A scoping review of the evidence for incentive schemes to encourage positive health and other social behaviours in young people

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# TABLE OF CONTENTS

EXECUTIVE SUMMARY ............................................................................................................. 1

1. BACKGROUND .................................................................................................................. 2

2. AIMS .................................................................................................................................... 4

3. METHODS .......................................................................................................................... 5

   3.1 Inclusion and exclusion criteria .................................................................................. 5
   3.2 Information retrieval .................................................................................................... 6
   3.3 Description of reports of research studies and ongoing schemes ............................... 7
   3.4 Benefits and limits of a scoping exercise ..................................................................... 8

4. DESCRIPTION OF PUBLISHED RESEARCH .................................................................. 10

   4.1 Identification of relevant studies .............................................................................. 10
   4.2 Classification of studies ............................................................................................. 10

5. DETAILS OF ONGOING INCENTIVES SCHEMES ......................................................... 15

   5.1 Identification of ongoing schemes ............................................................................ 15
   5.2 Health-promoting schemes ....................................................................................... 16
   5.3 Education and attendance promoting schemes ....................................................... 17
   5.4 Schemes promoting other social behaviours ............................................................ 19

6. DISCUSSION AND CONCLUSIONS ............................................................................... 22

   6.1 Published research ................................................................................................. 22
   6.2 Ongoing projects ..................................................................................................... 22
   6.3 Systematic review ................................................................................................... 22

7. REFERENCES ...................................................................................................................... 23

Appendix A: Search strategy ................................................................................................. 24

Appendix B: Reports of included studies .............................................................................. 29

Appendix C: Table of ongoing and recently completed projects ....................................... 36

Appendix D: Russell Commission ....................................................................................... 40
EXECUTIVE SUMMARY

• There is considerable policy interest in the use of incentives to promote positive behaviour in children and young people. However there is uncertainty about whether this approach works, and, if so, what the underlying mechanisms are. There is no recent evidence-based summary of the international research literature to inform policy decisions.

• A scoping exercise was undertaken by the EPPI-Centre team to identify the nature and extent of: a) international research studies evaluating incentive schemes; and b) ongoing incentive schemes in the UK.

• The results of the scoping exercise make it apparent that there is a considerable body of international research evidence in the area of incentives to promote a range of positive behaviours in children and young people.

• There is a range of ongoing projects across the UK. A number of major government initiatives now utilise incentives.

• It has been decided that the EPPI-Centre team will undertake a full systematic review of the research evidence. When the review questions have been constructed, the systematic review will be carried out in two stages: (i) a descriptive mapping of relevant studies; and (ii) an in-depth review and synthesis of the quality and findings of the studies on effectiveness and implementation (if the mapping indicates that there are sufficient studies suitable for synthesis to warrant this). Information will continue to be collected on UK ongoing schemes, and this will be extended to include international incentives schemes. A full systematic review will provide an opportunity to explore in more detail issues surrounding the use of incentives to target health, educational or social inequalities.
1. BACKGROUND

How to increase low levels of physical activity and healthy eating, and improve other health behaviours in children and young people, is of increasing policy interest. Patterns of health behaviour are often set early on in life and can maintain their influence throughout the lifespan. The development of patterns of behaviour in early and late childhood may affect people’s health, negatively or positively, in later years. Changing health behaviour is complex and difficult to achieve and, although the individual has a role to play in such changes, it is recognised that factors which work at the community and societal level contribute to individuals’ health status and ability to effect health behaviour change.

One method for encouraging positive behaviour is the use of ‘incentive’ or ‘reward’ schemes. The use of incentives has its roots in behaviourist approaches to psychology, where it has been extensively studied since the beginning of the twentieth century (Ferster, 1957; Skinner, 1976). The term ‘incentives’ is used here to include a wide range of motivations (e.g. prizes, payment, material support, free or reduced-cost-access to leisure facilities). Incentive schemes may take place in a variety of locations (e.g. school, home, or community and youth groups). They can be delivered to different groups of young people (e.g. universally or targeted at ‘high risk’ individuals) or organisations/individuals working with young people (e.g. schools, head teachers or health professionals). Incentives can be used to target a range of problem behaviours, including those related to health, truancy/school absenteeism, educational achievement and crime. For example, policy interest has been raised by the ‘Karrot’ scheme in Southwark, South London. This scheme includes an incentives element to target antisocial behaviours and truancy, and to make young people feel safe, valued and active. The Karrot scheme was presented as a case study in the recent Public Health White Paper ‘Choosing Health’ (Department of Health, 2004). The ‘Connexions Card’ is a national scheme available to all 16 to 19 year olds in England. It utilises secure smart card technology enabling the collection of points for achieving learning, training and developmental goals. These points can be exchanged for a range of rewards. The ‘Choosing Health’ report states the intention to extend this scheme to reward positive health choices (Department of Health, 2004). Further details of both of these schemes are given in Section 5 of this report.

The Department of Health is keen to ensure that where possible strategies to improve the health of the public are evidence-based. Systematic reviews have been published which include research studies of complex interventions with an incentives component. However, we have not found any systematic reviews which provide an evidence-based summary of the current status and effectiveness of incentives schemes to promote behaviour changes in children and young people. It is also unclear what range of incentive schemes are currently ongoing in the UK, or to what extent these are being evaluated.

Whilst incentives may work by creating an extrinsically-derived motivation for compliance with a preferred behaviour, there remains uncertainty about the mechanisms by which they work. It may be that they increase participation levels in a scheme, and/or adherence to behaviours by attaching a desirable reward to them (or avoidance of an undesirable reward) (Chapman, 1998). It is unclear
whether they should be given universally or to particular targeted groups, whether they are best delivered as part of a multi-component strategy or are more effective as a single component in a simple intervention. We do not know what type of incentives are appropriate or acceptable to different groups, and whether there is a ‘dose effect’, with more highly valued rewards contributing to higher levels of behaviour change maintenance. It is also unclear what the potential long-term impact of extrinsic incentives schemes might be on either levels of intrinsic motivation or other outcomes. It is worth noting that there is a long standing debate in psychology as to whether the use of extrinsic rewards discourages the development of intrinsic motivation that is necessary for the long-term maintenance of behavioural changes (Cameron et al., 2001); (Deci et al., 1999).

The need for a systematic review of the evidence for using incentives to effect positive behaviour changes was recognised in ‘Choosing Health’ (Department of Health, 2004).

“...incentive schemes offer rewards to young people for adopting positive behaviours. The Department of Health has recently commissioned a review of the international evidence for incentive schemes. The aim is to assess which areas of public health could benefit the most and to consider some piloting work should the general approach look to be encouraging.”

The results of the scoping review presented in this report represent a preliminary stage of the process commissioned by the Department of Health. The results of this work will be used to inform subsequent stages of the review process.
2. AIMS

This report is the result of a scoping review commissioned by the Department of Health, England, to identify the nature and extent of:

(i) the international research evidence on whether incentive schemes work to encourage healthy behaviours or can improve a range of other social behaviours in young people aged up to 19 years (this evidence includes studies reporting young people’s views and experiences of incentive schemes and those reporting practitioner implementation experiences), and

(ii) ongoing UK incentive schemes relevant to the encouragement of health and other social behaviours, and evaluations of these.

