

# Project design, Analysis and Presentation of WEMWBS Findings

Thinking it through



**Warwick**  
Medical School

# Project Design 1

- Gaining permission
- Aims
  - What do you want to achieve?
  - What questions do you want to ask?
  - Any other outcomes to measure?
- Sample selection
  - Who, when and where?

# Project Design 2

- Timescales
- Introducing the WEMWBS to potential respondents – Information and consent
- Introductory “spiel” about your project and why you wish them to complete the questionnaire
- Confidentiality
- How to follow up people – unique identifiers
- Keep the design as simple as possible, collect only essential data – maximise response

# Sample Materials – (in workbook)

- Introductory “spiel” for researchers
- Consent form
- Questionnaire including WEMWBS – other questions can be added or removed depending on the project
  - For example: Other outcomes such as ..Attending an activity ...times per week. Measured/lost weight.

# Data Collection 1

- Establish a realistic and easy plan for data collection
- Who will do it?
- Be aware of non response and bias – try to collect as many as possible
- Give a code number to each respondent and write it on both questionnaire and consent form along with the date
- Collect the second questionnaire at least two weeks after the first
- Match name with consent form to find the code number
- Write the code number and the date on the questionnaire

# Data collection 2 – keep data safe

- Keep the consent forms and questionnaires safe and confidential in a folder at the collection site
- Label the folder with date and place (eg Mums and toddler group date and location)
- Use a locked drawer for consent forms which have names on them
- Only put respondent codes on questionnaires not names

# Workbook

- Project design questions for discussion in groups
- Questions 2-4 in workbook

# The WEMWBS – Scoring

STATEMENTS	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5



# Analysis 1

- Enter responses to each WEMWBS item into the spreadsheet tab titled “Data”–Time 1 (T1) and all other data (e.g. gender and age)
- If the respondent left any questions out just leave a blank space for it in the database
- The computer will “impute” up to 3 missing values when calculating the score for WEMWBS
- Enter other data from questionnaire

# Database – data entry 1

Respondent code	Date 1	Wellbeing questions at baseline													
	Time 1 (T1)	I've been feeling optimistic about the future	I've been feeling useful	I've been feeling relaxed	I've been feeling interested in other people	I've had energy to spare	I've been dealing with problems well	I've been thinking clearly	I've been feeling good about myself	I've been feeling close to other people	I've been feeling confident	I've been able to make up my mind about things	I've been feeling loved	I've been interested in new things	I've been feeling cheerful
A1	01/01/2014	4	4	4	4	4	5	4	5	4	5	4	4	3	4
A2	02/01/2014	3	4	3	4	3	4	3	4	3	4	3	4	3	4
A3	03/01/2014	4	4	4	4	4	5	3	5	4	4	4	4	4	4
A4	04/01/2014	4	4	5	4	5	4	5	3	4	4	4	4	4	4
A5	05/01/2014	3	4	3	3	3	3	4	3	3	3	4	3	3	3

# Database – data entry 2

Demographic questions			
Gender	Age	Employment status	Ethnicity
Male	13-15	Full time Education	White
Male	13-15	Full time Education	Refused
Male	13-15	Full time Education	Black
Male	16-24	Full time Education	White
Female	16-24	Paid Work: Full Time	Asian

# Analysis 2

- Make absolutely sure you have matched the code number for “Time 1” data correctly then enter WEMWBS at “Time 2” in the same way
- The computer spread sheet will calculate
  - WEMWBS scores
  - Average differences in the group: Beginning to end T2-T1
  - Graphs to show change in scores and percentage of people in low, middle and high group
  - Statistics by age and gender

# Presentation of Results

- Mean (average) WEMWBS scores before the project and after the project
- Mean Change
- Number and percentage of people with meaningful change
- See if statistically significant change in WEMWBS score has occurred – P value

# Coventry Healthy Schools Project – Wellbeing Mentors

- Project in eight secondary schools in Coventry over two years, 2010 – 2012.
- Pupils referred to wellbeing mentors by teachers and mentoring was for one session a week for six weeks.
- The WEMWBS questionnaire administered at the beginning (Time1), at six weeks at the end of the mentoring period (Time2) and at follow up ten weeks after completion (Time3). The change in WEMWBS total scores in the group of pupils was calculated.

