those who drink (58%) reporting themselves as drinking above the daily recommended amount at least once a week, however, there is a smaller proportion than last year drinking 4-7 days per week (2009/10=8%; 2011=5%). Forty-two percent (42%) of the sample said that they never drank over the daily recommended amount.

Figure 2: Participants' health

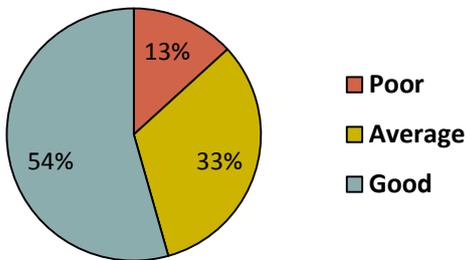
Self rated Health



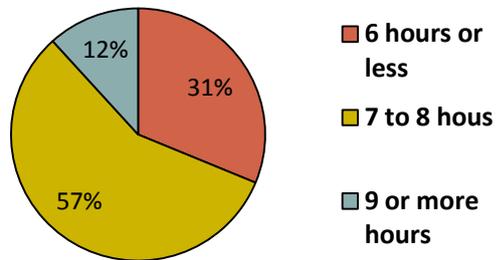
Healthy Eating: Fruit & Vegetable Consumption



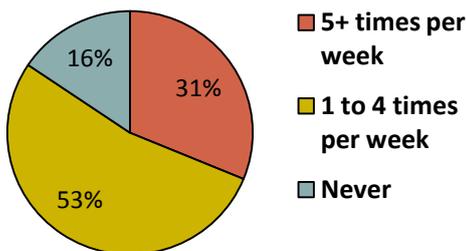
Sleep Quality



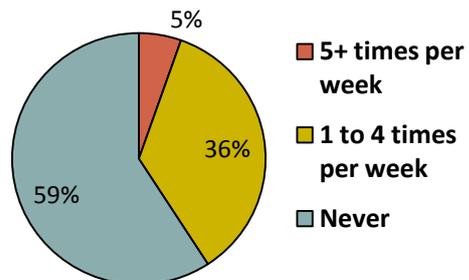
Sleep Quantity



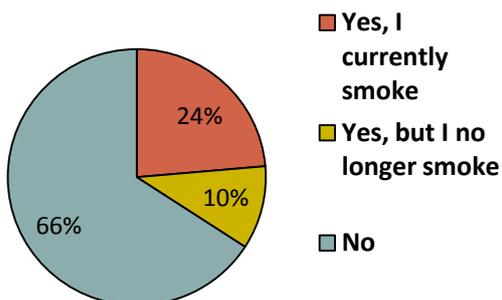
Weekly physical activity: Any type



Weekly physical activity: Sport



Smoking



Alcohol consumption over the recommended amount

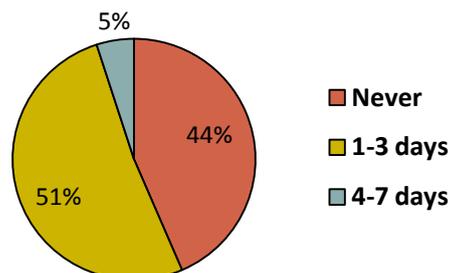
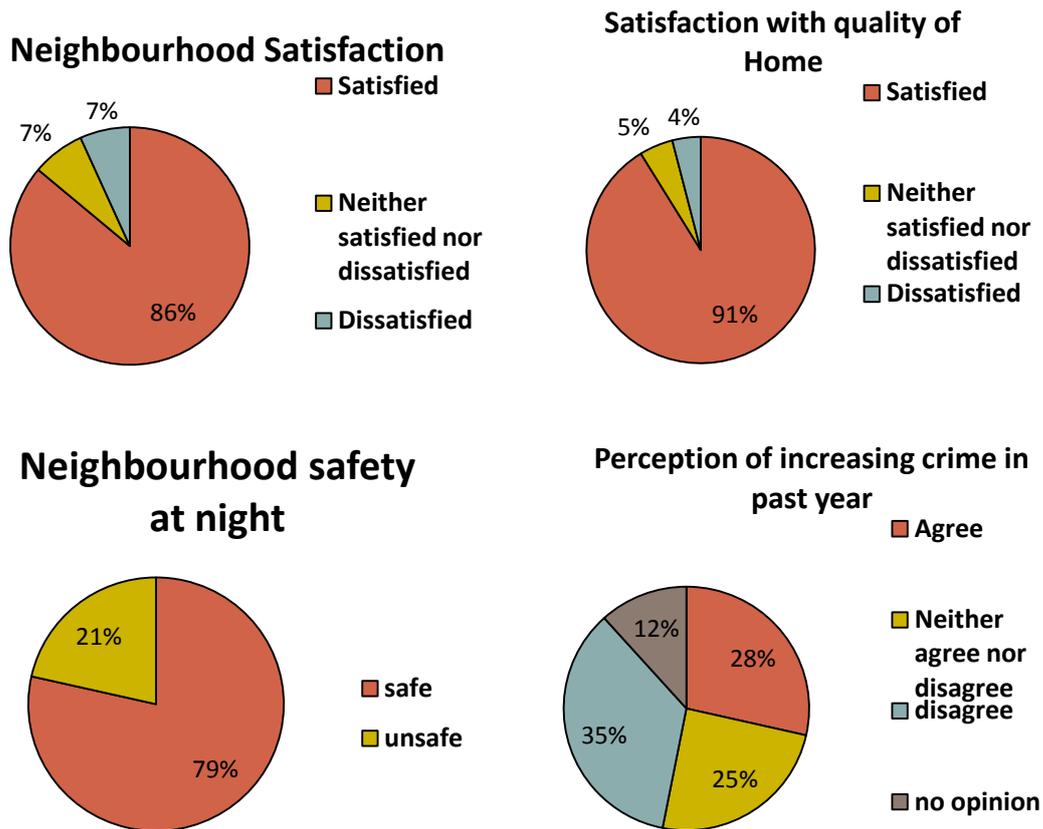


Figure 3 shows participants' responses to questions about their neighbourhood and environments.

- Satisfaction with neighbourhood and with the home: 91% of the sample were satisfied with the quality of their home and a high proportion were satisfied with their neighbourhood, though the proportion of those satisfied with their home was greater than neighbourhood satisfaction. A small proportion (4-7%), were dissatisfied with their home and with their neighbourhood.
- Safety and crime: Eight in ten respondents stated that they feel safe at night; with 21% reporting that they feel unsafe. Over a quarter of the sample thought that crime had increased in the past year, a little over a third thought that crime had not increased. Almost 40% either had no opinion or did not agree or disagree.

Figure 3: Participants' neighbourhood and environments



Summary of sample characteristics

Overall the findings suggest that the sample are representative of Coventry as far as age, gender, and ethnicity are concerned. Deprivation levels differ from last year in that the sampling procedures were stratified in different ways. Mostly there is good news, with people in the main rating their health as good; taking moderate physical exercise; eating some fruit and vegetables and reporting that they have a long enough period of good sleep. Smoking rates are lower than previous nationally reported levels, and they are lower than last year's reported results. A continuing area of concern is the 56% of people who report that they are drinking over the recommended limits of alcohol on at least one occasion per week.

As far as their environment is concerned, people are also on the whole satisfied with their neighbourhoods, however a greater proportion are satisfied with their home. Although almost 30% feel that crime has increased in the past year, a greater proportion than last year feel safe at night in their neighbourhoods.

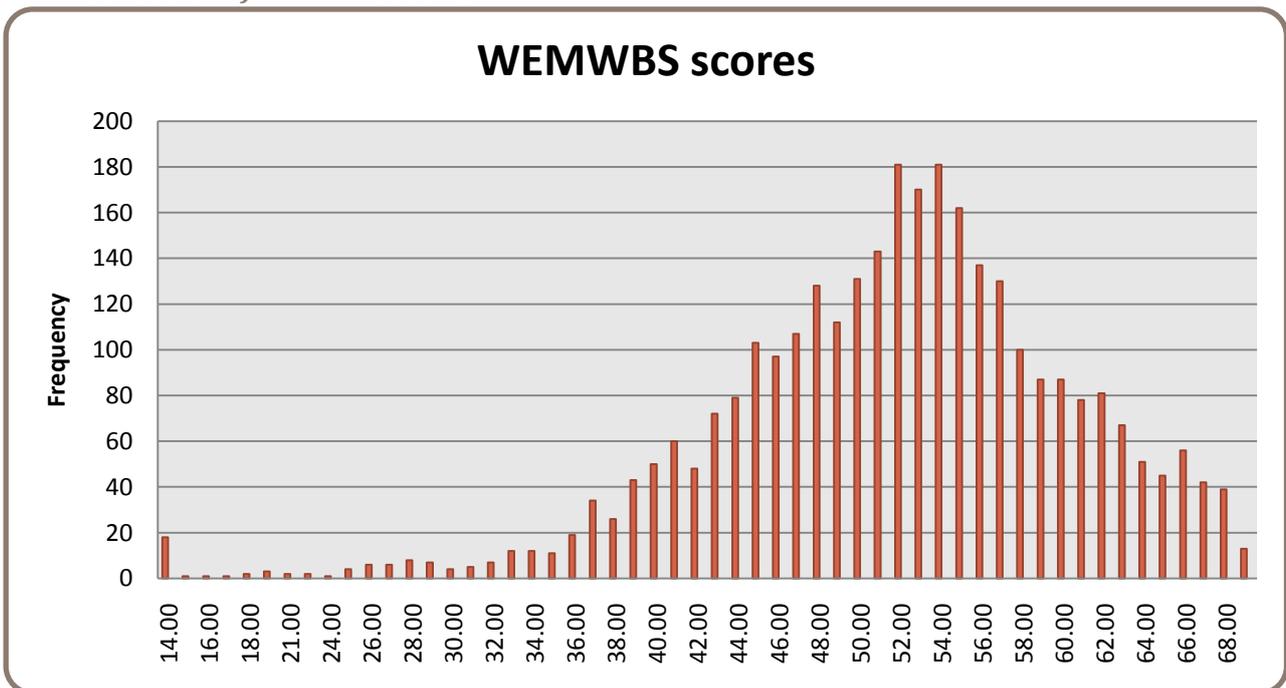
In the next section we go on to look at how these factors are correlated with levels of mental wellbeing. First we report the WEMWBS scores.

Wellbeing scores in Coventry using the WEMWBS

The average (mean) WEMWBS score for all participants combined was 51.7, with a standard deviation of 8.84. Raw mean WEMWBS scores are different for men (52.3) and women (51.1).

The figure below illustrates the distribution of WEMWBS scores within the total sample, showing a reasonably good agreement with a 'normal distribution', though it is positively skewed it is consistent with other distributions of WEMWBS scores. The cases which included data collection errors (N=401) are not included in the histogram below.

Distribution of WEMWBS scores



Population characteristics and WEMWBS

Tables 1-4 below show the percentages of the total sample (excluding the longitudinal subsample for the year to year comparison, n=375) and numbers for each variable/characteristic we asked about. In the final two columns the WEMWBS mean response for each variable/characteristic is given for 2011, and also for 2009/10. The percentage of the total sample refers to the number of participants who had complete and valid WEMWBS responses in 2011 and who did not participate in last year's survey (n=2707).

Table 1: General profile characteristics

Variable	Percentage of total sample (%) [^]	2011 N=	2011 mean WEMWBS	2009/10mean WEMWBS
Total sample[§]	100	2707	51.8	51.2
Age Band		2694		
16-24	18	486	53.7	52.5
25-34	20	531	52.8	51.9
35-44	18	477	51.8	51.2
45-54	16	421	51.1*	49.3
55-59	7	179	50.1	50.7
60-64	6	172	51.6	50.8
65-79	11	282	50.6	51.7
80+	5	146	49.5	48.3
Gender		2707		
Male	49	1318	52.5	52
Female	51	1389	51.3	50.5
Ethnicity		2707		
White	78	2097	51.6*	50.8
Mixed	1	26	50.3	50.7
Asian	14	374	52.7	52.
Black	5	129	52.6	54.
Chinese & Other	3	81	54.6	53.6
Marital status		2707		
Single	35	947	52.1	51.2
Married/cohabiting	53	1422	52.3	51.7
Separated/divorced/widowed	13	338	49.4	49.4

*indicates a significant difference between 2010 and 2011 datasets.

[^]Percentages rounded to the nearest whole number. [§]Total sample excluding error data and longitudinal data.

Table 2: Socio-demographic variables

Variable	Percentage of total sample (%)^	2011 N=	2011 Mean WEMWBS	2009/10 Mean WEMWBS
Deprivation		2707		
Quintile 1 (most deprived)	36	984	52.3*	49.7
Quintile 2	26	708	50.9	51.2
Quintile 3	18	482	52.4	52.6
Quintile 4	13	351	51.3	51.8
Quintile 5 (least deprived)	7	182	53.1	51.7
Education level		2693		
No qualifications	29	793	50.2	49.3
Levels 1 and 2; other qualifications	34	906	52	51
Levels 3 & 4	37	994	53	53.1
Employment status		2672		
In work	53	1422	52.8	52.4
Unemployed	9	246	47.9	47
Unpaid work	9	233	50.4	49.5
Retired	20	528	50.3	50.7
Student	9	243	55.1*	53.2

*indicates a significant difference between 2010 and 2011 datasets.

^Percentages rounded to the nearest whole number.