A scoping review such as this differs from a full systematic map of research or review of evidence in that it is a preliminary assessment of the potential size and scope of the available research literature. A further aim of this scoping exercise is to provide policy makers with an overview of the international research literature and ongoing UK incentives activity. This will help to inform policy decisions about whether or not a full systematic review of the topic is needed.

The benefits and limitations of a scoping review are discussed in the methods section below.
3. METHODS

The work was carried out in three parts (i) a scoping exercise of the research literature based on the abstracts and titles of relevant records located through searches conducted across a range of bibliographic databases; (ii) the identification and retrieval of information relating to ongoing UK schemes with an incentives element (whether evaluated or not); and (iii) a consultation between EPPI-Centre researchers and the Department of Health. The consultation was based on the interim results of the two stages described above and was an opportunity to take stock of the potential scope of the research evidence base, and current activity, and to decide if further work was feasible and useful to policy makers.

The scoping at stage (i) was based on information gathered from the title and abstract provided in records identified from searches of bibliographic databases. Full text research papers were not retrieved.

These aims were met using the methods described below.

3.1 Inclusion and exclusion criteria

For the purposes of this study incentives were defined as:

Any tangible benefit externally provided with the explicit intention of promoting pre-specified health or social behavioural change(s) in the direct or indirect recipient of the intervention. Examples of incentives are prizes, payment, gifts, material support, free or reduced-cost-access to leisure facilities, and access to activity holidays. Incentives may be targeted at individual children and young people or groups, and/or parents or organisations serving young people.

In order to be considered relevant to this scoping exercise, records of research evidence had to meet the following criteria:

- Incentives were a central component of the study (i.e. research which used incentives only as an adjunct to improve recruitment were excluded)

- UK studies were included if they:
  - evaluated the impact of ‘incentives’ interventions on health behaviour and other social outcomes (outcome evaluations), or
  - assessed people’s experiences of implementing incentives schemes (process evaluations), or
  - provided access to the views and experiences of children and young people on the use of incentives (views studies)

- International studies were included if they evaluated the impact of incentives schemes on relevant health and other social outcomes (outcome evaluations)
3. Methods

- Individuals or groups targeted by incentives were aged 19 years or less
- Studies had been published in the previous 10 years
- Abstracts were in the English language

To be included in this scoping exercise, ongoing schemes had to meet the following criteria:
- They are being conducted in the UK
- They have incentives as a central component of the scheme
- They target health or other social behaviour changes (whether evaluated or un-evaluated)
- They target individuals or groups aged 19 years or less

3.2 Information retrieval

The following methods were used to retrieve information on both published research and ongoing incentives schemes.

3.2.1 Published research evidence

Research evidence was identified in the following ways.

Searches were conducted across the following bibliographic databases for research published in the last 10 years:

- ERIC
- CINAHL
- SSCI
- ASSIA
- Medline
- PsycLIT
- The Cochrane Library
- SIGLE
- Bibliomap (EPPI-Centre database of health promotion research)
- C2-SPECTR (the trials register of the Campbell Collaboration)

A search strategy was developed on the OVID online version of the PsycINFO database. This strategy was then translated to reflect the different indexing terms, search functions and syntax available on the other databases to be searched. A full copy of this and other search strategies is given in Appendix A.
3.2.2 Ongoing projects

A number of strategies were used to identify ongoing incentives schemes in the UK. The National Research Register (http://www.nrr.nhs.uk/) and databases held by the Health Development Agency and Health Scotland were searched. Contact was made with relevant major non-governmental organisations and charities, e.g. The Sports Council and The National Lottery. Contact was also made with the Healthy Schools Network, and regional NHS health promotion departments. As incentives schemes might be relevant to a number of government departments we searched Policy Hub (http://www.policyhub.gov.uk/) and the following departmental websites:

- Department of Health
- Cabinet Office
- Department for Education and Skills
- The Home Office
- The Treasury
- Office of the Deputy Prime Minister

Non-systematic searches of the web via the Google search engine were also conducted.

3.3 Description of reports of research studies and ongoing schemes

Coding was applied to obtain a detailed description of the published research and ongoing UK incentives activity. This description was used to inform stage three of the process, a consultation between EPPI-Centre researchers and the Department of Health.

3.3.1 Published research evidence

References for all included records of research studies were entered on a searchable database. Keywords were applied to all records in order to describe their key features. The following descriptive codes were applied:

- Study design
- Country where study carried out
- Focus of the report (e.g. type(s) of behaviour targeted)
- Characteristics of the study population (e.g. age, sex)
- Type of incentive

Outcome evaluations were further coded on the following criteria:

- Name of programme/intervention evaluation
- Intervention site (e.g. school, outreach, health care unit)
- Provider of intervention (e.g. teacher, health promotion advisor)
- Type of incentive (e.g. prizes, outings, money)
- Type of intervention (e.g. advice, education, resource access)
3. Methods

3.3.2 Ongoing projects

Project leaders and staff of schemes identified were contacted and sent a brief questionnaire to complete outlining details of their scheme to ensure that schemes were eligible for inclusion, and to obtain information regarding other potentially relevant schemes that they were aware of. Where possible, schemes were also contacted by telephone.

The questionnaire asked for information on the following:

- Type of rewards and incentives used
- Behaviours or outcomes targeted
- Population aimed at (age group, gender, particular groups such as ex-offenders, school leavers)
- Number of participants
- Location of scheme
- Provider of the intervention (e.g. police, teachers, youth workers etc)
- Site of intervention (e.g. school, youth clubs, community outreach)
- Who is running the scheme
- Who is funding the scheme
- Date when scheme started and duration
- Is it being evaluated, has it already been evaluated?
- If evaluation ongoing or complete – how and by whom?
- Publication details of evaluations where available

3.4 Benefits and limits of a scoping exercise

As stated earlier, a scoping exercise is intended to provide a preliminary assessment of the potential size and scope of the available research literature, and, in the case of this report, of ongoing activity. The benefits of a scoping exercise are that it can be completed in a short space of time, and it provides an indication of salient issues. The results can be used to judge whether or not a full systematic review is required, and, if so, identify both a potential focus for the review and the resource implications of it.

Whilst a scoping exercise uses some of the methods common to the standard stages of a systematic review, it does so in a limited manner. The limits of a scoping exercise mean that its findings cannot be used to develop recommendations for policy and practice. The approach used in this study is systematic, transparent and replicable, but differs from a full systematic mapping and in-depth review in the following ways:

- It did not attempt to seek all the available research literature
  - There was a minimal attempt to retrieve grey literature
  - Hand searching was not conducted
  - There was limited contact with study authors
  - References of included research not scanned
3. Methods

- Full text copies of include reports were not obtained
  - Inclusion and exclusion criteria were therefore applied to a minimal amount of information
  - No attempt was made to appraise the quality of the research
  - No attempt was made to synthesis the findings of the research
4. DESCRIPTION OF PUBLISHED RESEARCH

4.1 Identification of relevant studies

The searches of bibliographic databases and specialist registers resulted in the identification of 4510 records with titles and/or abstracts. After screening these against our inclusion criteria we found that 94 reports of 88 individual studies were eligible for inclusion. The analysis presented here is based on coding of information available in the title and abstracts for the 88 studies.