# Using the spreadsheet to analyse data

- Using the spreadsheet for analysis
- Question 5

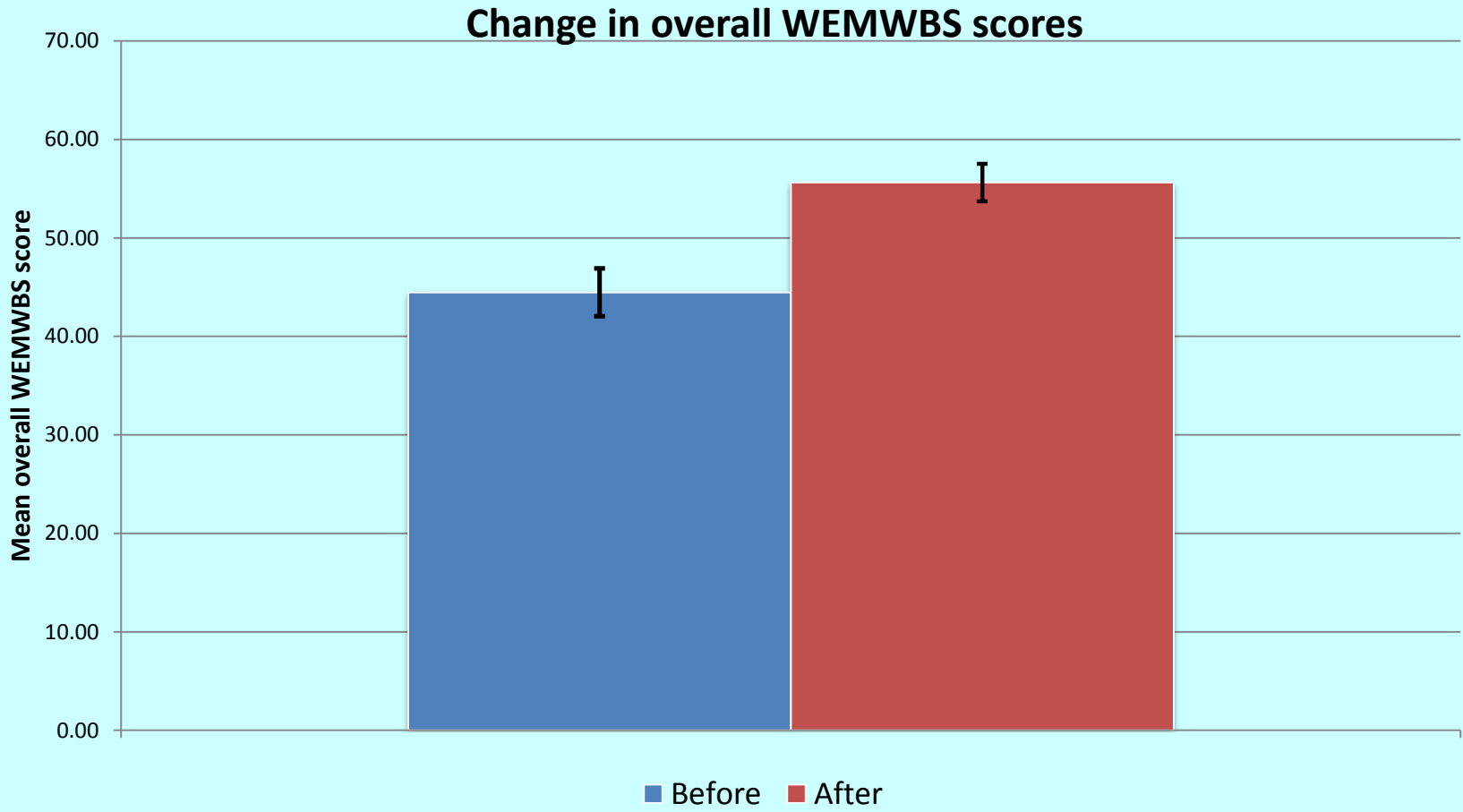
# Coventry Healthy Schools Project – Wellbeing Mentors

Change in WEMWBS scores between intervention time points

<b>Time-Points</b>	<b>Number of pupils</b>	<b>Change in Mean score</b>	<b>Standard deviation</b>	<b>P-value</b>	<b>Significant change?</b>
Time 3– Time 1	94	WEMWBS total mean score changed from 44.48 to 55.62 = 11.14 point change	10.9	P<.001	Significant positive change