Table 3: Health and lifestyle characteristics

Variable	Percentage of total sample (%)^	N=	2011 Mean WEMWBS	2009/10 Mean WEMWBS
Self-rated health status		2707		
Good	82	2221	53	52.6
Fair	13	363	48.2	47.9
Poor	5	123	43.2	42.7
Disability		2702		
No disability	87	2347	52.7	52.2
Limited a little	7	201	47.7	48
Limited a lot	6	154	45.1	44.8
Quality of sleep (past month)		2675		
Good	54	1453	53.6	53.1
Average	33	875	51.1*	49.6
Poor	13	347	46.9	45.5
Quantity of sleep (hours per night)		2707		
Fewer than 6 hours	31	835	49.9	48.9
7-8 hours	57	1551	53	52.3
9 hours or more	12	321	51.4	52.1
Daily fruit/ vegetable		2645		
5+ portions	25	672	53.3	53.0
>1 to 4 portions	62	1648	51.7*	50.8
1 or fewer portions	12	325	50.4	49.1
Physical activity: Any activity weekly		2679		
5+ times per week	32	853	53.3*	51.9
1-4 times per week	53	1411	52.1	51.4
Never	16	415	48.2	48.5
Physical activity: Play sports weekly		2642		
5+ times per week	6	144	54.4	53.5
1-4 times per week	36	950	52.7	53.2
Never	59	1548	51.1*	50.2
Smoking		2698		
Yes, Currently	24	638	51.1	49.6
Yes, Former	9	240	50.6	51.4
No, Never	67	1820	52.3	51.7
Alcohol consumption: Days/ week drink > daily recc. amount		1403		
Never	42	584	52.7*	51.2
1-3 days per week	53	747	52.3	52.2
4-7 days per week	5	72	50.1	49.3
Life satisfaction		2664		
Dissatisfied	4	100	41.1	--
Satisfied	67	1779	51.2	--
Very satisfied	30	785	54.9	--

*indicates a significant difference between 2010 and 2011 datasets.

^Percentages rounded to the nearest whole number.

Table 4: Neighbourhood characteristics

Variable	Percentage of total sample (%)^	2011 N=	2011 mean WEMWBS	2009/10 Mean WEMWBS
Neighbourhood satisfaction:		2701		
Satisfied	86	2326	52.1	51.5
Neither satisfied nor dissatisfied	7	200	50.2	49.4
Dissatisfied	7	175	51.1	47.4
Satisfaction with quality of home:		2702		
Satisfied	91	2460	52.1	51.5
Neither satisfied nor dissatisfied	5	134	50.1	50.7
Dissatisfied	4	108	48.8	46.7
Night-time neighbourhood safety:		2630		
Feel safe	79	2076	52.5	52.1
Feel unsafe	21	554	49.9	48.8
Feel that crime has increased in neighbourhood in past year		2502		
Agree	29	718	50.9	49.7
Neither agree nor disagree	26	640	51.4	51.4
Disagree	34	841	52.8	51.9
No opinion	12	303	51.1	--

*indicates a significant difference between 2010 and 2011 datasets. ^Percentages rounded to the nearest whole number.

Factors associated with mental wellbeing

The tables above suggest some variables are associated with mental wellbeing. The variables below were significantly associated with wellbeing scores and were considered for inclusion in the simple linear regression analysis.

Socio-demographic variables: (Age, gender), employment status, education, marital status

Health and lifestyle characteristics: Self-rated health status; quality and quantity of sleep, fruit and vegetable consumption, frequency of physical activity and frequency of playing sport, and smoking, and overall life satisfaction.

Neighbourhood characteristics: Satisfaction with neighbourhood, feeling safe at night, feeling satisfied with home, deprivation, perception of crime, housing tenure.

Differences from 2010 sample: After adjusting for age and gender, ethnicity and alcohol consumption over the recommended limit were not significantly associated with mental wellbeing in the simple linear regression. Because ethnicity was an associated factor last year, it was entered into the model for this year as well, but was not a strong enough factor relative to other variables to be included in the multiple regression.

The figures in the next section show results from the multiple regression model which adjusts for all factors simultaneously so that reported differences are due to the factor illustrated for each figure. In the analysis, the regression coefficient (B) illustrates the strength of the association between a given factor and mental wellbeing, measured in WEMWBS score units. The farther away from zero the B coefficient is, the stronger the association. The association can be either positive or negative.

For example, WEMWBS scores are on average 1 point higher for those with higher education qualifications compared to those with no formal educational qualifications when adjustment has been made for all other factors (e.g. age and gender etc).

Differences in Mental Wellbeing

The following figures describe what factors are associated with mental wellbeing in Coventry. Both positive and negative associations are shown in the bar charts. If there is a positive association, then the chart shows the WEMWBS score increasing compared to the reference (comparison) category, represented in bars above the horizontal line. The reference category is always the category where the bars are all equal height. If the factor has a negative association then a given bar will be below the horizontal line. In general, the longer the bar on the chart, the stronger the association.

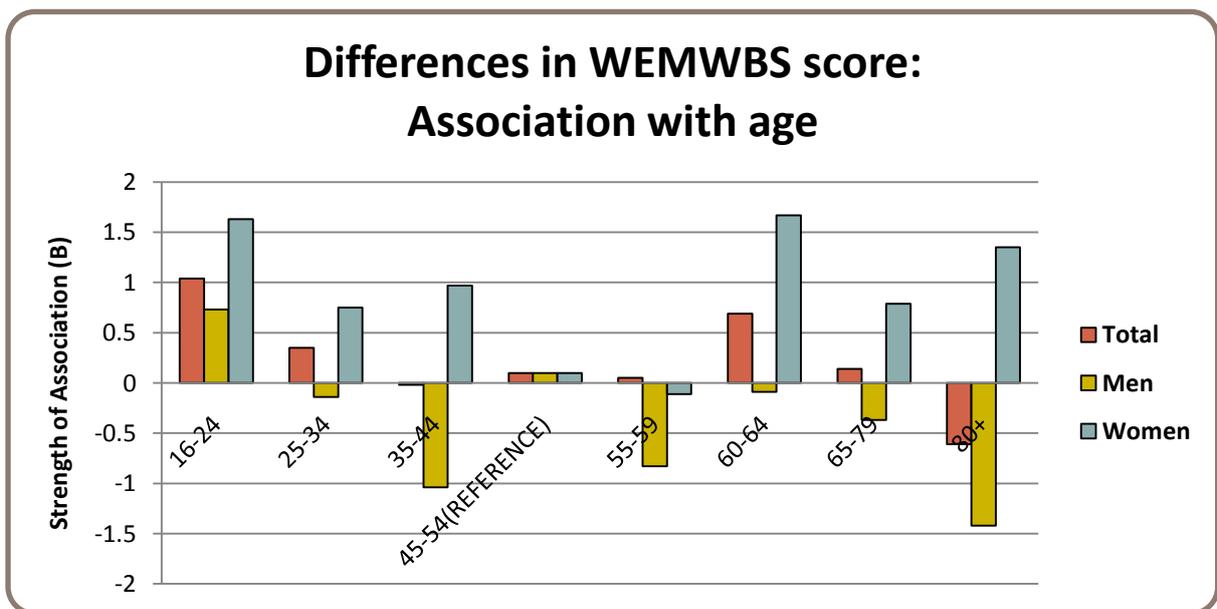
Associations with age

- In keeping with last year, the reference category remains the 45-54 age band. However, WEMWBS scores in this age band were significantly different, (higher) compared to last year’s sample. This has resulted in observable changes between age bands and between men and women.
- In 2009/2010, middle aged people (aged 45-54) had lower levels of wellbeing compared to other age groups. This remains true of women in the 2011 sample, but not men, whose WEMWBS scores were higher in age band 45-54 than every other age band except 16-24 year olds.
- Compared to age band 45-54, women in most other age bands have higher levels of mental wellbeing. In age band 60-64, WEMWBS is around 1.7 points higher on average than for middle aged women (aged 45-54).
- Women aged 55-59 have the lowest levels of mental wellbeing on average.
- The oldest men (80+) have an average WEMWBS score 1.4 points lower than middle aged men.

Statistically significant associations:

- There were no statistically significant associations between age and mental wellbeing after adjusting for other factors.

Figure 4: Associations between age band and mental wellbeing

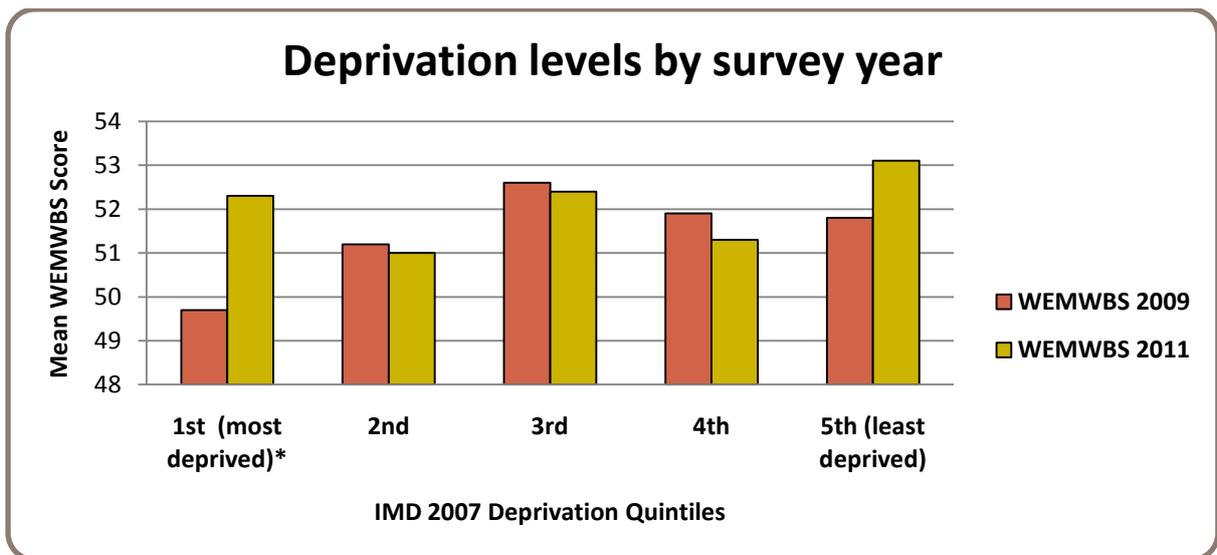


Associations with socio-demographic variables

Socio-demographic variables such as education and employment are commonly used for indicating socio-economic status. In this report, education and employment show associations with mental wellbeing scores. Another socio-demographic measure is deprivation level, classified by the Index of Multiple Deprivation (IMD, 2007). It is a combined measure of a Lower Super Output Area’s total ‘score’ of multiple factors related to deprivation. While both can be used to understand social and economic factors, education and employment are measured at the individual level and are more accurate (socio-demographically) from person to person. Therefore, level of deprivation is not included in this regression model.

However, it is worth noting that the mean scores of both the 2009/10 and 2011 surveys result in a similar lack of relationship between mental wellbeing and deprivation levels. Drawing on socio-demographic trends that those in deprived areas generally are worse off than those in less deprived areas, we would expect that mental wellbeing would decrease as deprivation increases. The figure below illustrates the average WEMWBS score for participants living in each area quintile, where quintile 1 is considered ‘most deprived’ and quintile 5 is considered ‘least deprived’. There does not appear to be a linear association between quintile level and WEMWBS score for either survey year. Note that this figure is not an illustration of the regression analysis, but a comparison of raw mean WEMWBS scores by Deprivation Quintile.

Figure 5: Mean WEMWBS level by deprivation quintile



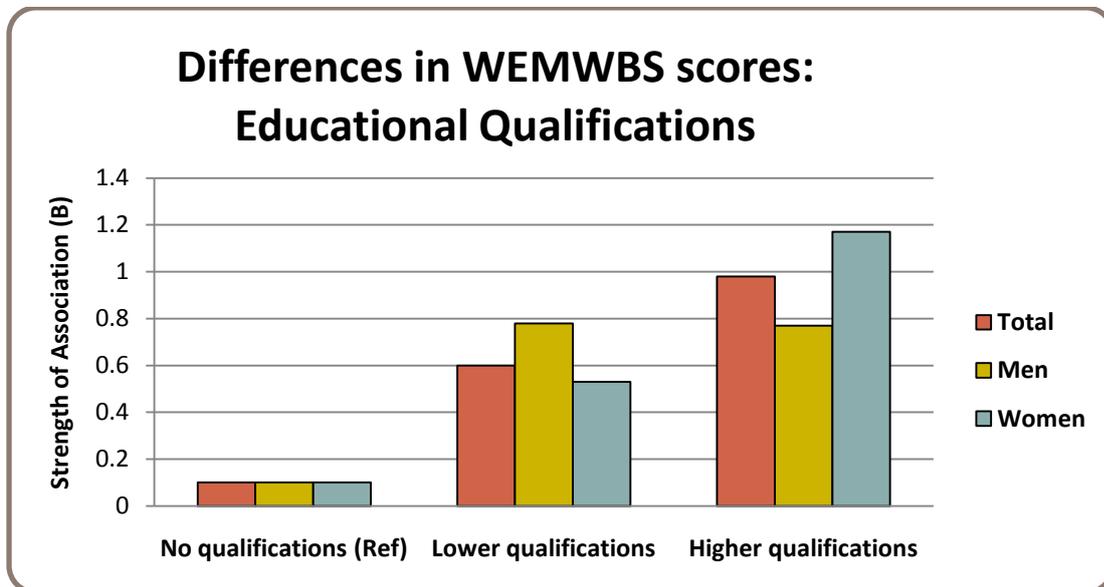
Education

- Overall, those with higher levels of education have higher levels of mental wellbeing.
- WEMWBS scores are on average higher by about 1 point for those with higher education qualifications compared to those with no formal educational qualifications.

