



University of the
West of England

Facts4Life Primary School Resource: Pilot Evaluation Report

Full Technical Report

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Executive Summary

Overview

Facts4Life is an initiative which aims to help everyone take ownership of their health by exploring illness and developing strategies to build wellbeing.

Led by the Facts4Life team (<http://facts4life.org>) together with Gloucestershire Healthy Living and Learning (<http://www.ghll.org.uk>), initial funding was obtained in 2012 for three years from Gloucestershire Clinical Commissioning Group (CCG) to develop, implement and evaluate a school-based health education resource, Facts4Life, in primary schools across Gloucestershire.

In July 2013 the Facts4Life team commissioned the University of the West of England, Bristol to conduct a pilot evaluation the Facts4Life resource. The pilot evaluation aimed to explore the effects of Facts4Life on school children's health-related attitudes, knowledge and behaviours. Furthermore, it aimed to provide insight into how the resource was received and the factors that could facilitate the dissemination and implementation of the resource more widely.

The key findings from the pilot evaluation are presented in this summary report. The full technical report provides a detailed account of the evaluation methodology, methods, findings, interpretation and recommendations for future development of the resource.

Pilot evaluation context

In recent years there has been increasing attention paid to the health and wellbeing of children in the UK, with obesity and overweight, physical inactivity, and mental health three areas of particular concern.

There is evidence to suggest that attitudes, beliefs and behaviour established during childhood can continue on into adulthood and as such, it is important to promote good health and wellbeing at an early age. The school environment provides a unique opportunity to promote health and wellbeing. In recognition of the fact that children spend much of their time at school, schools are now being encouraged to actively promote health.

Recent policy drivers have identified the important role that schools must play in encouraging active and engaged participation in promoting health. Furthermore, there has been an emphasis on supporting people to build resilience and manage their own health.

The Facts4Life Primary School resource

The Facts4Life resource was designed for use with primary school children aged 7-11 years. Facts4Life follows a pupil-centred approach to learning, in which children themselves are responsible for researching health and wellbeing-related topics of particular interest and importance to them. Facts4Life teaching materials are designed to be cross-curricular and directly linked to the UK National Curriculum.

To support delivery of the Facts4Life intervention, a resource booklet (and accompanying compact disk) was created based on three themes: 'Introduction to Homeostasis'; 'Healthy Me'; and, 'The Family'. The booklet incorporates learning objectives, lesson outlines and suggested activities.

Pilot evaluation methodology and methods

The pilot evaluation consisted of a controlled before-and-after study and a qualitative process evaluation.

Controlled before-and after study

Pupils ($n = 324$) from ten schools were asked to complete two questionnaires about their health-related attitudes, knowledge and behaviours before the Facts4Life intervention began (baseline) and again approximately one week after the intervention period had ended (follow-up). Findings from five schools adopting Facts4Life (intervention group) were compared with findings from five schools not adopting Facts4Life (control group) to determine whether Facts4Life was associated with any changes in health-related attitudes, knowledge and behaviour.

Qualitative process evaluation

The qualitative process evaluation involved analysis of programme implementation, delivery, engagement and areas for improvement. Pupils ($n = 23$) and teachers ($n = 6$) from schools adopting Facts4Life were asked to provide feedback.

Characteristics of schools participating in the pilot evaluation

This pilot evaluation involved ten primary schools located in the Gloucestershire Local Education Authority (LEA). Four schools were community schools, two were voluntary-aided schools, two were voluntary-controlled schools, one school was a foundation school, and one was an academy.

Participating schools were broadly similar to the England average, although evaluation schools had, on average, fewer students and a smaller proportion of children eligible for free school meals.

Schools allocated to the intervention and control groups were similar, although schools in the intervention group had a statistically higher Ofsted rating and proportion of children eligible for free school meals compared with the control group.

Pilot evaluation findings and conclusions

Questionnaire data suggest that the intervention may have led to small, yet significant, improvements in certain aspects of pupils' health-related attitudes, knowledge and behaviour. Areas for improvement relate specifically to questionnaire items on illness management and suggest a reduction in children's perceived reliance on medical intervention when feeling unwell. This is an interesting finding which supports the overarching aim of the project.

There were positive trends in some of the remaining questionnaire items, although these were not statistically significant. This means that in these cases the differences between intervention and control groups may conceivably be linked to the size of the sample and / or external social trends. It could also mean that a longer time period is needed for observable changes to occur.

Qualitative findings provided anecdotal evidence of perceived changes in personal responsibility for health and behaviour, and some examples of perceived changes in wider family behaviour. At this stage it is important to treat these findings with caution as they are representative of some, but not all pupils taking part in the intervention and are not based on quantifiable evidence.

The finding that there was some variation in quantitative and qualitative findings is interesting when trying to interpret the overall results of this pilot evaluation. The qualitative findings suggest that the resource may be having a larger impact upon pupils than the quantitative findings imply. It is possible that the tools used to measure changes in health-related attitudes, knowledge and behaviour were unable to capture the true experiences of pupils involved in this evaluation.

The qualitative process evaluation revealed that the majority of pupils and teachers were positive about the resource. Pupils referred to its enjoyable and novel content, the opportunity to develop research skills, appreciation of group work activities, and enjoyment of interactive as opposed to didactic approaches to teaching and learning. Pupils expressed preferences within the range of activities undertaken, and alternatives were suggested. The findings support the view that the resource is most successful when adapted to the setting in which the resource is delivered.

Teachers identified that some of the health-related issues covered in the intervention are potentially sensitive and require careful consideration for use with each class. This supports the intention of Facts4Life that the approach allows teachers to address issues that they may have previously found difficult to tackle. Children reported positive responses to increasing personal responsibility, although teachers recognised that

parents and guardians are ultimately responsible for their child's health. Facts4Life offered training to all teachers involved in the delivery of the resource and teachers recognised that it is important to maintain best practice.

The limitations of this pilot evaluation need to be considered. Participating schools were self-selecting and teachers expressed enthusiasm about the Facts4Life resource. Intervention delivery may have been enhanced by this enthusiasm and thus may have influenced some of the outcomes reported. The pilot evaluation involved the collection of self-reported questionnaire data and subjective evaluative feedback, opening up the possibility for socially desirable responses among those closely linked with Facts4Life.

Recommendations

Future development of Facts4Life resource

- Teaching materials should be reviewed and adapted in response to feedback to aid future delivery.
- Training should be developed in response to feedback and provided for all staff involved with the delivery of Facts4Life to ensure that the aims and objectives of the resource are understood and addressed in the classroom environment.
- Future development of Facts4Life should consider more holistic strategies for parental support, and increased dialogue between parents, teachers and children in the planning and delivery of health promoting policy and activity.
- The resource should continue to encourage group working activities as a strategy for developing pupils' sense of ownership over their learning.

Further evaluation of the Facts4Life resource

- Future evaluation should aim to explore differences in health-related attitudes, knowledge and behaviour among pupils from different Year groups.
- Future evaluation should aim to explore differences in health-related attitudes, knowledge and behaviour among pupils from different socio-economic backgrounds.
- Future evaluation of Facts4Life should consider the use of adapted or alternative measurement tools.
- In line with NICE guidelines future evaluation should involve assessment of the long-term outcomes for at least one year.

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1. Introduction

1.1 Overview

Facts4Life is an initiative which aims to help everyone take ownership of their health by exploring illness and developing strategies to build wellbeing.

Led by the Facts4Life team (<http://facts4life.org>) together with Gloucestershire Healthy Living and Learning (<http://www.ghll.org.uk>), initial funding was obtained in 2012 for three years from Gloucestershire Clinical Commissioning Group (CCG) to develop, implement and evaluate a pilot school-based health education resource, Facts4Life, in primary schools across Gloucestershire.

In July 2013 the Facts4Life team commissioned the University of the West of England, Bristol to complete the evaluation of the pilot Facts4Life resource. The evaluation aims to explore the effects of Facts4Life on school children's health-related attitudes, knowledge and behaviours. Furthermore, it aims to provide insight into how the pilot resource was received and the factors that could facilitate the dissemination and implementation of the pilot resource more widely.

The key findings from the evaluation are presented in this summary report. The full technical report provides a detailed account of the evaluation methodology, methods, findings, interpretation and recommendations for future development of the pilot resource.

1.2 Structure of this report

Chapter 2 provides a brief overview of the context for this evaluation. Chapter 3 describes the Facts4Life resource, including its rationale, key messages and anticipated outcomes. Chapters 4 and 5 identify the research questions addressed in this evaluation and describe the methodology and methods utilised. Chapter 6 describes the characteristics of schools involved in the evaluation. Chapters 7 to 12 presents the quantitative findings and analysis completed as part of this evaluation. Chapter 13 presents the qualitative process evaluation findings and analysis completed as part of this evaluation. Chapter 14 interprets the findings and provides recommendations for future development of the resource.

2. Context

In recent years there has been increasing attention paid to the health and wellbeing of children in the UK, with obesity and overweight, physical inactivity, and mental health three areas of particular concern. The latest figures suggest that approximately one third of children in Year 6 (aged 10-11 years) are overweight or obese ¹; less than one third of children meet the Chief Medical Officer's guidelines for physical activity ²; and, 10% of 5-16 year olds are estimated to have a diagnosable mental health disorder ³. Despite important improvements in some areas of public health there is still work to do to promote health, reduce preventable poor health outcomes and develop resilience among children in the UK.

There is evidence to suggest that people's lay beliefs of health and illness are strongly associated with health and illness behaviours, health awareness and perceptions of risk ^{4, 5}. Research has shown that understanding of health and illness varies according to age ⁶, with children's level of understanding often associated with on cognitive ability ⁷ and past experience ⁸. Understanding children's perceptions of health and illness may be particularly important as the attitudes, beliefs and behaviours they establish during childhood can continue on into adulthood ^{9, 10}; an important consideration when seeking to design appropriate health promoting and illness preventing interventions for children.

"What happens during these early years (starting in the womb) has lifelong effects on many aspects of health and well-being – from obesity, heart disease and mental health, to educational achievement and economic status."

Fair Society, Healthy Lives (The Marmot Review) ¹¹

The school environment provides a unique opportunity to promote health and wellbeing. In recognition of the fact that children spend much of their time at school, schools are now being encouraged to actively promote health ¹². Notably, there is evidence to suggest that good health is strongly associated with academic achievement ^{13, 14}, thus adding to the support for the creation of healthy school environments ¹⁵.

Traditional approaches to school-based health promotion have focused on information provision and targeting specific skill development, such as the use of refusal techniques ¹⁶ some of which have been shown to have a positive impact on health-related outcomes. However, the use of traditional approaches has been criticised for following a didactic approach (i.e., through teacher-to-pupil information provision, rather than enabling children to participate and take ownership of their learning) and victim-blaming ¹⁷, and for failing to provide consistent or long-term evidence of their effectiveness ^{18, 19}.

Recent policy drivers have identified the important role that schools must play in encouraging active and engaged participation in promoting health ^{3, 12, 20}. Furthermore,

there has been an emphasis on supporting people to build resilience³ and manage their own health²⁰.

3. The Facts4Life Primary School Resource

3.1 Introduction

Facts4Life is an initiative which aims to help everyone take ownership of their health by exploring illness and developing strategies to build wellbeing.

The Facts4Life primary school resource was designed for use with children aged 7-11 years. Facts4Life resource materials are delivered by a classroom teacher and follow a pupil-centred approach to learning, in which pupils themselves are responsible for researching health and wellbeing-related topics of particular interest and/or importance to them. Facts4Life teaching materials are designed to be cross-curricular and directly linked to the National Curriculum.

The resource aims are closely aligned with recent policy drivers^{3, 12, 20} in attempting to address health and wellbeing at an early age before ideas about how health is delivered and who is responsible become fixed in young minds.

3.2 Rationale

At the heart of the Facts4Life initiative is the understanding that promoting health and wellbeing is a key challenge for the 21st Century, and that taking more responsibility for our own health could significantly improve the wellbeing of individuals and save money.

“Instead of simply telling people to make healthier choices – eat vegetables, exercise more, smoke less – we need to help people to understand why doing certain things tends to lead to better health.”

Hugh van't Hoff, Director Facts4Life

Using an innovative approach to school-based health education, the Facts4Life resource introduces primary school children to the principles of health and illness early on in their lives so that they can incorporate them into their view of themselves and the world around them as they develop and grow.

The resource is specifically designed to help children develop a deeper understanding of health and personal responsibility for health. Sessions within the resource are designed to be accessible and engaging, and easy to incorporate into many areas of the primary school curriculum. The Facts4Life resource also aims to provide children with an opportunity to discuss health and illness issues in a way that they may not have been able to in the past.

3.3 Content

The resource is centred on three messages:

- 1) **Riding the ups and downs** – *“As we journey through life, our state of health is constantly changing because of the challenges we meet and how we respond to them. Rather than being either ‘ill’ or ‘well’, we move along an undulating path with high points (when we are well) and low points (when we are less well). Everyone’s journey will be different, but it is in our power to minimise the ‘downs’ and maximise the ‘ups’”.*
- 2) **Keeping balanced** – *“Throughout life, our bodies are constantly meeting challenges which knock us off-balance. A variety of processes in our bodies respond to these challenges. For example, a pulled muscle leads to inflammation which helps it to heal. A viral infection may lead to fever which helps to kill the virus. In this way, we ‘loop back’ into a balanced state again. By and large we are very successful at responding to challenges – most of the time, most of us get better from most illnesses without help”.*
- 3) **Smoothing the path** – *“How our bodies respond to challenges will depend on many factors, such as how well our heart functions, our stress levels or how fat or thin we are, as well as our genetic make-up. We can help our bodies to ‘loop back’ by equipping ourselves with certain things – a bit like putting ball bearings in a wheel so it can roll along smoothly. For example, we can exercise so that our heart is strong and keep our stress levels down through getting enough rest and relaxation.”*

Facts4Life ‘Key Messages’ (2015) - <http://facts4life.org/key-messages/>

To support teacher delivery of the Facts4Life resource, a teaching booklet and accompanying compact disk were created. Teaching materials are based on three themes: ‘Introduction to Homeostasis’; ‘Healthy Me’; and, ‘The Family’. The booklet incorporates learning objectives, lesson outlines and suggested activities developed specifically for pupils in Years 3 and 4 (7-9 years of age) and Years 5 and 6 (9-11 years of age). Teachers are provided with outline lessons plans to support the delivery of Facts4Life (see Appendices). Prior to Facts4Life resource delivery teachers are encouraged to attend Facts4Life training.

4. Aims, Objectives and Research Questions

This pilot evaluation aims to explore the effects of the Facts4Life resource on school children's health-related attitudes, knowledge and behaviour. Furthermore, this pilot evaluation aims to provide insight into how the Facts4Life resource was received and the factors that could facilitate the dissemination and implementation of the resource more widely.

The specific objectives of the pilot evaluation were to:

- To assess changes in pupils health-related attitudes, knowledge and behaviour in response to the Facts4Life resource;
- To explore pupils' experiences of the Facts4Life resource;
- To explore teachers' experiences of the Facts4Life resource;

This pilot evaluation addresses the following research questions:

- 1) To what extent are schools adopting the Facts4Life resource associated with a change in health-related attitudes, knowledge and behaviour amongst pupils?
- 2) To what extent are schools adopting the Facts4Life resource associated with a change in health-related knowledge, understanding and behaviour amongst pupils, compared with schools that have not adopted the Facts4Life resource?
- 3) What are the experiences of pupils and teachers in schools adopting the Facts4Life resource?

5. Pilot Evaluation Methodology and Methods

5.1 Introduction

This pilot evaluation adopted a mixed methods approach to research, involving the collection and analysis of quantitative and qualitative data to provide “a better understanding of research problems than either approach alone”²¹.

5.2 Research design

The pilot evaluation consisted of:

- A controlled before-and-after study.
- A qualitative process evaluation.

Controlled before-and after study

Pupils ($n = 324$) from ten schools were assessed before the Facts4Life resource was implemented (baseline) and again approximately one week after the intervention period had ended (follow-up). Findings from five schools adopting the Facts4Life resource (intervention group) were compared with findings from five schools not adopting the Facts4Life resource (control group) to determine whether the resource was associated with any changes in health-related attitudes, knowledge and behaviour.

Qualitative process evaluation

The qualitative process evaluation involved analysis of programme implementation, delivery, engagement and areas for improvement. Pupils ($n = 23$) and teachers ($n = 6$) from school adopting the Facts4Life resource were asked to provide feedback via focus group discussions and open-ended questionnaires.

5.3 Sampling

Pupils from Years 3 to 6 (7 to 11 years of age) were recruited from primary schools within the Gloucestershire Local Education Authority. Ten schools were invited to participate in the pilot evaluation.

A non-randomised study design was utilised. Each school was allocated to either the intervention group (i.e., schools adopting the Facts4Life resource) or the control group (i.e., schools not adopting the Facts4Life resource at the time of the evaluation). Allocation to the intervention group was based on whether the contact teacher from each school had received Facts4Life training and intended to implement the Facts4Life intervention in their school during the Spring term (January – April 2015). The remaining schools were subsequently allocated to the control group. The evaluation

team played no role in school recruitment or school allocation to the intervention or control groups.

324 pupils completed baseline questionnaires, with 295 (91%) completing questionnaires again at follow-up. If pupils did not complete all items from each questionnaire, these data were treated as missing during analyses. The mean age of pupils participating in the pilot evaluation was 8.99 ($SD = 1.12$).

Focus groups were conducted with 23 pupils from the intervention group. All school staff involved with Facts4Life training and/or delivery were invited to complete an online open-ended questionnaire. Six teachers representing four schools returned open-ended questionnaires (75% response rate).

5.4 Measures

The measures listed below were collected at two time points, immediately before the intervention began (January 2015) and again approximately one week after the intervention period had ended (April 2015). Each measure was assessed for internal consistency (i.e., the agreement between individual items that make up a measure) at each time point.

5.4.1 Facts4Life questionnaire

A questionnaire was constructed by the Facts4Life and GHLL teams to measure health and illness-related attitudes addressed explicitly by the intervention. The measure consisted of six questions: “When I feel unwell I need to take medicine to feel better”; “There is nothing I can do to reduce the risk of getting ill”; “When I am ill I always need to see a doctor”; “Some people are never ill”; “I am confident I can do things to keep myself as healthy and well as possible”; and, “Most of the time, most of us get better from illness without any help”. Pupils were asked to respond to each of these items according to a 5-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree.

5.4.2 Child Health and Illness Profile (Child Edition) (CHIP-CE) questionnaire

The CHIP-CE questionnaire comprises 45 items which describe five domains of health: “Achievement”; “Risk Avoidance”; “Resilience”; “Satisfaction”; and, “Comfort”. The questionnaire was originally designed for children 6-11 years of age and each item is based on a 5-point Likert scale. The CHIP-CE asks children to report on symptoms of illness and wellbeing, health-related behaviour, school performance, and family/peer relationships. Most items relate to the past 4 weeks; the remainder are not associated with a specific time period. The questionnaire also contains four demographic items (gender; age; Year group; and, date of birth). The CHIP-CE has been used extensively

with primary school aged children and demonstrates adequate-to-excellent levels of reliability and validity ^{22, 23}.

5.4.3 Pre-testing of pilot evaluation measures

To ensure that proposed assessment measures were appropriate for children 7 to 11 years of age, 92 pupils from two primary schools in the Gloucestershire area (that were not involved with this evaluation) were asked to complete a sample of items taken from the Facts4Life and CHIP-CE questionnaires. Items were read aloud by the class teacher. In addition to completing the sample items, pupils were asked to raise any concerns or to alert the researcher to any difficulties encountered (e.g., confusion over how to complete a questionnaire item). No objections were raised and all pupils completed the task.

5.5 Qualitative process evaluation

After the intervention period was over focus groups were conducted with pupils from each intervention school. Qualitative data were collected, in addition to quantitative questionnaire data, to explore health and illness-related attitudes and behaviour. Furthermore, qualitative data were used to provide insight into how the resource was received and factors that could facilitate the dissemination and implementation of the resource more widely. An indicative focus group question guide was developed and included factors relating to participation, experiences of the intervention, lesson style, wider implications of the resource, and areas for improvement.

Teachers from schools that had been involved in intervention training and/or delivery completed open-ended questionnaires. Questionnaires requested feedback on training and resources, intervention delivery, parental/guardian involvement, and areas for development.

5.6 Procedure

Approximately one week prior to the implementation of the Facts4Life resource all pupils were asked to complete the Facts4Life and CHIP-CE questionnaires in a classroom setting. Pupils were provided with instructions on how to complete the questionnaire by the research team and each item was read aloud by the class teacher to provide support where necessary. The intervention was implemented during the Spring term (January – April 2015). A detailed Facts4Life resource booklet, containing ‘theme’ lesson plans was provided to all teachers.

Approximately one week following the intervention period pupils were asked to complete two follow-up questionnaires, again in a classroom setting. Follow-up questionnaires were identical to those administered at baseline.

Pupils in schools allocated to the control group completed questionnaire measures at baseline and follow-up only. They had no other contact with the research team.

Qualitative process evaluation focus groups took place in intervention schools on the same day that follow-up questionnaires were administered. Open-ended questionnaires were administered to teachers at the end of the intervention period and teachers were given one month to respond.

5.7 Data analysis

Quantitative and qualitative approaches were combined for this pilot evaluation to provide a broad and in-depth understanding of the Facts4Life resource as a school-based intervention ²⁴.

Quantitative data collected from schools at baseline and at follow-up were entered into IBM SPSS Statistics v 20 – a software programme for statistical analysis. SPSS was used to produce descriptive statistics (including means and standard deviations) to compare intervention and control groups.

Independent-samples t-tests and Chi-squared tests of association were used to compare baseline organisational and demographic characteristics (gender, age, school size, Ofsted rating, Free School Meal status, and overall absence) in intervention and control group schools.

Finally, mixed analysis of variance (MANOVA) models were used to identify any changes in outcome measures in the intervention and control groups from baseline to follow-up. Essentially, this means that changes in intervention group scores from baseline to follow-up were assessed, while controlling for changes in the control group.

Further details of the findings from the statistical analyses employed in this pilot evaluation are presented in Chapters 7-12.

Qualitative focus group data were transcribed verbatim (word-for-word) and analysed using NVivo 10 (QSR International) – a software programme for qualitative data analysis. Teacher responses to the open-ended questionnaire items were also transcribed verbatim and analysed in NVivo. All data were explored using Thematic Analysis (TA); a useful method for “identifying, analysing and reporting patterns within data” ²⁵. Further details of the qualitative analyses employed in this evaluation are presented in Chapter 13.

5.8 Ethical issues

Each aspect of the pilot evaluation adhered to the British Psychological Society’s ‘Code of Human Research Ethics’ ²⁶ and was approved by the UWE, Bristol Research Ethics

Committee in November 2014. The evaluation team also completed a Risk Assessment form before visiting pilot evaluation schools.

