The effects of participation in performing arts for health on young people: a systematic review of the published literature 1994-2004

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1. Executive Summary

(i) There is increasing interest in the role of arts in health care, and a growing consensus that participation in arts activities can have a transformative impact upon the lives of young people. While there is growing evidence to support the benefits of arts for health and well-being, this is uneven. Most programmes that seek health outcomes through the performing arts have not been subject to high quality evaluation.

(ii) This literature review seeks to provide an overview of current evidence surrounding the effects of arts for health on adolescents and young people between 11 and 18 years old. The review includes music, performance, drama and dance in community settings as well as non-curricular activity in mainstream education. Clinical populations and settings such as hospitals were not included in the review: research in these settings addresses different questions and uses different methodologies to that in community settings. The review seeks to strengthen the evidence base surrounding arts for health activity among young people in the community.

(iii) Our literature search identified 3670 papers, 104 of which met our relevance criteria. A total of 85 full text papers were scrutinised in the review, including 30 reports of quantitative studies and 55 reports of qualitative and mixed methods research. Many of these were excluded on the grounds that they were not reporting on an intervention or, in the case of qualitative accounts, were reportage rather than research. A total of 15 papers are included in the review: 9 of these were reports of quantitative research and 6 qualitative research papers. All of these projects focused on drama interventions: hence our research found no evidence of evaluated music and dance interventions within non-clinical settings.

(iv) Our review included critical appraisal of studies and a number of validity issues were identified. In relation to quantitative research, we found some good examples of controlled studies that used randomisation to allocate individuals to intervention or control groups, although the majority of studies used non-random samples. Issues of sample size, power considerations, randomisation and blinding need to be addressed in future research.

(v) In relation to qualitative research, we found that methodologies of action research, grounded theory and ethnography were used to good effect. However, issues of reporting of data collection, appropriate frameworks of data analysis, ethical issues and consideration of the relationships between researcher and participants need to be addressed in future research.

(vi) The issue of heterogeneity is strongly apparent in both the quantitative and qualitative studies, which reported on diverse populations, interventions and settings, making any kind of synthesis of the results
inappropriate. Instead, we present a thematic overview of the results of both groups of studies.

(vii) The quantitative studies reported outcomes in three main areas: peer interaction and social skills; HIV/AIDS; sexual health, and alcohol, tobacco and drug use. Positive benefits of arts reported included changes in attitude, knowledge and reported behaviour in all of these areas although the research was not always consistent. The studies use a variety of validated measures of attitudes and knowledge. While these measures provide useful indicators it is important not to conflate attitudes and knowledge with behaviour when interpreting the results of studies.

(viii) Positive impacts of performing arts were also reported from qualitative research. A number of key concepts emerged from the studies relating to personal benefits, enhanced interaction and communication, and community empowerment. Process issues were also examined in the qualitative research, and greater understanding is needed of the influence of staff, teachers, peers and group leaders on the success or failure of performing arts initiatives. The importance of involvement and participation of young people in the research is a key issue emphasised in several qualitative studies.

(ix) Most of the studies focus on positive effects of arts and few focus on risks or negative aspects. Negative aspects and risks of drama were discussed in one qualitative study, which suggested that there is a need to further understand the reasons why some young people might be reluctant to participate in initiatives like drama.

(x) The review demonstrates that research on the impact of performing arts on the health of young people is at an early stage. A number of priorities for future research are identified including:

- A need for further quantitative and qualitative research on performing arts other than drama outside of clinical settings.
- A need for greater rigour in the selection, application and reporting of qualitative research procedures, particularly data analysis.
- Problems of bias can be reduced by use of independent researchers. Where this is not possible, rigorous models of practitioner research are needed in order to move beyond the common practice of journalistic reporting by those responsible for both the intervention and its evaluation.
- Qualitative research needs to draw on appropriate models and frameworks rather than borrowing language that is more appropriate to quantitative research.
2. Background

2.1 Arts for health activity and research: an overview

There is increasing interest in the role of arts in health care, a broad field that encompasses a wide range of activities including arts therapies, music, performance, drama and dance as well as visual arts, poetry and creative writing. Within the UK there are a growing number of agencies involved in sponsoring arts and health initiatives. These include Government departments, such as the Department of Culture, Media and Sport (DCMS, 1999) and the Department of Health (DH, 2006), as well as Arts Council England (ACE) and its regional bodies (ACE, 2004; 2006).

These bodies have all called for a strengthening of the evidence base for arts and health initiatives. Recent reviews of the literature have suggested that there is growing evidence for the impact of arts on health, but that this is not evenly spread across the health sector (Staricoff, 2004; White and Angus, 2003; Angus, 2002). The most extensively researched area is music, particularly music therapy in clinical settings (Staricoff, 2004). However, many arts for health initiatives are driven not by clinical goals but by social and holistic models of health (Angus, 2002). There is a growing concern to develop appropriate evaluation tools for this work that reflect these wider goals and concepts. There is also a concern to broaden the focus of arts and health work to address key concerns of public health such as coronary heart disease, obesity and sexual health (ACE, 2006).

2.2 Young people and arts for health activity

As well as focusing largely on clinical settings, the current literature tends to focus on adult health, with relatively little research and evaluation of projects aimed specifically at young people. Nevertheless, there has within the UK been increasing investment in arts activity by government and other agencies. This is based on a growing belief that young people’s engagement with the arts, irrespective of setting, can help even the most vulnerable young people to develop social and life skills (ACE, 2003a; Lloyd and Lyth, 2003). The Arts Council claims that engagement and participation in arts activities can have a transformative impact upon the lives of young people (ACE, 2003a; ACE, 2003b). Arts subjects are seen as attracting young people’s interest because of the alternative, personal and self-fulfilment needs they address (ACE, 2003a).