Statistically significant associations:

- Higher levels of educational qualifications were significantly associated with higher mental wellbeing levels in the total population only.
- There is a stronger association between education and mental wellbeing observed in women, but this is not a statistically significant association when adjusting for other factors.

Figure 6: Associations between education level and mental wellbeing



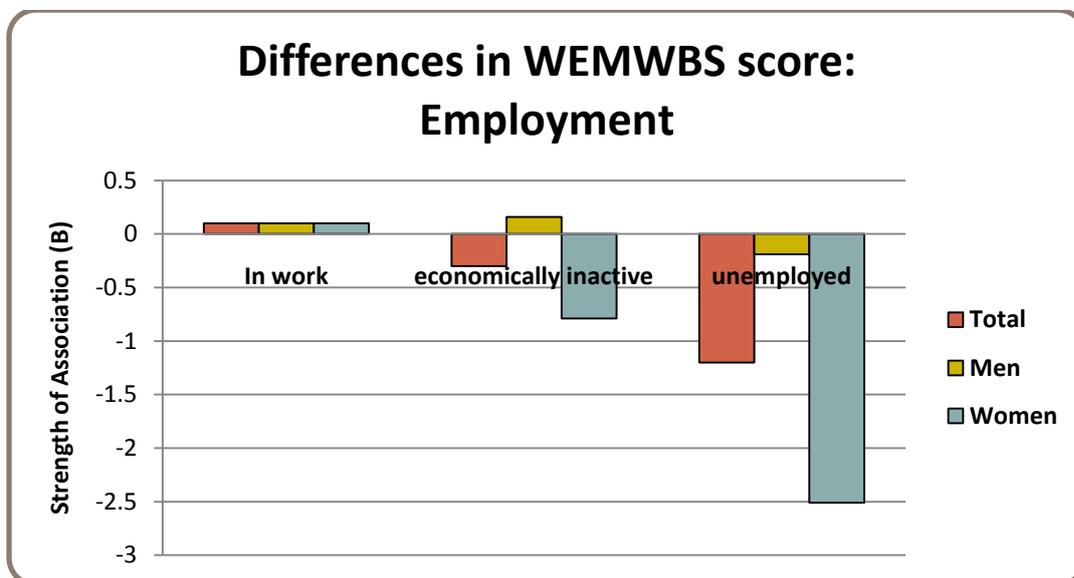
Employment

- Overall, mental wellbeing levels among the unemployed are significantly lower than those who are currently in work, reflecting the same trend as last year.
- However, where last year unemployed men showed stronger associations between unemployment and lower mental wellbeing, this year the trend is much weaker for men.
- Unemployed women have an average mental wellbeing score 2.5 points lower than employed women.

Statistically significant associations:

- In the total population, being unemployed was significantly associated with lower levels of mental wellbeing.
- Unemployed women have significantly lower average levels of mental wellbeing compared to employed women.

Figure 7: Associations between employment and mental wellbeing



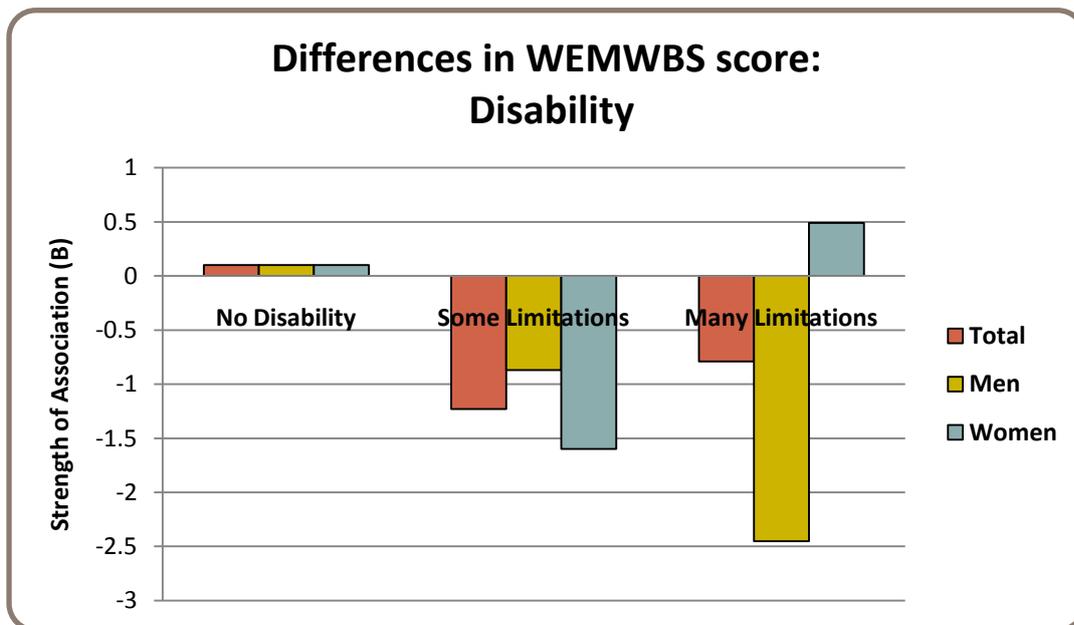
Disability

- In the total population, there were no significant associations between having a disability and mental wellbeing levels. This means that after adjusting for other factors, people who had a disability were just as likely as those without a disability to have high or low levels of mental wellbeing.
- Among women, neither having a minor nor majorly limiting disability was significantly associated with mental wellbeing levels. Women who have any disability were statistically just as likely to have high or low levels of mental wellbeing as those reporting no disability. While the chart below shows women with minor disabilities having lower average WEMWBS scores, the differences are not significant after adjusting for other factors in the model.
- Men who are limited a little have slightly lower mental wellbeing scores than men are not limited, this trend is increased as the severity of the limitation is increased.

Statistically significant associations:

- Among men, those who were limited a lot had significantly lower mental wellbeing levels than those who were not limited at all.

Figure 8: Associations between disability and mental wellbeing



Health and Lifestyle Characteristics

Sleep quality

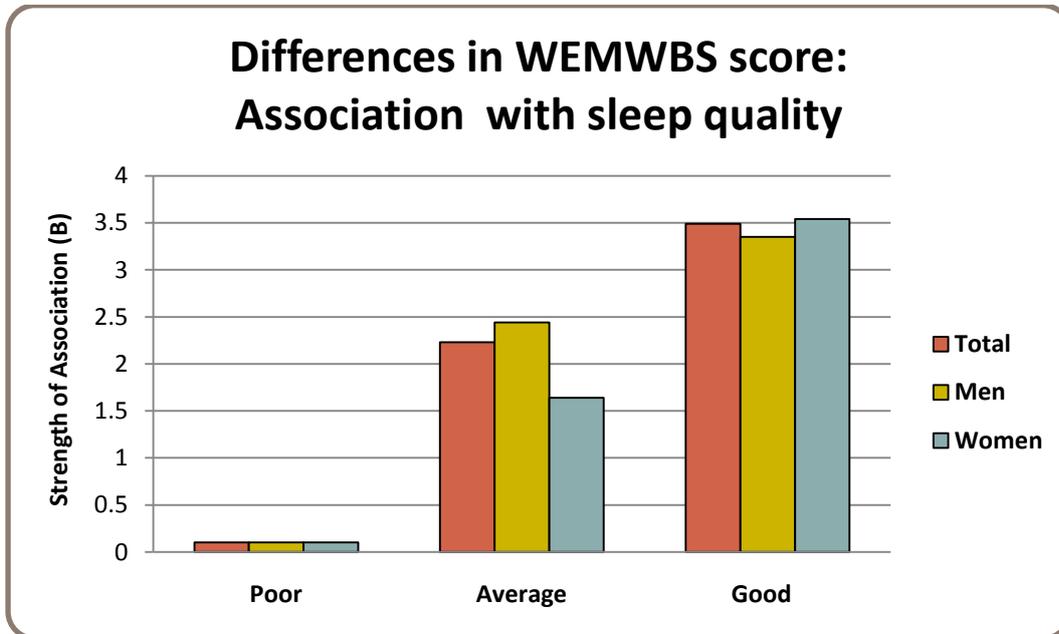
Quality of sleep is strongly associated with mental wellbeing levels observed in this sample. The better your quality of sleep, the higher your mental wellbeing level. The trends are similar for men and women.

- Mental wellbeing scores were about 3.5 points higher on average among those with good sleep quality compared to those with poor sleep quality.

Statistically significant associations:

- In the total population and for men and women, both average and good levels of sleep quality were significantly associated with higher mental wellbeing levels.

Figure 9: Associations between sleep quality and mental wellbeing



Self-rated health status

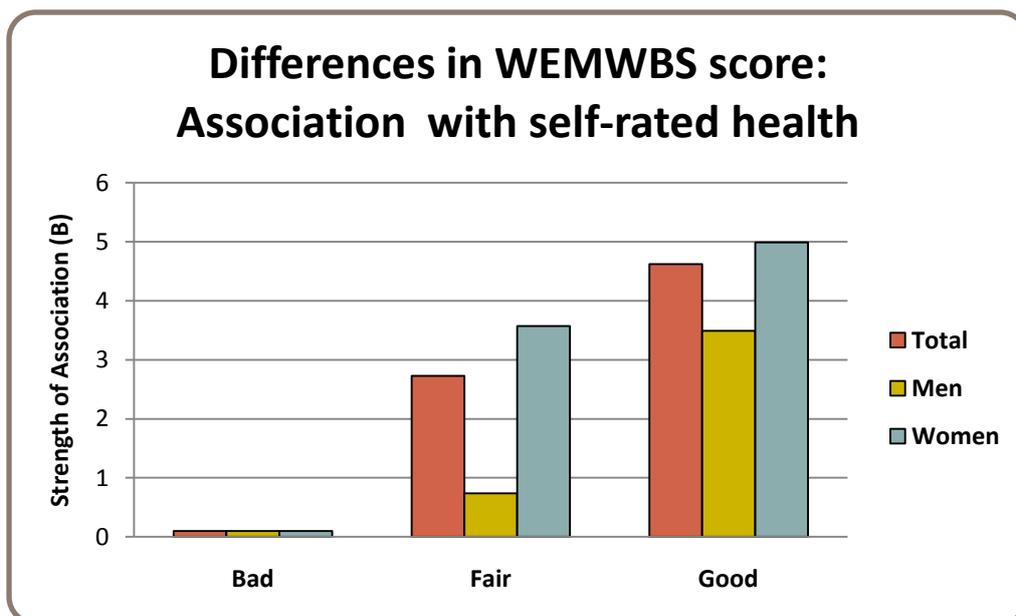
Self-rated health status is another important factor for mental wellbeing in Coventry. It is strongly associated with mental wellbeing levels in the overall sample, and men and women.

- Mental wellbeing levels were on average 4.6 points higher among people who rated their health as ‘good’ or ‘very good’.
- The association is stronger in women than it is in men. Women who have good self rated health have a mental wellbeing score that is 5 points higher on average than those who have bad self rated health.
- The same trend occurs in men, but the association is weaker than in women. Men with good self rated health have mental wellbeing scores around 3.5 points higher than those with bad self rated health.

Statistically significant associations:

- In the total population and for men and women, good levels of self-rated health were significantly associated with higher mental wellbeing levels in the total population, men and women. Women who had fair health also had significantly higher average mental wellbeing scores, but this was not a significant association in men.

Figure 10: Associations between self-rated health and mental wellbeing



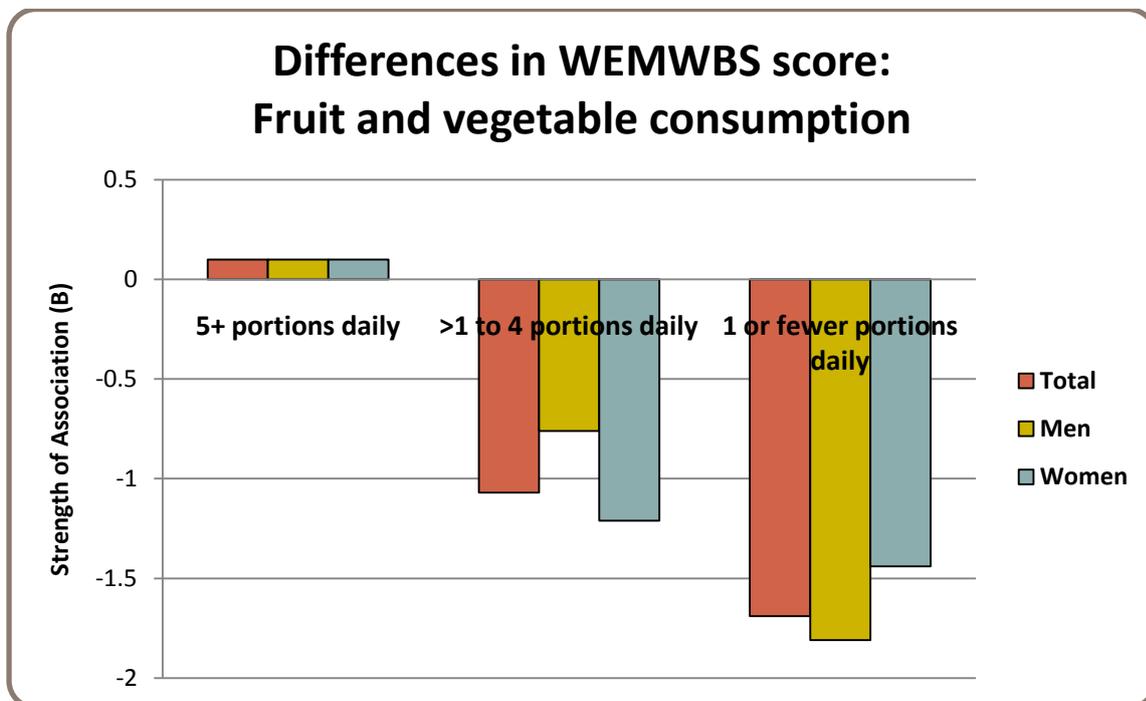
Healthy eating

- This year’s trend follows that of last year. Mental wellbeing was highest among people who ate five or more portions of fruit/vegetables a day and lowest among those who ate less than one portion a day.
- Respondents who eat around 1-4 portions had mental wellbeing levels around 1 point lower than those eating ‘five a day’.