Head teachers from each school were asked to provide written permission for their school to participate in the research project. Head teachers and teachers were invited to attend a meeting before the evaluation began and were provided with written and verbal information about the aims of the evaluation and what school participation in the study would involve.

Each school was responsible for providing pupils and their parents or guardians with information about the evaluation. Parents or guardians were asked to provide passive informed consent for their child to participate. Information sheets, containing an explanation of the nature of the research project and a method to retract permission, were sent to parents or guardians. If parents or guardians did not want their child to participate, they were able to 'opt out' by contacting the school. If a parent did not respond to the letter it was assumed that they permitted their child to take part.

Pupils were asked to provide active informed consent to participate in the pilot evaluation. Each pupil was provided with an information sheet explaining the purpose of the study and the procedure for withdrawal.

Teachers from all intervention schools were asked to provide active informed consent to participate. Each teacher was provided with an information sheet explaining the purpose of the evaluation and the procedure for withdrawal.

6. School characteristics

6.1 Introduction

This section of the report describes the schools that participated in the Facts4Life resource pilot evaluation.

6.2 Organisational and demographic characteristics

This pilot evaluation involved ten primary schools located in the Gloucestershire Local Education Authority (LEA). Four schools were community schools, two were voluntary-aided schools, two were voluntary-controlled schools, one school was a foundation school, and one was an academy.

As shown in Table 6.1 the average school size of schools involved with this pilot evaluation was slightly smaller than the England average. There was considerable variation in the number of pupils enrolled at pilot evaluation schools, ranging from 63 to 425. The gender splits were comparable for pilot evaluation schools and England average (47.5% vs 49.0% respectively).

Table 6.1 School size – comparison of evaluation schools with England average (Source: Ofsted School Data Dashboard, 2014)

	Evaluation schools	England schools
Average number of pupils per school	214	263

‘Free school meals’ eligibility is one measure that is commonly used as a proxy for deprivation. The percentage of pupils eligible for free school meals (FSM) was almost 10% lower in evaluation schools compared with the England average (Table 6.2).

Table 6.2 Pupils eligible for free school meals (%) – comparison of evaluation schools with England average (Source: Ofsted School Data Dashboard, 2014)

	Evaluation schools	England schools
% Eligible for free school meals	17.1	26.6

As shown in Table 6.3, according to Ofsted the overall effectiveness of pilot evaluation schools was broadly similar to the England average.

Table 6.3 Ofsted Inspection Ratings – comparison of evaluation schools with England average (Source: Ofsted School Data Dashboard, 2014)

	Evaluation schools	England schools
% Rated Good or Outstanding	70	71
% Rated Requires Improvement or Inadequate	30	29

Overall absence was slightly lower in pilot evaluation schools compared with the England average (Table 6.4).

Table 6.4 Overall absences (%) – comparison of evaluation schools with England average (Source: Ofsted School Data Dashboard, 2014)

	Evaluation schools	England schools
% Overall absence	3.5%	3.8%

6.3 Comparison of intervention and control groups

As shown in Table 6.5 the proportion of boys and girls recruited to the intervention and control group was similar. However, when exploring pupil characteristics by year group, there were significantly more children recruited from Years 3 and 4 compared with Years 5 and 6. 187 pupils participated from Years 3 and 4, with 108 pupils from Years 5 and 6.

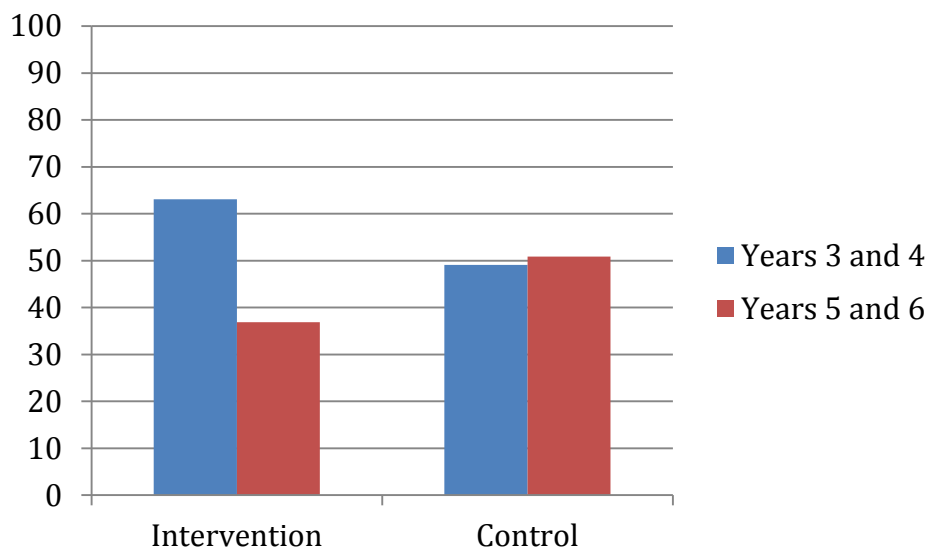
Table 6.5 Comparison of intervention and control group pupil characteristics at baseline (n=295)

	Intervention <i>n</i> (%)	Control <i>n</i> (%)	<i>p</i>
Gender			
Boy	101 (54.0)	61 (56.5)	
Girl	86 (46.0)	47 (43.5)	0.68†
Year group			
Years 3 and 4	118 (63.1)	53 (49.1)	
Years 5 and 6	69 (36.9)	55 (50.9)	0.02†*

Note. †Chi-squared test of association. *Difference between groups is statistically significant ($p < 0.05$).

Figure 6.1 presents a visual representation of the proportion of participations in Years 3 and 4 and Years 5 and 6, and according to intervention and control group.

Figure 6.1 Proportion (%) of pupils in the intervention and control group by Year group at baseline (n=295)



A comparison of intervention and control group school characteristics revealed that there were no statistically significant differences in school size, or overall absence (%). However, the Ofsted rating was significantly higher among intervention schools when compared with control group schools. Furthermore, the percentage of children eligible for free schools meals in the intervention group was significantly higher than in the control group (Table 6.6).

Table 6.6 Comparison of intervention and control group school characteristics at baseline

	Intervention Mean (SD)	Control Mean (SD)	P
School size	213.51 (134.68)	204.48 (123.46)	0.55††
Ofsted rating ^a	2.00 (0.00)	2.40 (0.82)	0.01†*
Free school meal eligibility (%)	11.71% (5.84)	7.87% (3.80)	0.01††*
Overall absence	3.49 (0.26)	2.49 (0.22)	0.95††

Note. ^aOfsted ratings range from 1 = Outstanding to 4 = Inadequate. †Chi-squared test of association. †† Independent-samples t-test. *Difference between groups is statistically significant (p<0.05).

7. Facts4Life questionnaire – Descriptive statistics

7.1 Introduction

This section of the report presents a descriptive summary (means and standard deviations) of pupil responses ($n = 295$) to the Facts4Life questionnaire at baseline and again at follow-up.

7.2 Methods

Facts4Life questionnaires were administered to pupils in the intervention and control groups approximately one week before the intervention period began (baseline) and again approximately one week after the intervention period had ended (follow-up). Questionnaires were completed in each school during January and April 2015.

The Facts4Life questionnaire contained six items designed to assess health-related attitudes, beliefs and behaviour addressed explicitly by the intervention. Each item was measured according to a 5-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree.

The questionnaire was assessed for internal consistency (i.e., the agreement between individual items that make up a questionnaire) at each time point. An acceptable level of internal consistency is $\alpha=0.70$ or above ²⁷. Internal consistency of the Facts4Life questionnaire at each time point was low ($\alpha=0.20$ at baseline and $\alpha=0.24$ at follow-up). This finding suggests that the questionnaire does not measure one overall construct (i.e., overall health-related attitudes, beliefs and behaviour addressed explicitly by the intervention). In other words, it appears that each of the items in the questionnaire measure different constructs. In response to this, each item from the Facts4Life questionnaire was assessed separately.

7.3 Descriptive summary of pupil responses

As shown in Table 7.1 there was a positive change in mean intervention group scores for five of the six items included in the questionnaire from baseline to follow-up. Item 5, “I am confident I can do things to keep myself as healthy and well as possible”, was the only item to experience a negative change among intervention group pupils.

Mean scores for pupils in the control group were broadly similar at baseline and follow-up; however in contrast to the intervention group, control group pupils reported a positive change in response to Item 5. Pupils in the control group reported a negative change in responses to Item 1, “When I feel unwell I need to take medicine to feel better”, and Item 4, “Some people are never ill”.

Table 7.1 Facts4Life questionnaire descriptive statistics (n=295)

Item	Intervention Mean (SD)		Control Mean (SD)	
	Baseline	Follow-up	Baseline	Follow-up
When I feel unwell I need to take medicine to feel better ^a	4.04 (0.93)	3.40 (1.15)	3.65 (1.01)	3.81 (1.00)
There is nothing I can do to reduce the risk of getting ill ^a	2.62 (1.25)	2.47 (1.17)	2.85 (1.23)	2.78 (1.12)
When I am ill I always need to see a doctor ^a	2.61 (1.14)	2.10 (1.03)	2.69 (1.10)	2.47 (0.89)
Some people are never ill ^a	1.94 (1.12)	1.81 (1.03)	1.87 (1.01)	2.00 (1.18)
I am confident I can do things to keep myself as healthy and well as possible ^b	4.38 (0.77)	4.29 (0.93)	4.24 (0.87)	4.35 (0.87)
Most of the time, most of us get better from illness without any help ^b	3.20 (1.16)	3.42 (1.09)	2.83 (1.15)	3.22 (0.98)

Note. Scores range from 1-5 on a Likert-response scale (1=strongly disagree, 5=strongly agree).

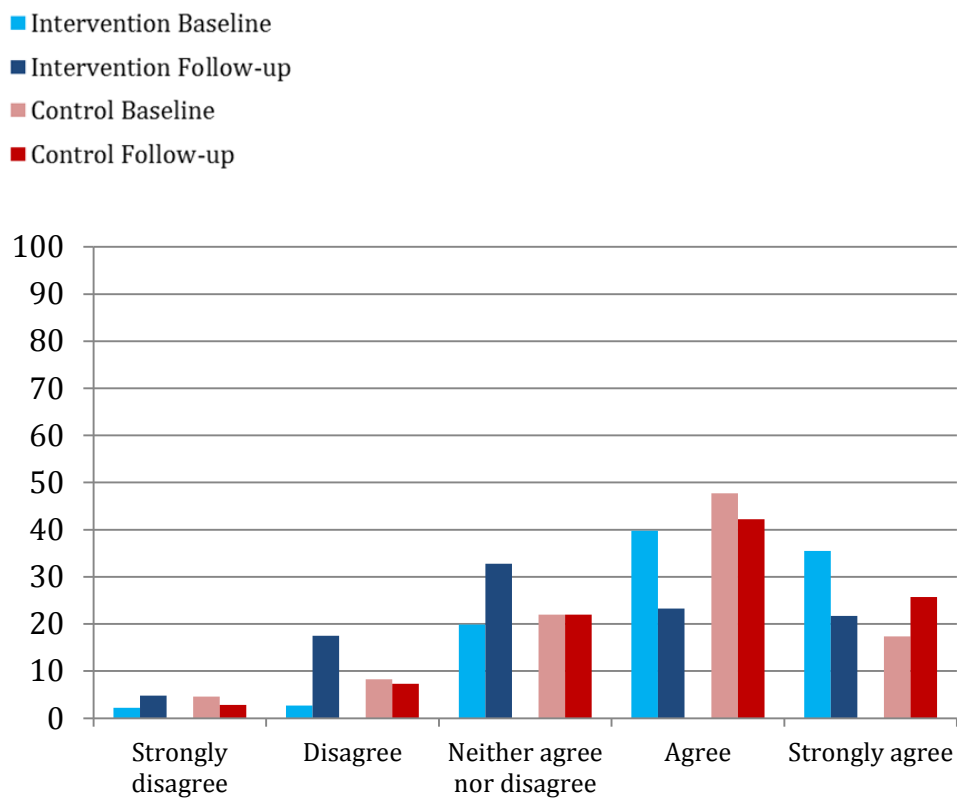
^aLower scores are more desirable.

^bHigher scores are more desirable.

When I feel unwell I need to take medicine to feel better

Findings presented in Figure 7.1 demonstrate a positive increase in the percentage of intervention group pupils reporting that they ‘strongly disagree’ or ‘disagree’ with the statement “When I feel unwell I need to take medicine to feel better”. At baseline, only 9 pupils in the intervention group (4.9%) reported ‘strongly disagree’ or ‘disagree’, while at follow-up this number increased to 42 (22.3%). Comparatively, at follow-up, only 11 pupils in the control group (10.1%) selected ‘strongly disagree’ or ‘disagree’ when responding to this item.

Figure 7.1 Pupil responses to: “When I feel unwell I need to take medicine to feel better” (%)

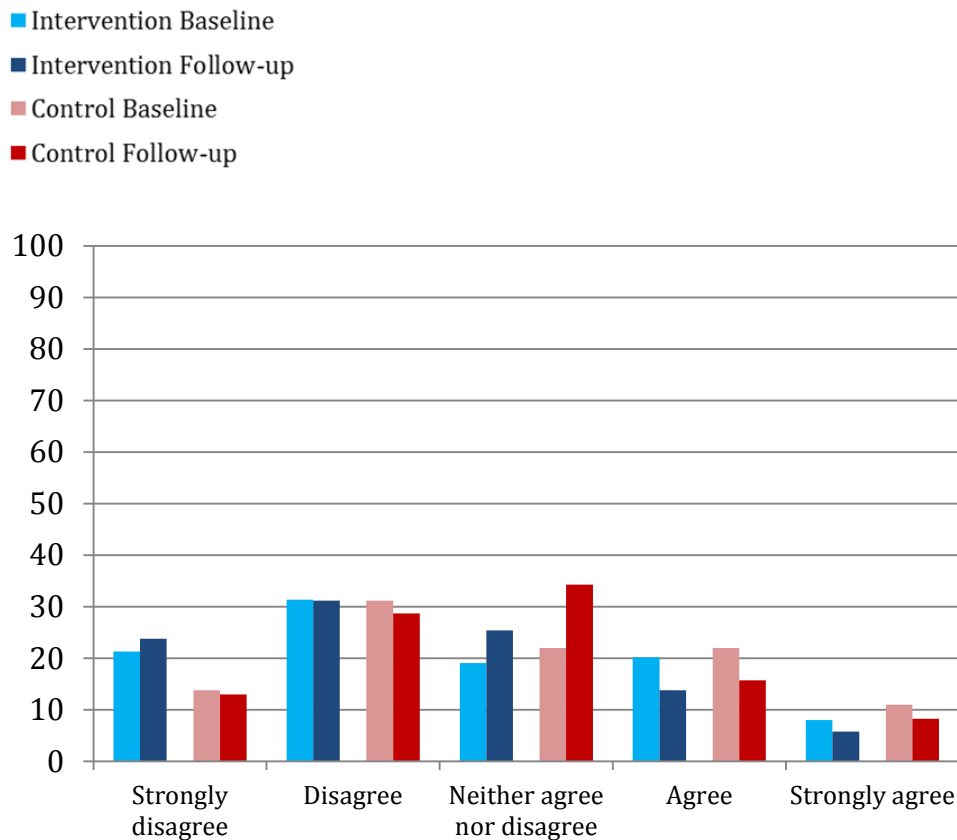


Note. Responses of ‘strongly disagree’ and ‘disagree’ are more desirable.

There is nothing I can do to reduce the risk of getting ill

Figure 7.2 shows a small positive increase in the percentage of intervention group pupils reporting strong disagreement with the statement “There is nothing I can do to reduce the risk of getting ill”. 40 pupils (21.3%) reported ‘strongly disagree’ at baseline and 45 pupils (23.8) at follow-up. In contrast, only 14 pupils in the control group (13.0%) reported ‘strongly disagree’ at follow-up.

Figure 7.2 Pupil responses to: “There is nothing I can do to reduce the risk of getting ill” (%)

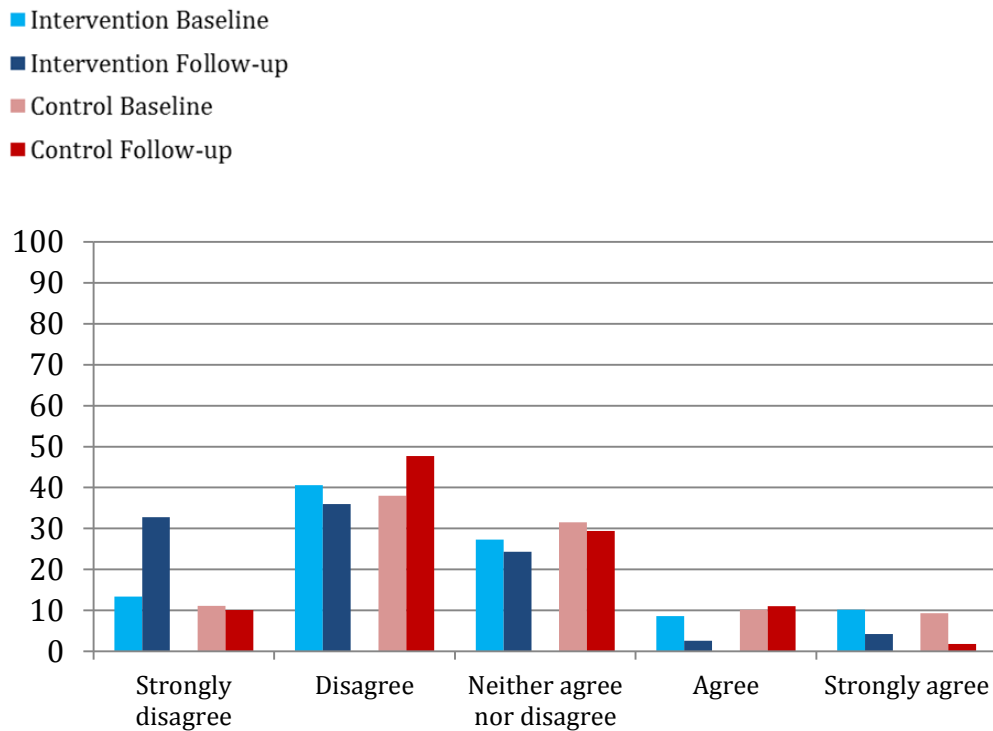


Note. Responses of ‘strongly disagree’ and ‘disagree’ are more desirable.

When I am ill I always need to see a doctor

There was a marked positive increase in the percentage of pupils in the intervention group that reported strong disagreement with the statement “When I am ill I always need to see a doctor”, with 25 pupils (13.4%) reporting ‘strongly disagree’ at baseline and 62 pupils (32.8%) at follow-up. In stark contrast, only 11 pupils (10.1%) in the control group reported strong disagreement with the statement (Figure 7.3).

Figure 7.3 Pupil responses to: “When I am ill I always need to see a doctor” (%)

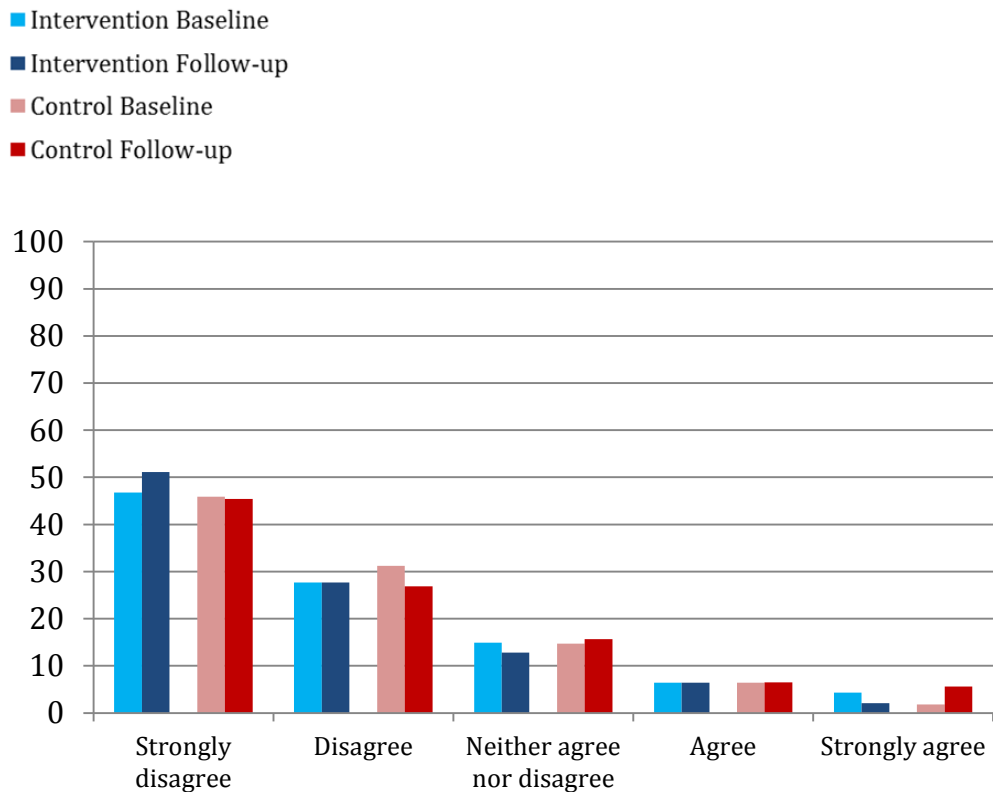


Note. Responses of ‘strongly disagree’ and ‘disagree’ are more desirable.

Some people are never ill

As shown in Figure 7.4 there were minimal changes in intervention and control group responses to the item “Some people are never ill”. Roughly 45% of pupils in the intervention and control groups reported strong disagreement with the statement at baseline, a percentage that rose to more than 50% among intervention pupils (50.8%) and fell slightly among control group pupils (45.0%) at follow-up.

Figure 7.4 Pupil responses to: “Some people are never ill” (%)

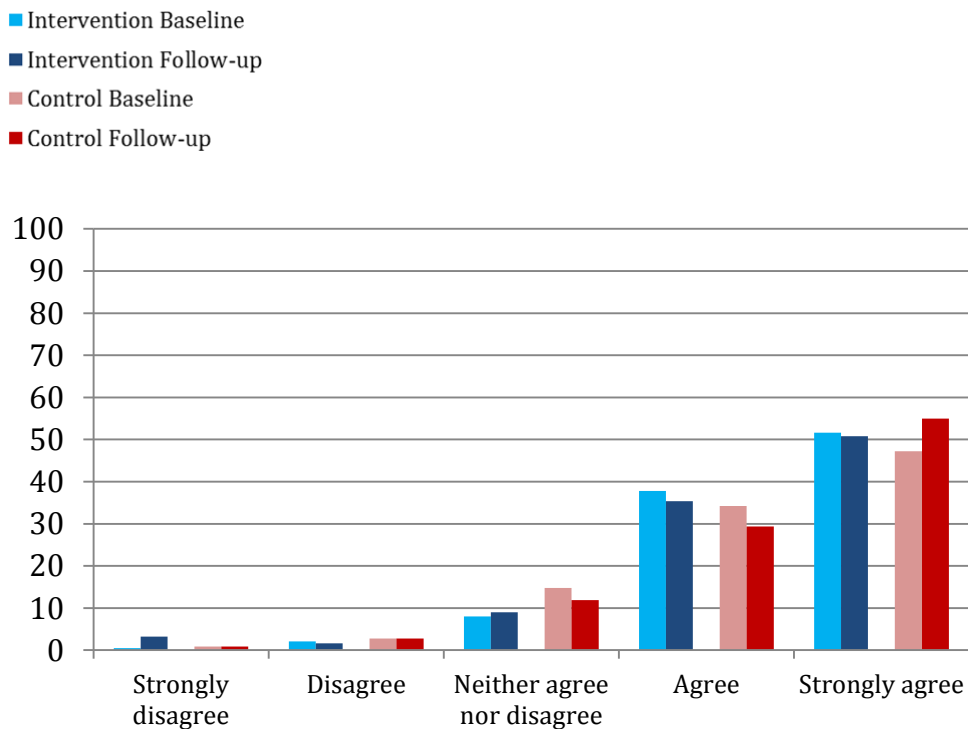


Note. Responses of ‘strongly disagree’ and ‘disagree’ are more desirable.