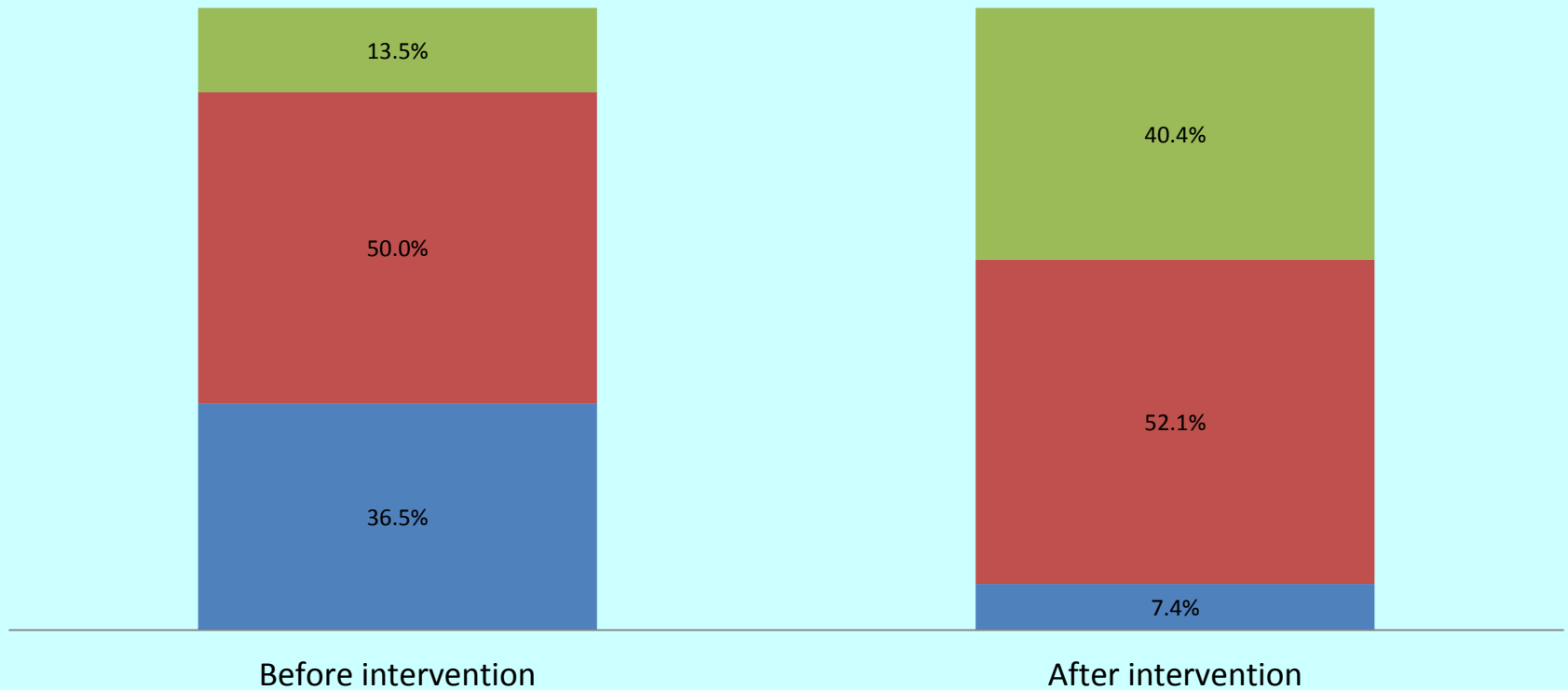
# Coventry Healthy Schools Project – Wellbeing Mentors



# Coventry Healthy Schools Project – Wellbeing Mentors

Proportion of clients in each group before and after intervention

■ % Low wellbeing    ■ % Moderate wellbeing    ■ % High wellbeing



# Coventry Healthy Schools Project – Wellbeing Mentors

- Using the WEMWBS to evaluate the project showed
  - Tangible evidence that the project was effective
  - Showed significant reduction in low wellbeing
  - Showed significant increase in wellbeing overall
  - Reasons for improvement may be either due to mentors alone or other changes associated with the project

# Communicate Results

- To all members of your team
- To participants
- To Coventry City Council
- Publish your findings in a journal
  - Example: Journal of Public Health