Statistically significant associations:

- In the total population, eating fewer than five portions of fruit and vegetables daily was significantly associated with lower levels of mental wellbeing.
- Amongst men eating less than one portion a day was significantly associated with lower levels of mental wellbeing (1.8 points).
- Amongst women, eating around 1 to 4 portions was significantly associated with lower mental wellbeing (1.2 points).

Figure 11: Associations between healthy eating and mental wellbeing



Physical activity

Last year, the association between physical activity and mental wellbeing was not a strong enough association to be included in the regression model. This year’s physical activity was fairly strongly associated with mental wellbeing levels.

Any:

Doing any physical activity per week, from playing sports to walking to the shops was associated with mental wellbeing in women but not in men. This means there were other factors that were more strongly associated with mental wellbeing in men.

- Among women there was a strong association between never doing any physical activity and lower levels of mental wellbeing. Average mental wellbeing scores for women who aren’t physically active are around 3.3 points lower than women who are frequently physically active, even in small amounts.
- The association was weaker (and was not significant) for women who were physically active a few times per week, compared to doing some physical activity almost every day. This means that women doing some exercise were just as likely to have high or low levels of mental wellbeing as their more frequently active counterparts.

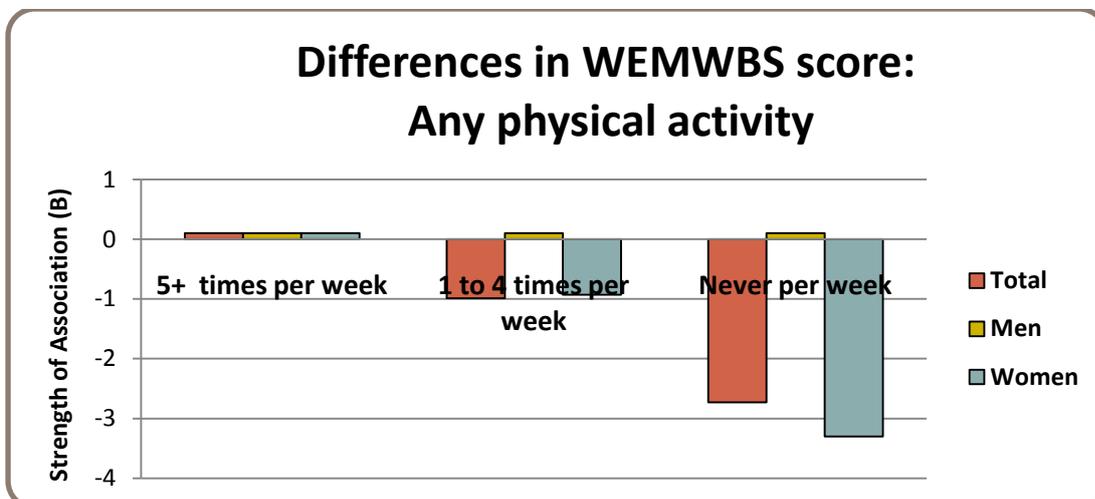
Statistically significant associations:

- Women who report never being physically active have significantly lower mental wellbeing levels than frequently active women.

Sports:

Though sport was associated enough to be included in the model, when combined with other factors, it was no longer a significant variable (not shown).

Figure 12: Associations between physical activity and mental wellbeing



Life satisfaction

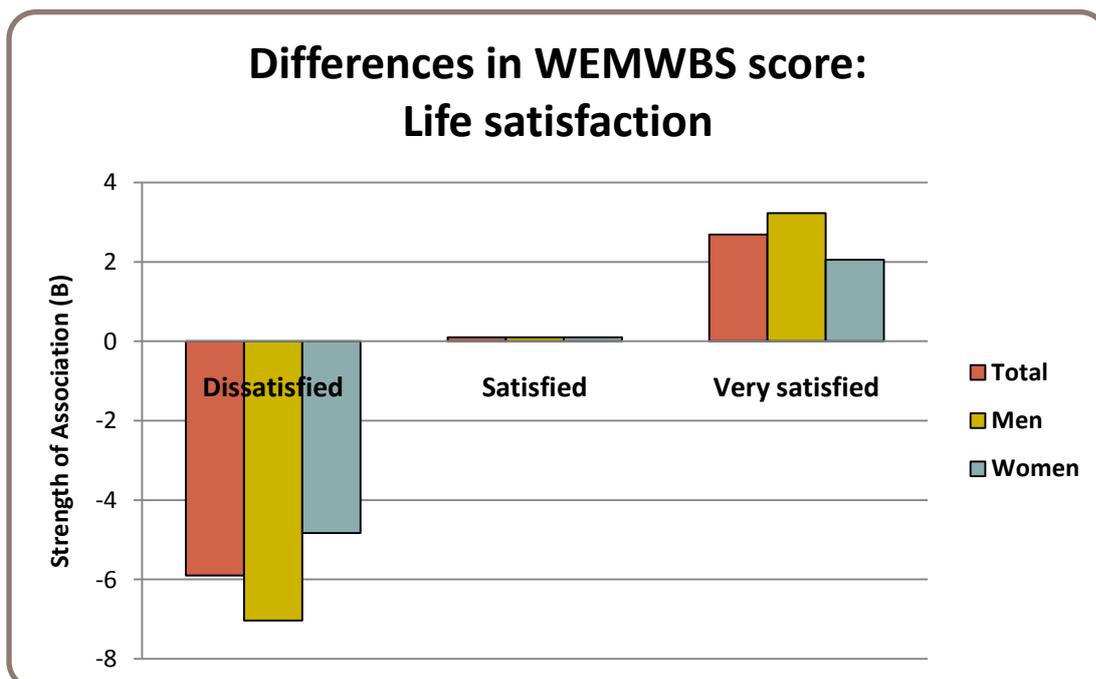
This variable was added to the survey this year and so no comparisons can be made between this year and last. For the total population, men and women, the more satisfied someone is with their life the higher their mental wellbeing is likely to be; the less satisfied with life, the lower their mental wellbeing is likely to be. This is the strongest variable in the model.

- Of all the variables included in this analysis, life satisfaction was most strongly associated with mental wellbeing.
- The trend is strong amongst men, where men who report being dissatisfied with life have an average mental wellbeing score 7 points lower than men who are satisfied.
- Though the association is slightly weaker amongst women, women who are dissatisfied with life have mental wellbeing scores nearly 5 points lower on average than women who are satisfied with life.
- Further, men and women who are very satisfied with life have mental wellbeing levels on average nearly 3 points higher than those who are satisfied.

Statistically significant associations:

- For the total population, men and women, life satisfaction is significantly associated with mental wellbeing.

Figure 13: Associations between life satisfaction and mental wellbeing



Neighbourhood characteristics

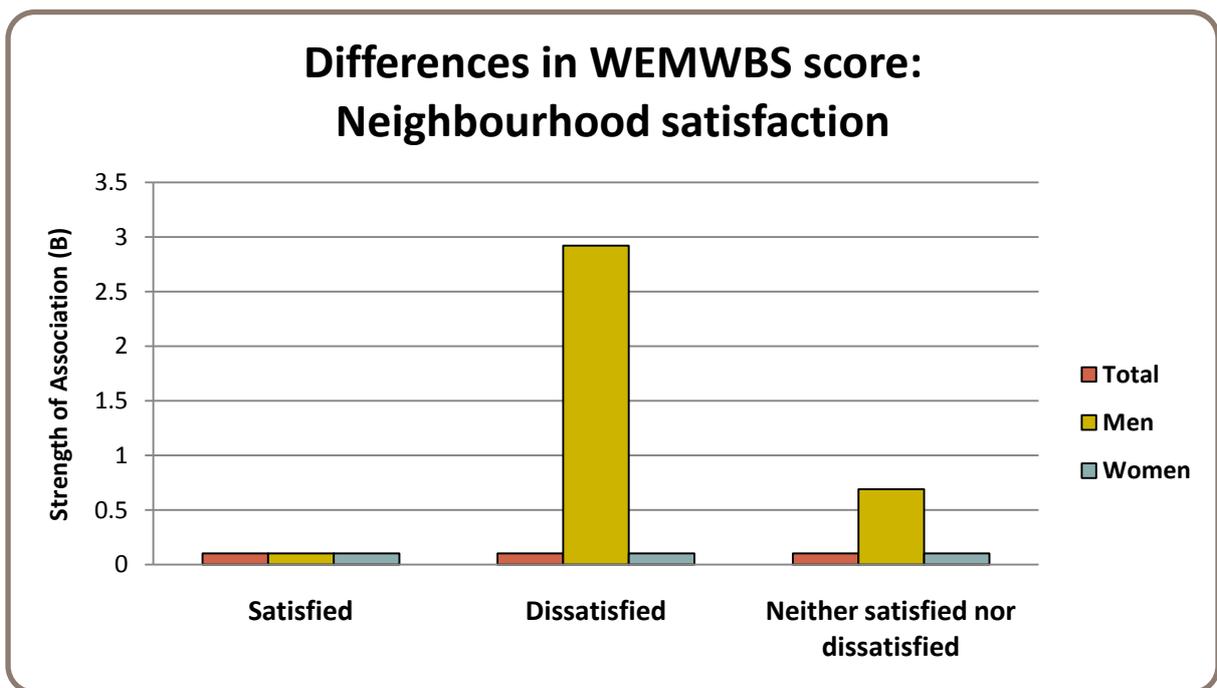
Satisfaction with neighbourhood

- Neighbourhood satisfaction was only a factor associated with mental wellbeing in men.
- Men who were dissatisfied with their neighbourhood had mental wellbeing levels nearly 3 points lower on average than men who were satisfied with their neighbourhood.

Statistically significant associations:

- Among men, being **dissatisfied** with one's neighbourhood was significantly associated with **higher** levels of mental wellbeing. This is an unexpected finding, and further analysis will need to be done to investigate potential explanations for this finding.

Figure 14: Associations between neighbourhood satisfaction and mental wellbeing



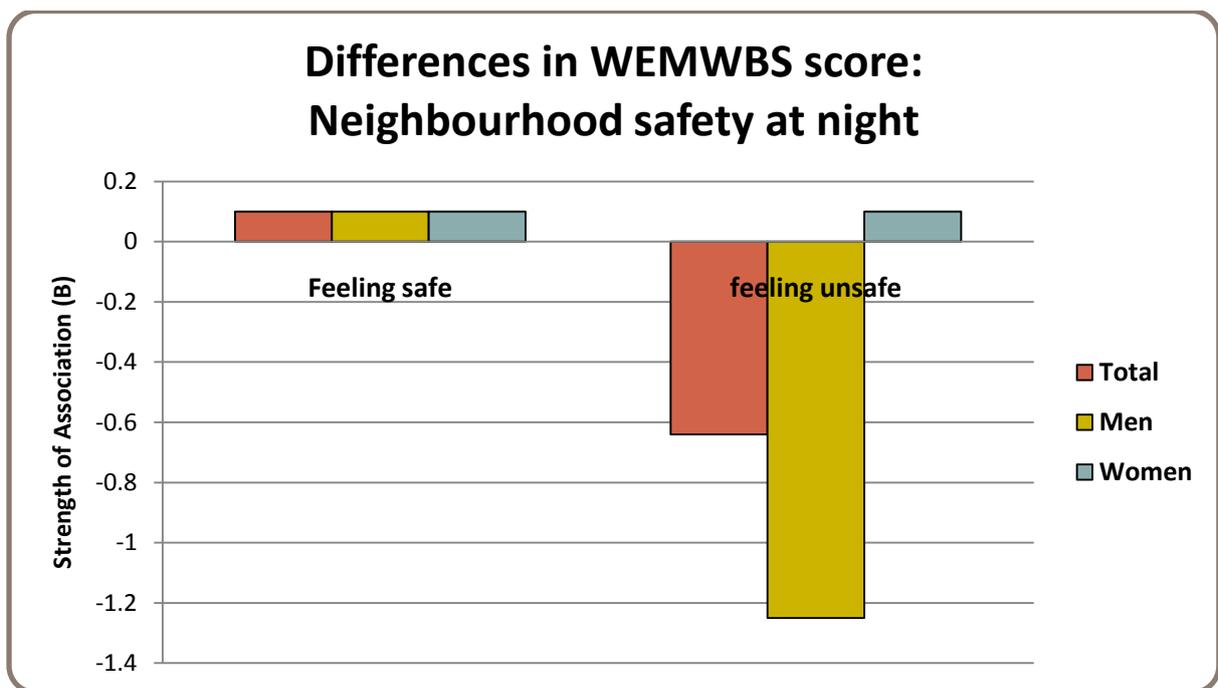
Neighbourhood safety at night

- Feeling unsafe at night was a factor included in the regression model for the total population and for men. Interestingly, feeling safe at night was not a factor for women this year as last year night time safety was significantly associated with mental wellbeing in women.

Statistically significant associations:

- Feeling unsafe at night was not significantly associated with mental wellbeing in the total population and in men; it was not a factor included in the model for women.