Appendix B contains a list of all 94 included reports of research.

4.2 Classification of studies

4.2.1 Study type

Table 4.1 shows the 88 studies described in the 94 reports according to study type.

Of the 88 studies, 78 were classified as outcome evaluations. Of these, 18 were randomised controlled trials (RCTs), 10 were controlled trials, 24 were single group pre-test post-test studies and the design of 26 was unclear. There were nine potential systematic reviews, two of which contained meta-analyses. Only one survey was included. Whilst we found no process evaluations, it is possible that there may be process data included in some of the outcome evaluations, and that this information was not included in the abstract.

Table 4.1: Studies (N=88) by study type

<table>
<thead>
<tr>
<th>Study type</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcome evaluation unclear</td>
<td>26</td>
<td>30</td>
</tr>
<tr>
<td>Single group pre-test post-test</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>Randomised controlled trial</td>
<td>18</td>
<td>21</td>
</tr>
<tr>
<td>Controlled trial</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Potential systematic review</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Survey</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

We think it likely that the majority of the outcome evaluations identified would be excluded from a systematic review on impact on the basis of their study design or the poor quality of conducting and reporting. For example only 28 (32%) state that they had a control group and a number of these are likely to be judged unreliable. Of the 26 reports that are of unclear design many of these will not be reports of controlled studies.
4. Description of published research

4.2.3 Country of origin

Of the 88 studies, only nine were conducted in the UK, 65 were conducted in the USA, four in Australia, and one each in Mexico, the Netherlands and Germany. In seven studies this information was not available.

4.2.4 Population

In terms of the populations targeted by the interventions there was a fairly even split between the age groups, with 44 targeting children between the ages of 0 and 10 years, and 52 targeting young people between the ages of 11 and 21 years. Some of the studies targeted both age ranges. Six studies included only females, three males only, with 71 being mixed sex, eight gave no information about sex.

Some of the abstracts provided more descriptive details of the population receiving the incentives than others. A range of groups were represented: eight studies were aimed at children with special educational needs, five at potential school drop-outs, five at teenage parents, four at drug users, four at low socio-economic groups, and two each at parents, teachers and dentists. It is possible that other more defined groups were being targeted by research studies but that information was not available in the reports of the research studies we identified.

4.2.4 Focus of the studies

Table 4.2 shows the type of focus in the 88 studies

The data presented here are based on the 88 studies. The reports of outcome evaluations focused on a wide range of issues and outcomes, with many having more than one focus. The types of behaviours that these studies focused on can be categorised as relating to health behaviours, education behaviours and other social behaviours, with many of the studies having more than one focus, some more relevant than others. In some cases a focus might be relevant to more than one category; we have presented these in only one category. Data are only presented on a focus if it was considered by more than two studies.

Table: 4.2 Studies (N=88) by study focus*

<table>
<thead>
<tr>
<th>Health focus</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health promotion unspecified/unclear</td>
<td>16</td>
<td>18</td>
</tr>
<tr>
<td>Tobacco</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Physical activity</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Medical care</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Healthy Eating</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>Drugs</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Accidents</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education system</td>
<td>42</td>
<td>48</td>
</tr>
</tbody>
</table>
4. Description of published research

Other social

<table>
<thead>
<tr>
<th>Focus</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem behaviour</td>
<td>22</td>
<td>25</td>
</tr>
<tr>
<td>Inequalities</td>
<td>18</td>
<td>20</td>
</tr>
<tr>
<td>Parenting</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>Unclear or other</strong></td>
<td>15</td>
<td>17</td>
</tr>
</tbody>
</table>

* Each study could have more than one focus

Additional codes were applied to the 42 studies which focused on the education system. Thirty-one of these focused on academic achievement, 20 on attendance, five on enrolment in post-compulsory education, and four on homework. Some of the studies had more than one educational focus.

4.2.5 Types of intervention and incentive

Table 4.3 shows the different categories of interventions and incentive.

The data presented here are based on the 78 outcome evaluations only. The reports of outcome evaluations focused on a wide range of intervention types. In many cases a study involved more than one intervention. We found that only 11 studies were of interventions which relied on an incentives component alone. All the other evaluations were of multi-component interventions with 37 of these involving an educational intervention. Only those interventions included in more than one evaluation are included here.

There was a broad range of incentives given, though financial incentives were the most common. Token economies tended to operate within a school setting and it was not clear what tokens could be exchanged for. Vouchers tended to be rewards given outside the school setting, and again it was not always clear what they could be exchanged for. The opportunity to win incentives ranged from an individual being entered into a prize draw or raffle, to a whole class or group being rewarded for maintaining a behaviour change (e.g. not smoking). Thirty-four studies did not specify what the incentives were, and 12 studies had incentives that were coded as ‘other’, such as free sunscreen, extra recess time or increased access to television.

**Table 4.3:** Studies (N=78) by type of intervention or incentive*

<table>
<thead>
<tr>
<th>Interventions</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>37</td>
<td>47</td>
</tr>
<tr>
<td>Other intervention</td>
<td>25</td>
<td>32</td>
</tr>
<tr>
<td>Advice</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Resource access</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Skill development</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Social support</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Environmental modification</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Immunisation</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Professional training</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
4. Description of published research

<table>
<thead>
<tr>
<th>Service access</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer monitoring</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

### Incentive

<table>
<thead>
<tr>
<th>Incentive</th>
<th>21</th>
<th>27</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Vouchers</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Token economy</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Opportunity to win</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Edible</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Unspecified</td>
<td>34</td>
<td>44</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>15</td>
</tr>
</tbody>
</table>

* Each study could have more than one type of intervention or incentive

#### 4.2.6 Intervention provider

Table 4.4 shows the different types of intervention provider.

The data presented here are based on the 78 outcome evaluations. Interventions could have more than one provider. Only those providers included in more than one evaluation are included here. Forty-one of the studies had an element of the intervention provided by a teacher, which reflects the number of educational interventions. Health professionals provided interventions including immunisation, screening and smoking prevention counselling.

**Table 4.4: Studies (N=78) by type of intervention provider**

<table>
<thead>
<tr>
<th>Provider</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>41</td>
<td>53</td>
</tr>
<tr>
<td>Health professional</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Parent</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Health promotion practitioner</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>Researcher</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>Community</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Peer</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Community worker</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Residential worker</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

* Studies could have more than one intervention provider

#### 4.2.7 Intervention site

Table 4.5 shows the different types of intervention site.
The data presented here are based on the 78 outcome evaluations. Interventions could have been conducted on more than one site. Only those sites included in more than one evaluation are included here. The biggest categories of intervention site were secondary education sites with 29, and primary education with 24.

