

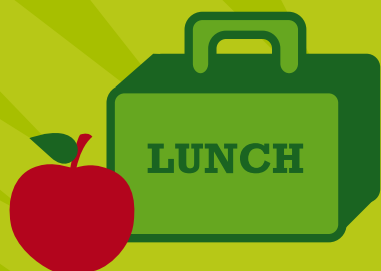
Evaluation of the effect of the Childhood Development Initiative's healthy schools programme

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Evaluation of the Effectiveness of the Childhood Development Initiative's *Healthy Schools Programme*

The Healthy Schools Programme



2012
CHILDHOOD DEVELOPMENT INITIATIVE



Evaluation of the Effectiveness of the Childhood Development Initiative's *Healthy Schools Programme*

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2012

CHILDHOOD DEVELOPMENT INITIATIVE



Additional contributors

Additional contributions to this research were made by **E. Hollywood** who was responsible for collecting the data for the body mass index calculations.

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Senator's Foreword

Health and education are both central elements to child well being and the achievement of milestones, and each has the potential to significantly impact on a child's likelihood of a full and fulfilling life. Every parent wants their child to be healthy and to do well at school, to learn and grow to the best of their ability; and as a nation, we know that it is not only our responsibility, but in our best interests to do all we can to ensure that this is indeed the case for each and every child. This *Healthy Schools* Programme, developed by the Childhood Development Initiative therefore makes sense on so many levels, with its objective of bringing together health services and school communities, in a more cohesive and integrated way.

I know from my own experience the value and benefits of being physically and mentally active. I also know the importance of a relevant and stimulating education, and my recent work as a Senator has reiterated for me that effective approaches require the involvement and commitment of a number of sectors: parents, schools, sporting organisations, health services, educational supports, environmental services and so on. Bringing together organisations and individuals with different priorities, perspectives and backgrounds takes skill, thought and care. Despite all our best intentions, collaboration generally requires some 'minding', leadership and logistical support.

This Report offers an important opportunity to learn and understand the dynamics and factors which can enable or mitigate against such collaboration. It highlights the centrality of relationships and a common vision; the difficulties arising from lack of clarity, and the complexity of bringing together systems which have a limited experience of working together. Most importantly, the Report identifies the fact that, how people feel about their participation, and how they understand their involvement, can centrally define the extent to which they engage, irrespective of the structures, processes and resources provided. Learning from this, and using these insights to inform and improve future policy and practice, could enable all of us to be more effective in achieving the objective of children leading happy and healthy lives.

I am delighted to welcome this Report and the learning it offers. I commend the Childhood Development Initiative, and its funders, the Department of Children and Youth Affairs, and The Atlantic Philanthropies, for their innovation and foresight in commissioning such valuable research and innovative practice.

**Eamonn Coghlan,
Senator**

CDI Response to the Evaluation of the *Healthy Schools Programme*

On behalf of the Board of the Childhood Development Initiative (CDI), I am delighted to receive, endorse and welcome this Report.

CDI is one of three sites which constitute the Prevention and Early Intervention Programme (PEIP), a joint initiative of the Department of Children and Youth Affairs (DCYA), and The Atlantic Philanthropies (AP). The three projects, (CDI, Youngballymun and Preparing for Life) were set up with the objective of *'testing innovative ways of delivering services and early interventions for children and young people, including the wider family and community settings'* (DCYA, 2011).

Based in Tallaght West, CDI is the result of the professionalism, passion and persistence of a group of 23 concerned individuals and organisations living and working in the community who had a vision of a better place for children. Through innovative partnerships, they brought together an approach which drew on both the science and the spirit of best practice, in order to meet the identified needs of children and families. A partnership was agreed between the Government and The Atlantic Philanthropies, and the consortiums' first piece of work was a needs analysis entitled *How Are Our Kids?* (CDI, 2004). A number of priorities were agreed based on this research, one of which was to establish and incorporate CDI. This was completed in 2007, and following this a range of programmes have been designed, delivered and independently evaluated.

Our programmes are the *Early Years Programme*; the *Doodle Den* literacy Programme; the *Mate-Tricks* Pro-Social Behaviour Programme; *Early Intervention Speech and Language Therapy*; *Community Safety Initiative*; the *Safe and Healthy Place Initiative*; *Restorative Practice*; the *Quality Enhancement Programme*, and of course, the *Healthy Schools Programme*, which is the focus of this evaluation report. All CDI programmes are evidence informed and incorporate elements for children, families and the practitioners working with them, and are delivered through existing services and structures. CDI has a core role in promoting quality, capacity, and value for money, whilst all elements of our work are rigorously and independently evaluated.

The *Healthy Schools Programme* was developed as a central strand of CDI's strategy as a result of concerns expressed through the early consultation process, regarding children's developmental milestones, and family access to health and specialist services. The development of a manual for this Programme was challenging for those involved, as it was apparent that what was required was a framework or guidelines for a whole-school approach, rather than the provision of a curriculum. In addition, ensuring that the manual informed practice and that delivery was in line with international thinking was vital, whilst at the same time recognising that local nuances, contexts and priorities must also be given space and recognition.

The establishment of a local steering committee to guide the manual development and programme focus was an important step in bringing together these two perspectives: the 'science and the spirit' of effective services. However, it is apparent from this Report that gaps remained, clarity was not always apparent and the balance of a top-down prescribed intervention alongside bottom up responses was not always achieved.

It is perhaps in this arena, the learning regarding what it takes to engage schools and health services, how to balance evidence based approaches with local insight, and how to promote best practice whilst maintaining buy-in, that the *Healthy Schools Programme* makes its greatest contribution. The Report documents the experiences which supported inter agency collaboration that can actually improve families' utilisation of local services; it describes dynamics within

school communities and in the wider context, which can impact positively on the integration of new initiatives; and it offers practical methods through which to strengthen connections between families, schools and health related organisations.

CDI is committed to sharing the learning and experiences from Tallaght West, and specifically those emerging from the *Healthy Schools* Programme, in order to inform and shape future policy, practice, training and curriculum development. This Report is one strand in a comprehensive dissemination process aimed at doing just that.

Joe Horan

Chair

CDI Board

Acknowledgements

This research was commissioned by the Childhood Development Initiative (CDI) and funded by The Atlantic Philanthropies and the Department of Children and Youth Affairs.

The evaluation was made possible through the valuable contributions of a number of people and organisations. For this reason, the research team would like to thank the following:

- The staff of the Childhood Development Initiative.
- The CDI Expert Advisory Committee.
- Members of the *Healthy Schools* Steering Committee.
- Health and educational professionals who contributed to interviews.
- Fieldworkers who helped administer the survey instruments in schools and over the phone and those who helped transcribe the data.
- All the service providers who assisted the *Healthy Schools* Project Team in the study recruitment.
- We would like to especially thank all children, parents, teachers and principals who very kindly consented to be involved in the study. This study would not have been possible without their time and contribution.

The research team would also like to acknowledge the Atlantic Philanthropies and the Department of Children and Youth Affairs whose generous support made this evaluation possible.

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Glossary

| | |
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| Baseline | Data from the first data collection phase of health questionnaires before a <i>Healthy Schools</i> initiative has been implemented. This provides a starting point for comparisons between the intervention and comparison schools across the <i>Healthy Schools</i> evaluation study as the initiative progressed. |
| Bottom-up decision-making | Decisions made at the school community level, where a decision for the school is made by the school itself while considering the needs and wishes of its members. |
| Capacity-building | Capacity-building is the development of knowledge, skills, commitment, structures, systems and leadership to enable effective health promotion. |
| DEIS – Delivering Equality of Opportunity in Schools | The DEIS action plan provides for a standardised system for identifying and regularly reviewing levels of educational disadvantage and a new integrated School Support Programme (SSP), which will bring together, and build upon, existing interventions for schools/communities, particularly with concentrated levels of educational disadvantage. |
| Early Start | A programme designed to boost educational achievement among disadvantaged 3- and 4-year-old children (Department of Education and Skills, 2011). |
| Fidelity | The degree to which essential elements of a programme have been delivered when compared to the essential elements of the original programme. |
| Health education | Health education comprises consciously constructed opportunities for learning, involving some form of communication designed to improve health literacy, including improving knowledge, and developing life skills that are conducive to individual and community health. |
| Health outcomes | A change in the health status of an individual, group or population, which is attributable to a planned intervention or series of interventions, regardless of whether such an intervention was intended to change health status (Health Impact Assessment (HIA), 2012). |
| Health promotion | Health promotion is the process of enabling people to increase control over and improve their health. |
| Health promotion outcomes | Health promotion outcomes are changes to personal characteristics and skills, and/or social norms and actions, and/or organisational practices and public policies that are attributable to a health promotion activity. |
| Health-promoting school | A health-promoting school can be characterised as a school constantly strengthening its capacity as a healthy setting for living, learning and working. Health-promoting schools are set up in a way that ensures positive changes are sustained. For this reason, the proposed approach is to develop policies, practices and structures which embed the fundamentals of a health-promoting school into a school's operation. |
| <i>Healthy Schools Programme</i> | The <i>Healthy Schools Programme</i> is a manualised, school-based health promotion initiative that seeks to improve children's overall health and increase their access to primary care services. |

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| <i>Healthy Schools</i> Coordinator (HSC) | The role of the <i>Healthy Schools</i> Coordinator is to guide the <i>Healthy Schools Programme</i> by supporting schools to develop their capacity to address areas of health in accordance with each school's uniquely identified needs and priorities. |
| <i>Healthy Schools</i> Working Group | The Working Group is comprised of professionals with okhealth, educational and community knowledge, with the responsibility for leading and developing the <i>Healthy Schools</i> manual. |
| Home School Community Liaison Officer (HSCLO) | The HSCLO has responsibility for implementing the Home School Community ok Liaison Scheme. |
| Home School Community Liaison Scheme | The Home School Community Liaison Scheme was established in Ireland in 1990. Teachers were initially appointed as liaison officers in a number of primary schools throughout the country in areas of urban disadvantage. In 1991, the scheme was extended to post-primary schools and in 1999 it was extended to all designated disadvantaged schools. |
| Impact evaluation | An impact evaluation measures the impact that an initiative has by comparing outcomes between the intervention and comparison schools, both before and after an initiative has been implemented. |
| Initiative funders | Childhood Development Initiative (CDI). |
| Interagency collaboration in health-promoting schools | A recognised relationship between part or parts of different sectors of society which has been formed to take action on an issue to achieve health outcomes or intermediate health outcomes in a way which is more effective, efficient or sustainable than might be achieved by the health sector acting alone. |
| Intervention school | A school within which the <i>Healthy Schools Programme</i> is being implemented. (A comparison school is one within which the programme is not being implemented.) |
| Logic model | A logic model is a visual method of presenting an idea. It helps communicate the relationships among programme elements, which together inform how a programme will operate to bring about a change process and reach a specified end. |
| Longitudinal design | A study in which participants, processes or systems are studied over time, with data being collected at multiple intervals. |
| Manualised initiative | Service delivery is guided by a manual. |
| National Educational Psychological Service (NEPS) | Provides psychological services in public and private primary and post-primary schools and in related educational centres. |
| Needs assessment | A systematic procedure for determining the nature and extent of health needs in a population. Needs assessment is an early step in planning a health promotion initiative. The scope of needs assessment in health promotion is broad, reflecting an understanding that health is shaped by individual factors and the physical, social, economic and political context in which people live. |

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| Observational study | A study that draws inferences about the possible effect of a treatment on subjects, where the assignment of subjects into a treated group versus a control group is outside the control of the investigator. |
| Process evaluation | A process evaluation provides in-depth information about the functioning of a programme. Evaluations of the process of programme planning and implementation are now a major focus of health-promoting school initiatives and are designed to identify factors that may impact on the project by supporting or constraining desired outcomes. |
| Quasi-experimental design | Quasi-experimental design involves selecting groups, upon which a variable is tested, without any random pre-selection processes. |
| Randomised controlled trials | Randomised controlled trials (RCTs) are studies that randomly assign individuals to an intervention group or to a control group in order to measure the effects of the intervention. |
| Realistic evaluation | Realistic evaluation is concerned with the most promising configurations that demonstrate 'what works' within a programme, how they work and in what circumstances. Configurations here can be understood as the 'mini theories' that explain what aspects of the health-promoting schools programme processes have worked and what were the circumstances that contributed to these processes working. |
| School community | Staff, children, parents and relevant members of the wider community. |
| School Completion Programme (SCP) Officer | The SCP Officer has responsibility for the delivery of the School Completion Programme. |
| School Completion Programme (SCP) | The SCP is a Department of Education and Skills initiative that aims to have a positive impact on levels of pupil retention in primary and second-level schools, and on the number of pupils who successfully complete the Senior Cycle, or equivalent. |
| Setting for health | A setting is where people actively use and shape the environment and thus create or solve problems relating to health. Settings can normally be identified as having physical boundaries, a range of people with defined roles and an organisational structure. |
| SPHE | Social, Personal and Health Education (SPHE) is part of the primary school curriculum, delivered through a minimum of a half-hour per week standalone time and also integrated across the curriculum. SPHE provides particular opportunities to foster the personal development, health and well-being of the child and to help him/her to create and maintain supportive relationships and become an active and responsible citizen in society. |
| Stakeholders | Individuals with a vested interest in the <i>Healthy Schools Programme</i> . |
| Steering Committee | The <i>Healthy Schools</i> Steering Committee is the decision-making body that oversees the development and delivery of the <i>Healthy Schools Programme</i> and oversees the work of the <i>Healthy Schools</i> Coordinator. The Steering Committee will guide and drive the work of the Coordinator to ensure that the objectives as outlined in the <i>Healthy Schools</i> manual are achieved. |

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| Sustainable health promotion actions | Actions that can maintain their benefits for communities and populations beyond their initial stage of implementation. Sustainable actions can continue to be delivered within the limits of finances, expertise, infrastructure, natural resources and participation by stakeholders. |
| Theory-based evaluation | Theory-based evaluation explores the causal pathways between action and outcomes as they occur in any given programme or intervention, therefore contributing to a broader understanding of an intervention and its components in practice. |
| Theory of change | Theory of change underpins the process, while the programme model itself is specific to a given project. The model complements systems thinking as a tool for generating a simplified illustration of real-world complexities. |
| Top-down decision-making | Decisions made solely by the school principal, manual-led decisions or decisions taken by those leading programme implementation (i.e. the programme funders or the <i>Healthy Schools</i> Coordinator). |
| Triangulation | The use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings. |
| Whole-school approach | Aims to develop an ethos and environment that supports learning and promotes the health and well-being of the entire school community. |
| Year 1 follow-up | Second data collection phase of the <i>Healthy Schools Programme</i> evaluation – one year after initiative has been implemented. |
| Year 2 follow-up | Third data collection phase of the <i>Healthy Schools Programme</i> evaluation – 2 years after initiative has been implemented. |

Acronyms used

| | |
|-------|---|
| BMI | Body Mass Index |
| CDI | Childhood Development Initiative |
| CDI-P | Children's Depression Inventory – Parent form |
| CDI-S | Children's Depression Inventory – Short form |
| DEIS | Delivering Equality of Opportunity in Schools |
| ENHPS | European Network of Health Promoting Schools |
| GUI | <i>Growing Up in Ireland</i> study |
| HBSC | Health Behaviour in School-aged Children (survey) |
| HP | Health Promotion |
| HPS | Health-Promoting School |
| HRBQ | Health Related Behaviour Questionnaire |
| HSCL | Home School Community Liaison |
| HSE | Health Service Executive |
| ITT | Intention-to-treat |
| LOCF | Last Observation Carried Forward |
| NOCB | Next Observation Carried Back |
| RCT | Randomised Controlled Trial |
| RE | Realistic Evaluation |
| SCP | School Completion Programme |
| SPHE | Social, Personal and Health Education |
| CDI | Childhood Development Initiative |
| WHO | World Health Organization |

Executive Summary

Background

The Childhood Development Initiative's *Healthy Schools Programme* seeks to improve children's health and well-being, and to increase their access to primary care services (Lahiff, 2008). The *Healthy Schools Programme* is a manualised initiative based on the World Health Organization's model for a health-promoting school. The WHO defines a health-promoting school as one in which '*all members of the school community work together to provide pupils with integrated and positive experiences and structures which promote and protect their health*'. This includes both the formal and informal health curriculum, the creation of a safe and healthy school environment, the provision of appropriate health services and the involvement of the family and wider community in efforts to promote health (Lahiff, 2008).

In the short and medium term, the focus of the *Healthy Schools Programme* is on addressing processes (policy, procedures and practice) that will facilitate change, leading a more health-promoting school environment. This work will be completed with the support of a school-based *Healthy Schools* Coordinator, whose role is to guide the programme by supporting schools to develop their capacity to address areas of health in accordance with each school's uniquely identified needs and priorities. In order to identify these needs and priorities, a support systems checklist is set out in the *Healthy Schools* manual to assist the Coordinator and the school community (i.e. staff, families, children) to classify areas of health promotion that are currently working successfully in the school and those that could be additionally developed by the school community and the Coordinator. Working with national, community, family and school stakeholders, the *Healthy Schools* Coordinator supports the school to develop sustained processes for the development of health-promoting school environments.

Aims and objectives

The aim of this study was to evaluate the implementation of, and outcomes from, the *Healthy Schools Programme*. The objective was to present the impact findings of the evaluation at the end of Year 2 of implementation and to compare these findings with those observed at baseline. In addition, the evaluation examined the programme's implementation process over its duration to examine if and how it was rolled out in line with its aims and objectives.

Design and methods

The evaluation of the *Healthy Schools Programme* was a longitudinal observational study that followed children and key stakeholders throughout the implementation of the programme. The evaluation was divided into two components: (1) **an impact evaluation** measuring specific health and well-being outcomes for children and (2) **a process evaluation** of the programme's implementation. Ethical approval for the study was obtained from the Faculty of Health Sciences, Trinity College, Dublin. The study adhered to national child protection guidelines, the principles of good research practice and all team members obtained Garda vetting.

Impact evaluation

The primary aim of the impact evaluation was to determine if the *Healthy Schools Programme* had any effect on specific short- to long-term health indicators in children who were targeted by the school community. Seven medium to long-term primary outcomes are identified in the *Healthy Schools* manual. These are:

1. that children demonstrate age-appropriate physical development;
2. that children have access to basic healthcare;
3. that children are aware of basic safety, fitness and healthcare needs;
4. that children are physically fit;
5. that children eat healthily;
6. that children feel good about themselves;
7. that parents are involved in their child's health.

Given that adopting the principles of a 'healthy school' takes time and that the majority of health indicators should be measured over the long term, the literature suggests that expectations of outcome changes in the short term should remain low. The sample in the impact evaluation consisted of children from 5 intervention schools (N=467) and 2 comparison schools (N=137) representing 50% of the original sample frame. At baseline in 2009, the children's ages ranged from 4-12 years. All schools were designated as disadvantaged (DEIS Band 1) by the Department of Education and Skills. Short-term health indicators included absenteeism (school records), immunisation and dental uptake (HSE records) rates. Long-term health outcomes included Health Related Quality of Life (HRQoL, Kidscreen-27), depressive symptoms (Children's Depression Inventory), risky health behaviours (Health Related Behaviour Questionnaire, HRBQ), and a computation of body mass index (BMI). Additional demographic information was obtained from each child using a demographic profile questionnaire. Responses for younger children in Junior and Senior infant classes (aged 4-6 years) were obtained from parents. Results from intervention and comparison schools were compared and tested for differences each year. Changes in responses from baseline to Year 1 follow-up, Year 1 to Year 2 follow-up, and from baseline to Year 2 follow-up within children from intervention schools and within children from comparison schools were analysed. As a means for schools in the *Healthy Schools* Programme to monitor their children's health status and identify future needs/priorities for the programme to focus on, a profile of the children's health outcomes was provided.

Process evaluation

The aim of the process evaluation was to investigate the processes involved in the implementation of the *Healthy Schools Programme* and to identify the key aspects undertaken that were contributing to the establishment of health-promoting schools. As the *Healthy Schools Programme* is a school change initiative, the focus of analysis was on ways in which the programme was contributing to change at the structural and systemic level within the schools – or in other words, at a whole-school level. Key here is that in contrast to the impact evaluation (*see above*), which examines the impact of the *Healthy Schools Programme* on children, the process evaluation shifts focus by examining the implementation of the programme itself. The process evaluation asks three questions: What was the *Healthy Schools Programme* in practice? What occurred during implementation? Was the implementation in line with the manual and the literature?

A critical approach to analysis drawing from the realistic approach to evaluation was taken. The aim was to examine the data in order to identify what occurred during programme implementation. In doing this, the data were analysed to identify aspects of implementation that evidenced processes that were in keeping with the principles underpinning the establishment of health-promoting schools as set out in the programme manual. In other words, the process evaluation is not just a description of what occurred, but a critical examination of what occurred in order to identify (a) *which processes*

worked (or have the potential to work in the longer term) and how these worked, and (b) which processes were felt not to work and why when analysed within the context of the programme theory. What was found to work, and found not to work and why are equally important since they help to illustrate and understand why certain processes are conducive to the establishment of the *Healthy Schools Programme* over others.

In order to explore the interplay between the schools and the *Healthy Schools Programme*, analysis focused on four broad areas of the implementation process. These were: (a) programme design phase; (b) programme planning and implementation; (c) responses to challenges arising in programme implementation; and (d) a move towards a more health-promoting schools programme. Data were drawn from a range of quantitative and qualitative methods, including one-to-one interviews, focus groups, observational data, meeting minutes and evaluation team feedback into the implementation phase and consequent discussions. These data were collected over the course of programme implementation.

Key findings from the impact evaluation

A total of 604 signed consent forms were returned by children from intervention (N=467) and comparison (N=137) schools at the beginning of the evaluation, representing 49% and 54% respectively of the estimated sample frames. Of the 604 children consenting, 298 (49%) were male and 306 (51%) were female. Follow-up rates at Year 2 were high, with 99.8% followed up within the older cohort of children (aged 6-12 years) and 85.6% followed up among the younger cohort (aged 4-7 years) where parents provided responses.

Comparing children's health outcomes between intervention and comparison schools

There were no significant differences found over the 3 time points between the intervention and comparison schools, although differences were identified in relation to specific areas. Therefore, the *Healthy Schools Programme* had no significant short-term impact on improving HRQoL as measured through the Kidscreen-27. It had no short-term impact on reducing depressive symptoms as measured through the Children's Depression Inventory, nor on increasing breakfast uptake, reducing children's thoughts of changing their weight, reducing incidences of reported bullying, intentions to smoke when they are older, reducing rates of children who were obese or rates of absenteeism over time. Finally, it was not possible to ascertain if the *Healthy Schools Programme* had any role to play in increasing uptake of immunisation vaccines or dental services since no information was provided by comparison schools.

Changes in children's health outcomes within intervention and comparison schools

Analysis of the **Kidscreen-27** revealed that at baseline, children within both the intervention and comparison schools were on average within the international average range and remained within these levels at both the Year 1 and Year 2 follow-ups. In addition, improvements were observed for children of all ages between baseline and Year 1 follow-up within the autonomy and parent relations domain of the Kidscreen-27 and this improvement was sustained within the older cohort in Year 2 follow-up for both the intervention and comparisons schools.

Analysis of the **Children's Depression Inventory** revealed that at baseline, children within both the intervention and comparison schools were on average within the international normal range and remained within these levels at both the Year 1 and Year 2 follow-ups. In addition, children in the 6-12 years cohort of children in both intervention and comparison schools demonstrated significant improvements in mean depression scores between baseline and Year 2 follow-up.

Within the 6-12 years cohort of children in intervention schools, the proportions reporting **bullying** decreased significantly between baseline (31.9%) and Year 2 follow-up (26.8%), and between Year 1 (33.8%) and Year 2 (26.8%) follow-ups. All rates of bullying were lower than that recorded in the 2009 *Growing Up in Ireland* study (40%) for 9-year-old children.

High proportions of all children consistently were found to **eat breakfast daily** (over 86%). All figures were above the Irish average according to the 2006 HBSC Survey (78.2%) and the 2008 *State of the Nation's Children* report (76%) for children aged between 9-17 years.

Over 28% of all children in the intervention schools were **overweight or obese**, and very low proportions were found to be underweight. Within the intervention schools, proportions within the various BMI categories changed significantly from baseline to Year 1 and Year 2 follow-ups within the 4-7 years cohort of children. Proportions of children overweight or obese increased from 29.6% (15.7% overweight and 13.9% obese) at baseline to 35.2% (16.7% overweight and 18.5% obese) at Year 2. The proportions were slightly higher than the Irish average (Barron *et al*, 2009; GUI, 2009), but higher prevalence is documented in the literature when children are from less affluent families (Due *et al*, 2009).

The level of in-school **dental service** coverage was 89% across the intervention schools. This is higher than the rate of dental service uptake last assessed in disadvantaged schools in Northern Ireland (McGuckin, 2007). In general, measles, mumps, rubella (MMR) and 4 in 1 booster immunisation levels remained marginally below 90%, with some schools demonstrating large drops in booster uptake in the Year 1 follow-up. Dental and immunisation records were not collected for comparison schools and there is no regional or national data available on rates of in-school immunisation vaccine uptake in Ireland.

Mean rates of **absenteeism** for intervention schools were similar or slightly above the national norm rates (5.74% – 7.43%) and under the average rate for DEIS Band 1 schools. The rate of absenteeism for the 4-7 years cohort of children significantly decreased between baseline and Year 2 follow-up. For the 6-12 years cohort of children, however, the rate of absenteeism significantly decreased between baseline and Year 1 follow-up, only to significantly increase and return to baseline figures by Year 2 follow-up.

Key findings from the process evaluation

The process evaluation found that the *Healthy Schools Programme* was very ambitious. The timeframe for change to occur to the degree that was aspired to at the outset of the 3-year evaluation phase was short. The findings highlight some of the key challenges that occurred during the earlier stages of implementation and some of the key processes that were found to work well, i.e. processes that involved the schools and the *Healthy Schools Programme* interacting in ways that fostered health-promoting practices and health-promoting school environments. Together, these findings inform a pathway forward in the development of health-promoting schools and the role and function of a *Healthy Schools Programme*.

The first key finding of the process evaluation was that all stakeholders did not have a shared understanding of the aims and objectives of the *Healthy Schools Programme*. This impacted on how the programme was being engaged with within individual schools on a day-to-day basis.

The second key finding was that the programme manual contained 7 health and well-being outcomes that were pre-determined prior to the beginning of the process of change in the schools. However, the process by which these indicators were identified included:

- a community-wide comprehensive needs assessment (entitled *How are our Kids*), which identified the priority outcomes to be targeted;
- the establishment of a *Healthy Schools* Working Group, drawn from professionals in the area, to inform the content of the manual;
- the tendering and commissioning of expertise to research evidence-based interventions that have been demonstrated as having the best potential for positively impacting on children's health outcomes.

The inclusion of the 7 outcomes in the manual indicated, from our process analysis, that schools unfortunately experienced a more 'top-down' approach to implementation, in spite of the fact that the development of the *Healthy Schools Programme* was based on a combination of local consultation, research and evidence, a prioritisation process with key stakeholders where they were encouraged to participate and the provision of support to enable review, reflection and planning. Despite these efforts, schools did generally experience this as a top-down approach.

This finding highlights the challenge in attempting to bring together interventions that are evidence-informed and based on proven models, alongside a desire to be responsive to and involving of the local community.

This experience by schools had implications in terms of not facilitating school community ownership of the process of becoming '*healthy schools*'. The literature highlights that school ownership of the change process is key for the success of establishing health-promoting schools (*see, for example*, Denman, 2002; St. Leger *et al*, 2008). The process evaluation found that a more 'bottom-up' school community-led approach to the identification and prioritisation of health and well-being issues, facilitated through the *Healthy Schools Programme*, would be required in order to re-orientate the school change process in line with the underpinning principles of '*healthy schools*'. A revised manual could then be used in the form of a step-by-step tool kit to help schools with the identification of these priorities. The key findings above had implications for the 'buy-in' to the programme.

A number of strategies were employed to work towards better aligning '*healthy schools*' implementation processes with the underpinning principles in the programme. These included needs assessments and feedback loops, and were organised by the funder (CDI) to address implementation concerns that arose in practice. These greatly aided understanding and communication between the various stakeholders and were found to be very beneficial.

In addition, cultural and capacity barriers within schools were identified in terms of the schools' readiness for the programme. Schools raised a number of concerns in feedback discussions that were key to understanding broader contextual issues that would be required to facilitate school engagement in the processes involved in becoming health-promoting schools. These concerns included:

- schools felt they might not be equipped to identify the health needs of the children;
- schools were concerned that they would be held responsible for whether the *Healthy Schools Programme* worked or not if they were expected to lead the process themselves;
- schools raised concerns about whether resources would be available to them, in the form of health and well-being services, to respond to needs that were identified;
- schools highlighted that they felt they would need Departmental support from the wider policy-making level (i.e. from both the Department of Education and Skills, and the Department of Health/Health Service Executive) to ensure that the effort being put into the development of health-promoting school environments would have support in the long term.

A further process finding noted that at the outset, schools identified links with health services as a key challenge for them. Various ways of responding to these challenges were identified and the *Healthy Schools Programme* was developed. However, not all schools were 'on board' with the idea of the programme at the outset, but agreed to stay involved. This appears to have impacted on the degree to which some schools engaged with the programme throughout the first 3 years.

In addition, the process evaluation found that the nature of work being undertaken by the *Healthy Schools Programme* and its Coordinator, particularly in the earlier stages of implementation, was more in line with the job description of an Activities Provider in schools, rather than a role that supports and facilitates the development of sustainable whole-school change processes in schools. The role of the *Healthy Schools Programme* and its Coordinator was found to be more facilitative of developing sustainable school change processes when it involved supporting consultation processes, resourcing responses to school needs, organised training and upskilling for school staff based on the health and well-being needs that schools identified. This contrasted to a role that was sometimes found to be delivering direct services to children in schools and/or parents and families, and supporting the service provision processes of health services providers and schools. While the provision of direct services to children and parents may have been found to be beneficial for the schools and families in the immediate term, this was unlikely to foster the development of sustainable and transferrable processes that would meet the needs of all individuals in the longer term.

There were a number of positive examples that illustrated school engagement with the *Healthy Schools Programme's* intervention activities that could potentially generate outcomes in line with the concepts and ideas underpinning the development of health-promoting schools. The most promising examples involved policy review and development processes; the development of enhanced knowledge, awareness and links between schools, parents and local services; school participation in the development of a Memorandum of Understanding for delivery of an early intervention Speech and Language Service; teacher capacity-building; and greater involvement of parents in schools.

A common finding across the above examples was that schools were more likely to engage with intervention activities that were in response to issues that they themselves had identified as being issues in their schools, or in response to public health issues that schools were asked to engage with from a Departmental level. In line with the literature, this would suggest that school ownership of the change process is key for success (*see, for example, Denman et al, 2002; St Leger et al, 2008*).

School engagement with the *Healthy Schools Programme's* intervention activities resulted in positive outcomes in relation to raised knowledge and awareness of teaching staff in schools. This was found to lead to teachers feeling better equipped to use their knowledge in practice in the school setting. Also, school involvement in the development of service-level agreements resulted in the development of processes that fitted in with school structures and consequently were more likely to run smoothly. Indeed, the support with a policy review process assisted schools to compile new policy that was up to date and relevant to the school.

The Steering Committee forum was found to be a positive vehicle for bringing health and education together at the local level. This type of local-level forum has considerable potential because it offers the means for timely communication across the sectors in terms of the health and well-being needs emerging among the school community and an identification of the service access challenges and gaps that exist at local level. The potential for this type of forum should be explored further.

Conclusions

Children were assessed at baseline, Year 1 and Year 2. At the end of Year 2 of the evaluation, the evidence suggests that while there were a number of challenges in implementing this model of health promotion, the schools have begun the process of change that is required to become a WHO-defined 'health-promoting school'.

The **impact findings** on health and well-being demonstrate that, overall, children within both the intervention and comparison schools were demonstrating age-appropriate development and no significant differences were observed between the school types. Mean scores on the Kidscreen and Children's Depression Inventory indicate that all children on average were comparable with international studies. While comparable, it should be recognised that DEIS schools have to date received resources to provide targeted supports to children in these schools. The cutbacks in DEIS schools currently occurring as a result of the economic crisis in Ireland may well have a negative impact on outcomes for children in these schools in the future and is an issue that should be monitored closely.

Closer analysis of the intervention schools data suggests that there are sizeable proportions of children with below-average Health Related Quality of Life on specific domains and a proportion of children with above-average depressive symptoms. Since the proportion of children who are overweight and obese is higher than the figures emerging from the *Growing Up in Ireland* study, this may also be an issue that can be explored further.

An improvement in depressive symptoms was found for children aged 7-12 years over time. In addition, improvements were evident in Kidscreen autonomy and parent relations, and bullying over time.

Some of the school principals requested individual school-based health and well-being information. It is recommended that individual school health reports be commissioned for the intervention and comparison schools, to be utilised not as a method of needs analysis, but as a starting point for a conversation with the whole school community on the needs of the school. A needs analysis could then be conducted, taking into account the views of all members of the school community, and together these members could identify and set their specific and targeted priorities within the constraints of what is achievable and feasible within their resources.

The **process findings** suggest that there is a need for a more strategic and whole-school approach to planning to be undertaken at the school level, one that is informed by a self-evaluation and that is inclusive of the views of the entire school community (i.e. staff, parents, children and services that are part of the school's functioning). In addition, the role and responsibilities of the school principals and staff need to be revisited to ensure that schools are aware of the fact that they are the drivers and implementers of the change process, and that the aim of the process is to facilitate them, along with children and parents, to have more control over the health issues relevant for themselves as a 'school community'.

The aspects of the role of the *Healthy Schools Programme* and its Coordinator that were more likely to support schools to make sustainable change were those activities that helped schools to make whole-school changes, such as policy development, teacher capacity-building and the development of service-level agreements. Emphasis at this structural level is more likely to bring about sustainable change within schools.

Looking to the future, refinements of the *Healthy Schools* manual (as outlined above in 'Key findings from the process evaluation') would provide clarity to all stakeholders concerning the planning and implementation of an evidence-based health-promoting school that can contribute to the improvement of children's health. Key here would be an emphasis in the manual on the process of establishing a health-promoting school through the provision of clear steps or a toolkit for schools to follow, and tools that would assist/support schools to make informed decisions about the health and well-being issues encountered in their daily working and learning environment.

Finally, and perhaps key to the findings, is that for schools to fully embrace the concept of health-promoting schools, they identified the need for support from the top-down from the Department of Education and Skills, and the Department of Health/Health Service Executive. This was identified as crucial in order for schools to feel that their efforts would have long-term support, as well as high-level support from the Department of Health for meeting health and well-being needs that arise in schools and require a local area service response. It was found that where local area health services were under-resourced and unable to respond to the health service access needs and the well-being needs identified within school communities, the establishment of health-promoting schools is greatly compromised. Schools cannot be expected to embark on such a complex process without collaboration from local area health services.

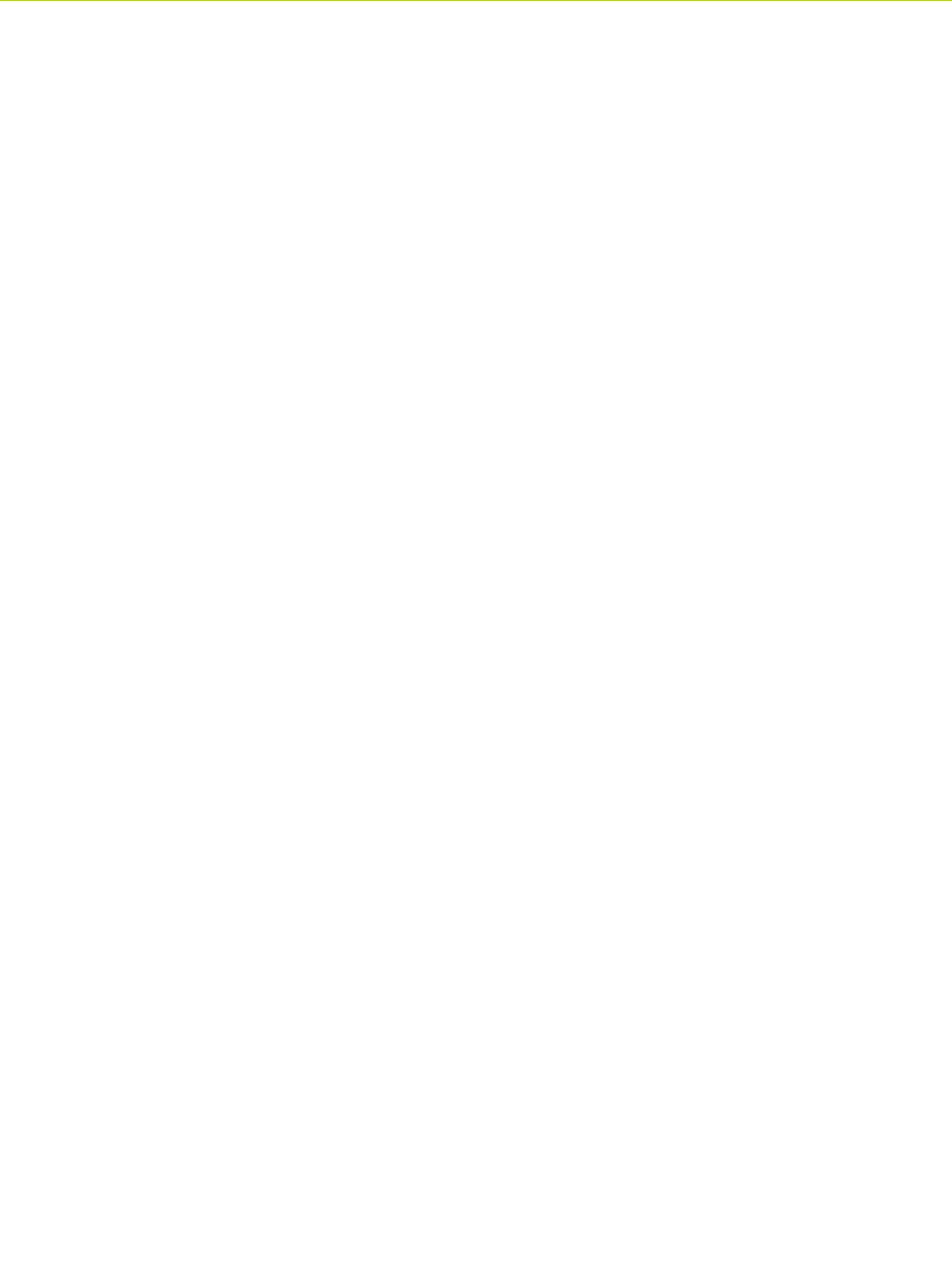
Table 1 illustrates a summary of the key contextual issues that were found to work well, along with the key contextual gaps that were identified as being required for successful ongoing development of health-promoting school environments. It also sets out the *Healthy Schools Programme's* intervention activities that were more likely to support schools to engage with the change process and the mechanisms (such as choice, logic and reasoning) whereby schools were found to engage ok with the change process.

Table 4.13: Child outcomes of the CDI SLT Service

| Contexts – Local, regional, national | Intervention activities of <i>Healthy Schools</i> Coordinator | Mechanisms for engagement of schools (e.g. logic, reasoning, choice) |
|---|---|--|
| <ul style="list-style-type: none"> Government level interdepartmental support for health-promoting schools (policy-level support). Concise list for schools that sets out steps in process of establishing a health-promoting school. School-driven process of organisational change. 'School community' participation in health-related decisions (i.e. staff, parents, children). Local school–health service partnership working models. Training resources. Funding. | <ul style="list-style-type: none"> Facilitation (e.g. of consultation, school–service links, information exchange). Support (e.g. for schools to undertake their own health and well-being audit). Researching (e.g. potential responses to needs identified by schools/required by schools that are in line with best practice). Providing health information to teachers to assist them in their roles. Sourcing quality trainers for teachers/staff. Supporting (e.g. the development of local area school–service partnership working). | <ul style="list-style-type: none"> Common understanding of health promotion. Leadership of process within each school. Staff perception of health and well-being needs of children. Staff perception of health and well-being needs for themselves. Motivation and interest of schools in intervention activities. Staff feel equipped/empowered to transfer learning into practice. |

Looking at the findings from this research within the wider context of cross-sector working between health and education, findings suggest a need for consultation not only at community level but also at the level of individual schools. Cross-school initiatives need to carefully consider their decision-making process. The readiness of individual schools needs to be considered, as do levels of current and future capacity for hosting and facilitating health interventions. In this regard, the inclusion of health promotion as part of new and ongoing teacher training needs to be considered.