Figure 15: Associations between safety and mental wellbeing



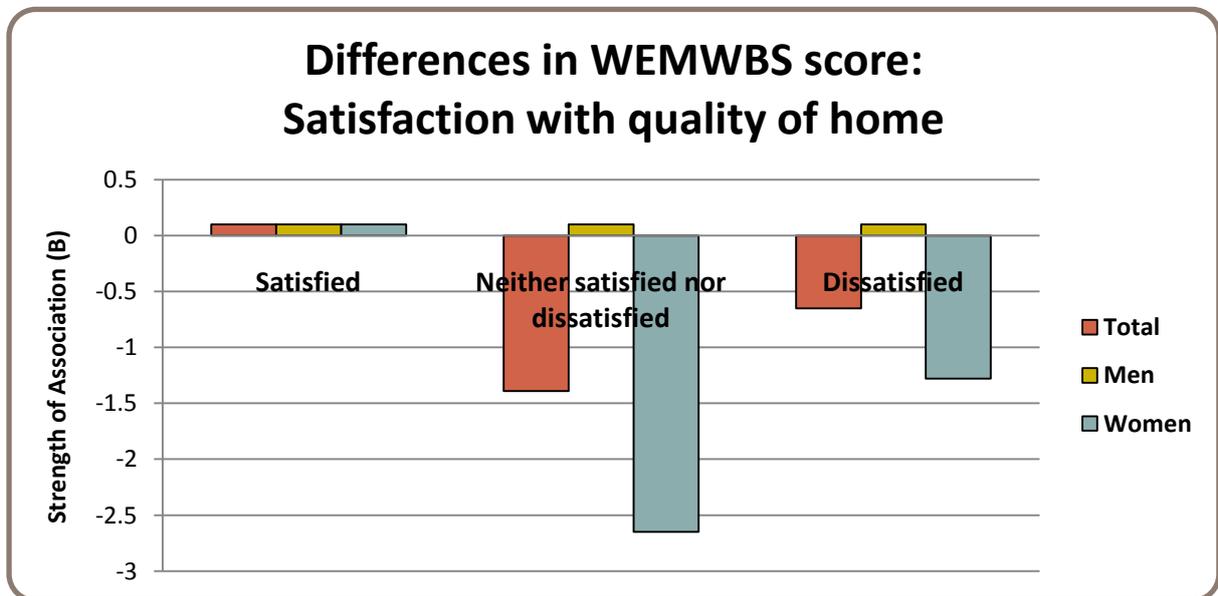
Satisfaction with home quality

- Being satisfied with the quality of one’s home was a factor included in the total population and for women, but not for men.
- Amongst women, those who were neither satisfied nor dissatisfied with the quality of their home had lower levels of mental wellbeing than those who were satisfied with the quality of their home.
- Though the figure below shows women dissatisfied with the quality of their home having lower levels of mental wellbeing, this is not a significant association, and they are just as likely to have high or low levels of mental wellbeing as women who are satisfied with their homes.

Statistically significant associations:

- Women who were neither satisfied nor dissatisfied with the quality of their home had significantly lower levels of mental wellbeing than those who were satisfied with the quality of their home.

Figure 16: Associations between home satisfaction and mental wellbeing



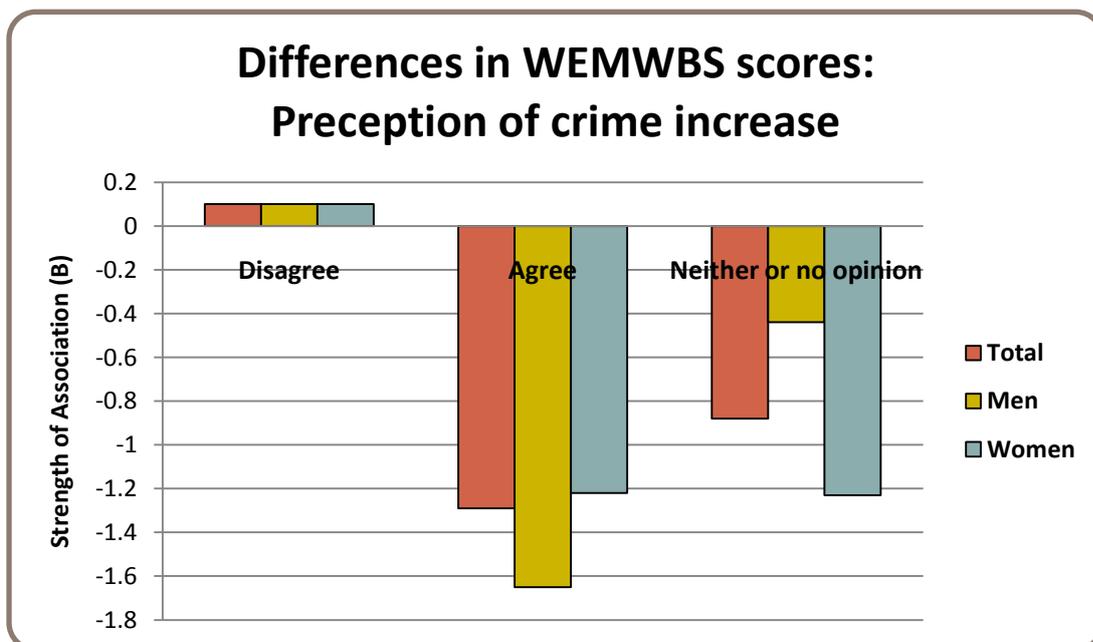
Perception of increasing crime

- Among the total population, people who agree that crime has increased in their neighbourhood in the past year have significantly lower levels of mental wellbeing than those who disagree; that is those who do not think local crime has increased.
- This association was stronger in men than in women; men who agreed that local crime was on the increase had mental wellbeing levels 1.7 points lower on average than those who disagreed.
- An association was also observed in women, though the association was slightly weaker than for men. Women who agreed crime had increased had mental wellbeing levels 1.2 points lower on average than those who disagreed.

Statistically significant associations:

- Mental wellbeing levels were significantly lower on average amongst the total population, men and women who agreed that crime had increased in their neighbourhood in the last year.

Figure 17: Associations between agreement of increased neighbourhood crime and mental wellbeing



Discussion and Key Point Summary

Coventry's population

Overall the findings suggest that the sample for this survey are representative of Coventry as far as age and gender are concerned. There are no major proportional differences between participant characteristics from the 2009/10 data and this year; however, there are geographical differences (Deprivation quintiles are proportionally different between years). There are some health and wellbeing differences, described below.

- A larger proportion of the sample than last year report their health as good (82% vs 76%).
- A smaller proportion of the sample are physically active 5 times a week or more (33% vs 42%), but a greater proportion are playing sport 1 to 4 times per week and the rate of those never playing sport has decreased.
- People in Coventry are consuming fruits and vegetables at levels similar to last year.
- There has been a small decrease in the proportion of people reporting good quality sleep, however this is still the case for over half the sample.
- Smoking rates are lower than last year.
- Alcohol remains a concern as the same proportion of people who report that they are drinking over the recommended limits of alcohol on at least one occasion per week remains high at 56% of those who drink at all. It's not all bad news, as there was a reduction in the proportion of drinkers drinking over the recommended amount 4-7 days per week.
- As far as their environment is concerned, people continue to be largely satisfied with their neighbourhoods and homes. Nine out of ten people are satisfied with the quality of their home, and 86% with their neighbourhood. A greater proportion of this year's respondents feel that crime has increased compared to last year (28% vs 24% in 2009/10) but the proportion also increased among those who don't think crime has increased, leaving a reduction in the proportion of those who neither agree nor disagree.

Mental wellbeing in Coventry

In this sample of Coventry residents, there were similarities and differences in mental wellbeing between this year and last year's survey results, yet the majority of the factors identified in the multivariate regression that were associated with mental wellbeing are consistent across both years.

Direct comparisons between the 2009/10 and 2011 data can tell us very little at this stage of observation. Annual or biennial monitoring of trends is perhaps a better approach to identifying trends and fluctuations in WEMWBS scores among Coventry residents over time. Nevertheless it is worth reporting that the majority of observed changes were fluctuations in the strength of association between mental wellbeing and included factors. Two variables which changed in more substantial ways were ethnicity and physical activity. Last year ethnicity was included in the total population multivariate model and this year it was not. Physical activity was not included in last year's multivariate model but this year it was significantly associated with mental wellbeing.

Age and gender: Overall, those who were middle aged had lower levels of mental wellbeing than the younger or the older population groups for women, a trend consistent with last year for men and women. However, this year men 45-54 had higher levels of mental wellbeing than almost every other age; the exception being 16-24 year olds. None of the differences between age bands were significant regarding mental wellbeing levels after adjusting for other variables. Gender is not significantly associated with mental wellbeing after adjusting for other factors.

Deprivation: In this sample, the differences observed between levels of deprivation and mental wellbeing do not appear to follow expected results. In the simple linear regression (not shown) deprivation level is significantly associated with mental wellbeing. However, looking at the differences between levels of deprivation shows no direction of a trend. If the level of deprivation was associated with mental wellbeing, we might expect to see mental wellbeing levels decreasing as level of deprivation increases. This has not been observed, and further examination should be done in order to identify whether or not this is an accurate reflection of the population, or statistical artefact.

Other UK surveys that have included WEMWBS have found similarly unclear trends. The Northwest Public Health Observatory (NWPHO) conducted a very large survey (n=18,500) of mental wellbeing which included the 7-item WEMWBS [29]. In a recent follow up of the NWPHO survey that examined wellbeing, employment, and resilience, the authors found that respondents living in the **third** most

deprived areas were more likely to have below average mental wellbeing than their more deprived counterparts. The large regional survey did also find that living in the most deprived communities was 'strongly associated' with below average levels of mental wellbeing. However, the methods used in this report do not appear to account for multiple variables which might influence the strength of the association between mental wellbeing and deprivation levels, as observed in this report.

The association between mental wellbeing and deprivation was more pronounced in Scotland. In 2008, the Scottish Health Survey researchers found that respondents living in the most deprived and second most deprived quintiles were more likely to have below average WEMWBS scores. In women only, the likelihood of having below average WEMWBS scores increased as deprivation increased [30]. Further, the method of analysis used was a multivariate logistic regression accounting for multiple variables simultaneously.

The above reports suggest that there is an association between deprivation levels and mental wellbeing, particularly at the extremes of 'most' and 'least' deprived. However, there appears to be no consistent direction of relationship between mental wellbeing and each deprivation level, and so it will be important to monitor other reports and research examining these potential associations.

Education: There is a positive association between education and mental wellbeing, showing that the higher a person's level of education, the higher their mental wellbeing scores are likely to be. However, this trend was only significant among the total population when comparing persons with no qualifications to those with high qualifications. Last year this relationship was stronger amongst women, however there is no evidence of that finding this year.

Employment: Being unemployed was significantly associated with lower levels of mental wellbeing. In 2009/10 this trend was stronger amongst men; this year it is stronger amongst women.

Ethnicity: Any relationship between ethnicity and mental wellbeing was not statistically detected in this year's sample.

Sleep quality: Good sleep remains strongly associated with mental wellbeing. The better the quality of sleep, the higher the level of mental wellbeing. For the total population, men and women this relationship was significant. Sleep quantity was not found to be as strongly associated with mental wellbeing as quality of sleep, a findings supported from other research [31].

Self-rated health status: Self-rated health status was again one of the strongest factors associated with mental wellbeing in this population overall, and for men and women. The better a person rated their health status, the higher their mental wellbeing levels were likely to be.

Fruit and vegetable consumption: Eating the optimal amount of fruit and vegetables on a daily basis was related to higher levels of mental wellbeing, consistent with last year's findings.

Physical activity: The relationship between mental wellbeing and physical activity is well documented in other research, however it was not found to be associated with mental wellbeing in last year's survey. This year, it was an associated factor. Being frequently physically active in any way (from cleaning the house to cycling in the park), was significantly associated with higher levels of mental wellbeing. Although playing sports was also associated, it was not a significant factor relative to other factors in this analysis. Generally, the less physical activity a person does, the lower their mental wellbeing scores are likely to be.

Life satisfaction: This was a new question added to the survey in 2011. It is very strongly associated with mental wellbeing. In the total population and in men and women, being dissatisfied was significantly associated with lower levels of mental wellbeing, and being very satisfied was significantly associated with higher levels of mental wellbeing compared to those 'satisfied with life'. This trend was stronger in men than in women.

Neighbourhood characteristics: Dissatisfaction with the quality of one's home was significantly associated with poorer mental wellbeing levels amongst women only, it was not a factor for men. This is a change from last year, where it was not a factor for women but was for men (non-significant). Dissatisfaction with one's neighbourhood was related to poorer mental wellbeing levels in men, but not in women, matching findings from last year. Interestingly, feeling unsafe at night in one's neighbourhood was associated with lower levels of mental wellbeing in men; last year the opposite was true, however this association was not significant.

Strengths & Weaknesses

A weakness of this year's survey included errors made during the data collection process which resulted in the removal of cases. These errors were nevertheless identified and steps can be taken to inform decisions for future survey data collection.

This is a survey of data collected at one point in time, and the relationships reported describe a population at one point in time. It has to be emphasised that correlation between a factor and mental wellbeing does not automatically imply that the factor causes alteration in wellbeing scores.

Further, factors which might be very important or associated with mental wellbeing may not have not been included in this survey, for this population it remains unknown how some factors interact with others resulting in associations with mental wellbeing. These include common mental health problems, levels of social support, and the quality of employment; all these variables have been associated with mental wellbeing elsewhere but are not included in this survey. A more focused approach to identifying factors associated with mental wellbeing in Coventry could help determine better predictors and key areas for local improvement. Continued investigation into this survey and others is warranted.

A strength of this survey is the use of the WEMWBS as a tool for monitoring and comparing mental wellbeing around the country; The Health Survey for England is now measuring mental wellbeing using WEMWBS, creating the opportunity to measure Coventry's wellbeing alongside national trends.