This is borne out by a national study of the attitudes of young people to participation in curriculum-based arts subjects (Harland et al., 2000). This highlighted the sense of excitement, fulfilment and fun generated by these subjects, which were reported to provide young people with opportunities to relieve stress, deal with criticism and explore emotions. Similarly, findings from the national evaluation ‘Positive Futures’ revealed that young people reported that their engagement with the performing arts also impacted on a wide range of outcomes such as relieving stress, calming down, dealing with
criticism and managing their own emotions (Positive Futures, 2005; Harland et al., 2000). A national evaluation of voluntary arts projects (Jackson, 2003) concluded that the voluntary arts present a cost-effective opportunity to promote government policies with regard to social exclusion and life-long learning. The study suggested that arts have therapeutic benefits: they enable participants to distance themselves from personal problems and provide a way of living with ambivalence. Additionally, arts initiatives can be highly inclusive, motivational and respectful of differences. One project leader claimed that it enabled people to ‘transfer their addiction to alcohol and drugs into an addiction to embroidery’ (Jackson, 2003: 6). Drama and related arts activities seem particularly appealing to girls (Colley and Comber, 2003; Miller and Budd, 1999) although a recent study suggests that as well as influencing factors such as attainment, attendance and behaviour, out-of-school activities have an integrative effect for the whole school community (Wilkin et al., 2003).

Since the late 1990s the government has encouraged schools to develop coherent programmes of out-of-school activities, supporting the view that by enhancing emotional literacy, self-awareness and ability to enjoy positive relationships with others, these programmes can encourage young people to be better able to think, learn and make lifestyle decisions that will promote their well-being (DfES, 2003). According to MORI and BRMB surveys (Kirkham and Evans, 2000), 97% of secondary schools provided out-of-school hours activities. Universally this was at the end of the day but they also provided activities at other times including lunch times (90%), before school starts (37%), at weekends (60%) and during summer holidays (65%). Nearly all UK secondary schools offer sports, music and creative and performing arts activities out-of-school hours. Almost 70% of schools reported that they had increased their provision of activities in the last two years.

2.3 Researching and evaluating the effects of performing arts for health on young people

Most programmes that seek health promotion outcomes through the performing arts have not been subject to high quality evaluation (Orme and Salmon, 2002). Further, those programmes that have been evaluated are rarely comparable, with differences in terms of setting, duration, target age group, peer involvement and specificity of health promotion aims (Angus, 2002). Evaluation is made difficult by a lack of clarity about the aims of projects. For example, much arts for health work with young people has focused on encouraging young people to resist drugs (Drugs Strategy Directorate, 2002; Starkey and Orme, 2001). Yet a recent review of this work suggests that the aims of projects are often unclear, with health related aims often added as an afterthought (Davis and Dawson, 1999). Angus’s review (2002) of arts for health evaluations across the UK found that relatively few of these stated explicit health promotion objectives. Moreover, even fewer projects explicitly theorise the association between creative artistic endeavours and health promotion.
As well as lack of clarity about aims, there is a lack of agreement about the best way to evaluate arts for health projects. Measurable outcomes, such as psychosocial state, are seen by some as a useful indicator of young people’s health and well-being (Murphy and Bennett, 2003). Yet methodologies used within evidence based health care, such as the randomised control trial (RCT) are not necessarily accepted as the ‘gold standard’, with some practitioners viewing these approaches as reductionist and likely to undermine the creativity that defines arts interventions (Angus, 2002). Hence practitioners resist crudely causal accounts of the relationship between creative action and health outcomes (Health Education Authority, 1999).

In reality, most arts for health evaluations are small scale and qualitative in design. A number of Theatre in Education (TIE) programmes have been subject to small scale evaluations in the past decade. TIE has been evaluated in connection with a wide variety of issues including sexual health (Denman et al., 1995), appropriate physical contact (Orme and Salmon, 2002) and homelessness (Day, 2002). Allott et al.’s review (1999) identified a number of evaluations of TIE programmes with drugs education elements. TIE programmes tend not to be didactic and have an emphasis upon affective impact and social skills, making quantitative evaluation difficult. Process and impact evaluations report positive short-term effects upon student attitudes and, to a lesser extent, knowledge. However the review found little evaluation evidence in terms of outcome effects.

2.4 Rationale for the literature review

This literature review seeks to provide an overview of current evidence surrounding the effects of arts for health on adolescents and young people between 11 and 18 years old. The review includes music, performance, drama and dance in community settings as well as non-curricular activity in mainstream education. Clinical populations and settings such as hospitals were not included in the review as research in these settings addresses different questions and uses different methodologies to that in community settings. The review seeks to strengthen the evidence base surrounding arts for health activity among young people in the community.
3. Systematic Review Methodology

3.1 The search strategy

The literature search was undertaken in July 2004 using the databases identified in Appendix 1. We restricted the search to publications with English language abstracts published over the last 10 years. Our search terms (see Appendix 2) reflected our inclusion criteria. We also identified information produced by key agencies through searching on the internet, using broad search terms including: young people, performing arts and research.

Inclusion criteria (see Appendix 3) encompassed population characteristics, type of intervention and research and evaluation methods. Hence we included papers on performing arts interventions with children and young people including school pupils between the ages of 11 to 18 within mainstream education and community settings. We excluded research on clinical and 'special' populations and settings such as hospitals, special schools and prisons. In relation to interventions, we included studies of performing arts outside of the standard curriculum in three areas: drama, dance and music. We excluded interventions that took place as part of the regular curriculum as well as other art forms such as visual arts and martial arts. Where there was any doubt about whether a paper met the inclusion criteria two reviewers screened the full text paper.

3.2 Results

The search was undertaken in two phases. The phase one database search resulted in 3670 initial hits (see Appendix 1). The titles and abstracts of these were screened for relevance and duplicates removed: this process reduced the number of papers to 202. The abstracts of these were downloaded into a Procite database and after further screening of these, 104 papers were identified that seemed to meet our relevance criteria.