I am confident I can do things to keep myself as healthy and well as possible

Figure 7.5 demonstrates that there was a small reduction in health-related confidence levels among intervention group pupils over time. 168 pupils (88.9%) in the intervention group reported 'strongly agree' or 'agree' at baseline compared with 163 (86.2%) at follow-up. In contrast, confidence levels in control group pupils were seen to increase over time (from 80.7% at baseline to 94.4% at follow-up).

Figure 7.5 Pupil responses to: "I am confident I can do things to keep myself as healthy and well as possible" (%)

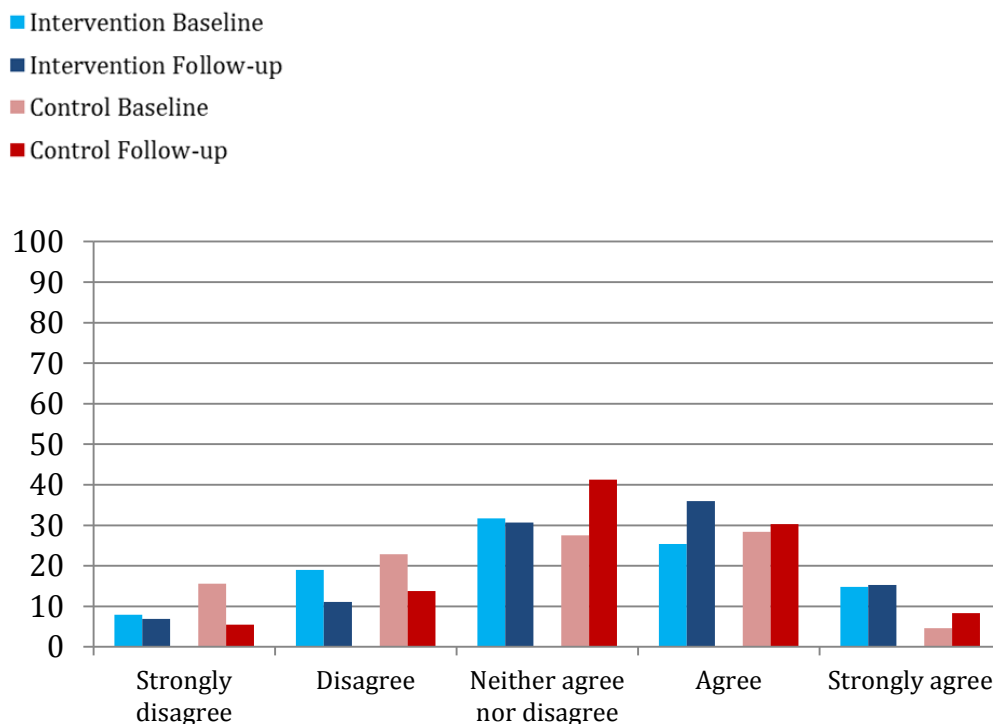


Note. Responses of 'strongly agree' and 'agree' are more desirable.

Most of the time, most of us get better from most illnesses without any help

Figure 7.6 demonstrates a positive shift in intervention and control group responses to the item “Most of the time, most of us get better from most illness without any help”. For the intervention group, 76 pupils (60.2%) reportedly ‘agreed’ or ‘strongly agreed’ with the statement at baseline, a number which increased to 87 (51.3%) at follow-up. Control group responses of ‘strongly agree’ and ‘agree’ were also seen to improve from baseline to follow-up (36 (33%) to 42 (38.6%) respectively).

Figure 7.6 Pupils responses to: “Most of the time, most of us get better from most illness without any help” (%)



Note. Responses of ‘strongly agree’ and ‘agree’ are more desirable.

7.4 Chapter summary

The descriptive findings presented in this chapter suggest that, in general, pupils’ health-related attitudes, beliefs and behaviour addressed explicitly by the intervention were improved after taking part in the intervention.

However, it is important to note that the findings presented in this chapter are purely descriptive and do not statistically control for responses from the control group. An assessment of statistical changes in health-related attitudes, beliefs and behaviour addressed explicitly by the intervention, controlling for control group responses, can be found in the next chapter.

8. Facts4Life questionnaire – Statistical comparisons

8.1 Introduction

This section of the report presents the findings from a statistical comparison of intervention and control group responses to the Facts4Life questionnaire.

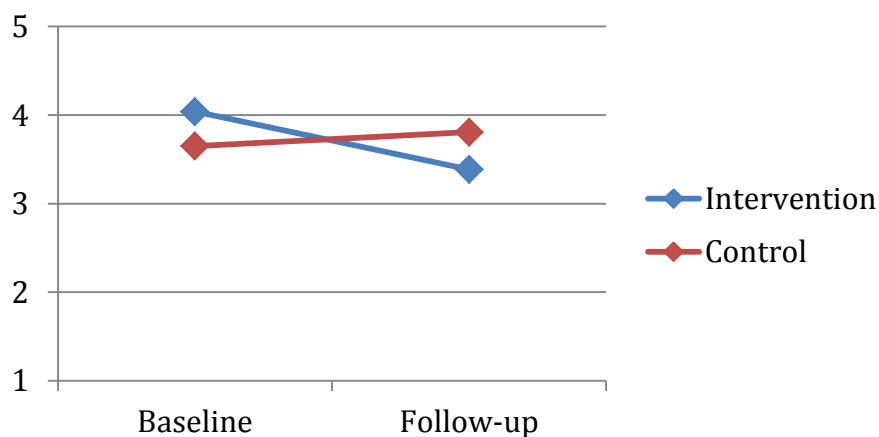
8.2 Methods

Mixed analysis of variance (MANOVA) models were used to identify any changes in outcome measures among intervention and control groups from baseline to follow-up. Essentially, this means that any changes in the intervention group from baseline to follow-up were assessed, while controlling for changes in control group responses.

8.3 Statistical Comparisons - Results

As shown in Figure 8.1, there was a statistically significant improvement in intervention group responses to the item “When I feel unwell I need to take medicine to feel better”, when controlling for control group responses, $F(1, 292) = 31.59, p = 0.01$.

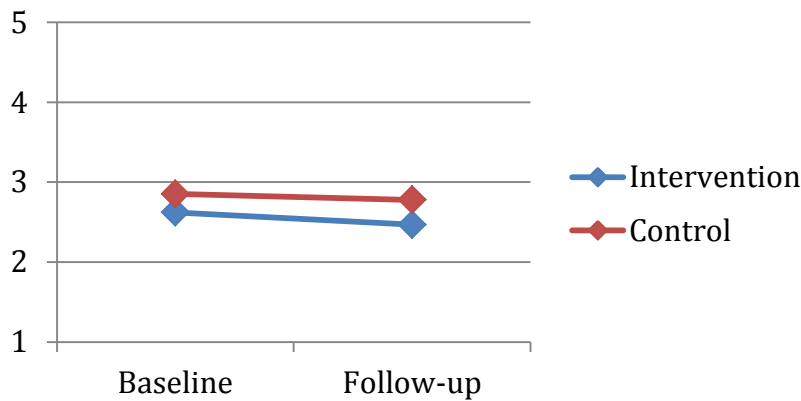
Figure 8.1 Mean responses to: “When I feel unwell I need to take medicine to feel better” at baseline and follow-up*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. A decrease in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

Figure 8.2 shows no statistically significant improvement in intervention group responses to the item “There is nothing I can do to reduce the risk of getting ill”, when controlling for control group responses, $F(1, 293) = 0.16, p = 0.69$.

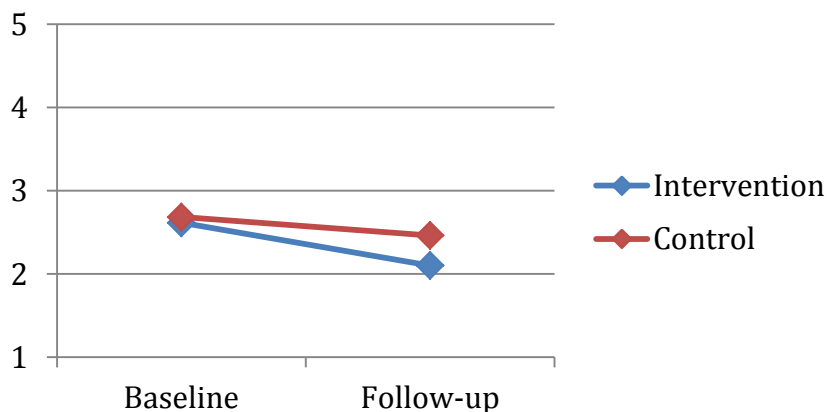
Figure 8.2 Mean responses to: “There is nothing I can do to reduce the risk of getting ill” at baseline and follow-up*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. A decrease in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

Figure 8.3 shows that there was a positive reduction in mean intervention group scores over time relating to the item “When I am ill, I always need to see a doctor”, and this was statistically significant when controlling for control group responses, $F(1, 292) = 3.77, p = 0.05$.

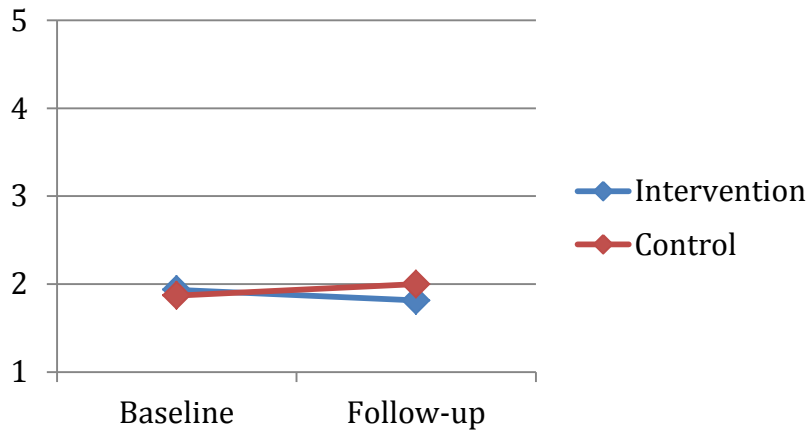
Figure 8.3 Mean responses to: “When I am ill, I always need to see a doctor” at baseline and follow-up*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. A decrease in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

Figure 8.4 shows that there was no statistically significant improvement in intervention group responses to the item “Some people are never ill”, when controlling for control group responses, $F(1, 292) = 2.61, p = 0.11$.

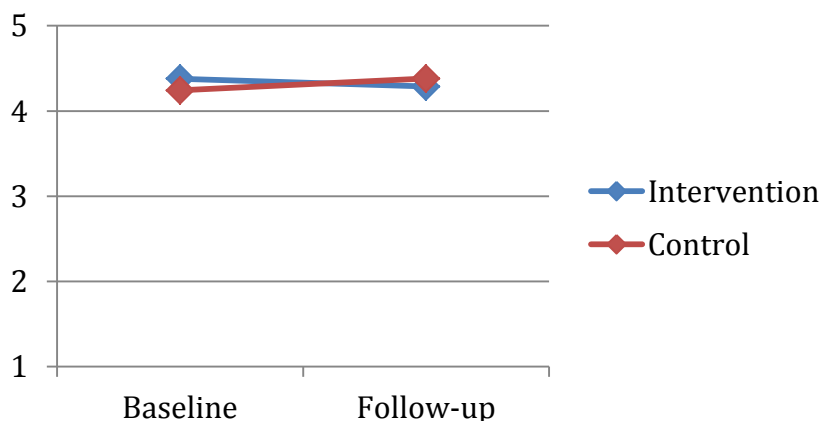
Figure 8.4 Mean responses to: “Some people are never ill” at baseline and follow-up*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. A decrease in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

As shown in Figure 8.5 there was a small negative reduction in mean intervention group scores over time relating to the item “I am confident I can do things to keep myself as healthy and well as possible”. However, when controlling for control group responses, this reduction was not statistically significant, $F(1, 293) = 3.25, p = 0.07$.

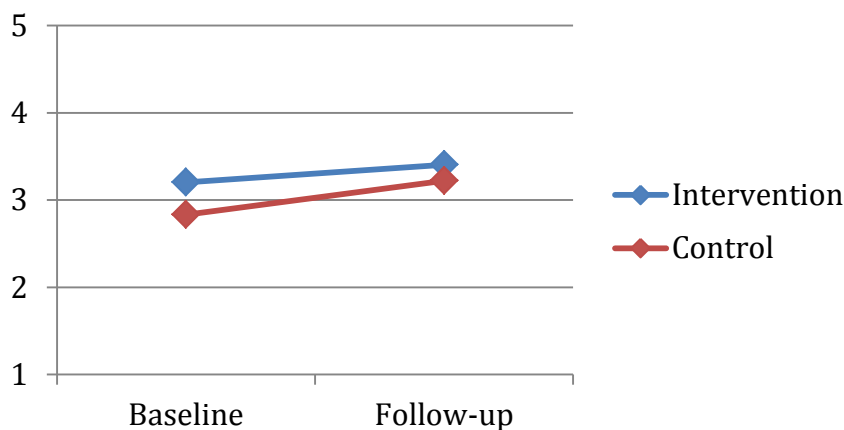
Figure 8.5 Mean responses to: “I am confident I can do things to keep myself as healthy and well as possible” at baseline and follow-up*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. An increase in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

Figure 8.6 shows a positive increase in intervention group mean scores relating to the item “Most of the time, most of us get better from illness without any help”. However, this increase was not found to be statistically significant when controlling for control group scores, $F(1, 292) = 1.48, p = 0.23$.

Figure 8.6 Mean responses to: “Most of the time, most of us get better from illness without any help” at baseline and follow-up*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. An increase in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

8.4 Chapter summary

The statistical results presented in this chapter demonstrate statistically significant improvements in intervention group health-related attitudes, knowledge and behaviour in relation to items:

- When I feel unwell I need to take medicine to feel better
- When I am ill, I always need to see a doctor

Notably, changes in intervention group mean responses from baseline to follow-up were positive for all items, except “I am confident I can do things to keep myself as healthy and well as possible”.

9. Facts4Life questionnaire – Descriptive statistics by Year group

9.1 Introduction

This section presents average (mean and standard deviation) Facts4Life questionnaire scores at baseline and follow-up, according to Year group.

9.2 Methods

As shown in section 6.3, there was a statistical difference in the number of pupils in Years 3 and 4 and Years 5 and 6 allocated to the intervention or control group. To explore these differences in more detail, statistical analysis was conducted to identify any changes in outcome measures in the intervention and control groups from baseline to follow-up, by separating the sample into two: Years 3 and 4; and, Years 5 and 6.

9.3 Descriptive summary of pupil responses by Year group

As shown in Table 9.1 there was a positive change in mean intervention group scores for five of the six items included in the questionnaire among pupils in Years 3 and 4. Item 5, “I am confident I can do things to keep myself as healthy and well as possible”, was the only item to experience a negative reduction in mean score among pupils in the intervention group.

Mean scores for Year 3 and 4 pupils in the control group were broadly similar; however in contrast to the intervention group, control group pupils reported a positive mean change in response to Item 5. Pupils in the control group reported a negative reduction in mean change scores in response to Item 1, “When I feel unwell I need to take medicine to feel better”, and Item 4, “Some people are never ill”.

As shown in Table 9.1 there was a positive change in mean intervention group scores for four of the six items included in the questionnaire from baseline to follow-up among pupils in Years 5 and 6. There was a negative change in intervention group responses to Item 4, “Some people are never ill”. Mean responses to Item 5, “I am confident I can do things to keep myself as healthy and well as possible”, did not change over time.

In contrast to the intervention group, Year 5 and 6 control group pupils reported a positive mean change in response to Item 5, “I am confident I can do things to keep myself as healthy and well as possible”. All other items demonstrated a positive change over time.

Table 9.1 Facts4Life questionnaire descriptive statistics by Year group (n=295)

Item	Intervention Mean (SD)		Control Mean (SD)	
	Baseline	Follow-up	Baseline	Follow-up
Years 3 and 4 (n=171)				
When I feel unwell I need to take medicine to feel better ^a	4.18 (0.97)	3.47 (1.23)	3.70 (0.91)	4.00 (0.89)
There is nothing I can do to reduce the risk of getting ill ^a	2.80 (1.33)	2.60 (1.27)	2.98 (1.31)	2.94 (1.04)
When I am ill I always need to see a doctor ^a	2.74 (1.23)	2.19 (1.11)	2.87 (1.17)	2.46 (0.87)
Some people are never ill ^a	2.09 (1.24)	1.85 (1.11)	1.68 (0.89)	1.96 (1.19)
I am confident I can do things to keep myself as healthy and well as possible ^b	4.33 (0.82)	4.17 (1.02)	4.13 (0.98)	4.33 (0.86)
Most of the time, most of us get better from illness without any help ^b	3.16 (1.25)	3.41 (1.15)	2.74 (1.21)	3.17 (0.96)
Years 5 and 6 (n=124)				
When I feel unwell I need to take medicine to feel better ^a	3.81 (0.72)	3.25 (1.00)	3.65 (1.09)	3.65 (1.06)
There is nothing I can do to reduce the risk of getting ill ^a	2.26 (0.97)	2.25 (0.95)	2.75 (1.19)	2.61 (1.19)
When I am ill I always need to see a doctor ^a	2.38 (0.88)	1.88 (0.80)	2.56 (1.00)	2.49 (0.92)
Some people are never ill ^a	1.68 (0.85)	1.69 (0.78)	2.02 (1.06)	1.98 (1.12)
I am confident I can do things to keep myself as healthy and well as possible ^b	4.47 (0.61)	4.47 (0.74)	4.31 (0.82)	4.36 (0.89)
Most of the time, most of us get better from illness without any help ^b	3.31 (0.98)	3.47 (1.00)	2.96 (1.10)	3.24 (0.99)

Note. Scores range from 1-5 on a Likert-response scale (1=strongly disagree, 5=strongly agree).

^aLower scores are more desirable.

^bHigher scores are more desirable.

When I feel unwell I need to take medicine to feel better

Years 3 and 4

Figure 9.1 shows an increase in the proportion of intervention group pupils responding desirably to item 1 of the Facts4Life questionnaire. At baseline, 6 (5%) intervention group pupils 'strongly disagreed' or 'disagreed' with the statement "When I feel unwell I need to take medicine to feel better". At follow-up this number increased to 25 (21.4%). In stark contrast only 3 (5.7%) control group pupils responded in this way at follow-up.

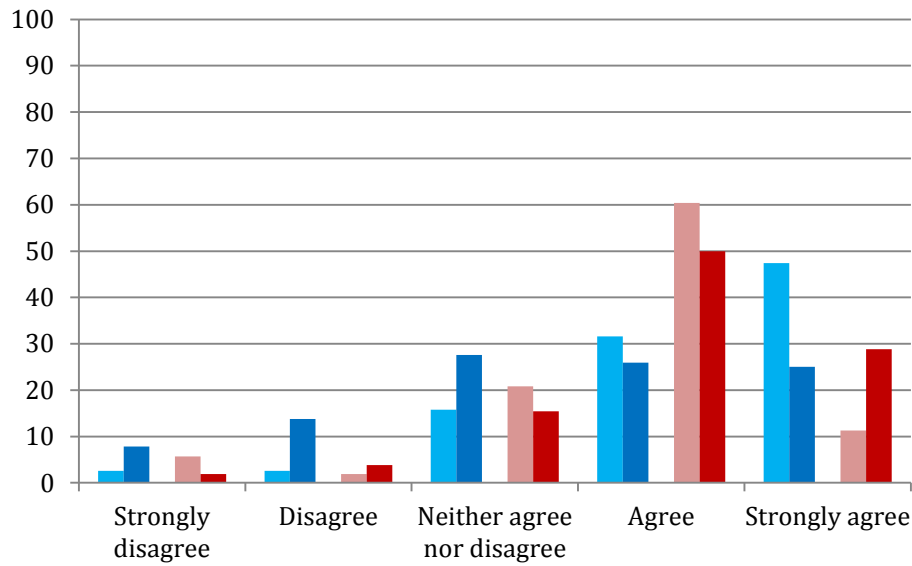
Years 5 and 6

A positive shift in item 1 responses was also observed among Year 5 and 6 intervention group participants over time (see Figure 9.1). For example, at baseline only 2 (2.9%) participants responded desirably ('strongly disagree' or 'disagree'); this increased to 16 (23.2%) at follow-up. Responses from pupils in the control group showed only minimal change over time.

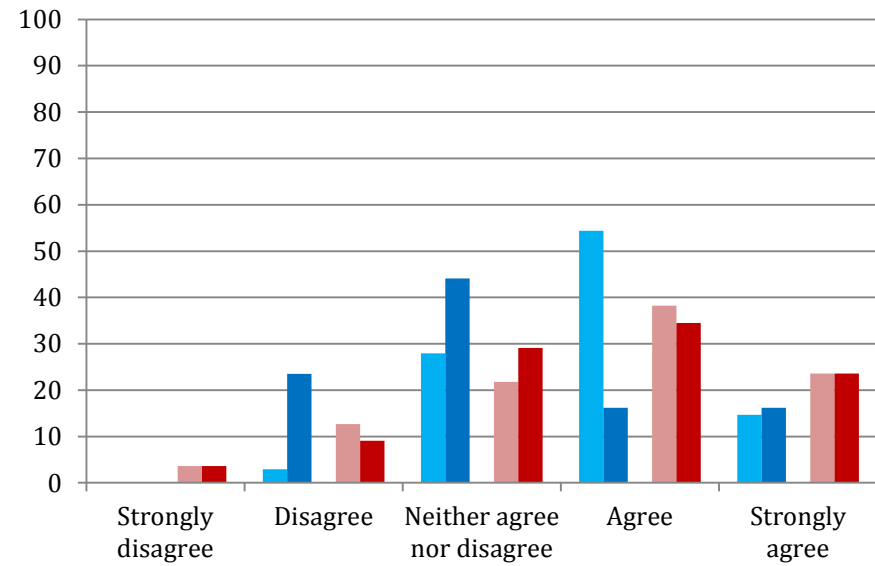
Figure 9.1 Pupil responses to: “When I feel unwell I need to take medicine to feel better” by Year group (%)

- Intervention Baseline
- Intervention Follow-up
- Control Baseline
- Control Follow-up

Years 3 and 4 (n=171)



Years 5 and 6 (n=124)



Note. Responses of ‘strongly disagree’ and ‘disagree’ are more desirable.