Table 4.5: Studies (N=78) by type of intervention site*

<table>
<thead>
<tr>
<th>Intervention Site</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary education</td>
<td>29</td>
<td>37</td>
</tr>
<tr>
<td>Primary education</td>
<td>24</td>
<td>31</td>
</tr>
<tr>
<td>Community site</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Educational institution</td>
<td>13</td>
<td>17</td>
</tr>
<tr>
<td>Health care unit</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Home</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Outreach</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Preschool</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Specialist clinic</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

* Studies could have more than one intervention site

4.2.8 Systematic reviews

We found reports of nine possible systematic reviews. However, we think it likely that few of these would subsequently be judged systematic on the basis of the full paper. The reports included four potential reviews with educational outcomes and two health promotion reviews with a broad scope, but it is unclear to what extent incentives were a central issue in any of these. One Australian study reviewed the use of incentives for immunisation uptake, a study from the USA reviewed the effectiveness of statewide approaches to help teenage mothers complete high school, and one review from the USA looked at diverting children from a life of crime.
5. DETAILS OF ONGOING INCENTIVES SCHEMES

5.1 Identification of ongoing schemes

A mixture of searching and personal contacts with organisations identified 18 ongoing UK schemes. This was a time consuming process involving many phone calls and emails to obtain details of the schemes. Information was obtained by word of mouth rather than web searches. We identified a number of relevant and useful national databases (HDA-online, What Works With Children, National Youth Agency, CrimeReduction.gov, TeacherNet). Many schemes are only funded for a limited period and we encountered problems of incomplete or outdated information. Furthermore many schemes, though often funded by central government departments, are designed and implemented at a local level and so can be difficult to track down. It is hard to estimate how many more might have been missed.

Of 18 potential incentives schemes identified by our search methods, two were no longer ongoing, two did not have incentives as a central component and thus were excluded, and 14 were sent questionnaires and/or contacted by telephone. We obtained information from 13 relevant schemes. Details of these schemes are provided below and Appendix C contains a summary table of the information. We have so far collected only limited information on completed or ongoing evaluations of the schemes. We have not appraised the quality of any of the evaluations and cannot therefore pass comment on the validity of any claims of effectiveness. Claims of success/effectiveness therefore need to be treated with caution.

Of the thirteen schemes examined in greater detail, five were central government initiatives predominantly under the aegis of the Department for Education and Skills (DfES). Three of these were fully operational schemes (The Educational Maintenance Allowance [EMA], Playing for Success, the Connexions Card), and two were national pilots (Community Merit Scheme [Youth Justice Board] and Young Volunteer Challenge [DfES]). A further six were run by local authorities, generally in partnership with other stakeholders and often with funding/support from central government (Karrot, Dudley Life Skills Partnership, the Food Dudes Primary School pilots, Fit to Succeed, Fuelzone, Passport 2k) and two were youth work initiatives (Dreamscheme and the Tumbler Youth Centre). The five government schemes have commissioned regular ongoing evaluations, which are, or will become, publicly available. Of the other eight schemes, two have already been formally evaluated and three more are having evaluations conducted. All of the schemes, whether targeted or universal in scope, claim to address inequalities in terms of health or access to education and leisure, provide opportunities for personal development and aim to increase life chances.

We specified that the incentives offered should be tangible rather than simply social (e.g. verbal praise). However, most of the schemes that we found deployed incentives as a part of a wider social or educational initiative which also offered social and symbolic rewards and aimed by this to develop a wider culture that supported and promoted the desired behaviours. Incentives were thus often part of a complex intervention with multiple interlocking components. Tangible incentives included small gifts; point-based reward systems that could be exchanged for goods and services; vouchers; discounts; payment and prize...
draws. Less tangible rewards included experiential rewards such as outings, overnight trips and access to enjoyable leisure activities and other resources or services.

We have supplied a brief overview of each project as they are diverse and differ in scale. Of the thirteen projects, only three were directly focused on health: Fit to Succeed (physical activity), Food Dudes and Fuelzone (both nutrition). The other ten were designed to promote achievement in education, personal development and citizenship and in most cases to foster social inclusion. It is possible that this may be because behaviourist models have historically had a wider currency in education and the social sciences (and of course the use of fiscal incentives is a recognised technique in business and economics).

5.2 Health-promoting schemes

5.2.1 Fit to Succeed

Fit to Succeed (http://www.sheu.org.uk/fts/fts.htm) is based in schools in Exeter and Tiverton. It was developed from pilot work conducted by the Schools Health Education Unit in collaboration with Exeter City Council and other stakeholders, including the company running the local leisure centres. Incentives comprised free offers/reduced-cost-access and taster sessions for children and families to local leisure centres. School staff were also given free taster sessions and reduced-cost-access to local leisure centres in order to increase interest in and uptake of sport offers in the area. Evaluation suggested that this had some success in increasing participation in and enjoyment of sport, though some operational difficulties were noted related to the capacity of the sports centres to cope with larger than expected numbers. The scheme continues and has been awarded further funding, including a grant for continuing research from Barnado's and Glaxo Smith Kline. It appears that the incentive component has diminished, and that it has become a more mainstream educational programme aimed at schools via the School Sports Co-ordinator programme.

An evaluation of this scheme was reported in the EPPI-Centre review on children and physical activity (Brunton G et al., 2003). The evaluation was not included in the in-depth review due to concerns about the quality of the study. From the report of the evaluation available to us it was unclear whether the groups were equivalent at baseline, it was also unclear whether outcome data were completely reported.

5.2.2 Food Dudes

The Food Dudes (http://www.fooddudes.co.uk/) is an intervention so far trialled on primary aged children. It has been designed and evaluated by the Food Research Unit at Bangor University and is based upon a long-standing programme of research into the key psychological factors influencing children’s food choices. It deploys the techniques of taste exposure, modelling and rewards. The theory is that, if children can be encouraged to explore a range of possibly unfamiliar fruit and vegetables, increasing exposure will lead to greater liking and hence to greater consumption. The modelling component is provided by six videos.
5. Details of ongoing incentives schemes

featuring heroic ‘peers’ who enjoy eating fruit and vegetables and receive small rewards for doing so. The children are similarly rewarded with small gifts for their consumption of the fruits and vegetables on offer. The researchers claim that the programme is effective for children from lower socio-economic groups and suggest that it has the potential to reduce health inequalities across the country. A further evaluation of the scheme commissioned by the Food Standards Agency is currently being carried out in six Welsh schools. We are in the process of trying to locate further information of this evaluation.

An evaluation of this scheme was reported in the EPPI-Centre review on children and health eating (Thomas et al., 2003). The evaluation was not included in the in-depth review due to concerns about the quality of the study. Selection bias in this study could not be ruled out as pre- and post-test data were presented for only 40% of the participants in the intervention group and 53% in the control group.

5.2.3 Fuelzone

Fuelzone (http://www.fuelzone.co.uk/) is a scheme operating in Glasgow secondary schools which aims to encourage young people to choose healthier foods in their school cafeterias. It depends upon the use of a Young Scot smartcard which can be used to collect the reward points that are on offer for ‘vital mix’ choices. Points can be exchanged for rewards (at present these are I-Pods, X-boxes and vouchers for books and cinema tickets). The card also supports increased physical activity by providing free entry to swimming sessions. It was initially piloted in three schools and the aim is now to extend it to all Glasgow secondary schools by June 2005. This scheme is part of a whole school approach to school meal improvement which included refurbishment of school dining rooms. It does not, however, have universal uptake as it depends upon young people choosing to apply for a Young Scot card.