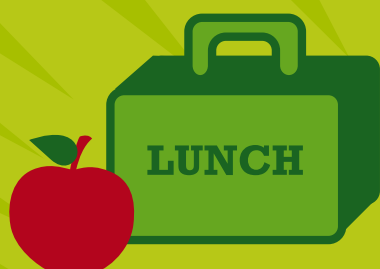
Finally, it is important to note that the development of a health-promoting school is recognised internationally as a challenging process that requires time, enthusiasm and support. The current *Healthy Schools Programme* is an ambitious health-promoting schools initiative. However, with a number of adaptations and with higher level support (beginning with a partnership agreement between the relevant Government departments), this initiative has the potential in the long term to become an evidence-based national health-promoting schools initiative.



Chapter 1: Background and Context



The Healthy Schools Programme



1.1 Introduction

The *Healthy Schools Programme* is a manualised, school-based health promotion programme that seeks to improve children's overall health and to increase their access to primary care services. The *Healthy Schools Programme* was conceptualised in response to research completed by the Childhood Development Initiative (CDI), which identified the overarching health needs of children living in the local area of Tallaght West (Dublin) (CDI, 2004 and 2005). Following on from these findings, CDI, in consultation with a range of local professional stakeholders with expertise in child well-being (collectively known as the *Healthy Schools Programme* Working Group) explored the evidence-based literature of 'what works' in addressing children's health. Subsequently, a health-promoting schools programme was endorsed and the *Healthy Schools Programme* manual was developed by the Working Group to steer and focus the programme. This chapter provides a brief overview of the literature on health-promoting schools and also sets out the context within which the *Healthy Schools Programme* was implemented.

CDI is one of three sites which constitute the Prevention and Early Intervention Programme (PEIP) in Ireland, and is jointly funded by the Department of Children and Youth Affairs (DCYA) and The Atlantic Philanthropies (AP). The three sites, (CDI, Youngballymun and Preparing for Life) were set up with "the objective of testing innovative ways of delivering services and early interventions for children and young people, including the wider family and community settings." (DCYA, 2011)

CDI is based in Tallaght West and is the result of the professionalism, passion and persistence of a group of 23 concerned individuals and organisations in the community, who had a vision of a better place for children. Through innovative partnerships, they brought together the science of evidenced-based practice and rigorous evaluation, with the spirit of an approach focused on the identified needs of children and families. A partnership was agreed between Government and The Atlantic Philanthropies and the consortium's first piece of work was a needs analysis entitled "How Are Our Kids?" (HAOK, 2004). A number of priorities were agreed based on this research, one of which was the set up and incorporation of CDI in 2007. Following this a number of programmes were designed and delivered between 2007-2011.

Our programmes for Tallaght West are the *Early Years* Programme; *Doodle Den* - Literacy Programme for Senior Infant Children; *Mate-Tricks* - Pro-Social Behaviour Programme for 4th Class Children; *Healthy Schools Programme* - A Whole School Approach; *Early Intervention Speech and Language Therapy*; *Community Safety Initiative*; *Safe and Healthy Place Initiative*; *Restorative Practice*; and the *Quality Enhancement Programme*. All CDI programmes are evidence-informed and manualised, and are delivered through existing structures and services. CDI has a core role in promoting quality, fidelity, value for money and added value. All elements of our work are rigorously and independently evaluated and we are committed to sharing the learning and experiences from Tallaght West, in order to inform and shape future policy, practice, training and curriculum development.

1.2 Outline of the *Healthy Schools Programme*

In order to provide a structure for the *Healthy Schools Programme*, Lahiff (2008), in collaboration with the *Healthy Schools* Working Group and CDI, set out their vision through a manual to provide direction and steer programme implementation. The manual aims to improve fidelity and provide a background to the programme, outlining the research from which the programme is constructed (both the international literature on health-promoting schools and local contextual research) and practical guidelines setting out a blueprint for the schools.

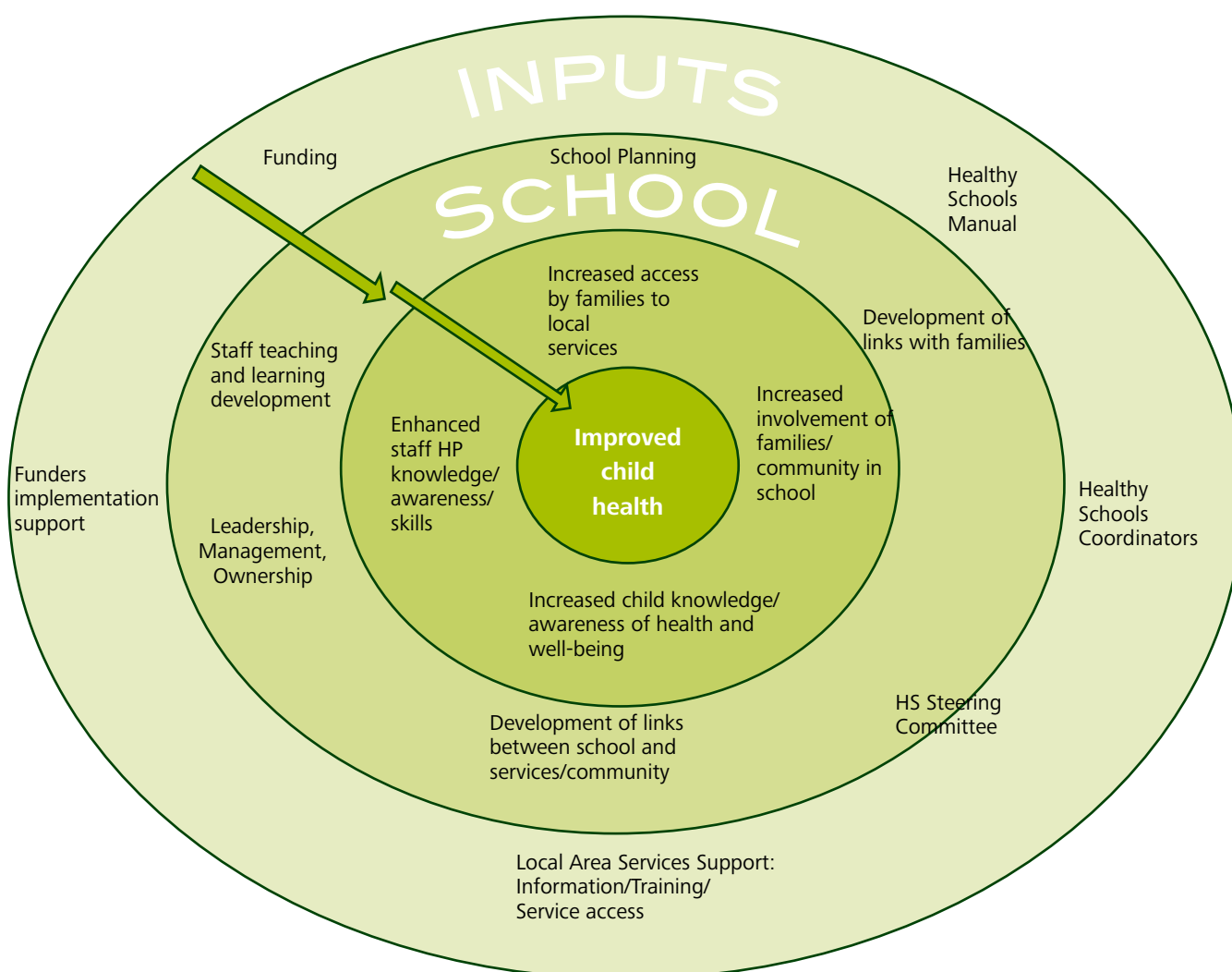
1.3 Logic model of *Healthy Schools Programme*

The *Healthy Schools Programme* is underpinned by a logic model or theory of change that is set out in the manual, written specifically for the programme (Lahiff, 2008). A logic model is a statement of how and why something works, and is typically represented using visual means. This helps to communicate the relationships among programme elements, which together inform how a programme will operate to bring about a change process and reach a specified endpoint (or endpoints).

In terms of the *Healthy Schools Programme*, the desired outcome is the development of health-promoting schools (Lahiff, 2008). While the ultimate aim in achieving this outcome is the improved health and well-being of the children attending the school, the process undertaken aims at generating a wider health-promoting school environment by and for the entire school community (see Figure 1.1).

This model is guided by the overarching principles of a health-promoting school as defined by the European Network of Health Promoting Schools. These principles are democracy; equity; care; empowerment and action competence; school environment; curriculum; partnership working; transparency; holistic approach; and sustainability (Thessalonika, 1997, cited in Lahiff, 2008). According to the manual, the guiding principles should define the health-promoting work of the schools in the development of *healthy schools'* processes.

Figure 1.1: Logic Model of *Healthy Schools Programme*



1.4 Outcome indicators

The logic model set out in the *Healthy Schools* manual is structured mainly around broad 'whole-school' pillars that are the focus for change within the school organisation. These broad areas relate to the school's management structures and policies; physical environment; ethos and social environment; partnerships/links with services and community groups; curriculum and teaching/learning styles; parent and family links/supports; support for transitions; and clarity of the *Healthy Schools* Coordinator's post/job description (Lahiff, 2008, pp. 58-59). Within each broad area, the manual sets out a wide range of indicators that if met, together or in part, will illustrate that the schools are (or are working towards) becoming health-promoting environments – in other words, they are engaging in the change process.

Although there are a wide range of indicators of programme outcomes in the *Healthy Schools* manual (109 in total), in practice, actual areas of proposed change are identified by each individual school community, based on issues that are relevant for them. In line with best practice for health-promoting schools, the manual also sets out a comprehensive checklist for completion by schools, supported by the *Healthy Schools* Coordinator, in order to identify health and well-being needs/priorities relevant for each school and which the school might choose to address. The manual also states that a *Healthy Schools* Steering Committee should be set up to lead the programme development and implementation across the intervention schools, and provides a set of role descriptions outlining the roles and responsibilities of key stakeholders, alongside a Memorandum of Understanding to be agreed by the schools and funders (Lahiff, 2008).

In addition to the school-led identification of needs, '*specific outcomes (and accompanying indicators) are also identified because they are considered important indices of overall physical, psychological and social well-being*' (Lahiff, 2008, p. 38). These additional 7 outcomes of the *Healthy Schools Programme* were based on local area research (CDI, 2004) and decided upon by a *Healthy Schools* Working Group comprising representatives from the health, education and community sectors, together with the programme funders. The specific outcomes identified are: (1) that children demonstrate age-appropriate physical development; (2) that children have access to basic healthcare; (3) that children are aware of basic safety, fitness and healthcare needs; (4) that children are physically fit; (5) that children eat healthily; (6) that children feel good about themselves; and (7) that parents are involved in their child's health (Lahiff, 2008, pp. 50-57).

1.4.1 Activities

In order to achieve any of the outcomes set out in the *Healthy Schools* manual, different types of activities are required within the school community (i.e. staff, families and children) and with other relevant stakeholders in the *Healthy Schools Programme* (as per the programme logic model, Lahiff, 2008, pp. 50-57). Activities undertaken to bring about whole-school change in a manner that is in keeping with the principles of a health-promoting school are a key focus of the process evaluation. Examples of such activities might include: (a) focus groups, informal meetings, surveys or checklists to facilitate 'school-community' participation in the identification of health and well-being needs at the school level; (b) identification/clarification of roles and responsibility changes/developments (e.g. school leadership and management processes); and (c) forging of links that facilitate new and/or more developed working processes at inter-school, intra-school and interagency levels to facilitate greater collaboration/partnership working between schools and community.

1.4.2 Process indicators

As a consequence of the activities undertaken, certain outputs result which have occurred as a result of the findings from the earlier activities stage of the process. In terms of evaluation, these can be understood as process indicators (see Figure 1.2), which can include training sessions, events, trips, working groups, campaigns, health and well-being literature.

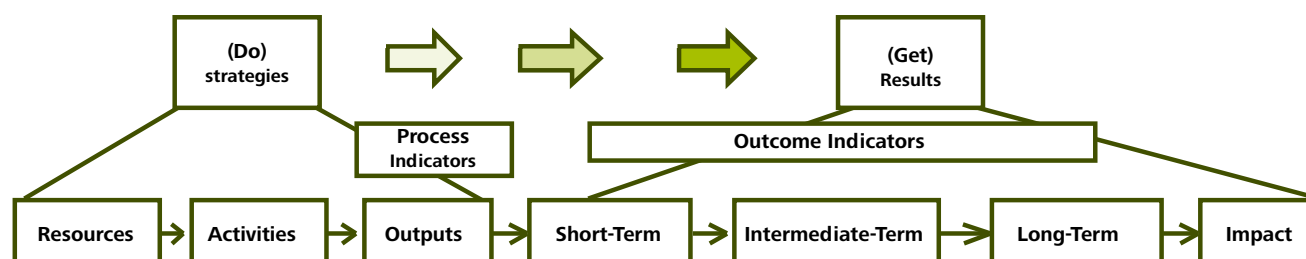
1.4.3 Impact indicators

The impact of changes in processes, procedures and practices on the school community are the cumulative result of the process of becoming a healthy school. Engaging in health-promoting processes can have benefits for all who participate. The measure of the impact of this current evaluation relates to children's health outcomes specifically. The methodology used in the impact evaluation is described in Chapter 2.

1.5 Evaluation study

A programme planned using a logic model will also inform the evaluation process. Where specific activities, expected outputs and outcomes are identified at the outset, the programme evaluation plan can be built around these. With logic models as the framework for design decisions, evaluation can provide critical feedback loops about the progress of a strategy, programme, initiative or organisation towards its desired results (Wyatt-Knowlton and Phillips, 2009). Where the process evaluation explores processes and their outcomes at the *organisational* level, the impact evaluation will examine outcomes at the *individual child* level. Figure 1.2 illustrates how each component of the evaluation can be mapped onto the logic model. The process evaluation will explore the short and medium-term outcomes of the initiative: Has the school become a more health-promoting environment? Has the intervention had an impact on the school communities' knowledge and awareness of health and well-being? What was it that triggered/caused these changes? The impact evaluation is concerned with the longer term impact of the process of change in the schools on children's health outcomes (i.e. the last two boxes in Figure 1.2).

Figure 1.2: Programme evaluation and theory of change



Source: Adapted from Wyatt-Knowlton & Philips, 2009

1.6 Aims and objectives of the *Healthy Schools Programme* evaluation project

The overarching aim of the *Healthy Schools Programme* evaluation study was to establish the effectiveness of the programme over a 3-year period. As highlighted above, a two-pronged approach was taken to evaluate the impact and the process of the programme.

1.6.1 Aims and objectives of the **IMPACT** evaluation

The aim of the impact evaluation was to measure health outcomes using a quantitative, longitudinal comparative study design. This involved the measurement of key health outcomes for children from 5 schools that had taken part in *Healthy Schools* (i.e. the intervention schools) and 2 schools that had no exposure to *Healthy Schools* (i.e. the comparison schools) at 3 time points, i.e. baseline, Year 1 follow-up and Year 2 follow-up.

Research questions that informed the impact evaluation were:

- Did the health and well-being outcomes for intervention and comparison children change from baseline to Year 1 follow-up (i.e. did outcomes change in the short term)?
- Did the health and well-being outcomes for intervention and comparison children change from baseline to Year 2 follow-up (i.e. did outcomes change in the longer term)?
- Did the health and well-being outcomes for intervention and comparison children change from Year 1 to Year 2 follow-up (i.e. did outcomes that were observed at one year change (deteriorate, sustain, improve) in the second year)?
- Did the intervention children differ from the comparison children at baseline, Year 1 and Year 2 follow-up?

1.6.2 Aims and objectives of the **PROCESS** evaluation

The principal aim of the process evaluation was to provide in-depth information about what occurred during the design, planning and implementation of the *Healthy Schools Programme*. In doing this, it focused on four broad areas: (a) programme design phase; (b) programme planning and implementation; (c) responses to challenges that were arising in programme implementation; and (d) a move towards a more health-promoting schools programme. A key objective of this exploration was to set out what happened during programme implementation and to explore the impact of the implementation process in terms of whether it was generating change in the schools in a manner that adhered to the programme's underpinning theory. In other words – Was the programme supporting the schools to become more health-promoting, and if so, how?

Research questions that informed the process evaluation were:

- In what ways does the current programme design facilitate the development of health-promoting schools?
- How effectively was the programme implemented in practice?
- What contextual factors facilitated schools to engage with the *Healthy Schools Programme* in a way that supported the schools to develop more health-promoting school environments (as set out in the programme's underpinning theory)?
- How can the programme be developed and improved going forward?

The process evaluation drew from a realistic evaluation approach, the focus of which is the transformation process that occurred during programme implementation. Qualitative and quantitative methods were employed involving participation from a range of stakeholders, including schools, families, funders and services.

1.7 Structure of report

The report consists of 6 chapters. Following this introduction:

Chapter 2 summarises the methodological details on the study design, implementation and execution of the impact evaluation.

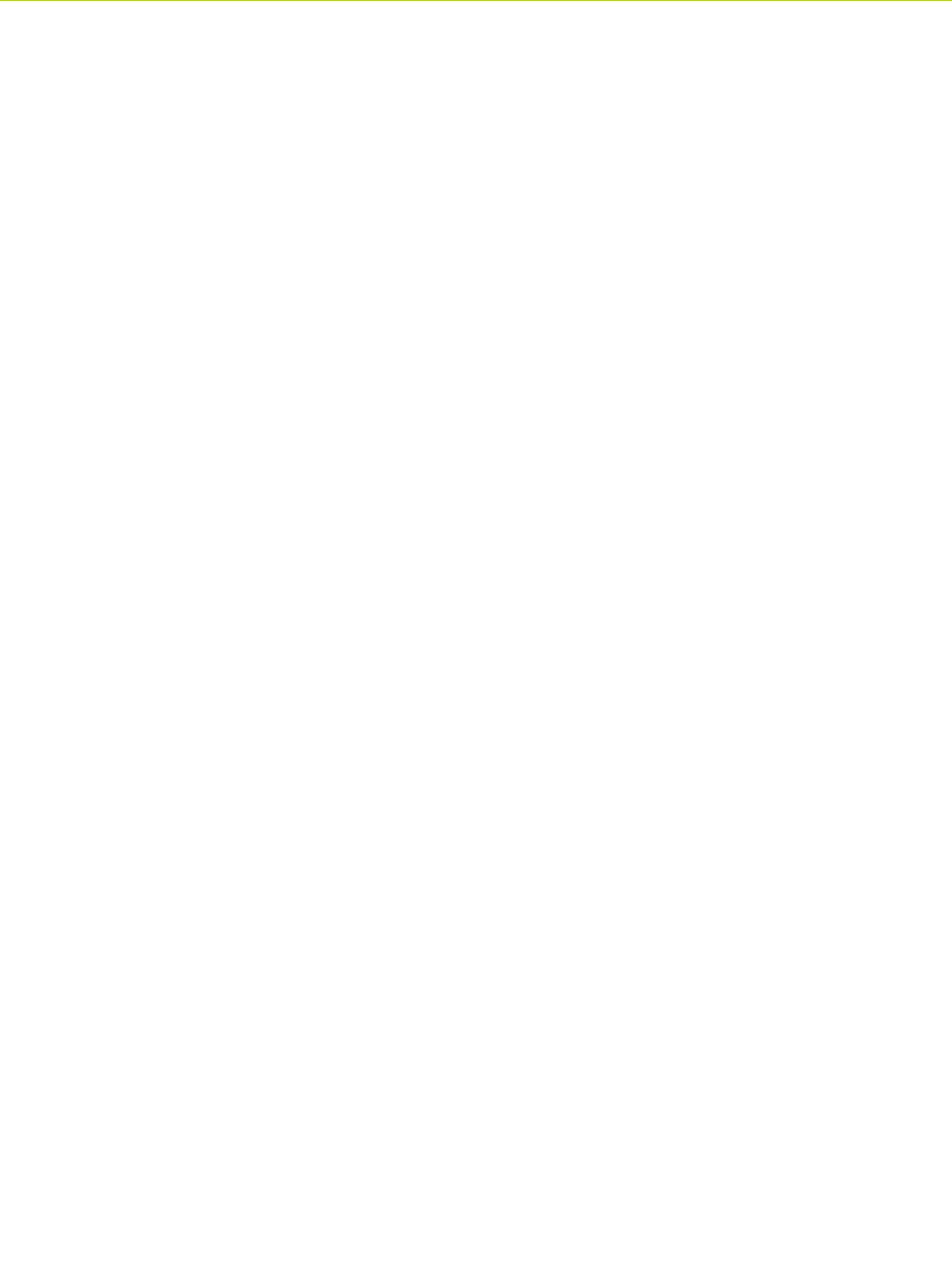
Chapter 3 sets out the methodological design of the process evaluation component of the evaluation.

Chapter 4 presents the results of the impact evaluation.

Chapter 5 presents the findings of the process evaluation.

Chapter 6 presents a critical discussion and analysis of the findings, while also highlighting some considerations for the future.

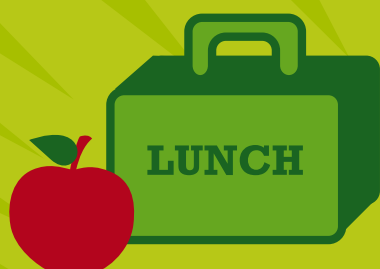
The main report is followed by a **Bibliography** and **5 Appendices** detailing various aspects of the evaluation study.



Chapter 2: Impact Evaluation: Study design and methodology



The Healthy Schools Programme



2.1 Introduction

This chapter sets out the study design and methodology employed in the impact evaluation component of the overall *Healthy Schools Programme* evaluation. The null hypothesis was that the *Healthy Schools Programme* does not change child health outcomes over time. The alternative hypothesis was that the *Healthy Schools Programme* improved child health outcomes over time.

2.2 Study design and methods

Seven specific child health outcomes set out in the manual (Lahiff, 2008, pp. 50-57) were assessed in terms of the research questions. These outcomes were: (1) that children demonstrate age-appropriate physical development; (2) that children have access to basic healthcare; (3) that children are aware of basic safety, fitness and healthcare needs; (4) that children are physically fit; (5) that children eat healthily; (6) that children feel good about themselves; and (7) that parents are involved in their child's health. A longitudinal comparative evaluation of the children's health outcomes was implemented, involving the measurement of key health outcomes in children from intervention and comparison schools at baseline, Year 1 and Year 2 follow-up.

2.2.1 Participants and settings

The sample in the impact evaluation consisted of children from 5 intervention schools (N=467) and 2 comparison schools (N=137), representing 50% and 55% respectively of the estimated sample frames. At the baseline stage in 2009, the children were aged 4-12 years and were recruited from Junior Infant Class to 5th Class. Parents of the 2009 sample of children in Junior and Senior infants (aged 4-7) agreed to participate and answer the survey on their child's behalf (N=116 parents in intervention schools and N=30 parents in the comparison schools). During the follow-up period, some children may have (a) left the school; (b) graduated from the school; (c) a parent who has withdrawn consent for themselves and/or their child; (d) been absent from school; or (g) not consented to take part on the day. For some questions on the survey, the sample of respondents was reduced further as the children may have skipped or spoiled questions, or not known how to respond. Appendix 3 provides a full description of the consent, follow-up and participation rates, as well as details on the total number of cases (N) that were statistically analysed over the 3 time points.

2.2.2 Data collection

Parent proxy surveys were completed over the telephone by parents of the 2009 cohort of children (Junior and Senior infants) at baseline, Year 1 and Year 2 follow-ups, and also by postal survey at Year 1 and Year 2 follow-ups. However, at Year 1 and Year 2 follow-ups, this 2009 cohort of children in Senior infants and Junior infants progressed into 1st Class respectively and so they also then completed the self-report survey themselves.

Self-report surveys were completed by the 2009 cohort of children (1st to 5th Class) in the school at baseline, Year 1 and Year 2 follow-ups.

2.2.3 Research instruments

The impact evaluation involved 3 phases of assessment each year: self-reported health surveys of children, parent proxy reported health surveys of their own children, and BMI measurements. The *Healthy Schools* health survey existed in a parent proxy and self-report form.

The Parent Proxy Report consisted of:

- A profile questionnaire developed by the research team and adapted for parents of children aged 4-7 years to obtain a short demographic background of the child.
- The Kidscreen-27 – Parent version (ages 8-18): A 27-item questionnaire asking parents about their child's quality of life across 5 domains : physical well-being, psychological well-being, autonomy and parent relations, social support and peer relations, and school environment (Kidscreen Group, 2004).
- The Child Depression Inventory – Parent (CDI-P) version (ages 7-17): A 17-item questionnaire asking parents to rate their child's behaviour at home in family situations. It provides scores for the following 2 subscales: emotional problems and functional problems (Kovacs, 2009). This Parent Proxy Report is not suitable for children under 7 years of age. The purposes of assessing children aged 5 and 6 using this instrument was for method validation purposes.
- The Health Related Behaviour Questionnaire, Adapted (HRBQ-A) – Parent version (ages 8-12): A 31-item questionnaire asking parents to record the health behaviour of their child across a broad range of health-related topics (Balding, 2002). It was adapted with the permission of the developers to use with parents of children aged 4-7. The instrument consists of 50 questions within 12 short sections, which are: you and your home; your health; the food you eat; feelings; your money; hygiene; bullies; alcohol; smoking; stranger danger; leisure time; and growing up. Any questions regarded as not appropriate for this age group were removed (e.g. questions on substance use).

The Child Self Report consisted of:

- A Profile Questionnaire developed by the research team to obtain a short demographic background of children aged 7-12 years.
- The Kidscreen-27 – Self Report version (ages 8-18): A 27-item questionnaire that records the child's quality of life across 5 domains : physical well-being, psychological well-being, autonomy and parent relations, social support and peer relations, and school environment (Kidscreen Group, 2004). Assessing children aged 6 and 7 using this instrument was for method validation purposes.
- The Children's Depression Inventory Short (CDI-S) – Self Report version (ages 7-17): A 10-item questionnaire that measures children's negative affect. It retains 4 of the 5 factors in the full CDI: anhedonia (i.e. a psychological condition characterised by inability to experience pleasure), negative mood, ineffectiveness and negative self-esteem (Kovacs, 2009). The Self Report is not suitable for children under 7 years of age and assessing children aged 6 using this instrument was for method validation purposes.
- The Health Related Behaviour Questionnaire – Self (HRBQ-S) Report version (ages 8-12): A 31-item questionnaire asking children to record their health behaviours across a broad range of health-related topics (Balding, 2002). It was adapted with the permission of the developers to use with children aged 6-12. The instrument consists of 50 questions within 12 short sections, which are: you and your home; your health; the food you eat; feelings; your money; hygiene; bullies; alcohol; smoking; stranger danger; leisure time; and growing up. Any questions regarded as not appropriate for this age group were removed (e.g. questions on substance use).

Body Mass Index (BMI)

- BMI is a screening tool used to identify individuals who are underweight, normal weight, overweight or obese. BMI is not a diagnostic tool.
- Measurement of all children's weight was conducted with a digital scales (SECA – model) in their stockings and with all heavy outdoor clothing removed.
- Measurement of all children's height was taken using a portable height measurer and outdoor shoes were also removed.
- Measurement of all children's waist circumference was taken at the midpoint between the top of the iliac crest and the last rib. This measurement was recorded over very light clothing (e.g. school polo shirt or shirt only).

Dental service provision

- The percentage of children screened/examined by a dental service in the intervention schools was obtained from the Health Service Executive (HSE). Children are examined/screened in school every 2 years, beginning in Senior infants. Therefore, the dental data available to the evaluation team only relates to Senior infants, 2nd Class, 4th Class and 6th Classes at Year 1 follow-up stage in the intervention schools. Dental service uptake data was not provided by comparison schools.

Immunisation vaccine provision

- Levels of immunisation vaccine uptake for children in intervention schools were obtained from the Child and Adolescent Health Development Officer (CAHDO)/Immunisation Coordinator in the HSE. Immunisation vaccine uptake data was not provided by comparison schools.

Individual and school absenteeism levels

- Individual child and total school absenteeism data were obtained from roll books by fieldworkers. Roll books list the attendance of named pupils, are assigned to each classroom in a school and must be completed yearly for State records.

2.2.4 Intention-to-treat analysis and missing value computations

Absenteeism often occurs in longitudinal studies where there are multiple data collection points. Skipping questions is also a common occurrence with self-reporting questionnaires and even more common in child self-reports. Information on absenteeism is useful for determining follow-ups and follow-up rates.

Although a 'completers analysis' is sufficient, it is often more desirable to perform an 'all subjects' analysis, which is also called an intention-to-treat (ITT) analysis. The purpose of an ITT analysis is to ensure that the observed results are valid and applicable to the target sample being studied (Shao and Zhong, 2003). For the purposes of this study, missing values were computed where possible for cases where at the time of assessment one of the events (f) – (j) occurred. Appendix 3 provides details on the computation of missing values in the current evaluation. If, at the time of assessment, events (a) – (e) occurred, missing values were not computed as it was not appropriate either ethically or methodologically to do so. The potential reasons for attrition were as follows:

- (a) child left the school;
- (b) child graduated from school;
- (c) child's parents withdrew consent for them and their child;
- (d) child's parents never provided written consent to take part in the parent proxy survey;
- (e) child was of a particular age where questions were not applicable to them;
- (f) child was absent;
- (g) child did not wish to take part on that particular day;
- (h) child skipped questions;
- (i) child did not know how to respond;
- (j) child spoiled the question.

2.2.5 Statistical tests

A profile of the children's health outcomes is provided through frequencies and descriptive statistics of responses in the form of:

- Mean Kidscreen and CDI T-scores, calculated using manual guidelines provided by the instrument developers. Percentages of responses to health behaviour and perception questions, rates of absenteeism and immunisation and dental service uptake.
- BMI scores ($\text{BMI} = \text{weight in kg} \div \text{height in m}^2$) assessed in terms of age and sex of the child.

Responses from intervention (I) and comparison (C) school children were compared and tested for differences each year using the following tests:

- Independent t tests and ANCOVAs were conducted on the mean Kidscreen and CDI T-scores, and absenteeism rates of children in intervention and comparison schools at baseline, Year 1 and Year 2 follow-ups to determine if there were any significant differences between the means. Unlike independent t tests, ANCOVAs determine if there are differences between the groups given their scores at baseline.
- Chi squared, Fishers exact and Mann Whitney U tests were conducted on the percentages of children in intervention and comparison schools falling into particular BMI, health behaviour and health perception categories at baseline, Year 1 and Year 2 follow-ups to determine if there were any significant differences between the proportions.
- National and international reference data were available and compared to Kidscreen T-scores¹, CDI T-scores², BMI scores³ and absenteeism rates⁴.

In addition to these methods, the following tests were used to ascertain change in responses between baseline and Year 1 follow-up, baseline and Year 2 follow-up, and Year 1 and Year 2 follow-ups in children from intervention (I) schools and separately from comparison (C) schools:

- Paired t tests were conducted on the mean Kidscreen and CDI T-scores, and absenteeism rates of children in intervention schools and comparison schools, comparing the T-scores between baseline and Year 1 follow-up, baseline and Year 2 follow-up, and Year 1 and Year 2 follow-ups to determine if there were any significant changes over time.
- McNemar tests were conducted on the percentages of children in intervention and comparison schools falling into particular health behaviour and perception categories, comparing the proportions between baseline and Year 1 follow-up, baseline and Year 2 follow-up, and Year 1 and Year 2 follow-ups to determine if there were any significant changes over time.
- Wilcoxon Signed Rank Tests for related samples that were conducted on the percentages of children in intervention and comparison schools falling into particular BMI categories, comparing the proportions between baseline and Year 1 follow-up, baseline and Year 2 follow-up, and Year 1 and Year 2 follow-ups to determine if there were any significant changes over time.
- Binomial tests were also conducted on percentages of immunisation vaccine uptake for children in intervention schools only.

¹ European reference data from studies of children aged 8-18 years was compared to Kidscreen-27 – Parent Proxy and Self Report outcomes of children aged 4-12 years. These were extracted from the Kidscreen Questionnaires Handbook (Kidscreen Group Europe, 2006, p. 84).

² CDI Interpretive Data Guidelines from studies of children aged 7-17 years was compared to CDI-P and CDI-S outcomes of children aged 4-12 years (extracted from Kovacs, 2009, p. 31).

³ Using US normative data, the Centers for Disease Control and Prevention (CDC) developed growth charts, which categorise BMI-for-age into categories based on the percentiles children aged 2-20 years fall into (Kuczmarski et al, 2002). Underweight is defined as BMI less than the 5th percentile; normal as at or above the 5th percentile but lower than the 85th percentile; overweight as at or above the 85th percentile but lower than the 95th percentile; and obesity as at or above the 95th percentile (Krebs et al, 2007). Caution in interpretation of children in the underweight or obesity category, however, is warranted due to a lack of suitable underweight cut-offs for international use and the multiple interpretations for the term 'obesity' (Woodruff and Duffield, 2002; Ogden et al, 2008).

⁴ The report by Mac Aogáin (2008) on Analysis of School Attendance Data in Primary and Post-Primary Schools, 2003/4 to 2005/06 (for the National Educational Welfare Board) provides national data on absenteeism from schools (see www.newb.ie/downloads/pdf/school_attendance_report.pdf).

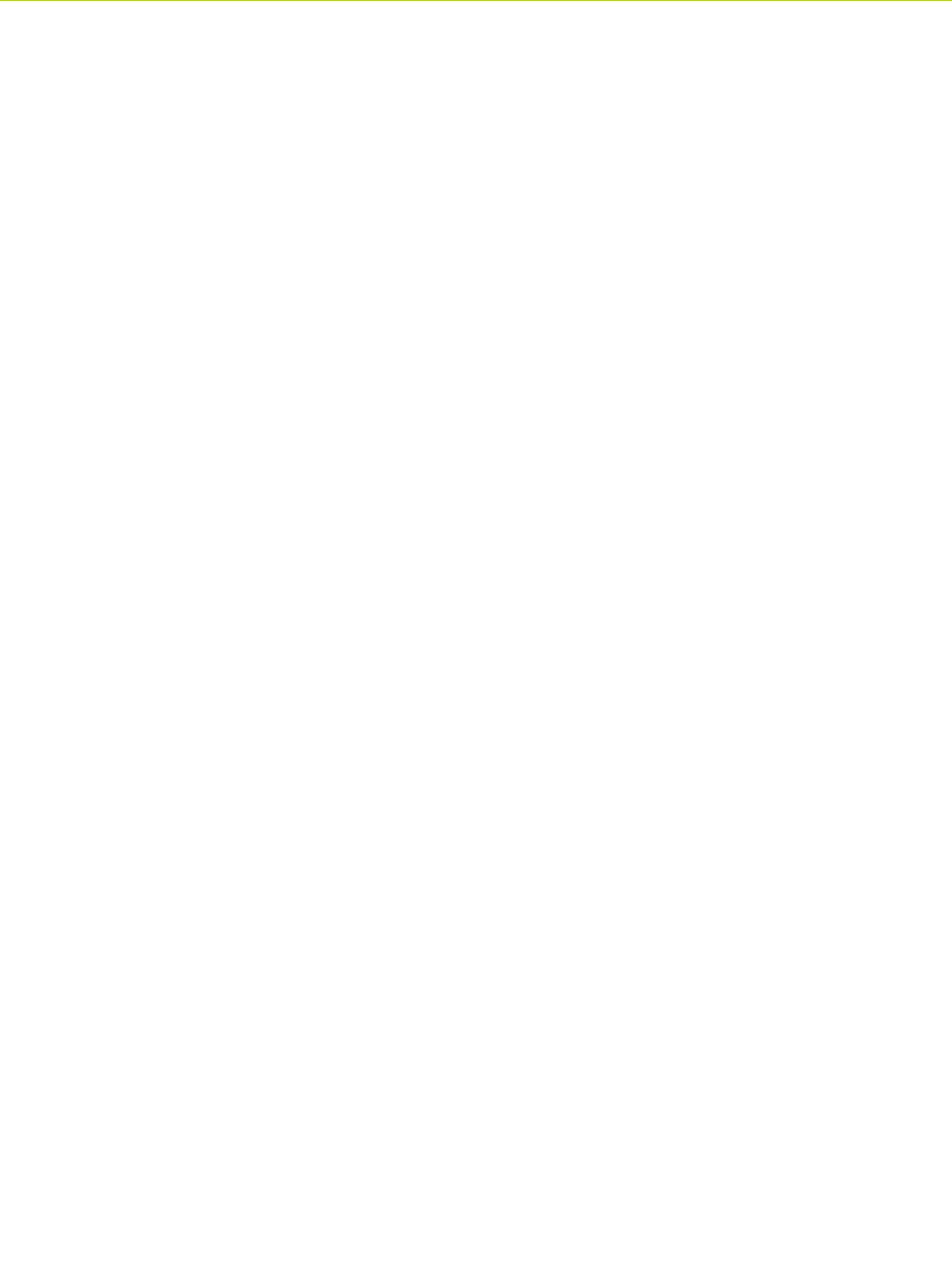
2.2.6 Quality control and data auditing

Prior to the analysis of any outcome data, a comprehensive audit of the quality of the data entry was conducted. Both the parent database and self-report databases were audited for data entry accuracy and quality.

2.3 Ethics, consent and risk

To ensure that children continued to be informed about the nature of their involvement, information leaflets explaining the research were distributed to the parents again at Year 2 follow-up.

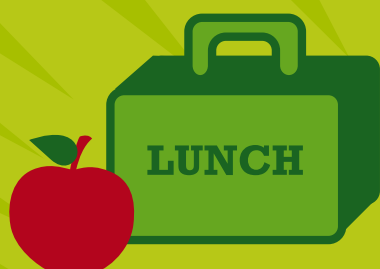
The research team recognised that it had a duty of care to children with whom it was in contact for research purposes and if it was deemed necessary, researchers reported directly any incidences or concerns to the school principal. The issue or incident was to be discussed and a decision made about the importance of following up and informing the parent. Informed by the *Children First* national guidelines, consideration was given to whether or not it was necessary for the research team to follow up with the principals on the outcome of the referred child.



Chapter 3: Impact Evaluation: Findings



The Healthy Schools Programme



3.1 Introduction

This chapter presents the findings for children in intervention (I) and comparison (C) schools at 3 time points: baseline, Year 1 follow-up and Year 2 follow-up. The measures used in these assessments include the Kidscreen-27 (Kidscreen Group, 2004); Children's Depression Inventory (Kovacs, 2009); Health Related Behaviour Questionnaire (Balding, 2002); Body Mass Index calculations and data on the children's dental and immunisation uptake.

The results of the health surveys are presented in the form of proportions falling within a particular category and mean T-scores⁵. Results are presented according to whether the instrument administered during fieldwork was parent-proxy or child self-report, the former being administered to parents of children in Junior and Senior infants (aged 4-7), whilst the latter was administered to children in 1st to 5th class (aged 6-12). Results are presented for children in I and C schools at baseline, Year 1 and Year 2 follow-up. The BMI measurements are in the form of the proportions within each BMI category and absenteeism is in the form of percentage days absent in the year. As above, these are presented according to whether children belonged to the parent-proxy or child self-report group in the intervention and comparison schools at baseline, Year 1 and Year 2 follow-up (*see Table 3.1 for sample size*). Dental uptake is presented in terms of percentages for a cohort of children in intervention schools at Year 1 follow-up (N=475). Finally, immunisation uptake is presented in terms of percentages for a cohort of children in intervention schools at baseline (N=137), Year 1 follow-up (N=131) and Year 2 follow-up (N=164).