There is nothing I can do to reduce the risk of getting ill

Years 3 and 4

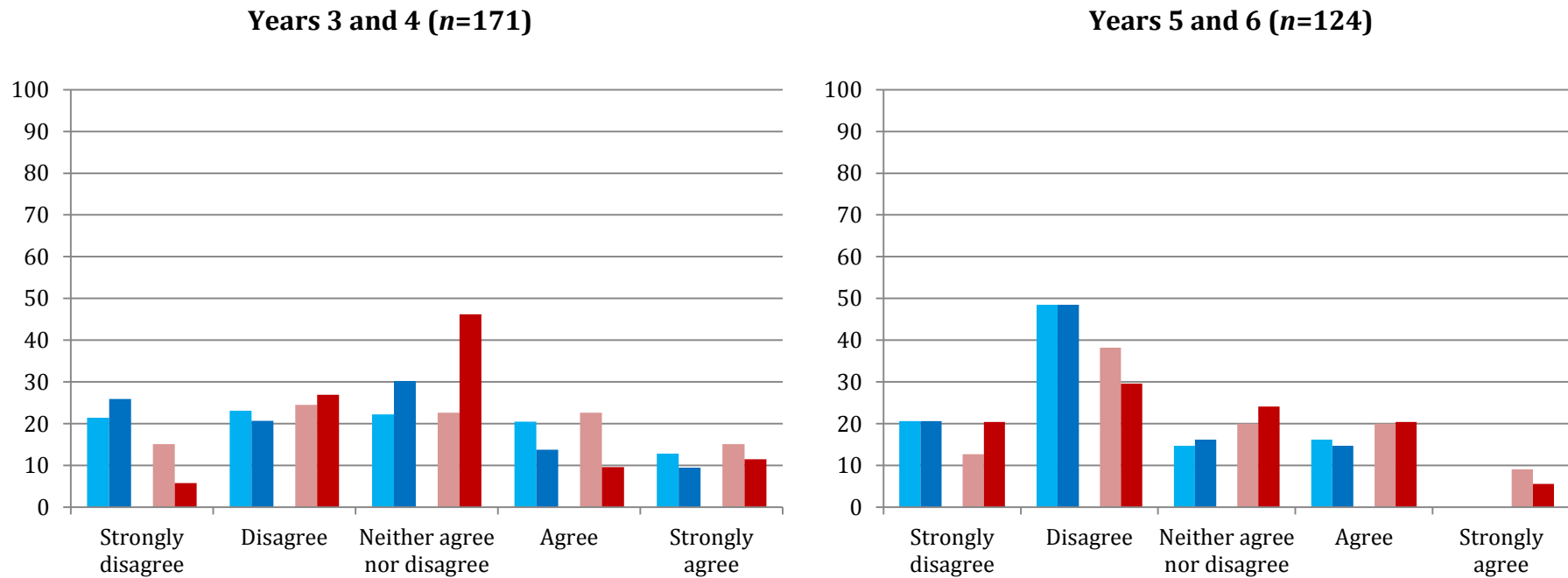
Figure 9.2 suggests that there was minimal change in Year 3 and 4 intervention group responses to item 2 at baseline and follow-up. Among control group pupils, there was a strong increase in the number of pupils selecting 'neither agree nor disagree' in response to the statement "There is nothing I can do to reduce the risk of getting ill" (baseline n = 12 (22.6%); follow-up n = 24 (45.3%).

Years 5 and 6

As shown in Figure 9.2 there were minimal differences in intervention and control group responses at baseline and follow-up.

Figure 9.2 Pupil responses to: “There is nothing I can do to reduce the risk of getting ill” by Year group (%)

- Intervention Baseline
- Intervention Follow-up
- Control Baseline
- Control Follow-up



Note. Responses of ‘strongly disagree’ and ‘disagree’ are more desirable.

When I am ill I always need to see a doctor

Years 3 and 4

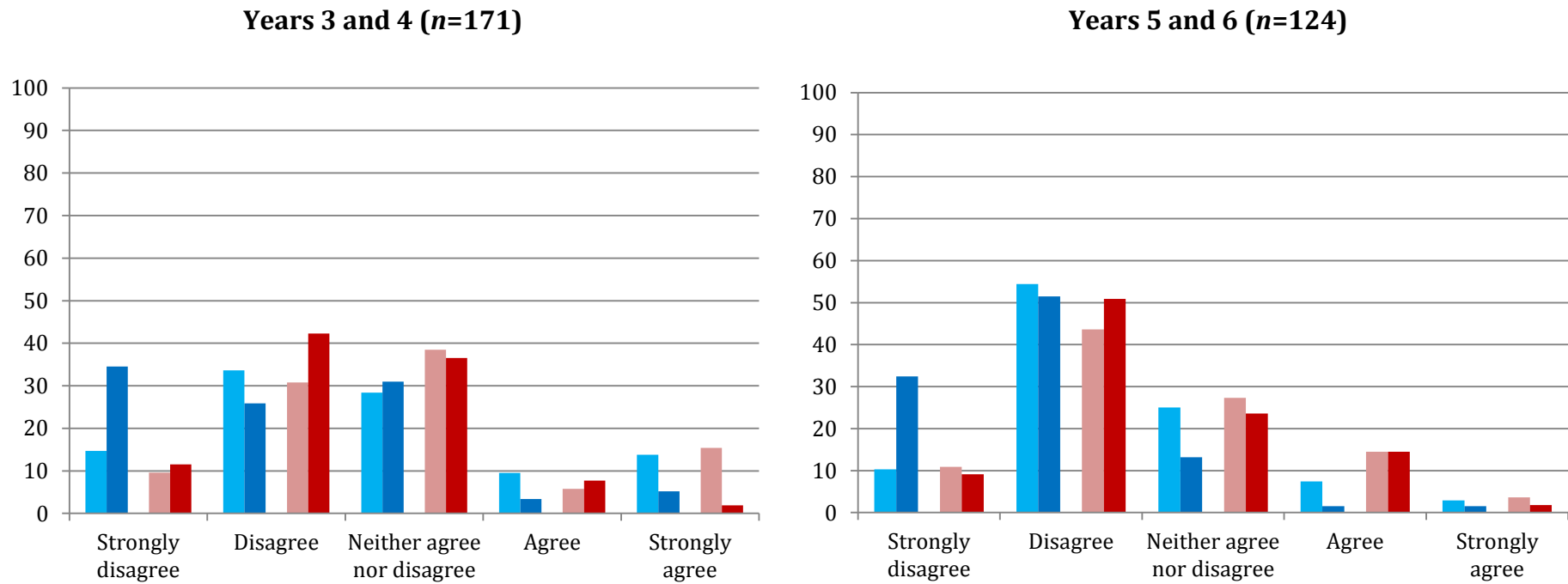
Figure 9.3 demonstrates that a higher proportion of Year 3 and 4 pupils in the intervention group reported strong disagreement or disagreement with item 3 at follow-up (n = 70; 59.3%) compared with baseline (n = 56; 47.5%). However, it should be noted that the proportion of desirable responses also increased among the control group from baseline to follow-up (n = 21 (39.6%) to 28 (52.8%) respectively).

Years 5 and 6

Findings presented in Figure 9.3 demonstrate that Year 5 and 6 responses were broadly similar to responses provided by pupils in Years 3 and 4.

Figure 9.3 Pupil responses to: “When I am ill I always need to see a doctor” by Year group (%)

- Intervention Baseline
- Intervention Follow-up
- Control Baseline
- Control Follow-up



Note. Responses of ‘strongly disagree’ and ‘disagree’ are more desirable.

Some people are never ill

Years 3 and 4

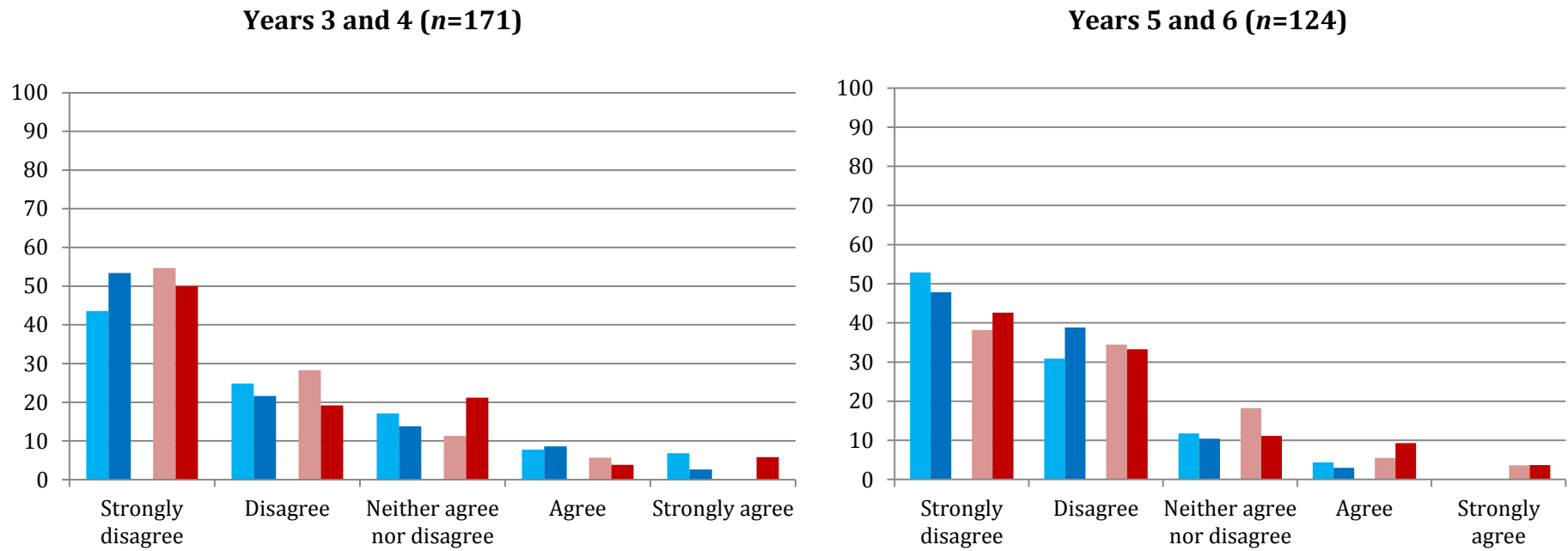
Figure 9.4 reveals that at baseline almost half of the pupils in Years 3 and 4 were aware that almost everyone will be unwell at some point in their lives. Responses of 'strongly disagree' with the statement "Some people are never ill" were selected by 43.2% intervention group pupils and 54.7% control group pupils at baseline. At follow-up responses were broadly similar (52.5% vs 49.1% respectively).

Years 5 and 6

Responses among pupils in Years 5 and 6 were very similar to those from Years 3 and 4. Baseline responses once again demonstrated good awareness among pupils in intervention and control groups, but did not change dramatically at follow-up.

Figure 9.4 Pupil responses to: “Some people are never ill” by Year group (%)

- Intervention Baseline
- Intervention Follow-up
- Control Baseline
- Control Follow-up



Note. Responses of ‘strongly disagree’ and ‘disagree’ are more desirable.

I am confident I can do things to keep myself as healthy and well as possible

Years 3 and 4

As shown in Figure 9.5 perceived confidence levels among Year 3 and 4 pupils were high at baseline (proportion responding 'strongly agree' and 'agree' = 86.4%) and remained high at follow-up (proportion responding 'strongly agree' and 'agree' = 81.3%). This was equally true for control group pupils at baseline (proportion responding 'strongly agree' and 'agree' = 75.5%) and follow-up (proportion responding 'strongly agree' and 'agree' = 77.3%).

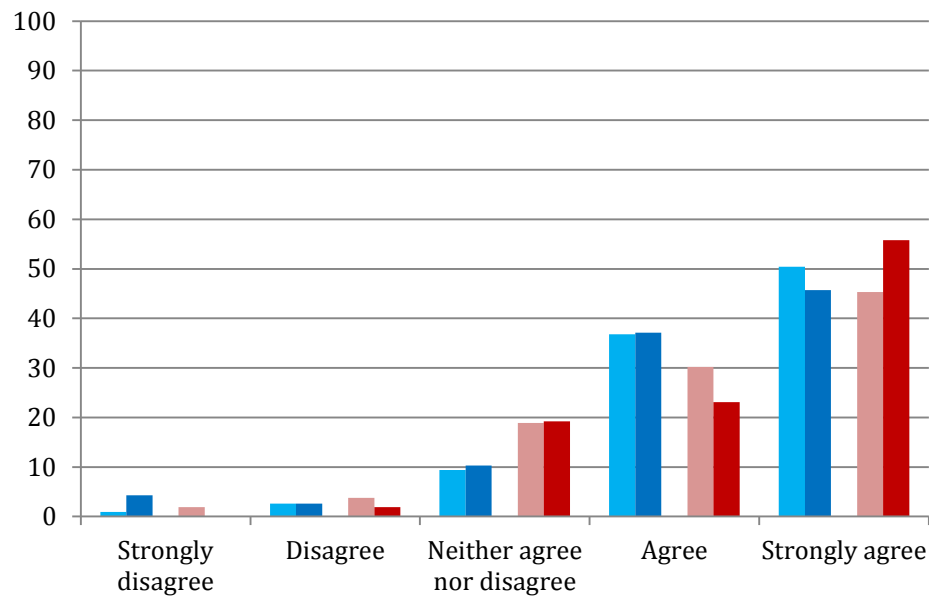
Years 5 and 6

Figure 9.5 demonstrates that responses among intervention and control group pupils in Years 5 and 6 were similar to those among pupils in Years 3 and 4.

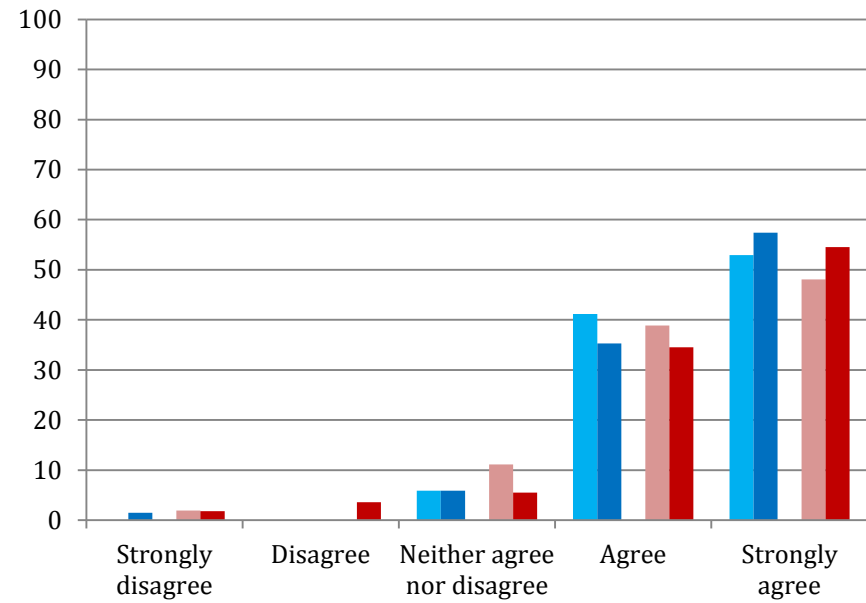
Figure 9.5 Pupil responses to: “I am confident I can do things to keep myself as healthy and well as possible” by Year group (%)

- Intervention Baseline
- Intervention Follow-up
- Control Baseline
- Control Follow-up

Years 3 and 4 (n=171)



Years 5 and 6 (n=124)



Note. Responses of ‘strongly agree’ and ‘agree’ are more desirable.

Most of the time, most of us get better from most illnesses without any help

Years 3 and 4

Baseline and follow-up responses presented in Figure 9.6 show almost an equal spread of responses across each of the five possible options (ranging from 'strongly disagree' to 'strongly agree'). The highest proportion of responses was for 'neither agree nor disagree' when asked the following: "Most of the time, most of us get better from most illnesses without any help".

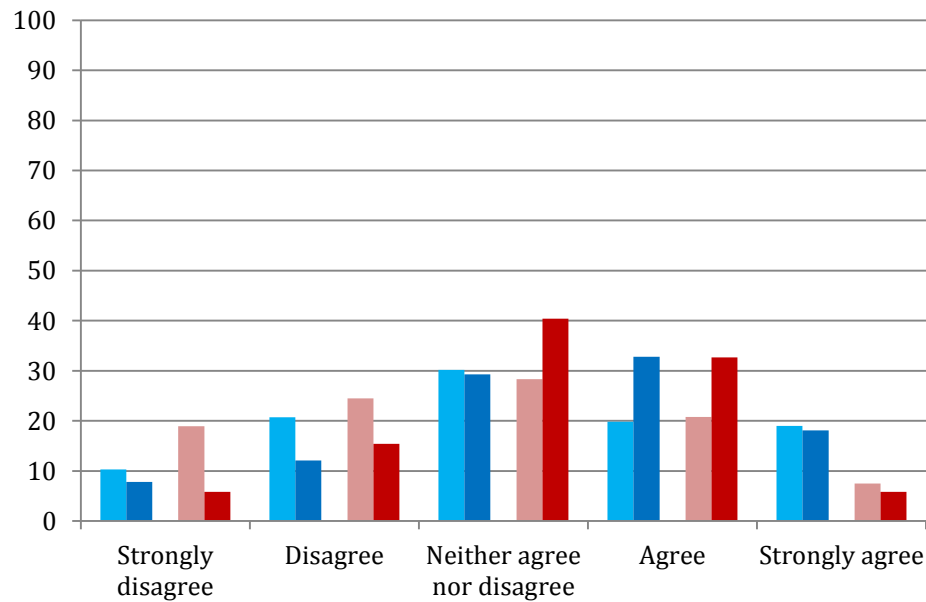
Years 5 and 6

As above, Year 5 and 6 pupil responses to the item "Most of the time, most of us get better from most illnesses without any help" were broadly spread with no clear trend emerging.

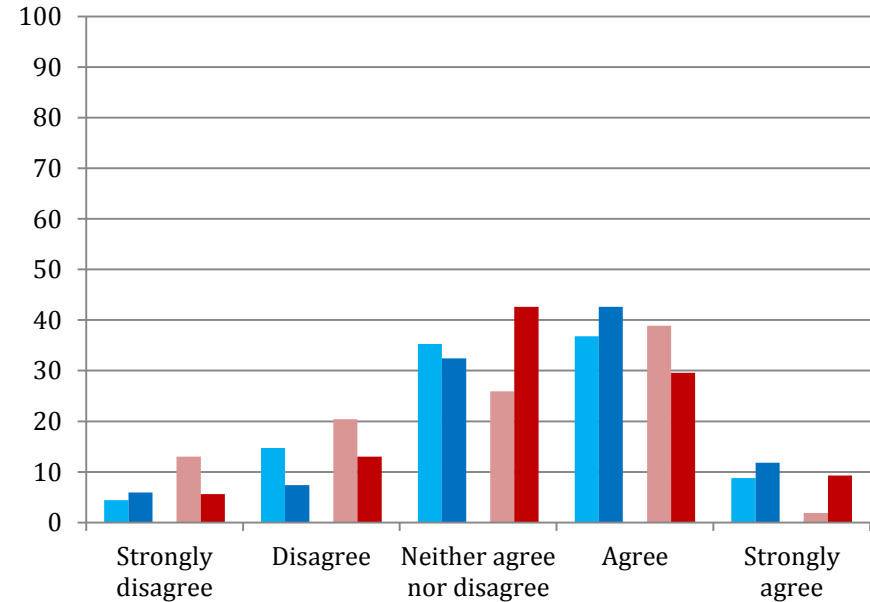
Figure 9.6 Pupils responses to: “Most of the time, most of us get better from most illness without any help” by Year group (%)

- Intervention Baseline
- Intervention Follow-up
- Control Baseline
- Control Follow-up

Years 3 and 4 (n=171)



Years 5 and 6 (n=124)



Note. Responses of ‘strongly agree’ and ‘agree’ are more desirable.

10. Facts4Life Questionnaire – Statistical comparisons by Year group

10.1 Introduction

As described above in chapter 8.2 mixed analysis of variance (MANOVA) models were used to identify any changes in each of the outcome measures from baseline to follow-up. For these tests, Years 3 and 4, and Years 5 and 6 were considered separately.

10.2 Statistical comparisons - Results

When I feel unwell I need to take medicine to feel better

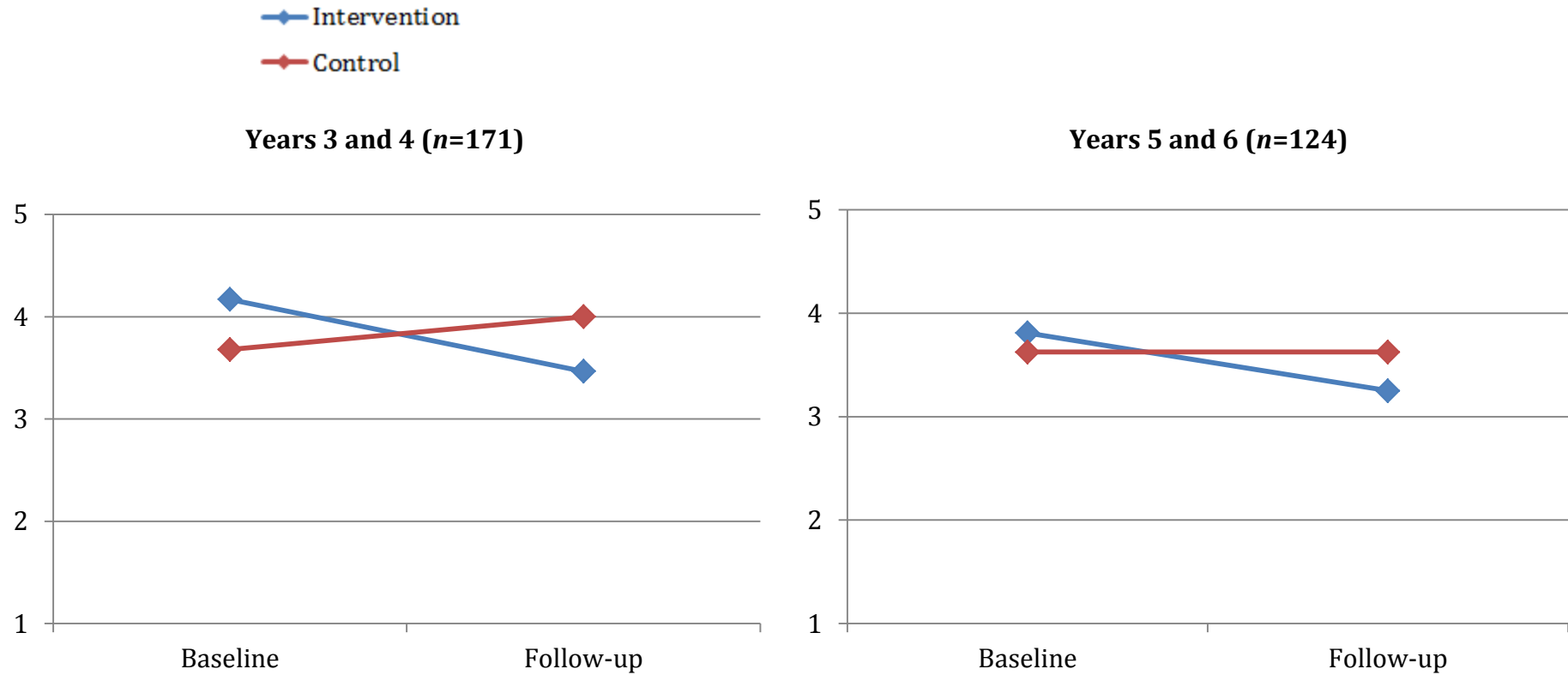
Years 3 and 4

As shown in Figure 10.1, there was a statistically significant improvement in Year 3 and 4 intervention group responses to the item “When I feel unwell I need to take medicine to feel better”, when controlling for control group responses, $F(1, 168) = 23.82$, $p = 0.01$.