This scheme is in line with UK government support for smartcards at local government level. According to a recent report (Nelson et al., 2004) on secondary school meals, at least 20% of schools in England are already using smart cards for school meals and this system makes it possible to build in rewards for points systems. One of the report’s recommendations is that school catering services should move towards the use of cashless smart cards and, in the context of a whole school approach to food, healthy choices should be encouraged by rewards. It is possible that there are other reward schemes operating in school cafeterias. However, the contacts we have had with professionals in the field of school catering suggest that Fuelzone is the one of the largest and most well developed of these schemes to date.

5.3 Education and attendance promoting schemes

Three very different intervention schemes are aimed at improving attendance in education. Two of these are large-scale national schemes funded by the Department for Education and Skills (DfES): the Education Maintenance Allowance (EMA) and the Connexions Card. The third is Karrot, a scheme in the London Borough of Southwark. This aims to improve school attendance and reduce youth crime.
5. Details of ongoing incentives schemes

5.3.1 Education Maintenance Allowance

The Education Maintenance Allowance ([http://www.dfes.gov.uk/financialhelp/ema](http://www.dfes.gov.uk/financialhelp/ema)) aims to encourage participation, retention and achievement in post-compulsory education. It is an allowance paid directly to young people between the ages of 16 and 18 doing at least 12 hours of guided learning a week and available to all whose parental income is less than £30,000 p.a. Weekly payments are £10, £20 or £30 a week (subject to satisfactory attendance and the meeting of learning targets) and bonuses are also payable for satisfactory progress. Originally piloted in 15 authorities in 1999, there has been an ambitious programme of evaluations (undertaken by the Institute of Fiscal Studies and the University of Loughborough). These evaluations were used as a basis for the decision taken in the 2002 spending review to roll out the scheme nationally from 2004. A range of pilot reports have been published and a controlled outcome evaluation was due to be submitted at the end of 2004 to the DfES (Feinstein, 2005).

5.3.2 Connexions Card

The Connexions Card ([http://www.connexionscard.com/x/c/cxc.jsp?P1=HOME](http://www.connexionscard.com/x/c/cxc.jsp?P1=HOME)) has similar aims to the EMA. In its initial stages it targeted disadvantaged young people. However, following piloting it has been made universally available to all 16–19 year olds across England from September 2002. The contract to run the scheme was awarded to Capita in 2001, at a cost of over £100 million, the eventual aim being to have 2.4 million cards in circulation. York Consulting have had been awarded a three year contract to undertake regular evaluations (both outcome and process). The most recent evaluation is due to be delivered to the DfES in Jan 2005. We are in the process of obtaining copies of completed evaluations.

Cardholders earn points for attendance in education and for undertaking informal learning such as voluntary, sporting or cultural activities. Bonus points may also be available for achieving specific goals agreed with a personal advisor. Points can be exchanged for a range of goods, special offers and other opportunities shown on the Connexions website. The card can also be used to provide a range of discounts to help reduce the cost of learning, covering local transport, learning materials, leisure and local stores. The scheme does not yet have universal coverage as at present only about a quarter of post-16 establishments are sending attendance data to the Connexions Card Information Server so that points can be computed and rewards collected, and there are 480,000 cardholders to date.

We identified few health-promoting incentives schemes; more addressed education and citizenship. The recent White Paper on Public Health (Department of Health, 2004), however, has called for the creation of Children’s Trusts the aim being that they should be established in all areas by 2008. These trusts will bring together the planning, commissioning and delivery of children’s and young people’s health services alongside education, social care and other partners such as Connexions and where desired, Youth Offending Teams. The White Paper also states that Connexions Partnerships and Learning Centres will be encouraged to link the reward opportunities offered by the Connexions Card with activities related to healthy choices.
5.3.3 Karrot

Karrot ([http://www.karrot.org.uk/](http://www.karrot.org.uk/)) was initially a pilot project funded by HM Treasury and the Cabinet Office. It is now run and funded by the London Borough of Southwark Youth Service, but the majority of the funding comes from the Metropolitan Police. Although primarily aimed at vulnerable young people, it is open to all young people between the ages of 11 and 16 in Southwark to avoid any creation of perverse incentives (i.e. appearing to reward poor behaviour or bad attendance). Attendance targets are set with young people and, if these are met, points are collected on a smart card which can be exchanged for gift vouchers or cinema tickets. There are also school award ceremonies. There is a developing emphasis on rewarding good citizenship and providing group rewards rather than individual ones. Karrot also offers a programme of activities such as sport, music, art and drama with specialist instructors, away trips and an Internet bus. A central aim of the project is to build greater trust between young people and the police and to prevent youth crime. Claims have been made for the success of the scheme. However, uncertainty about sources of future funding. An evaluation is underway by the consultancy Applied Research in Community Safety (ARCS) which will attempt to use a control group of young from neighbouring Lambeth where the initiative does not exist. The report is due in August 2005.

5.3.4 Playing for Success

Playing for Success ([http://www.dfes.gov.uk/playingforsuccess](http://www.dfes.gov.uk/playingforsuccess)) is an educational intervention provided through out-of-school-hours study support centres. The incentive element lies in access to sporting resources, as the centres are based in football clubs and other sports grounds. The centres use the environment and medium of football, rugby and other sports as motivational tools, and focus on raising literacy, numeracy and Information and Communication Technology (ICT) standards amongst Key Stage 2 and 3 pupils aged between 8 and 13 years. The Department of Education and Skills website states: Currently (September 2004) 101 football and other sports clubs have signed up to the full Playing for Success model and 83 have opened centres to date with more due to open later this year. Around 100,000 pupils have benefited so far, and over 40,000 will benefit each year when all centres are open. The National Foundation of Educational Research has carried out four evaluations and a recent sub-study looking at the longer-term effectiveness of the intervention. Copies of these evaluations will be obtained.

5.4 Schemes promoting other social behaviours

Dudley Life Skills Partnership, the Tumbler Youth Centre, Passport 2K and Dream Scheme are all youth work initiatives designed to reach disadvantaged young people which make use of incentives to encourage and reward participation.

5.4.1 Dudley Life Skills Partnership

The Dudley Life Skills Partnership is organised by Barnardo’s in consultation with various voluntary and statutory youth based agencies, local businesses and
public services. It is funded by West Midland Police and works with approximately 50 at risk young people aged between 8 and 19. It provides activities and workshops that are aimed at increasing good citizenship and community participation and helping young people to move on to further training or learning. Participation is rewarded by music vouchers, prize draws and visits to leisure attractions, as well as certificates and a presentation event for young people, their families and the participating agencies. No evaluations have been undertaken or commissioned.

5.4.2 Tumbler Youth Centre

The YMCA run Tumbler Youth Centre is based in Hayes, West London and operates a point-based system to reward participants. The scheme only opened in October 2004 and little information is available regarding the working of the incentives system. We are awaiting further information once the scheme has had more time to develop and refine its operating procedures in terms of rewarding participation.