3.1: Sample size (N) surveyed, measured for BMI and with absenteeism data

| Outcome | Baseline N | | Year 1 follow-up | | Year 2 follow-up | |
|--------------------------|------------|-----|------------------|----|------------------|----|
| | I | C | I | C | I | C |
| Parent proxy survey | 108 | 27 | 106 | 27 | 103 | 25 |
| Self report survey | 345 | 104 | 329 | 99 | 235 | 80 |
| Parent proxy BMI | 115 | 29 | 112 | 28 | 108 | 26 |
| Self report BMI | 348 | 104 | 329 | 99 | 235 | 80 |
| Parent proxy absenteeism | 116 | 27 | 111 | 25 | 108 | 26 |
| Self report absenteeism | 349 | 101 | 329 | 99 | 236 | 80 |

To determine if the *Healthy Schools Programme* had any short-term impact on children's health, differences between intervention and comparison school children were analysed at each time point. Changes within intervention and within comparison schools were also analysed. Finally, within the intervention schools, proportions of children below average, average and above average scores were prepared where appropriate.

⁵ A T-score is a standardised score that is calculated from the total distribution of scores within the community sample. Scores are rescaled so that T scores have a mean of 50 and a standard deviation of 10. Scores within one standard deviation (i.e. a T-score of 10) of the mean on any dimension are usually taken to be within the normal range on that dimension (Spence, 1998).

3.2 Kidscreen-27

The following section details the results of the children's subjective Health Related Quality of Life (HRQoL) across 5 dimensions as reported by the child or parent proxy.

3.2.1 Comparing children's HRQoL between intervention and comparison schools

Tables 3.2 and 3.3 present the results of each of the 5 Kidscreen-27 dimensions reported by parents and children in the form of mean T-scores.⁶ For parent proxy reports, in all cases over the 3 time points, there were no significant differences in scores observed between the intervention and comparison school children, suggesting that the *Healthy Schools Programme* did not have any short-term impact on the health of parent proxy reporting children.

Unlike the parent proxy reports, significant differences were seen between intervention and comparison school children in some HRQoL domains – physical well-being, autonomy and parent relations. In the case of physical well-being, it was observed that at baseline, children within the intervention schools self-reported significantly higher physical well-being than children within comparison schools and that this difference remained at Year 1 and Year 2 follow-ups. Importantly, however, there were no significant improvements in children's physical well-being over time. This suggests that while self-reporting children within the intervention schools had a higher score on physical well-being than the children within the comparison schools from the outset and throughout the evaluation, the *Healthy Schools Programme* had no short-term impact on the children's physical well-being.

In terms of autonomy and parent relations, self-reporting children in intervention schools scored significantly higher than children in comparison schools from the outset. This difference was sustained at Year 1 follow-up, but not at Year 2 follow-up. In addition, all self-reporting children in intervention and comparison schools demonstrated significant improvements in this domain over time. While self-reporting children within the intervention schools started out feeling more positive about their relationship with their parents than the children within comparison schools, and improved over time, so too were the comparison school children, and by the end of the second year, intervention school children were not improving at a significantly greater rate than the comparison school children. This suggests that, again, the *Healthy Schools Programme* had no short-term impact on the children's autonomy and parent relations.

⁶ The Normal Distribution of European T-scores can be explained as follows: 'A group with a mean of the defined threshold shows a difference of medium effect size relative to the population mean. Such a difference reaches statistical significance if a sample size of 50 is exceeded. In the range from mean minus half a standard deviation (sd) to mean plus half a standard deviation, 38% of persons of a normal distributed sample are included. Below this threshold, 31% of the persons with the lowest values can be found, above this threshold the 31% highest values are located' (Kidscreen Group Europe (2006), Kidscreen Questionnaires Handbook, p. 84).

Table 3.2: Mean T-scores for 5 Kidscreen dimensions for PARENT PROXY REPORTS and statistics from between and within groups analysis

| Parent Proxy Report 5 dimensions of Kidscreen-27 | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline | Difference between (I) (C) at Year 1 | Difference between (I) (C) at Year 2 | Difference between baseline and Year 1 | Difference between baseline and Year 2 | Difference between Year 1 and Year 2 | |
|---|---------------------------|--------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--|--|--|--|---|--------------------------------------|---|
| | T-scores N | | T-scores N | | T-scores N | | Independent t-test value p-value | Independent t-test value p-value (ANCOVA F, p-value) | Independent t-test value p-value (ANCOVA F, p-value) | Paired t-test value p-value | Paired t-test value p-value | Paired t-test value p-value | |
| Intervention (I) Comparison (C) | I | C | I | C | I | C | | t,p (F,p) | t,p (F,p) | I | C | I | C |
| Physical well-being | 58.65 ³ 108 | 61.06 ³ 27 | 59.80 ³ 106 | 60.72 ³ 27 | 57.81 ³ 103 | 56.68 ² 25 | -1.127, 0.262 | -0.457, 0.649 (F _(1,130) =0.015, 0.904) | 0.436, 0.663 (F _(1,125) =0.849, 0.359) | -1.093, 0.194, 0.277 0.848 | 0.821, 1.747, 0.413 0.093 | 1.789, 1.711, 0.077 0.1 | |
| Psychological well-being | 53.46 ² 108 | 54.63 ² 27 | 54.06 ² 106 | 55.89 ² 27 | 53.66 ² 103 | 55.39 ² 25 | -0.673, 0.502 | -0.98, 0.329 (F _(1,130) =0.591, 0.443) | -0.88, 0.38 (F _(1,125) =0.696, 0.406) | -0.647, -0.723, 0.519 0.476 | -0.045, -0.677, 0.964 0.505 | 0.602, 0.076, 0.548 0.94 | |
| Autonomy and parent relations | 52.90 ² 101 | 54.82 ² 25 | 55.70 ³ 101 | 57.68 ³ 25 | 54.21 ² 100 | 56.58 ³ 25 | -1.055, 0.294 | -0.999, 0.32 (F _(1,123) =0.188, 0.666) | -1.152, 0.251 (F _(1,122) =0.402, 0.527) | -3.666, -2.264, <0.001¹ 0.033¹ | -1.724, -1.394, 0.088 0.176 | 1.669, 0.618, 0.098 0.542 | |
| Social support and peer relations | 48.58 ² 108 | 50.39 ² 27 | 51.82 ² 106 | 53.42 ² 27 | 49.55 ² 103 | 48.83 ² 25 | -0.785, 0.434 | -0.758, 0.45 (F _(1,130) =0.201, 0.655) | 0.37, 0.712 (F _(1,125) =0.573, 0.451) | -2.941, -2.052, 0.004¹ 0.05¹ | 0.836, 2.018, 0.411 0.046¹ | 3.063, 0.005¹ | |
| School environment | 59.68 ³ 108 | 58.70 ³ 27 | 59.96 ³ 106 | 58.22 ³ 27 | 59.94 ³ 103 | 57.66 ² 25 | 0.462, 0.645 | 0.795, 0.428 (F _(1,130) =0.413, 0.521) | 1.06, 0.291 (F _(1,125) =0.721, 0.397) | -0.269, 0.258, 0.788 0.799 | 0.352, -0.043, 0.728 0.966 | 0.03, 0.976 | |

¹ This result shows a significant difference either between intervention and comparison children at p≤0.05 or a significant improvement in children over time at p<0.05.

² This result was within the European average range.

³ This result was higher than the European average.

Table 3.3: Mean T-scores for five Kidscreen dimensions for CHILD SELF REPORTS and statistics from between and within groups analysis

| Child Self Report 5 dimensions of Kidscreen-27 | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline Independent t-test value p-value (ANCOVA F, p-value) | Difference between (I) (C) at Year 1 Independent t-test value p-value (ANCOVA F, p-value) | Difference between (I) (C) at Year 2 Independent t-test value p-value (ANCOVA F, p-value) | Difference between baseline and Year 1 Paired t-test value p-value | | Difference between baseline and Year 2 Paired t-test value p-value | | Difference between Year 1 and Year 2 Paired t-test value p-value | |
|--|---------------------------|---------------------------|---------------------------|--------------------------|---------------------------|--------------------------|--|--|--|--|-------------------------------------|--|--|--|--------------------------------------|
| | I | C | I | C | I | C | | | | I | C | I | C | I | C |
| Intervention (I) Comparison (C) | | | | | | | | t,p (F,p) | t,p (F,p) | | | | | | |
| Physical well-being | 55.03 ² 345 | 51.23 ² 104 | 54.72 ² 329 | 50.49 ² 99 | 55.71 ² 246 | 49.88 ² 80 | 3.174, 0.002 ¹ | 3.466, <0.001 ¹ (F _(1,425) =5.410, 0.020 ⁴) | 3.937, <0.001 ¹ (F _(1,323) =8.34, 0.004 ¹) | -0.134, 0.893 | 0.505, 0.615 | -0.412, 0.681 | 0.546, 0.586 | -0.377, 0.706 | 0.581, 0.563 |
| Psychological well-being | 52.57 ² 345 | 52.97 ² 104 | 53.36 ² 329 | 52.64 ² 99 | 54.28 ² 235 | 53.12 ² 80 | -0.355, 0.723 | 0.566, 0.572 (F _(1,425) =0.676, 0.411) | 0.88, 0.38 (F _(1,312) =0.663, 0.416) | -1.325, 0.186 | 0.316, 0.752 | -1.331, 0.185 | 0.03, 0.977 | -0.963, 0.337 | 0.044, 0.965 |
| Autonomy and parent relations | 51.16 ² 345 | 47.19 ² 103 | 53.37 ² 329 | 49.60 ² 99 | 55.29 ² 235 | 52.46 ² 80 | 2.913, 0.004 ¹ | 2.606, 0.009 ¹ (F _(1,425) =1.786, 0.182) | 1.704, 0.089 (F _(1,312) =0.410, 0.522) | -3.527, <0.001 ¹ | -2.35, 0.021 ¹ | -4.859, <0.001 ¹ | -5.133, <0.001 ¹ | -3.065, 0.002 ¹ | -2.413, 0.018 ¹ |
| Social support and peer relations | 53.36 ² 345 | 51.72 ² 104 | 54.74 ² 329 | 52.95 ² 99 | 55.41 ² 235 | 54.31 ² 80 | 1.194, 0.233 | 1.231, 0.219 (F _(1,425) =0.943, 0.332) | 0.707, 0.48 (F _(1,312) =0.304, 0.582) | -1.726, 0.085 | -0.594, 0.554 | -2.336, 0.02 ¹ | -1.227, 0.223 | -1.661, 0.098 | -0.689, 0.493 |
| School environment | 54.38 ² 345 | 53.29 ² 104 | 56.10 ² 329 | 54.42 ² 99 | 56.43 ² 235 | 56.23 ² 80 | 0.809, 0.419 | 1.255, 0.21 (F _(1,425) =1.231, 0.268) | 0.132, 0.895 (F _(1,312) =0.051, 0.821) | -2.546, 0.011 ¹ | -0.825, 0.411 | -0.316, 0.752 | -1.291, 0.201 | 0.591, 0.555 | -0.703, 0.484 |

¹ This result shows a significant difference either between intervention and comparison children at p<0.05 or a significant improvement in children over time at p<0.05.² This result was within the European average range.

3.2.2 Changes in children's health outcomes within intervention and comparison schools

Tables 3.2 and 3.3 show that parent proxy children within the intervention (and comparison) schools demonstrated significant improvements within the domains of autonomy and parent relations between baseline and Year 1 follow-up (i.e. after the first year, the 4-7 year-old children as a group felt significantly more positive about the relationship with their parents and about having enough age-appropriate freedom to choose, and felt more satisfied with financial resources and felt more well-off). Feelings remained at the same level of positivity between the first and second year. As already mentioned, the self-reporting children in intervention (and comparison) schools demonstrated significant improvements within their autonomy and parent relation scores from baseline to Year 1 follow-up, Year 1 to Year 2 follow-up and baseline to Year 2 follow-up, demonstrating that initial improvements were both sustained and increased with time.

The average Irish T-scores are similar to the average European T-scores for the Kidscreen-52 (*see Table 3.4*). From comparing the average European T-scores for the Kidscreen-27 in Table 3.5 to the mean T-scores of the parent proxy and self reports in Tables 3.2 and 3.3, it is clear that the mean T-scores for all children in this study on all 5 HRQoL domains were average or above the average Irish and European HRQoL values at baseline, Year 1 and Year 2 follow-ups.

Using the European standards for Kidscreen 27, Tables 3.6 and 3.7 present the proportion of children in intervention schools according to proxy and self reports who obtained 'below average1', 'average2' or 'above average3' scores on the 5 HRQoL domains (the 1-3 category numbers can be found in Kidscreen Table 3.5 below, where 1 is below average, 2 average and 3 is above average). Overall, for parent proxy reports, the majority of children either fell within average or above average range on 4 of the 5 HRQoL domains across the 3 time points (physical, psychological, autonomy and parent relations, and school environment). Unlike these 4 HRQoL domains, larger proportions of children consistently scored below average in the social support and peer relations domain. For self-reporting children in intervention schools, the results in Table 3.7 show that the proportions were more evenly distributed between the above average, average and the below average ranges on the 5 Kidscreen HRQoL scores for all children across the 3 years.

Table 3.4: National Irish and European mean T-scores for 6 domains of the Kidscreen-52*

| Dimensions of Kidscreen-27 | Mean T-score (Ireland) | SD | Mean T-score (Europe) | SD |
|-----------------------------------|------------------------|-------|-----------------------|-------|
| Physical well-being | 48.6 | 9.42 | 49.94 | 9.88 |
| Psychological well-being | 48.90 | 9.20 | 49.92 | 9.87 |
| Autonomy | 48.43 | 10.32 | 50.11 | 10.14 |
| Parent relations | 49.11 | 10.34 | 50.13 | 10.16 |
| Social support and peer relations | 51.03 | 9.82 | 49.88 | 9.95 |
| School environment | 47.63 | 9.63 | 50.05 | 10.14 |

* There are no national Irish reference scores for the Kidscreen-27, but there are for the Kidscreen-52, which contains the same domains except it separates out autonomy and parent relations. The mean T-scores for Ireland are marginally lower than the mean European T-scores in all domains, with the exception of 'social support and peers', which is marginally higher.

Source: Extracted from results of the Kidscreen National Survey 2005

Table 3.5: European mean T-scores for 5 domains of the Kidscreen-27: Parent Proxy and Child Self Reports

| Dimensions of Kidscreen-27 | Parent Proxy 8-11 years* | | | Child Self Report 8-11 years* | | |
|-----------------------------------|----------------------------|----------------------|----------------------------|-------------------------------|----------------------|----------------------------|
| | Below average ¹ | Average ² | Above average ³ | Below average ¹ | Average ² | Above average ³ |
| Physical well-being | <47.9 | 47.9 – 57.4 | >57.4 | <48.74 | 48.74 – 58.7 | >58.7 |
| Psychological well-being | <46.93 | 46.93 – 56.51 | >56.51 | <48.07 | 48.07 – 58.01 | >58.01 |
| Autonomy and parent relations | <45.93 | 45.93 – 55.59 | >55.59 | <46.41 | 46.41 – 56.73 | >56.73 |
| Social support and peer relations | <45.74 | 45.74 – 55.14 | >55.14 | <45.98 | 45.98 – 56.02 | >56.02 |
| School environment | <48.02 | 48.02 – 57.88 | >57.88 | <45.85 | 45.85 – 59.21 | >59.21 |

* European reference data for proxy Kidscreen females and males (age 8-11 years)

** European reference data Kidscreen females and males (age 8-11 years)

Source: Extracted from the Kidscreen Group Europe (2006), *Kidscreen Questionnaires Handbook*, pp. 152-79.

Table 3.6: Proportions of children in the intervention schools who were below average, average or above average in the 5 Kidscreen dimensions for PARENT PROXY REPORT over time (% , N)

| | Below average ¹ | | | Average ² | | | Above average ³ | | |
|-----------------------------------|----------------------------|------------------|------------------|----------------------|------------------|------------------|----------------------------|------------------|------------------|
| | Baseline | Year 1 follow-up | Year 2 follow-up | Baseline | Year 1 follow-up | Year 2 follow-up | Baseline | Year 1 follow-up | Year 2 follow-up |
| Physical well-being | 15.7% 17 | 13.2% 14 | 21.4% 22 | 31.5% 34 | 28.3% 30 | 25.2% 26 | 52.8% 57 | 58.5% 62 | 53.4% 55 |
| Psychological well-being | 23.1% 25 | 16% 17 | 25.2% 26 | 48.1% 52 | 55.7% 59 | 45.6% 47 | 28.7% 31 | 28.3% 30 | 29.1% 30 |
| Autonomy and parent relations | 13.9% 14 | 7.9% 8 | 15% 15 | 54.5% 55 | 41.6% 42 | 46% 46 | 31.7% 32 | 50.5% 51 | 39% 39 |
| Social support and peer relations | 36.1% 39 | 20.8% 22 | 31.1% 32 | 33.3% 36 | 45.3% 48 | 47.6% 49 | 30.6% 33 | 34% 36 | 21.4% 22 |
| School environment | 7.4% 8 | 8.5% 9 | 8.7% 9 | 31.5% 34 | 23.6% 25 | 24.3% 25 | 61.1% 66 | 67.9% 72 | 67% 69 |

Table 3.7: Proportions of children in the intervention schools who were below average, average or above average in the 5 Kidscreen dimensions for CHILD SELF REPORT over time (% , N)

| | Below average ¹ | | | Average ² | | | Above average ³ | | |
|-----------------------------------|----------------------------|------------------|------------------|----------------------|------------------|------------------|----------------------------|------------------|------------------|
| | Baseline | Year 1 follow-up | Year 2 follow-up | Baseline | Year 1 follow-up | Year 2 follow-up | Baseline | Year 1 follow-up | Year 2 follow-up |
| Physical well-being | 29.3% 101 | 28.6% 94 | 28.9% 68 | 32.8% 113 | 32.5% 107 | 28.5% 67 | 38% 131 | 38.9% 128 | 42.6% 100 |
| Psychological well-being | 34.5% 119 | 28% 92 | 29.8% 70 | 33.9% 117 | 40.7% 134 | 33.2% 78 | 31.6% 109 | 31.3% 103 | 37% 87 |
| Autonomy and parent relations | 36.2% 125 | 30.4% 100 | 26.8% 63 | 40% 138 | 35.6% 117 | 36.2% 85 | 23.8% 82 | 34% 112 | 37% 87 |
| Social support and peer relations | 23.8% 82 | 21.9% 72 | 20.9% 49 | 27.5% 95 | 19.5% 64 | 17.9% 42 | 48.7% 168 | 58.7% 193 | 61.3% 144 |
| School environment | 28.1% 97 | 21.9% 72 | 23% 54 | 38.8% 134 | 38.3% 126 | 37.4% 88 | 33% 114 | 39.8% 131 | 39.6% 93 |

Summary

In summary, it can be observed that there were no differences between intervention and comparison school children in HRQoL as a result of the *Healthy Schools Programme*. Despite this, all children in intervention (and comparison) schools had a mean score that was average or above average Irish and European HRQoL. Parent proxy reporting children in intervention (and comparison) schools demonstrated significant improvements within autonomy and parent relations, and social support and peer relations in the first year, but there were no further improvements. Self-reporting children in intervention (and comparison) schools showed sustained improvements at significant levels in autonomy and parent relations from baseline to Year 2 follow-up.

The results also reveal that there were much fewer parent proxy reporting children in the below average category than in the average or above average category across the majority of the HRQoL domains, with the exception of social support and peer relations, where the proportions were evenly distributed. The proportions of self-reporting children scoring below average, average and above average European HRQoL were evenly distributed on all HRQoL domains.

3.3 Children's Depression Inventory

The following section presents the results of the Children's Depression Inventory (CDI), which provides an overall rating of negative affect or depressive symptoms as reported by the child or parent proxy.

3.3.1 Comparing children's depressive symptoms between intervention and comparison schools

Tables 3.8 and 3.9 present the mean T-scores for the CDI-P and CDI-S provided by parent proxy and children's self reports, respectively. In each case, higher scores indicate higher levels of childhood depressive symptoms. For both parent proxy and child self reports, there were no significant differences in scores observed between the intervention and comparison school children at any of the time points, suggesting that the *Healthy Schools Programme* did not have any short-term impact on the depressive symptoms of the children.

Table 3.8: Mean T-scores for CDI-P for PARENT PROXY REPORTS and statistics from between and within groups analysis*

| Parent Proxy Report | Baseline** | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline Independent t-test value p-value | Difference between (I) (C) at Year 1 Independent t-test value p-value | Difference between baseline and Year 1 Paired t-test value p-value | Difference between baseline and Year 2 Paired t-test value p-value | Difference between Year 1 and Year 2 Paired t-test value p-value |
|------------------------------------|------------|-----|--------------------|--------------------|--------------------|--------------------|---|---|--|--|--|
| | I | C | I | C | I | C | | | | | |
| Intervention (I) Comparison (C) | | | | | | | | | | | |
| CDI-P Total T-score | n/a | n/a | 45.96 ⁴ | 45.84 ⁴ | 45.46 ⁴ | 44.72 ⁴ | n/a | 0.074, 0.941 | 0.361, 0.719 | n/a | 0.948, 1.061, |
| | | | 100 | 25 | 100 | 25 | | | | | 0.345 0.299 |

* For any question within the CDI that is not answered, responses are marked as missing. In accordance with best practice guidelines as provided by the author of the CDI-S instrument, any questionnaires with more than 10% of responses missing (i.e. one missing response) were excluded from analysis to maintain validity of the data (Kovacs, 2009). The CDI-P was not administered to parents at baseline as the instrument is not validated for this age group (n/a (not applicable) appears in the table above). At Year 1 follow-up, the CDI-P was administered and methods of validation are being carried out.

** As discussed in Chapter 2, the CDI-P was not administered to parents at baseline as the instrument is not validated for this age group.

4 This result was within the international average range.

No CDI-P (Childhood Depression Inventory Parent version) data collected at baseline stage as children were under 7 years.

Table 3.9: Mean T-scores for CDI-S for CHILD SELF REPORTS and statistics from between and within groups analysis

| Child Self Report | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline Independent t-test value p-value | Difference between (I) (C) at Year 1 Independent t-test value p-value | Difference between baseline and Year 1 Paired t-test value p-value | Difference between baseline and Year 2 Paired t-test value p-value | Difference between Year 1 and Year 2 Paired t-test value p-value | | | |
|------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---|---|--|--|--|---------------|-------|---------------|
| | T-scores N | T-scores N | T-scores N | T-scores N | | | | | | | | | | |
| Intervention (I) Comparison (C) | I | C | I | C | I | C | | | I | C | I | C | | |
| CDI-S Total T-score | 47.44 ⁴ | 47.96 ⁴ | 46.83 ⁴ | 47.17 ⁴ | 46.54 ⁴ | 45.15 ⁴ | -0.318, 0.751 (ANCOVA F _(1,425) =0.019, p=0.890) | 1.493, 0.137 (ANCOVA F _(1,312) =1.239, p=0.267) | 1.616 | 1.001 | 2.542 | 2.585 | 1.334 | 2.241 |
| | 343 | 103 | 329 | 99 | 235 | 80 | | | 0.107 | 0.319 | 0.012* | 0.012* | 0.184 | 0.028* |

⁴ This result was within the international average range.

This result shows a significant improvement in children over time at p<0.05.

3.3.2 Changes in children's health outcomes within intervention and comparison schools

Table 3.9 show that self-reporting children within the intervention (and comparison) schools demonstrated statistically significant improvements in depressive symptoms between baseline and Year 2 follow-up. No significant improvements in depressive symptoms were seen in parent proxy reporting children.

From comparing the CDI T-score Interpretive Guidelines in Table 3.10 with the mean CDI T-scores of this study above, it is clear that, on average, all children from intervention (and comparison) schools obtained scores that fell within the average range of the CDI international standards for depressive symptoms at baseline, Year 1 and Year 2 follow-ups.

Using the CDI Interpretive Guidelines, Tables 3.11 and 3.12 present the proportion of parent proxy and self-reporting children in intervention schools who obtained anything from 'much below average' to 'very much above average' depressive symptom scores on the CDI scale. The above average categories indicate higher levels of depressive symptoms (the 1-8 category numbers can be found in the CDI Table 3.10 below). Results from Table 3.11 reveal that the majority of all children within the intervention schools exhibited scores average or below average levels of depressive symptoms (over 82%). The proportion of parent proxy reporting children experiencing over average levels of depressive symptoms was low, with 9% at Year 1, increasing to 14% at Year 2 follow-up. The proportion of self-reporting children experiencing over average levels of depression was low, with 17.1% at baseline, significantly decreasing to 16.6% at Year 2 follow-up.

Table 3.10: CDI T-score Interpretive Guidelines for the CDI Total Dimension

| T-scores | Much below average ¹ | Below average ² | Slightly below average ³ | Average ⁴ | Slightly above average ⁵ | Above average ⁶ | Much above average ⁷ | Very much above average ⁸ |
|----------|---------------------------------|----------------------------|-------------------------------------|----------------------|-------------------------------------|----------------------------|---------------------------------|--------------------------------------|
| Total | 30 – 34 | 35 – 39 | 40 – 44 | 45 – 55 | 56 – 60 | 61 – 65 | 66 – 70 | >70 |

* International reference data for proxy and self report CDI females and males (age 7-17 years).

The 1-8 category numbers can be found in the CDI tables below for reference

Source: Kovacs (2009)

Table 3.11: Proportions of children in the intervention schools who fell into the 8 CDI total international reference categories for PARENT PROXY REPORTS (% , N)

| | Much below average ¹ | Below average ² | Slightly below average ³ | Average ⁴ | Slightly above average ⁵ | Above average ⁶ | Much above average ⁷ | Very much above average ⁸ | Total |
|----------|---------------------------------|----------------------------|-------------------------------------|----------------------|-------------------------------------|----------------------------|---------------------------------|--------------------------------------|-------------|
| Baseline | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Year 1 | 2% 2 | 5% 5 | 45% 45 | 39% 39 | 5% 5 | 3% 3 | 0% 0 | 1% 1 | 100% 100 |
| Year 2 | 7% 7 | 13% 13 | 38% 38 | 30% 30 | 6% 6 | 4% 2 | 4% 4 | 0% 0 | 100% 100 |

Note: N was lower for CDI parent proxy analysis due to the non application of the CDI instrument at baseline thus minimising the amount of missing values that can be computed.

Table 3.12: Proportions of children in the intervention schools who fell into the 8 CDI total international reference categories for CHILD SELF REPORTS (% , N)

| | Much below average ¹ | Below average ² | Slightly below average ³ | Average ⁴ | Slightly above average ⁵ | Above average ⁶ | Much above average ⁷ | Very much above average ⁸ | Total |
|----------|---------------------------------|----------------------------|-------------------------------------|----------------------|-------------------------------------|----------------------------|---------------------------------|--------------------------------------|-------------|
| Baseline | 0% 0 | 0% 0 | 55.4% 190 | 27.4% 94 | 9% 31 | 2% 7 | 2.3% 8 | 3.8% 13 | 100% 343 |
| Year 1 | 0% 0 | 0% 0 | 60.8% 200 | 24% 17 | 7.6% 25 | 1.8% 6 | 0.6% 2 | 5.2% 17 | 100% 329 |
| Year 2 | 0% 0 | 0% 0 | 64.7% 152 | 18.7% 44 | 8.1% 19 | 4.7% 11 | 1.7% 4 | 2.1% 5 | 100% 235 |

Summary

In summary, it can be observed that there were no differences between intervention and comparison school children in depressive symptoms as a result of the *Healthy Schools Programme*. All children in intervention (and comparison) schools had a mean score that was within the average international reference for depressive symptoms in children. The majority (over 82%) of parent proxy and self-reporting children were within or below the average international reference standards, indicating low levels of depressive symptoms. There were higher proportions of self-reporting children with above average levels of depression (over 17%) than parent proxy reporting children (9%) at baseline. The self-reporting children, however, showed significant improvement in depressive symptoms over time, while parent proxy reporting children did not.

3.4 Health Related Behaviour Questionnaire

The following section details the results of the children's health-related behaviour across 4 of the 12 sections of the Health Related Behaviour Questionnaire (HRBQ), i.e. on nutrition, body perception, bullying and smoking.

3.4.1 Comparing children's HRBQ responses between intervention and comparison schools and identifying changes within intervention and comparison schools

Children were asked whether they **eat breakfast in the morning**. Tables 3.13 and 3.14 show that there were no differences between proportions who said 'Yes' and 'No' in the intervention and comparison schools at baseline, Year 1 and Year 2 follow-ups for either parent proxy or self-reporting children, which suggests that the *Healthy Schools Programme* did not have any short-term impact on increasing the number of children who eat breakfast in the morning.

There were no significant changes in proportions of children in intervention (or comparison) schools eating breakfast over time. Over 94% of children from parent proxy reports and over 86% of children from self reports in intervention schools reported eating breakfast in the morning at baseline, Year 1 and Year 2 follow-ups.

Table 3.13: Proportion of children having breakfast from the HRBQ for the PARENT PROXY REPORT and statistics from between and within groups analysis

| HRBQ Parent Proxy Report | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline | Difference between (I) (C) at Year 1 | Difference between (I) (C) at Year 2 | Difference between baseline and Year 1 | Difference between baseline and Year 2 | Difference between Year 1 and Year 2 | | |
|---------------------------------|-------------|-------|-------------|-------|-------------|------|--|--------------------------------------|--------------------------------------|--|--|--------------------------------------|-------|-------|
| | Percentages | N | Percentages | N | Percentages | N | Fishers exact value/ p value | Fishers exact value/ p value | Fishers exact value/ p value | McNemar | McNemar | McNemar | | |
| Intervention (I) Comparison (C) | I | C | I | C | I | C | | | | I | C | I | C | |
| Yes | 97.2% | 96.3% | 95.3% | 96.3% | 94.2% | 96% | Fishers exact test sig= 1.000 | Fishers exact test sig= 1.000 | Fishers exact test sig= 1.000 | 0.727 | 1.000 | 0.508 | 1.000 | 1.000 |
| | 105 | 26 | 101 | 26 | 97 | 24 | | | | | | | | |
| No | 2.8% | 3.7% | 4.7% | 3.7% | 5.8% | 4% | | | | | | | | |
| | 3 | 1 | 5 | 1 | 6 | 1 | | | | | | | | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | | | | | | | | |
| | 108 | 27 | 106 | 27 | 103 | 25 | | | | | | | | |

Table 3.14: Proportion of children having breakfast from the HRBQ for the CHILD SELF REPORT and statistics from between and within groups analysis

| HRBQ Child Self Report | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline | Difference between (I) (C) at Year 1 | Difference between (I) (C) at Year 2 | Difference between baseline and Year 1 | Difference between baseline and Year 2 | Difference between Year 1 and Year 2 | | | | | | | | | | | | |
|------------------------------------|------------------|-------|------------------|-------|------------------|-------|--|--|--|--|--|--------------------------------------|-------|---|---|--|--|--|--|--|--|--|--|--|
| | Percentages N | | Percentages N | | Percentages N | | Fishers exact value/ p value | Fishers exact value/ p value | Fishers exact value/ p value | McNemar | McNemar | McNemar | | | | | | | | | | | | |
| Intervention (I) Comparison (C) | I | C | I | C | I | C | | | | I | C | I | C | | | | | | | | | | | |
| Yes | 86.9% | 88.5% | 89.7% | 88.9% | 91.5% | 86.3% | $\chi^2=0.179$ Exact sig=0.672 | $\chi^2=0.049$ Exact sig=0.825 | $\chi^2=1.846$ Exact sig=0.174 | 0.243 | 1 | 0.154 | 0.607 | 1 | 1 | | | | | | | | | |
| | 298 | 92 | 295 | 88 | 215 | 69 | | | | | | | | | | | | | | | | | | |
| No | 13.1% | 11.5% | 10.3% | 11.1% | 8.5% | 13.8% | | | | | | | | | | | | | | | | | | |
| | 45 | 12 | 34 | 11 | 20 | 11 | | | | | | | | | | | | | | | | | | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | | | | | | | | | | | | | | | | | | |
| | 343 | 104 | 329 | 99 | 235 | 80 | | | | | | | | | | | | | | | | | | |

Children were asked whether they were **happy with their weight** the way it was or if they would like to change it. While Table 16 shows that there was no significant difference between proportions who said 'Yes' and 'No' in the intervention and comparison schools at any time point for self-reporting children, Table 15 shows there was a difference in parent proxy reporting children. Parent proxy reporting children in the intervention schools were significantly less happy with their weight than children in the comparison schools, but this difference existed from the beginning of the study. By Year 1 follow-up, there was no significant difference as the proportion of parent proxy reporting children who were unhappy with their weight in intervention schools slightly decreased, while comparison schools slightly increased. This suggests that the *Healthy Schools Programme* did not have any short-term impact on reducing the number of children (parent proxy or self-reporting) who were unhappy with their weight.

There were no significant changes in proportions of children in intervention (or comparison) schools unhappy with their weight over time. In intervention schools, over 71% of children from parent proxy reports and over 57% of children from self reports reported throughout the study being happy with their weight as it is. Over 10% of children from parent proxy reports and over 33% of children from self reports reported that they would like to lose weight throughout the study.

Table 3.15: Proportions of children in the three perception of body image categories from the HRBQ for PARENT PROXY REPORT and statistics from between and within groups analysis

| HRBQ Parent Proxy Report PERCEPTION OF BODY IMAGE | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline Fishers exact value/ p value | Difference between (I) (C) at Year 1 Fishers exact value/ p value | Difference between (I) (C) at Year 2 Fishers exact value/ p value | Difference between baseline and Year 1 McNemar | | Difference between baseline and Year 2 McNemar | | Difference between Year 1 and Year 2 McNemar | |
|--|-------------|-------------|-------------|-------------|-------------|------------|---|---|---|---|-------|---|-------|---|-------|
| | I | C | I | C | I | C | | | | I | C | I | C | I | C |
| Intervention (I) Comparison (C) | | | | | | | | | | | | | | | |
| S/he is happy with her/his weight as it is | 71.3% 77 | 88.9% 24 | 75.5% 80 | 70.4% 19 | 79.6% 82 | 92% 23 | Fishers exact test sig= 0.044 | Fishers exact test sig= 0.783 | Fishers exact test sig= 0.244 | 1.000 | 0.063 | 0.424 | 1.000 | 1.000 | 0.219 |
| S/he would like to put on weight | 9.3% 10 | 0% 0 | 6.6% 7 | 7.4% 2 | 3.9% 4 | 4% 1 | | | | | | | | | |
| S/he would like to lose weight | 10.2% 11 | 3.7% 1 | 12.3% 13 | 14.8% 4 | 14.6% 15 | 4% 1 | | | | | | | | | |
| Don't know | 9.3% 10 | 7.4% 2 | 5.7% 6 | 7.4% 2 | 1.9% 2 | 0% 0 | | | | | | | | | |
| Total | 100% 108 | 100% 27 | 100% 106 | 100% 27 | 100% 103 | 100% 25 | | | | | | | | | |

* McNemar Test conducted on dichotomy: 1 = happy with weight as it is; 2 = Would like to lose/gain weight.

Table 3.16: Proportions of children in the three perception of body image categories from the HRBQ for CHILD SELF REPORT and statistics from between and within groups analysis

| HRBQ Child Self Report | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline | Difference between (I) (C) at Year 1 | Difference between (I) (C) at Year 2 | Difference between baseline and Year 1 | | Difference between baseline and Year 2 | | Difference between Year 1 and Year 2 | |
|--|--------------|-------------|--------------|-------------|--------------|-------------|--|--------------------------------------|--------------------------------------|--|------|--|-------|--------------------------------------|-------|
| | I | C | I | C | I | C | Fishers exact value/ p value | Fishers exact value/ p value | Fishers exact value/ p value | I | C | I | C | I | C |
| PERCEPTION OF BODY IMAGE | | | | | | | | | | | | | | | |
| Intervention (I) Comparison (C) | | | | | | | | | | | | | | | |
| S/he is happy with her/his weight as it is | 58.2% 199 | 53.4% 55 | 57.9% 190 | 54.5% 54 | 60.4% 142 | 65% 52 | | $\chi^2=0.741$ Exact sig=0.389 | $\chi^2=0.355$ Exact sig=0.551 | $\chi^2=0.528$ Exact sig=0.467 | 1.00 | 0.845 | 0.434 | 0.470 | 0.307 |
| S/he would like to put on weight | 8.2% 28 | 2.9% 3 | 6.4% 21 | 6.1% 6 | 4.3% 10 | 2.5% 2 | | | | | | | | | |
| S/he would like to lose weight | 33.6% 115 | 43.7% 45 | 35.7% 117 | 39.4% 39 | 35.3% 83 | 32.5% 26 | | | | | | | | | |
| Don't know | 0% 0 | 0% 0 | 0% 0 | 0% 0 | 0% 0 | 0% 0 | | | | | | | | | |
| Total | 100% 342 | 100% 103 | 100% 328 | 100% 99 | 100% 235 | 100% 80 | | | | | | | | | |

* McNemar Test conducted on dichotomy: 1 = happy with weight as it is; 2 = Would like to lose/gain weight.

Children were asked whether they have been **bullied at or near the school** in the last year. While Table 17 shows that there were no significant differences between proportions of parent proxy reporting children who were bullied in intervention and comparison schools across the 3 time points, Table 18 shows that there were significant differences in self-reporting children. Self-reporting children in the comparison schools reported significantly higher rates of bullying than children in intervention schools, but this difference existed from the beginning of the study. By Year 1 follow-up, there was no significant difference as the proportion of children in comparison schools self-reporting incidences of bullying decreased. This suggests that the *Healthy Schools Programme* did not have any short-term impact on reducing the number of children (parent proxy or self-reporting) that have been bullied in the last year.

The proportion of children self-reporting incidences of bullying in intervention (not comparison) schools significantly decreased between baseline and Year 2 follow-up, and between Year 1 and Year 2 follow-up. In intervention schools, children self-reported higher incidences of bullying (over 26%) than the parent proxy reporting children (over 7%).

Table 3.17: Proportions reporting bullying from the HRBQ for the PARENT PROXY REPORT and statistics from between and within groups analysis

| HRBQ Parent Proxy Report HAS YOUR CHILD BEEN BULLIED IN THE LAST 12 MONTHS? | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline Fishers exact value/ p value | Difference between (I) (C) at Year 1 Fishers exact value/ p value | Difference between (I) (C) at Year 2 Fishers exact value/ p value | Difference between baseline and Year 1 McNemar | Difference between baseline and Year 2 McNemar | Difference between Year 1 and Year 2 McNemar |
|--|----------|-------|--------|-------|--------|------|---|---|---|---|---|---|
| | I | C | I | C | I | C | | | | | | |
| Intervention (I) Comparison (C) | | | | | | | | | | | | |
| Yes | 8.3% | 14.8% | 7.5% | 14.8% | 12.6% | 24% | Fishers exact test sig= 0.296 | Fishers exact test sig= 0.268 | Fishers exact test sig= 0.206 | 1.000 | 0.388 | 0.125 |
| No | 90.7% | 85.2% | 90.6% | 85.2% | 87.4% | 76% | | | | | | |
| Don't know | 0.9% | 0% | 1.9% | 0% | 0% | 0% | | | | | | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | | | | | | |
| | 108 | 27 | 106 | 27 | 103 | 25 | | | | | | |

Table 3.18: Proportions reporting bullying from the HRBQ for the CHILD SELF REPORT and statistics from between and within groups analysis

| HRBQ Child Self Report HAS YOU BEEN BULLIED IN THE LAST 12 MONTHS? | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline Fishers exact value/ p value | Difference between (I) (C) at Year 1 Fishers exact value/ p value | Difference between baseline and Year 1 McNemar | Difference between baseline and Year 2 McNemar | Difference between Year 1 and Year 2 McNemar |
|---|--------------|-------------|--------------|-------------|--------------|-------------|---|---|---|---|---|
| | I | C | I | C | I | C | | | | | |
| Intervention (I) Comparison (C) | | | | | | | | | I | C | I C |
| Yes | 31.9% 108 | 45.2% 47 | 33.8% 110 | 38.4% 38 | 26.8% 60 | 33.3% 26 | $\chi^2=7.733$ Exact sig=0.005 | $\chi^2=0.259$ Exact sig=0.611 | 0.897 | 0.118 | 0.048* Exact sig=0.269 |
| No | 56.9% 193 | 41.3% 43 | 54.5% 177 | 54.5% 54 | 59.8% 134 | 53.8% 42 | | | | | |
| Don't know | 11.2% 38 | 13.5% 14 | 11.7% 38 | 7.1% 7 | 13.4% 30 | 12.8% 10 | | | | | |
| Total | 100% 339 | 100% 104 | 100% 325 | 100% 99 | 100% 224 | 100% 78 | | | | | |

* This result shows a significant difference either between intervention and comparison school children at p<0.05 or a significant improvement in children over time at p<0.05.