Phase two involved full text scrutiny of papers. We wrote to the authors of any papers that were not available electronically or from library sources, although some authors, particularly those of papers from the early period of selection, were difficult to contact. A total of 19 papers proved to be unobtainable, ten of which were from NHS and local government organisations from the mid 1990s onwards.

A total of 85 full text papers were scrutinised, including 30 reports of quantitative studies and 55 reports of qualitative and mixed methods research. As well as relevance, additional inclusion criteria were applied at phase two. In relation to quantitative research, we only included papers that reported results of pre and post-testing following a performing arts intervention. In relation to qualitative research, we only included papers that used recognised procedures of data collection such as interviews, focus groups and observation. Critical appraisal of the studies using standard
critical appraisal tools was undertaken by members of the research team working in pairs.

Among the qualitative reports were a large number of case vignettes and reports by practitioners describing a wide range of benefits of a range of performing arts interventions including music training, music performance and creative drama. However, the lack of reporting of procedures for data collection and analysis meant that it was difficult to include these reports. This left a total of 14 papers, including one mixed methods study. There were 9 reports of quantitative research and 6 reports of qualitative research. All of these reports focused on drama interventions: hence our research found no evidence of evaluated music and dance interventions within non-clinical settings.

An overview of the search strategy and results is provided in Appendix 4. An overview of the papers included in the review is provided in Appendices 5 and 6.

3.3 Methodological characteristics of the studies

The quantitative research included in the review focuses mainly on drama, and relatively little quantitative research on other performing arts interventions was found. Despite this common focus, diverse topics and methodologies mean that the results cannot be easily synthesised. The research encompassed diverse interventions ranging from one performance through to weekly drama sessions over an extended period of more than a month. Drama was provided with and without discussion workshops. In some interventions the target population were performers and in others they were the audience. The homogeneity of these interventions makes them difficult to compare. In multifactoral interventions there is the added difficulty of identifying which element of the programme leads to specific changes.

The studies also encompassed diverse populations. Some focused on selected groups of young people including those defined as ‘at risk’ by parents, teachers and professionals, young people in deprived areas and young people from minority ethnic groups. Others focused more generally on young people. This diversity also makes it difficult to compare results and generalise the findings.

The studies differed in the methodologies used. Of the nine quantitative studies, a total of six controlled studies were identified, although only three of them (Elliott et al., 1996; McArdle et al., 2002; Harvey et al., 2000) used procedures of randomisation to allocate individuals to intervention or control groups. The remaining three studies used pre and post-test questionnaires to assess interventions but did not make use of control or comparison groups in the research design.

A number of validity issues arise from the review. Many of the studies drew on small samples and, with some exceptions (e.g. McArdle et al., 2002), issues of sample size and power considerations were not generally addressed
in the majority of studies. Other research design issues such as lack of randomisation and blinding can be identified as weaknesses in many studies. The difficulties of randomising young people to group interventions are discussed by McArdle et al. (2002). Nevertheless, problems arise from lack of randomisation including inappropriate comparisons and bias introduced through self selected samples. Some of the authors reported difficulties of access to the field and administrative hurdles leading to a number of problems including high levels of attrition in some studies. Finally, most of the studies relied on self-report measures. It is important not to conflate reported changes with actual changes, particularly in relation to behaviour.

Six qualitative studies were included in the review, all of which focused on the impact of drama based interventions. We found many anecdotal reports of other performing arts interventions but most of these were reportage and none met the inclusion criteria for the review. The studies we included used a wide range of methods including observation, interviews and group discussion. The methodological approach was not always clear, although the review found that the methodologies of action research, grounded theory and ethnography were used to good effect.

While all the selected studies used recognised procedures for data collection, standards of reporting of these procedures varied widely. In general little detail was provided about research procedures including selection of participants, data collection and data analysis. Some studies included reflexive discussion of ethical issues and the relationships between researcher and participants, but most did not.

Reporting of data analysis was generally more limited and approaches ranged from thematic analysis to reflexive discussion of experience. Several studies relied on face value reporting of participants’ accounts with little reference to any kind of interpretative framework. In these studies, the ontological and epistemological assumptions were often drawn inappropriately from quantitative research.

The issue of heterogeneity is therefore strongly apparent in these studies. Not only did the studies use a range of different research designs, they drew on different ontological and epistemological premises, although these were not always made explicit. This led to variations in the reporting of outcomes. While some of the qualitative studies focused on outcomes using language borrowed from quantitative research, others focused on issues more suited to qualitative analysis, such as process issues and the development of conceptual and theoretical findings.
4. Results of the Quantitative Studies

The quantitative studies identified a range of benefits of drama and performing arts in three main areas: peer interaction and social skills; sexual health and HIV/AIDS knowledge, attitudes and risk. A number of positive benefits of performing arts were identified including changes in self concept, self esteem, knowledge, peer and social interaction, attitudes and behaviour.

4.1 Peer interaction and social skills

Two studies focused on general health, educational and social benefits of drama with young people. McArdle et al. (2002) carried out a randomised control trial of 122 children aged 11 in a deprived area of the UK. The children were identified as ‘at risk’ according to criteria developed in consultation with teachers. These included scholastic under performance, known major family problems, ill nourished or poorly cared for appearance, impaired peer relationships and behavioural and emotional difficulties.

The intervention was a one-hour group drama session lasting 12 weeks and the control group worked on national curriculum maths and English. Initially there was random allocation with some attempt at blinding, with participants allocated to intervention and control groups by members of the research team who did not know them. However, the authors report that afterwards some children were exchanged between groups following consultation with teachers in order to ensure an appropriate case mix for the groups. Seventeen of the original participants were not included in the follow-up.

Issues of sample size and power considerations were addressed based on a previous study that demonstrated significant differences between interventions each comprising approximately 60 children (Kolvin et al., 1981). Hence, in McArdle et al.’s 2002 study 122 children were randomised between the group therapy and the curriculum studies interventions, which ran in parallel, eight children in each group, repeated in three consecutive terms in two schools.