5.4.3 Passport 2K

Passport 2K, based in the North West, has been included despite the fact that its main funding only ran from 2000–2003, as ten of the participating areas are said to have adopted the Passport 2K model as standard provision. It is hoped that these can be followed up in the expanded survey of ongoing projects. It was developed as part of the NW2002 Economic and Social Single Regeneration Budget scheme, and engaged over 13,500 young people from disadvantaged communities in a wide variety of projects. Its overall aims were to engage socially excluded young people in a wide variety of projects which would broaden their horizons and increase their knowledge of the opportunities available to them throughout the region. Incentives included two weeks of activities offered over the summer period as well as a range of other one-off events, and free travel to events and activities. Young people were provided with bus passes and a list of available activities enabling them to make their own decisions and plan their days effectively. Activities were based loosely around five themes: health, sport, the commonwealth, arts and culture and future opportunities. This scheme does not appear to have undergone any evaluation.

5.4.4 The Dreamscheme Network

The Dreamscheme Network (http://www.dreamscheme.org.uk/) is a Registered Charity and Social Enterprise which offers a framework in which groups of young people are enabled to carry out community-based work projects for which they earn points. Work projects include environmental, social, creative and personal development tasks. These can then be exchanged for trips or activities of their choice. There are approximately 30 such schemes in the UK with approximately 25 young people in each group. Dreamschemes have existed as parts of Housing Associations; Residents’ Associations; Community Safety Units; and Regeneration Initiatives. A three year evaluation of the impact of the schemes on young people and their communities is currently under way at Lancaster University and is due to be completed in 2006. The evaluation will look at
quantitative and qualitative data with a particular interest in the behavioural and attitudinal changes in the young people who have participated in the projects.

5.4.5 Community Merit Scheme

The Community Merit Scheme is run by the Youth Justice Board at sites in London, West Midlands, Merseyside and Greater Manchester, operating as part of the Youth Inclusion Programme. It was piloted in Southwark, Wandsworth, Islington and Hackney and following this expanded to cover other parts of the country. Projects identified and worked with a core group of the most disaffected young people in each area. Overall there were twelve projects with a minimum of eighteen participants in each. The scheme seeks to reduce offending, truancy and social exclusion in disadvantaged neighbourhoods by providing a range of supervised support and activities to 13–16 year olds who are at risk of offending. Both group and individual rewards reward the young people for attendance. Group rewards include day trips, restaurant meals, visits to leisure centres and short residential trips. The initiative finished in November 2004 and is being evaluated by Andrew Gibson Consulting Ltd using both quantitative and qualitative data, with the report due at the beginning of 2005.

5.4.5 Young Volunteer Challenge

The Young Volunteer Challenge is a scheme aimed at young people (aged between 18–19 years, though up to 21 years if they have special needs) from low-income backgrounds who would like to undertake volunteering and would not normally be able to afford a ‘gap’ year. It will have run for two and a half years when it concludes in September 2005. So far fewer than 500 young people have been through the scheme of whom approximately 200 have already completed placements. The scheme is being run in approximately eight areas by established volunteer organisations. Placements are negotiated with young people in line with their interests and needs and can last up to nine months. Over that period they receive an allowance £45.00 per week with a bonus of £750 at the end of a successfully completed placement (pro rata for shorter periods of time). Evaluation is being carried out by GHK Consulting, who have produced quarterly and interim reports over the life of the project. We have yet to obtain copies of these evaluations.

Any future schemes are likely to be affected by the recommendations of the Russell Commission on Youth Action and Engagement (see Appendix D). This report on youth volunteering and civic service will be submitted to the Home Secretary in March 2005.
6. DISCUSSION AND CONCLUSIONS

6.1 Published research

The results of the scoping review make it apparent that there is a considerable body of international research evidence in the area of incentives to promote a range of positive behaviours in children and young people. There do not appear to be any existing systematic reviews which focus on the use of incentives in this population across a range of behaviours.

6.2 Ongoing projects

There is a range of ongoing projects across the UK and further potentially relevant schemes have been identified. A number of major government initiatives now utilise incentives across a range of issues. Nine of the 13 ongoing schemes we have identified have been evaluated and many have ongoing evaluations. These evaluations will be considered for inclusion in any full systematic review.

6.3 Systematic review

Following an interim consultation between EPPI-Centre researchers and the Department of Health in November 2004, it has been decided that the EPPI-Centre team will undertake a full systematic review of the research evidence. When the review questions have been constructed, the systematic review will be carried out in two-stages: (i) a descriptive mapping of relevant studies; and (ii) an in-depth review and synthesis of the quality and findings of the studies on effectiveness and implementation (if the mapping indicates that there are sufficient studies suitable for synthesis to warrant this). In the process of this mapping we will create a searchable database that will be made freely available via the EPPI-Centre website. A full systematic review will provide an opportunity to explore in more depth, issues relevant to policy makers and practitioners in the field who wish to design and implement effective and sustainable incentive based schemes.

We will continue to search for ongoing schemes and will extend this to international incentives schemes. Any relevant research identified about ongoing schemes will be considered for inclusion in the systematic review.


APPENDIX A: Search strategy

PsycINFO (OVID)

1 motivation/
2 exp achievement motivation/
3 educational incentives/
4 exp INCENTIVES/
5 monetary incentives/
6 monetary rewards/
7 exp REWARDS/
8 exp positive reinforcement/
9 reinforcement/
10 (incentiv$ or reward$).mp. [mp=title, abstract, subject headings, table of contents, key concepts]
11 ((prize$ or pay or payment or gift or gifts or token$) adj6 (behavio$ or attend$ or change$ or changing or increas$ or decreas$ or health$)).mp.
12 or/1-11
13 exp health promotion/
14 exp health education/
15 exp health behavior/
16 exp health attitudes/ ( exp behavior change/ or lifestyle changes/
17 (antisocial behavior or behavior disorder).mp.
19 exp BULLYING/
20 exp juvenile delinquency/
21 (antisocial or anti-social).mp.
22 exp school truancy/ or exp truancy/ or exp school refusal/
23 ((non-attend$ or nonattend$ or absen$) adj3 (class$ or session$ or college or educat$)).mp.
24 adolescent behavior.mp.
25 (dropouts or school dropouts or college dropouts).mp.
26 exp physical fitness/
27 exp EXERCISE/
28 physical activity.mp.
29 exp sports/
30 walking.mp.
31 obesity.mp.
32 obesity/
33 exp Food Preferences/
34 exp NUTRITION/
35 exp social skills/
36 (behavio$ adj3 (chang$ or improv$ or worse$ or deteriorat$ or decreas$ or increas$ or reduc$ or better)).mp.
37 (health$ adj3 (eat$ or food$ or diet$ or choice$)).mp.
38 (physical$ adj3 (activ$ or fit or fitness)).mp.
39 school based intervention/
40 crime prevention/ or preventive medicine/ or primary mental health prevention/
41 behavior modification/ or classroom behavior modification/
42 *academic achievement/
Appendix A: Search strategy

CINAHL - Cumulative Index to Nursing & Allied Health Literature (OVID)