Finally, children within the self-reporting cohort were also asked whether they think they will smoke when they are older. There were no differences between the proportions who said 'Yes/Maybe' and 'No' in intervention and comparison schools across the 3 time points. This suggests that the *Healthy Schools Programme* did not have any short-term impact on reducing the number of self-reporting children who think they might smoke when they are older.

There were no significant changes in the proportions of self-reporting children in intervention (or comparison) schools who think they will smoke when they are older. It is worth noting that only 2% of self-reporting children in the intervention schools thought that they would smoke when they were older.

Summary

In summary, it can be observed that there were no differences between intervention and comparison school children in health-related behaviours like eating breakfast, wanting to change their weight, being bullied and smoking when they are older, which can be attributed to the *Healthy Schools Programme*.

Consistently in intervention schools throughout the study, high proportions of all children were found to eat breakfast every day (over 86%) and very small proportions (2%) of self-reporting children thought that they will/maybe will smoke when they were older. Over 57% of children self-reported and over 71% of parent proxies reported that children were happy with their weight. Finally, children generally self-reported higher incidences of bullying (over 26%) than parent proxy reporting children (over 7%), but proportions of self-reported incidences of bullying decreased significantly over time.

3.5 Body Mass Index

The following section details the results of the proportion of children who are underweight, normal weight, overweight and obese in terms of their Body Mass Index (BMI) for age.

3.5.1 Comparing children's BMI for age scores between intervention and comparison schools and identifying changes within intervention and comparison schools

Tables 3.19 and 3.20 present the proportions of children in each BMI category for the parent proxy and self report cohort of children, and show that there were no significant differences between the intervention and comparison schools in the distribution of the BMIs at baseline or at Year 1 and Year 2 follow-ups. This suggests that the *Healthy Schools Programme* did not have any short-term impact on reducing the number of overweight and obese children over time.

For the parent proxy reporting children within the intervention schools, significant differences in BMI categories were observed between baseline and Year 1 follow-up and baseline and Year 2 follow-up, with the percentage of children within the obese category increasing over time from 13.9% at baseline to 18.5% at Year 2 follow-up. Increases were also observed within the comparison schools, but these were not found to be significant. Within intervention schools, there were similar proportions of overweight and obese children in the parent proxy and self report cohort (over 28%).

Table 3.19: Proportion of children belonging to the PARENT PROXY REPORT group within the body mass index (BMI) categories and statistics from between and within groups analysis

| Children belonging to Parent Proxy Reports | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline | Difference between (I) (C) at Year 1 | Difference between (I) (C) at Year 2 | Difference between baseline and Year 1 | Difference between baseline and Year 2 | Difference between Year 1 and Year 2 |
|--|--------------|-------------|--------------|-------------|--------------|-------------|--|--------------------------------------|--------------------------------------|---|--|--|
| | I | C | I | C | I | C | | | | | | |
| BMI | | | | | | | | | | | | |
| | | Percentages | | Percentages | | Percentages | | | | | | |
| | | N | | N | | N | | | | | | |
| Intervention (I) | | | | | | | | | | | | |
| Comparison (C) | | | | | | | | | | | | |
| Underweight | 3.5% | 0% | 2.7% | 0% | 1.9% | 0% | Mann Whitney U test p = 0.615 | Mann Whitney U test p = 0.216 | Mann Whitney U test p = 0.233 | Related samples Wilcoxon Signed rank test p=0.041* | Related samples Wilcoxon Signed rank test p=0.564 | Related samples Wilcoxon Signed rank test p=1.000 |
| | 4 | 0 | 3 | 0 | 2 | 0 | | | | | | |
| Normal weight | 67% | 79.3% | 62.5% | 82.1% | 63% | 80.8% | | | | | | |
| | 77 | 23 | 70 | 23 | 68 | 21 | | | | | | |
| Overweight | 15.7% | 6.9% | 18.8% | 3.6% | 16.7% | 3.8% | | | | | | |
| | 18 | 2 | 21 | 1 | 18 | 1 | | | | | | |
| Obese | 13.9% | 13.8% | 16.1% | 14.3% | 18.5% | 15.4% | | | | | | |
| | 16 | 4 | 18 | 4 | 20 | 4 | | | | | | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | | | | | | |
| | 115 | 29 | 112 | 28 | 108 | 26 | | | | | | |

* This result shows a significant change in children over time at p≤0.05.

Table 3.20: Proportion of children belonging to the CHILD SELF REPORT group within the body mass index categories and statistics from between and within groups analysis

| Children belonging to Child Self Reports BMI | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline | Difference between (I) (C) at Year 1 | Difference between (I) (C) at Year 2 | Difference between baseline and Year 1 | Difference between baseline and Year 2 | Difference between Year 1 and Year 2 |
|---|----------|-------|--------|-------|--------|-------|--|--------------------------------------|--------------------------------------|---|---|---|
| | I | C | I | C | I | C | Mann Whitney U Test p value | Mann Whitney U Test p value | Mann Whitney U Test p value | Related samples Wilcoxon Signed Rank Test p value | Related samples Wilcoxon Signed Rank Test p value | Related samples Wilcoxon Signed Rank Test p value |
| Intervention (I) Comparison (C) | | | | | | | | | | | | |
| Underweight | 0.3% | 0% | 0.9% | 0% | 0.4% | 0% | Mann Whitney U test p = 0.536 | Mann Whitney U test p = 0.647 | Mann Whitney U test p = 0.172 | Related samples Wilcoxon Signed rank test p=0.873 | Related samples Wilcoxon Signed rank test p=0.467 | Related samples Wilcoxon Signed rank test p=0.411 |
| | 1 | 0 | 3 | 0 | 1 | 0 | | | | | | |
| Normal weight | 68.7% | 67.3% | 68.4% | 69.7% | 71.5% | 66.3% | | | | | | |
| | 239 | 70 | 225 | 69 | 168 | 53 | | | | | | |
| Overweight | 19% | 15.4% | 17.6% | 10.1% | 14% | 8.8% | | | | | | |
| | 66 | 16 | 58 | 10 | 33 | 7 | | | | | | |
| Obese | 12.1% | 17.3% | 13.1% | 20.2% | 14% | 25% | | | | | | |
| | 42 | 18 | 43 | 20 | 33 | 20 | | | | | | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | | | | | | |
| | 348 | 104 | 329 | 99 | 235 | 80 | | | | | | |

Summary

In summary, it can be observed that the *Healthy Schools Programme* did not have any short-term impact on reducing the number of children who were overweight or obese. There was a large proportion of children in the intervention schools measured as overweight or obese (over 28%), and the proportion of parent proxy reporting children in the obese category significantly increased over time.

3.6 Dental and immunisation service availability and uptake

A summary of dental and immunisation follow-ups provided by the Health Service Executive (HSE) was recorded for the purposes of informing the evaluation as to whether there were any short-term impacts on service availability and level of uptake of services as a result of the *Healthy Schools Programme*. This information, however, was only recorded for the intervention schools, meaning that no conclusions could be drawn from the data. The following section, instead, describes service availability and level of uptake of services in the intervention schools.

3.6.1 Description of dental service availability and uptake within 5 intervention schools

As children in primary schools are only screened by a dental team every 2 years, beginning in Senior infants, the dental data available to the evaluation team only relates to Senior infants, 2nd Class, 4th Class, and 6th Classes at Year 1 follow-up. To determine if there were any changes to service availability and level of uptake of services over time, access to additional records from the year prior or post the *Healthy Schools Programme* evaluation should be obtained.

Overall, the level of dental service coverage was 89% (475/534) across the intervention schools (*see Table 3.21*). On an individual level, it is evident that the service coverage between schools varied considerably – from 69% to 97%. According to the HSE records, no oral health initiatives were planned in any of the intervention schools.

Table 3.21: Dental service records for 5 intervention schools

| | Sample | N screened/ % coverage | 'At risk' children registered to be seen more frequently | % who received fissure sealant this year | Oral health initiatives planned |
|----------|--------|---------------------------|---|--|---------------------------------------|
| School 1 | 94 | 65 69.2% | 2 2.1% | 16 17% | No |
| School 2 | 67 | 56 83.6% | 5 7.5% | 21 31.3% | No |
| School 3 | 105 | 97 92.4% | 4 3.8% | 55 51.4% | Not recorded |
| School 4 | 131 | 124 94.7% | 0 0% | 49 37.4% | No |
| School 5 | 137 | 133 97.1% | 0 0% | 34 24.8% | No |
| Totals | 534 | 475 89% | 11 2% | 175 33% | No recorded plans |

3.6.2 Changes in immunisation uptake within 3 intervention schools

The levels of immunisation booster uptake in the last 3 years are provided in Table 3.22. In primary schools, immunisations are only carried out with Junior infants. To determine if there were any short-term impacts on service availability and level of uptake of immunisations as a result of the *Healthy Schools Programme*, there should be access to comparison as well as intervention school data.

Over the 3 years, the level of immunisation uptake varied across schools, ranging from 61% to 95%. There was a significant decrease in the '4 in 1' and MMR booster uptake between baseline and Year 1 follow-up for children in Junior Schools 1 and 2, but figures significantly increased and returned to baseline levels by Year 2 follow-up. School 3 followed a similar pattern with the MMR booster uptake, but differences were not significant. In relation to School 3, levels of uptake of the '4 in 1' vaccination continuously increased between baseline and Year 2 follow-up, but they did not increase significantly.

Table 3.22: Booster uptake for intervention schools (Junior infants only: N, %)

(Where a, b, and c refer to baseline, year 1 and year 2 respectively and 1, 2, 3 refers to the three schools)

| | Year | Sample | '4 in 1' vaccination | MMR |
|---|--------------------------------|--------|---|---|
| Comparing proportions within School 1 over time abc: Binomial test (P) | | | P=.00 (a1b1), P=.13 (a1c1), P=.01 (b1c1) | P=.00 (a1b1), P=.44 (a1c1), P=.00 (b1c1) |
| Junior School 1 | Baseline ^{a1} | 35 | 32 91.4% | 30 85.7% |
| | Year 1 follow-up ^{b1} | 31 | 20 65.5% | 19 61.3% |
| | Year 2 follow-up ^{c1} | 47 | 39 82.98% | 39 82.98% |
| Comparing proportions within School 2 over time abc: Binomial test (P) | | | P=.02 (a2b2), P=.28 (a2c2), P=.03 (b2c2) | P=.02 (a2b2), P=.16 (a2c2), P=.10 (b2c2) |
| Junior School 2 | Baseline ^{a2} | 25 | 25 100% | 25 100% |
| | Year 1 follow-up ^{b2} | 35 | 30 85.7% | 30 85.7% |
| | Year 2 follow-up ^{c2} | 40 | 38 95% | 37 92.5% |
| Comparing proportions within School 3 over time abc: Binomial test (P) | | | P=.49 (a3b3), P=.30 (a3c3), P=.34 (b3c3) | P=.18 (a3b3), P=.12 (a3c3), P=.47 (b3c3) |
| Junior School 3 | Baseline ^{a3} | 77 | 65 84.4% | 63 91.8% |
| | Year 1 follow-up ^{b3} | 65 | 55 84.6% | 56 86.2% |
| | Year 2 follow-up ^{c3} | 77 | 67 87% | 67 87% |
| Comparing proportions over time: Binomial test (P) | | | P = .004 (ab), P = .415 (ac), P = .007 (bc) | P = .04 (ab), P = .419 (ac), P = .02 (bc) |
| Total uptake in all 3 schools | Baseline ^a | 137 | 122 89.1% | 118 86.1% |
| | Year 1 follow-up ^b | 131 | 105 80.2% | 105 80.2% |
| | Year 2 follow-up ^c | 164 | 144 87.8% | 143 87.2% |

3.7 Absenteeism

This section presents the percentage rate that the parent proxy and self report cohort of children are absent in the year. The National Educational Welfare Board's report of the *Analysis of School Attendance Data in Primary and Post-Primary Schools, 2003/4 to 2005/06* (Mac Aogáin, 2008) provides national data on absenteeism from school. According to this report, the mean absentee rate by pupils attending DEIS Band 1 urban primary schools is 9.37%, with a standard deviation of 3.18. The mean rate for non-DEIS schools is 6.07, with a standard deviation of 2.10.

3.7.1 Comparing children's absenteeism rate between intervention and comparison schools and identifying changes within intervention and comparison schools

Tables 3.23 and 3.24 reveal that there was no significant difference between absenteeism rates in intervention and comparison schools at any time point in the evaluation. This suggests that the *Healthy Schools Programme* did not have any short-term impact on reducing absenteeism in the intervention schools.

The rate of absenteeism for the parent proxy reporting cohort in intervention schools significantly decreased between baseline and Year 2 follow-up (between baseline and Year 1 follow-up for comparison schools). For the self-reporting cohort, however, the rate of absenteeism significantly decreased between baseline and Year 1 follow-up, only to significantly increase and return to baseline figures by Year 2 follow-up. Mean rates of absenteeism for intervention schools were similar or slightly above the national norm rates (5.74% to 7.43%) and under the average rate for DEIS Band 1 schools.

Table 3.23: Absenteeism rates of PARENT PROXY COHORTS and statistics from between and within groups analysis

| | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline | Difference between (I) (C) at Year 1 | Difference between (I) (C) at Year 2 | Difference between baseline and Year 1 | Difference between baseline and Year 2 | Difference between Year 1 and Year 2 | National average DEIS Band 1 | National average primary schools | | |
|---------------------------------|----------|------|--------|------|--------|------|--|--------------------------------------|--------------------------------------|--|--|--------------------------------------|------------------------------|----------------------------------|----------------|------|
| | I | C | I | C | I | C | Independent t-test value p-value | Independent t-test value p-value | Independent t-test value p-value | Paired t-test value p-value | Paired t-test value p-value | Paired t-test value p-value | % | % | | |
| Intervention (I) Comparison (C) | | | | | | | | | | | | | | | | |
| Proportion absent per day | 7.06 | 6.16 | 6.28 | 4.07 | 5.74 | 6.36 | 1.71, <0.54 | 1.77, <0.08 | 0.029, <0.60 | 0.72, <0.47 | 2.55, <0.02 | -0.26, <0.80 | 1.07, <0.29 | -1.68, <0.11 | 9.37 (sd 3.18) | 6.00 |
| | 116 | 27 | 111 | 25 | 108 | 26 | | | | | | | | | | |

Table 3.24: Absenteeism rates of SELF REPORTING COHORTS and statistics from between and within groups analysis

| | Baseline | | Year 1 | | Year 2 | | Difference between (I) (C) at baseline | Difference between (I) (C) at Year 1 | Difference between (I) (C) at Year 2 | Difference between baseline and Year 1 | | Difference between baseline and Year 2 | | Difference between Year 1 and Year 2 | | National average DEIS Band 1 | National average primary schools |
|---------------------------------|----------|------|--------|------|--------|------|--|--------------------------------------|--------------------------------------|--|--------------|--|--------------|--------------------------------------|-------------|------------------------------|----------------------------------|
| | I | C | I | C | I | C | Independent t-test value p-value | Independent t-test value p-value | Independent t-test value p-value | I | C | I | C | I | C | | |
| Intervention (I) Comparison (C) | | | | | | | | | | | | | | | | | |
| Proportion absent per day | 7.43 | 6.60 | 6.70 | 7.60 | 6.65 | 6.01 | 0.004, <2.68 | 0.847, <0.36 | 0.790, <0.36 | 2.47, <0.01 | -2.26, <0.03 | 0.16, <0.87 | -0.69, <0.49 | -2.04, <0.04 | 0.79, <0.43 | 9.37 (sd 3.18) | 6.00 |
| | 349 | 101 | 329 | 99 | 236 | 80 | | | | | | | | | | | |

3.8 Summary and Key Findings

Comparing children's health outcomes between intervention and comparison schools

- There were no significant differences found over the 3 time points between the intervention and comparison schools. Therefore, the *Healthy Schools Programme* had no significant short-term impact on improving HRQoL as measured through the Kidscreen-27. It had no short-term impact on reducing depressive symptoms as measured through the Children's Depression Inventory, nor on increasing breakfast uptake, reducing children's thoughts of changing their weight, reducing incidences of reported bullying or intentions to smoke when they are older, reducing rates of children who were obese or rates of absenteeism over time. Finally, it was not possible to ascertain if the *Healthy Schools Programme* had any role to play in increasing uptake of immunisation vaccines or dental services since no information was provided by comparison schools.

Changes in children's health outcomes within intervention and comparison schools

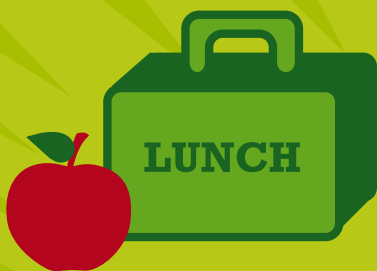
- At baseline, children within the intervention (and comparison) schools were on average within or above the National and European average range for Health Related Quality of Life (HRQoL), and remained within or above these levels at both the Year 1 and Year 2 follow-ups.
- Parent proxy reporting children in intervention (and comparison) schools demonstrated significant improvements within autonomy and parent relations in the first year, but there were no further improvements. Self-reporting children in intervention (and comparison) schools showed sustained improvements at significant levels in autonomy and parent relations from baseline to Year 2 follow up.
- Looking at proportions within HRQoL reference categories, there were as many parent proxy children (4-7 year-olds) below average on social support and peer relations as there were in the average or above average category. There were also as many self-reporting children (6-12 year-olds) scoring below average on all HRQoL domains as there were in the average or above average categories.
- At baseline, children within the intervention schools were on average within the international average range for depressive symptoms and remained within these levels at both the Year 1 and Year 2 follow-ups. The self-reporting children showed significant improvement in depressive symptoms between baseline and Year 2 follow-up, while parent proxy reporting children did not.
- The majority (over 82%) of parent proxy and self-reporting children were within or below the average international references, indicating low levels of depressive symptoms. There were higher proportions of self-reporting children with above average levels of depression (over 17%) than parent proxy reporting children (9%) at baseline.
- High proportions of all children consistently were found to eat breakfast daily (over 86%).
- Children generally self-reported higher incidences of bullying (over 26%) than parent proxy reporting children (over 7%). Proportions of children self-reporting bullying decreased significantly between baseline and Year 2, but not for parent proxy reporters.
- Only a small proportion of self-reporting children consistently reported that they think they will smoke when they are older (2%).
- Children generally self-reported lower rates of being happy with their weight (over 57%) than parent proxy reporting children (over 71%).

- Over 28% of children in the intervention schools were overweight or obese. For the parent proxy reporting children within the intervention schools, significant differences in BMI categories were observed between baseline and Year 1 follow-up and baseline and Year 2 follow-up, with the percentage of children within the obese category increasing over time from 13.9% at baseline to 18.5% at Year 2 follow-up.
- The level of dental service coverage was 89% across the intervention schools.
- In general, MMR and '4 in 1' booster immunisation levels remained marginally below 90%, with some schools demonstrating large drops in uptake in Year 1 follow-up, only to return to baseline figures at Year 2 follow-up.
- Mean rates of absenteeism for intervention schools (5.74% to 7.43%) were similar to the national rates in primary schools and under the average rate for DEIS Band 1 schools. The rate of absenteeism for the parent proxy reporting cohort significantly decreased between baseline and Year 2 follow-up. For the self-reporting cohort, however, the rate of absenteeism significantly decreased between baseline and Year 1 follow-up, only to significantly increase and return to baseline figures by Year 2 follow-up.

Chapter 4: Process Evaluation: Methodology



The Healthy Schools Programme



4.1 Introduction

This chapter sets out the theoretical underpinnings of the *Healthy Schools Programme* process evaluation and details the study design and methodology employed.

4.2 Theoretical underpinnings of process evaluation methodology

We drew from a realistic approach to programme evaluation. This approach differs from evaluation approaches rooted in positivism and interpretivism. A brief examination of the differences between the three approaches will help clarify the realist approach.

Positivist approaches to evaluation measure the impact of a programme by examining the degree to which it has affected change in the target group. Change can be measured by comparing outcomes among groups that receive an intervention with those who do not. Positive changes within an intervention group are used as a validation of the theory underpinning a programme; changes are understood as evidence of the programme having worked. This approach is used in the quantitative component of this study. This approach does not examine how change occurs.

Interpretivist approaches to evaluation explore the meanings that programme participants place on the experiences they have of a programme. This approach is based on the idea that all participants involved in the programme (and evaluators) have their own interpretation, experience, claims as to what a programme involves and its impact in practice. The focus of evaluation is an examination of the complexity itself: the processes of reasoning, negotiations, persuasions, advocacy that have occurred during programme implementation (Tones and Tilford, 2001) with a view to moving towards consensus about how to move the project forward in the local context (Guba and Lincoln, 1989). A critique of this approach is that findings are mostly relative to each situation or local context: that people in different situations, localities or contexts would place different meanings on, or have different experiences of, the same programme. Therefore, the evidence generated from one study cannot be generalised to other equivalent situations (Pawson and Tilley, 1997).

A realist approach, on the other hand, is concerned with the transformation process itself, i.e. the transformation of, for example, a 'system', 'structural condition' or a 'person' examining if the desired changes in structures and processes are achieved as a result of an intervention. This approach is based on the idea that the transformation process does not occur merely through the introduction of an intervention, but through the additional factor of how people interact with that intervention or programme. To map the transformation process, it requires a description of programme interventions along with an identification of how the intervention is interacted with by social actors (i.e. the logic/reasoning that is ascribed to the intervention by social actors) and how this generates consequent outcomes that are in line with original aims and objectives. Importantly though, a person's reasoning or logic in relation to an intervention is informed by wider (e.g. systemic, organisational, personal) circumstances or contexts. Therefore, an understanding of how these circumstances impact on the logic that an individual or group applies to an intervention will elucidate what it is that facilitates or inhibits the desired change. In this approach, change or transformation is viewed as being *generated* as a result of the way that programme characteristics and people's logic or reasoning interplay in practice.

The focus of a realist approach to evaluation is to not only examine what happened, but to distinguish between what happened that facilitated change in line with programme aims, and what happened that did not facilitate change in line with programme aims. Examination of both can help to elucidate why some intervention activities are resulting (in this case) in the schools moving towards positive outcomes (structural/processes change) and some are not. Understanding the schools interplay (reasoning/choice) with the programme and whether the interplay is leading towards the desired change is the purpose of a realistic approach to evaluation. By this reasoning, being able to identify the context that facilitates interplay by the schools with the *Healthy Schools Programme* activities in a manner that leads towards the desired change will facilitate a general understanding of what needs to be repeated to bring about similar change in other settings.

4.3 Rationale for a realistic evaluation approach

The schools themselves may find that aspects of an intervention worked well, or not, for them for particular reasons. However, what is found to 'work well' from the school community perspective may not always be in line with the overarching programme aims and objectives. The aim of this component of the evaluation study is instead to move beyond the views of the school community (and therefore beyond an interpretivist approach) by taking a more critical approach to analysis in order to try and understand which implementation processes (here, this refers to a combination of context, intervention activity and mechanisms – see Section 4.7 below) were more facilitative of the development of health-promoting school environments and which were not. Understanding which implementation processes were (or were not) more facilitative, and under what circumstances, can contribute to knowledge on what is required for the successful roll-out of health-promoting schools programmes more generally. To this end, we decided to draw from a realistic evaluation approach.

4.4 Sample frame

The process evaluation drew from a number of data sources. These include semi-structured interviews, meeting minutes, structured observation and documentary analysis. The nature and scope of data collected for the process evaluation is presented in Table 4.1.

Table 4.1: Process evaluation data sources

| | 2008/2009 (n) | 2009/2010 (n) | 2010/2011 (n) |
|---|------------------|------------------|------------------|
| Semi-structured interviews and focus groups | | | |
| <i>Healthy Schools</i> Coordinators interviews | 2 | 2 | 3 |
| Principal interviews | 4 | 5 | 7 |
| CDI interviews | 2 | 2 | 3 |
| Services interviews | 1 | 3 | 0 |
| Parent focus groups | <i>n/a</i> | <i>n/a</i> | 2 |
| Teacher focus groups | <i>n/a</i> | <i>n/a</i> | 2 |
| Documentary analysis | | | |
| Steering Committee meeting minutes | | | |
| <i>Healthy Schools</i> manual | | | |
| <i>Healthy Schools</i> Coordinator work plans | | | |
| <i>Healthy Schools</i> Coordinator progress reports | | | |
| Structured observation | | | |
| Steering Committee Meeting | 1 | 4 | 4 |
| Service provider questionnaire | 0 | 0 | 13 |
| Feedback loops to schools | Yes | Yes | Yes |
| Parents, Services | | | |

Semi-structured interviews: Interview schedules were designed to explore the development of the *Healthy Schools Programme* as it was implemented. Schedules were tailored to the role of the participant.

Documentary analysis: Analysis was carried out on a range of documents that have been generated over the life of the programme to date. These included meeting minutes drawn from a range of sources (e.g. *Healthy Schools* Steering Committee meetings, CDI, CDI internal *Healthy Schools* meetings, CDI and various HSE health services representatives, CDI and *Healthy Schools* Co-ordinator's planning meetings); *Healthy Schools* Coordinator's work plans and progress reports; Steering Committee reports to CDI; and service-level agreements.

Structured observation was carried out at all *Healthy Schools Programme* Steering Committee meetings. Detailed notes on the meeting content and process were taken and included in the analysis.

Focus groups were completed with a number of parents and teachers across the intervention schools. These focus groups explored the involvement of families and school staff in the planning and implementation of the programme.

Online Service Provider Questionnaires were completed retrospectively with a range of professionals who were involved with the *Healthy Schools Programme* at varying levels over the period of implementation. The purpose of these questionnaires was to ascertain how service providers linked with the programme.

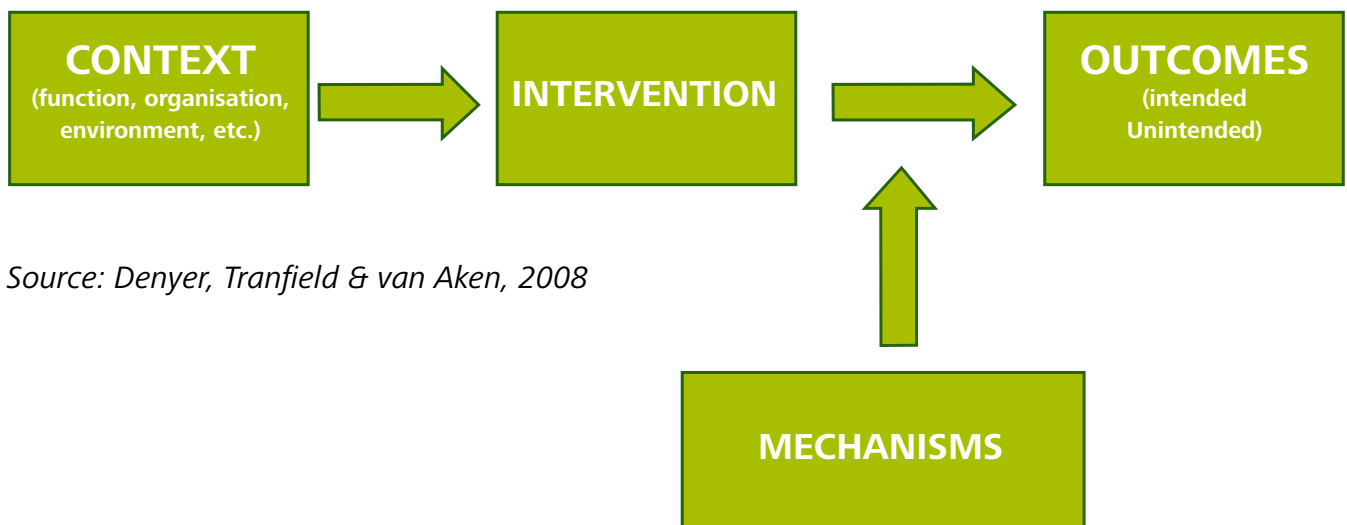
4.5 Ethics, consent and risk

Participants were fully informed of the nature of their involvement in the *Healthy Schools Programme* evaluation. Informed consent was obtained from all participants and ethical procedures during data collection were in line with the Psychological Society of Ireland's Code of Conduct. As far as possible, all interviews were anonymised using a coding system and all data were only accessible to the research team.

4.6 Data analysis

Realistic evaluation is concerned with the most promising configurations that demonstrate what works within a programme or process, how it works and in what circumstances. Configurations according to Pawson and Tilley (1997), the authors of the realistic evaluation approach, comprise of context-mechanisms-outcomes (C-M-O) that occur during the school change process (see Figure 4.1). Therefore, analysis will be undertaken in order to identify processes that occurred during programme implementation with a view to exploring how and why they worked. While Pawson and Tilley (1997) refer to a C-M-O configuration, the current study has drawn from the organisational literature and, more specifically, the work of Denyer *et al* (2008) who include the 'intervention' (activity) in the configuration, i.e. C-I-M-O (see Figure 4.1). The inclusion of the intervention activity in the configuration helps to understand better that it is the way that the intervention activity is interacted with (the Mechanism) by the school, in a particular Context or due to particular circumstances, that generates a specific type of Outcome.

Figure 4.1: C-I-M-O configurations



Source: Denyer, Tranfield & van Aken, 2008

Mechanisms are key in this configuration. They refer to the reasoning arrived at and the choices made by people that are derived from being part of an initiative (Pawson and Tilley, 1997). The choices made by individuals or groups ultimately generate the intended/unintended outcome.

The inquiry also aims at gleaning an understanding of what informs the choices that are made by examining the wider *context* that shapes the person's reasoning and choices. Reasoning is not fixed, but contingent upon the range of potential facilitating or inhibiting contextual factors in an organisation (Pawson and Tilley, 1997, p. 70):

"All social programmes wrestle with prevailing contextual conditions. Programmes are always introduced into pre-existing social contexts and, these prevailing social conditions are of crucial importance when it comes to explaining the successes and failures of social programmes."

4.6.1 Analytical framework

In order to frame our analysis, we draw from the logic model (see Figure 1.1 in Chapter 1), which sets out how the school might become a more health-promoting school. The logic model is informed by the definition of health promotion, and the WHO's 1997 definition of a health-promoting school:

"The Health-promoting School sets out to create the means for all who live and work within it to take control over and improve their physical and emotional health. It does this through changes in its management structures, its internal and external relationships, the teaching and learning styles it adopts and the methods it uses to establish synergy with its social environment."

As set out in the *Healthy Schools* manual, the guiding principles of the process of developing a health-promoting school are democracy, equity, empowerment and action competence, transparency, holism, partnership working and sustainability. Exploration of the data generated about the transformation process was drawn from this framework.

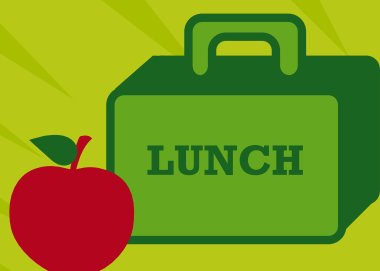
4.7 Conclusion

The use of a realistic evaluation framework provides a useful approach to evaluating the implementation of a programme like *Healthy Schools*, particularly as it is being rolled out across 5 schools. Being able to compare and contrast different schools' interactions with the intervention can help to elucidate the range of contextual factors that facilitate or inhibit smooth implementation and those common factors that may need to be in place for this type of school change initiative to be successful in the longer term.

Chapter 5: Process Evaluation: Findings



The Healthy Schools Programme



5.1 Introduction

This chapter sets out the findings from the process evaluation of the *Healthy Schools Programme*. It is categorised into four broad areas: (a) programme design; (b) programme planning and implementation; (c) responses to challenges arising; and (d) a move toward a more health-promoting schools programme. The findings have been categorised under these headings for ease of access for the reader; however, it should be noted that complex programmes like health-promoting schools do not necessarily happen in a linear fashion as might appear from the chapter's structure. The findings draw on key aspects of programme design, planning and implementation (programme activities) that occurred and examine if, how and why schools engaged with those programme activities. The outcomes resulting from the schools' engagement with those activities are also explored in order to examine if those outcomes are in line with the underpinning programme theory, its aims and objectives. The central purpose of this exploration is to identify the contextual factors, or the circumstances, that are more likely to support and facilitate schools to engage in the ongoing process of becoming more health-promoting school environments. In doing so, the findings from this chapter will be used to make recommendations about a programme model for the future.

5.2 Programme design

5.2.1 Initial programme development phase

At the outset of programme planning and design, consultation with the schools occurred and the schools identified the need for a medical person, preferably a nurse, to assist with forging links to health services that they were having difficulties engaging with. However, upon researching the possibility of rolling out this type of intervention, the funders found that this would not be feasible. This was, in part, due to the fact that secondment from the HSE, as originally planned, would not be an option due to employment embargos.

Other ways of responding to the schools' needs were researched by the funders and their consultative team. In addition to the service access issues that schools identified, the funders sought ways of responding to findings that had emerged in a community study they had undertaken, entitled *How are our Kids?* (CDI, 2004). A decision was taken to roll out a manualised, health-promoting schools programme in the schools. In order to design this manualised programme, the funders brought together a group of health and education representatives to feed into the process. After a period of programme design and planning, implementation began in the 5 intervention schools in September 2008. The model set out requirements for 2 *Healthy Schools* Coordinators who would facilitate the process in the schools. These were recruited and one Coordinator worked with 3 schools and the second Coordinator worked with 2 schools.

Although the *Healthy Schools* manual had not been finalised, it was decided to move ahead and begin the programme in the schools. The relevant school personnel had not received any formal induction to the programme. The funders recognised that the delay in schools receiving the manual impeded the schools' understanding of the programme and felt that it impacted upon the first year of its implementation:

"I suppose when we got to the point when we were asking the schools if they wanted to be involved ... at that stage – the actual manual content wouldn't have been gone through in detail because both were being done in parallel so some principals wouldn't have really got down to the nitty gritty of the manual until we started the programme which in and of itself presented a huge challenge – for them and for us –because it's a bit like 'this wasn't our understanding of what this was going to be' [schools] so we had to work through quite a lot of that ... I think it has taken a year to bed down this whole notion of...what the programme is and who's going to benefit – and undo ... in some ways what people's expectations and perceptions of what it actually is."

(CDI Member 1, Year 1).

Similarly, one school principal felt that there was a lack of early stage discussion and clarity about the programme due to the delay in the manual. The following is an extract from notes taken during an (unrecorded) interview:

This principal noted that because the manual was completed and distributed after the programme had begun s/he felt that it hindered the possibility of principals holding discussions about the programme, its aims and objectives, at the Steering Committee meetings.

(School Principal 4, Year 1)

In addition, not all schools were happy with the change in focus from the earlier nurse led model that had been identified. For example, this principal highlights how s/he felt 'short changed' due to the shift in focus and that it impacted on that schools' level of engagement for the duration of the programme to date:

"I always felt we were short changed ... we were hoping to get a nurse on the campus who would address those issues with parents and that's not what we got, and I suppose we had issues around duplication in the early stages with the [Home School Community Liaison Officer (HSCLO)]. I think there is such a need here for a medical type intervention, HSE [Health Service Executive] based, nurse on campus. We would still have kids [whose] basic needs [are still] missed very early on ... and we worked with the HSC [Healthy Schools Coordinator] with that as well, she made efforts but it just doesn't have the same impact as a medical person ... I suppose initially when the whole Healthy Schools thing was promoted many years ago, that's what we were looking for."

(School Principal 1, Year 1)

These findings highlight some of the earlier issues that impacted upon school 'buy-in' to the programme, and their general understanding of its aims and objectives.

5.2.2 The manual

Upon completion of the manual, each school received a copy. At this stage, the *Healthy Schools* Coordinators and the schools had already begun implementing the programme and stakeholders had different reactions to the manual.

One principal, for example, commented on the fact that s/he had read the manual but found it very difficult to identify the focus of the programme; its aims and objectives. The following is an extract from notes taken during an (unrecorded) interview:

The principal said that s/he read it from cover to cover and could not make out quite what the programme was aiming to achieve, or how it was going to achieve its aims. Also, the principal felt that the programme was very vague, and unlike other programmes that were running in the school, this did not have a clear set of aims, objectives, and steps to follow, to meet stated outcomes.

(School Principal 4, Year 2)

The key difference between the *Healthy Schools Programme* and others being delivered in the school was that the target group of the *Healthy Schools Programme* was the school, its systems, processes and procedures, rather than the children themselves. Without this understanding it was very difficult for schools to understand the manual. One *Healthy Schools* Coordinator also highlighted the challenges of working with the manual at the outset and that this delayed the programme getting moving in practice:

"The manual's outcomes were so huge and big so we needed two or three months to get our heads around it and then see what was achievable in Year 1."

(*Healthy Schools Coordinator, Year 1*)

At various stages during the 3-year pilot phase⁷ there were a number of changes of principal posts, both temporary changes and permanent. Replying to a question about how this principal learned of the *Healthy Schools Programme* when s/he came into the post midway during the pilot phase s/he said:

"When I came into being principal, there wasn't really an information pass over or I wasn't given a whole lot of information about the post. I'm aware of the manual. But I haven't really had the time to delve into the manual."

(*School Principal 2, Year 2*)

This suggests that the programme manual was not an accessible route to understanding the programme aims and objectives by principals new to post mainly due to the time that would be required to devote to it. This is particularly relevant as principals were to be the key liaison persons for the *Healthy Schools Coordinator* in relation to programme implementation in each of the schools'.

The challenges that schools had in clarifying exactly what the programme was aiming to achieve meant that stakeholders developed different ideas of what the programme was setting out to achieve. This principal highlights how s/he came to her/his own conclusion about what the programme was about:

"One of the difficulties that we had in Year one is that everybody seemed to have a different idea of what the Healthy Schools Programme was about and I had my own very clear notion of it which hasn't changed an iota since it started ... My understanding hasn't changed and ... if the programme is different to what I think well then the programme is wrong."

(*School Principal 5, Year 2*)

It is worth noting that this approach to understanding the programme cannot guarantee that it will be rolled out in line with the underpinning theory and guiding principles of a health-promoting school, which would have implications for programme fidelity.

These findings suggest the need for greater clarity and shared understanding of a programme like a health-promoting schools programme from the outset to ensure that schools understand both the potential of these programmes and clarity about the programme in order to manage schools' expectations of what the programme can achieve from the outset.

⁷ Pilot phase' is being used here to refer to the duration of the programme evaluation. The development of health-promoting schools is an ongoing and incremental process, therefore to suggest an end point of the programme would not recognise this aspect of the concept.

5.3 Programme planning and implementation

5.3.1 Work-plan design

Steering Committee involvement

The *Healthy Schools* Coordinators decided at the outset to develop work plans that would identify achievable targets within manageable timeframes. These plans were drawn up based on what the Coordinators, in conjunction with the individual school principals, were identifying as relevant to the schools, and the topics identified in the programme manual. These plans were drawn up with support from the funders, and the external role support⁸ person, and then signed off by school principals and the Steering Committees. One of the early issues that arose in the planning and implementation process was that the Steering Committee was found to not be a suitable forum for making decisions on plans as it was becoming apparent that plans needed to be made at an individual school level rather than across all the 5 intervention schools. The following quote from one of the principals demonstrates this finding:

"All five schools are in different places and have different agendas. ... So there is that difficulty in taking a step back from your own school, which is your priority, and to be a member of a steering committee. But it really isn't for me to be making suggestions about what should be going on in another school ... So there is a little bit of a conflict of interest there and we need to be careful and diplomatic that you know, what will work in one school and is successful in one school, may not be appropriate at all in a different setting."

(School Principal 5, Year 1)

Consequently, different avenues for planning processes needed to be explored. This links also to point 5.5.2, where schools highlighted that they may not always feel equipped to undertake health needs assessments at individual school levels and suggests the need for developing tools and/or processes that help schools to build capacity around health planning in order to incorporate it into the wider school planning processes and procedures. This need for capacity building in relation to strategic development within schools has been highlighted internationally by St. Ledger *et al* (2008).