Conclusions & Recommendations

The data collected from this survey demonstrate general trends among the population that will be able to provide insight to develop a response strategy and improve wellbeing in Coventry.

There are some clear indicators of factors associated with mental wellbeing for the Coventry Partnership to reflect on this year.

Characteristics such as age and gender demonstrate some differences between groups, however the majority of these differences are not significant; men are just as likely to experience low and high levels of mental wellbeing as women adjusting for other factors. There were no statistically significant associations between mental wellbeing and age in the final adjust model. People 16 and over are equally likely to experience lower and higher levels of mental wellbeing.

There is little evidence of a positive, linear relationship between deprivation levels and mental wellbeing observed in this sample of Coventry residents; there is little evidence of a trend demonstrating consistent increases between less deprivation and greater mental wellbeing. Further investigation into this association is required.

Largely consistent with last year, people at greater risk of having poor mental wellbeing are those who are less well educated, who are unemployed, who sleep poorly, who are in poor physical health and who are dissatisfied with life. Satisfaction with one's environmental surroundings has again shown to be associated with mental wellbeing. This year we have found that a lack of physical activity and dissatisfaction with one's life overall are factors associated with poorer mental wellbeing in this sample. Life satisfaction proved to have the strongest association with mental wellbeing levels.

We have found that people with higher levels of mental wellbeing are more frequently physically active even if that activity is housework or brisk walking; they report consuming optimal amounts of fruits and vegetables, feel safe in their neighbourhoods, have better quality sleep, report good general health and are satisfied with life.

A direction of travel for wellbeing in Coventry

Last year, the following definition was used to define Well-being:

“A positive physical, social and mental state;...It requires that basic needs are met, that individuals have a sense of purpose, that they feel able to achieve important personal goals and participate in society. It is enhanced by conditions that include supportive personal relationships, strong and inclusive communities, good health, financial and personal security, rewarding employment, and a healthy attractive environment.” (Whitehall well-being working group 2006)

This definition incorporates prerequisites for health as laid out by the Ottawa Charter of Health Promotion (WHO,1986), and builds upon the knowledge and understanding that wellbeing is a complex concept; there is no simple definition and there is no simple response for understanding and addressing the wellbeing needs of a population. Yet on the basis of this definition, the results from this survey give us some indication of the direction of travel for improving mental wellbeing in Coventry, with local government and NHS Coventry promoting elements of wellbeing already.

- Basic needs include access to good quality housing, food, and security and this is reflected in the relationship between mental wellbeing and home and neighbourhood satisfaction and safety.
- A sense of purpose and the achievement of personal goals are factors related to wellbeing operating at the individual level. These elements of wellbeing are enhanced by supportive and nurturing parenting; in home, school, and workplace environments where opportunities to develop and maintain self-efficacy, where confidence and responsibility are abundant. A high satisfaction with life may be indicative of these elements being present among many Coventry residents.
- Supportive personal relationships and strong inclusive communities (large or small) have the opportunity to flourish in educational and employment establishments when wellbeing is made a priority, as well as in the home. This is highlighted in the relationship between education, employment and mental wellbeing. However it must be pointed out that there is a distinct and important difference between having employment and having rewarding employment.
- Evidence from this report supports the relationship between good mental wellbeing and having good physical health, indicated by self rated health status, physical activity levels, and eating optimal amounts of fruit and vegetables every day.

Key points summary

→ The association between mental wellbeing and healthy lifestyle behaviours such as fruit and vegetable consumption and physical activity remained strong. It is likely that the *promotion of healthy lifestyles will improve mental as well as physical wellbeing.*

→ Sleep quality remains an important factor related to good mental wellbeing, *investigating the extent to which poor sleep quality is a manifestation or a cause of poor wellbeing* as well as the transition from poor to better quality sleep are worthwhile public health concerns to address.

→ Life satisfaction was a new addition to this year's report. It was strongly associated with mental wellbeing, and indicates that the recent shift of focus to subjective *quality of life* measures rather than 'objective' measures of income and social status provide a more robust understanding *for investing in what is valued by the residents of Coventry.*

→ For the second year in a row, the relationship between Deprivation Quintile and Mental Wellbeing does not show a clear trend. Further investigation is needed to better understand this relationship.

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Appendix

Appendix A: Additional tables- Multivariate regression results

Multivariate linear regression determinants of WEMWBS scores for the total population, and stratified population by gender.			
	Association with WEMWBS score (regression coefficient with 95% CI)		
Variable	Total (n≈2552)	Men (n≈1241)	Women (n≈1336)
Gender	-0.61 (-1.24, 0.02)	--	--
Age band			
16-24	1.04 (-0.11, 2.18)	0.73 (-1.48, 1.63)	1.63 (-0.05, 3.30)
25-34	0.35 (-0.67, 1.38)	-0.14 (-1.61, 1.33)	0.75 (-0.67, 2.18)
35-44	-0.02 (-1.05, 1.00)	-1.04 (-2.50, 0.43)	0.97 (-0.46, 2.39)
45-54(REFERENCE)	0	0	0
55-59	0.05 (-1.44, 1.33)	-0.83 (-2.78, 1.12)	-0.11 (-2.01, 1.78)
60-64	0.69 (-0.69, 2.07)	-0.09 (-1.99, 1.80)	1.67 (-0.34, 3.67)
65-79	0.14 (-1.22, 1.50)	-0.37 (-2.37, 1.64)	0.79 (-1.04, 2.62)
80+	-0.61 (-2.41, 1.19)	-1.42 (-4.06, 1.22)	1.35 (-0.98, 3.67)
Disability			
(none vs some limitations)	-1.23 (-2.58, 0.11)	-0.87(-2.80, 1.06)	-1.60 (-3.39, 0.19)
(none vs many limitations)	-0.79 (-2.44, 0.85)	-2.45 (-4.87, -0.03)*	0.49 (-1.71, 2.69)
Education			
(no qualifications vs low qualifications)	0.60 (-0.22, 1.43)	0.78 (-0.37, 1.94)	0.53(-0.64, 1.70)
(no qualifications vs high qualifications)	0.98 (0.11, 1.84)*	0.77(-0.42, 1.95)	1.17(-0.08, 2.43)
Employment			
(in work vs economically inactive)	-0.30 (-1.13, 0.53)	0.16 (-1.17, 1.48)	-0.79 (-1.87, 0.28)
(in work vs unemployed)	-1.2 (-2.36, -0.03)*	-0.19 (-1.76, 1.38)	-2.51 (-4.28, -0.76)**
Ethnicity			
(white vs mixed)	--	--	
(white vs Asian)	--	--	
(white vs Black)	--	--	
(white vs Chinese/other)	--	--	
Sleep quality			
(poor vs average)	2.23 (1.20, 3.26)***	2.44 (0.88, 4.01)**	1.64 (0.29, 2.99)**
(poor vs good)	3.49 (2.48, 4.50)***	3.35 (1.81, 4.89)***	3.54 (2.22, 4.86)***
Self-rated health			
(bad vs good)	4.62 (2.79, 6.45)***	3.49 (0.75, 6.22)**	4.99 (2.51, 7.46)***
(bad vs fair)	2.73 (0.97, 4.48)**	0.74 (-1.93, 3.41)	3.57 (1.25, 5.89)**
Fruit and vegetable consumption			
(5+ vs >1 to 4 portions daily)	-1.07 (-1.79, -0.35)**	-0.76(-1.80, 0.28)	-1.21(-2.19, -0.22)**
(5+ vs 1 or fewer portions daily)	-1.69 (-2.81, -0.56)**	-1.81(-3.35, -0.28)*	-1.44 (-3.04, 0.16)
Physical Activity, Any			
(5+ vs 1 to 4 times per week)	-0.99 (-1.73, -0.27)**	--	-0.93 (-1.93, 0.07)
(5+ vs never per week)	-2.73 (-3.77, -1.69)**	--	-3.30(-4.72, -1.87)***
Physical Activity, Sport			
(5+ vs 1 to 4 times per week)	-.594 (-2.07, 0.890)	--	-0.80 (-3.36, 1.76)
(5+ vs never per week)	0.49 (-0.98, 1.97)	--	0.38 (-2.12, 2.89)
Life Satisfaction			
(satisfied vs dissatisfied)	-5.90 (-7.56, -4.24)***	-7.03(-9.35, -4.71)***	-4.83(-7.21, -2.44)***

(satisfied vs very satisfied)	2.69 (1.99, 3.39)***	3.23 (2.26, 4.20)***	2.05 (1.06, 3.05)***
Home satisfaction			
(satisfied vs dissatisfied)	-0.65 (-2.23, 0.93)	--	-1.28 (-3.32, 0.77)
(satisfied vs neither satisfied nor dissatisfied)	-1.39 (-2.88, 0.09)	--	-2.65 (-4.79, -0.52)**
Night-time neighbourhood safety			
(feeling safe vs unsafe)	-0.64 (-1.42, 0.14)	-1.25 (-2.54, 0.02)	--
Crime increase in the past year			
(disagree vs agree)	-1.29 (-2.09, -0.51)**	-1.65(-2.79, -0.52)**	-1.22 (-2.30, -0.14)*
(disagree vs neither or no opinion)	-0.88 (-1.60, -0.15)**	-0.44 (-1.45, 0.56)	-1.23 (-2.26, -0.19)
Neighbourhood satisfaction			
(satisfied v dissatisfied)	--	2.92 (0.92, 4.92)**	--
(satisfied v neither satisfied nor dissatisfied)	--	0.69 (-1.09, 2.46)	--

* p<0.05 ; ** p< 0.01 ; *** p<0.001

Appendix A: Additional tables- Differences between entire dataset and Wellbeing Report dataset

Variable	% Entire sample (N=3548)	% Excluding 401 cases (N=3072-3147)	% point difference
Age Band	Entire	Excluding 401 cases	% point difference
16-24	17	17	--
25-34	19	19	--
35-44	18	17	1
45-54	15	16	1
55-64	14	14	--
65+	16	17	1
Gender	Entire	Excluding 401 cases	% point difference
Male	49	48	1
Female	51	52	1
Ethnicity	Entire	Excluding 401 cases	% point difference
White	78	78	--
Mixed	1	1	--
Asian	14	13	1
Black	5	5	--
Chinese & Other	3	3	--
Marital status	Entire	Excluding 401 cases	% point difference
Single	34	33	1
Married/cohabiting	53	54	1
Separated/divorced/widowed	12	13	1
Deprivation	Entire	Excluding 401 cases	% point difference
Quintile 1 (most deprived)	39	38	1
Quintile 2	25	26	1
Quintile 3	17	17	--
Quintile 4	13	13	--
Quintile 5 (least deprived)	6	6	--
Education level	Entire	Excluding 401 cases	% point difference
No qualifications	29	29	--
Levels 1 and 2; other qualifications	34	34	--
Levels 3 & 4	37	37	--
Employment status	Entire	Excluding 401 cases	% point difference
In paid work full time	36	36	--
In paid work part time	12	12	--
Self employed	3	3	--
Taking part in a Government training programme	*	0.2	--
Registered unemployed	4	4	--
Not registered but actively seeking work	2	2	--
At home, not seeking work	8	8	--
Long term sick/disabled	4	4	--
Retired	21	21	--
Student	9	9	--
Unpaid voluntary	*	0.3	--
carer	1	1	--
other	1	1	--
Health	Entire	Excluding 401 cases	% point difference
Limiting long term illness	14	15	1
Housing tenure	Entire	Excluding 401 cases	% point difference
Owner occupied	62	63	1
Rented from Whitefriars	9	9	--
Rented from other housing assoc	6	6	--
Private rental	20	20	--
Other	3	2	1

Appendix B: 2011 Coventry Household Survey

COVENTRY HOUSEHOLD SURVEY 2011

INTERVIEW DETAILS				
INTERVIEWER NAME :				
INT. I.D. NUMBER :				
INT. DATE				
INT. TIME: (USE 24 HOUR CLOCK)		INT. DAY (CIRCLE)		
HRS	MINS	MON	TUES	WED THURS
		FRI	SAT	SUN

INTRODUCTION: Good morning / afternoon. My name is and I work for BMG Research. We have been commissioned by the Coventry Partnership, which includes the City Council, local Police, Primary Care Trust, the Coventry Health Improvement Programme and other partners, to undertake an important survey about the quality of life in this neighbourhood and across Coventry as a whole. It's also about what needs doing to improve the area in the future.

RE-CONTACT SAMPLE: You may recall taking part in a similar survey last year.

To help us to analyse the data, the survey also asks some questions about you and your household.

All views are very important to the survey. May I please take 15 – 20 minutes of your time to ask you some questions? The questionnaire is entirely confidential and your personal details will not be passed on to any organisation without your permission. Information from the survey will be used by the Partnership to develop services and help create a better quality of life for residents here.