Years 5 and 6

As shown in Figure 10.1, there was also a statistically significant improvement in Year 5 and 6 intervention group responses to the item “When I feel unwell I need to take medicine to feel better”, when controlling for control group responses, $F(1, 121) = 8.43$, $p = 0.01$.

Figure 10.1 Mean responses to: “When I feel unwell I need to take medicine to feel better” at baseline and follow-up by Year group*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. A decrease in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

There is nothing I can do to reduce the risk of getting ill

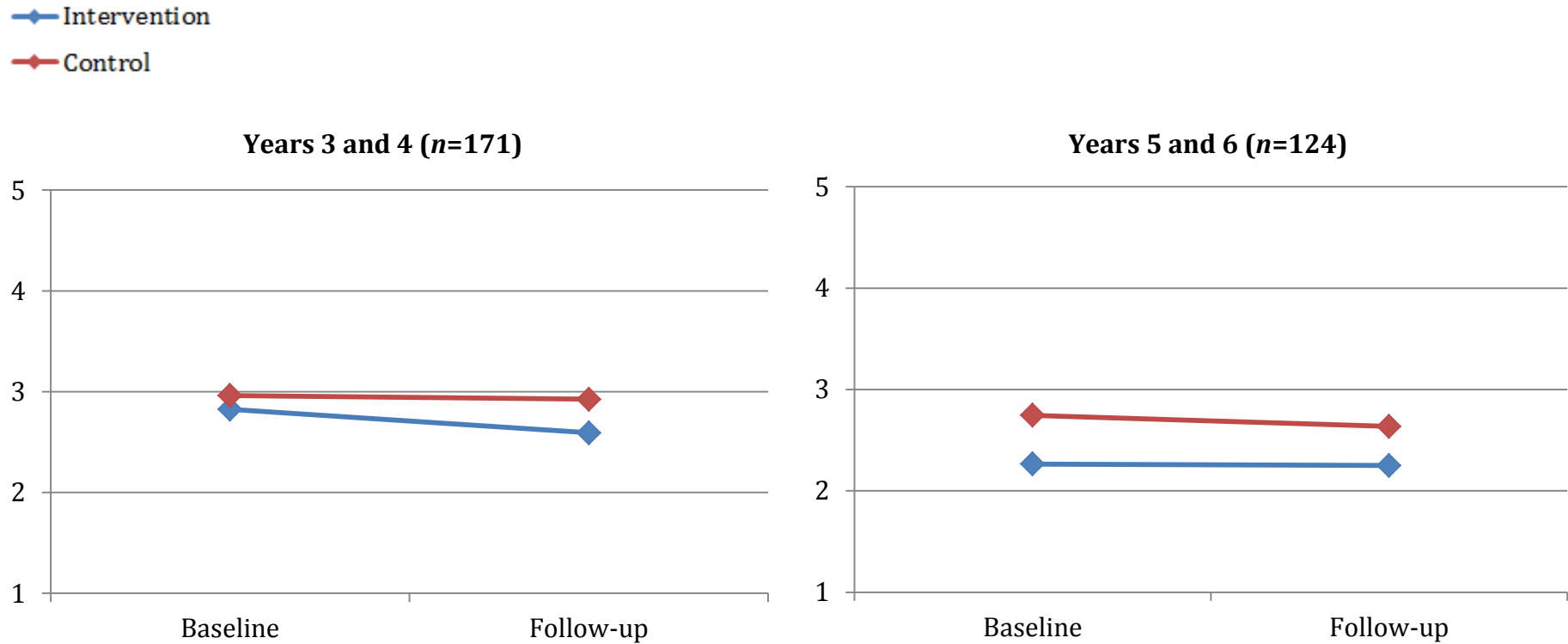
Years 3 and 4

Figure 10.2 reveals that despite a positive change in Year 3 and 4 responses to this item, there was no statistically significant change in intervention group scores when controlling for control group responses, $F(1, 170) = 0.44, p = 0.51$.

Years 5 and 6

Similarly, as shown in Figure 10.2 there was no statistically significant change in Year 5 and 6 intervention group scores when controlling for control group responses, $F(1, 120) = 0.13, p = 0.72$.

Figure 10.2 Mean responses to: “There is nothing I can do to reduce the risk of getting ill” at baseline and follow-up by Year group*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. A decrease in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

When I am ill I always need to see a doctor

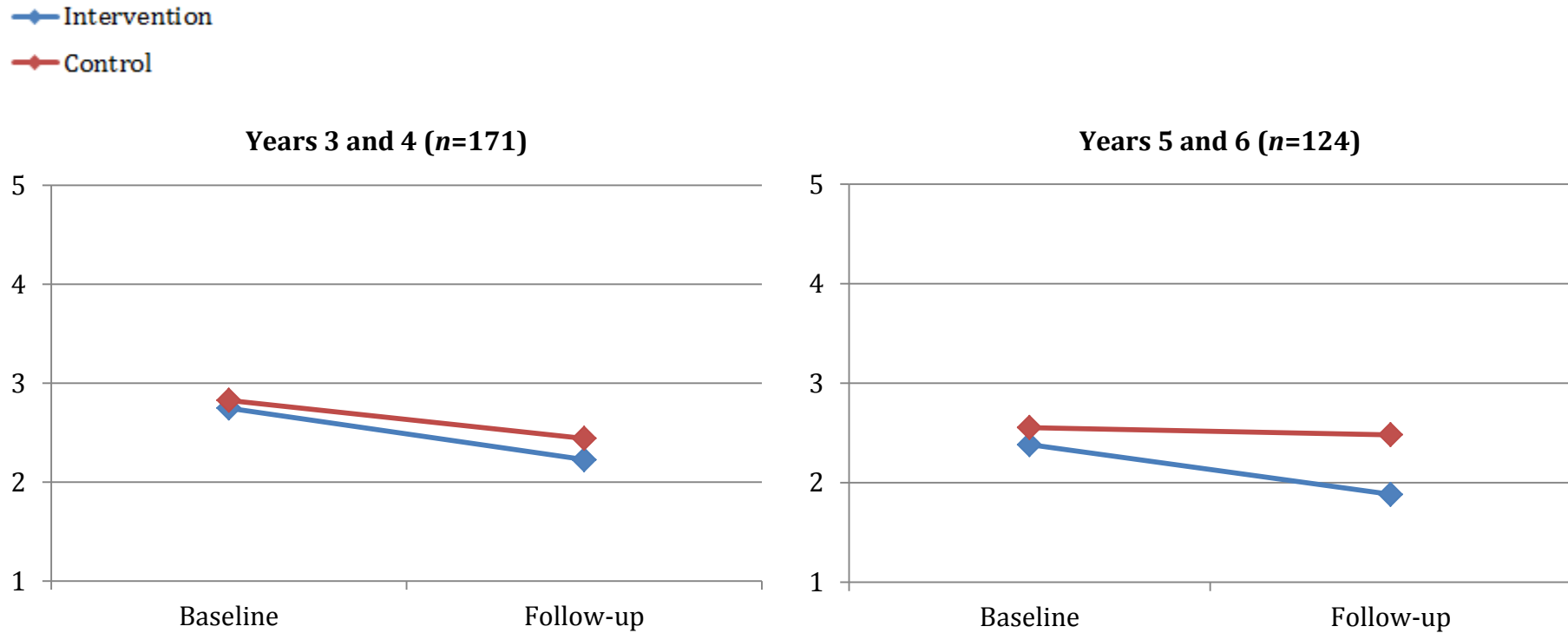
Years 3 and 4

As shown in Figure 10.3 there was no statistically significant change in Year 3 and 4 intervention group scores for the item “When I am ill I always need to see a doctor” when controlling for control group responses, $F(1, 168) = 0.35, p = 0.56$.

Years 5 and 6

Conversely, when looking specifically at responses from Year 5 and 6 pupils, Figure 10.3 demonstrates that there was a statistically significant change in intervention group scores for the item “When I am ill I always need to see a doctor” when controlling for control group responses, $F(1, 121) = 5.61, p = 0.02$.

Figure 10.3 Mean responses to: “When I am ill I always need to see a doctor” at baseline and follow-up by Year group*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. A decrease in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

Some people are never ill

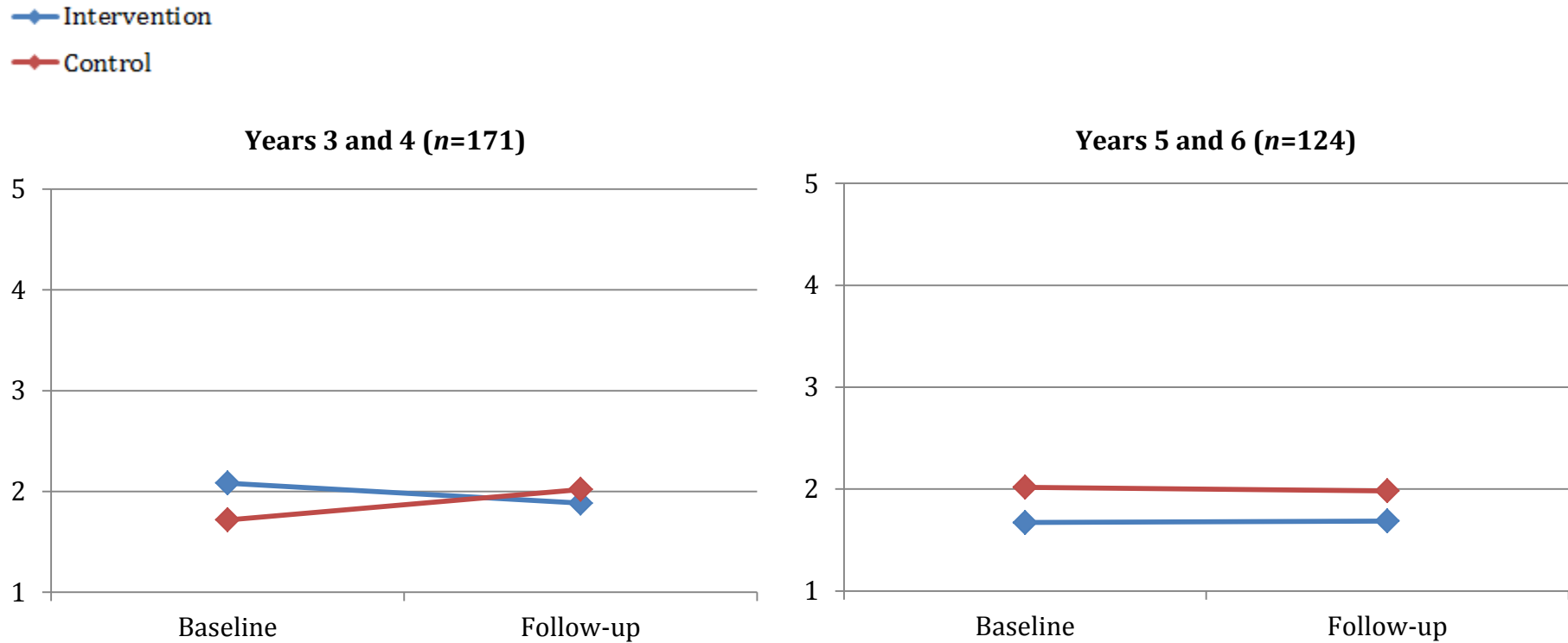
Years 3 and 4

Figure 10.4 demonstrates that there was a statistically significant change in Year 3 and 4 intervention group scores for the item “Some people are never ill” when controlling for control group responses, $F(1, 170) = 4.68, p = 0.03$.

Years 5 and 6

In contrast to responses from pupils in Years 3 and 4, there was no statistically significant change in item responses from pupils in Years 5 and 6, when controlling for the control group, $F(1, 119) = 0.07, p = 0.80$ (Figure 10.4).

Figure 10.4 Mean responses to: “Some people are never ill” at baseline and follow-up by Year group*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. A decrease in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

I am confident I can do things to keep myself as healthy and well as possible

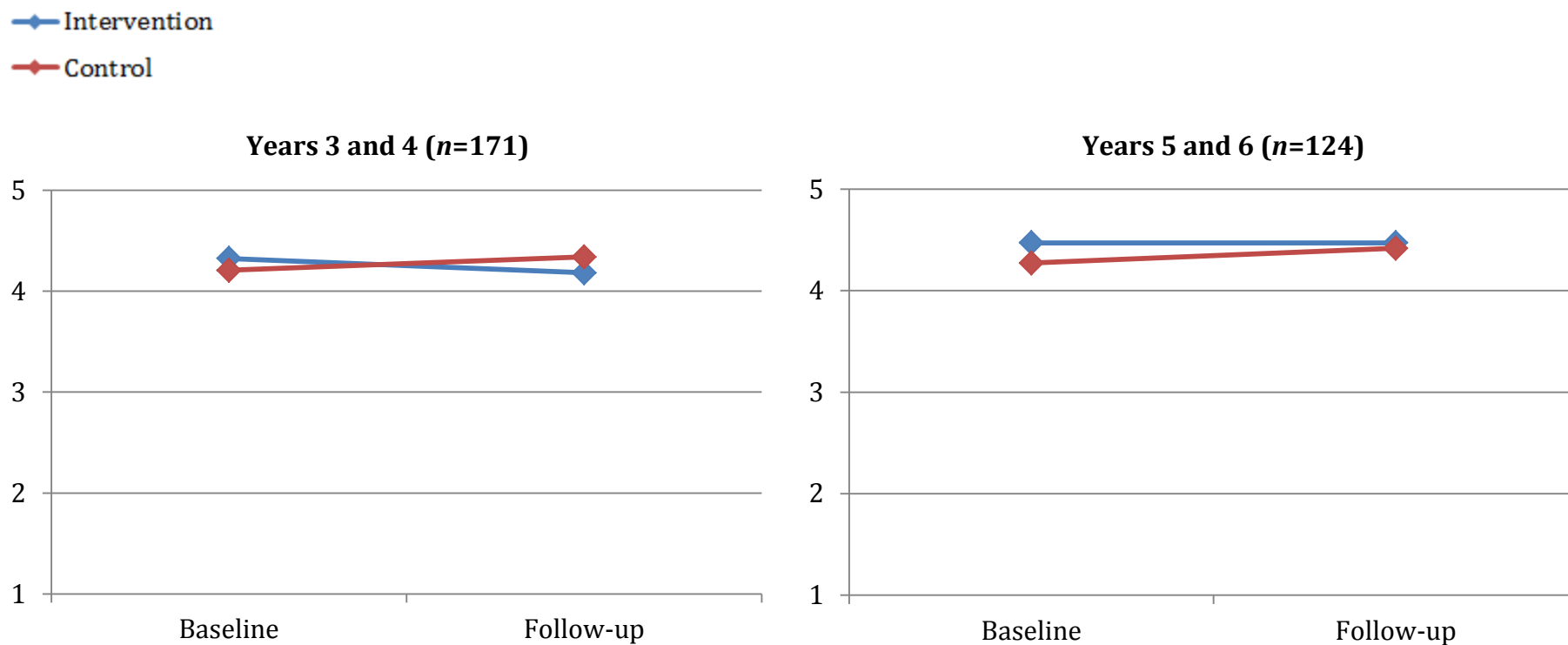
Years 3 and 4

Figure 10.5 demonstrates that there was a small reduction in Year 3 and 4 pupils perceived confidence levels relating to their personal health control. However, this reduction was not statistically significant when controlling for control group responses, $F(1, 170) = 2.14, p = 0.15$.

Years 5 and 6

In contrast to Years 3 and 4 pupil responses, Figure 10.5 demonstrates little-to-no change in confidence levels relating to personal health control, $F(1, 121) = 0.74, p = 0.39$.

Figure 10.5 Mean responses to: “I am confident I can do things to keep myself as healthy and well as possible” at baseline and follow-up by Year group*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. An increase in mean score is desirable. * Mean score based on estimated marginal mean derived from MANOVA test.

Most of the time, most of us get better from most illnesses without any help

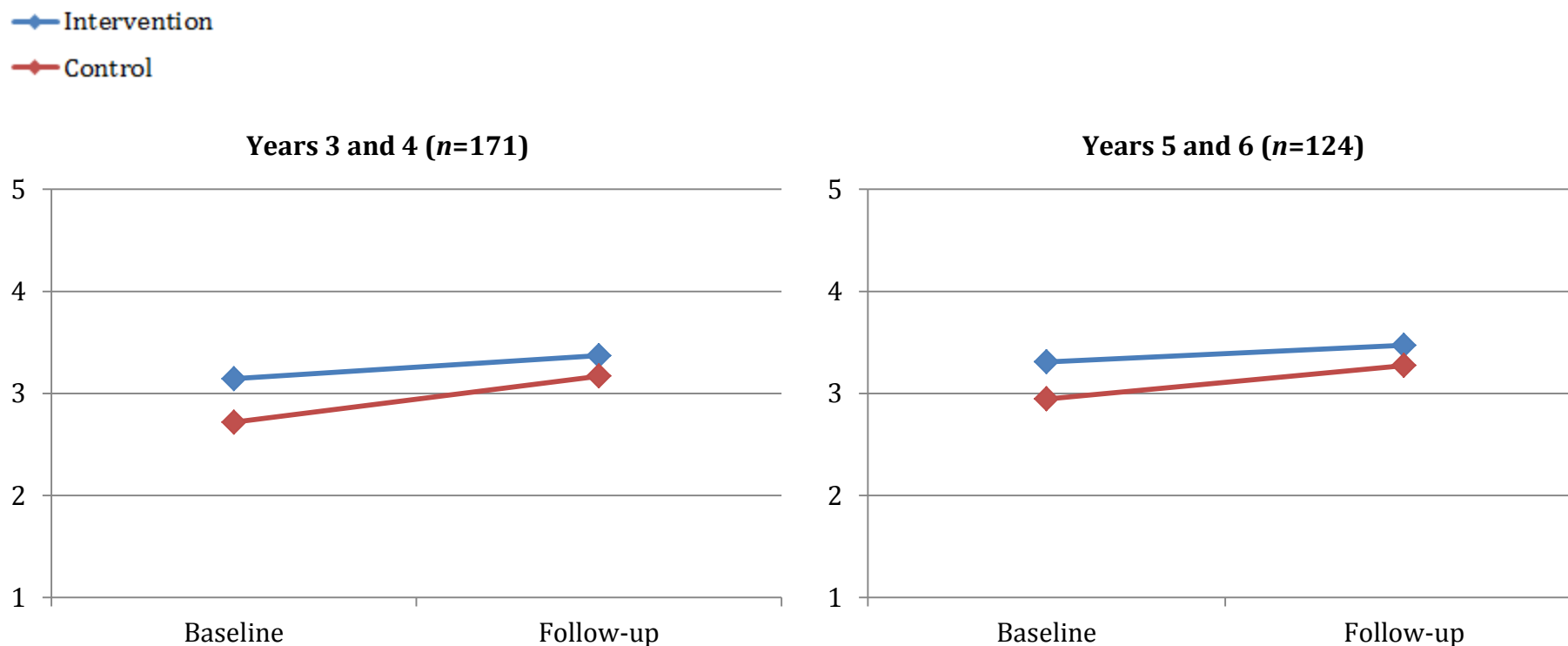
Years 3 and 4

Figure 10.6 demonstrates that there was a positive change in Year 3 and 4 intervention group responses to the item “Most of the time, most of us get better from illness without any help”. However, a positive change was also observed in the control group, $F(1, 169) = 0.99$, $p = 0.32$.

Years 5 and 6

As shown in Figure 10.6, intervention group responses among pupils in Years 5 and 6 were broadly similar to those of pupils from Years 3 and 4. Statistical analyses revealed that changes were not statistically significant over time, $F(1, 120) = 0.69$, $p = 0.41$.

Figure 10.6 Mean responses to: “Most of the time, most of us get better from illness without any help” at baseline and follow-up by Year group*



Note. Scores range from 1 = strongly disagree – 5 = strongly agree. An increase in mean score is desirable.

* Mean score based on estimated marginal mean derived from MANOVA test.

10.3 Chapter Summary

The statistical results presented in this chapter are broken down according to Year group: Years 3 and 4; and, Years 5 and 6.

Among pupils in Years 3 and 4 there were statistically significant improvements in health-related attitudes, knowledge and behaviour in relation to items:

- When I feel unwell I need to take medicine to feel better;
- Some people are never ill.

In comparison, there were statistically significant improvements in Year 5 and 6 pupils' responses to items:

- When I feel unwell I need to take medicine to feel better;
- When I am ill I always need to see a doctor.

11. Child Health and Illness Profile (CHIP-CE) questionnaire – Descriptive statistics and statistical comparisons

11.1 Introduction

This section of the report presents a descriptive summary (means and standard deviations) of all ($n=295$) pupil responses to the Child Health and Illness Profile (Child Edition (CHIP-CE) questionnaire at baseline and again at follow-up.

11.2 Methods

CHIP-CE questionnaires were administered to pupils in the intervention and control groups approximately one week before the intervention period began (baseline) and again approximately one week after the intervention period had ended (follow-up). CHIP-CE questionnaires were administered at the same time as the Facts4Life questionnaires. Questionnaires were completed in each school during January and April 2015.

CHIP-CE is a 45 item questionnaire that assesses health-related quality of life according to five different domains: “Achievement”; “Risk Avoidance”; “Resilience”; “Satisfaction”; and, “Comfort”. Items are based on a 5-point Likert scale; most items relate to the past 4 weeks, and the remainder are not associated with a specific time period.