Healthy Schools Programme manual versus school-informed planning processes

This evolved into a process that was undertaken mainly by the funders, the *Healthy Schools* Coordinators, and then was to be signed off by the school principals. The content of the plans was drawn from the Coordinators' observations in the schools, in some schools teacher/staff input, and broadly informed by the health-related topics associated with child health outcomes set out in the *Healthy Schools* manual (pp. 50-57). There was a sense that the planning process was viewed more as a task for the Coordinators or the programme funders rather than for the school itself. One Coordinator commented on the fact that the school principals did not really have time to take part in the process:

"It [the planning process] wasn't with the principals because most of the time they are too busy to sit down and [go through] them."

(*Healthy Schools* Coordinator, Year 1)

⁸ Role support was provided to the *Healthy Schools* Coordinators by a HSE representative during the first year of the programme. This post provided personal support to the Coordinators in their role, but did not have any role in terms of programme-related decision-making.

While some school principals engaged in this planning process to a greater degree, one of the *Healthy Schools* Coordinators indicated that she was not always sure if others were fully on board with the plans:

"But at the same time you wouldn't really get much input or feedback either [from some principals]. So I don't know whether the plan was agreed because people you know really went through it and agreed with it, or whether there was kind of a lack of interest in it at times."

(*Healthy Schools* Coordinator, Year 1)

This finding suggests that more than likely principals viewed the programme as an 'add-on' in the school rather than a school change programme. In some schools plans were drawn up with input from teaching staff also. While this is more in line with the broader processes of establishing a health-promoting school in terms of undertaking an in-school audit of needs, it seemed as though teacher input was used to inform the content of a task list for the *Healthy Schools* Coordinator to undertake rather than an assessment of needs that the school itself was interested in addressing at a whole-school level. In an (non-recorded) interview, one principal reported that:

... s/he had consulted staff/teachers to identify issues and specific activities for inclusion in the HSP. These ideas were then passed onto the Healthy Schools Coordinator. The principal noticed that the ideas that were generated by teachers (which she added took time for them to think about and write up) were not being carried out by the Healthy Schools Coordinator.

(School Principal 4, Year 1)

This finding demonstrates some of the difficulties that arose between the *Healthy Schools* Coordinators and the school principals due to different understandings of the role of the Coordinators and the aims of the programme more generally.

This principal also highlighted the fact that s/he did not want the workload of teachers in the school to be increased, as the school was a busy one and teachers were already working to capacity. From notes taken during the interview, Principal X stated that s/he did not view the *Healthy Schools Programme* as being a programme that would result in 'more work' for teachers in the school. Instead, Principal X stated that s/he saw the *Healthy Schools* Coordinator as being the 'representative' for health in the school. (School Principal 4, Year 1)

Again, this would suggest a lack of understanding of the aims and objectives of the programme, as up-skilling teaching staff in health and well-being is a key vehicle for a whole-school approach to the development of a more health-promoting school environment.

A key challenge that underpinned the planning process was the pull between drawing up work plans that were informed by the programme manual and/or individual level school needs. The following quote from one of the teachers in a focus group highlights why this was challenging:

"So she [the Healthy Schools Coordinator] was coming to us [the teachers] and we were giving her, based on needs, well we need to do this and the principals were saying you need to do this ... because this is what we need at the school and then she was getting direction from her manual and some things in that were completely opposed to what she was being asked to do here and it created an awful lot of stress. So I suppose you can decide whether you're going to react to needs [identified by the school] or whether you're going to work from a manual and [the funder]."

(School staff member, Year 3)

One of the *Healthy Schools* Coordinators also highlights the confusion that was occurring in practice as a result of the pull and push between manual informed planning, and school community led planning:

"You see, we didn't have a priority at the beginning of the project. We had to identify the priority area ourselves, with the principal. And then priority areas were identified differently, totally differently, from one school to another. And then we started to work on (those issues) and the other people or maybe Steering Committee came on board and said that, You should have focussed on this. Or, what about this area? This area was not covered [referring to the contents of the manual]."

(*Healthy Schools* Coordinator, Year 2)

Much of the confusion around programme planning and implementation was located in the attempts to marry school led planning (bottom-up) and perceived programme manual content led planning (top-down). The development of the HSP was based on a combination of local consultation, research and evidence and a prioritisation process in which key stakeholders were encouraged to participate. In spite of these efforts, schools generally experienced a top down approach. They did not take ownership of the programme initially, and felt much of the content was imposed.

In addition, this was further complicated by the view in schools that the *Healthy Schools* Coordinator was the programme implementer, rather than a facilitator to support schools to themselves implement changes that would meet self-identified health and well-being needs at a whole-school level.

5.3.2 Implementing work plans

Implementing plans was also found to be challenging, particularly in the first two years. The following quote demonstrates how work plans in theory and practice were very different. This may well be linked to the fact that plans were not driven by the schools themselves:

"So you think that you can do something and then you go and try and do it, but realistically it either doesn't work or has to be changed to work."

(*Healthy Schools* Coordinator, Year 2)

It was found that some aspects of a school's plan that were being implemented by the *Healthy Schools* Coordinator were not being engaged with by staff in the schools. This Coordinator, for example, stated:

"The first time I tried to do it ... I had put up notes on the white board saying 'please keep this week free', as all during the week I had activities organised. And then there was a curry day and none of the children were in their classes ... I couldn't find people. The kids weren't coming to the hall when there was activities on 'cause they were going to other stuff ... and I kind of found that half the teachers just gave up 'cause it was just so frustrating. And none of it was working, so I just gave up on it."

(*Healthy Schools* Coordinator, Year 1)

This links back to the challenges mentioned above in relation to the planning processes. As planning was viewed more as a task list for the *Healthy Schools* Coordinator to undertake, schools may well have not felt obliged to engage with or support activities that the Coordinator was offering for children in the schools. This suggests again that the programme was viewed as being separate from the schools at the outset, something that was being delivered to or in the schools to the children/parents, rather than a programme that was helping schools to become more health-promoting organisations. The definition of a health-promoting school is a school which takes control itself of improving the school community's physical and emotional health. The fact that the programme work plan was being designed using a top-down approach (i.e. designed by individuals other than those for whom responses are targeting) instead of a bottom-up one highlighted the fact that the schools were not in control of the process themselves. This was more than likely due to the fact that there was a lack of clarity within school communities in relation to what the programme was aiming to achieve. It should be noted however, that this began to shift to a degree in some schools during the second year of the programme. According to this principal:

"The success of that [the programme] is very much based on how effectively the integration worked between the Healthy Schools Coordinator and myself as the principal, with the Home School Liaison teacher, with the sports coordinator, with the SPHE coordinator ... all of that ... was far more evident in Year 2 than it was in Year 1 ... I think we have to be careful... not to see the Healthy Schools Coordinator as an add-on... or as somebody in isolation from the school. The more closely the integration works, the more successful the programme will be. I'm absolutely convinced of that."

(School Principal 5, Year 2)

5.4 Responses to challenges arising

In response to concerns in relation to early findings in the pilot phase relating to a) work plans being designed with a more top-down approach to planning, b) common understanding of health promotion and the objectives of a health-promoting school, and c) the fact that the *Healthy Schools* Coordinator role was being viewed as an activities provider in the school, the funders adopted a three pronged response to these issues. These responses (which are explored below) involved:

- designing a tool for needs assessment that could be undertaken in the schools,
- organisation of various feedback loops to schools to develop understanding of the programme in schools;
- deciding to instruct the *Healthy Schools* Coordinator to continue with a certain amount of child activities provision to encourage continued buy-in from the schools.

5.4.1 Needs assessment

The programme manual contains a checklist to help schools identify priority areas that they might want to focus upon at an individual school level. The checklist was divided into sections that dovetailed with a whole-school approach to developing a health-promoting school. However, schools felt that the checklist was too broad, a perception that was very likely linked to the fact that they perceived the programme to be a child health activities programme.

In order to assist schools with a process of identifying needs at an individual school level, the funders designed a different assessment tool for use in the participating schools. Agreement for undertaking this process was received from principals at the Steering Committee meeting. The needs assessment was to be completed by the *Healthy Schools* Coordinator with school staff in order to inquire into the health issues of priority for each of the schools, along with an exploration of

school policies and procedures. In addition to these staff assessments, a series of focus groups that would be undertaken by the *Healthy Schools* Coordinator with parents were planned. As it transpired, this was a particularly challenging exercise. Feedback from the various stakeholders highlighted how school staff were not comfortable with the idea of answering questions about the presence or otherwise of policies and policy implementation within the school. Staff felt uncomfortable about the process as they felt it was an examination of their school and colleagues by an outside agency. Consequently, there was a degree of resistance to the exercise by some schools. According to one of the funders:

"I think the audit ... was taken defensively by some schools. That it was... questioning of their policy and of their procedures. And who are we [the funders] to do that, type of thing? And then also, some schools [were] quite open."

(CDI Member 2, Year 2)

This was echoed in this principal's comment in an unrecorded interview, where they highlighted that s/he

"does not feel it was the place of [the funders] to evaluate the school – but instead that is the role of the Board of Management."

(School Principal 4, Year 2)

The resistance from schools to the needs assessment exercise meant that the process of identifying priorities at school level, and the focus of work plans continued to be challenging in practice. The following quote from one of the *Healthy Schools* Coordinators demonstrates this finding:

"What I found a little bit confusing was that, a couple of weeks before they did [the needs assessment], they [the funders] had asked the principals to decide on two main areas each ... and then they did the focus group and the teacher's questionnaire. And I tried to clarify ... at the steering committee, well, we've got two different things now ... One is saying focus on this. And the other thing is saying focus on this. Which are we actually focussing on? ... and [the feedback was] you're doing everything but you're just putting the main focus on those things ... What we've been saying all along is, the job's just too big, too wide, we're better off to do a few things well, than do a lot of things poorly."

(Healthy Schools Coordinator, Year 2)

Key here is that when schools felt they were under scrutiny by an outside organisation (the funders) some resisted taking part in the intervention activity (the needs assessment process). This resulted in ongoing challenges in terms of identifying what was relevant to schools and what areas of health would be focused upon within each of the schools.

5.4.2 Feedback loops

Due to concerns in relation to whether schools were clear on aims and objectives and the function of the *Healthy Schools Programme*, the funders organised a number of different feedback sessions so that findings that were emerging from the evaluation could be used to assist with forging a clearer and shared understanding of the programme aims and objectives. These feedback sessions involved:

- A seminar that was held in Year 2 for principals, members of the Steering Committee and a small number of teaching staff in each of the participating schools. This seminar focused on the literature underpinning the Health-promoting Schools concept, the *HSP* manual, and experiences of individuals who have implemented other health-promoting school programmes. Findings from the baseline stage of the process and impact evaluation were presented by the *HSP* evaluation team.
- A large seminar was held for all members of the five intervention schools, where all staff of the schools were invited to attend. Presentations were given by a number of individuals involved in the *HSP* and an opportunity for school staff to engage in a part-funded Masters degree programme⁹ was presented, and subsequently several staff availed of this opportunity. Findings from the baseline stage of the *HSP* evaluation were again presented and discussed.

According to the interview data, these seminars did assist to generate a better understanding of the programme and the role of the *Healthy Schools* Coordinator in the school:

"We did some healthy schools...myself and [the principal] and [another teacher] went and did a course for a day just about the whole healthy schools thing. The course that we did, a lot of it was kind of facts and figures which just kind of went over our heads but then ... they [the funders] had someone over from ... Wales [a Healthy Schools Coordinator from a Welsh Healthy Schools Programme] so that was really good, we found that really interesting."

(School staff member, Year 3)

The data also demonstrates however that the primary message taken by some principals from these seminars was sometimes more related to the statistical data provided to the schools by the evaluation team, rather than the programme implementation findings and concerns. For example, while commenting on his/her perception of the benefits of one of the seminars this principal stated:

"I think the information that they are going to gather from measuring the children and the surveys are things that I found very, very valuable actually was the surveys that they do with the children and their mental health ... Doing those surveys can have a dramatic effect. It could highlight a parent to a mental health issue that their child might be having. That's crucial."

(School Principal 3, Year 3)

⁹ CDI recognised the need for further training at a more advanced level and was instrumental in establishing a Masters Degree programme for teachers and others with a focus on health promotion in schools. This arose from the recognition that there was a need to offer capacity-building to schools in relation to strategic planning, understanding of educational disadvantage and its impact on the school environment, and linking school activities within the community context.

Another principal commented on the fact that s/he felt that the 'Welsh example' was very different to what the *Healthy Schools Programme* was about.

An additional feedback session was organised by the funders. This session was held during a Steering Group meeting. The meeting involved (attending) school principals, key stakeholders, and the funders. This session focused on programme implementation findings in the Year 1 evaluation report.

Key issues highlighted in the presentation included:

- That the *Healthy Schools* process was beginning to work better when it was being led more by the needs of each individual school (bottom-up), rather than the content of the programme manual (top-down),
- That the findings were demonstrating that where school principals, as gatekeepers, were more involved in programme planning, involvement of other school staff in implementation was also more likely, which in turn was feeding into a more school led process,
- The role of the *Healthy Schools* Coordinator as facilitator/resource person for the school was more in line with the programme objectives than some of the direct child activities provision tasks that the Coordinator was undertaking,
- The need for greater input from children into the planning process.

During the discussion that occurred after the presentation the principals highlighted a number of concerns in relation to the findings and suggestions being made. These included the following, (from notes from feedback discussion session, Year 3):

- Schools would not necessarily feel equipped for identifying the health needs of the children and they felt this is more the domain of health rather than education;
- Schools could not be expected to be aware of whether resources for, and responses to, health issues that they would identify would be available to them or not;
- A concern was highlighted in relation to the fact that a 'school led' programme would mean that the school would be responsible for whether the programme worked or not when its role was to deliver education, and responding to health issues would be beyond its remit, and dependent upon service availability and accessibility;
- Concerns about the effort that a school would put into the process that may not receive the support required from the Departments of Education and Skills (and Department of Health), only for the programme to stop after the pilot phase.

This feedback highlights a number of fundamental contextual issues that schools would feel have to be in place if they were going to engage fully with a health-promoting schools programme like *Healthy Schools*. These include support at a Department of Education and Skills level for programme implementation, partnership working, as well as shared responsibility for programme implementation with the Health sector and support with the identification of health and well-being needs. These findings are consistent with the evidence of contextual factors that are required for the implementation of health-promoting schools at an international level.

5.4.3 Role of the *Healthy Schools Coordinator*

Activities provider for children versus facilitator for whole-school development

The third main concern that had arisen from the process evaluation interim reports was the finding that the *Healthy Schools Coordinator* role was perceived by the schools to be more a children's (and parents) activities co-ordinator's, than a facilitative role for assisting schools to engage in activities that would instead be targeted at wider whole-school level change (i.e. to support an in school planning process, to resource best practice in terms of responding to needs identified in the school, to organise for capacity building of the school to meet needs etc.). In order to foster greater buy-in into the programme the funders recommended that the *Healthy Schools Coordinators* continue to provide a certain degree of once-off activities for the children in the schools. These types of activities ranged from yoga classes, play therapy sessions, hip hop classes, gardening lessons, skipping, etc. (A full table of *Healthy Schools Coordinators'* activities are set out in Appendix 4.) The schools responded to this work in two different ways. One was where schools carved out a role for the *Healthy Schools Coordinator* in the school and the second was where schools were ambivalent about having the Coordinator in their schools at all. These are discussed below.

Healthy Schools Coordinator as additional role in school (i.e. carved out a role like a HSLO for the HSC)

On the one hand, schools became very involved in managing the nature and extent of activities that would be provided by the *Healthy Schools Coordinator* to the children, as well as the amount of time that would be allocated to in-school activities and/or if activities were to occur outside of school hours. One of the ways that these schools utilised the *Healthy Schools Programme/Healthy Schools Coordinator* was to fit the role in around current staff capacity and time-tabling providing additional personnel (resources):

"I think though with all the activities that the [Healthy Schools Coordinators] have done ... are great ideas and I personally would love to be able to foster those ideas and you know get them going in my own class myself but you know there's a lot of time that goes into it ... It's very useful when someone ... has the time to sit in her office and dedicate 5 or 6 hours to planning something and she can come in and roll it out in the class...it can be done properly from start to finish ... I think the actual physical presence of the healthy schools co-ordinator coming into your class and taking the kids out to the yard and doing skipathons and things like that was brilliant, was invaluable."

(School staff member, Year 3)

The benefits of having a Co-ordinator to roll out activities for the children in schools has clear benefits, both for the schools in terms of having an extra resource, and for the teachers at an individual level in terms of having a person to undertake specific health related lessons with the children. Whilst this is a positive outcome in the short-term for schools, when analysed in the context of the development of a health-promoting school, this approach does not facilitate the development of a wider whole-school change process to addressing health and well-being. In continuing this work to maintain school buy-in, there is the risk of schools reverting to an approach that is more in line with a health education model than health-promoting practices in schools model.

Resistance to additional activities

Other schools engaged less with the roll out of activities in their schools. While they facilitated the *Healthy Schools* Coordinator in undertaking the activities, they were concerned about the degree to which the additional activities were occurring in school time which was felt to be taking away from the core purpose of the school – education. This concern is evidenced in the following principals' quote:

"If I have to change anything about the whole [Healthy Schools Programme] ... if you are talking about food or health issues they are all after school ... and I think just there needs to be a huge rethink...there has been too much cutting into the core teaching time that has been a huge issue with all of these incentives ... You're taking away from the English, Irish and the Maths, the day is short as it is."

(School Principal 1, Year 3)

This demonstrates how a programme that is increasing the amount of health related activities that occur in a school is not necessarily seen as a requirement of, or a benefit to, the school. This may explain why some schools resisted engaging with the programme as it was delivered.

Ambivalence to the activities role

Other schools responded with a degree of ambivalence, commenting on the fact that the roll out of children's activities in the school would be occurring regardless. According to this principal:

"Look, to be totally honest, what [the Healthy Schools Coordinator] is doing ... your healthy schools, the healthy eating and skipathons, or golf, or yoga, or hip hop, you know, that would probably be happening anyway."

(School Principal 3, Year 3)

The findings in this section demonstrate that if given an extra resource schools will: a) utilise it in a manner that fits in around their current structures and, b) if a resource is not viewed to add to the school environment, schools will be either ambivalent, or resist engagement at all. This highlights the fact that when issues/concerns emerge in practice it may be more beneficial in the longer term to address them head on rather than attempt to work around them.

5.5 A move towards a more health-promoting schools programme

While there were challenges in programme implementation in the earlier stages, the findings demonstrate that as the programme progressed, there was evidence of the intervention being engaged with by the schools in ways that were more health-promoting. Some key findings that could be attributed to the more positive move towards the development of health-promoting schools was the greater involvement of principals in the planning and implementation processes as the programme bedded down, greater use of school community identified needs both by teaching staff and parents to direct intervention activities, and engagement by the school community in intervention activities as a result.

The following section explores key aspects that worked well in terms of school engagement along with some examples of what did not. There are four broad headings in this section that are consistent with the four broad areas of focus of the *Healthy Schools Programme*: teacher training/up-skilling, parental links, interagency working and policy development.

5.5.1 Teacher training: Development of teaching and learning styles

Focus group sessions were undertaken with teachers. Findings highlighted examples of what had occurred in practice that resulted in teachers engaging positively with *HSP* activities. This engagement with *HSP* activities helped to increase their knowledge and awareness of health and well-being related issues, and consequently meant they were equipped to use their learning in the school setting. This occurred mainly when health and well-being topics and issues were:

- identified by the schools themselves (teachers and/or principals) based on health and well-being needs that they had identified through their day-to-day work in their schools;
- or
- associated with wider public health issues that were being highlighted at a national level.

In response to the identified need, the *Healthy Schools* Coordinator (often in collaboration with other school roles, such as the Home School Community Liaison Officer or School Completion Programme Co-ordinator) either (a) provided training herself or (b) sourced service providers to provide training sessions for the teachers. These occurred either in in-class situations or were directly targeting the teaching staff. Examples of teacher training included teacher voice health training provided by a Speech and Language Therapist, training on child hygiene issues, hand-washing (during a swine flu epidemic) and addressing fussy eating habits of children. Teachers were very willing to take part in these training sessions as they were relevant to issues that had been identified by themselves and/or they were issues that had been endorsed by the school principal.

Teachers reported many benefits for themselves both in terms of their own health (SLT/voice training, *see sections 5.6 and 5.4* for further details) and their raised capacity to address the various health related issues with the children in the school. This teacher highlights the benefits for her/him of having taken part in the SLT voice health training. Having been asked if s/he found it beneficial s/he responded:

"Absolutely ... even just the thing like relaxation techniques and I found I was using them at the weekend. Just bringing up your shoulders and just letting them down ... or it was just about being more aware about the way you are speaking ... that you don't try to get your voice across the whole class or even [the effects of] whispering, you know."

(School staff member, Year 3)

Another teacher highlighted how she continues to draw from public health messages with her class, having gained raised awareness through a campaign that was rolled out in the school in response to a swine flu outbreak:

"[The Healthy Schools Coordinator came] around and there was posters everywhere, we all had the hand gels, the sanitizers, tissues for every child on nearly every desk and there was posters everywhere ... and in infants it was demonstrated about you know sneezing to your arm [the Healthy Schools Coordinator came] into every class to demonstrate it. Yeah, I still continue [the lessons we learned] on with my class by washing their hands with sanitizers and everything now."

(School staff member, Year 3)

Similarly, this teacher explains how s/he has learned through the training to address hygiene issues with the children in the class, a topic that s/he previously felt was difficult to address with children in 5th class:

"Well, I found that the personal hygiene course that we did ... the kids felt more open to speak [during it] ... even though I was with them [in the classroom], the fact that there was a visitor there made them more comfortable. I think they still feel more comfortable even though the visitors are gone now. I'm there, the door is still open so that I can still talk about it ... If I see dirty nails or that that we can still actually talk about it in the classroom. I wouldn't have felt as comfortable talking about it before we did the personal hygiene course and I think the actual courses has allowed us to open up more together as a class to discuss things that were [in the course]."

(School staff member, Year 3)

Similarly, this teacher highlights how s/he has learned about how to use alternative language about foods around children, particularly those who are fussy eaters:

"Well with the food, I mean I'm acutely conscious now of making sure not to tell [children] that you don't like something ... just the language you use around the kind of foods that they have. Or ... if they get like a ham sandwich and say 'that's horrible', you're just more conscious of saying "Well, it's not horrible, you just don't particularly like it, but ..." Things like that."

(School staff member, Year 3)

Each of these examples demonstrate how the *Healthy Schools Programme* activities involving the organisation of training for teachers on health issues worked well when the training was organised in response to needs that were identified by the schools themselves. Teachers were willing to engage with the training as a result. This has had a positive impact on the a) raised knowledge and awareness of the teaching staff and b) the incorporation of health practices into the school day, and demonstrates that for sustainable change to occur in this area, the intervention activities need to be driven by needs relevant at the individual school level.

5.5.2 Parent/family involvement

A key aspect of the development of health-promoting schools is the development of strong links between the school and parents and families. The aim of involving parents is to facilitate them to have a more active role in their children's health. In terms of the education setting, parental involvement in the decisions about health and well-being issues that are relevant for their children ensures that the priorities identified by schools are inclusive of the views of parents who are key stakeholders in the school change process. Study findings demonstrated that schools were very keen to continually involve parents, in the schools. Indeed, parental involvement in the school is a key component of all schools DEIS plans, and a requirement of schools in DEIS Band areas. The involvement of parents in the school is a key aspect of the role of the Home School Community Liaison Officer.

The schools encouraged parent involvement for the purposes of promoting not only the children's health but the parent's health too. For some schools the specific focus that was placed on health with parents through the *Healthy Schools Programme* was felt to be a positive benefit of having the HSP in the schools. HSP activities and processes included setting up parents 'healthy schools' committees; inviting parents to inform health-promoting related ideas and decisions that were relevant to their own health and the health of their children; involving parents in the organisation of health related

activities and events; providing education and information sessions on health related topics for parents; hosting 'healthy schools' days as health service knowledge and awareness raising events for the entire school community; hosting parent child group sessions like the breakfast clubs etc. to foster raised knowledge and awareness of health and well-being; and providing a space for parents to attend fitness, nutrition and health motivational programmes.

Parental involvement was found to work well in some schools when the *Healthy Schools* Coordinator and parents together identified and developed responses to health and well-being needs that were identified during group needs analysis processes.

5.5.3 *Healthy Schools* Coordinator role

Healthy Schools Coordinator's role as additional resource in schools for forging links with families

In the interview data, the schools identified *resources* as a crucial factor if the nature and extent of links that the *Healthy Schools Programme* has established with parents was to continue. This was particularly in relation to financial resources for some schools. According to this principal:

"To have a budget specifically for health promotion ... because the home schools' budget gets sucked up in so many things but I think if there was a budget specifically for health promotion ... Even if we were to lose the [Healthy Schools] Coordinator maybe then...like if you give money that has to be spent on specific purpose maybe you would have a teacher who you could ... appoint healthy schools teacher."

(School Principal 3, Year 3)

A further requirement highlighted by this principal was the personnel to devote the time to forging links:

"I mean, particularly the local community because there are a significant number of families here that would be hard to reach ... And I think one of the major successes of the Healthy Schools Programme has been, now it has taken time, but it has been a growing capacity to break through those invisible barriers that do exist out there."

(School Principal 5, Year 3)

The presence of a *Healthy Schools* Coordinator was also viewed as a positive mediating role in the school by some parents:

"Now for people that mightn't be as quick to speak up as I would, she's the link between the teachers and the parents. And I think we need that."

(Parent, Year 3)

Healthy Schools Coordinator's role and duplication of Home School Community Liaison Officer's role

Similar to previous findings, some schools felt that the nature of the work being undertaken by the *Healthy Schools* Coordinator with parents was a duplication of the role of the Home School Community Liaison Officer (HSCLO). According to this principal:

"I would have said from Day 1 ... we worked with the Healthy Schools Coordinator and everything and I said, "Look [to the funders], [the HSCLO] can do that stuff". We have a HSCLO. We are not a big school ... we know all our parents really really well, as with all the schools in [the area]. If there are problems I can get the [HSCLO] to ring up and do that kind of stuff."

(School Principal 1, Year 2)

Some schools were very interested in engaging with the *HSP* in relation to greater parental involvement in the school. The *Healthy Schools Programme* greatly contributed to the schools requirement from the Department of Education and Skills to draw up and realise DEIS plans that are inclusive of ways to enhance parent involvement in the schools. In some schools the *HSP* provided the resource to facilitate that to occur. Of note however, is that some schools did not see this as a necessary resource, but instead a duplication of roles already available in the school.

5.5.4 Policy development

One of the functions of the *Healthy Schools Programme* was to offer assistance to schools by supporting the review and development of 'effective, realistic and achievable policies, practices and procedures congruent with the charter and guiding principles of a 'healthy school' (Lahiff, 2008:58).

Resistance to written policy review

For the most part, it was found that schools did not want to engage with the *Healthy Schools Programme* around the review and development of in-school policies. As highlighted earlier, schools did not want to engage in a needs assessment rolled out by the funders in relation to their in-school policies. This may well have been due to the fact that they did not view the *Healthy Schools Programme* as being a programme that had that function. Indeed, some schools commented on the fact that policy in their schools was something that was not necessarily written down. According to this principal:

"I think that [policy development] happens, that evolves organically anyway as you go along ... these things become evident and that's an organic evolution and ... policy can be changing. Policy is not just something that is written down."

(School Principal 5, Year 3)

As a result of the reluctance from the schools and after the feedback during the needs assessment exercise referred to earlier, the *Healthy Schools Programme* implementers decided not to focus on this area of the programme.

"It got people's back up a little bit, about us touching the policies. So, we have left that kind of idle for the moment."

(CDI Member 2, Year 2)

Healthy Schools Programme 'bringing policy to life'

While a broad level written review and development of in-school policies was challenging to undertake, one school principal highlighted the fact that while not incorporated into written policies, the work of the *HSP* did have an effect on how the school approached health related issues, which s/he said was the same as policy change in the schools. This principal for instance, refers to two examples, healthy eating and parental involvement:

"Our healthy eating policy has really been strengthened, and it has been given life. It has been brought to life in a way that wouldn't have been possible without the Healthy School Programme. Another example would be the open door policy to parents, particular ways that we would have parents involved in activities in the school. That has been given a new dimension as well, by involving parents in health-related activities, as well as, more curricular things. So, that's two things that spring to mind immediately, I'm sure there are more ... Policy is what you do and that has changed."

(School Principal 5, Year 3)

SPHE Policy review and development

One particular example of policy review is where a school decided to undertake an SPHE policy review in order to identify the strengths, weaknesses and gaps. The process was undertaken in collaboration with the schools' deputy principal, teaching staff and the *Healthy Schools* Coordinator. A key role of the Coordinator was the design of questionnaires that were administered to teaching staff in the schools. Based on the feedback, the Coordinator compiled a report, which informed the review and development of the SPHE policy for that school (notes from *Healthy Schools* Coordinator Year End Report).

This example demonstrates one of the ways that *Healthy Schools Programme* activities can facilitate schools to monitor and evaluate their own policies in order to ensure that they are up to date and relevant to the specific school environment. Key to why this process can be understood as being successful was that it was the school that drove and consequently engaged in the policy review process.

5.5.5 Interagency working and developing community links

Referrals and information sharing protocols

Health services access was the main need identified by the schools prior to the beginning of the *Healthy Schools Programme*. Schools reported having ongoing challenges around:

- accessing certain services for children in the school due to service gaps and long waiting lists;
- knowing if a child/family had linked in with a service once a referral had been made and appointment set up.¹⁰

One of the objectives of the *Healthy Schools Programme* was to assist with these service information gaps, through referrals support and the development of information sharing protocols. This proved to be challenging as health services pointed out that they could not share family/child service use information because of confidentiality clauses.

Tracking exercise – Challenging

It was suggested by the HSE that a tracking exercise be undertaken by the schools to identify where specific service access gaps existed. The funders raised this idea in the Steering Committee meeting and while schools were in agreement with the exercise, they did not want to undertake it themselves.

The tracking exercise was not received well in the schools. This may well have been because many of the schools had their own internal tracking systems in place already, and the problem that they identified was the link between the school and health services rather than their own internal monitoring systems. The following quote from one of the *Healthy Schools* Coordinators highlights this finding:

"I would have actually expected to focus more on the referral system and the tracking [of] referrals and it didn't necessarily happen in Year 2 ... The X School they have their own. They have a very good tracking system in the school and... then they said that they don't necessarily need support around that area ... So the whole area of the referrals wasn't necessarily covered, although it's in the manual."

(*Healthy Schools* Coordinator, Year 2)

While some schools chose not to avail of the support of the *Healthy Schools* Coordinator with family referrals, other schools did. The advantage highlighted by schools that did utilise the *HSP* as support for one-to-one referrals was in the form of an extra resource that could devote the time needed for repeat phone calls to families and services, form-filling and appointment attendance.

"She is a link with [services]. Like say for a class teacher to have to go and ring a speech therapist they might have to make five phone calls before you get the person ... so at least you could get the Healthy Schools person onto it because those kind of things like making phone calls and all that, that can take up your whole day."

(School staff member, Year 3)

¹⁰ Schools wanted to know if families had taken up referrals because they were sometimes unsure if a family/child had availed of a referral and consequently were unsure if an issue that had been identified within the school about a child was being followed up on or not. Consequently, schools were unsure of whether they needed to follow up on the issue again themselves or if it was already being dealt with.

While some schools may have found this beneficial, at a wider level the provision of one-to-one referral support to families and children may well have contributed to the perception of the schools that the *Healthy Schools* Coordinator was a provider of direct services to children and families rather than a resource that could help individual schools to raise their capacity to respond to and address issues relevant to them in a whole-school manner. Key here is that the original issue that was highlighted as being problematic by schools was service gaps, accessibility, and information sharing protocols. The challenges associated with addressing these types of issues are perhaps ones that need to be addressed at a higher interdepartmental level.

Links between the funders, HSE and schools. *Healthy Schools* Coordinator as an additional resource for schools

The funders set up an HSE Review group where they met regularly to discuss service gaps and access issues that were emerging on the ground in the local community. The fact that the *Healthy Schools* Coordinator was working in the schools was highlighted to services, and the *Healthy Schools* Coordinator was identified as a liaison person for the health services in the community. Feedback from service providers suggested that having the *Healthy Schools* Coordinator in situ in the schools made it easier to link with the schools.

According to this service provider:

"Having one contact person [Healthy Schools Coordinator] has made it easier to liaise regarding specific clients. However, it can lead to a move away from the traditional working relationship we, as [a health service provider], would have with some teachers as we may link in with Healthy Schools Coordinator rather than the teacher themselves due to ease of access."

(Service Provider, Year 3)

Similarly, this health service provider stated:

"In the absence of a [health post with direct links to the school due to HSE restructuring] we have not engaged in schools in other areas – this work [the Healthy Schools Programme] has allowed us to stay involved [with the schools participating in the Healthy Schools Programme]."

(Service Provider, Year 3)

This finding illustrates the fact that the presence of the *Healthy Schools* Coordinator is a beneficial resource for the health services whose own capacity has been reduced. While beneficial in the short-term, the findings suggest that without the *Healthy Schools* Coordinator as a liaison person, issues that existed prior to the beginning of the *HSP* in terms of school-services links would not be resolved should the *Healthy Schools* Coordinator no longer be in post. A key finding here is that school-service links have been further impacted by wider health service cuts and the moratorium on hiring that is a result of Government decisions made due to the current economic climate in Ireland. Without well resourced health and education services, the function of a health-promoting schools programme in supporting better inter-agency working between schools and other services is compromised.

SLT Service Level Agreement development

CDI funded a part-time Speech and Language Therapist (SLT) to deliver an Speech and Language Therapy Service to Early Start, Junior infants, and follow through to Senior infants as part of the *Healthy Schools Programme*. This initiative was developed in response to issues raised by school principals at the *HSP* Steering Committee. The service was established within six months of agreement as this service was a key priority for schools. The speed of the establishment of the service proved to be central to the buy-in of school principals.

The CDI *Speech and Language Therapy Service* model included three dimensions: (a) on-site assessment and therapy for children; (b) support and training for parents; and (c) support and training for teachers aimed at providing teachers with practical and effective strategies to help develop children's communication skills in the school.¹¹

As part of the development of the *SLT* service, a Service Level Agreement was drawn up between the schools, HSE and CDI. This agreement included: 1) providing suitable space within the schools for the *SLT* to undertake assessments with the children and provide therapy sessions, 2) teacher participation and 3) schools ensuring that delivery of the *SLT* service could be incorporated into the day to day school structures and timetable in a seamless manner. The service is being evaluated separately to this study.

In terms of this study, of relevance is that the schools were centrally involved in the identification of the need for the service in the first instance and the development of the service level agreement informing its roll out. Being involved at both of these stages meant that (a) the service was one that was identified from the bottom-up and (b) the delivery of the *SLT* service could be incorporated into each school's day-to-day structures and timetable in a seamless manner.

This would suggest that schools are very willing to develop new ways of working with available health services in order to support children's needs but that health service provision in schools needs to be designed with input from the school itself in order to ensure that it fits with current structures and timetabling. Upon doing so the schools can be found to readily engage and 'buy-in' to the process.

General community links – Raising service availability, knowledge and awareness

Another aspect of community links that were focused upon by the *HSP* was knowledge and awareness raising in relation to the services that were available in the local area. In order to address this, the *Healthy Schools* Coordinator made contact with a wide range of services (*see Appendix 4 for list*) and developed good working relationships with them. An example of an activity undertaken to enhance the school community's knowledge and awareness of services were *Healthy Schools* Open Days that were organised in the schools and involved local service providers sharing information with the school staff, children and parents, about health issues and service availability. These were found to be beneficial on a number of levels. For example, they helped to raise local knowledge and awareness of the services that were available in the area, they were health related information sharing exercises, and they were instrumental in bringing larger than usual numbers of parents into the school.

¹¹ Some *SLT* training was undertaken with teachers in 2010 (not necessarily accredited training), although Eklan training did not happen within the timeframe of the evaluation. The *Speech and Language Therapy Service* is being evaluated independently.

According to this principal:

"The Healthy Schools afternoon ... that was a powerful day ... The first thing is, the people that need the services need to know that these services exist. And even before that they need to know that they need the service. So, that's very much an awareness building exercise. The third step then, is to actually make that connection with the service, but that link is a two-way link. I think before the Healthy Schools Programme, pro-activity was less than it should have been on both sides of the divide. I do think that now far more people are aware of the fact that they need the service, they're far more aware of the services that are out there and they are far clearer on what they need to do in order to make that engagement happen."

(School Principal 4, Year 3)

Similarly, this parent highlighted the benefit of learning about a service that she was not previously aware existed in the local community:

"That was a service we didn't know that was available so she came in [through the Healthy Schools Programme] ... She's from the HSE and she looks after people let's say who have a disability ... but we hadn't got a clue that that service, we never knew that service was down there."

(Parent, Year 3)

Having resources in the form of the *Healthy Schools* Coordinator and for them to organise days such as the *Healthy Schools* Open Days meant that schools readily engaged with the *Healthy Schools Programme* activities. This would suggest that resources/personnel may well be required if similar activities are to occur in the future.

Steering Committee as a vehicle for local level intersectoral working

The Steering Committee was found to be a good vehicle for bringing representatives from health and education together locally. This level of communication between health and education does not happen to this degree in other forums and the use of the local Steering Committee approach has considerable potential for bringing representatives together to discuss needs and issues at the local level.

5.6 Conclusions and Key Findings

Programme design and school 'buy-in'

Initial changes in the programme design meant that not all schools were on board and this would appear to have impacted on the degree to which some schools engaged with the programme throughout the first 3 years. The evidence suggested that all stakeholders did not have a shared understanding of the aims and objectives of the *Healthy Schools Programme* at the outset. This lack of shared understanding had particular implications for the notion of 'buy-in' as it raises the question of 'buy-in' to exactly what? The findings would suggest that there were very different ideas of what was occurring and what was expected to occur across stakeholders. This greatly impacted on programme implementation throughout its 3 years. While the manual contains the breadth of evidence that underpins the *Healthy Schools Programme*, it was not found to be an accessible tool for guiding the programme planning and implementation by the schools or the *Healthy*

Schools Coordinators. The findings suggest that the lack of clarity in relation to the programme's aims and objectives meant that schools interpreted the programme based on their own personal perceptions of it. This was not necessarily a view congruent with the underpinning theory of the programme.

Steering Committee

While the terms of reference for the Steering Committee included advising and informing the work of the *Healthy Schools* Coordinator and approving plans for action, the role of the Steering Committee as a decision-making forum for programme implementation in schools was found to be challenging. This was mainly because schools were recognised as being individual organisations with their own internal structures, processes and procedures, and more importantly their own health priorities. Consequently, it was found that the Steering Committee was not an appropriate forum for principals of one school to make decisions about another and where this was attempted it was found to be a conflict of interest for principals. However, the Steering Committee as per its terms of reference was involved in decision-making about overarching issues relating to the overall development and implementation of the *Healthy Schools Programme*. This was also particularly beneficial in the sense that it ensured that all schools were aware of the degree of work being undertaken by both the *Healthy Schools* Coordinators, preventing any overburdening of their role.

Planning and implementation

The programme planning process was found to be a challenging one by stakeholders. This was primarily because of the conflict between drawing up school plans that were based on health-related outcomes set out in the programme manual (that were feeding into the child health outcomes identified in the manual) and the actual health and well-being needs of individual schools. The findings suggested that schools were not really engaged with the planning process at all at the outset, but saw it more as a role of the programme promoters.

Challenges in relation to the planning process had direct implications for programme implementation. This resulted in varying degrees of engagement by schools in programme activities that were being rolled out by the *Healthy Schools* Coordinator primarily for the children in the schools, and suggested that schools were not part of the programme itself. Essentially, this resulted in the emergence of a programme that was more focused on once-off activities being delivered to children in schools, than one that was supporting schools to become more health-promoting in a whole-school way.

Feedback loops as HSP activities

The funders organised a number of feedback loops in order to highlight the challenges that were emerging in practice. These involved presentations of findings from the evaluation team in various forums. The forum most beneficial was the Steering Committee forum in that the discussion findings highlighted fundamental concerns that schools would have with the roll-out of a health-promoting schools programme.