1 exp motivation/ or commitment/ or drive/ or excellence/ or power/ or praise/ or success/
2 (incentiv$ or reward$).ti,ab.
3 (prize$ or pay or pays or payment$ or gift or gifts) adj6 (behavio$ or attend$ or change$ or changing or increas$ or decreas$ or health$)).ti,ab.
4 "reinforcement (psychology)"/ or reward/
5 1 or 2 or 3 or 4
6 Health Promotion/
7 Health Promotion.mp.
8 Health Education.mp.
9 Preventative health care.mp.
10 Preventive health care.mp.
11 exp Juvenile Delinquency/
12 social behavior disorders/ or aggression/ or bullying/ or student abuse/ or verbal abuse/ or deception/ or social alienation/
13 exp Academic Performance/
14 truan$.ti,ab.
15 (anti-social or antisocial).mp.
16 behaviour modification.mp.
17 behaviour modification/
18 exp CRIME/
19 exp Social Behavior Disorders/
20 adolescent behavior/
21 learning/ or skill acquisition/ or skill retention/ or student dropouts/
22 exp LEARNING/
23 child behavior/
24 behavioral objectives/ or disruptive behavior/ or health behavior/ or social skills.mp.
25 self concept/ or confidence/ or self-efficacy.mp.
26 psychological well-being.mp.
27 psychological well-being/
28 *psychological well-being/
29 violence/
30 ((absen$ or dropout$ or non-attend$ or nonattend$ or attend$) adj3 (school$ or class$ or educat$ or college$ or student$ or pupil$)).ti,ab.
31 Physical Activity/
32 Physical fitness/
33 sports/
34 exp Eating Behavior/
35 *diet/
36 *nutrition/ or *adolescent nutrition/ or *child nutrition/
37 (health$ adj2 (eat$ or food$ or diet$ or choice$)).ti,ab.
38 (physical$ adj2 (activ$ or fit or fitness$)).ti,ab.
39 obesity/

A scoping review of the evidence for incentive schemes to encourage positive health and other social behaviours in young people

25
Appendix A: Search strategy

MEDLINE (OVID)

1 exp Reward/
2 reward.mp.
3 *REWARD/
4 incentive.mp.
5 (incentiv$ or reward$).ti,ab.
6 "Reinforcement (Psychology)/
7 ((prize$ or pay or payment or gift or gifts or token$) adj6 (behavio$ or attend$ or change$ or changing or increas$ or decreas$ or health$)).mp.
8 exp MOTIVATION/
9 *MOTIVATION/
10 motivation/
11 motivation.mp.
12 exp Health Promotion/
13 exp Health Education/
14 *Health Behavior/
15 exp Attitude to Health/
16 behavior change.mp.
17 *Life Style/
18 *preventive medicine/ or exp preventive psychiatry/
19 *preventive health services/ or **early intervention (education)/ or *school health services/
20 bullying.mp.
21 disruptive behavior.mp.
22 exp Juvenile Delinquency/
23 *Juvenile Delinquency/
24 juvenile delinquency.mp.
25 (antisocial or anti-social).mp
26 (truancy or school refusal).mp.
27 ((non-attend$ or non-attend$ or absen$) adj3 (class$ or session$ or college or educat$ or school$)).mp
28 student dropouts.mp.
29 adolescent behavior.mp.
30 *Adolescent Behavior/
31 *Child Behavior/
32 child behavior.mp.
33 Health Knowledge, Attitudes, Practice/
34 Attitude to Health/
35 exp Physical Fitness/

A scoping review of the evidence for incentive schemes to encourage positive health and other social behaviours in young people
Appendix A: Search strategy

36 physical fitness.mp.
37 *Physical Fitness/
38 exp exercise/ or exp walking/
39 *EXERCISE/
40 *WALKING/
41 exp Sports/
42 *Obesity/
43 exp Obesity/
44 exp Obesity/pc, px
45 food habits/ or food preferences/
46 *food habits/ or *food preferences/
47 *Nutrition/
48 *Achievement/
49 (health$ adj3 (eat$ or food$ or diet$ or choice or chose$)).mp.
50 (behavio$ adj3 (chang$ or improv$ or wors$ or deteriorat$ or decreas$ or reduc$ or better)).mp
51 (physical$ adj3 (activ$ or fit or fitness)).mp.
52 obesity.mp.
53 obesity/
54 ((food or eat or eating) adj3 (habit$ or prefer$)).ti,ab.
55 adolescent/ or child/
56 (young adj3 (male or males or pupil$ or student$ or woman or women)).ti,ab.
57 (juvenile$ or adolescence$ or teenage$).ti.
58 or/1-7,10
59 or/12-22,25-38,41-43,45-54
60 or/55-57
61 and/58-60
62 limit 61 to (human and yr=1995 - 2004)

SSCI- Social Science Citation Index (ISI Web of Knowledge)

#1 TS=(motivat* or reinforc* or incentiv* or reward*)
#2 TS=(Health Promotion or Health Education or Health Psychology or Health Behav* or Health Attitude*)
#4 TS=(Truancy or school refusal or nonattendance or dropouts)
#5 TS=(offend* or juvenile delinquent* or behav* problems)
#6 TS=(bullying or antisocial behav* or vandal* or disruptive behav*)
#7 TS=(Behav* change or lifestyle change or behav* modif* or preventive health service*)
#8 TS=(Behav* change or lifestyle change or behav* modif* or preventive health service* or intervention)
#9 TS=(physical fitness or physical activity or exercise or health maintenance)
#10 TS=(sport* or walk* or recreation or leisure)
#11 TS=(nutrition or healthy eating or food choice or food preference*or diet)
#12 TS=(Obesity or overweight)
#13 TS=(academic achievement or success or sporting achievement or well-being or quality of life)
#14 TS=(mental health)
#15 TS=(children or teenage* or adolescent* or young men or young women or youth or boy* or girl* or young people)
Appendix A: Search strategy

#16  #2 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14
#17  #1 and #15 and #16
#18  TS=(baby or infant)
#19  #17 not #18
#20  #19 not #8

ERIC – Educational Research Index and catalogue (CSA - Cambridge Scientific Abstracts)

AB=(incentive* or reward* or motivation) AND KW=(health or (health activities) or (health promotion) or (physical fitness) or exercise or wellness or (eating habit*) or nutrition or obesity or truancy or attendance or dropouts) AND AB=(child* or (young people) or adolescen*)
APPENDIX B: Reports of included studies


Balding A (2000) Fit to Succeed: A partnership between the children of Exeter, Exeter Academic Council, Exeter City Council, Devon Curriculum Services, the Schools Health Education Unit and DC Leisure Management, to promote physical activity and achievement in schools. Exeter: Schools Health Education Unit.

Balding A (2001) Pupils get 'Fit to Succeed': a pilot project in the West Country found that not only could regular exercise be promoted - but also found links with academic performance. Education and Health 19: 17-20.


Center for Human Resources (1995) **Quantum Opportunities Program. A Brief on the QOP Pilot Program.** Waltham, MA: Center for Human Resources, Brandeis University.


Appendix B: Reports of included studies


Appendix B: Reports of included studies


Appendix B: Reports of included studies

Scott LS (1999) *The Accelerated Reader Program, Reading Achievement, and Attitudes of Students with Learning Disabilities*. Specialist in Education: Department of Middle-Secondary Education and Instructional Technology in the College of Education Georgia State University.