CHECK THAT THE RESPONDENT IS AGED OVER 16

INTERVIEWER RECORD GENDER : 1 MALE 2 FEMALE

1. Firstly, can you please tell me your age last birthday? **WRITE IN EXACT AGE AND THEN CODE. IF REFUSE SHOWCARD 1 AND CODE**

_____ YEARS

16 – 24	25 - 34	35 – 44	45 - 54	55 - 59	60 - 64	65 - 79	80+
1	2	3	4	5	6	7	8

LSOA: TO BE NOTED

The first questions are about the local neighbourhood (this means the streets and houses within a few minutes walk from your home)

1. So firstly, can I ask how long you have lived in this neighbourhood? **CODE ONE ONLY**

Less than 1 year	1
1-2 years	2
3-5 years	3
6-10 years	4
11-15 years	5
16-20 years	6
More than 20 years	7

2. And what do you like MOST about the neighbourhood where you live? **WRITE IN VERBATIM**

3. And generally, how satisfied are you with THIS NEIGHBOURHOOD as a place to live? **SHOWCARD 2 and CODE ONE ONLY**

Very satisfied	1
Fairly satisfied	2
Neither satisfied nor dissatisfied	3
Slightly dissatisfied	4
Very dissatisfied	5
Don't know	6

4. What is your overall perception of how quality of life in this neighbourhood has changed over the last 2 years? **CODE ONE ONLY**

Improved	1
Stayed the same	2
Got worse	3
Don't know	4

5. In which of these places, if any, do you a) currently get information about public services in Coventry and b) would like to be able to get information about public services in Coventry in the future? **SHOWCARD 3 and CODE ALL THAT APPLY FOR a) and b)**

	Q5a) Current	Q5b) Future
Local Newspaper	1	1
Local radio station	2	2
Citivision or other magazine	3	3
Website	4	4
By telephone	5	5
By visiting services in	6	6

person		
Posters	7	7
Leaflets	8	8
Libraries	9	9
Other, please specify:	10	10
None of above	11	11

6. Do you agree or disagree that you can influence decisions affecting your local area? **CODE ONE ONLY. SHOWCARD 4**

Definitely agree	1
Tend to agree	2
Tend to disagree	3
Definitely disagree	4
Don't know	5

7. On this card are a list of things people have said would make it easier for them to influence decisions. Which if any of these might make it easier for you to influence decisions in your local area? **SHOWCARD 5: CODE ALL THAT APPLY**

If I had more time	1
If the council got in touch with me and asked me	2
If I could give my opinion online/by email	3
If I knew what issues were being considered	4
If it was easy to contact my local councillor	5
If I knew who the local councillor was	6
If I could get involved in a group making decisions about issues affecting my local area/neighbourhood	7
Other, please specify:	8
Nothing	9
Don't know	10

8. Are you actively involved in working towards improving your neighbourhood? e.g. through Neighbourhood Watch, Residents or Tenants Association, Helping with Parent Teacher Association, volunteering at community building, etc. **CODE ONE ONLY**

Yes	1
No	2
Don't know	3

9. And generally, how hopeful do you feel about the future both for yourself and your household? **SHOWCARD 6 and CODE ONE ONLY**

Very hopeful	1
Hopeful	2
Neither hopeful nor worried	3
Worried	4
Very worried	5
Don't know	6

10. To what extent do you agree or disagree that this neighbourhood is a place where people from different backgrounds (i.e. different ethnic groups, faith groups, social backgrounds or countries of origin) get on well together? **SHOWCARD 7 and CODE ONE ONLY**

Definitely agree	1
Tend to agree	2
Tend to disagree	3
Definitely disagree	4
Don't know	5
Too few people live in the local area to judge	6

Section 2 - Housing and Environment

We would now like to ask you some questions about housing and the environment.

11. First of all, is your property....**READ OUT AND CODE ONE ONLY**

Owner Occupied	1
Rented from Whitefriars	2
Rented from another Housing Association e.g. Midland Heart	3
Rented from Private Landlord	4
Shared Ownership	5
Other PLEASE SPECIFY	6

12. And how satisfied are you with the quality of your home? **SHOWCARD 8 and CODE ONE ONLY**

Very satisfied	1
Fairly satisfied	2
Neither satisfied nor dissatisfied	3
Slightly dissatisfied	4
Very dissatisfied	5
Don't know	6

13. How likely is it that you will want to move house in the next 4 or 5 years? **CODE ONE ONLY**

Very likely	1	Go to Q14
Fairly likely	2	Go to Q14
Not very likely	3	Go to Q16
Not at all likely	4	Go to Q16
Don't know	5	Go to Q16

ASK Q14 if VERY OR FAIRLY LIKELY- OTHERWISE GO TO Q16:

14. What are the main reasons for you possibly wanting to move? **SHOWCARD 9 AND CODE ALL THAT APPLY**

To move to a larger property	1
To move to a smaller property	2
To move to a more modern property	3
To move to a property more suited to my needs	4
To change the type of tenure (renting, owning etc)	5
To be nearer place of work or job opportunities	6
To be nearer to my preference for schools	7
To be nearer to shops and local facilities	8
To be nearer family or friends	9
To move away from an unsatisfactory situation	10
To move to a more desirable location	11
Other PLEASE SPECIFY:	12
No particular reason	13

15. And whereabouts would you most like to move to? **CODE ALL THAT APPLY**

Somewhere in this neighbourhood	1
Elsewhere in Coventry [PROBE] Whereabouts?	2
Somewhere outside Coventry [PROBE] Whereabouts?	3
Don't know	4

And now thinking about the environment....

16. Do you recycle any of the following? **READ OUT AND CODE ALL THAT APPLY. NOTE: INCLUDES CHARITABLE DONATIONS AND HOUSEHOLD CHARITY COLLECTIONS**

Paper and cardboard	1
Cans	2
Glass	3
Garden Waste	4
Textiles/Clothing/Shoes	5
None of the above	6

17. Please tell us if you have taken any of these environmental actions at home in the last 12 months? **SHOWCARD 10 and CODE ONE FOR EACH (a) to (e)**

	YES	NO
a) Reduced water use for instance by actions such as using a water saving device or dual flush in your toilet, not using a hose or garden sprinkler etc.?	1	2
b) Reduced energy use by actions such as not leaving your TV etc. on standby, turning off lights when leaving a room etc.?	1	2
c) Reduced the amount of waste you throw away by making compost out of kitchen and garden waste?	1	2
d) Encouraged wildlife in your garden by actions such as feeding birds, not using chemicals, planting wild flowers?	1	2
e) Grown your own fruit and vegetables Includes home garden, window boxes and allotments?	1	2

Section 3 - Community Safety

We would now like to ask you some questions about crime and community safety

18. How safe do you feel IN YOUR NEIGHBOURHOOD? **CODE ONE FOR EACH (a) to (b)**

	Very safe	Safe	Not very safe	Very unsafe	Don't know
a) Around your neighbourhood during the day	1	2	3	4	5
b) Around your neighbourhood at night	1	2	3	4	5

19. To what extent do you agree with the following statement 'Crime in my neighbourhood has increased over the last 12 months'? **SHOWCARD 11 and CODE ONE ONLY**

Agree strongly	1
Agree slightly	2
Neither agree nor disagree	3
Disagree slightly	4
Disagree strongly	5
No opinion	6
Have not lived in the area for 12 months	7

20. How much of a problem, if at all, are the following in your NEIGHBOURHOOD? **SHOWCARD 12 and CODE ONE FOR EACH**

	Major problem	Minor problem	Not a problem at all	Don't know
Theft from vehicles	1	2	3	4
Theft of vehicles	1	2	3	4
Traffic Offences (e.g. speeding)	1	2	3	4
Problem/Noisy Neighbours	1	2	3	4
People hanging around	1	2	3	4
Rubbish or litter lying around	1	2	3	4
Vandalism to bus shelters or public telephones	1	2	3	4
Vandalism to other types of public property	1	2	3	4
Graffiti	1	2	3	4
Burglaries	1	2	3	4
Mugging	1	2	3	4
People using or dealing drugs	1	2	3	4
People being drunk or rowdy in public places	1	2	3	4
Hate Crime (incident motivated by prejudice or hate. Reasons include age, faith, race, sexuality, disability)	1	2	3	4
Prostitution/Kerb Crawling	1	2	3	4
Mini Mopeds	1	2	3	4
Vandalism to private property	1	2	3	4
Dog fouling/barking	1	2	3	4
Other, PLEASE SPECIFY	1	2	3	4

Section 4 - Health and Well-being

I'd now like to move on to ask you some questions about health and well being.

21. First of all, would you say in general your health is...? **CODE ONE ONLY**

Very good	1
Good	2
Fair	3
Bad	4
Very bad	5

22. Are your day-to-day activities limited because of a health problem or disability which has lasted, or is expected to last, at least 12 months? (include problems related to old age) **CODE ONE ONLY. NOTE: INCLUDES MENTAL HEALTH**

Yes, limited a lot	1
Yes, limited a little	2
Not at all	3

WHERE YES IN Q22:

23. How would you describe your impairment?

Physical	1
Sensory	2
Learning	3
Mental	4
Other	5

ASK ALL:

The following questions are designed to be asked of everyone to find out how physically active and healthy people who live in the Coventry area are with regard to people living elsewhere.

24. Please tell which of these statements best describes your level of mobility at the moment? **SHOWCARD 13 AND CODE ONE ONLY**

I have no problems in walking about	1
I have some problems in walking about	2
I am confined to bed	3

25. Please tell which of these statements best describes your level of ability with regard to self-care? **SHOWCARD 14 AND CODE ONE ONLY**

I have no problems with self-care	1
I have some problems washing or dressing myself	2
I am unable to wash or dress myself	3

26. Which of these statements best describes the extent to which you are able to carry out usual activities such as work, study, housework, family or leisure activities?

SHOWCARD 15 AND CODE ONE ONLY

I have no problems with performing my usual activities	1
I have some problems with performing my usual activities	2
I am unable to perform my usual activities	3

27. Which of these statements best describes the level of pain or discomfort you may be experiencing? **SHOWCARD 16 AND CODE ONE ONLY**

I have no pain or discomfort	1
I have moderate pain or discomfort	2
I have extreme pain or discomfort	3

28. And which of these statements best describes the level of anxiety or depression you may be experiencing? **SHOWCARD 17 AND CODE ONE ONLY**

I am not anxious or depressed	1
I am moderately anxious or depressed	2
I am extremely anxious or depressed	3

29. In order to help gauge the state of health of people in the local area, compared with those in other areas, I would like you to indicate how good or bad your own health is today, in your opinion? For this we are using a scale of 0 to 100 and I would like you to indicate the point on the scale which best reflects how good or bad your health state is today. **SHOWCARD 18 (SCALE OF 0 – WORST IMAGINABLE HEALTH STATE TO 100 – BEST IMAGINABLE HEALTH STATE) WRITE IN NUMERICAL VALUE GIVEN**

30. How would you rate the quality of your sleep in the last month? **CODE ONE ONLY**

Poor	1
Average	2
Good	3
Not sure	4

31. And approximately, how long have you typically slept for per night during the last month (including naps during the day). **WRITE IN NUMBER OF HOURS PER DAY (ROUNDED NEAREST HOUR)**

Number of hours

32. How many portions of fruit or vegetables would you say you eat in a typical day?
CODE ONE ONLY SHOWCARD 19

A portion can be:

- Vegetables (fresh, raw, tinned, or frozen) 1 portion = 3 tablespoons
- Pulses, 1 portion = 3 tablespoons or more
- Salad, 1 portion = 1 bowl
- Fresh fruit, 1 portion = 1 medium apple
- Dried fruit (excluding cereal, cakes) 1 portion = 1 tablespoon or more
- Frozen or tinned fruit, 1 portion = 3 tablespoons
- Fruit juice (excluding cordials, fruit drinks, squashes), 1 portion = 1 small glass or more

Potatoes, rice or pasta are not included.

At least 5 portions	1
At least 3 portions, but less than 5 portions	2
At least one portion, but less than 3 portions	3
About one portion	4
Less than one portion	5
Don't know	6
Refused	7

33. Do you, or have you ever, smoked? **CODE ONE ONLY**

Yes, I currently smoke	1	Go to Q34
Yes, but I no longer smoke	2	Go to Q35
No	3	Go to Q35

WHERE SMOKE (Q33/1):

34. On average, how many cigarettes (including roll ups, cigars etc) do you smoke per day? **WRITE IN NUMBER OF CIGARETTES**

Number smoked per day	
-----------------------	--

DO NOT ASK IF Q33=CURRENT SMOKER:

35. Are you currently exposed to passive smoking (second hand smoke) either at work or at home? **CODE ONE ONLY**

Yes	1
No	2
Don't know	3

36. How many days in a typical week do you usually drink alcohol? **CODE ONE ONLY.**
NOTE: ALSO THINK ABOUT SPECIAL OCCASIONS

7 days	1	Go to Q37
5-6 days	2	
2-4 days	3	
Once per week	4	
Less than once per week	5	
Don't drink	6	Go to Q38

37. How many days in an average week, do you drink more than [WOMEN 2-3 units] [MEN 3-4 units] of alcohol? **CODE ONE ONLY. SHOWCARD 20 FOR UNIT**

DEFINITIONS

- Normal strength beer, lager, cider (less than 6% ABV) = 1 pint equals 2 units; cans or bottles (size unknown) equals 1.5 units.
- Strong beer, lager, cider (6% ABV or more) = 1 pint equals 4 units; cans or bottles (size unknown) equals 2.5 units .
- Spirits and liqueurs glass (single measure) = 1 unit
- Sherry, martini, vermouth or other fortified wines (glass) = 1 unit
- Wine = small glass (125ml) equals 1.5 units; standard glass (175ml) equals 2 units;
- large glass (250ml) equals 3 units
- Alcopops/alcoholic soft drinks = small can or bottle equals 1.5 units

0 days	1
1 day	2
2 days	3
3 days	4
4 days	5
5 days	6
6 days	7
7 days	8
Refused	9
Don't know	10

38. Can you tell us how frequently, if at all, you do the following? **SHOWCARD 21 AND CODE ALL THAT APPLY**

**PHYSICAL ACTIVITY SHOULD BE OF MODERATE INTENSITY* - PROMPT -
*FOR AT LEAST 30 MINUTES AT A TIME WHERE THE PARTICIPANT IS
SLIGHTLY OUT OF BREATH BUT ABLE TO TALK**

	At least 5 times a week	3-4 times a week	Less than 3 times a week	Never	Don't know
Take part in ANY physical activity* (e.g. brisk walking, cycling, housework, gardening, DIY, swimming, or sport)	1	2	3	4	5
Participate in any sport (e.g. playing football, netball, attending an aerobics class, visiting the gym, visit a sports/leisure centre, running, cycling, swimming etc)	1	2	3	4	5

I am now going to be asking you to respond to statements about your thoughts and feelings over the past two weeks. The aim of this is to find out about local people's feelings in general. Your responses will not be linked back to you, remaining anonymous when the survey findings are reported. I'd like you to read out the letter relating to each statement and **then tell me how often each applies to you.** (If necessary: On my screen I only have the statements listed by their letter, not the statement written out in full.)

