

# WHY DANCE?

Company: Laban and NKLAAP  
Production: *dance 4 your life*  
Photographer: Spaghetti Weston



# WHY SCIENCE?

## What research and evidence backs up claims that dance improves people's health?

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Living in the UK today, you can't help but be aware of the benefits of physical activity on health and well-being. From TV adverts advocating ways to lower your cholesterol, to in-depth scientific studies, the message is clear: exercise is vital for good health.

At Laban various research studies have been carried out assessing the benefits of dance.

In tackling the first question, a recent article in *The Times* newspaper says 'young and old, male and female, accomplished and appalling, the British are putting on their dancing shoes again.' Dance is enjoying a renaissance, or rather a revolution in the UK today. This happily comes at a time when there is also a vitally recognised need

at government level and among health professionals, to increase participation in physical activity across the population.

At Laban various research studies have been carried out assessing the benefits of dance. These projects had dual aims; to deliver a dance programme that enticed the young participants to engage in dance as a physical activity, and to scientifically investigate the impact of the dance programme on the fitness, health, and well being of the young participants. The first study in 2005/06, was the *NRG Youth Dance and Health Project* (commissioned by the Joint Investment Fund for the Arts) in partnership with Hampshire Dance, which investigated creative dance. In line with positive trends towards dance previously shown, this study found that girls had a more significant level of interest and enjoyment in, and placed more effort and

From a scientific perspective, the impact physical activity can have on physiological and psychological well-being is well documented. Physical activity has been prescribed to prevent heart disease, maintain a healthy body weight, and combat the effects of obesity. It has furthermore been identified as a key factor for adolescent health. Psychological studies also recognise the benefits of physical activity, with research concluding that exercise can improve levels of self esteem in children and young people.

The wealth of findings available within sports and health studies led, perhaps quite naturally, to professionals in the dance field seeking to investigate dance in a similar, but dance-appropriate scientific fashion. The questions are often asked why advocate dance as opposed to other physical activities, and why a scientific approach?

importance on, the dance classes, than the boys. In addition it found statistical improvements in physical areas such as lung capacity, flexibility and aerobic capacity.

Similarly, Laban's more recent project *dance 4 your life* (commissioned by the North Kent Local Authorities Arts Partnership: NKLAAP) found that teenage girls had above average levels of intrinsic motivation to participate in dance. Additionally improvements were seen in aerobic capacity and upper body strength. However, the most significant impact was that the dance classes statistically enhanced the self-esteem of its participants.

So what is it about dance, in terms of its potential to elicit these positive results in not only physical, but psychological well being? Is it the inherent elements of creativity and expression? The potential for problem-solving in an imaginative forum perhaps? Or interaction between music and movement? In Dance Science, the questions to be asked far outweigh the answers so far discovered. It is an evolving field which requires rigour and innovation to advance.

Current Laban projects such as *NRG 2* (in partnership with Hampshire Dance and commissioned by West Sussex County Council) seek to unpick some of the subtler effects of dance. In addition to physical impacts, *NRG 2* will examine whether dance can encourage a greater sense of autonomy, competency and relatedness. Gender specific groups, mixed groups, and control groups will be observed, with young people from deprived postcodes being especially targeted.

The complexities of a research project such as *NRG2* lead to the second question often asked: 'why in particular can scientific methods of enquiry aid in a way in which differs from evaluation?'

Evidence based research is important within dance for two main reasons; to investigate and substantiate the impacts of dance, and to advocate with confidence for further funding and investment within the sector. Whilst various modes of evaluation are often used successfully within dance, evidence based research employs a different approach – generally considered more objective.

This research approach requires a sound knowledge of previous and current literature and research, in both specific and related fields. Informed by this knowledge and expertise, a methodological approach is designed, gathering baseline information, even before a dance project begins. Statistical analysis is then used to determine the strength of the impact which a dance project has had on the participants. These results prove valuable when advocating the numerous benefits of dance to organisations within and beyond the field of dance.

At a time when there is a growing need to shake a sedentary population into physical activity, and when, across the country in jaded church halls, and gleaming purpose built facilities, people are shimmying, breaking, stamping, and pirouetting to the beat of a new revolution,

it is now more than ever, the time to scientifically investigate, analyse, and disseminate, just what dance can do. ■

[www.hampshiredance.org.uk/youth\\_nrg.php](http://www.hampshiredance.org.uk/youth_nrg.php)  
[www.nklaap.com.dance-4-your-life.html](http://www.nklaap.com.dance-4-your-life.html)

### Summary of Systematic Review into the Effects of Dance Interventions on the Health and Well Being of Children and Young People

Jan Burkhardt (Health Improvement Specialist for NHS Leeds) has recently undertaken an international review of evidence acceptable to health professionals focusing on the link between dance and health. Here is a breakdown on the evidence she has surveyed:

**Inclusion criteria:** Quantitative research into recreational or non elite dance interventions involving children and young people aged 5 – 21 years. All dance styles were included.

**Findings of the 26 studies included in the review:**

Eight studies showed significant improvements in cardio respiratory fitness through dance interventions compared to control groups and one study showed a non significant trend towards this. Many were studies of dance aerobics.

Three studies found dance interventions decreasing overweight or obesity, one study found trends towards reduced Body Mass Index (BMI) and a further study found no change in BMI.

Four studies found bone mineral density of the lower limbs improved significantly through childhood or adolescent recreational dance activity.

One study found involvement in childhood dance increased likelihood of bulimic behaviours but a further study showed this was linked to learning experiences around drive to thinness rather than the dance activity itself.

Seven studies found significant improvements in psychological well being including improvements in self perception, body image and reduced anxiety or stress levels. Two studies found no change and one found trends towards improved well being.

The systematic review is due to be published shortly. For more information or a copy of full review email: [jan.burkhardt@nhsleeds.nhs.uk](mailto:jan.burkhardt@nhsleeds.nhs.uk) Jan Burkhardt is a Health Improvement Specialist at NHS Leeds.