Measurements encompassed three domains: behaviour, symptoms and self concept. Established measurements were used including the Teacher Report Form (TRF), the Youth Self Report tool (YSR), the Multidimensional Self Concept Scale (MSCS) and the parent completed Child Behaviour Checklist (CBCL). A series of analyses were reported including use of an Intercooled STATA 6.0 for Windows random effects regression model technique that allowed for both within and between subject effects to be considered as well as changes over time.

The study found significant decline in self reported symptoms and significant improvements in self concept as well as teacher assessed behaviour among the intervention drama group compared with the curriculum studies group. The study also found evidence of short-term improvements in behaviour assessed by parents, although these improvements were not sustained at follow-up (McArdle et al., 2002). The authors concluded that group therapy
interventions are superior to no interventions and that compared with curriculum studies, group therapy appears to accelerate change.

The impact of drama interventions on social skills and interaction was explored in a mixed methods study by Walsh-Bowers and Basso (1999). This study focused on two drama interventions with seventh grade children in a rural elementary school in Ontario, Canada. The first of these involved 24 students in a class of 33 who, with their parents, agreed to take part in a 15 week drama intervention. This group was compared with a class in a smaller school in the region who did not receive the drama programme. The usefulness of this comparison was, however, questioned by the authors, who point out important differences between the two environments. Hence the comparison class is described as a particularly supportive climate for peer relations compared to the problematic intervention class that was embedded in a more traditional school climate. While a range of validated measurement tools were used in a pre and post-test design focusing on domains of peer interaction and social skills, the quantitative data yielded ambiguous results. However, significant improvements in parent rating of social skills were reported in the intervention group over the comparison group.

A second intervention in an urban school involved 29 students and used the same drama intervention and similar outcome measures as the first. The results for this group were compared with those from three similar classes that did not receive the intervention. The results show no differences in self-report peer interaction measures although teacher ratings showed significant improvements in the intervention group. Overall, lack of randomisation and blinding, small sample size and the problematic use of a comparison group in the first study limit the quantitative findings of this research.

4.2 Knowledge, attitudes and risk behaviour in relation to HIV/AIDS

Three studies focused on the use of drama in HIV/AIDS education. These studies reported mixed results in relation to the claim that drama can lead to improvements in knowledge and changes in attitudes and behaviour. The most extensive study was that by Harvey et al. (2000) who investigated the impact of drama on changes in knowledge, attitudes and behaviours concerning HIV/AIDS of teenage secondary school children in South Africa. The study was a randomised community intervention trial involving over a thousand pupils in seven pairs of secondary schools. Ten pairs of schools were selected and randomised to receive the programme (DramAide intervention) or information booklets (booklet intervention). Three pairs of schools were excluded from the study due to problems of access and administration.

A pre-intervention survey was conducted in all the schools followed by a post-intervention survey on the same students 6 months after completion of the programme. Out of 1080 who took part in the pre-intervention survey, 699 (64.7%) were present during the post-intervention round. Reasons given for the lower numbers were that students had either left school, changed schools or were absent on the day.
The data were collected using a structured self completion questionnaire that focused on what were viewed as attitude determinants for behaviour change including knowledge about HIV/AIDS, attitudes to risk, attitudes towards people with AIDS and preventive behaviour. The data were analysed with input by medical researchers in the UK Public Health Laboratory Service. This analysis focused mainly on attitudes and knowledge and excluded self reported behaviour change. It used a grading of three ‘correctness’ scores and the change in mean scores from pre to post-intervention surveys was measured to assess the influence of the intervention.

The reported results included significant increases in knowledge about HIV/AIDS in both the DramAide and booklet intervention schools, with a greater increase that was statistically significant in the former group. In relation to attitudes about HIV/AIDS, mean scores increased in the DramAide intervention schools but showed no evidence of change in the booklet intervention schools. Analysis of self reported behaviour showed some changes, including increased reported condom use, in students in the DramAide intervention schools although these changes were not statistically significant. The authors conclude that drama intervention can lead to significant improvements in knowledge and particularly attitudes to HIV/AIDS. The limitations of the study are discussed: these include the inability to link individual responses due to the anonymous nature of the questionnaire, a high attrition rate which allowed considerable potential for bias and reliance on self report measures. Nevertheless, the high response rate within schools (over 90%), the consistency of results and the randomised design all contribute to the validity of the findings.

Evidence by Denman et al. (1995) also supports the claim that drama can lead to improved knowledge and changes in attitude in relation to HIV/AIDS. This controlled study examined the effects of a drama programme focusing on HIV/AIDS in 12 UK secondary schools. The children were divided into an intervention group of 252 who took part in a Theatre in Education Programme focusing on HIV and AIDS entitled ‘Someone Like You’ and a control group of 428. Following the intervention, the experimental group showed significantly bigger gains in knowledge than the control group and also showed significantly greater shifts in attitude. Hence the authors conclude that the drama programme improved knowledge levels and influenced the attitudes of the children participating in the initiative.

Research by Elliott et al. (1996) does not support claims that theatre has a positive impact on HIV knowledge and attitudes, although the research does indicate that theatre may influence some reported behaviours. This controlled study of the effects of theatre in HIV/AIDS education on knowledge, attitudes and risk behaviour involved young people in ten youth projects in socially deprived areas of Glasgow. The research compared a theatre production on HIV with a standard group based health education seminar. Self completion questionnaires were completed prior to the intervention and two months afterwards. The questionnaires were based on standard tools used in previous research. A total of 132 young people attended a theatre
performance and 85 attended the seminars. However, complete pre and post-intervention data were available for only 42 of the theatre attendance group and 35 of the young people attending the standard seminars. The small sample size was acknowledged as a limitation by the authors. The research found little change in knowledge and attitudes of either group following the intervention, although there was some evidence of attitudinal change among those exposed to the group seminar. There were also changes in reported behaviour with more of the theatre intervention group reporting buying and carrying condoms, although this did not extend to levels of reported unprotected sex.