39. Please tell me which best describes your experience of each statement over the last two weeks.... **SHOWCARD 22 AND CODE ONE ONLY FOR EACH**

		None of the time	Rarely	Some of the time	Often	All of the time
A	I've been feeling optimistic about the future	1	2	3	4	5
B	I've been feeling useful	1	2	3	4	5
C	I've been feeling relaxed	1	2	3	4	5
D	I've been feeling interested in other people	1	2	3	4	5
E	I've had energy to spare	1	2	3	4	5
F	I've been dealing with problems well	1	2	3	4	5
G	I've been thinking clearly	1	2	3	4	5
H	I've been feeling good about myself	1	2	3	4	5
I	I've been feeling close to other people	1	2	3	4	5
J	I've been feeling confident	1	2	3	4	5
K	I've been able to make up my own mind about things	1	2	3	4	5
L	I've been feeling loved	1	2	3	4	5

		None of the time	Rarely	Some of the time	Often	All of the time
M	I've been interested in new things	1	2	3	4	5
N	I've been feeling cheerful	1	2	3	4	5

40. All things considered, how satisfied are you with your life as a whole nowadays? On a scale of 0-10, where 0 is extremely dissatisfied and 10 is extremely satisfied. **CODE ONE ONLY**

											DK/refused
1	2	3	4	5	6	7	8	9	10		11

Section 5 – Work and Training

41. Which of the following best describes your current economic status? **SHOWCARD 23 and CODE ONE ONLY**

In full time paid work	1
In part time paid work	2
Self employed	3
Taking part in a government training programme (e.g. trade and modern apprenticeships, work based learning for adults)	4
Registered unemployed/signing on for Job Seekers Allowance	5
Not registered unemployed but actively seeking work (i.e. have actively looked for work in the last 4 weeks)	6
At home/not seeking work – (looking after the home or family)	7
Long-term sick or disabled	8
Retired	9
In full-time education	10
Doing unpaid/voluntary work	11
Carer	12
Other PLEASE SPECIFY:	13

42. And what type of work do you do, or did you do most recently? PROBE FULLY AND WRITE IN VERBATIM

If Working: Probe For Job Function, Job Title, Job Grade And Level Of Skill. Obtain Any Qualifications Required For Job (E.G. Degree, Vocational Qualifications – Apprenticeship Etc). If Owner/Professional/Manager/Supervisor – Probe For No. Of Employees In Company And The Industry Of The Employer.

If Retired ask if they have an occupational pension and find out what they used to do for work. If Unemployed, Obtain Information Regarding Previous Job Function.

If Housewife, Probe For Length Of Time As A Housewife And Obtain Information Regarding Previous Job Function As Appropriate

43. And how many adults living permanently in your household are in paid employment? CODE ONE ONLY. NOTE: EITHER FULL OR PART TIME.

None	1
1 person	2
2 people	3
3 people	4
4 or more people	5

44. And could you tell me, which of these is your highest qualification? SHOWCARD 24 AND SINGLE CODE. If the qualification is not listed, select the nearest equivalent. REFERS TO THE INDIVIDUAL RESPONDENT NOT THE HOUSEHOLD

Level 1: 1+ 'O' levels/CSE/GCSE (any grade), NVQ level 1, Foundation GNVQ	1
Level 2: 5+ 'O' levels, 5+ CSEs (grade 1), 5+ GCSEs (grade A - C), School Certificate, 1+ 'A' levels/'AS' levels, NVQ level 2, Intermediate GNVQ or equivalents	2
Level 3: 2+ 'A' levels, 4+ 'AS' levels, Higher School Certificate, NVQ level 3, Advanced GNVQ or equivalents.	3
Level 4/5: First degree, Higher Degree, NVQ levels 4 - 5, HNC, HND, Qualified Teacher Status, Qualified Medical Doctor, Qualified Dentist, Qualified Nurse, Midwife, Health Visitor or equivalents.	4
Other qualifications/level unknown: Other qualifications (e.g. City and Guilds, RSA/OCR, BTEC/Edexcel), Other Professional Qualifications.	5
No qualifications: No academic, vocational or professional qualifications.	6

Section 6 - Transport and Accessibility

45. For each of the following types of journey, what is the main form of transport that you currently use? **SHOWCARD 25 and CODE ONE FOR EACH**

	Travel to work	Education	Escorting children to school
Car as Driver	1	1	1
Car as Passenger	2	2	2
Train	3	3	3
Bus	4	4	4
Motorbike	5	5	5
Bicycle	6	6	6
Taxi	7	7	7
Walking	8	8	8
Park & Ride	9	9	9
Not applicable	10	10	10

Section 7 - General Profile Questions

Finally we've got a few questions about you; these are just to make sure we have covered a representative cross section of Coventry people.

46. What is your marital status? **SHOWCARD 26 and CODE ONE ONLY.**
INTERVIEWER NOTE: SELECT OPTION THAT BEST FITS

Single (Never married and never registered a same-sex civil partnership)	1
Co-habiting	2
Married	3
Separated but still legally married	4
Divorced	5
Widowed	6
In a registered same-sex civil partnership	7
Separated but still legally in a same-sex civil partnership	8
Formerly in a same-sex civil partnership that is now legally dissolved	9
Surviving partner from a same-sex civil partnership	10

47. How many people living permanently in your household (including yourself) are in each of the following categories? (Write the number in each category, enter 0 if the answer to any category is nil). **WRITE NUMBER of PEOPLE FOR EACH. CHECK: CROSS REFERENCE 4)-6) AGAINST WORKERS IN HOUSEHOLD (Q43)**

	Number
1) Pre-school age (0-4 years)	
2) Primary school age (5-11 years)	
3) Secondary school age (12-16 years)	
4) Post school education (16/17 years)	
5) Adult (18-59 or 64)	
6) Retired (60 or 65+)	

48. Please can you tell me which of the numbered options on **SHOWCARD 27** best describes you? Please just read out the number on the showcard which best describes you. If you prefer not to say, I can record that instead. **CODE ONE ONLY**

Heterosexual	1
Gay man	2
Gay woman/lesbian	3
Bisexual	4
Other	5
Prefer not to say	6

49. And looking at the card which number best describes your religion?
SHOWCARD 28 AND CODE ONE ONLY

No religion	1
Christian (including Church of England, Catholic, Protestant, and all other Christian denominations)	2
Buddhist	3
Hindu	4
Jewish	5
Muslim	6
Sikh	7
Any Other religion PLEASE SPECIFY:	8

50. Which of the following groups do you consider you belong to? **SHOWCARD 29 and CODE WHETHER A, B, C, D and E AND THE NUMBER WITHIN THE GROUP**

A	WHITE
1	BRITISH
2	IRISH
3	ANY OTHER WHITE BACKGROUND Please specify:
B	MIXED
4	WHITE AND BLACK CARIBBEAN
5	WHITE AND BLACK AFRICAN
6	WHITE AND ASIAN
7	ANY OTHER MIXED BACKGROUND Please specify:
C	ASIAN OR ASIAN BRITISH
8	INDIAN
9	PAKISTANI
10	BANGLADESHI
11	ANY OTHER ASIAN BACKGROUND Please specify:
D	BLACK OR BLACK BRITISH
12	CARIBBEAN
13	AFRICAN
14	ANY OTHER BLACK BACKGROUND Please specify:
E	CHINESE OR OTHER ETHNIC GROUP
15	CHINESE
16	ANY OTHER ETHNIC GROUP Please specify:

51. And finally, can I ask you what **three words** summarise Coventry as a place?

1	
2	
3	

52. The Coventry Partnership may want to involve people more in the future, looking at ways of improving services and the quality of life for residents. Would you be interested in taking part in further consultation such as workshops, focus groups and other surveys like this? **CODE ONE ONLY**

Yes (make sure contact details are collected on front page of survey)	1
No	2

WHERE YES:

53. Thank you for agreeing to take part in further consultation. Your details will be passed to the Coventry Partnership. As well as taking part in other consultation, you may be approached to take part in a follow-up survey to this one next year. Your participation in the follow up survey would also be anonymous and your responses would remain strictly confidential. Can you confirm that you are happy to take part in a follow-up survey to this one in approximately 12 months time?

Yes	1
No	2

MANY THANKS FOR YOUR ASSISTANCE IN COMPLETING THE QUESTIONNAIRE

RESPONDENT TO COMPLETE: I CONFIRM THAT THIS INTERVIEW WAS CONDUCTED WITH MYSELF IN A PROPER MANNER AND THAT THE DETAILS HAVE BEE RECORDED ACCURATLEY. I HAVE RECEIVED INFORMATION ABOUT BMG AND THE SURVEY

Respondent to sign:-----

Date:-----

To make sure that we are doing our job properly, a number of people interviewed will be asked to confirm that an interview has taken place. May we have your telephone number so this can be checked? Your telephone number will not be used for any other purpose and you will not be contacted except for this reason.

Telephone number: -----

THAT'S ALL THE QUESTIONS, THANK YOU VERY MUCH FOR COMPLETING THE SURVEY

Appendix C: BMG consultants data collection method

Supporting method details from BMG Research Consultants.

Methodology

All fieldwork involved face-to-face interviews with respondents, with interviews employing computer-assisted-personal-interviewing (CAPI) units to facilitate data collection. All fieldwork took place between week commencing 24th January 2011 and week commencing 28th March 2011.

There were three elements included in the fieldwork. A total of 3,548 interviews were conducted with respondents on their doorsteps across Coventry, including 404 interviews conducted with respondents that agreed to take part in further research during the 2009 household survey. A further 209 interviews were conducted with Coventry residents in-street.

For the first group of re-contacted respondents, a protocol was implemented in which interviewers sought to interview the named respondent for the first two calls at the address, and on the third call sought to interview the named person, but if that person was unavailable or refused, then they sought to interview another eligible adult in the household. Thus there were three potential outcomes for each contact – that the named contact was interviewed, that another member of the household was interviewed, or that no interview was achieved because the household had gone away, we were unable to achieve a contact, or we were refused interview. It was necessary to increase the number of calls to these addresses, however, when response rates were lower than expected.

The overall sample was structured so that the number of interviewers achieved by Middle Super Output Area (MSOA) was representative of the population distribution across all MSOAs in Coventry. Within MSOAs, sample quotas were set by gender and age, to reflect the 16+ population profile of each MSA⁵ and economic status based on recent estimates across the area⁶.

With regard to the main sample, for each MSA sampling point, interviewers were issued with a discrete list of all eligible addresses. Each address was loaded onto the CAPI units and would therefore only allow an interview to be recorded against a valid address within the sample point. Interviewers then followed established procedures to randomise the household selected. Within each household, if there was more than one eligible respondent, then the appropriate respondent would be selected using the 'first birthday' method.

Survey sample composition was controlled against quotas for age, gender, ethnicity and disability, and demographic variables such as employment status and tenure were also monitored, and, where necessary, the sample controlled at city level by these further criteria. Broad quotas for age and gender were set for each sampling point based on the latest (2009) mid-year population estimates. Quotas were assessed through the survey process in field, to ensure that the sample composition was meeting the targets set.

⁵ Based on ONS 2009 mid-year estimates (the most recent available)

⁶ Based on Labour Force Survey Data July 2009 to June 2010

Interviews were undertaken on weekdays between noon and 20.00 hours and at weekends between 09.00 hours and 18.00 hours, to ensure that ample opportunities were provided for all respondents to take part in the survey.

The achieved sample reflected the population profile of the area and as such it was decided that weighting data, usually undertaken in order to address sample bias, was not necessary.

BMG's in-house data validation team undertook random call-backs to 20% of all respondents to check the accuracy of data recorded, and the quality of the interviewing experience.

The 'in street' interviews were undertaken at the following locations over one weekend in March:

- West Orchards Shopping Centre
- City Arcade
- Arena Park Shopping Centre
- Trinity Street/Burges/Cross Cheaping
- Coventry Retail Market
- High Street
- Cannon Park

Interviewers carried with them a covering letter to explain the purpose of the survey (on Coventry Partnership headed paper), a shorter version of this introductory message in several languages, to be used as a laminated card, multi-lingual calling cards for households not answering, and 'show cards'.

Response rates:

Re-contacted sample

The base for this sample was those agreeing to be followed up in the 2009 Household survey.

The number of contacts available was 1,119. Interviews were achieved with 404 of the named contacts. Refusals accounted for 10% of contacts made. For the remainder of the re-contacted sample interviewers were unable to make contact with the named contact.

The number of call backs without a completed or refused outcome amongst the remainder of the contacts broke down as follows:

4+ call backs	31% of all contacts issued;
3 call backs	23% of all contacts issued;
2 call backs	3% of all contacts issued;
1 call*	1% of all contacts issued.

*Addresses that were no longer occupied, occupied by businesses or were unable to be located.

Main sample

The base for this sample was a random selection of households in Coventry.

Call outcomes were recorded for 7,320 addresses. Interviews were achieved at 2,935 of these addresses (a response rate of 40%). Refusals accounted for 33% of contacts made.