Appendix B: Reports of included studies


*A scoping review of the evidence for incentive schemes to encourage positive health and other social behaviours in young people*
### APPENDIX C: Table of ongoing and recently completed projects

<table>
<thead>
<tr>
<th>No</th>
<th>Project</th>
<th>Location and Provider/Funder</th>
<th>Focus</th>
<th>Population</th>
<th>Evaluation status</th>
<th>Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Karrot</td>
<td>London Borough of Southwark Youth Service and Metropolitan Police</td>
<td>Improve school attendance/reduce youth crime</td>
<td>Open to all 8,500 11–16 year old young people educated in the borough. Schools however need to opt in to the scheme. Number of participants not known</td>
<td>External evaluation being undertaken by Applied Research in Community Safety Due August 2005</td>
<td>Vouchers, activities, trips, award ceremonies</td>
</tr>
<tr>
<td>2.</td>
<td>Dudley Lifeskills Partnership</td>
<td>Metropolitan Borough of Dudley and West Midlands Police. Managed by Barnados</td>
<td>Social inclusion, citizenship</td>
<td>Participants are approximately 50 at risk young people.</td>
<td>Internal evaluation.</td>
<td>Vouchers, prize draws, certificates, award ceremonies</td>
</tr>
<tr>
<td>3.</td>
<td>Food Dudes</td>
<td>Pilots in selected Primary schools in England and Wales; Pilots in six Welsh schools funded by Food Standards Agency</td>
<td>Healthy eating/ changing peer and school culture with respect to eating fruit and vegetables.</td>
<td>Children and young people aged 11–16 years in pilot schools. Over 1,100 children have taken part in various pilot studies.</td>
<td>Several evaluations available and others ongoing by the devisors of the scheme at the Bangor University Food Research Unit. Evaluations included in scoping exercise</td>
<td>Small rewards for tasting novel foods.</td>
</tr>
<tr>
<td>No</td>
<td>Project</td>
<td>Location and Provider/Funder</td>
<td>Focus</td>
<td>Population</td>
<td>Evaluation status</td>
<td>Incentives</td>
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<td>4.</td>
<td>Fit to Succeed</td>
<td>Primary/secondary schools children in Exeter and Tiverton</td>
<td>Raising levels of physical activity and participation in sport and promoting healthier eating,</td>
<td>Children and young people aged 8–16 years (and their families). 2003 report provides pre- and post-intervention data 19 schools (n= 727 pre-intervention, n=634 post intervention)</td>
<td>Pilot devised and evaluated by Schools Health Education Unit. Included in scoping exercise.</td>
<td>Free taster sessions/discounts/money off vouchers at leisure centres for children, families and teachers.</td>
</tr>
<tr>
<td>5.</td>
<td>EMA scheme</td>
<td>DfES Implemented throughout the UK since Sept 2004.</td>
<td>Continued and constructive participation in post 16 education and good attendance.</td>
<td>Pilots run in 15 LEAs. Total number of participants not known. Since Sept 2004, universally available to all financially eligible young people in post-16 education. Total extent of uptake not known.</td>
<td>Repeated pilot evaluations conducted by Loughborough U (Centre for Research in Social Policy) and the Institute of Fiscal Studies. Included in scoping exercise.</td>
<td>Eligibility dependent on parental/household income. Maximum incentive allowance, £30p/w paid directly to young people as piloting indicted this was the most effective route.</td>
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<td>6.</td>
<td>Fuelzone</td>
<td>Piloted in 3 Glasgow Secondary Schools. Glasgow City Council and partners</td>
<td>Healthy eating</td>
<td>Number of participants in pilot schools not known. To be extended to all secondary schools in Glasgow by June 2005.</td>
<td>Internal monitoring and evaluation.</td>
<td>Smart card records healthy choices. Points exchanged for gifts/vouchers</td>
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</table>
### Appendix C: Table of ongoing projects

<table>
<thead>
<tr>
<th>No</th>
<th>Project</th>
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<td>7.</td>
<td>Connexions</td>
<td>DfES England</td>
<td>Supporting and rewarding attendance and effort in education post 16.</td>
<td>Available to all 16–19 year olds since 2002. In Aug 2004 there were 358,514 cardholders (24% of the 16–19 cohort). A small proportion of these (3.7%) were currently engaged in claiming rewards at the time of the most recent evaluation (Jan 2005).</td>
<td>Repeated evaluations carried out. York Consulting Ltd available for scoping exercise.</td>
<td>Points exchanged for goods, vouchers, and experiential rewards</td>
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<td>Smart Card</td>
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<td>8.</td>
<td>Passport 2K</td>
<td>North West England funded by Single Regeneration Budget 2002–2003. Regional network still operates and some areas continuing to use model for mainstream youth provision.</td>
<td>Social inclusion, and personal development.</td>
<td>Young people aged 14–25 years. Approximately 7,000 young people took part in regional events over the three years in which the scheme was running.</td>
<td>No formal evaluation located.</td>
<td>Help with cost of travelling to take part in holiday activities. Experiences and opportunities available via Passport 2K website</td>
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<td>9.</td>
<td>Dreamscheme</td>
<td>30 schemes in deprived areas of the UK</td>
<td>Social inclusion and community cohesion.</td>
<td>Mainly 11–18 year olds. Approximately 750 participants in all.</td>
<td>Evaluation being undertaken as a postgraduate project at Lancaster University.</td>
<td>Points given for volunteer work exchangeable for trips.</td>
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<td>12</td>
<td>Young Volunteer Challenge</td>
<td>DfES funded. Pilot schemes in 8 areas of the UK using existing volunteer organisations to run schemes</td>
<td>Social and personal development that can come with volunteering.</td>
<td>18–19 year olds from low-income households. By Oct 2004, 408 young people had been involved with the programme out of a projected 785.</td>
<td>Regular quarterly and interim reports produced by GHQ consulting who will supply final evaluation. Uncertain as to public availability</td>
<td>Volunteers receive £45 p/w and a completion award of £750 after 9 months. Also expenses.</td>
</tr>
<tr>
<td>13</td>
<td>Playing for Success</td>
<td>Approximately 100 Centres UK wide based in Football/other Sports clubs. DfES and LEAs</td>
<td>Focus on raising literacy, numeracy and ICT standards in underachieving children.</td>
<td>KS 2 and 3 pupils. Approximately 100,000 pupils were said to have participated by Sept 2004. (Press release on Playing for Success website)</td>
<td>Repeated evaluations by the National Foundation for Educational Research. Included in scoping exercise.</td>
<td>Access to resources and activities</td>
</tr>
</tbody>
</table>
APPENDIX D: Russell Commission

The Russell Commission launched its consultation into youth action and engagement on Monday 4 October 2004. The purpose of this consultation document is to test a number of questions about the measures to be contained in a new national framework to increase youth volunteering and civic service by young people. In doing so, the Russell Commission wishes to build on the existing strengths and expertise of voluntary organisations and businesses involved in community and mentoring activity and it would be grateful for your contribution.

Additionally, for a new framework to be successful, young people’s interests and motivations, their aims and aspirations, have to be meaningfully reflected in our proposals. The Russell Commission therefore particularly wants to hear from young people about their experiences, and the incentives and opportunities which they would like to see included.

Taken from: http://www.russellcommission.org/
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http://www.ioe.ac.uk/ssru/

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The views expressed in this work are those of the authors and do not necessarily reflect the views of the funder. All errors and omissions remain those of the authors.

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