4.3 Alcohol, tobacco and illegal drug use

Two of the studies examined the impact of drama on young people’s use of alcohol, tobacco and illegal drugs. In a study of a combined arts programme in a US secondary school, 292 students who volunteered to take part in the programme were compared with those in a comparison school where the intervention did not take place (Nelson and Arthur, 2003). The study examined pre and post-intervention responses on drug and alcohol use, reporting increased resistance to drug use among those participating in the programme. However, as the arts were embedded in a complex multifaceted intervention it is difficult to attribute these outcomes to any specific arts component. The use of a self selected, non-random sample creates further difficulty in interpreting these results.

One mixed methods study examined the effects of an interactive drama production and day workshop on 10-11 year olds in 41 schools in England (Starkey and Orme, 2001). Data were collected using a recognised ‘draw and write’ tool and statistical analysis of pre and post-test results concerning knowledge, attitudes and decision making skills was carried out. Significant improvements in children’s knowledge about drugs were reported, although the authors noted several limitations in the research design. These included the lack of a comparison group and the use of a self-selecting sample.

4.4 Sexual health

Two studies focused on sexual health issues. Lloyd and Lyth (2003) examined the impact of a drama production and workshops delivered by a theatre company to 280 pupils in a UK comprehensive school. A pre and post-intervention questionnaire was used although there was no comparison group. Reported benefits included improved sexual knowledge and changes in attitudes concerning availability of and access to contraception. The authors acknowledged some limitations of the study including the difficulty of identifying which element of the programme led to specific changes. Further, they noted that changes in attitude cannot be assumed to imply changes in behaviour.

Kerr and MacDonald (1997) examined the effects of an interactive drama performance by student nurses on secondary school pupils. This study
involved 48 secondary school pupils in a large UK comprehensive school. Pre and post-intervention questionnaires were administered along with a focus group held six months after the initiative. Wide ranging benefits of the intervention were reported; however, although a response rate of 81% was reported for the post-intervention questionnaire, any further interpretation of the quantitative data is limited because of the lack of systematic procedures reported.

4.5 Summary of findings from quantitative research

Randomised research on the effects of drama on peer interaction and social skills reported the following:

- Positive changes in attitude among ‘at risk’ young people (McArdle et al., 2002).
- Short term changes in reported behaviour (McArdle et al., 2002).
- Non-randomised research on the effects of drama on peer interaction and social skills reported ambiguous results (Walsh-Bowers and Basso, 1999).

Randomised studies of drama in HIV/AIDS interventions reported the following:

- Improvements in knowledge (Harvey et al., 2000; also supported in non-randomised research by Denman et al., 1995).
- Changes in attitudes (Harvey et al., 2000; also supported by non-randomised research by Denman et al., 1995).
- Changes in reported behaviour e.g. condom use (Harvey et al., 2000; Elliott et al., 1996).
- No changes in knowledge or attitudes (Elliott et al., 1996).

Non-randomised studies of drama interventions in sexual health reported improved sexual knowledge and changes in attitudes concerning availability of and access to contraception (Lloyd and Lyth, 2003; Kerr and Macdonald, 1997).

Non-randomised studies of drama interventions addressing alcohol, tobacco and illegal drug use reported the following:

- Significant improvements in children’s knowledge about drugs (Starkey and Orme, 2001).
5. Results of the Qualitative Studies: Key Concepts

While the qualitative studies were too diverse to allow synthesis of the results, key concepts did emerge from the research that can be grouped thematically. These include personal benefits, such as education and skills; interactive benefits, such as enhancing expression and communication; and changes at community level, such as tackling marginalisation and representation of young people.

5.1 Personal benefits: enhancing learning and skills

Douglas et al. (2000) undertook a qualitative process evaluation to examine the effectiveness and assist in the development of ‘Vital Youth’, a Theatre in Education project addressing health and performance related topics with participants. Nineteen African and African-Caribbean young people, aged 15+ took part in the evaluation. The drama project involved 17 three hour workshops plus more intensive rehearsals in the later stages, culminating in performances at a local theatre.

The report is a reflexive account of an innovative participatory evaluation workshop and includes consideration of some methodological evaluation issues arising from the project. Data were collected through a three-hour evaluation workshop in which participatory games and exercises were used to gather information about whether intended outcomes had been achieved. The data were analysed using a thematic grounded theory approach. A number of themes were identified including the development of social skills, performing arts skills and increased knowledge of relevant health topics. The intervention is described as having been largely successful, with participants reporting opportunities to learn about and discuss relevant health-related topics, as well as develop enhanced social skills and confidence.

Personal benefits of participation in arts were also examined by Lasic and Kenny (2002) in a study of young people defined as ‘at risk’ drawn from three secondary schools in a disadvantaged area of Melbourne, Australia. Nineteen young people took part in eleven drama performances that were viewed by a total of 550 students. The aim of the drama project was to build resilience as part of a health promotion programme. The evaluation used a mixed methods approach and the qualitative data were generated from interviews with teachers and student performers as well as a focus group with five young people drawn the latter group. Informal interviews with parents after the performance were also carried out.

There was a reported increase in self-confidence following the intervention. Teachers reported academic and social benefits as well as improved student-teacher relationships. The authors concluded that there are positive effects of drama relating to personal benefits, although drama is less effective in raising awareness of relevant community support services.

This report has some weaknesses. Relatively little information about selection of participants is given and the method of data analysis is not
described in detail. These gaps make it difficult to draw any wider interpretation of the findings.

5.2 Interaction: enhancing expression and communication

A study by Jackson (2003) involved 20 young people aged 10-16 in a community school in a disadvantaged area of Scotland. All the participants were white and Scottish born. The project sought to enable young people to express their views about health services, to encourage professionals to listen to young people and to stimulate action to address the issues. The intervention was a series of drama workshops involving group discussion, role-play and improvisation. A drama performance before an invited audience of 30 health and education professionals was followed by a question and answer session. The drama engendered practical outcomes in relation to usage and experience of health services for young people.