Data were handled according to the CHIP-CE Technical Manual ²⁸. Following CHIP-CE guidance mean scores were standardised to *T*-scores with a mean of 50 and a standard deviation of 10. A ‘normative’ mean score for each health domain is 50 (SD=10). A higher mean score indicates better health-related quality of life.

11.2.1 Internal consistency of the CHIP-CE

CHIP-CE was assessed for internal consistency (i.e., the agreement between individual items that make up the questionnaire) at each time point. An acceptable level of internal consistency is $\alpha=0.70$ or above. Internal consistency for each health domain of the CHIP-CE was acceptable-to-good in relation to this evaluation (see Table 11.1 for details).

11.3 Descriptive summary of pupil responses

At baseline and follow-up mean *T*-scores were similar across intervention and control groups (Table 11.1). All mean scores were near to the ‘normative’ value of 50, suggesting good health-related quality of life across pupils at baseline and at follow-up.

There was a positive change in mean intervention group scores for the ‘Risk Avoidance’ domain over time. All other domains experienced a small reduction in mean score over time.

Mean scores for pupils in the control group were broadly similar; however in contrast to the intervention group, control group pupils reported small positive changes in all domains except ‘Risk Avoidance’.

Table 11.1 CHIP-CE descriptive statistics by health domain (n=295)*

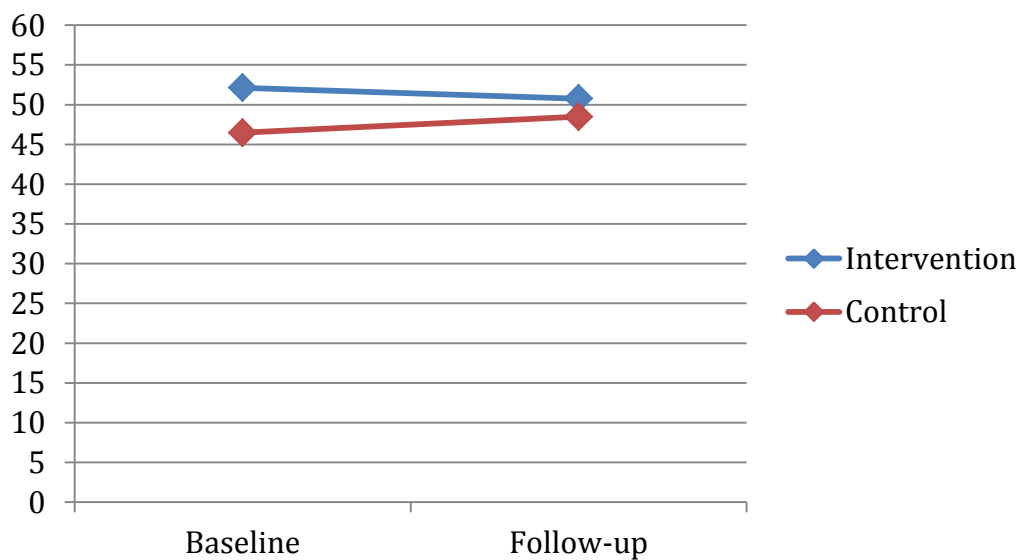
Domain	Intervention group		Control group		Internal consistency	
	Baseline M (SD)	Follow-up M (SD)	Baseline M (SD)	Follow-up M (SD)	Baseline	Follow-up
Achievement	51.88 (8.83)	50.84 (9.44)	46.55 (11.14)	48.64 (10.81)	0.68	0.69
Risk Avoidance	49.38 (10.29)	50.28 (10.15)	50.57 (10.10)	49.45 (9.78)	0.74	0.76
Resilience	50.08 (9.58)	49.76 (9.93)	49.58 (10.28)	50.52 (10.15)	0.69	0.72
Satisfaction	50.63 (9.53)	50.03 (10.20)	48.57 (11.01)	50.01 (9.74)	0.83	0.83
Comfort	50.30 (9.87)	49.96 (10.67)	49.41 (10.20)	50.14 (8.81)	0.82	0.81

Note. Higher scores indicate a better health-related quality of life. * Following CHIP-CE guidance mean scores were standardised to *T*-scores. A ‘normative’ mean score for each domain is 50. α = Cronbach’s alpha. An acceptable level of internal consistency is 0.70 or above.

11.4 Statistical comparisons - Results

Figure 11.1 reveals that intervention group mean Achievement scores decreased over time, while control group mean scores increased. Overall there was a statistically significant reduction in intervention group scores when controlling for control group responses, $F(1, 275) = 8.04, p = 0.01$.

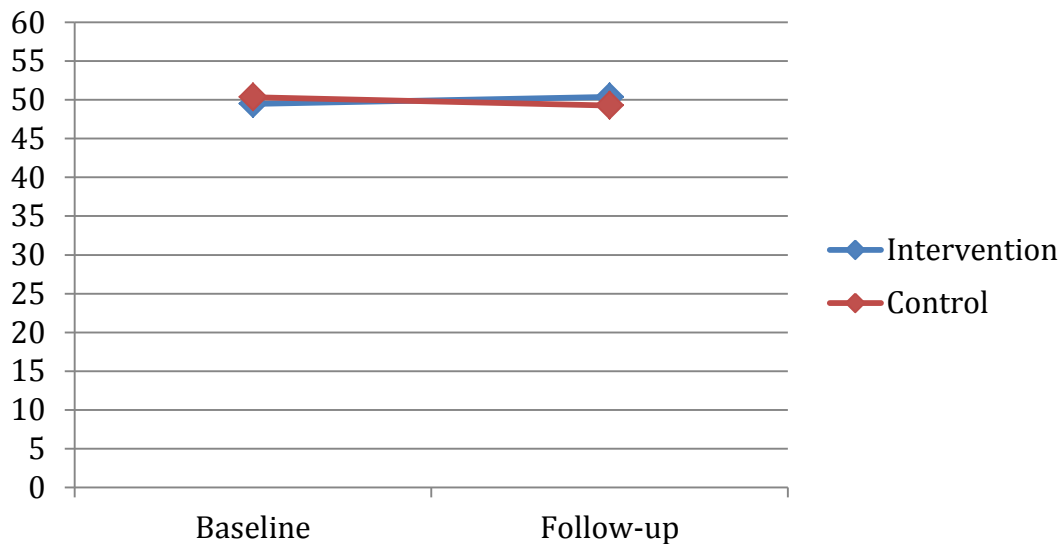
Figure 11.1 Mean 'Achievement' domain scores*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

As shown in Figure 11.2 there was minimal change in intervention and control group Risk Avoidance scores over time. Overall there was no statistically significant change in intervention group scores when controlling for control group responses, $F(1, 275) = 3.16, p = 0.08$.

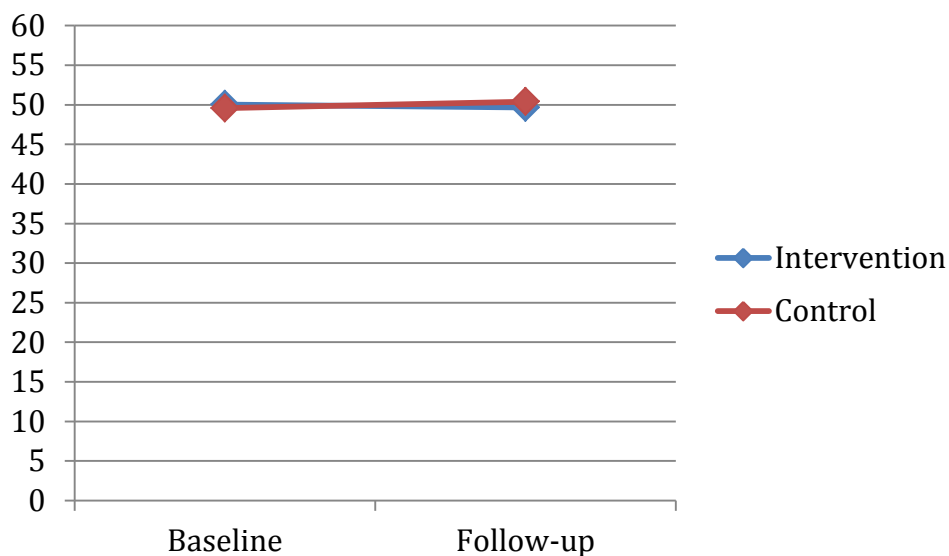
Figure 11.2 Mean 'Risk Avoidance' domain scores*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

As above, there were also minimal changes in intervention and control group Resilience scores over time. Statistical analysis revealed that there was no statistically significant change in intervention group scores when controlling for control group responses, $F(1, 271) = 0.95, p = 0.33$.

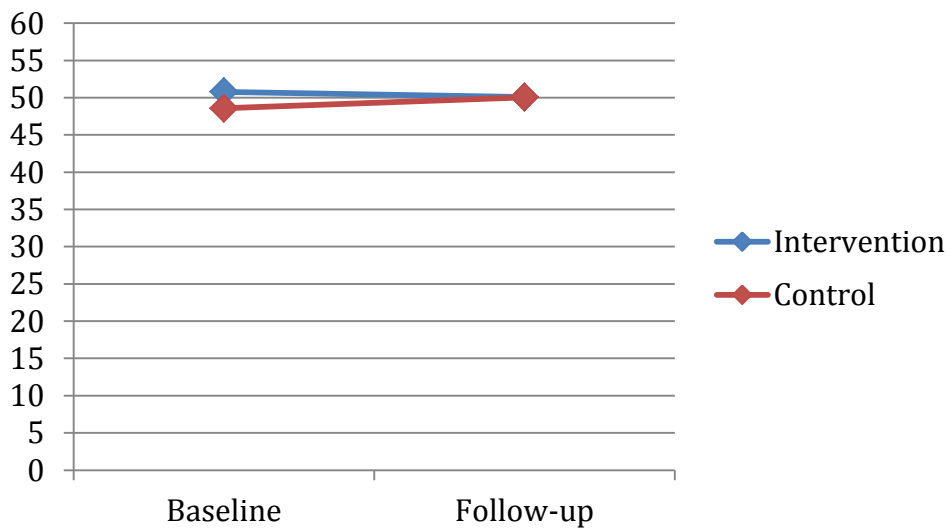
Figure 11.3 Mean 'Resilience' domain scores*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

Figure 11.4 demonstrates that pupil health-related satisfaction among children in the intervention group decreased slightly over time. However, statistical tests revealed no statistically significant change in intervention group mean scores when controlling for control group mean scores, $F(1, 279) = 3.09, p = 0.08$.

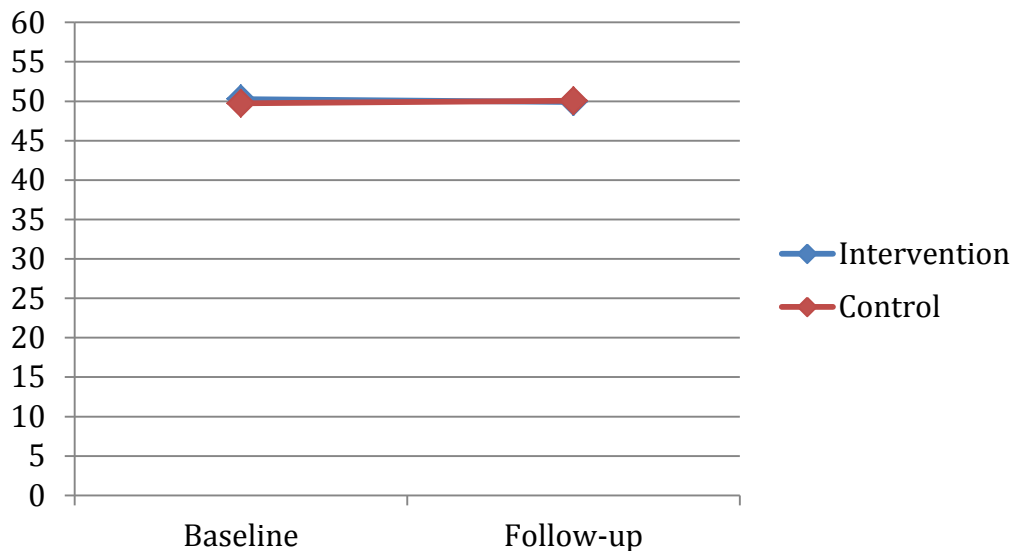
Figure 11.4 Mean 'Satisfaction' domain scores*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

As shown in Figure 11.5, intervention and control group mean Comfort scores were broadly similar to each other at each time point. There was no statistically significant change in intervention group mean scores when accounting for control group scores, $F(1, 283) = 0.30, p = 0.58$.

Figure 11.5 Mean 'Comfort' domain scores*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

11.5 Chapter summary

This chapter reports on changes in intervention group CHIP-CE scores, when controlling for responses in the control group. CHIP-CE consists of five domains of health and asks children to report on symptoms of illness and wellbeing, health-related behaviour, school performance, and family/peer relationships.

The statistical results presented in this chapter demonstrate a statistically significant reduction in the CHIP-CE Achievement domain score among intervention group pupils over time. There were no statistically significant changes in any of the remaining CHIP-CE domains (Risk Avoidance; Resilience; Satisfaction; Comfort).

12. Child Health and Illness Profile (CHIP-CE) questionnaire - Descriptive statistics and statistical comparisons by Year group

12.1 Introduction

This section presents the average (mean and standard deviation) CHIP-CE scores at baseline and follow-up, and a statistical comparison of intervention and control group responses, according to Year group.

12.2 Methods

As shown in section 6.3, there were statistical differences in the number of pupils in Years 3 and 4 and Years 5 and 6 allocated to the intervention or control group. To explore these differences in more detail, statistical analysis was conducted to identify any changes in outcome measures in the intervention and control groups from baseline to follow-up, according to Year group.

Data were handled according to the CHIP-CE Technical Manual ²⁸. Following CHIP-CE guidance mean scores were standardised to *T*-scores with a mean of 50 and a standard deviation of 10. A 'normative' mean score for each health domain is 50 (SD=10). A higher mean score indicates better health-related quality of life.

12.2.1 Internal consistency of the CHIP-CE by Year group

CHIP-CE was assessed for internal consistency (i.e., the agreement between individual items that make up the questionnaire) at each time point, according to Year group. An acceptable level of internal consistency is $\alpha = 0.70$ or above. Internal consistency for each health domain of the CHIP-CE was generally acceptable-to-good (see Table 12.1 for details).

12.3 Descriptive summary of pupil responses - Years 3 and 4

At baseline and follow-up mean *T*-scores were similar across intervention and control groups (Table 12.1). All mean scores were close to the 'normative' value of 50, suggesting good health-related quality of life across pupils at baseline and at follow-up.

As shown in Table 12.1 there were minimal changes in Year 3 and 4 mean scores across intervention and control groups. There was a small positive change in intervention group mean scores for the 'Risk Avoidance' domain over time. All other domains experienced a small negative reduction in mean score over time.

Mean scores for pupils in the control group were broadly similar; however in contrast to the intervention group, control group pupils reported small positive changes in all domains except 'Risk Avoidance'.

12.3 Descriptive summary of pupil responses – Years 5 and 6

At baseline and follow-up mean *T*-scores were similar across intervention and control groups (Table 12.1). All mean scores were near to the ‘normative’ value of 50, suggesting good health-related quality of life across pupils at baseline and at follow-up.

Table 12.1 demonstrates that among Year 5 and 6 pupils in the intervention group, there was a small positive increase in all health-related domains, with the exception of Achievement. In contrast, there were small negative changes in Year 5 and 6 control group responses for Achievement, Risk Avoidance, and Comfort domains, and an increase in mean Resilience and Satisfaction domain scores.

Table 12.1CHIP-CE descriptive statistics by health domain and Year group (*n*=295)

Domain	Intervention group		Control group		Internal consistency	
	Baseline M (SD)	Follow-up M (SD)	Baseline M (SD)	Follow-up M (SD)	Baseline	Follow-up
Years 3 and 4						
Achievement	51.94 (9.69)	50.58 (10.65)	46.61 (11.83)	49.87 (10.69)	0.69	0.66
Risk Avoidance	49.37 (10.91)	50.47 (10.22)	50.00 (9.85)	49.28 (10.04)	0.65	0.74
Resilience	48.95 (10.08)	48.43 (10.14)	48.13 (10.05)	49.77 (9.65)	0.65	0.67
Satisfaction	51.47 (9.99)	50.44 (10.20)	48.14 (11.85)	48.84 (9.72)	0.82	0.79
Comfort	50.59 (10.65)	49.89 (11.10)	46.28 (10.32)	49.98 (7.50)	0.82	0.80
Years 5 and 6						
Achievement	51.78 (7.18)	51.27 (7.89)	51.15 (10.42)	47.44 (10.90)	0.67	0.74
Risk Avoidance	49.40 (9.22)	49.96 (10.11)	51.15 (10.42)	49.63 (9.61)	0.65	0.80
Resilience	52.00 (8.38)	52.21 (9.11)	51.16 (10.41)	51.31 (10.70)	0.74	0.79
Satisfaction	49.14 (8.53)	49.31 (10.23)	48.98 (10.22)	51.15 (9.70)	0.85	0.88
Comfort	49.79 (8.39)	50.08 (9.94)	52.54 (9.15)	50.29 (9.94)	0.82	0.84

Note. Higher scores indicate a better health-related quality of life. * Following CHIP-CE guidance mean scores were standardised to *T*-scores. A ‘normative’ mean score for each domain is 50. α = Cronbach’s alpha. An acceptable level of internal consistency is 0.70 or above.

12.5 Statistical comparisons - Results

Achievement domain

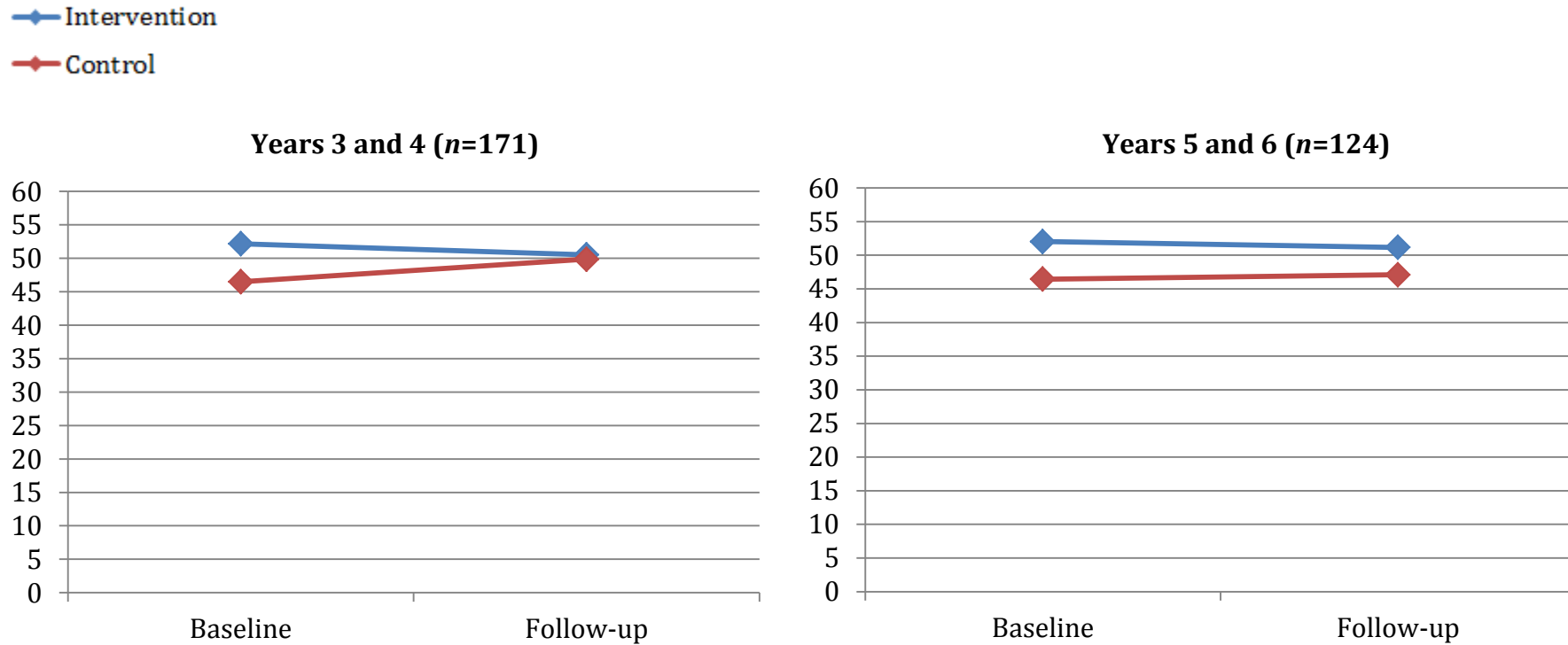
Years 3 and 4

As shown in Figure 12.1 there was a reduction in mean Achievement score among the intervention group, while there was an improvement in mean control group scores. Statistical analysis revealed that these changes were statistically significant, $F(1, 160) = 6.90, p = 0.01$.

Years 5 and 6

As shown in Figure 12.1 there was a small reduction in mean Achievement score among the intervention group, while there was a slight improvement in mean control group scores. In contrast with mean score changes among Year 3 and 4 pupils, statistical analysis revealed that these changes were not statistically significant among pupils from Years 5 and 6, $F(1, 112) = 1.65, p = 0.20$.