Key concerns about the implementation of the programme highlighted by schools included:

- schools did not feel equipped to identify the health needs of the children. This was felt to be the domain of health rather than education;
- schools could not be expected to be aware of whether responses to health needs identified would be available to them;
- schools were concerned that they would be held responsible for programme failure if it occurred;

- concern in relation to the amount of commitment required from schools to implement the programme if it was not going to receive support from the Department of Education and Skills (and Department of Health), and consequently be dropped at the end of the 3-year pilot phase.

Role of the *Healthy Schools* Coordinator

The role of the *Healthy Schools* Coordinator as facilitator, researcher and training resource for identifying responses that would facilitate the school to incorporate health and well-being into the school in a whole-school way was found to be the most promising approach to the provision of the *Healthy Schools Programme* intervention activities.

With the aim of encouraging buy-in to the programme in the longer term, it was decided to continue providing a certain amount of direct services to the children in the schools through the *Healthy Schools Programme*. Some schools carved out a role for the *Healthy Schools* Coordinator in order to utilise the resource. Other schools resisted the roll-out of additional child-related activities through the programme since they felt that it was impinging on the amount of time that should be devoted to the core curriculum, while a third reaction was ambivalence due to the perception that the school could themselves have undertaken the children's activities if the Coordinator was not providing them.

Developing teaching and learning

Teachers were found to develop knowledge and awareness of health and well-being topics with support from the activities of the *Healthy Schools Programme*. This worked particularly well when the topics were identified by the teachers in response to issues that were arising in a particular school and/or wider public health messages that the principal wanted incorporated into daily practices. Teachers reported that they felt equipped to use this knowledge in the classroom and wider school setting as a result.

Parent/family involvement

Parental involvement in the schools was found to work well when the *Healthy Schools* Coordinator and parents together developed, organised and rolled out health-promoting opportunities for parents and their children in response to a group needs analysis undertaken with parents. In order to provide the nature and extent of parent/family links that occurred in some schools during the implementation of the *Healthy Schools Programme*, however, the schools would need extra resources in the form of an additional person.

On the other hand, some schools felt that the role of the *Healthy Schools* Coordinator as a link for parents was a duplication of the role of the Home School Community Liaison Officer. Consequently, some schools chose not to avail of the *Healthy Schools* Coordinator as a parent link person at all.

Policy development

For the most part, written policy development and review were not activities that the schools wanted to engage in via the *Healthy Schools Programme*. Therefore, this did not occur in many of the schools. Schools reported that policy for them was sometimes more about what they did than what was written down in documents. In the instance where a review and development process did occur, the key finding was that it was the school that instigated the process and therefore willingly engaged with the consultation process that was facilitated through the programme.

Interagency working

Addressing information-sharing protocols between schools and health services at the local level was found to be challenging due to confidentiality clauses that exist in relation to an individual's use/access of a service. Schools that availed of the *Healthy Schools* Coordinator as a referral advocate for parents/children found this beneficial due to the fact that the school had a person who could devote time to this work. Health service providers found that having the *Healthy Schools* Coordinator in post as a contact person between themselves and the schools meant it was easier for them to liaise about individual clients and that having the Coordinator in post compensated for some of the loss of personnel occurring in local area services due to cutbacks in health services in the current economic crisis.

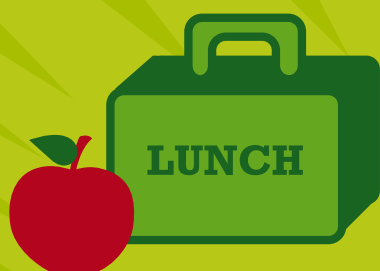
Interagency working that was being undertaken to facilitate service delivery in the schools was found to work well when schools and services together drew up service-level agreements that accommodated mechanisms for both service provision and service access that fitted in around the current school structures and time-table. Key here was the fact that the service was developed in response to service access needs that the schools had and that the responses were constructed in a manner that was conducive to fitting in around the school day. This was particularly the case in the development of the CDI-funded *Speech and Language Therapy Service* model piloted in the schools (see discussion in Section 5.5.5).



Chapter 6: Discussion and Conclusion



The Healthy Schools Programme



6.1 Introduction

This chapter examines the key findings that emerged in the impact and process evaluation of the *Healthy Schools Programme*. It discusses these findings from each component in the context of the wider literature. An issue that is key for contextualising the discussion is that becoming a health-promoting school is a process that cannot be bound by time. National, regional and local issues and contexts can greatly dictate the pace at which the school change process occurs. What is important is that the school change process is occurring. This study adopted a mixed-methods approach to evaluating the programme process and impact. The process evaluation examined what occurred in practice and what worked in the context of supporting the schools to become more health-promoting environments. The impact evaluation set out to measure change based on the key child health outcomes set out in the *Healthy Schools* manual. The complexities surrounding programme implementation and the time that would appear to be needed for the programme to be rolled out smoothly that were evident from practice would suggest that finding statistically significant health outcome changes in the children, in what is in effect still the short-term, is unlikely.

6.2 Impact evaluation discussion

6.2.1 Summary of impact findings

There were no significant differences found over the 3 time points between children in intervention and comparison schools. The *Healthy Schools Programme* had no significant short-term impact on improving Health Related Quality of Life (HRQoL) as measured through the Kidscreen-27. It had no short-term impact on reducing depressive symptoms, as measured through the Children's Depression Inventory. It had no short-term impact on reducing children's thoughts of changing their weight, incidences of reported bullying, intentions to smoke when they are older, rates of children who were obese or rates of school absenteeism over time. Finally, it was not possible to ascertain if the *Healthy Schools Programme* had any role to play in increasing uptake of immunisation vaccines or dental services since no information was provided by comparison schools. The *Healthy Schools* manual emphasizes the importance of evaluating health outcomes in the medium to long term, and if these outcomes are evaluated in the short term that expectations of significant improvements in children should remain low (Lahiff, 2008). Findings revealed, however, that overall, children in the study were, on average, doing well, doing better on some dimensions of well-being than others, and improving, deteriorating or maintaining levels of well-being on some dimensions at different stages throughout the study.

6.2.2 Impact findings in national and international context

Kidscreen and Health Related Quality of Life

Although no differences were observed between intervention and comparison schools, analysis of the Kidscreen-27 revealed that at baseline, children aged 4-12 years within both the intervention and comparison schools were on average within or above the national and European average range for HRQoL and remained within these levels at both the Year 1 and Year 2 follow-ups. This is consistent with a Kidscreen study in Ireland that revealed that most Irish children enjoy a high HRQoL (Keenaghan and Kilroe, 2008). In addition, significant improvements were observed for children aged 4-12 years between baseline and Year 1 follow-up within the autonomy and parent relations domain. These improvements were observed within both the intervention and comparison schools. Furthermore, this level was sustained for children in the Junior classes aged 4-7 years at Year 2 follow-up and continued to improve for children in the Senior classes aged 6-12 years.

Although the children from these designated disadvantaged schools were in line with Irish and European ranges, there were some disparities in results. Within the evaluation, children aged 4-7 from intervention and comparison schools on average scored lowest on the social support and peer relations dimension and children aged 7-12 on average scored lowest on the autonomy and parent relations dimension. This is in contrast to the findings from the Irish Kidscreen study, where children aged 8-12 on average scored the lowest on the school environment dimension and in the European Kidscreen study, which found, on average, that children in Ireland scored significantly below the mean on mental health, unlike all the other countries involved in the study (Ravens-Sieberer *et al*, 2008). Disparities also existed between the highest rated dimension within this evaluation and the Irish Kidscreen study. Children aged 4-12 in this study on average scored the highest on the school environment dimension, while children aged 8-12 in the Irish Kidscreen study on average scored the highest on the parent relations and social support and peer relations dimensions (Keenaghan *et al*, 2008). Low levels of socio-economic status (SES) and growing up in disadvantaged neighbourhoods have been found to be significantly associated with poorer HRQoL on all Kidscreen dimensions in adolescence and more specific domains in childhood (Von Rueden *et al*, 2006; Ravens-Sieberer *et al*, 2008). This difference in SES may explain the above disparities.

Children's Depression Inventory

Analysis of the Children's Depression Inventory revealed that at baseline children in both the intervention and comparison schools were on average within the international normal range and remained within these levels at both the Year 1 and Year 2 follow-ups. In addition, children in the 6-12 years cohort in both intervention and comparison schools demonstrated significant improvements in mean depression scores between baseline and Year 2 follow-up. No changes in levels of depressive symptoms were found for children in the 4-7 age group over time, but this may be explained by the fact that the measure used was only suitable for children aged 7-17 years and may not be sensitive enough to pick up on improvements over time in this younger age group (Kovacs, 2009).

The majority of parent proxy and self-reporting children were within or below the average international references. The proportions of all children with above average levels of depression, however, lie midway between 5% and 20%, the rate of school-aged children experiencing depressive symptoms at any given time according to international studies (Charman and Pervova, 1996; Edelsohn *et al*, 1992). While the children were on average within the normal international ranges, a proportion of children remained with above average levels of depression and this remains a concern. It is important to note that a low level of socio-economic status is associated with poorer psychological well-being in children (Williams *et al*, 2009). It is also important to highlight that the prevalence of depression in youth has gradually increased over the past century (2.8% for under 13-year-olds – Costello, 2006), with the age of onset becoming steadily younger. This is a key area for monitoring within schools and with the support of local and national level health services.

Health Related Behaviour Questionnaire

From the Health Related Behaviour Questionnaire, children aged 6-12 years in intervention schools generally reported higher incidences of bullying than parents reported for the 4-6 year-olds. Proportions of 6-12 year-old children reporting bullying decreased significantly between baseline and Year 2, but not for the 4-6 year-old cohort. All rates were lower than that recorded by the 2009 *Growing Up in Ireland* study (40%) for 9-year-old children. Notably in the intervention schools for children aged 6-12 years, a significant reduction in the rate of bullying was found over the course of the evaluation. This is significant given that the risk of being bullied is found to be higher among children of parents from lower socio-economic background (Von Rueden *et al*, 2006).

In terms of nutrition, analysis revealed that at each time point, a high proportion of children in both the intervention and comparison schools ate breakfast in the morning. These figures were above the Irish average according to the 2006 HBSC Survey (78.2%) and the 2008 *State of the Nation's Children* report (76%) assessing children aged 9-17 years. These figures are important given that consistent findings in other studies show that children who eat breakfast daily are less likely to be overweight or obese (Timlin *et al*, 2008, Deshmukh-Taskar *et al*, 2010) and that children from low socio-economic status (SES) backgrounds have a poorer diet than children from higher SES (Hanson and Chen, 2007).

Body Mass Index

Over a quarter of children aged 4-12 years in the intervention schools were overweight or obese, while few children fell into the underweight category. The proportions were slightly higher than results from a national study of children aged from 4-13 years (approximately 25% – Barron *et al*, 2009; Williams *et al*, 2009), but under the proportion of overweight and obese children in Ireland who are from less affluent families (33% – Williams *et al*, 2009).

For the 4-7 year-old children within the intervention schools, significant differences in BMI categories were observed between baseline and Year 1 follow-up, and baseline and Year 2 follow-up, with the percentage of children within the obese category increasing over time from baseline to Year 2 follow-up. Over the past 20 years, there has been a dramatic increase in obesity and it is now recognised as the most prevalent childhood disease worldwide (Lobstein *et al*, 2004), with 15%-35% prevalence of overweight and obesity in Europe (Lobstein and Jackson-Leach, 2006). Given the many complications that obesity poses to children's health, the prevalence and increase over time of overweight and obesity may be monitored or targeted by schools in the future.

Dental service

The level of dental service coverage within the intervention schools was higher than the only other available data source of dental screening rates in Irish primary schools (75%), which screened 5-year-old children in a fifth of the most disadvantaged areas in Northern Ireland (McGuckin, 2007). However, in the United Kingdom, it was decided to terminate the schools' dental screening programme due to a lack of evidence of effectiveness in schools. Research found that while children were screened in school and parents of children identified with oral health problems were contacted to arrange an appointment for their child with the dentist, attendance was poor (Milsom *et al*, 2006; O'Carolan, 2008). While the in-school dental service coverage was high in intervention schools, the schools should incorporate into their dental initiative mechanisms that are effective in getting parents/children to attend their follow-up dental appointments.

Immunisation

In general, measles, mumps and rubella (MMR) and the '4 in 1' booster immunisation levels remained marginally below 90%, with some schools demonstrating a large decline in booster uptake in the Year 1 follow-up. There are no regional or national data available on rates of in-school immunisation vaccine uptake in Ireland. The national infant (24 months) immunisation uptake rate for the MMR vaccine, however, was 91% in 2011 (Health Protection Surveillance Centre, 2011).

Absenteeism

Despite these children being from designated disadvantaged schools, mean rates of absenteeism for intervention schools were similar or slightly above the national norm rates and under the average rate for DEIS Band 1 schools. The rate of absenteeism for the 4-7 years cohort of children significantly decreased between baseline and Year 2 follow-up. For the 6-12 years cohort of children, however, the rate of absenteeism significantly decreased between baseline and Year 1 follow-up, only to significantly increase and return to baseline figures by Year 2 follow-up.

6.2.3 Strengths and weaknesses

The main strengths of the impact evaluation were both the high coverage and follow-up rates obtained within a designated disadvantaged urban school environment. Despite the high absenteeism rates, with approximately 20% of children absent on 20 school days or more, over 50% of parents and children from both the intervention and comparison schools consented to participate. In addition, follow-up and interview rates increased over the 3-year period and ranged from 83.6% to 99.8%. A further strength of the impact evaluation was the use of internationally recognised and validated instruments measuring Health Related Quality of Life, depressive symptoms and comprehensive Body Mass Index (BMI) measurements. The BMI measurements were undertaken by a team of children's nurses trained by an international consultant in child development and endocrinology.

The main limitation of the impact evaluation was the short duration over which the children's outcomes were measured. The impact evaluation was initiated in parallel with the implementation of the *Healthy Schools Programme* into the schools and as a result the timeframe for expected change was short to medium term, as opposed to medium to long term as recommended by Lahiff (2008).

The data in the *Healthy Schools Programme* questionnaires were obtained using a number of self-report measures. While these are widely used in applied research, there is some debate about the reliability of self-report. Another issue to consider is information bias and in particular recall bias. According to Ashworth (2003), recall can be affected by factors such as time delay, wording of questions and possibly qualities of the researcher, while Del Boca and Noll (2000) state that respondent recall can also be influenced by fatigue and mood. However, these authors also suggest that recall bias can be limited by relating questions to specific time periods. Accordingly, children and parents were assessed by trained fieldworkers with reliable questionnaires appropriately designed for their age that asked them to relate their replies to a specified time period (e.g. in the last 2 weeks).

6.2.4 Impact evaluation conclusions

There were no significant differences found over the 3 time points between the intervention and comparison schools, indicating that there was no short-term impact of the *Healthy Schools Programme* on children's health and well-being outcomes (see recommendations under the 'Process evaluation' discussion for ways to move the *Healthy Schools Programme* forward and approaches to future evaluations). The study did find, however, that children overall in intervention schools were within or above international average Health Related Quality of Life (HRQoL) ranges on all Kidscreen dimensions; they were also within the international average score for depressive symptoms on the Children's Depression Inventory (CDI) and within the range of international rates of depressive symptoms experienced by children at any given time. The study also found that the rate of reported bullying was below the national average, the rate of breakfast consumption was above the national average, while the rate of overweight and obesity was slightly higher than the national average. The rate of in-school dental coverage was above the rate recorded by disadvantaged schools in Northern Ireland in the final 2007/2008 period of service provision, the rate of MMR immunisation uptake by children in this study was similar to the national uptake at 24 months and the mean absenteeism rate in each school was closer to the national average than the DEIS Band 1 absenteeism rate.

The study also found that some groups of children were improving, deteriorating or maintaining levels of well-being over time. In particular, all children showed significant improvements after Year 1 in the HRQoL autonomy and parent relations. The levels were sustained into Year 2 for children aged 4-7 years in Junior classes and improved further for children aged 6-12 years in Senior classes. Children aged 6-12 years also demonstrated significant improvements in mean depression scores over time and decreases in incidences of reported bullying over time. Over the course of the study, there were significant changes in the proportions of children aged 4-7 years in BMI categories, with the proportion of obese children

increasing. The rate of absenteeism significantly decreased for children aged 4-7 years in Junior classes, but not Senior classes, over time. Finally, there was a significant decrease in the '4 in 1' and MMR booster uptake between baseline and Year 1 follow-up for schools with children in the Junior classes, but these figures significantly increased and returned to baseline levels by Year 2 follow-up.

6.2.5 Recommendations specific to the Childhood Development Initiative's intervention schools

- Some of the school principals requested individual school-based health and well-being information. It is recommended that brief school-based reports on health and well-being, and in particular BMI, be commissioned for each of the 5 intervention and 2 comparison schools. These reports would not represent a needs analysis for the schools, but a starting point to a conversation with the whole school community about their needs. As outlined in the process evaluation, a needs analysis must take into account the views of all members of the school community and together these members must identify and set their specific and targeted priorities within the constraints of what is achievable and feasible within their resources.
- Findings demonstrated that on average children were in line with average national and international HRQoL. In some HRQoL dimensions, however, there were high proportions of children displaying poor health outcomes and this suggests that looking at mean HRQoL scores, in isolation, may not be sufficient. There is a need to explore the rate of children falling into each category of below, within and above international average HRQoL ranges. These results may help inform the school community of the number of children who need additional supports in particular areas of health.
- Given that there are many health and well-being complications associated with childhood obesity, and that the proportion of overweight and obesity in this study is slightly above the national average (with levels of obesity increasing for children aged 4-7 years in Junior classes), it is recommended that the schools work toward a health-promoting school model guided by a specialised manual that targets physical activity on a whole-school level, with provisions also mapped out for children at risk of overweight and obesity.
- While on average children appear to be doing well, it should be highlighted that there was a sizeable proportion of children falling below average on particular HRQoL domains, above average on depressive symptoms and those who are obese or at risk of becoming obese.
- In addition, if schools are to focus on making their referral systems more efficient and the appropriate contexts are in place for them to do this (*see Process recommendations*), as a means for monitoring the level of efficiency, the rates of in-school health service coverage/uptake and attendance to out-of-school health service follow-up appointments should be tracked over time (e.g. the rates of in-school dental service coverage, out-of-school dental appointment follow-up and in-school immunisation uptake).
- Furthermore, as the national and international literature has identified significant links between child well-being and socio-economic status, all health outcomes should be discussed in context given that the children in this study were living in and attending schools designated as urban and disadvantaged.

6.3 Process evaluation discussion

6.3.1 Contextual factors found to support the development of health-promoting schools

School identified needs

The findings indicated that the *Healthy Schools Programme* initiative worked better in practice when the programme activities were informed by the health and well-being needs that were relevant to individual schools. In some instances, these were identified by schools themselves and in others they were informed by wider public health messages or awareness-raising in terms of training that would be available to the schools (e.g. voice health training). However, what was evident throughout the findings was that *Healthy Schools Programme* activities that were rolled out needed to be relevant to the schools at an individual school level. This then meant that engagement by the schools was far more likely when the programme's activities were organised in response to school community identified needs. This was evident throughout the findings and highlights the need for individual school communities (i.e. children, families and staff) to be at the centre of the school change process. Indeed, a 'school led' or 'bottom-up' process (Weare, 2000; Stewart-Brown, 2006) has been identified as an essential component of successful school-based health promotion initiatives (Kam *et al*, 2003; West, 2006; Fullan, 2008). Change processes that are led by the needs and ideas of the school community foster ownership of the process for the school community (Weare and Markham, 2005). Becoming a more health-promoting school is a process that requires 'ownership' by each individual school community since this facilitates schools to have control of their own health and well-being. Having control over one's own health and well-being is central to the definition of health promotion and at the core of the agenda of health-promoting schools (WHO, 1997).

School capacity-building (developing teaching and learning styles)

Additionally, the findings illustrate that when schools were at the centre of identifying or engaging in consultations about health and well-being needs of the children and themselves, they were also motivated and interested in engaging with the *Healthy Schools Programme* activities that were organised in response. This differed to findings that demonstrated sometimes low uptake of *Healthy Schools Programme* activities that were based on ideas not generated by schools themselves. School-driven plans resulted in the process running more smoothly as responses were incorporated into current school structures, processes and time-tabling.

Teachers also spoke of the benefits that they gained in terms of raised knowledge and awareness of health issues, and the fact that they felt better equipped to incorporate their new knowledge into practice in the classroom and the wider school environment. Teachers were happy to engage in a consultation process about policy review and development when they themselves were the instigators rather than when this was completed by the *Healthy Schools* Coordinator. Staff development is recognised as key to the school change process (Newman *et al*, 2000; Hazell, 2006; Hoyle *et al*, 2008; Rowling, 2009). Indeed, Rowling (2009) points out that staff within a school are the key drivers of school policies and, therefore, increasing staff capacity can potentially influence the entire school community to develop more health-promoting policies.

Role of the *Healthy Schools Coordinator/Healthy Schools Programme*

The findings demonstrate that when the nature of *Healthy Schools Programme* activities included facilitating consultation processes in the schools, researching ideas for the schools, providing or organising training for staff, they were more useful for the schools in terms of addressing health and well-being issues in a whole-school manner. This is similar to how the *Healthy Schools Coordinator* role is described in the literature (Lahiff, 2000). Some of the main concerns highlighted by schools in this study in terms of feeling equipped to identify health needs and concerns about being able to source support for responding to identified needs are tasks well suited to the role of the *Healthy Schools Coordinator*. The Coordinator could then guide and support the school through the planning process and source responses and training that respond to school needs, responses that are drawn from best practice in that area. Many responses may well be already available through the HSE and the *Healthy Schools Coordinator* would be in a good position to devote time to drawing from those available resources to build capacity in the schools.

Study findings indicate that some schools reported benefits from having an extra person available to them (i.e. the *Healthy Schools Coordinator*), who provided support with referral advocacy, rolled out children's activities in-school and after-school, and provided a service to parents. Indeed, health service providers highlighted that having the *Healthy Schools Coordinator* in schools meant that they became the liaison person for them, and in some cases compensated for service gaps in their own sector. In addition, the funders indicated that this work by the Coordinator as an additional member of staff increased the enthusiasm of schools for the acceptance of the Coordinator in the school.

However, the nature of these additional resources provided to the schools may lead to unrealistic expectations and perceptions of the *Healthy Schools Programme/Healthy Schools Coordinator* as an extra resource for in-school provision of activities. Furthermore, while perhaps beneficial for these schools and services in the short term, the use of the *Healthy Schools Programme/Healthy Schools Coordinator* in this manner does not contribute to the support of sustainable processes in schools for addressing needs and gaps in the longer term. In addition, this may provide a smokescreen for service provision gaps in the health services and potential resource requirements within schools that would be required for the development of sustained service responses in schools. The limitations of providing 'once-off' or 'discrete events' in schools in terms of the development of sustainable change are highlighted in both the national and international literature (Nic Gabhainn and Clerkin, 2004; Weare, 2000).

This study's analysis would suggest that a degree of *Healthy Schools Programme/Healthy Schools Coordinator* 'distance' would be more beneficial for schools in this type of intervention. The role of the *Healthy Schools Coordinator* as facilitator, researcher and resource person would mean that schools take a lead and drive the process, and receive support with the links, training, and resources necessary to realise their aspirations through the Coordinator. Key here is that this would also allow a school to pace the process at a speed conducive to its own organisational capacity. This function of the *Healthy Schools Programme/Healthy Schools Coordinator* would offer a potentially more sustainable approach to incorporating health into education settings for better child health and educational outcomes in the longer term (Moon *et al*, 1999; Wyn *et al*, 2000; Stewart-Brown, 2006; Weare, 2007).

Steering Committee structure

Of note was the fact that the Steering Committee structure that was set up to support the implementation process encountered challenges for similar reasons to those planning and implementation-related challenges. Key here was that the Steering Committee structure was not an appropriate forum for making decisions about individual schools and *Healthy Schools* intervention activities that would take place. Schools are individual organisations with their own internal structures and processes, and therefore decisions about what would occur and how this would occur in any given school needed to be made at an individual school level.

Notwithstanding this, the Steering Committee was found to be beneficial in terms of being a forum for information exchange and communication between school principals themselves, and between local area service providers and schools. It also has great potential for supporting better local-level partnership working between health and education. An examination of current broader structures in other sectors may be beneficial for the development of supports for establishing health-promoting schools.

6.3.2 Contextual factors found to be required for the development of health-promoting schools

Developing an understanding of health promotion/health-promoting schools

This study demonstrates that, while a Memorandum of Understanding was signed by schools, due to a number of reasons a lack of clarity at the outset of programme implementation had implications for all stakeholders for the duration of the 3-year pilot phase. This would suggest that an extended period of development and consultation at the local level prior to the beginning of a complex programme like *Healthy Schools* would be beneficial to ensure that stakeholders have a shared understanding of the aims and objectives of the programme, its underpinning theory and the various roles and responsibilities associated with the school change process. An understanding of health promotion (as opposed to health education) and the agenda of health-promoting schools at the outset would support schools and other key stakeholders to have greater clarity in terms of programme (or process) aims. In addition, this would help to manage expectations from the outset and schools could focus on health and well-being priorities, while highlighting issues that would need greater support from the health sector if they are to be addressed in the school setting. Clarity of purpose from the outset is important as schools have been found to be resistant and sceptical about a concept that may not be fully understood (Stewart *et al*, 2000, cited in Deschesnes *et al*, 2003).

A factor that was found to contribute to challenges in terms of *Healthy Schools Programme* clarity, and consequently implementation, was the inaccessibility of the manual for schools, and the *Healthy Schools* Coordinators in terms of setting out tangible steps to guide programme implementation. While the manual contains the wider theoretical underpinnings of the programme and the evidence supporting the benefits of incorporating health into the education environment, it would benefit from having a shorter, and perhaps extractable, toolkit, setting out steps that would guide the process of implementation so that the process is more tangible for schools from the outset.

School community-led planning and implementation

While study findings indicate that the *Healthy Schools Programme* worked well when the processes were school-led from the outset, it should be noted that the involvement by schools in the identification of relevant health and well-being issues was found to be piecemeal in nature rather than part of a cohesive and strategic whole-school plan. There were a number of programme planning and implementation issues that emerged in practice. These were mainly due to the competing priorities of the activities associated with realising the child health outcomes that were prescribed in the *Healthy Schools* manual and the relevance (or otherwise) of those activities and health outcomes for individual schools. This resulted in considerable levels of confusion for programme implementation as efforts made to incorporate both the top-down (manual) and bottom-up (school) informed ideas into the one plan resulted in various levels of engagement, ambivalence, and resistance to intervention activities accordingly. Deschesnes *et al* (2003) highlight the importance of systematic and negotiated planning by schools. This would involve schools undertaking in-school health and well-being audits that are built into their routine whole-school planning processes to identify what the school is already doing well, what areas it identifies as gaps, and importantly, what gaps it feels it has the capacity to address in the short, medium or longer term (St. Leger *et al*, 2008 and 2010). The *Healthy Schools* manual provides a good starting point for schools since it provides a broad checklist that schools can use to self-assess their current standing. According to Lahiff (2002, p. 42),

'The model of a Health-promoting School should be seen as a framework which assists schools in assessing their standing and deciding priorities for action'. Clear planning processes have been identified as crucial for the development of effective health-promoting schools (Rowling, 2009). The work of the Schools for Health in Europe (SHE) Network is also a useful resource that provides evaluation tools for schools to assist them with this process and topic-related tools to help with developing policy and practices in responses to specific issues that are identified.

Leadership in schools

Another key issue that emerged in the findings was the concern that school principals voiced in relation to the sense of responsibility that they feel they would have for the success or failure of the *Healthy Schools Programme* should they take a leadership role in the process. This highlights again the need for the wider interdepartmental support of the education and health sectors so that school principals do not have to feel that responsibility rests with them and that it is recognised that what can be achieved depends on good interdepartmental working and how that is mirrored at local level. This also highlights the importance of the role of a *Healthy Schools* Coordinator to ensure that schools are supported in the processes of identifying needs and gaps, and incorporating ways of addressing health and well-being issues into the school setting.

The literature suggests that when senior management/leadership is in place, aspects of implementation become easier in practice (Inchely *et al*, 2006). This is particularly relevant in the Irish context because principals are essentially managers of their own schools and as such are gatekeepers that decide how the school is run on a day-to-day basis.

Interagency working

The findings demonstrate that a key contextual factor that would be required for schools to engage fully in the process of becoming health-promoting is support from the Department of Education and Skills. In addition, the concerns that the schools highlighted in relation to the support that they feel they would require for responding to health needs that have been identified also highlight the need for commitment to the process from the Department of Health. These findings are consistent with the international literature on the development of health-promoting schools, which highlights the necessity of close cross-departmental working and collaboration between education and health at Government level in order to support partnership working at the local level. As stated by the ENHPS (1997, p. 6), *'Partnerships between ministries of health and education have been key elements of success. These have been mirrored at the local level through alliances and commitments from a wide range of agencies, groups and institutions'*. This finding highlights the need for a national health-promoting schools framework in order to support the development of health-promoting schools at local level.

The existence of good interdepartmental working between health and education would go a long way towards addressing some of the partnership working challenges that were evident at the local level in this current study. For example, challenges in relation to developing information sharing protocols, and service access and up-take would perhaps need to be addressed at a Departmental level in the first instance. This would support the development of models of partnership working at the local level.

6.3.3 Process evaluation conclusions

In conclusion, the findings from the process evaluation component of this study have highlighted some of the key contextual factors that either have supported the programme to work well to date and/or would be required for the further development of health-promoting schools in the future. In addition, a number of mechanisms have been identified that evidence what was found to support engagement by schools with *Healthy Schools Programme* intervention activities;

for example, when the schools perceived an issue being relevant for themselves or for the children in the school, they engaged with addressing it when the circumstances facilitated that engagement. The findings in this study not only highlight what contexts or circumstances were found to facilitate engagement, but also those contexts or circumstances that were missing and which would be required for full engagement by schools in the establishment of their schools as health-promoting schools, such as Government support from the Department of Education and Skills, and the Department of Health, together with well-resourced health services at the local level to respond to needs arising.

Together, the findings would suggest that the establishment of health-promoting schools more generally would require that attention be paid to the contextual factors and circumstances that might better support the implementation process. Table 6.1 sets out the key contexts and mechanisms that have been identified in this study that should be considered for the implementation of health-promoting school programmes more generally. The nature of intervention activities that are more likely to support change in the structural conditions of the school, or support for whole-school level change, are also set out.

Table 6.1: Outcome – Development of health-promoting schools

| Contexts – Local, regional, national | Intervention activities of <i>Healthy Schools</i> Coordinator | Mechanisms for engagement of schools (e.g. logic, reasoning, choice) |
|---|---|--|
| <ul style="list-style-type: none"> • Government level interdepartmental support for health-promoting schools (policy-level support). • Concise list for schools that sets out steps in process of establishing a health-promoting school. • School-driven process of organisational change. • ‘School community’ participation in health-related decisions (i.e. staff, parents, children). • Local school–health service partnership working models. • Training resources. • Funding. | <ul style="list-style-type: none"> • Facilitation (e.g. of consultation, school–service links, information exchange). • Support (e.g. for schools to undertake their own health and well-being audit). • Researching (e.g. potential responses to needs identified by schools/required by schools that are in line with best practice). • Providing health information to teachers to assist them in their roles. • Sourcing quality trainers for teachers/staff. • Supporting (e.g. the development of local area school–service partnership working). | <ul style="list-style-type: none"> • Common understanding of health promotion. • Leadership of process within each school. • Staff perception of health and well-being needs of children. • Staff perception of health and well-being needs for themselves. • Motivation and interest of schools in intervention activities. • Staff feel equipped/empowered to transfer learning into practice. |

6.4 Recommendations

Detailed recommendations relating to the possible rolling out of the *Healthy Schools Programme* are now provided. However, further learning from this evaluation can be used to inform more general policy, practice and future training needs when introducing other social programmes within schools or elsewhere.

6.4.1 General recommendations

General Recommendation 1

Prior to the implementation of an intervention or programme, an assessment of the readiness of the school or organisation for the intervention needs to be undertaken. The needs to be assessed with reference to the emerging body of evidence on implementation drivers include leadership, vision, structures and outcomes at varying levels throughout the school or organisation.

General Recommendation 2

At the level of the Department of Education and Skills and the Department of Health, an expansion of the culture of joint-working is essential in order to continue the development of well-being in educational settings.

General Recommendation 3

At a local, community level, ongoing mechanisms for engagement between education and health services need to be developed with the HSE, schools and allied services.

General Recommendation 4

Existing teacher training and continuing practice development for teachers should include information on health promotion, how health services are delivered and how teachers may engage on health issues with pupils and schools.

General Recommendation 5

Proactive local system development for health and well-being in schools needs to be fostered and encouraged within school management boards and with stakeholders to enable schools to address local needs in an appropriate and sustainable way for their school.

In relation to recommendations for the *Healthy Schools Programme* specifically, as a first step in moving forward, it was found that the manual needs to be revised (*see below*) and that the job description of the *Healthy Schools* Coordinator needs to be refocused from one of 'an activities coordinator' to one of 'a facilitator, communicator and capacity-builder for change processes in schools'. A further recommendation below is one of training and capacity-building. It should be noted, however, that during this evaluation CDI recognised the need for further training at a more advanced level and was instrumental in establishing a Masters Degree programme for teachers and others with a focus on health promotion in schools. This arose from the recognition that there was a need to offer capacity-building to schools in relation to strategic planning, understanding of educational disadvantage and its impact on the school environment, and linking school activities within the community context.

6.4.2 Healthy Schools Programme (HSP)-related recommendations

HSP-related Recommendation 1

Pre-programme planning

- It is recommended that prior to completing a Memorandum of Agreement with schools or commencing programme implementation, sufficient time should be allocated to ensuring that all stakeholders understand the contents of a revised manual (see *HSP Related Recommendation 3.1*), as well as their roles and responsibilities. The findings indicate that, as the manual was not completed at the commencement of programme implementation, there was incongruence between the schools' understanding of the programme and the manual content. This led to resistance by the schools towards the programme, which may be minimised with adequate pre-implementation consultations.

HSP-related Recommendation 2

Induction and training

- It is recommended that appropriate training and induction on a revised *Healthy Schools* manual is undertaken by all key stakeholders prior to the implementation of the initiative to a new school. In the current evaluation, principals found the manual difficult to access. Some did not read it at all, while some read it but found it difficult to use in practice. This resulted in some schools developing their own interpretation of what the programme was aiming to achieve and how it should be implemented.

HSP-related Recommendation 2.1

- Where the *Healthy Schools Programme* has already been initiated, it is recommended that training and induction is revisited to examine the core principles, aims and objectives of the programme once the manual has been revised (see *Recommendations 3, 3.1 and 3.2*). This should be completed to ensure that the school community understands that health promotion initiatives are targeting the development of 'supportive contexts', i.e. that the structural conditions of schools are enhanced to make school settings more health-promoting.

HSP-related Recommendation 2.2

- It is recommended that when new staff take on key management roles in the schools during programme implementation, induction training should also be provided by the programme funders to ensure fidelity to the manual/consistency of programme delivery. In the current study, staff turnover of principals occurred in 4 of the 5 schools and new staff indicated they did not receive any induction training to develop their understanding of how the programme was being implemented in their school. To further ensure a shared understanding by all school staff, feedback on the programme could be provided by key implementers of the programme at events such as staff meetings and parent committee meetings.

HSP-related Recommendation 2.3

- It is recommended that upon completion of induction training, a revised Memorandum of Understanding be agreed in consultation with all stakeholders. Here, the roles and responsibilities of all key stakeholders should be set out, complete with realistic expectations and limitations. This will ensure that all stakeholders are aware of how their role is interlinked and perhaps dependent upon other stakeholders fulfilling their roles and responsibilities. This will also ensure that all parties in the process have realistic expectations of the potential and pace of the process of change.

HSP-related Recommendation 3

The *Healthy Schools* manual

- **If this programme is to be rolled out on a national basis, it is recommended that the literature in Chapters 1 and 2 of the *Healthy Schools* manual focuses on health-promoting school models in practice internationally and process findings from evaluations of these practices, including the primary challenges faced by schools in the school change process.** The literature as currently set out in Chapters 1 and 2 of the *Healthy Schools* manual provides a background to the *Healthy Schools Programme* funders and the health needs specific to a local geographical area. While useful in the current local context, it would not be appropriate for a wider audience.

HSP-related Recommendation 3.1

- **It is recommended that a step-by-step toolkit setting out the key components to be undertaken towards the establishment of a health-promoting school be included in the *Healthy Schools* manual.** This would replace the 7 pre-determined outcomes listed in the current manual since these were taken to be prescriptive, rather than offering a framework. This toolkit would assist schools to understand initiative implementing action in a more tangible manner. The willingness to follow the toolkit should be agreed and clarified with all stakeholders at the outset. The steps for schools to follow might include:
 - (1) Create a small *Healthy Schools Programme* Committee to actively lead the process in schools that is inclusive of any or all of the following: the principal, the *Healthy Schools* Coordinator, teaching staff, non-teaching staff, pupils, parents and community members.
 - (2) Conduct an in-school audit (with assistance from a short audit tool supplied in the manual – *see recommendations below*) of the range of health and well-being issues currently being addressed in the school and those that are emerging as issues for the school.
 - (3) Based on the audit, identify the issues/responses that the school wishes to continue, those that they wish to discontinue, those that they would like to do more efficiently and those that are emerging issues in the school that they would like to respond to.
 - (4) Refine the list to arrive at a realistic set of goals/priorities – both in terms of the school's capacity to address the issues and the availability of support from health and other local community services to respond to needs/issues identified. Draw up a strategy for responding to priorities identified.
 - (5) Facilitate staff/wider school community capacity-building to meet schools needs. These may relate to child, teacher, parent health and well-being issues and will require support from local service providers from health and social care.
 - (6) Acknowledge achievements at regular intervals.
 - (7) Monitor and evaluate on an ongoing basis to ensure that actions are relevant to school health and well-being needs.

The *Healthy Schools* Coordinator role would be key here in terms of supporting schools to undertake these tasks.

HSP-related Recommendation 3.2

- It is recommended that the *Healthy Schools* manual is edited to remove the pre-designed/prescribed set of 7 outcomes at the front of the manual. The findings in the process evaluation highlighted how the perception that the programme required responses to targets identified in the programme manual (and not by the school community themselves) led to difficulty in implementation. Instead, and as set out in the previous recommendation, schools should identify health and well-being issues that are relevant for themselves, using a school-led needs assessment or audit tool.
- The central tenet of a health-promoting school is that the population of the school community have control over the identification and realisation of health and well-being needs that are relevant to themselves. It is through this process that individuals can empower themselves. Capacity-building within the school leadership to drive such an approach should be provided.

HSP-related Recommendation 4

School self-evaluation and monitoring

- It is recommended that the identification of health and well-being needs for the school should be done in conjunction with wider school year planning processes. This will ensure that the process of identifying health and well-being needs/priorities is done in a manner that is relevant within the context of the educational planning process. Also, it will ensure that health and well-being needs and priorities are monitored by schools at regular intervals.

HSP-related Recommendation 4.1

- It is recommended that the children in the school participate in the identification of health priorities for the *Healthy Schools Programme* in their school. Many of the schools have a student representative body and this forum could be used to gather input from students.

HSP-related Recommendation 4.2

- It is recommended that parents are consulted on an ongoing basis about health and well-being issues that are relevant for their children. Parental input should be built into the schools' self-evaluation and monitoring processes also. The parents' committee, if established, may provide a useful environment to gather areas of potential programme focus which are perceived as relevant to families and appropriate supports should be put in place to ensure meaningful engagement.

HSP-related Recommendation 4.3

- It is recommended that schools set up *Healthy Schools Programme* Committees that are chaired by a *Healthy Schools* Coordinator (or a nominated teacher in the school) and are inclusive of whole-school community representation. These committees should explore health and well-being issues that have been identified as relevant for the school in the wider planning processes and contribute to the development of actions that can be incorporated into the school in a manner that is conducive to current staff capacity and time-tabling.

HSP-related Recommendation 5

Healthy Schools Coordinator role

- It is suggested that the job description of the *Healthy Schools* Coordinator (or that of the nominated teacher) should clearly state that their role should primarily be targeted at assisting schools to develop the structural conditions (i.e. whole-school approach) for responding to health and well-being issues as they emerge. This will eliminate the perception that the role is concerned with the delivery of 'once-off' interventions directly to children/parents in the schools. This will also minimise the duplication of roles within the school since the *Healthy Schools* Coordinator can be supportive of other roles in the school in terms of assisting the development of structures that will make those roles operate more smoothly. A focus on the development of good structures and systems will help schools to develop sustainable responses to issues as they arise.