The play was enthusiastically received and this led to further reported initiatives. Participants were interviewed after the performance about its impact on them. Peer interviews were also used. These interviews sought to evaluate the impact of the drama project on participants. The authors concluded that drama has a number of uses including enhancing self-expression and exploring health issues. They suggested that, in conjunction with conventional techniques such as focus groups, drama can also be useful in communicating the needs of client groups to service providers and planners as well as generating outcomes in the form of service improvements.

A number of gaps were identified in the report including a lack of detail about the framework and procedures used for data analysis. The authors referred to a number of indices that were used although no further information about these was provided, and the framework for qualitative analysis was not explained in detail. This again makes it difficult to interpret the findings from the research.

5.3 Community benefits: tackling marginalisation and representation of young people

Tackling marginalisation emerged as a key theme from a study of the ‘Voices’ project, which focused on capacity building in community development for youth ‘at risk’ (Bradley et al., 2004). The study used a methodology of participatory action research and the paper is a well-structured account with rigorous reporting of action cycles used in this type of research. A number of research interventions were used including participation in public debate about youth ‘at risk’ and the formation of a theatre group for ten young people. Interviews with the young people were undertaken at pre, mid and post-theatre experience. Other data sources were used including transcripts of meetings, Council minutes, observation of theatrical exercises and interview data. These were analysed using thematic identification of similarities and differences that emerged from the data sets.
The authors suggested that the project brought together a disparate set of marginalised youth and forged them into a cohesive group who then tackled their various problems in a unified way. The project also raised the visibility of the issues, enabling the researchers to contribute to policy debates. This involvement by young people in the intervention was seen generating immediate benefits both for them and their community, and the authors concluded that young people need to be centrally involved in initiatives aimed at changing their lives for the better.

Marginalisation emerged as a theme in an ethnographic study of a community theatre project with ‘at risk’ teenagers in California, USA (Mattingly, 2001). Ethnographic research and personal experience were used to examine a number of issues arising from the project and the concept of representation was identified as key to the understanding of the ways in which arts might benefit marginalised teenagers. By empowering this group into forms of self and community representation, community arts can challenge marginalisation and stereotyping.

5.4 The importance of participation and involvement of young people

The importance of participation was emphasised in several of the studies, although there were different interpretations of the meaning of participation. Hence for Douglas et al. (2000) the success of the drama intervention was underpinned by their ability to actively involve young people, address their concerns and engage them in productive group work processes. The importance of participation in research was emphasised by Jackson (2003), with methodologies such as action research seen as facilitating engagement of young people in service development. Finally, the importance of participation of young people and their advocates in public debate in order to influence perceptions and policy was emphasised (Bradley et al., 2004; Mattingley, 2001).

5.5 Risk and reluctance

Some issues of risk and negative effects of drama were identified by Walsh-Bowers and Basso (1999) who included qualitative observation and interviews with ten students as part of the mixed methods study described above. The data focused on responses to the drama intervention as well as issues of group dynamics and co-operation with others. They revealed that groups taking part in the first intervention were initially reluctant to engage with the process, and by the end of the intervention at least one group refused to do drama. Some staff were also unwilling to take part in aspects of the evaluation. Nine out of the ten interviewees are reported as giving unenthusiastic responses to questions about how they felt about participating in the drama groups. On the other hand, all the interviewees identified ways in which the groups facilitated co-operation. Hence the findings are seen to indicate that students’ peer relations skills can be to some extent improved by participation in drama.
A number of issues arose from the evaluation. These included the need for school staff to own the programme. The research experience seemed to indicate that there is a cognitive bias of education systems that means that staff are not adequately equipped to deal with the dynamics inherent in classroom group work, especially in creative drama. The presence of motivated group leaders who are skilled in both group work and creative activity and familiar with school settings may be essential for this type of intervention to succeed.

While the authors offer an insightful account, methodologically, the study had a number of weaknesses. Little information was given about the framework for analysis of the interview data and as the qualitative methods were not described in any detail it is difficult to generalise from the findings.

5.6 Summary: key findings from qualitative research

- Performing arts can contribute to a range of ‘outcomes’ including personal benefits, enhanced interaction and communication, and community empowerment.
- The success or failure of performing arts initiatives can depend on process issues that need to be understood. These include the role and impact of staff, teachers and group leaders.
- The importance of involvement and participation of young people in the research is a key issue emphasised by several authors.
- Most studies focus on positive effects. However, negative aspects and risks of drama were also identified and there are indications that some young people might be reluctant to participate in initiatives like drama.
- The problem of heterogeneity makes it difficult to synthesise the findings from these studies.
6. Limitations of the Review

The search has been comprehensive and systematic. A large amount of literature was retrieved and it was a labour intensive process to reduce this to a relevant body of work. The use of bibliographic software (Procite) was extremely useful for ensuring this process was systematic, transparent and valid.

The review encompasses a broad definition of young people that extends across the age range (11 –18). While some studies focused on different sub groups within this range, it was not possible to subdivide the group and the differences facing different age groups within this range may not be reflected in the review. Applicability of the findings was strengthened by exclusion of studies with populations that only included the outer ages (e.g. studies focusing on 8-11 or 18-24 year olds were excluded).

The review concentrated on performing arts interventions: the exclusion of other forms, such as creative writing and poetry, means that the findings cannot be applied to all arts as they impact on young people.

The review focused on performing arts interventions in community settings including mainstream education. Interventions in ‘special’ settings, such as hospital and clinical settings, special schools and prisons were excluded. Hence the particular insights from research on interventions such as music and art therapies in these settings are not included in the review.