Figure 12.1 Mean 'Achievement' domain scores by Year group*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

Risk Avoidance domain

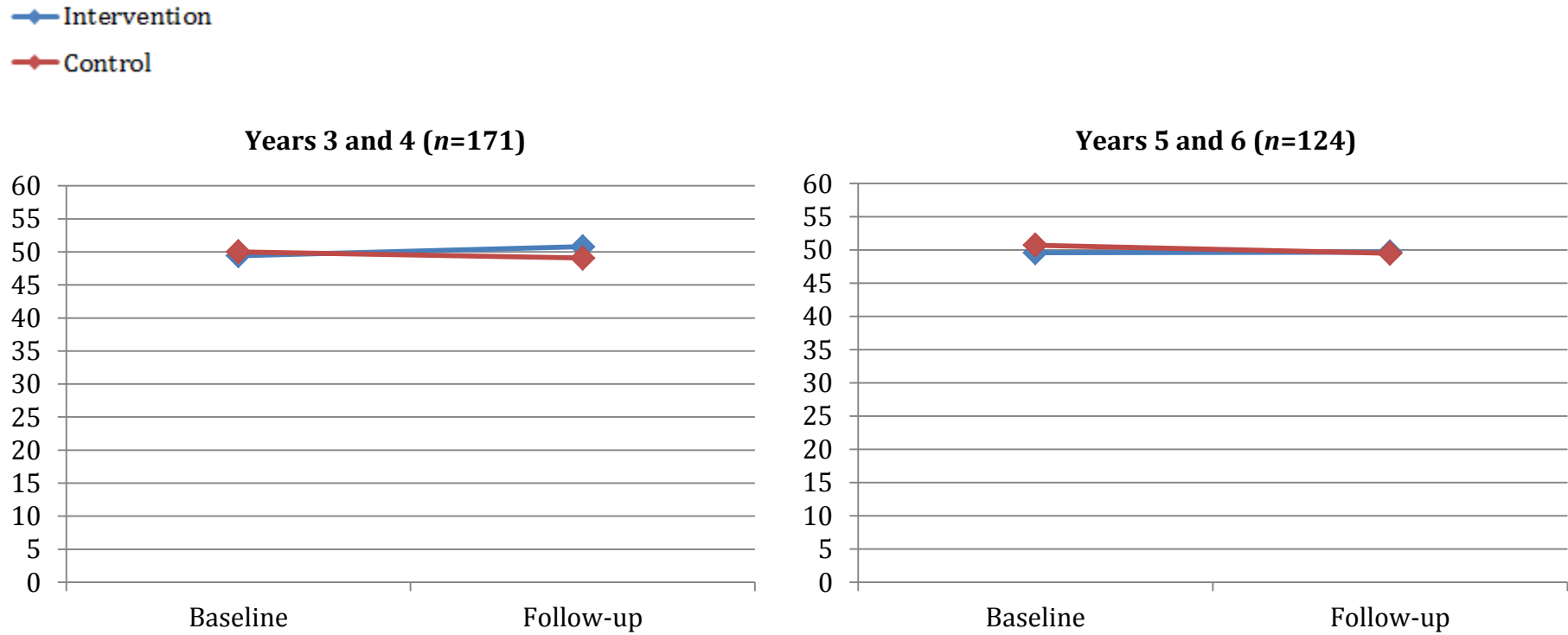
Years 3 and 4

There was a small increase in mean intervention group Risk Avoidance scores over time. However, this increase was not statistically significant when controlling for control group scores, $F(1, 160) = 1.75, p = 0.19$ (see Figure 12.2).

Years 5 and 6

Figure 12.2 suggests that mean Risk Avoidance scores were broadly similar across intervention and control groups. This was confirmed by statistical tests which revealed no statistically significant differences in intervention group mean scores over time when controlling for the control group responses, $F(1, 112) = 1.25, p = 0.27$.

Figure 12.2 Mean 'Risk Avoidance' domain scores by Year group*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

Resilience domain

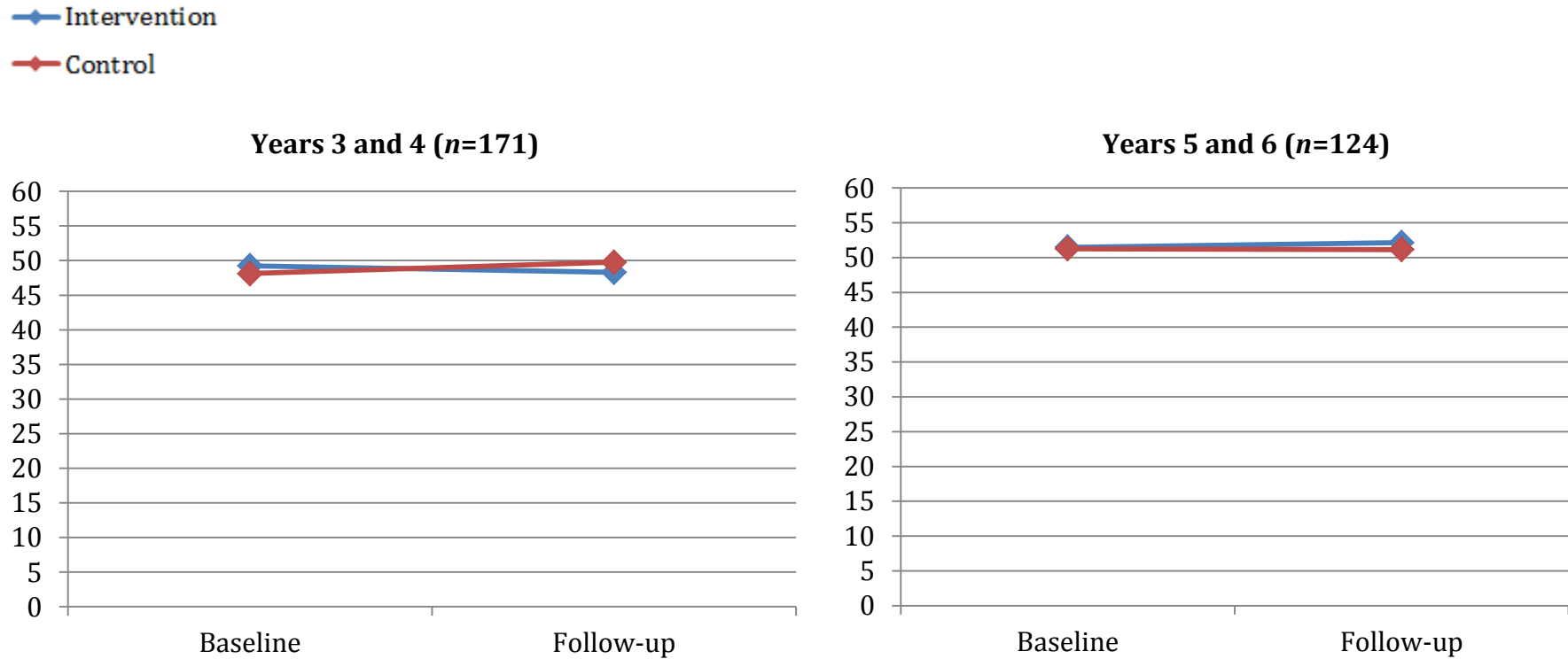
Years 3 and 4

Figure 12.3 demonstrates that mean Resilience scores among intervention group pupils decreased over time. However, this reduction was not found to be statistically significant when accounting for control group scores, $F(1, 164) = 1.87, p = 0.17$.

Years 5 and 6

Figure 12.3 demonstrates that there was little-to-no change in mean Resilience scores among intervention and control group pupils. Overall, statistical tests revealed that there was no statistically significant change in mean intervention group scores when controlling for control group scores, $F(1, 104) = 0.38, p = 0.54$.

Figure 12.3 Mean 'Resilience' domain scores by Year group*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

Satisfaction domain

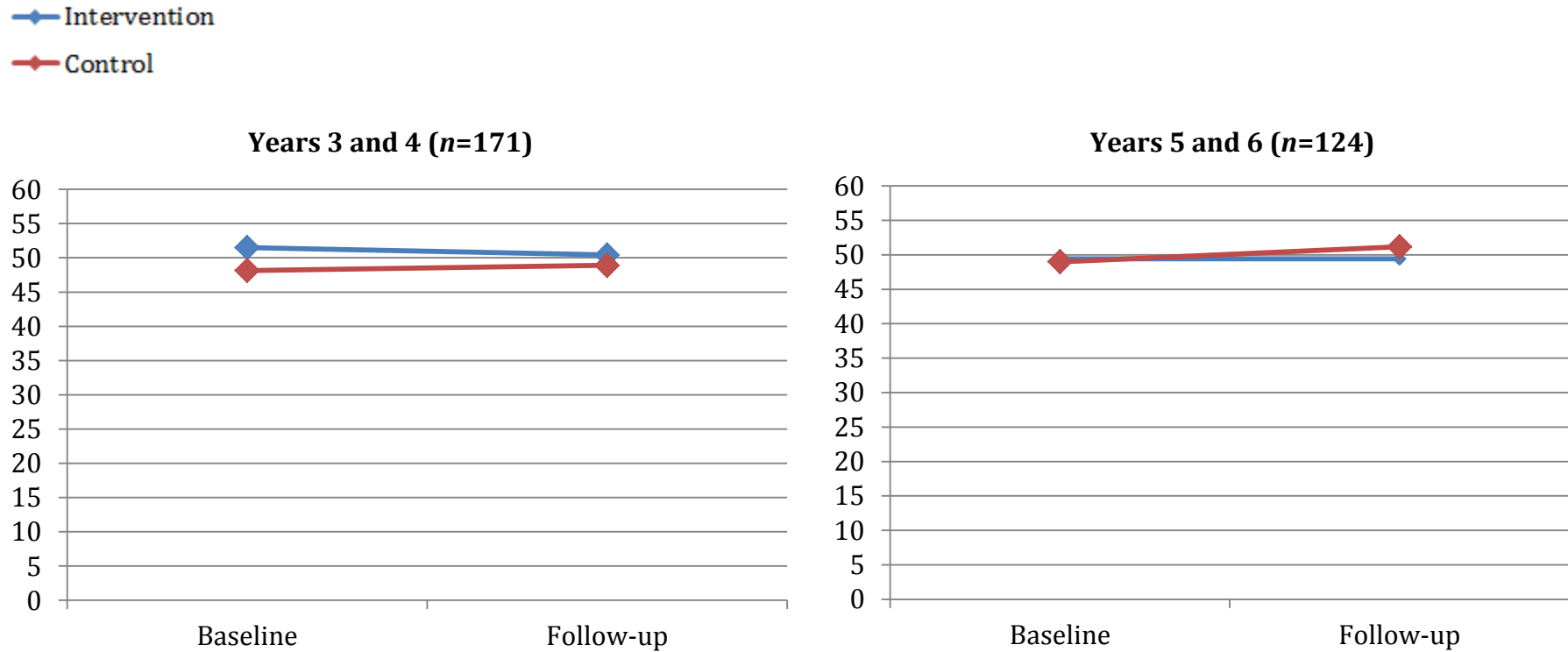
Years 3 and 4

As shown in Figure 12.4 mean intervention group Satisfaction scores were slightly higher than mean control group scores. However, there was no statistically significant change in intervention group score over time when controlling for control group scores, $F(1, 164) = 0.94, p = 0.33$.

Years 5 and 6

Similarly, as shown in Figure 12.4 mean Year 5 and 6 pupil control group Satisfaction scores were slightly higher than mean intervention group scores. However, when statistically assessing intervention group changes, there was no statistically significant change over time when controlling for control group scores, $F(1, 112) = 2.10, p = 0.15$.

Figure 12.4 Mean 'Satisfaction' domain scores by Year group*



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

Comfort domain

Years 3 and 4

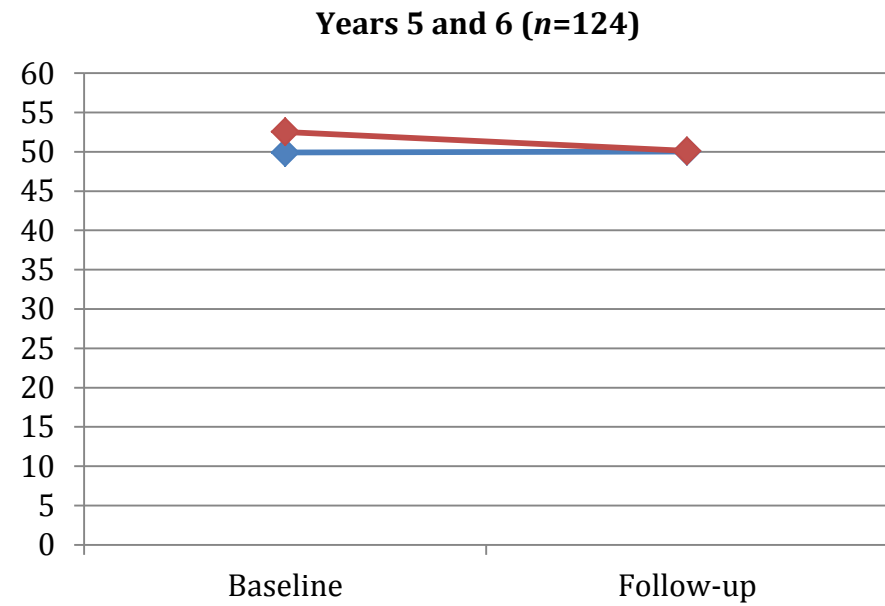
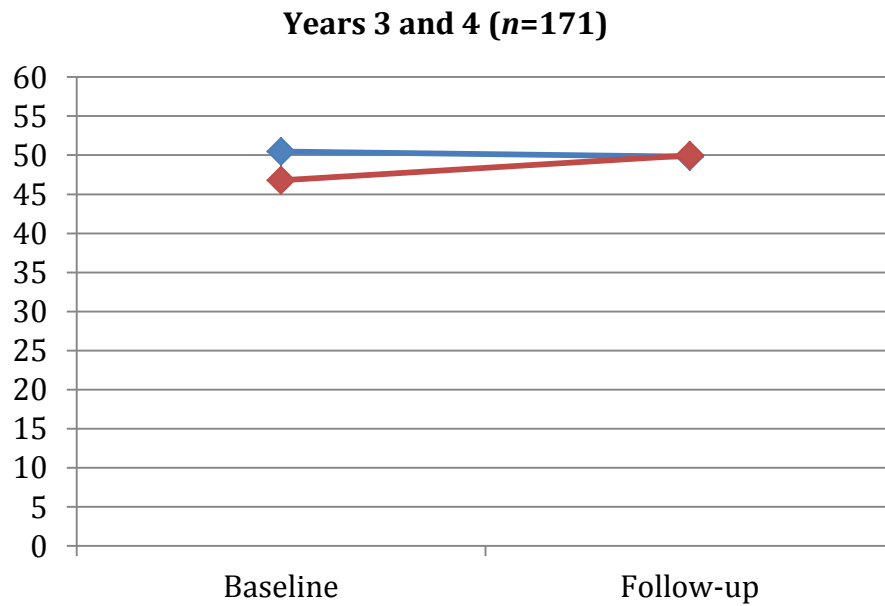
Figure 12.5 demonstrates an improvement in control group Comfort scores over time, with minimal changes in mean intervention group scores. Although small, assessment of intervention group changes revealed that there was a statistically significant difference in mean Comfort scores over time, $F(1, 166) = 4.11, p = 0.04$. However, changes were no longer statistically significant when also controlling for baseline differences between the intervention and control groups, $F(1, 164) = 0.96, p = 0.33$.

Years 5 and 6

Figure 12.5 demonstrates a small improvement in mean Year 5 and 6 intervention group Comfort scores and a decrease in mean control group scores over time. Statistical assessment of mean intervention group scores (when controlling for control group scores) revealed that changes over time were not statistically significant, but approached significance, $F(1, 114) = 2.97, p = 0.09$.

Figure 12.5 Mean 'Comfort' domain scores by Year group*

—◆— Intervention
—◆— Control



Note. Higher scores indicate a better health-related quality of life. A 'normative' mean score for this domain is 50. * Mean score based on estimated marginal mean derived from MANOVA test.

12.6 Chapter summary

The statistical results presented in this chapter are broken down according to Year groups: Years 3 and 4 and Years 5 and 6. This chapter reports on changes in intervention group CHIP-CE scores, when controlling for responses from the control group. CHIP-CE consists of five domains of health and asks children to report on symptoms of illness and wellbeing, health-related behaviour, school performance, and family/peer relationships.

Among pupils in Years 3 and 4, there was a statistically significant reduction in the CHIP-CE Achievement and Comfort domain scores over time. There were no statistically significant changes in any of the remaining CHIP-CE domains (Risk Avoidance; Resilience; Satisfaction) over time.

In comparison, there were no statistically significant changes in Year 5 and 6 responses to any CHIP-CE domain responses over time.

13. Qualitative process evaluation – Results

13.1 Introduction

This section of the report presents the findings of the qualitative process evaluation conducted alongside the Facts4Life main pilot evaluation. The aim of the process evaluation was to explore the experiences of pupils and teachers in schools adopting the Facts4Life resource. Qualitative research methods were used to encourage discussion of Facts4Life resource implementation, delivery, engagement and areas for improvement.

13.2 Methods

Focus groups took place in a school setting approximately one week after the intervention period had ended. Focus groups discussions were conducted with 23 pupils representing all schools and all year groups that received the Facts4Life intervention. Focus group size ranged from 4-7 with pupils hand-selected by teaching staff at each school (see Table 13.1). Each focus group lasted approximately 20 minutes (Mean minutes = 20.71; Standard deviation = 4.62).

Discussions were led according to an indicative focus group guide that included questions relating to participation, experiences of the intervention, lesson style, wider implications of the intervention, and areas for improvement. Focus group discussions were recorded using an audio recording device and transcribed verbatim. All transcripts were compared to the audio recordings and amended as necessary to ensure accuracy.

All teaching staff that received Facts4Life training and/or delivered Facts4Life resource materials were invited to complete an online open-ended questionnaire. Questionnaires requested open-ended feedback on training and resources, intervention delivery, parental/guardian involvement, and areas for development. Questionnaires were completed by teaching staff in four of the five Facts4Life participating schools. 6 staff completed questionnaires (75% response rate) (see Table 13.1).

Table 13.1 Focus group characteristics

Intervention school ID	Participants (N)	Gender	Year group	Teacher questionnaire completion (Yes/No)
1	4	2 x male, 2 x female	3, 4	Yes
2	4	2 x male, 2 x female	4	Yes
3	7	4 x male, 3 x female	3, 4, 5, 6	No
4	4	2 x male, 2 x female	3, 4	Yes
5	4	2x male, 2 x female	5, 6	Yes

13.3 Data analysis

All qualitative data collected as part of the process evaluation were transcribed verbatim and analysed using NVivo 10 (QSR International) – a software programme for qualitative analysis. Data were explored using Thematic Analysis (TA); a useful method for “identifying, analysing and reporting patterns within data”²⁵. More specifically analysis adopted the Framework Method²⁹, an approach commonly used to analyse qualitative data in multidisciplinary health research^{30,31}.

The Framework Method involves 7 stages:

- 1) Verbatim transcription all qualitative data;
- 2) Familiarisation with qualitative data – reading and re-reading, and initial note taking;
- 3) Coding of qualitative data - line by line reading of each transcript and interpretation of concepts/ideas deemed to be important to the area of interest. Initial codes were produced independently by the research team.
- 4) Developing a working analytical framework – comparison of initial labels/codes among researchers and agreement on codes for remaining transcripts;
- 5) Applying the analytical framework – all remaining transcripts coded according to codes agreed by the research team;
- 6) Charting the data into the framework matrix – charting and summarising of codes and categories generated from each transcript;
- 7) Interpreting the data – research team exploration and interpretation of themes emerging from the data.

13.4 Results

Three themes emerged during qualitative analysis regarding Facts4Life implementation, delivery, engagement and areas for improvement. The themes are presented in three sections: 1) Wider implications of Facts4Life; 2) Facts4Life content; and, 3) Facts4Life delivery.

13.4.1 Theme 1: Wider implications of Facts4Life

This theme explores pupil and teacher perceived outcomes associated with the Facts4Life resource.

Perceptions about health and illness

During focus group discussions some pupils talked about how they believed the Facts4Life resource had altered their perceptions about health and wellbeing. In some cases, pupils revealed that they had a new perspective on how they could, to some extent, manage their own health. This is an important finding to emerge from focus group discussions as a key tenet of the Facts4Life resource relates to increasing pupils’ personal responsibility for their health through making healthy lifestyle choices.

"I think the most interesting part for me was when we learnt how to fight some of the diseases and the common cold and a lot of those things because it could help me in the rest of my life so I don't get the worst part of it."

Focus group – School 2

"When we did the healthy body thing, when we had to label everything in our body, it made me think twice about sugar levels because you are not going to have a very healthy body if you eat too much junk [or] too much sugar."

Focus group – School 3

"I enjoyed it because it teaches us on how we can help ourselves in the future."

Focus group – School 1

"Now I have actually had the advice..., it could be like 'hang on you don't have to take the pain and just be, like, oh god, my head's hurting, I have got to sleep for 12 hours until it's actually bedtime and its gone'. I just thought 'hang on you want to enjoy your day, so just take this medicine, take one a day so it will help and then you will be better and you can just go every day like you never had it in the first place."

Focus group – School 2

"[In one lesson] there was different sections for food and one of them was exercise, one was growth and one was healthy and so we put them into different orders and then we talked about what we should have and like what we don't need that much of."

Focus group – School 4

In some instances pupils' reflections on Facts4Life referred to their perceptions of health-related risk. These reflections are interesting in light of the quantitative findings relating to the Risk Avoidance domain of the CHIP-CE where no statistically significant changes were identified from baseline to follow-up.

"When we learnt about the drugs and the alcohol lesson that was really interesting because it makes you aware of what they can do to your body and especially the alcohol that can damage your body even though you just have a small amount."

Focus group – School 1

"[I'm aware] of all the side effects that could happen if you take any risks."

Focus group – School 4

Behaviour

Some pupils reflected upon their perceptions of the impact of Facts4Life on their wider behaviour, and that of their wider family and friends.

One pupil reported a change in her own eating habits in light of what she had learned from the intervention:

“When you get home you, like, you take say a packet of sweets out of somewhere and you think back to what you have done at school and, like, if you have had something sweet or fatty already you think ‘if I eat this it could um...it could affect your health’.”

Focus group – School 1

Another pupil from the same school commented that, after talking to his parents about what he had learned in a ‘Healthy Me’ themed lesson, his parents had made a small change to their shopping habits:

R1: *“My mum goes to Aldi and she [now] buys the complete sugar free [soft drinks] and she used to buy the normal ones that are like...the Lucozade ones...”*

R2: *“...and now you are like getting isotonic...”*

R1: *“...Yeah the isotonic that has no sugar.”*

Focus group – School 1

However, one teacher expressed concerns that although some pupils seemed to be improving their knowledge base it is parents and/or guardians who ultimately make health-related decisions.

“Children were fully knowledgeable about eating healthily but found this difficult at home as they had no say over food bought.”

Teacher – School 2

Wider feedback from teachers revealed that despite being invited to learn more about the Facts4Life resource, parents and guardians showed little-to-no interest in the Facts4Life resource or the pilot evaluation. This is perhaps unsurprising as parents and guardians are bombarded with information from school and may have limited time to engage with new initiatives. One of the long-term aims of Facts4Life is to provide health education that is accessible to children and their parents; future development of the resource could therefore encourage further engagement between teachers, pupils and their parents.

While teachers did not receive feedback direct from parents or guardians, some children reported parental or wider family interest in Facts4Life and the content

covered. In some cases there was a sense of increased self-confidence among children; for example, many felt that they could share their new knowledge with their family. This was also linked to a sense of responsibility regarding their health and the health of their wider family and friends.

“My sister, she got, um, an infection in her throat but it wasn’t that major so I thought back to the [Facts4Life] lesson and told her everything about it and we just decided to have a little talk with the doctor just in case it was really bad and we just got given some medicine for her to take.”

Focus group – School 2

“I think that it’s really improved my family’s life because it’s showed us that actually there is more than one way to cure things and it actually can affect other people’s lives because if they see you doing it they will want to copy so it’s just affected everyone’s life.”

Focus group – School 4

“I said it to my mum and dad because not everybody knows everything about everything, and so I said to them that there’s actually more ways than you think to cure a cold ... so we sat down and we spoke about it.”