HSP-related Recommendation 5.1

- It is recommended that the *Healthy Schools* Coordinator is not 'a member of school staff'. In order for the role of the *Healthy Schools* Coordinator to be the most effective, it should be somewhat removed from the everyday in-school delivery of interventions and instead target their efforts at helping schools to undertake interventions themselves, but more efficiently. The *Healthy Schools* Coordinator role as mediator/facilitator between schools and services would also be key to facilitating this to occur. In order for the Coordinator to have leverage at this level, it is recommended that the post be a senior one. In addition, it is recommended that the Coordinator is not based in the schools on a day-to-day basis, but instead easily accessible by the schools as a support for the school change process.

HSP-related Recommendation 5.2

- The *Healthy Schools* Coordinator role may be more beneficial to a wider number of schools if they were part of a network of health promotion officers who provide support and consultation to the school/school-based *Healthy Schools* 'drivers'. A central office could provide support and training to these regionally based *Healthy Schools* Coordinators, as suggested by Lahiff (2002). The school-based *Healthy Schools* 'driver' would instead be a member of school staff whose role it would be to lead the school's own efforts. More specifically, this staff member could lead the school's *Healthy Schools* Steering Committee and feedback progress to the school. This member of staff would receive some form of remuneration, either financially or collegially, to develop enthusiasm for the role.

HSP-related Recommendation 5.3

- It is recommended that a minimal start-up fund be provided to each school. However, it is also suggested that establishing a health-promoting school should not be solely or primarily funding dependent within schools. Instead, the process should be 'collaboration/support dependent', i.e. support from regional/area-level *Healthy Schools* Coordinators, national-level Health and Education Departments, and local-level health and social care service responses and training supports. This recommendation links back to Recommendation 2.3 above and highlights the importance of clarity of roles and responsibilities for participating stakeholders at the outset.

HSP-related Recommendation 6

Interagency working

- **It is recommended that models of interagency working between schools and health services at the national, regional and local level be explored in more detail.** Good interagency working is central to the success of the establishment of health-promoting schools and greater knowledge of how this could occur in practice would greatly facilitate smoother school change processes. Clear models of working would also assist in identifying service gap, communication or other issues that might exist. The current economic climate in Ireland means that service reconfigurations and cutbacks in both health and education are an ongoing feature of the local area services landscape. Good partnership working may help to focus scarce resources on issues that are most needed.

HSP-related Recommendation 6.1

- **It is recommended that local-level forums for face-to-face communication between health and education at local level be explored further.** The Steering Committee forum established to support and drive the *Healthy Schools Programme* was found to be unique in terms of facilitating local-level health and education communication. One forum that currently exists, and may be explored for developing this level of interagency working between schools and services going forward, are the local-area Principal Networks. The potential for primary care teams driving such structures should also be examined.

HSP-related Recommendation 7

Policy

- **It is recommended that a national framework for health-promoting schools is developed and rolled out.** The international literature on health-promoting schools highlights the importance of top-down Departmental drive behind the health-promoting schools concept if they are to be successful and sustainable in the longer term (St. Ledger *et al*, 2008). The findings from this study detail how schools themselves are less likely to engage fully in the process if they do not feel supported from both their own Department (Education and Skills), and the Department of Health.

HSP-related Recommendation 8

Research

- **It is recommended that an independent evaluation team for this type of school change (or indeed, wider community change) initiative should be involved in the process from the outset.** A key role for the external evaluation team would be in facilitating stakeholders to work towards an agreed and shared understanding of the aims and objectives of the school change initiative. In addition, the evaluation team could assist schools and services to identify realistic, relevant and achievable (process) indicators of success at the outset and assist in focusing the change process towards achieving those targets.
- It is recommended that research be conducted into the school communities' perceptions of child and parents' participation in decision-making about health in schools in low-income communities.
- It is recommended that mechanisms for the greater participation of children and parents in decision-making processes in schools in low-income communities be explored further.

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Appendix 1: Background to Health Promotion

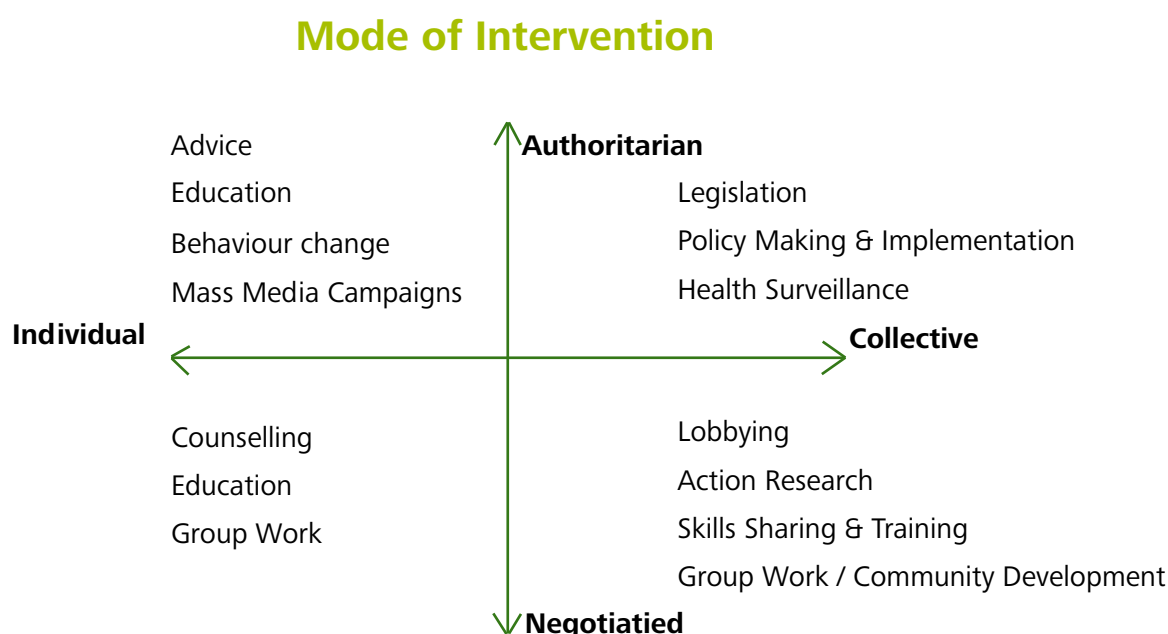
Health promotion

Key to an understanding of the theoretical framework that underpins health-promoting programmes is the trajectory of change in models of health in the context of the education setting. Denman *et al* (2002) discuss three such models, the medical model, the educational model, and the social change model. The 'medical model' of health education (rather than health promotion) was the dominant model prior to the 1980's. Interventions were aimed at influencing personal lifestyles by modifying individual health behaviour. At this time, health education and practice was located mostly in public health and preventative medicine (Beattie, 1991). This model of health intervention was challenged by health education practitioners who were proponents of what was called the 'educational model'. The notion of freedom of choice in health actions was at the core of the educational model of health education. However, this model of health education was later challenged, as its focus on individual behaviour change was felt to be unethical, or 'victim blaming' (Crawford, 1977, cited in Denman *et al*, 2002). Blaming people for making 'poor' lifestyle choices was felt to be reductionist and uninformative in terms of thinking about public health and disease prevention more generally. A shift in focus was called for and this led towards a model of health intervention that focused on social factors, that have an influence on health and well-being, and focus on improving population health (Denman *et al*, 2002).

Health Promotion intervention strategies

Beattie (1991) offers a concise analysis of health promotion strategies. In Beattie's model, two continuums intersect and generate four health promotion paradigms. Figure A.1 illustrates the model.

Figure A.1: Health promotion strategies



Source: Beattie (1991)

The Individual/Authoritative paradigm refers to an authoritative approach where individuals are not given choices for decisions. An example might be a nurse persuading a patient to eat more healthily for the sake of their health. The Individual/Negotiated paradigm refers to strategies that focus on client specific needs usually on a one-to-one basis. The Authoritative/Collective paradigm refers to wider top-down strategies that aim to protect the welfare of the community. Smoking bans in public places are an example of this mode of health promotion intervention. Finally, the Collective/Negotiated paradigm focuses at interventions targeted at a community level. This approach refers to a community development, or collective and inclusive approach where community identifies its own health needs and designs strategies for addressing these.

Ecological model of health promotion

In order to map health-promoting school programmes onto Beattie's (1991) model, we draw on the ecological model of health promotion. An ecological model of health promotion understands health to be determined by a complex interplay of environmental, organisational and personal factors, largely determined outside of 'health' services. It represents a shift of focus from illness towards salutogenesis, individuals to populations, and from a reductionist focus on single health problems, towards a more holistic view, concerned to develop supportive contexts, within which people live their lives (Kickbusch, 2003, cited in Dooris, 2006). It is this idea of 'supportive contexts' that informs the focus of health promotion interventions within this model as the focus of change is upon interpersonal (Micro), organisational (Meso), community (Exo) and policy or wider social contextual (Macro) factors that support and maintain unhealthy behaviours (McLeroy *et al*, 1998). This model assumes that appropriate changes in the social environment will produce changes in individuals, and that the support of individuals in the population is essential for implementing environmental changes (McLeroy *et al*, 1998).

The settings approach

Drawing from the work of the World Health Organization, Denman *et al* (2002) demonstrates that broadly, the concepts and principles of health promotion maintain that it involves the whole population, that it is concerned with the context of people's everyday lives and that the focus should not solely be on people at risk from the specific diseases. Health promotion is also directed at the determinants of health. The shift towards this approach which focuses on people and places rather than diseases helped to pave the way for what is called the 'settings approach'. This refers to the generation of health settings e.g. hospitals, schools, workplaces. The settings approach was further endorsed through the Ottawa Charter by specifying five principal areas of action for health promotion: the building of healthy public policy, the creation of supportive environments, the strengthening of community action, the development of personal skills and the reorientation of health services (WHO, 1986).

Settings are viewed as dynamic complex systems with 'inputs, throughputs, outputs and impacts, characterised by integration, inter-connectedness, inter-relationships and inter-dependencies between different elements' (Dooris, 2006, p. 56). The settings approach refers to a focus on bringing about change within the whole organisation. The process for doing so is in striking a balance between top-down commitment with bottom-up stakeholder engagement to ensure that change programmes are driven by both public health and what Dooris (2006) calls 'core business' agendas.

The health-promoting school

This broader understanding of the concept of health promotion and the growth of the settings approach has had important implications for the scope of the work of schools and the way in which they plan, implement and evaluate their interventions. The definition of the health-promoting school that was developed at the first meeting in 1997 of the European Network of Health-promoting Schools clearly sets out the key focus for change in the process of becoming a more health-promoting school:

The Health-promoting School sets out to create the means for all who live and work within it to take control over and improve their physical and emotional health. It does this through changes in its management structures, its internal and external relationships, the teaching and learning styles it adopts and the methods it uses to establish synergy with its social environment.

(WHO, 1998, in Denman *et al*, 2002, p. 21).

An approach that is confined to the teaching of health education does not make full use of the potential of the setting and is unlikely to impinge on the health of children. Instead, the contribution of the school environment and the influence and knowledge of parents and the wider community must be harnessed, co-ordinated and embedded in positive policies at all levels (Denman *et al*, 2002, p. 18).

A whole-school approach

The *Healthy Schools Programme* manual draws on a 'whole-school approach' to health promotion within schools (Lahiff, 2008). This approach is based on the guiding principles of the Ottawa Charter for Health Promotion (WHO, 1986) and the more recent Vilnius Resolution in 2009.

As defined by the Bristol *Healthy Schools* initiative (2009): 'The whole-school approach aims to develop an ethos and environment that supports learning and promotes the health and well-being of all in the school community. It is an extremely effective, evidence-based school improvement mechanism which brings about and embeds cultural change in schools ... The whole-school approach involves working with children and young people, parents, school staff and the wider school community to provide a solid foundation from which developments and improvement are embedded in a systematic way. These processes contribute to the physical and emotional development of all members of the school community.'

Adopting a whole-school approach to becoming a more health-promoting school means developing coherence between the school's policies and practices (Vilnius Resolution, 2009). Key policy and practice areas include the development of healthy school policies, developing the physical and social environment of the school, making effective links with the home and with health and community services, as well as developing a more health-promoting curriculum. Making changes at this broad 'whole-school' level fosters the development of a more health-promoting school environment that has the capacity to benefit the entire school community. The evidence supporting the whole-school approach has led to the Department of Education advocating that all schools in Ireland adopt this approach in both the curriculum and in their duty of care for children's health (Department of Education, 2007).

Sustainability

Sustainability is a central guiding principle of the *Healthy Schools Programme*. St. Leger (2005, p. 317) states that '*for far too long we have paid little attention to what we mean by sustainability in health promotion*'. Similarly, Shediach-Rizkallah and Bone (1998, as cited in St. Leger, 2005) have argued that there has been a lack of consensus about conceptual and operational definitions of sustainability in respect to health promotion programmes. In terms of evaluation (as well as programme planning) this is an important issue as an agreed understanding of the definition of sustainability is necessary to inform the work of the health promotion programme. Indeed, the sustainability of a programme is key if it is to bring about health gain over long periods, and if the organisation (or school) is to retain what they have invested in the programme (Pluye *et al*, 2004).

The literature explores the concept of sustainability in relation to the different levels of change that interventions might produce. Watzlawick and colleagues (1974, cited in Swerrisen and Crisp, 2004) explore change in terms of first and second order change. The authors highlight that first order change refers to interventions that seek to change individuals so that they are better able to adapt to the existing settings and institutions. Change in the second order, or organisational, community and national policy levels of change seek to produce change in the fundamental rules and practices of social systems. This type of change requires a bottom-up approach, promotes self-determination and partnership working rather than the more top-down approach in first order change.

The types of changes that programmes produce are also set out by Swerrisen and Crisp (2004). The authors categorise these as individual change, organisational change, community change and national policy change. Indeed, when discussing these in the context of sustainability, they state that '*interventions which isolate individual action from its wider social context would be unlikely to produce sustainable health gain in the absence of change to the organisational, community and institutional conditions that make up the social context*' (ibid, p. 127). Health promotion interventions are seeking to produce health gain by effecting sustained change to the social context, rather than individuals per se.

Drawing on the organisational literature, Pluye *et al* (2004) discuss sustainability in relation to the concept of routinisation. In health promotion, the notion of sustainability refers to the continuation of the programme over extended periods of time. According to the authors, continuation is achieved where a programme is defined by the presence of routinised activities, thus becoming part of the way an organisation works on a day to day basis. Health gain is achieved through sustained/routinised programme delivery.

What works in establishing a health-promoting school?

As outlined in the introduction chapter, the literature acknowledges that implementation of a whole-school health-promoting programme is a complex and challenging endeavour. Indeed, the WHO Expert Committee made the point that the health-promoting school concept is more advanced than its actual implementation (WHO, 1997). A number of key components have been identified as being common to the process of establishing health-promoting schools at an international level (St. Leger *et al*, 2008). These include;

- Developing a supportive government/local authority policy for Health-promoting Schools;
- Achieving administrative and senior management support;
- Creating a small group who is actively engaged in leading and co-ordinating actions; including teachers, non teaching staff, students, parents and community members;
- Conducting an audit of current health-promoting actions according to the 'whole-school' pillars of the school;
- Developing a Health-promoting School Charter;
- Ensuring appropriate staff and community partners undertake capacity building; programmes, with opportunities to put learning into practice;
- Allowing time to complete specific goals.

Weare (2000) points out that a first step to any new initiative is to find out where the school is 'situated' in relation to whole-school health and well-being issues and then develop the initiative from that point. This is in order to identify both in-school and school/community services links needs and gaps. This highlights the importance of carrying out a needs analysis/self-evaluation as a point of departure in order to inform the direction that the school would like to take going forward. A senior figure within the school is crucial in terms of driving this process (St. Leger *et al*, 2008). The school social environment, or ethos, is shaped by underlying norms and values that are reflected in school policies and procedures, such as codes of discipline and standards of behaviour and these are critical factors in the type of relationships formed between staff, students, and parents (Rowe *et al*, 2007). Any new initiative should build upon previously established school aims, ethos, policies and procedures. An important factor from the outset is that stakeholders involved in change programmes need to be aware of the responsibilities that the process entails for them (Weare, 2000).

The literature emphasises the need for a tightly co-ordinated and well-planned framework from the outset (Weare, 2000). Indeed, in order to avoid any emphasis on one-time, compartmentalised interventions systematic and negotiated planning should occur within the school (Butterfoss *et al*, 1996; Kegler *et al*, 1998, cited in Deschesnes *et al*, 2003). More recently Stewart-Browne (2006) conducted a WHO-funded systematic review investigating the efficacy of varying forms of the health-promoting schools internationally and found that the most successful programmes addressed health issues by promoting a bottom-up approach to school planning and implementation which is inclusive of the school community. Rowe *et al* (2007) highlight that this generates '*a sense of belonging and connectedness in the school community [that] is not only protective of health but is also identified as contributing to improved academic achievement and engagement*'. Involvement in the process fosters ownership and of the change process among the school community by facilitating empowerment and action competence, principles that are key to the process of becoming a Health-promoting School (Vilnius Resolution, 2009; St. Leger *et al*, 2010).

Clarity in relation to programme aims and objectives is crucial. Lack of definitional clarity on health-promoting schools has been found to result in increased resistance and scepticism about a concept that may not be fully understood. A consequence of this lack of clarity is that schools may have a tendency to retreat to what they can locally control and feel safe with, such as issue-based, small-scale, short-term programmes (Stewart *et al*, 2000, cited in Deschesnes *et al*, 2003; Weare, 2000). Where this occurs, sustainability of programme delivery is compromised.

The literature highlights that becoming a health-promoting school is dependent on the willingness of teachers and school staff to embrace the concept. The building of teacher skills and competencies, or capacity building, in relation to health promotion has been identified as key to successful programme implementation (St. Leger and Nutbeam, 2000). Hoyle *et al* (2008, p. 2) draw from the school improvement literature defining capacity building as '*a series of actions that lead to an increase in the collective power of a group to improve student achievement*'. The authors argue that only when conditions of organisational capacity are met can schools ensure an environment that supports the individual capacity of staff and students to perform at high levels. However they add that capacity building should be recognised as a long-term process that is inter linked with the development of structures, external supports, policies, resources, and professional development (Hoyle *et al*, 2008). Inchely *et al* (2006) highlight the importance of integrating any new initiatives into the ongoing life of the school in order to foster sustainability in the longer-term. Schools can feel overwhelmed by constant reform and so may tend to view the health-promoting school programme as yet another 'add-on', for which staff lose enthusiasm if immediate results are not apparent. Therefore it is important that the HPS is not seen as a discrete activity, but rather as a way of being that permeates all aspects of school life and links to the core objectives of the school.

Health-promoting schools in Ireland - SPHE

In recent years in Ireland health education as a strategy for achieving health has been integrated into the broader concept of health promotion. Ireland was an early adopter of the Health-promoting Schools (HPS) approach (Nic Gabhainn and Kelleher, 1998; Lahiff, 2000, Dooris, 2006), and under the National Health Promotion Strategy (2000-2005) the Health Promotion Policy Unit has been supporting the Department of Education and Skills in implementing the HPS approach through Social, Personal and Health Education (SPHE) all primary schools in Ireland. The aim of SPHE is to provide particular opportunities to foster the personal development, health and well-being of the child and to help them to create and maintain supportive relationships. This is done within the curriculum by supporting children in developing a framework of health-promoting values, attitudes, understanding and skills that will inform their actions and decisions (SPHE Support Service, 2009). In line with the HPS concept, a whole-school approach to the consistent implementation of SPHE is considered essential. The classroom teacher is responsible for the implementation of the SPHE curriculum (in a discrete thirty minute blocks per week) and a school's SPHE coordinator may also help in the process of whole-school planning and coordination to support the effective implementation of SPHE.

While much progress has been made in the implementation of the SPHE curriculum, some challenges remain. Although SPHE is built on the principles and processes of the Health-promoting School framework, efforts to integrate the implementation of SPHE in Ireland more closely with the development of the health-promoting school process have been impeded by a lack of clarity on the theoretical concepts and practical applications involved (Burtenshaw, 2003). Firstly, the term '*healthy schools*' is frequently and interchangeably used with the concept of health-promoting schools. It is imperative to understand the convergence between the principles and practice of 'good' or 'effective' schools and those of 'healthy' or 'health-promoting' schools (Nic Gabhainn and Clerkin, 2004).

In addition, it has been found that children and parents as two key stakeholders are not being fully involved or consulted in the SPHE planning process (Subject Inspection of SPHE Report 2009). Key also is that while SPHE is designed to be rolled out using a whole-school approach, it has been found that once-off/short-term interventions are occurring in schools which are counter-productive to the effective implementation of SPHE (Subject Inspection of SPHE Report, 2009; SPHE Best Practice Guidelines, 2010). These issues are similar to challenges identified in the international literature discussed above.

Evaluating health-promoting school initiatives

As outlined above, health-promoting initiatives are not discrete undertakings but instead are system change interventions. As such, the work of these programmes is located within complex and open health and social systems and therefore so is evaluation. Nutbeam (2006) maintains that there are four key forms of outcomes to be considered when evaluating school based health-promoting initiatives. These include: (1) determinants of health outcomes; (2) health outcomes themselves; (3) health promotion outcomes and finally; (4) health promotion actions. The latter two are concerned with the wider question of how healthy outcomes were achieved where as the former two are concerned with the 'what' outcomes were achieved.

The wide range of evaluative information required to assess health promotion initiatives adequately highlights, the need for careful consideration when deciding upon a methodological approach (Nutbeam, 1996). There is growing literature in recent times exploring the use of more theory based evaluations (e.g. Greenwood, 1994; Layder, 1998; Tilley, 2000; Coote *et al*, 2004; Rogers, 2007). Realistic evaluation in particular provides a useful framework in that it acknowledges specifically the relationships between individuals and their environment, exploring the impact of context upon mechanisms and how this impacts the way in which a programme evolves (Pawson and Tilley, 1997). As Dooris (2006, p. 62) states: *'It presents a vision and strategic goals, but also sets out context in terms of needs and assets, a rationale for the chosen range of 'interventions', expected consequences, and performance indicators. In this way, it explores both process and outcomes, tracking the stages that make up overall programmes, mapping the links between the programmes that comprise a larger initiative, and enabling a more sophisticated and utility focused understanding not only of whether something works, but also of why and how it works or does not work in particular situations.' In its simplest form, the realistic evaluation examines 'what works for whom in what context?'* (Pawson and Tilley, 2004).

As health promotion initiatives are evolving processes, (e.g. each school decides on their own outcomes and goals as well as health directions), it is widely acknowledged that the sole use of reductionist positivist approaches using only quantitative methods do not prove sensitive enough to system changes (Nutbeam, 2006). Instead, realistic evaluation provides a means of considering how specific aspects of a programme work or don't work. However, whilst much evidence suggests that theory based evaluations offer more insight into the workings of a programme over purely positivist approaches, the usefulness of such a dichotomy is questionable. Stewart *et al* (2006) for example highlights the need for quantitative measurements of health outcomes in order to provide a measurable indicator of the impact of such programmes on children's health. Other school-based health promotion evaluations support the use of mixed methods, with Lee *et al* (2005) advocating the triangulation of various data collection methods to ensure a comprehensive investigation of all elements of such programmes.

Studies which include quantitative methodology in the evaluation of health promotion initiatives, often advocate the use of quasi-experimental approaches in place of more rigid randomised controlled trials (RCTs) (e.g. Lee *et al*, 2005; Stewart-Brown, 2006). While RCTs are often noted as the gold standard for measuring differences among samples, given the complex nature of health promotion programmes, an RCT may actually not prove an effective methodological approach (Baum, 1995). Indeed one WHO paper highlights that *'in the field of health promotion, RCTs are inappropriate, misleading and unnecessarily expensive'* (Stewart-Brown, 2006). The quasi-experimental prospective design provides a clear and reliable indicator of health change for the individual child whilst proving more cost effective and flexible when compared to RCT design (Lee *et al*, 2005). Importantly however, Chambers *et al* (2006) emphasise that when using quasi-experimental approaches, the inclusion of matched controls are essential to provide an adequate measure of change. Indeed, evaluation studies with no comparison groups are often excluded in synthesis of the literature on health promotion evaluation studies.

In the field of evaluating health promotion initiatives there is growing consensus that a mixed methods approach provides a more comprehensive assessment of the efficacy of such initiatives (e.g. Nutbeam, 1999; Raphael, 2000). By using both qualitative data examining what worked in what context and why alongside quantitative impact data collected over time, an evaluation can maintain focus both on improving the quality of the programme and programme design as well as ascertaining the outcomes and effectiveness of the programme as it was implemented (Wimbush and Watson, 2000). Dooris (2006, p. 58), for example, highlights the use of qualitative and quantitative methods as this approach *'allows the effectiveness of programmes to be captured without losing their intrinsic richness and diversity, and for an 'evidence into practice into evidence' cycle ... There has also been growing recognition that for evidence to be useful, it should demonstrate not only what works, but how and under what conditions it works. In addressing these questions, commentators have emphasized the importance of underpinning theory'*. In Stewart-Brown's (2006) review of the evidence available for school based health promotion programmes, it was also concluded that in such mixed method approaches, the quantitative outcome data should complement research which focuses on the quality of programme implementation.

Summarising, in line with the health-promoting evaluation literature, the current study maintains the view that a longitudinal, mixed methods approach to the HS evaluation will deliver the most useable findings for the programme developers. Using a range of data sources, the overall findings of the report will investigate how and to what extent the *HS programme* is positive for the child, the family, the school, and the local community.

Appendix 2: Primary School Governance and Education Sector Cutbacks

Primary School governance

The Department of Education and Skills administers all aspects of education policy including curricula, syllabi and national examinations. All State primary schools in Ireland are inspected by the Department of Education and Skills on a regular basis in accordance with the Education Act (1998). The vast majority of these schools are privately owned and supported by the different churches. The Department pays a direct capitation grant per student to each school to pay for the day-to-day running of the school and for teaching materials and resources, which the schools must manage and stay within budget. Enhanced capitation grants are paid for children with special educational needs who attend special classes in schools. Under the Education Act (1998), the patron is obliged to appoint a board of management in consultation with national associations of parents, school management organisations, teacher representatives and the Minister for Education and Skills. The board of management consists of a principal, parents, teachers and other nominees. The board's main function is to work in partnership, to manage the school on behalf of the patron and for the benefit of the students and to provide an appropriate education for each student at the school.

The Education Act and Delivering Equality of Opportunity in Schools (DEIS)

The Education Act (1998) states that '*A recognised school shall promote the moral, spiritual, social and personal development of students and provide health education for them, in consultation with their parents, having regard to the characteristic spirit of the school*'. Children's opportunities for health, however, are strongly influenced by the social and economic conditions in which they live. Access to and participation in the education system are prerequisites to achieving the health benefits that education can provide and social and economic conditions strongly influence children's opportunities to achieve these health benefits. In 2003 the Delivering Equality of Opportunity in Schools (DEIS) action plan was devised, which provides for a standardised system for identifying, and regularly reviewing, levels of educational disadvantage and a new integrated School Support Programme (SSP) which will bring together, and build upon, existing interventions for schools/communities particularly with concentrated levels of educational disadvantage. Since 2005, no less than 8 separate schemes to tackle educational disadvantage have been put in place with some schools benefiting from just one or two of these and others benefiting from more. Giving Children an Even Break (incorporating the primary Disadvantaged Areas Scheme and Breaking the Cycle), the Support Teacher Project, Literacy and Numeracy Scheme (aspects of the Early Literacy Initiative include the Reading Recovery initiative and Demonstration Library Project), the Home School Community Liaison Scheme, and the School Completion Programme.

Education and health sectors – Current context

The Irish economy has experienced an extremely sharp downturn since its peak in 2007 (Honohan, 2009). Facing its biggest economic crisis in history, radical reform is occurring across various sectors, including the Education sector. The Public Service Agreement (2010 or Croke Park Agreement) is a key document outlining the broader strategic response to the current economic crisis as reflected in the National Recovery Plan 2011-2014, the EU-IMF Programme of Financial Support for Ireland and the new Programme for Government 2011. The Education sector is responding to the challenges it faces with incentivised retirement, redeployment, capping of particular jobs and increasing teacher's hours. How the primary schools are responding to the cutbacks helps set the context in which the HS programme is rolled out.

Within the Public Service Agreement career break schemes and incentivised early retirement are promoted. There is also a general moratorium on recruitment and promotion on most of the public service. These measures aim to reduce public service numbers to 266,700, a 53,000 reduction, by the end of 2015. In terms of retirement, the agreement states that anyone retiring up until February 2010 will receive their retirement lump sum based on the 'uncut' salary pre 2010 budget cuts. These measures may result in an increased rate of staff turnover and the loss of a lot of highly experienced staff who retire in order to secure their pension. A number of staffing changes are in progress in the Education sector. The Education sector is responding to the challenges it faces with employment targets by redeploying teachers as of the 2011/12 school year. Teachers in resource, support and coordination roles are being redeployed to regular teaching positions, which means that 1,100 fewer teachers are being recruited in September 2011 and a further 270 less will be recruited in September 2012. This is in addition to the withdrawal of Resource Teachers and Visiting Teachers for Travellers posts, removal of Rural Co-ordinator Teachers posts and a phased reduction in the number of Language Support Teachers and the Budget (2011) cap on the number of Special Needs Assistants (SNAs) and the number of psychologists employed by NEPS at the current level.

The agreement also states that with effect from the start of the 2010/11 school year, an additional hour per week (a total of 33 hours in the year) would be made available to facilitate non class/tuition time activities such as school planning and policy development and parent teacher meetings, which previously resulted in a loss of tuition time for the children. This means teaching time for students will be significantly increased as a wide range of school activities such as planning, training and meetings, including parent teacher meetings, are now be held outside of normal teaching hours thus eliminating the need for school closures and enabling parents to attend meetings without the inconvenience and cost of having to take time off from work.

The Health sector is also reconfiguring a range of their services in response to the cutbacks, which may also impact on the Education sector in terms of how schools make referrals. One of the main objectives of this reconfiguration is to expand the range of services that can be easily accessed by patients and clients in their own communities so as to avoid them having to attend hospital. The provision of primary care teams and social care networks in the community are measures being taken by the Department of Health that will give people direct access to integrated multi-disciplinary teams. The development and implementation of care/disease/referral pathways, processes and protocols will also help deliver better quality care, with easier access at lower unit costs.

The wider context of re-configurations and reduced service delivery in both health and education have implications for the implementation of initiatives like *Healthy Schools* in the local context.

Appendix 3: Additional Impact Results

Introduction

This chapter provides information on recruitment numbers of children in the study, absentee rates within the intervention and comparison schools and coverage given the size of the sample frame. Follow-up rates within the intervention and comparison schools at Baseline, Year 1 and Year 2 follow-ups are also detailed. Finally results are provided on the quality assurance audit of the Year 2 follow-ups database (see Baseline and Year 1 Reports for previous quality assurance audits).

School absenteeism

When considering recruitment rates and coverage within schools, the rates of absenteeism among students attending those school needs to be considered as this rate will affect the true size of the sample frame from which the children can be recruited.

The National Educational Welfare Board's (NEWB) report of the *Analysis of School Attendance Data in Primary and Post-Primary Schools, 2003/4 to 2005/06* (Mac Aogáin, 2008 – see www.newb.ie/downloads/pdf/school_attendance_report.pdf) provides national data on absenteeism from school. According to this report, the mean absentee rate by pupils attending DEIS Band 1 urban primary schools is 9.37% (with a standard deviation of 3.18) and the mean proportion of pupils absent for 20 days or more was 24.38% (sd 9.03). This is considerably higher than the 11% reported for primary schools in general (see previous reports for further information on this report).

Results on absentee rates were available for baseline, Year 1 and Year 2 follow ups for some but not all schools in the evaluation and are reported below in Table 3.1. Overall, reductions in absenteeism rates were found in all of these schools over the three years. The table shows that three of the five absentee rates within the intervention schools (Code 2, 4 and 5) and both comparison schools were similar to national rates for DEIS Band 1 urban schools at baseline. Intervention school Code 1 was closer to the National average for Primary schools, while intervention school Code 3 was more than a standard deviation above the DEIS Band 1 average at baseline. By Year 2 follow-up, Code 2, 3 and 4 schools' absenteeism rate decreased, despite Code 4 schools' initial hike at Year 1 follow-up, bringing them closer to the national rates for all primary schools. There was no data available for intervention school Code 1 and 5 at Year 2 follow-up, but the absentee rate by Year 1 follow-up decreased from baseline, bringing the rate closer to non-DEIS Band 1 schools. With data only available for comparison school Code 2, by Year 2 follow-up the absenteeism rate for this school decreased, bringing it closer to the national average for primary schools

Table A3.1: Annual absentee rates at National, DEIS Band 1, intervention and comparison school levels

| Absentee rates Total enrolled (T) Cohort recruited (C) | | Intervention | | | | | Mean | | | Comparison | | Mean absentee rate % | National average DEIS Band 1 % | National average primary schools % |
|--|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------------|--|--|
| | | school code 1 % | school code 2 % | school code 3 % | school code 4 % | school code 5 % | absentee rate % | absentee rate % | absentee rate % | school code 1 % | school code 2 % | | | |
| Baseline | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| Proportion absent per day | T | 6.28 | 9.90 | 13.00 | 9.54 | 8.69 | 9.68 | 9.14 | 8.26 | 10.02 | 8.26 | 9.37 (sd 3.18) | 9.37 (sd 3.18) | 6.00 |
| | C | 5.95 | 6.93 | 8.29 | 8.47 | 7.81 | 7.49 | 6.91 | 7.91 | 5.91 | 7.91 | 9.37 (sd 3.18) | 9.37 (sd 3.18) | 6.00 |
| Proportion absent for 20 days or more | T | 22.81 | 22.81 | 17.54 | 14.04 | Not Provided | 19.3 | 23.49 | 24.88 | 22.10 | 24.88 | 23.49 | 24.38 | 11.00 |
| | C | 20.8 | 19.8 | 27.0 | 24.6 | 25.4 | 23.52 | 20.95 | 26.3 | 15.6 | 26.3 | 20.95 | 24.38 | 11.00 |
| Year 1 | | | | | | | | | | | | | | |
| Proportion absent per day | T | 6.79 | 7.74 | 9.60 | 10.43 | 7.30 | 8.37 | Not provided | 8.26 | Not provided | 8.26 | Not provided | 9.37 (sd 3.18) | 6.00 |
| | C | 4.69 | 6.34 | 7.44 | 9.27 | 6.19 | 6.79 | 7.08 | 7.56 | 6.60 | 7.56 | 7.08 | 9.37 (sd 3.18) | 6.00 |
| Proportion absent for 20 days or more | T | 21.05 | 16.84 | 14.04 | 18.60 | Not provided | 17.63 | Not provided | 14.15 | Not provided | 14.15 | Not provided | 24.38 | 11.00 |
| | C | 9.8 | 17.9 | 23.7 | 35.0 | 15.2 | 20.32 | 15.25 | 13.5 | 17.0 | 13.5 | 15.25 | 24.38 | 11.00 |
| Year 2 | | | | | | | | | | | | | | |
| Proportion absent per day | T | Not provided | 7.22 | 8.30 | 7.70 | Not provided | Not provided | Not provided | 6.54 | Not provided | 6.54 | Not provided | 9.37 (sd 3.18) | 6.00 |
| | C | 4.87 | 6.63 | 6.59 | 6.63 | 7.38 | 6.42 | 6.52 | 7.66 | 5.38 | 7.66 | 6.52 | 9.37 (sd 3.18) | 6.00 |
| Proportion absent for 20 days or more | T | Not provided | 19.00 | 25.00 | 20.76 | Not provided | Not provided | Not provided | 18.1 | Not provided | 18.1 | Not provided | 24.38 | 11.00 |
| | C | 11.4 | 19.5 | 15.8 | 12.1 | 15.9 | 14.94 | 17.4 | 23.7 | 11.1 | 23.7 | 17.4 | 24.38 | 11.00 |

Recruitment and coverage

When considering recruitment rates and coverage within the five intervention and two comparison schools, the rates of absenteeism among students attending these schools need to be considered as this rate will affect the true size of the sample frame from which the children can be recruited. Details on the registered number of pupils from Junior infant class to 5th Class for each of the 5 schools are provided in Table 3.2.

Table A3.2: Numbers of pupils per school, estimated numbers absent and resulting estimated sample frame

| School code | Number of pupils from Junior Infants to 2nd and/or 3rd to 5th Class | Estimated number missing on an average day | Estimated sample frame |
|----------------------------|---|--|------------------------|
| Intervention school | | | |
| 3 | 165 | 22 | 143 |
| 4 | 121 | 12 | 109 |
| 5 | 185 | 16 | 169 |
| 1 | 358 | 23 | 335 |
| 2 | 219 | 22 | 197 |
| Total | 1048 | 95 | 953 |
| Comparison school | | | |
| 1 | 108 | 11 | 97 |
| 2 | 171 | 14 | 157 |
| Total | 279 | 25 | 254 |
| Overall Total | 1327 | 120 | 1,207 |

Each school's absentee rate was applied to the school population of Junior infants to 5th Class children inclusive. Details of the estimated size of the sample frame are also provided in Table 3.2. This shows the sample frame within the 5 intervention and 2 comparison schools from which children could be recruited for the study. Table 3.3 shows the total number of signed consent forms returned by children of intervention (n=467) and comparison (n=137) schools at the beginning of the evaluation, which is 49% and 54% respectively of the sample frames. The sample frame of the entire cohort of children in the evaluation consisted of 1,207 children available to consent and 604 (50%) of the children consented to participate in the evaluation.

Table A3.3: Recruitment numbers of those children who returned signed consent forms from intervention and comparison schools

| | Parents recruited for Proxy Surveys | Children recruited for Self Report Surveys | Total recruited | Sample frame |
|----------------------------|-------------------------------------|--|-----------------|---------------|
| Intervention school | 116* | 351 | 467 49% | 953 100% |
| Comparison schools | 30 | 107 | 137 54% | 254 100% |
| Total | 146 | 458 | 604 50% | 1,207 100% |

* Actual total = 115. One parent agreed for child to take part in the BMI and validation Self Report Survey, but opted out of the Parent Proxy Survey.

Gender and age of children recruited

The gender of all of the children recruited both within the intervention and comparison schools is provided in Table 3.4. Within the class groups and across the overall sample, there is a close distribution between the number of boys and girls (49.3% boys and 50.7% girls).