Finally, the review excluded some ‘grey’ literature, for example US dissertations. It applied fairly strict methodological inclusion criteria at Phase 2. This means that some studies are excluded including post-test only evaluations, cross sectional surveys and practitioner case studies. The review is therefore focused on high quality empirical research, including robust qualitative research, and not on general forms of knowledge and insight into the impact of performing arts on the health of young people.
7. Conclusions: A Research Agenda

The review demonstrates that research on the impact of performing arts on the health of young people is at an early stage and a number of validity issues have been identified that need to be addressed in future research.

7.1 Issues for quantitative research

- More quantitative studies on performing arts other than drama, outside of clinical settings are needed.
- Research design needs to give closer attention to identifying which element of a given programme leads to specific changes.
- Other research design issues need to be addressed including issues of sample size and procedures for randomisation and blinding.
- Studies use a variety of validated measures of attitudes and knowledge. While these measures provide useful indicators it is important not to conflate attitudes and knowledge with behaviour when interpreting the results of studies.

7.2 Issues for qualitative research

- There is a need for qualitative studies of performing arts interventions other than drama.
- A range of qualitative methods can be used to good effect in research on performing arts and young people. Action research, grounded theory and ethnography have all been successfully used, and there is unlikely to be a single qualitative methodology that serves as the equivalent of the RCT, the ‘gold standard’ in quantitative research.
- More rigour is needed in selecting, applying and reporting research procedures, particularly data analysis.
- Problems of bias can be reduced by use of independent researchers; those studies using journalistic reporting by those carrying out the intervention were the weakest and there were a large number of these.
- Ontological and epistemological assumptions need to be made explicit and appropriate conceptual frameworks developed for research on performing arts and young people.
References


## Appendix 1: Databases Searched

<table>
<thead>
<tr>
<th>Database</th>
<th>Initial Hits</th>
<th>Results after relevance screening</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMED (Allied and Complementary Medicine); BNI (British Nursing Index); CINAHL (Cumulative Index to Nursing and Allied Health Literature) EMBASE, HMIC (Health Management Information Consortium)</td>
<td>240</td>
<td>17</td>
</tr>
<tr>
<td>ASSIA (Applied Social Sciences Index and Abstracts); BHI (British Humanities Index)</td>
<td>106</td>
<td>19</td>
</tr>
<tr>
<td>British Education Index</td>
<td>167</td>
<td>6</td>
</tr>
<tr>
<td>CareData</td>
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<td>7</td>
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<tr>
<td>ChildData</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Cochrane Library</td>
<td>486</td>
<td>19</td>
</tr>
<tr>
<td>CommunityWISE</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>HealthPromis (Health Development Agency)</td>
<td>44</td>
<td>21</td>
</tr>
<tr>
<td>Humanities Abstracts</td>
<td>304</td>
<td>1</td>
</tr>
<tr>
<td>IBSS (International Bibliography of the Social Sciences)</td>
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<td>6</td>
</tr>
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<td>Index to Theses</td>
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<td>5</td>
</tr>
<tr>
<td>MEDLINE</td>
<td>137</td>
<td>7</td>
</tr>
<tr>
<td>NRR (National Research Register)</td>
<td>58</td>
<td>12</td>
</tr>
<tr>
<td>PsycINFO/SPORTDiscus</td>
<td>805</td>
<td>51</td>
</tr>
<tr>
<td>Science Citation Index; Social Sciences Citation Index; Arts and Humanities Citation Index</td>
<td>51</td>
<td>11</td>
</tr>
<tr>
<td>SIGLE (System for Information on Grey Literature in Europe)</td>
<td>70</td>
<td>4</td>
</tr>
<tr>
<td>Sociological Abstracts</td>
<td>795</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total (including duplications)</strong></td>
<td><strong>3670</strong></td>
<td><strong>202</strong></td>
</tr>
</tbody>
</table>
## Appendix 2: Search Terms Used

<table>
<thead>
<tr>
<th>Word group 1</th>
<th>Word group 2</th>
<th>Word group 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young*</td>
<td>Music*</td>
<td>Evaluat*</td>
</tr>
<tr>
<td>Youth</td>
<td>Drama</td>
<td>Research</td>
</tr>
<tr>
<td>Adolescen*</td>
<td>Danc*</td>
<td>Intervention*</td>
</tr>
<tr>
<td>Teenage*</td>
<td>Singing</td>
<td>Results</td>
</tr>
<tr>
<td>Juvenile*</td>
<td>Song*</td>
<td>Outcome*</td>
</tr>
<tr>
<td>Pupil*</td>
<td>Theat*</td>
<td>Impact</td>
</tr>
<tr>
<td>Student*</td>
<td>Arts</td>
<td></td>
</tr>
<tr>
<td>School*</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Curricul*</td>
<td></td>
<td>Not Operating theat*</td>
</tr>
<tr>
<td>Extracurricular</td>
<td></td>
<td>(if necessary)</td>
</tr>
</tbody>
</table>

Word Group 4 (added for Sociological Abstracts and Humanities Abstracts only)

- Self esteem
- Safety
- Risk*
- Prevent*
- Sex*
- Drug*
- Diet*
- Alcohol*
- Smok*
- Tobacco
- Eat*
- Self harm

Notes: * truncation.
- Words within groups combined with OR.
- Groups combined with AND.
Appendix 3: Inclusion and Exclusion Criteria Used in the Review

**Inclusion criteria**
- Interventions with children and young people aged 11 to 18.
- Interventions in community settings including mainstream schools.
- Performing arts interventions (music, drama, dance).
- Interventions outside of the usual curriculum.
- Papers reporting outcomes and exploring impacts relating to health and well-being as a result of interventions.
- English language.
- Pre and post-test measurement of a performing arts intervention (quantitative research) – applied at phase two.
- Recognised procedures for data collection reported (qualitative research) – applied at phase two.