Focus group – School 2

Skills development

One aspect of focus group discussions that was repeatedly raised regarded the development of new practical skills. When children discussed their experiences of Facts4Life there were repeated references to the need to use research skills (for example, to research a specific health issue in a small group) and to critically assess the quality of data sources (for example, when using the Internet, it was important to consider which websites were genuine and trustworthy). This was particularly notable as a pupil-centred approach to learning where children are responsible for researching health-related topics is specifically identified as an aim of the Facts4Life resource.

“My favourite [Facts4Life lesson] was the one where we sort of had to work out which [illnesses] that you can help by yourself, like, if you had a stomach ache you can use Calpol, and which ones you had to go to the doctors and the hospital for, like a broken arm.”

Focus group – School 3

"We had a group to work with, like, we had a system to work on and we got each a family member and then we had to find out the best way so we could make them better."

Focus group – School 5

R1: *"We did something...and we had to research it on the computer..."*

R2: *"Yeah, we had a sheet with diseases on like cancer, dementia, Ebola and all that, and we would have a sheet of information about that disease or illness and we would have to read it through for about ten minutes and...we had a sheet we had to fill in, like, it said how can you...how does this disease develop or is there, like, a cure for it."*

Focus group – School 1

I [now] know that people can put anything on a website... you can't always trust the Internet because some pages you could just go on it and type things in."

Focus group – School 2

13.4.2 Theme 2: Facts4Life content

This theme incorporates numerous sub-themes that were concerned specifically with the content of the Facts4Life resource.

Enjoyment

Qualitative feedback from pupils and teachers at all schools suggested that the content of the Facts4Life resource was broadly enjoyable.

"Lessons are always really exciting because you know what's coming and you know that it's going to help you in your future life."

Focus group – School 1

"I said [to my parents] it [Facts4Life] was really good and really fun."

Focus group – School 3

"Children found the topic interesting. It was good to see that there was more to keeping yourself healthy than just using medication."

Teacher – School 2

Notably, some pupils referred to their enjoyment of a specific lesson. The theme 'Introduction to Homeostasis' was particularly popular among pupils and teachers alike.

"I just loved that I saw how my body worked. I was just confused about how it worked before... because, like, I was wondering how all the blood went round and what made the heart go...I was getting confused and I just wanted to see it, like, real."

Focus group – School 3

"I feel like I really wanted to know what's happening in my body. I was, like, 'What's happening? Is my brain thinking? Is my heart pumping? What's it doing?!' I learned that it's always working, every single day."

Focus group – School 5

"I particularly liked the balance ball [activity] because what [the teacher] taught us was sometimes when our bodies are working, sometimes one piece can actually go wrong...stop working and all the other body parts are still working except for that little bit... and so what [the teacher] told us, if we kept our hands on the ball and the body is working fine and nothing's wrong, and then if we took one away...some of the balls would fall but some of them wouldn't."

Focus group – School 4

One teacher commented:

"The intervention was great for our children. The children surprised me with their knowledge and understanding. The children enjoyed the sessions and materials, especially the game."

Teacher – School 2

A few pupils commented that certain aspects of Facts4Life lessons were less enjoyable than other lessons, and some made suggestions for improving the content of the resource.

"I liked the art and the science mixed together but I don't like to talk about what I have drawn and what it means."

Focus group – School 5

"I didn't really like it when we had to draw ourselves and do like the healthy stuff and unhealthy...I don't think I learned that much"

Focus group – School 4

“Most people were [enjoying Facts4Life]...but some people weren't. It's probably like 87% [enjoying Facts4Life].

Focus group – School 2

“I didn't really enjoy that ['Me in balance' activity] to be honest because I do love my art, but I am not a big fan of drawing. I would rather colour in, like, maybe if we got a sheet about, like, the body or you could just colour what we think the right colour was.”

Focus group – School 4

Feedback from one school suggested that some of the activities (e.g., the respiratory system) were *“pitched slightly too high for our children”* (Teacher – School 3).

Teacher feedback also contained some areas for consideration or improvement.

“[Facts4Life resource is] Presented clearly but too much content for each session.”

Teacher – School 5

“[I would like to see] more activities with differentiated materials.”

Teacher – School 4

“Time is always a constraint in primary classrooms.”

Teacher – School 1

Novelty value

Beyond the general enjoyment expressed by the majority of pupils to receive Facts4Life, there was also a sense among some pupils that the resource provided an opportunity for novel learning experiences, which differed from 'normal' school lessons.

“We were learning something, but it was fun as well, so we weren't just like, 'oh god, we are sat here and [the teacher] is just giving us information we barely even understand'...this type of lesson is just...it's fun. It's like you get to do activities and then after the activity you find that you know information, without even knowing it!”

Focus group – School 2

“Well, before in year 3 when we were learning about it [health], it wasn’t fun and you couldn’t really remember it because it was just ‘right, I am only telling you this once and you have got to remember it and write it down in your books’... but with this it’s fun and also you can remember it because...you have memories of picturing it.”

Focus group – School 3

“Well, I thought that science was just making things that making things like systems and finding out something. I didn’t know that it could be fun the same time as serious. So it kind of made me more confident with science.”

Focus group – School 5

Among teachers, there was a sense that pupils enjoyed the novel opportunity to talk openly about their own experiences regarding health and illness.

“The children were very open during the discussions and were keen to share their experiences. Bereavement was an issue with some children in my class, but this was dealt with sensitively, as always. These children enjoyed the opportunity to talk to their peers about difficult issues.”

Teacher – School 1

“One child revealed he had [a potentially serious health condition] previously unknown to school as parent had not informed us.”

Teacher – School 4

However, teachers also urged caution when discussing potential sensitive or upsetting topics in the classroom.

“Discussions on illness raised emotional issues. Some children having experienced illness of family members. [There is a] need to consider experience of children.”

Teacher - School 4

Knowledge generation

Focus group discussions suggested that many of the children were engaged with the Facts4Life resource and had generated new knowledge about specific health and illness topics previously unknown to them. This is an important finding as the resource aims to help children to develop a deeper understanding and knowledge base in relation to health and illness. It is also an interesting finding in that it suggests that the resource may be having a larger impact upon pupils than the quantitative findings suggest.

"In my group we did epilepsy and we knew nothing about it, and then after that [lesson] we knew how...like what can set off a seizure and um like bright lights, flashing lights and like noises some sort of noise...a high pitched noise that can trigger and there is no cure for it, it's just...you've got to let it happen."

Focus group – School 1

"Well I never knew there was such thing as mental illness. I learnt, well, basically that mental illness is really bad."

Focus group – School 4

"...knowing about fatty or sugary foods, what they can actually, like, do to your body, which, like, other children wouldn't be aware of before they learnt the lesson."

Focus group – School 1

Links to wider curriculum

As previously described the Facts4Life resource was developed alongside existing knowledge of the National Curriculum, with the aim of linking Facts4Life materials directly to core subjects (e.g., Science; Physical Education; Design and Technology; Art; Computing, Geography; and, History) covered in primary school. Teachers from all schools commented specifically upon the useful links between Facts4Life and National Curriculum materials.

"It [Facts4Life] fitted in with our science topic of learning for the term."

Teacher - School 1

"The topic of 'Healthy Me' fitted well within our current theme of 'body beautiful'."

Teacher – School 2

"[There were] some good activities – fitted in well with current teaching."

Teacher – School 4

"As with any published resource they acted as a spring board for a sequence of lessons that better suited class interests/needs."

Teacher – School 5

However, there were suggestions from two teachers that future development of Facts4Life could include further consideration of the National Curriculum.

"It would be great if they [Facts4Life resources] tied in even more closely with the new NC [National Curriculum] objectives."

Teacher – School 1

"I think children could go deeper in understanding of biology and cross-curricular links could be exploited."

Teacher – School 5

13.4.3 Theme 3: Facts4Life delivery

This theme relates to the combination of a number of sub-themes that were concerned with resource delivery and includes in-depth of consideration of teaching and learning approaches associated with Facts4Life sessions.

Group work

Feedback from pupils and teachers revealed that Facts4Life delivery involved a combination of independent and group work activities. In numerous instances, pupils reported that group work activities improved class cohesion, encouraged participation and identified the importance of teamwork when completing a specific task.

"Sometimes when you are doing your work yourself you are a bit stuck on ideas and with a group you can introduce more ideas so you can implement them into your work and make it better."

Focus group – School 1

"Sometimes we worked in big groups where there was jobs that we had to do together because one person couldn't do it...some people knew different information and we shared it with each other."

Focus group – School 2

However, when asked to reflect more deeply upon group dynamics within the classroom, some pupils identified difficulties associated with group working, especially when there were tensions within friendship groups.

"I quite enjoyed it [group work] but sometimes I didn't because there's a few kids, I am not mentioning any names, but they were just like 'oh this is boring', but it actually taught me a lesson. I just thought 'hang on, if you're doing that and you are not writing in your book, you are not necessarily learning anything... I thought...don't copy them because they are being silly and not taking part whereas if you actually enjoy it and take part you will learn something."

Focus group – School 2

One pupil suggested that self-selection of groups could solve potential animosity in the classroom.

"If we are with someone that you don't really get along with then you can't work together really... so if we picked our own friends we could work together well because we wouldn't have, like, any arguments or, like...we may have a giggle but at least we would get it done!"

Focus group – School 4

Teaching and learning styles

In addition to the positive comments regarding the teaching content, there was also praise from some pupils about the novel teaching style adopted by teachers during Facts4Life lessons. For example, some pupils reflected on their enjoyment at working in a less formal manner, with more interactive activities built into their school day than normal. Further, some pupils expressed feeling of ownership over their learning as they felt they had been given autonomy to research and find things out for themselves.

"I did quite enjoy when we were in like groups of three and we just had to work on and learn about that one, like, illness. I didn't even know there was a thing called the unhealthy brain until then."

Focus group – School 4

"There was one [lesson] where you could just turn to the person next to you and just ask if they knew anything and then you could interact and you could combine your ideas to make sort of one."

Focus group – School 3

"I think that it does help because, um, you can change your family's life with all the information you've learnt and I think that you also can learn things for yourself in the future and if you don't know something you can always look it up if you don't know."

Focus group – School 2

"It's [interactive teaching and learning approach] made me more enthusiastic with my learning."

Focus group – School 5

Notably, one pupil remarked strongly about one lesson they had not enjoyed as much as other Facts4Life lessons; they felt that, in contrast to other lessons it had been delivered too didactically.

"I had one [Facts4Life lesson] where it wasn't necessarily learning. [Our teacher] just told us what to write down and I just thought 'you're just telling us the information, we are not necessarily learning anything because we haven't had the time to actually think of it ourselves'. I would have liked to have a bit more time to talk about it...to actually research it [and] understand what [the teacher] is telling us."

Focus group – School 2

Quality of training

Feedback from teachers on the Facts4Life training received was broadly complimentary.

"We had a day's training to introduce the material and the project. It was extremely informative and gave a taste of the children's activities to promote key learning. The practical session in the afternoon was great for my own CPD."

Teacher – School 1

Teachers also identified some areas for enhancing or improving the training provided, with some teachers suggesting that additional practical information and/or interactive activities on how to deliver Facts4Life may be beneficial.

"Interactive demonstrations would be engaging and embed concepts. Work samples from other schools would be informative."

Teacher – School 5

"[Training was] generally good. Could have spent more time working on delivery of some sessions."

Teacher – School 4

Not all teachers involved with the delivery of Facts4Life attended a training session. However, training was provided to at least one representative from each school participating in the intervention. One teacher that did not attend training commented:

"I wasn't provided with an awful lot of training. I was given time to read through the booklet to ensure I fully understood the outcomes. This is something I would like to change if I did the process again."

Teacher – School 2

Feedback from another teacher suggested that the resource was accessible and uncomplicated, despite not attending a training session.

“The head teacher, rather than myself received the initial training. I was asked to carry out the project with my class as it fitted in with our science topic of learning for the term. The teaching resources were easy to follow.”

Teacher – School 1

Quality of physical resources

Feedback from pupils and teachers highlighted that the quality of certain physical resources provided in the classroom could be improved upon to enhance delivery. Despite strong support for the content covered by the Facts4Life resource, there were a few specific examples where pupils and teachers reported frustration with the physical teaching and learning materials.

“That [lesson] was hard. We were trying to recreate the human body and learn where the organs are and what was the organs inside it and you had to... you didn’t know where the organs went so you had to place them carefully like because there wasn’t that much room on the body...because it [the activity worksheet] was so small.”

Focus group – School 1

“The board that the game is printed on needed to be a bit more durable.”

Teacher – School 2

“Some of the resources on the [compact] disc didn’t seem to be labelled / referenced properly.”

Teacher – School 1

“Change some of the [physical] resources – create visual aids to support concepts.”

Teacher – School 5

13.5 Chapter summary

Overall, the findings presented in this chapter have identified important issues that contributed to the delivery of the Facts4Life intervention. These findings highlight a number of positive aspects of the resource including, enjoyable content, knowledge and skills generation, links to the curriculum, appreciation of novel material and the use of alternative teaching approaches. Further, analysis identified perceived changes in pupils’ attitudes and beliefs surrounding health and illness, and in some cases perceived changes in health-related behaviour were also discussed. Findings also identified a number of areas for improving the Facts4Life resource, including ideas relating to resource content, quality of the physical resources, and the training of teachers. It is important to take caution when drawing conclusions from these qualitative data as the evidence is anecdotal.

14. Conclusions and Recommendations

14.1 Introduction

This chapter presents the key findings from the pilot Facts4Life evaluation and reflects upon the implications of these in relation to future resource development and evaluation.

This pilot evaluation aimed to explore the effects of Facts4Life on school children's health-related attitudes behaviour. Furthermore, it aimed to provide insight into how the pilot Facts4Life resource was received and the factors that could facilitate the dissemination and implementation of the pilot resource more widely.

14.2 Pilot evaluation conclusions

Objective 1: To assess changes in pupils' health-related attitudes, knowledge and behaviour

Analysis of Facts4Life questionnaire data presented in this report suggest that the pilot Facts4Life intervention may have led to small, yet significant, improvements in certain aspects of pupils' health-related attitudes, knowledge and behaviour following the intervention. Areas of improvement relate specifically to questions on illness management and suggest a reduction in children's perceived reliance on medical intervention when feeling unwell. This finding supports the overarching aim of the project and a central priority of the "*Five Year Forward View*" vision²⁰.

There was a positive trend in some of the remaining questionnaire items (with the exception of health-related confidence), although these were not statistically significant. This means that in these cases the differences between intervention and control groups may conceivably be linked to the size of the sample and / or external social trends. It could also mean that a longer time period is needed for observable changes to occur.

There was little-to-no evidence of a change in health-related quality of life assessed via the CHIP-CE questionnaire. This is perhaps unsurprising, given that questionnaires were administered immediately after the intervention and more time may be required for quantifiable changes to occur. Notably, guidance from the National Institute for Health and Care Excellence recommend that the long-term outcomes of an intervention are assessed for at least one year.

When the sample was separated by Year group, broadly similar findings to those presented in the main analysis were revealed. However, there were significant improvements among Year 3 and 4 intervention group pupils in response to the item "Some people are never ill" although not among pupils in Year 5 and 6. These identified differences between responses from children in Years 3 and 4 and Years 5 and 6 may warrant further exploration.

Qualitative findings provided anecdotal evidence of perceived changes in personal responsibility for health and behaviour, and some examples of perceived changes in wider family behaviour. At this stage it is important to treat these findings with caution as they are representative of some but not all pupils taking part in the intervention and are not based on quantifiable evidence.

The finding that there was some variation in quantitative and qualitative findings is interesting when trying to interpret the overall results of this pilot evaluation. The qualitative findings suggest that the resource may be having a larger impact upon pupils than the quantitative findings imply. It is possible that the tools used to measure changes in health-related attitudes, knowledge and behaviour were unable to capture the true experiences of pupils involved in this pilot evaluation.

For example, although pre-tested with a small sample of pupils before the intervention, it is possible that certain questionnaire items were too difficult to comprehend. This issue was raised anecdotally by two teachers involved with Facts4Life delivery, and difficulties were observed by the research team in two schools when administering questionnaires before and after the intervention. Future evaluation of the resource may benefit from the use of adapted or alternative measurement tools.

Objective 2: To explore pupils' experiences of Facts4Life

The qualitative analysis of focus group data revealed that the majority of pupils were positive about the Facts4Life resource. Pupils referred to its enjoyable and novel content, the opportunity to develop research skills, appreciation of group work activities, and enjoyment of interactive as opposed to didactic approaches to teaching and learning. Pupils expressed preferences within the range of activities undertaken, and alternatives were suggested. The findings support the view that the resource is most successful when adapted to the setting in which the resource is delivered.

Objective 3: To explore teachers' experiences of Facts4Life

Feedback from teachers was also broadly positive in relation to the Facts4Life resource. Teachers commended its enjoyable content, opportunities for group discussions, good links to the National Curriculum, and engaging training.

Teachers provided suggestions for improving the content of the resource, for example, making the content more accessible as some activities were pitched at too high a level for all pupils to grasp. It was also suggested that some activities were too long in duration, and that additional links to the National Curriculum were desirable. It was noted that although all teachers were offered training in Facts4Life delivery, not all were able to engage with it.

Teachers identified that some of the health-related issues covered in the intervention are potentially sensitive and require careful consideration for use with each class. This supports the intention of Facts4Life that the approach allows teachers to address issues

that they may have previously found difficult to tackle. There were positive responses to increasing personal responsibility among children, although teachers recognised that parents and guardians are ultimately responsible for their child's health.

14.3 Strengths and limitations of the pilot evaluation

The use of a controlled before-and-after study design was beneficial as it allowed for a comparison of outcome measures among pupils receiving the Facts4Life intervention and pupils that did not receive the intervention. As allocation to the intervention or control group was not randomised, baseline differences in school and pupil characteristics were identified and explored during analysis.

The qualitative process evaluation involved analysis of programme implementation, delivery, engagement and areas for improvement. Analysis of pupil and teacher feedback provided a unique insight into the intervention, from two different perspectives with potentially different agendas.

There are a number of limitations to the current evaluation. Participating schools were self-selecting and teachers expressed enthusiasm about the Facts4Life resource. Intervention delivery may have been enhanced by this enthusiasm and thus may have influenced some of the outcomes reported. Therefore, school diversity needs to be considered in future planning and evaluation. The pilot evaluation involved the collection of self-reported questionnaire data and subjective evaluative feedback, opening up the possibility for socially desirable responses among those closely linked with Facts4Life. The research would benefit from replication with a larger sample of pupils.

There were some aspects of evaluation that were not possible within the scope of this project:

- Evaluation of parental engagement with the resource.
- Clustered analysis of outcomes according to socio-economic status.
- Evaluation of the longer term development and outcomes of the resource.
- Economic evaluation of the resource.
- Consideration of the wider policy implications of Facts4Life.

14.4 Recommendations

Future development of Facts4Life resource

- Teaching materials should be reviewed and adapted in response to feedback to aid future delivery.
- Training should be developed in response to feedback and provided for all staff involved with the delivery of Facts4Life to ensure that the aims and objectives of the resource are understood and addressed in the classroom environment.

- Future development of Facts4Life should consider more holistic strategies for parental support, and increased dialogue between parents, teachers and children in the planning and delivery of health promoting policy and activity.
- The resource should continue to encourage group working activities as a strategy for developing pupils' sense of ownership over their learning.

Further evaluation of the Facts4Life resource

- Future evaluation should aim to explore differences in health-related attitudes, knowledge and behaviour among pupils from different Year groups.
- Future evaluation should aim to explore differences in health-related attitudes, knowledge and behaviour among pupils from different socio-economic backgrounds.
- Future evaluation of Facts4Life should consider the use of adapted or alternative measurement tools.
- In line with NICE guidelines future evaluation should involve assessment of the long-term outcomes for at least one year.

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Appendices

A. Facts4Life Outline Lesson Plan – Years 3 and 4

Outline Lesson Plans		
Session	Years 3 and 4	
1	<p>Baseline</p> <p>Draw and write activity prior to commencing project</p> <ul style="list-style-type: none"> • What does someone who is well look like? • Physical & emotional well-being 	<p>Year 3 programme of study (statutory requirements)</p> <p>Animals, including humans</p>
2	<p>Homeostasis</p> <p>Brain – regulates the body systems</p> <p>Functional – how the body deals with illness</p> <p>A & P (Anatomy & Physiology) – body systems (Digestive, Respiration)</p>	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat.
3	<p>Diet/exercise – how it prevents or reduces risk of illness</p> <p>Responsibility – recurring theme throughout</p>	<ul style="list-style-type: none"> • Identify that humans and some animals have skeletons and muscles for support, protection and movement.
4 onwards	<p>Family – children create a 'family' group, teacher could give an example inc. extended family, varying relations and relationships.</p> <p>Children determine areas of focus, depending on the issues affecting their family & friends</p> <ul style="list-style-type: none"> • SRE links (or at upper KS depending on school preference) • Family trees • Based around 3 generations covering a range of illness scenarios • Cancer • Catching illness/common illness • Asthma • Vaccinations • Illness through injury – normal healing – pain – links with broken bones objectives • Healthy minds – looking after our emotional needs 	<p>Year 4 programme of study (statutory requirements)</p> <p>Animals, including humans</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> • describe the simple functions of the basic parts of the digestive system in humans.
Plenary	Responsibility	

B. Facts4Life Outline Lesson Plan – Years 5 and 6



Session	Years 5 and 6
1	<p>Baseline</p> <p>Draw and write activity prior to commencing project</p> <ul style="list-style-type: none"> • What does someone who is well look like? • Physical & emotional well-being
2	<p>Homeostasis</p> <p>Brain – regulates the body systems</p> <p>Functional – how the body deals with illness</p> <p>A & P (Anatomy & Physiology) – body systems (Digestive, Respiration, Circulatory)</p>
3	<p>Diet/exercise – how it prevents or reduces risk of illness</p> <p>Responsibility – recurring theme throughout</p>
4 onwards	<p>Family – children create a 'family' group, teacher could give an example including extended family, varying relations and relationships.</p> <p>Children determine areas of focus, depending on the issues affecting their family & friends</p> <ul style="list-style-type: none"> • Link with genetics • SRE links (or at upper KS depending on school preference) • Family trees • Based around 3 generations covering a range of illness scenarios • Brief recap of lower KS illnesses or more detail depending on what the children highlight as their areas of interest • Cancer – links with genetics objectives • Catching illness/common illness • Asthma – links with respiratory objectives • Vaccinations • Illness through injury – normal healing – pain • Dementia • Stroke • Heart disease – links with circulatory objectives • Healthy minds – looking after our emotional needs
Plenary	Responsibility

Year 5 programme of study (statutory requirements)
Animals, including humans

Pupils should be taught to:

- describe the changes as humans develop from birth to old age.

Year 6 programme of study (statutory requirements)
Animals including humans

- identify and name the main parts of the human circulatory system, and explain the functions of the heart, blood vessels and blood.
- recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.
- describe the ways in which nutrients and water are transported within animals, including humans.

Evolution and inheritance

Pupils should be taught to:

- recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.