Table A3.4: Gender of children in intervention and comparison schools at recruitment

| Class groups | Junior and Senior infants | | 1st and 2nd Class | | 3rd, 4th and 5th Class | | Total |
|------------------------------------|---------------------------|-------|-------------------|-------|------------------------|-------|-------|
| Intervention (I) Comparison (C) | I | C | I | C | I | C | |
| Boys | 43.1% | 43.3% | 52% | 43.2% | 53% | 58.6% | 49.3% |
| | 50 | 13 | 52 | 16 | 133 | 34 | 298 |
| Girls | 56.9% | 56.7% | 48% | 56.8% | 47% | 51.4% | 50.7% |
| | 66 | 17 | 48 | 21 | 118 | 36 | 306 |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| | 116 | 30 | 100 | 37 | 251 | 70 | 604 |

Table A3.5: Age of children in intervention and comparison schools at recruitment

| Class groups | Age | Intervention | Comparison | Total |
|---------------------------|--------------|--------------|-------------|-------------|
| Junior and Senior infants | 4 | 1.7% 2 | 3.3% 1 | 2.1% 3 |
| | 5 | 53.4% 62 | 56.7% 17 | 54.1% 79 |
| | 6 | 38.8% 45 | 33.3% 10 | 37.7% 55 |
| | 7 | 3.4% 4 | 0% 0 | 2.7% 4 |
| | Missing | 2.6% 3 | 6.6% 2 | 3.5% 5 |
| | Total | 100% 116 | 100% 30 | 100% 146 |
| 1st and 2nd Class | 6 | 9% 9 | 13.5% 5 | 10.2% 14 |
| | 7 | 54% 54 | 54.1% 20 | 54.7% 74 |
| | 8 | 35% 35 | 24.3% 9 | 32.1% 44 |
| | 9 | 0% 0 | 8.1% 3 | 2.2% 3 |
| | Missing | 2% 2 | 0% 0 | 1.5% 2 |
| | Total | 100% 100 | 100% 37 | 100% 137 |
| 3rd, 4th and 5th Class | 8 | 7.2% 18 | 8.6% 6 | 7.5% 24 |
| | 9 | 31.1% 78 | 32.9% 23 | 64% 101 |
| | 10 | 33.1% 83 | 22.9% 16 | 56% 99 |
| | 11 | 23.1% 58 | 21.4% 15 | 44.5% 73 |
| | 12 | 4% 10 | 8.6% 6 | 21.6% 16 |
| | Missing | 1.6% 4 | 5.7% 4 | 7.3% 8 |
| | Total | 100% 251 | 100% 70 | 100% 321 |
| Total recruited | | | | 604 |

Follow-up rates

The rate of parents who were followed up for parent proxy reports and the rate of children followed up for child self reports from Intervention and Comparison schools at Baseline, Year 1 and Year 2 follow-up points can be seen in Tables 3.6 and 3.7 respectively. The follow-up rate for child self reports is high ranging from 94.3% to 99.8% over the 3 time points. The follow-up rate for parent proxy reports, while lower than that for the child self reports, ranging between 83.6% and 87% over the 3 time points, is high given an over the phone survey method was implemented in this part of the study. A 100% follow-up rate was not obtained due to children being absent from school and parents being unreachable by phone (see Section 3.5 to see for which of these children and parents that were unreachable could missing values be computed for their non-responses to the survey/assessment).

Comparing follow-up and participation rates, tables show that the participation rates of children in the self report surveys (68.6%, 92.4%, 93%) and of parents in the proxy reports (76.7%, 78.8%, 84.9%) were lower than the follow-up rates achieved at each time point. This can be explained by the following: (a) children not wanting to take part in the survey at that time point, (b) children leaving and moving to another school before completion, (c) children graduating from school after completing, (d) parents not providing written consent to be contacted for the proxy survey or (e) parent withdrawing consent for them and their child to take part in the study.

Table A3.6: Number of parents participating in the PROXY REPORT SURVEYS and follow-up rate in intervention and comparison schools at baseline, Year 1 and Year 2 follow-up

| | Participated | Child did not want to participate that year | Child left the school | Parent did not provide written consent for Proxy Survey | Parent withdrew consent for them and their child | Follow-up rate | Unreachable | Total |
|----------------------|----------------------------|---|--------------------------|---|--|----------------------------|---------------------------|---------------------------|
| Baseline | | | | | | | | |
| Intervention schools | 100 | 0 | 0 | 1 | 0 | 101 | 15 | 116 79.45% |
| Comparison schools | 24 | 0 | 1 | 0 | 1 | 26 | 4 | 30 20.55% |
| Total | 124 84.9% | 0 0% | 1 0.7% | 1 0.7% | 1 0.7% | 127 87% | 19 13% | 146 100% |
| Year 1 | | | | | | | | |
| Intervention schools | 93 | 0 | 4 | 1 | 0 | 98 | 18 | 116 79.45% |
| Comparison schools | 22 | 0 | 1 | 0 | 1 | 24 | 6 | 30 20.55% |
| Total | 115 78.8% | 0 0% | 5 3.4% | 1 0.7% | 1 0.7% | 122 83.6% | 24 16.4% | 146 100% |
| Year 2 | | | | | | | | |
| Intervention schools | 87 | 0 | 8 | 1 | 0 | 96 | 20 | 116 79.45% |
| Comparison schools | 25 | 0 | 3 | 0 | 1 | 29 | 1 | 30 20.55% |
| Total | 112 76.7% | 0 0% | 11 7.5% | 1 0.7% | 1 0.7% | 125 85.6% | 21 14.4% | 146 100% |

Table A3.7: Number of children participating in the SELF REPORT SURVEYS and follow-up rate in intervention and comparison schools at baseline, Year 1 and Year 2 follow-up

| | Participated | Child did not want to participate that year | Child left the school | Child graduated from the school | Parent withdrew consent for them and their child | Follow-up rate | Unreachable | Total |
|----------------------|----------------------------|---|--------------------------|---------------------------------|--|----------------------------|--------------------------|---------------------------|
| Baseline | | | | | | | | |
| Intervention schools | 330 | 2 | 0 | 0 | 0 | 332 | 19 | 351 76.64% |
| Comparison schools | 96 | 1 | 1 | 0 | 2 | 100 | 7 | 107 23.36% |
| Total | 426 93% | 3 0.7% | 1 0.2% | 0 0% | 2 0.4% | 432 94.3% | 26 5.7% | 458 100% |
| Year 1 | | | | | | | | |
| Intervention schools | 325 | 2 | 20 | 0 | 0 | 347 | 4 | 351 76.64% |
| Comparison schools | 98 | 0 | 6 | 0 | 2 | 106 | 1 | 107 23.36% |
| Total | 423 92.4% | 2 0.4% | 26 5.7% | 0 0% | 2 0.4% | 453 98.9% | 5 1.1% | 458 100% |
| Year 2 | | | | | | | | |
| Intervention schools | 234 | 2 | 31 | 83 | 0 | 350 | 1 | 351 76.64% |
| Comparison schools | 80 | 0 | 6 | 19 | 2 | 107 | 0 | 107 23.36% |
| Total | 314 68.6% | 2 0.4% | 37 8.1% | 102 22.3% | 2 0.4% | 457 99.8% | 1 0.2% | 458 100% |

Missing Value computations: The Last Observation Carried Forward Method

As can be seen from the tables the follow-up rate includes all those cases who participated plus (a) – (e) below. It also shows that 13%, 14.4% and 16.4% of the parent proxy reporters were lost to follow-up and 0.2%, 1.1% and 5.7% of the child self reporters were lost to follow-up over the 3 time points. These cases were Unreachable due to (f) and (g) below. There was also some instances where children and parents took part in the assessments on the day but provided missing values due to (h) – (j) below. For the purposes of this study, missing values will be computed where possible for cases where at the time of assessment (f) – (j) occur. If at the time of assessment (a) – (e) occur, missing values will not be computed as it is not the intention of this project to follow up on these cases.

- (a) child left the school;
- (b) child graduated from school;
- (c) child's parents withdrew consent for them and their child;
- (d) child's parents never provided written consent to take part in the parent proxy survey;
- (e) child was of a particular age where questions were not applicable to them;
- (f) child was absent;
- (g) child did not wish to take part on that particular day;
- (h) child skipped questions;
- (i) child did not know how to respond;
- (j) child spoiled the question.

In order to conduct an intention-to-treat (ITT) analysis on the quantitative outcome data, Last Observation Carried Forward (LOCF) and Next Observation Carried Back (NOCB) were used to compute missing values, thus including those lost to follow-up. In an ITT analysis, missing values from non-responses or non measurements can be computed using a Last Observation Carried Forward (LOCF) method (see Bywater *et al*, 2009). If missing data cannot be filled in from the LOCF then, where possible, Next Observation Carried Back (NOCB) can be used (Cartwright-Hatton, McNally and Field, 2011). This method treats the last observation prior to that non-response as the observation from that most recent visit, and, if a last observation is not available, it treats the next observation post non-response as the observation from that most recent visit. Thus, those lost to follow-up can be included in the analysis.

Although the LOCF analysis has a long history of application, it may create biases in inference. Treating carried-forward data as observed data is a conservative method as it assumes no change since the last available response or measurement for those lost to follow-up. Despite having information on a participant's absenteeism, the analysis is assuming that if the participant were to take part, their responses would not change over time.

The methods, however, could not be applied to all participants who were unreachable as some of them never provided responses or measurements throughout the study and there must be at least one response or measurement from the participant over the 3 time points for missing values to be computed. Tables 3.8 and 3.9 show the number of unreachable participants whose missing values could be computed. When these figures are added to the number of parents and children who participated each year it gives the Total sample N on which statistical analysis can be conducted.

Table A3.8: Number of PARENT PROXY REPORT SURVEYS in intervention and comparison schools at baseline, Year 1 and Year 2 follow-up that were statistically analysed

| | Child did not want to participate that year | Unreachable | Unreachable | Participated | Total number of cases N that will be statistically analysed |
|---|---|-------------|-------------|--------------|---|
| Could missing values be computed for these cases? | No (but * is an exception) | No | Yes | n/a | n/a |
| Baseline | | | | | |
| Intervention schools | 0 | 7 | 8 | 100 | 108¹ |
| Comparison schools | 0 | 1 | 3 | 24 | 27² |
| Total | 0 | 8 | 11 | 124 | 135 |
| Year 1 | | | | | |
| Intervention schools | 0 | 5 | 13 | 93 | 106³ |
| Comparison schools | 0 | 1 | 5 | 22 | 27⁴ |
| Total | 0 | 6 | 18 | 115 | 133 |
| Year 2 | | | | | |
| Intervention schools | 0 | 4 | 16 | 87 | 103⁵ |
| Comparison schools | 0 | 1 | 0 | 25 | 25⁶ |
| Total | 0 | 5 | 16 | 112 | 128 |

¹ A BMI measurement is available for 7 extra children

² A BMI measurement is available for 2 extra children

³ A BMI measurement is available for 6 extra children

⁴ A BMI measurement is available for 1 extra child

⁵ A BMI measurement is available for 5 extra children

⁶ A BMI measurement is available for 1 extra child

Table A3.9: Number of CHILD SELF REPORT SURVEYS in intervention and comparison schools at baseline, Year 1 and Year 2 follow-up that were statistically analysed

| | Child did not want to participate that year | Unreachable | Unreachable | Participated | Total number of cases N that will be statistically analysed |
|---|---|-------------|-------------|--------------|---|
| Could missing values be computed for these cases? | No (but * is an exception) | No | Yes | n/a | n/a |
| Baseline | | | | | |
| Intervention schools | 2 | 4 | 15 | 330 | 345¹ |
| Comparison schools | 1* | 0 | 7 | 96 | 104 |
| Total | 3 | 4 | 22 | 426 | 449 |
| Year 1 | | | | | |
| Intervention schools | 2 | 0 | 4 | 325 | 329 |
| Comparison schools | 0 | 0 | 1 | 98 | 99 |
| Total | 2 | 0 | 5 | 423 | 428 |
| Year 2 | | | | | |
| Intervention schools | 2 | 0 | 1 | 234 | 235 |
| Comparison schools | 0 | 0 | 0 | 80 | 80 |
| Total | 2 | 0 | 1 | 314 | 315 |

¹ A BMI measurement is available for 3 extra children

Data audit and quality control of results

Prior to the analysis of any outcome data from the Year 2 evaluation, a comprehensive audit of the quality of the data entry was conducted. Both the parent database and self-report databases were audited for data entry accuracy and quality.

A printout of a random sample of 16 cases from the self-report and 12 cases from the parent databases entered onto the computer were checked against the original paper file.

The self-report audit revealed 4 errors in total. Of these, 4 were real errors among the 4,032 data points, although 2 of these were because a child replied 'stayed with a minder after school' and named the minder as their dad. This is not what was meant by 'stayed with a minder' and thus needed to be changed. These coding errors were rectified and where there were systemic problems in the way a question was entered into the database, the problem was corrected for the entire database. The true error rate was 0.10% or 4 errors out of 4,032 data points.

The parent audit had a total of 14 errors, with 2 of these being coding errors and 12 real errors. Errors found included 1 error on interview date, 2 errors where 'don't know' was entered instead of often, 9 errors were generated by 1 section where the data entered missed reading a question and subsequently entered 9 answers for the next question. Another 2 errors were identified in 2 questions where 'n/a' should have been entered instead of 'Never' to distinguish that nothing was ticked for the questions 'How often do you worry about something else' and 'Do you do something else during school breaks'. As before the coding errors were easily corrected and were subsequently checked and changed where necessary for the entire database. The true error rate was 0.43% or 12 errors per 2,760 data points.

The new self-report had a total of 8 errors; all were real errors. 5 errors were caused because Section B28 was only to be filled in if a bullying problem was identified in Section B27. When this section was left blank in the questionnaire, it was subsequently filled in as 'No' instead of 'n/a'. As before, the coding errors were easily corrected and were subsequently checked and changed where necessary for the entire database. The true error rate was 0.31% or 8 errors per 2,580 data points.

Errors encountered during the audit process were subsequently cleaned/corrected.

Appendix 4: Processes and Outputs of the *Healthy Schools* Initiative

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|--|------------------------------|--|---|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| 1. Children develop age-appropriate physical development and 4. Children are physically fit | Skip Hop | Skipping Programme over a 3 day period | <p>All children participated.</p> <p>Six trained teachers facilitated skipping programme.</p> <p>The Healthy Schools Coordinator (HSC) designed, distributed and collected child friendly questionnaires for feedback at end of programme.</p> | 3/5 | | |
| | Skipping during break times | Skipping during break times was encouraged, once a week a skipping session was facilitated by the trained HSC and skipping clubs were formed | <p>Children from 1st, 3rd and 4th Class participated from 2 schools and out of all the children that were targeted in the 30 other schools a random group of 105 participated.</p> <p>HSC collaborated with teachers and principals regarding who to target. Teachers brought class to the PE hall. HSC facilitated one skipping session per week during break.</p> | | 5/5 | 2/5 |
| | Skipping After-school Club | 4-week skipping club to target overweight/inactive children who prefer less competitive activities | <p>1st and 2nd Class children targeted and participated in one school. A group of 20 children from different classes were targeted and participated in another school.</p> <p>HSC collaborated with teachers and principals regarding who to target. Training delivered by HSC.</p> | | 2/5 | |
| | Monthly skipping competition | A monthly skipping competition to target overweight/inactive children who prefer less competitive activities | <p>All children were involved.</p> <p>HSC collaborated with teachers and principals. Competition coordinated by HSC.</p> | 2/5 | | |
| | Skipathon | One day Skipathon event | <p>All children were involved.</p> <p>HSC collaborated with teachers, distributed skipathon sponsor cards, planned timetables, prepared rhymes/games, shopped for prizes, invited parents and informed children and facilitated the one day event.</p> | | 1/5 | |
| | Yoga | 8 week yoga sessions | <p>Junior Infants were involved.</p> <p>HSC delivered the programme and designed, distributed and collected child friendly questionnaires for feedback at end of programme.</p> | 1/5 | | |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|----------|--|--|--|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| | Walk on Wednesday (W.O.W.) campaign and Walk to School Programme | Children and parents were encouraged to walk to school every Wednesday as part of a healthy lifestyle. Talks were given to children on the importance of walking to school. Prizes were given at the end of the term for children who walked the most and class who walked the most. The Walk to School Programme that ran in a couple of schools, however, was a short term intervention. | All children were involved. HSCs did posters and 'walking charts' for all classes and distributed them to all teachers. Teachers filled out the charts every Wednesday. | 3/5 | 1/5 | 4/5 |
| | Basketball After-school Club | After-school Basketball Club ran once a week | One class per month was selected (e.g. 1st Classes) Teachers distributed and collected letters. Training delivered by professional basketball coach and assisted by HSC | | 1/5 | 1/5 |
| | Basketball Tournament | A half day Easter Basketball Tournament was organised where the winning team won trophy and certificate. | All 2nd Classes were involved. HSC organised the event (teams, timetable, matches, trophy, certificate and Easter eggs) in collaboration with teachers and Basketball coach on the last day of term. | | | 1/5 |
| | Football Training After-school Club | After-school Football Training Club ran once a week | One class per month was selected (e.g. 1st Classes) and participated once a week Teachers distributed and collected letters. Training delivered by Local Football Club and assisted by HSC | | 1/5 | |
| | After-school Martial Arts introductory sessions | Introduction to Martial Arts after-school sessions. | 40 children from 5th and 6th Classes were involved. Teachers distributed and collected forms. Sessions delivered by the Local Martial Arts Club facilitator assisted by the HSC. | | 1/5 | |
| | Cardio Kids After-school Club | Physical activities, interactive games, Panda information, importance of food pyramid | Care Team identified children from two classes in one school. In other schools, classes identified by principals. Teachers distributed and collected letters. Training delivered by expert in the Local Leisure Centre and assisted by HSC in collaboration with the principal. | 2/5 | 3/5 | 3/5 |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|----------|--|---|---|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| | Summer Camp | 1 week multi activity Summer Camp (interactive games and sports, healthy smoothie making, certificates and prizes, Little Chefs Healthy Cookery Summer Camp and linked children to local activities/events over the summer) | <p>HSC identified children in 1st Class and above who could benefit the most from this camp in collaboration with each teacher.</p> <p>Two HSCs co facilitated planning, organising and roll out of camp. They collaborated with school staff in 5 schools, teachers (distributed/collected letters from all classes and verbally reminded parents), Home School Community Liaison (HSCL) officer and School Completion Programme (SCP) Officer and local sports facilities/services.</p> | 5/5 | 5/5 | 2/5 |
| | Golf After-school | Golf training for children delivered by Golf Pro trainer. | <p>principal, Care Team and teachers identified children (5th and 6th Class) who were overweight, lacking in confidence and self-esteem.</p> <p>Training delivered by Golf Pro trainer in collaboration with the local County Council, schools in the area and the HSC who distributed and collected letters, and accompanied children to golf course.</p> | | 3/5 | 1/5 |
| | After-school Dance training for children | After-school dance training for children | <p>All children targeted (40 children participated).</p> <p>HSC coordinated with the teachers in collecting and distributing letters and reminding children about activities. Training delivered by dancing trainer and assisted by HSC.</p> | 1/5 | 1/5 | 1/5 |
| | Yard Games | Planned and coordinated School Yard Games | <p>All children and teachers participated. Children went out in the yard with their teachers where they were taught new yard games.</p> <p>Games organised in collaboration with Active School Committee.</p> <p>HSC photocopied and distributed yard games for teachers. Talked to all teachers to arrange times suitable for all of them. Did timetable and distributed it to all teachers.</p> | | 1/5 | |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|--|------------------------------|--|--|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| 2. Children have access to basic healthcare | Referrals and follow-up | Following up on children who have been referred to external services (e.g. SLT, Psychological Services, Dental). | <p>Collaboration between principal, vice-principal, Primary Care Team, HSC, SNA coordinator, HSCL, Regional SLT, Occupational Therapy team, parents and children re referrals and appointments, Non Governmental Organisations (NGO), the National Educational Psychological Service (NEPS), Child and Adolescent Mental Health Service and school counsellors.</p> <p>HSC investigated children's health needs and the process of referrals and fed back on case developments to the Care Team and principal. The Care team identifies children who need support but the HSC assisted in further referrals. For example, the HSC linked children to speech and Language supports available while on the waiting lists for the Speech and Language Therapist (SLT) and referred children and parents to relevant local supports (Counsellors, Therapists etc.).</p> <p>The HSC linked in with a couple of parents twice a month to put advice of speech and Language into practice, and the HSC supported parents with information on head lice, epilepsy, health-promoting activities and services in the area, dyspraxia and separation rights. HSC provided support in advocating for appointments, making scheduled appointments, with phone calls, reminders and accompanied parent and child to appointments where necessary.</p> <p>At the beginning of Year 2 in one of the 5 schools a decision was made at the STC level that referrals would not be covered by HSC.</p> | 5/5 | 5/5 | 4/5 |
| | | Looking at whether referrals are appropriate, developing a contact list of service providers working with children and families in the locality, supporting children and their families to attend appointments, and identifying families who need support accessing health services. | | | | |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|---|-------------------------------|---|---|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| 3. Children are aware of basic safety and health needs | Healthy Schools Open Day | 'Our Health is Our Wealth' – Open Day with health-promoting stations in the school hall to create awareness on healthy habits for families and the importance of being and staying healthy. | <p>All children attended.</p> <p>Collaboration between the HSC, Initiative Funders, parents, HSCL, SCP, Health Promotion Department, Public Health Nurse, Dental Nurse Educator, Primary Care Health Centre, SLT, Expert on Nutrition and Balanced Diet from Local Food Producing Company, social worker, and different local services who donated prizes (e.g. Local County Council, Health Promotion Department, FAI).</p> <p>Parents were involved in collecting prizes from local shops, advertising the event to other parents, organising the details for the event. HSC designed and distributed posters and notes to all parents. HSC informed all teachers and their classes about the event and encouraged children to attend. They advertised event locally, organised facilitators, resources and prizes.</p> | | 2/5 | 3/5 |
| | Healthy Schools Week (Easter) | Week of promoting the Walk to School Programme, Skipathon, yoga, art competitions, Skipping Rhyme, cardiokids, Healthy Lunch Competition, sensory play talk, after school activities and golf lessons | <p>HSC consulted all classes about the event, distributed sponsor cards, planned timetables for schools and shopped for prizes. All children kept informed of timetable and motivated by teachers to be involved in activities.</p> <p>HSC liaised with parents, children, teachers, local sports facilitators to organise their involvement.</p> <p>One teacher helped by organising a rounders game for parents and children</p> | | 3/5 | |
| | Easter Camp | 4 days multi activity Easter Camp | <p>In collaboration with 2nd and 3rd class teachers, children who are isolated and not good at sports were identified</p> <p>HSC collaborated with 4 other local schools, distributed/collected letters from all classes, reminded parents about the camp, resources, trainers and prizes.</p> | | 5/5 | |
| | Sun Safety Activities | Sun Safety Activities ran during school and on the Sports Day | <p>HSC distributed packs to classes re; Sun Safety to do in class.</p> <p>HSC liaised with school staff. HSC had a Sun Safety Stand on sports day and provided Sun creams, info, workbooks etc to children and provided information to parents who attended. Children got involved and encouraged other children to apply sun cream.</p> | | 3/5 | |
| | Active School Week | Multi activity week in school | HSC planned and organised activities, organised sports trainers in collaboration with Active School Committee Members | | 2/5 | |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|----------------------------------|--|--|--|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| 5. Children eat healthily | Adapting SPHE lesson plans to include Nutrition sessions for all 3rd Classes | Nutritional resources received from Health Promotion were used in SPHE classes. | HSC collaborated with SPHE Post Holders/support teachers to review Nutrition lesson plans. HSC provided health-promoting resources. 3rd class teachers used charts, posters, session plans in their sessions. | | 1/5 | 1/5 |
| | Healthy Eating Community Forum | Established links with the local Healthy Eating Community Forum and attended meetings in order to promote healthy eating as a community and to facilitate a large healthy eating community event in the area. This did not go any further. | Collaboration between the HSC and the local Healthy Eating Community Forum | 3/5 | | |
| | FOOD DUDES Programme | FOOD DUDES healthy eating programme ran over 15 days. Children received fruits and vegetables every day and encouraged to increase their fruit and vegetables intake at school and also at home. | All children participated HSC and two teachers went to training delivered by Bord Bia in order to implement this project into their school. They organised timetables, delivery system for each class and parents to support with delivery. | | | 1/5 |
| | HSC Organic Gardening training and Gardening Project | HSC attended 8 week Organic Gardening course for use with parents/children in Year 2 which involved facilitated sessions on gardening. | All children were involved. Coordinated by HSC and facilitated by expert in wildlife. | 3/5 | | 3/5 |
| | Nutrition sessions for children and parents | Nutrition sessions during SPHE lessons with children and parents to see and encourage children's healthy eating (e.g. Healthy Bites, shopping for the right foods, Soup Tasting and Brown Bread Snacks sessions) | Children in Junior and Senior Infants and their parents. Children designed invitations for their parents to invite them to attend the sessions. HSC collaborated with the principal, HSCL and teachers to plan the sessions. Teachers distributed notes to parents. Sessions facilitated by teacher and assisted by the HSC during SPHE lessons. Handouts, presentations, posters, notes for parents, resources and evaluation sheet for children prepared by HSC. | | 1/5 | 1/5 |
| | Incredible Edibles Growing Competition | Children grew fruit and vegetables with their teachers. | 40 children participated (3rd class and 5th class). HSC collaborated with teachers throughout the process | | 1/5 | |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|---|--|--|--|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| 6. Children feel good about themselves | Plan for transition from school to school | Began developing plans to support children transitioning to new schools. In the end it was decided that this was already being covered by the School Completion Liaison (SCL) Officer | Initially the HSC consulted with parents, teachers and SCL officer in developing plans to support children transitioning to new schools. | 3/5 | | |
| | Bug busting campaign | A campaign promoting good hygiene | HSC, pupils, parents, teachers, other schools in the area and the PHN were involved | 5/5 | | |
| | Sensory Room Committee | Committee set up to develop new Sensory Room | Made up of teachers, HSC and Deputy Head | 3/5 | | |
| | Sensory Room | Use Sensory Room to facilitate Sensory Play with children in order to promote positive mental health. | Initially was used for 150 children. Now different groups of children in the school use it. HSC collaborated with Sensory Room Committee to organise use of the room. | 3/5 | 3/5 | 3/5 |
| | Review S.P.H.E. Policy | Review S.P.H.E. Policy and identify strengths, weaknesses and gaps in SPHE policy. | Collaboration between HSC, Deputy head and teachers. HSC designed and distributed questionnaires for staff with aim of identifying strengths, weaknesses and gaps in SPHE policy. The HSC compiled a report based on the findings, met with staff to discuss how to address issues, formed an SPHE Policy Review committee and devised new SPHE policy. | 1/5 | | |
| | SPHE Curriculum and Policy Change incorporating Sensory Room | Incorporated use of Sensory Room into SPHE Programme and policy. | HSC lead this process In collaboration with the Deputy Head of the school | 1/5 | | |
| | Health and Hygiene incorporated into SPHE curriculum | Carried out as part of SPHE Curriculum and included: games discussion activities, DVD and discussion and practical sessions around hygiene | All 4th and 6th class children participated in one school. Issues were raised by teachers. HSC co-facilitated sessions with teachers to support existing SPHE Curriculum in a fun informal way. Teachers supported with collection and distribution of letters. | | 1/5 | 1/5 |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|----------|--|---|--|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| | Health and Hygiene Programme | A 5 week, a 7 week and a 6 week health and hygiene programme was ran each year which incorporated Therapeutic Play, educational and practical sessions | <p>All of 5th and 6th class children participated from 2 schools in the final year and 5th class girls participated from one school participated the previous two years.</p> <p>Need identified by teachers and the principal due to hygiene concerns. HSC co-facilitated the programme with the teachers, the SCP, guest speakers Dental Educator, Nutritionist, and conducted an ongoing evaluation of it.</p> | 1/5 | 1/5 | 2/5 |
| | FARE (Football Against Racism in Europe) Art Competition | <p>Racism art competition to mark 2010 Social Inclusion Week.</p> <p>Children were invited to design a poster to highlight social inclusion – themed 'Football against Racism in Europe'.</p> <p>Posters were displayed in the Local Football Stadium on the night of the match. Prizes provided.</p> | <p>4th, 5th and 6th Class children participated.</p> <p>Initiated by HSC in school in collaboration with Local Football Club and a local newspaper.</p> | | 1/5 | |
| | Active School Committee | Active School Committee set up to obtain Active School Flag. | <p>Monthly meeting with the Active School Committee which consists of principal, PE post holder, Home School Community Liaison (HSCL) coordinator, teachers, SNAs, parents from Local Committee)</p> <p>HSC to support with organising training for teachers in Term 2.</p> | | 2/5 | 2/5 |
| | Low Energy Day | HSC and Green School Committee organised a Low Energy Day. | <p>All children were involved.</p> <p>HSC collaborated with Green School Committee, teachers and children. HSC facilitated low energy benefits talks through classes and also reminded all children and teachers to keep energy levels down.</p> | | | 1/5 |
| | Breakfast Club | A daily Breakfast Club which also focused on hygiene, healthy diet, linking with disadvantaged parents and their children. | Deputy principal and HSC identified children in need. | | 1/5 | 1/5 |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|---|---|---|--|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| 7. School community/ parents' involvement and capacity-building/training | SLT-related Health Education Session with Parents | Provided updates on SLT in the Health Centre and updates on SLT appointments and current waiting list | Targeted all parents. HSCL coordinator contacted parents, HSC organised posters, notes home, talked to parents and arranged healthy snacks. Information was provided by the SLT. | | 2/5 | |
| | Monthly Health Education sessions for parents | One Healthy Breakfast session/talk for parents per month to increase their awareness of local health services that can promote their children's physical and mental health, nutrition and access to HSE referrals | Principal, teachers, HSCL coordinator, parents, HSC and guest speakers from the Health Promotion Department, the local Primary Care Team and the local Basketball Association. HSC organised speakers, venue, healthy bites, handouts with useful tips on how to encourage a healthy diet and handouts on reading food labels. Teachers reminded parents about these sessions. HSCL coordinator informed parents about these on their visits. | 2/5 | 2/5 | 2/5 |
| | Healthy Breakfast Events for Parents | Healthy breakfast events with aim of forming a parents support and healthy activities group went ahead as part of the Parental Quit Smoking Programme | Small group of parents attended. Coordinated by HSC and facilitated by the Regional Health Promotion Officer | | | 3/5 |
| | Quit Smoking Programme for parents | Parental Quit Smoking Programme | Small group of parents attended. Coordinated by HSC and facilitated by the Regional Health Promotion Officer | | | 3/5 |
| | Breakfast Club with parents | 2 Breakfast Club sessions organised for parents whose children are coming to Breakfast Club. | HSC organised these in collaboration with HSCL coordinator and Learning Support Teacher | | 1/5 | 1/5 |
| | Dyspraxia training for parents | Based on training received by the HSC, information material was provided to parents on Dyspraxia to identify problems and support children at home (e.g. exercise ball to strengthen hand and a fatter pen for child to try out, swimming pool vouchers) For 2/3 schools, the HSC collaborates with the Care Team on these issues. | HSC, care team, SLT and parents. | 3/5 | 3/5 | 3/5 |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|----------|--|---|---|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| | Last Day Dance Training Ceremony | Parents were invited on the last day ceremony to watch their children's dance performance. | HSCs, principal, HSCL coordinator, dance trainer and parents (15 attended) and the local Sports Complex Co-ordinator HSC organised a few prizes and co-ordinated the day. | 1/5 | 1/5 | 1/5 |
| | Last Day of Cardiokids Ceremony | Parents were invited on the last day ceremony to play a game of volleyball with their children. All children received certificates and family swim vouchers to Tallaght Leisure Centre. | HSCs, principal, HSCL coordinator, dance trainer and parents (15 attended) | | | 1/5 |
| | Parent Visit to Local Foods Company | One day guided tour of Local Foods Company for parents to look at the importance of a balanced diet. | HSC, HSCL coordinator, parents, Local Foods Company | | 2/5 | |
| | Parent Bug busting workshop | Bug Busting workshop for parents supplying and educating families about the bug busting kit. | HSCs collaborated with other schools in the area, PHN, all parents and children. | 5/5 | | |
| | Parent pamper day | Ran Relaxation and Healthy Lunch for parents on Local Committee. | HSCs collaborated with other schools in the area, HSCL coordinator, parents from Local Committee. HSC organised and co-facilitated the day. | 5/5 | | |
| | Parents support and healthy activities group | A parent health forum | HSC drafted questionnaire up to be given to parents initially to identify interests and needs. HSC planned regular meetings and events using this information to suit interests and needs of parents and facilitated meetings weekly initially with aim of group becoming self managed. | 3/5 | | |
| | Supporting parents with child referrals and follow-ups | Supporting parents with child referrals and follow-ups | The HSC provided information to parents regarding referral pathways, explanation of service. They provided support in advocating for and making scheduled appointments; with phone calls, reminders, encouraged attendance and accompanied parent and child to appointments where necessary. They also linked parents to monthly drop in advice clinic while awaiting assessment for speech and language therapy. | 3/5 | | |
| | Parent and Child Yoga | A 4 week after school parent and child yoga sessions | Junior infants and some of their parents were involved. HSC designed, distributed and collected child and adult questionnaires for feedback at end of programme An outside facilitator ran the sessions | 1/5 | 1/5 | |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|----------|--|--|--|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| | Information on Local Healthy Activities | Link parents to local sports facilities/groups. | Some parents were informed. HSC collaborated with the County Sports Partnership | 3/5 | | |
| | Healthy Cookery Programme | 4 weeks Healthy Cookery Programme for parents | All parents targeted (8 participated). Dietician from the Health Promotion Department used a Resource pack to run the session. HSC co facilitated Healthy Cookery Programme and collected and documented feedback at the end of the programme. | 3/5 | | |
| | Health Promotion Education Sessions for parents | Organised 4 health talks for parents as part of group/ forum based on interests and needs of group. 3 Nutrition sessions held after follow-up to concerns about eating habits, sugar content in foods and comparing labels for fat, sugar, salt content. | All parents targeted (25 participated). Visiting nutritionist facilitated the sessions. HSC collected and recorded feedback from parents | 3/5 | | |
| | Capacity building nutrition training for parents | 8 wks Capacity building training programme (food and nutrition) for parents | A small group of parents participated. HSCL coordinator informed parents about these on their visits and HSC identified parents interested from the Breakfast Club. HSC and Health Promotion representatives facilitated the training. | | 2/5 | |
| | Personal development training for parents | Personal Development training for parents called 'Time Out 4 Me' (7 weeks covered goal setting, a session on cookery and another 6 weeks covered mental health awareness). The theme of the training was identified by parents in the previous school year. HSC organised admin details and other facilitators. | A small group of parents were identified in collaboration with HSCL coordinators and teachers. HSC collaborated with the Regional Health Promotion Officer, local County Council, Demonstration Chef, HSCL coordinators, teachers, parents and the Personal Development Trainer facilitated sessions. | | | 5/5 |
| | Play Therapy talk for parents | The session was focussed on using play to support children's emotional development and gave handouts to parents with suggested activities. | All children in Senior Infants and most parents participated. Talk was facilitated by the HSC. | | 2/5 | |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|---|---|---|---|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| | Health Info Stand for parents | Health information and support provided for parents in the HSC office/main hall once a week (e.g. health promotion leaflets, fliers, linking with parents advert in school newsletter about future events and activities for children and parents). | HSC targeted all parents and children and many availed of this service. | 5/5 | 5/5 | 5/5 |
| | Healthy Schools Committee | A Healthy Schools Committee was set up to organise the Healthy Schools Day | Healthy Schools Committee is made up of 10 parents, HSC and the HSCL coordinator. | | 2/5 | |
| 8. School Staff capacity-building/training | Anti bullying | Anti-Bullying session for teachers as part of their staff meeting | HSC and teachers were involved in this session | 2/5 | | |
| | School Speech and Language Therapist (SLT) | SLT employed to provide speech and language therapy to school children and provide training to teachers in identifying children with difficulties and in applying techniques in class to improve the children's speech and language. | Junior and Senior Infants and all teachers in the schools were involved in accessing SLT supports. | | 3/5 | 3/5 |
| | Teacher Stress management training | Stress management training for teachers | HSC and all the teachers were involved in this training. | 2/5 | | |
| | FOOD DUDES Programme training for teachers | FOOD DUDES healthy eating programme ran over 15 days. Children received fruits and vegetables every day and encouraged to increase their fruit and vegetables intake at school and also at home. | HSC accompanied by 2 other teachers went to training (delivered by Bord Bia) to implement this project into their school. | | | 1/5 |
| | Skip Hop facilitation training | Teachers were trained in facilitating the children's skipping programme | 6 teachers, HSC and the skipping facilitator were involved. | 3/5 | | |
| | Dyspraxia training for teachers | Based on training received by the HSC, information material was provided to teachers on Dyspraxia. | HSC in collaboration with the Care Team provided teachers with Dyspraxia training in relations to tools for teachers to identify children with difficulties and support children in the classroom and during PE and games (e.g. using an exercise ball to strengthen hand and a fatter pen for child to try out). | | 3/5 | |
| | HSC was trained up on occupational Therapy issues and techniques. | HSC received Dyspraxia training in relations to tools for teachers to identify children with difficulties and support children in the classroom and during PE and games | HSC attended workshop. | | 3/5 | |

| Outcomes | Activities Services Training | Description of Activities, Services or Training | Who will be/was involved | How many schools were involved in each year | | |
|----------|---|---|---|---|------|------|
| | | | | 2009 | 2010 | 2011 |
| | Buntas: | Had information table at Healthy Schools Open Day regarding getting access to sports equipment for the school. Buntas programme is not currently in operation in the schools. | All staff received information about it. HSC collaborated with the Regional County Sports Partnership. | | | 3/5 |
| | Steering Committee Expert Panel | Experts were invited to attend the Steering Committee meetings to exchange information with school staff. | Steering Committee members and expert advisers from, for example, psychological services, primary care teams and regional health promotion offices attended. | 5/5 | 5/5 | 5/5 |
| | Healthy Schools Initiative Information Exchange Seminar | Experts were invited to attend Information Exchange Seminar about Health-promoting Schools. | Initiative Funders, an International Health-promoting Schools Coordinator, HSCs, teachers, principals, health promotion officer, Healthy Schools manual developer, service providers, community members and HS evaluators attended. | | 5/5 | |
| | Postgraduate course in Health Promotion | A part funded postgraduate course in health promotion for members of the school community was provided. | 2 teachers and a small number of community members registered. | | 5/5 | 5/5 |
| | | | | | | |

Appendix 5: Governance of *Healthy Schools* Programme

This section sets out briefly some key issues for consideration in terms of the initiative, role of the *Healthy Schools* Coordinator and governance structures within the programme model.

Steering Committee

The Steering Committee was designed as follows:

- The Steering Committee was to comprise of the 5 school principals, Home School Community Liaison Officers, HSE, Local Authority community professionals and parents.
- The *Healthy Schools* Coordinator was to work with the Steering Committee and the Steering Committee was to provide guidance and support to the Coordinator.
- The Steering Committee was to oversee the implementation of the *Healthy Schools* manual and to approve plans for action.

Steering Committee in practice

- The Steering Committee was a key forum for communication between the schools and health services at the local level, and is the only setting where schools and health services come together at local level. In this regard, it was a very positive and beneficial structure in the process of raising awareness, developing links and working through service-level agreements between the schools and local-level services.
- The Steering Committee was found to be a useful forum for information sharing between schools and service providers. In response to key health service access gaps identified across the schools, the funders invited a representative of these services to come to the Steering Committee meetings and discuss issues for both the schools and services.
- The Steering Committee was also highlighted as being a useful communication forum for the principals of the participating schools.
- The Steering Committee was not found to be the appropriate channel for overseeing the implementation of the *Healthy Schools* manual since planning for implementation needed to occur at an individual school level. Therefore, the approval of plans for action needed to be undertaken at an individual school level also.
- The *Healthy Schools* Coordinator provided feedback to the Steering Committee on plans and work being undertaken.
- The Steering Committee was originally supposed to include representation from parents. However, this did not occur in practice. The non-involvement of parents meant that they were not part of decisions made in this forum.

Line management

Line management for the *Healthy Schools* Coordinators was to be provided by a principal of one of the schools. One Coordinator was working with 3 schools and the second Coordinator with 2 schools. Principals of the schools that were not allocated Line Managers were to be Liaison Persons for the Coordinator who was working with those schools.

Line management in practice

- This system was not appropriate in situations where the *Healthy Schools* Coordinators needed support around initiative implementation issues that arose in non-Line Management schools. Each school principal is the manager of their own school and therefore a Line Manager (principal) was not in a position to become involved in initiative implementation issues that arose in a neighbouring school. This meant that the Coordinators did not have a consultation/support channel to access in these instances.
- In order to get around this issue, the Coordinators reported to each school principal to the same degree when working with any of the schools.

Role support

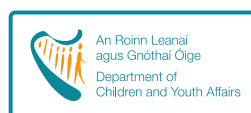
Role support for the *Healthy Schools* Coordinators was to be provided by an external person based in the HSE. Support was to be provided on a 6-weekly basis and was set up to provide a confidential space for the Coordinators to access supervisory support in their roles.

Role support in practice

- The role support system was challenging in practice since the person providing role support did not have a mandate to advocate on behalf of the *Healthy Schools* Coordinators if issue arose. This meant that the Coordinators did not have any support system to assist with issues that occurred in practice.
- It was decided in the second year that role support would be provided by a staff member of the *Healthy Schools* initiative funders. This person was in a position to mediate between the Coordinators and the schools where needed.
- This was found to work better; however, in general, the Coordinators found it challenging to navigate the wide range of reporting channels that existed in relation to their role.

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