**Exclusion criteria**
- Interventions with children under 11 or adults over 18.
- Interventions with ‘special’ populations, e.g. those in hospitals, clinical settings, special schools and prisons.
- Not performing arts interventions.
- No outcomes or impacts reported.
- Non English language
- Not a pre and post-test measurement of a performing arts intervention (quantitative research) – applied at phase two.
- No recognised procedures for data collection reported (qualitative research) – applied at phase two.
Appendix 4: Overview of Search Strategy and Results

- 3670 initial hits
- 202 hits after preliminary screening
- 104 papers identified after further abstract screening
- Full text scrutiny of 85 papers
  - 9 quantitative papers identified
  - 6 qualitative papers identified
## Appendix 5: Overview of Quantitative Studies Included in the Review

<table>
<thead>
<tr>
<th>Type</th>
<th>Paper</th>
<th>Research Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Randomised Community Intervention Trial (RCIT)</td>
<td>Harvey et al. 2000</td>
<td>Included 1080 students across 14 secondary schools participating in HIV/AIDS drama education programme. Improvements in knowledge and attitudes about HIV/AIDS as well as significant increase in condom use reported in intervention groups.</td>
</tr>
<tr>
<td>Controlled study with randomisation</td>
<td>Elliott et al. 1996</td>
<td>Controlled study Theatre in Education vs standard health education focusing on HIV/AIDS awareness in 10 youth projects. Random allocation to intervention. Little change in knowledge, attitudes or behaviour in relation to HIV reported post-intervention.</td>
</tr>
<tr>
<td>Controlled study, no randomisation</td>
<td>Denman et al. 1995</td>
<td>Controlled study utilising pre and post-test questionnaire on HIV/AIDS Theatre in Education programme for children in 12 UK secondary schools. Benefits include improved knowledge and changes in attitude among participants. Controlled study.</td>
</tr>
<tr>
<td>Controlled study, no randomisation</td>
<td>Walsh-Bowers &amp; Basso 1999</td>
<td>Two drama interventions with 52 children in an urban elementary school in Ontario, Canada. Pre and post-test questionnaire. Use of control group in first intervention only, no randomisation. Reported benefits of the first intervention include significant improvements in parent rating of social skills. Reported benefits of the second intervention include significant improvement in teacher rated peer interaction problems.</td>
</tr>
<tr>
<td>Controlled study, no randomisation</td>
<td>Nelson and Arthur 2003</td>
<td>Study of a combined arts programme in a US secondary school. 292 volunteer student participants were compared with those in a comparison school with no intervention. Results included increased resistance to drug use among participants.</td>
</tr>
<tr>
<td>Pre and post-test questionnaire</td>
<td>Lloyd and Lyth 2003</td>
<td>Drama production and workshops delivered by a theatre company to 280 pupils in a UK comprehensive school. Benefits include improved sexual knowledge and changes in attitudes concerning availability of and access to contraception.</td>
</tr>
<tr>
<td>Pre and post-test questionnaire</td>
<td>Kerr and MacDonald 1997</td>
<td>Interactive drama performance by student nurses aimed at secondary school pupils in the UK. Educational and social benefits reported.</td>
</tr>
<tr>
<td>Pre and post-test questionnaire</td>
<td>Starkey and Orme 2001</td>
<td>Interactive drama production and workshop day focusing on alcohol, tobacco and illegal drug use in 41 schools in England. Benefits included increased knowledge about drugs. Use of innovative ‘draw and write’ tool.</td>
</tr>
</tbody>
</table>
Appendix 6: Overview of Qualitative Studies Included in the Review

<table>
<thead>
<tr>
<th>Type</th>
<th>Paper</th>
<th>Study Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action research</td>
<td>Bradley et al. 2004</td>
<td>Action research with 10 participants in a theatre project. Social and political benefits of participation in drama identified. Rigorous reporting of three action cycles.</td>
</tr>
<tr>
<td>Workshops/ Grounded Theory</td>
<td>Douglas et al. 2000</td>
<td>Theatre in Education project involving 19 African and African-Caribbean participants. Benefits include enhanced social skills, performing arts skills and knowledge of health related topics.</td>
</tr>
<tr>
<td>Mixed methods including qualitative interviews</td>
<td>Lasic and Kenny 2002</td>
<td>Two year health promotion drama project for young people at risk from three secondary schools in a disadvantaged area of Melbourne, Australia. Benefits reported include increased self confidence, academic and social benefits and improved student-teacher relationships. Used qualitative interviews with teachers and parents, focus groups with performers and an audience survey.</td>
</tr>
<tr>
<td>Mixed methods including qualitative interviews</td>
<td>Mattingly 2001</td>
<td>Community theatre project for at risk teenagers in California. Benefits reported include empowerment and representation of marginalised teenagers. Reflexive account of ethnographic project, no further report of data collection or analysis procedures.</td>
</tr>
<tr>
<td>Qualitative interviews and observation</td>
<td>Walsh-Bowers and Basso 1999</td>
<td>Qualitative interviews and observation of drama intervention. Found that some students and staff are reluctant to engage with drama. Positive benefits of drama include improved co-operation and interaction. Interventions need motivated and skilled group leaders to succeed. Little information given about framework for data analysis.</td>
</tr>
</tbody>
</table>
### Appendix 7: Data Extraction Sheet

<table>
<thead>
<tr>
<th>Paper</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of study</strong></td>
</tr>
<tr>
<td><strong>Focus/aims of study</strong></td>
</tr>
<tr>
<td><strong>Research Design</strong></td>
</tr>
<tr>
<td><strong>Population and sample</strong></td>
</tr>
<tr>
<td><strong>Details of intervention</strong></td>
</tr>
<tr>
<td><strong>Data collection and analysis</strong></td>
</tr>
<tr>
<td><strong>Outcomes/results reported</strong></td>
</tr>
<tr>
<td><strong>Summary of theoretical findings</strong></td>
</tr>
<tr>
<td><strong>Reported conclusions</strong></td>
</tr>
<tr>
<td><strong>Notes</strong></td>
</tr>
</tbody>
</table>