Editorial

THE BEAUTIFUL, ARTICULATE, FUNNY, ELEGANT Usain Bolt, star of world athletics and likely icon of the London 2012 Olympics, dances past his fellow, super-fit, competitors. Most us watching this miracle of human endeavour are overweight. Between 60 and 75 per cent of young people do not meet current physical activity guidelines.

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Does it matter? In short, yes it does. As this issue of Better explains, physical and mental health makes a difference to student test scores. Physical exercise gets us fit, produces endorphins, encourages mastery and helps us to work in teams.

Yoga may help students to be more mindful, getting them to reflect on immediate choices about what they eat, hear and do. School curricula such as Life Skills Training can boost young people's ability to resist doing what they don't want to do, like taking drugs. A tired and satisfied child will sleep through the night and wake up ready for school. Improving an adolescent's self-image can reduce their risky behaviour and increase their

physical activity. Each of us is a tortoise to Bolt's hare, but a host of simple evidence-based changes to the way we parent and school our children can boost their physical and mental health, which in turn will help them to learn.

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CONTENTS

Volume 4, Issue 3

Using physical education and 4 - 5sports to raise school standards Annette Montaque 6-7 Sports and young people's educational achievement

Karen Schucan Bird, Mark Newman, and Janice Tripney

8-9 Physical activity programs for at-risk students David Lubans

Mindful yoga for urban youth 10-11 Tamar Mendelson and Mark Greenberg

Outcomes of martial arts 12-13 practice Jikkemien Vertonghen and Marc Theeboom

14 - 15How does sleep affect academic performance? Eric Eide and Mark Showalter

16-17 Addressing school effects on drug use Adam Fletcher

LifeSkills Training and 18 - 19educational performance Kenneth Griffin and Gilbert Botvin

20-21 Promoting positive behaviors and image Chudley Werch

<i>Kevin Haggerty and R</i>	olem behavior
24–25 Evidend	ce in the news

26-27 Latest research



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POLICY AND PRACTICE Choosing evidence

Sports and young people's educational achievement

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Does participation in sports deliver educational benefits for youth? Karen Schucan Bird, Mark Newman, and Janice Tripney have examined the research

MANY INITIATIVES HAVE BEEN DEVELOPED

in the U.S. to encourage young people to become more active, such as First Lady Michelle Obama's "Let's Move" campaign. While there are clear health benefits associated with physical activity and The findings from the included studies were combined using statistical metaanalysis. This provided an overall numerical measure of the educational impact of sports participation. To draw conclusions, two procedures were undertaken:

රර While there are clear health benefits associated with physical activity and participation in sports, less is known about the educational impacts. ඉ

participation in sports, less is known about the educational impacts.

This article summarizes the findings of a systematic review that examined just this issue. The research analyzed the impact of young people's participation in sports on their educational outcomes.

Methods

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A systematic review gathers and synthesizes research on a particular subject. For this systematic review, we used a comprehensive search strategy to identify studies published since 1997 and written in English. To be included in the review, studies had to meet the following criteria:

- Examine the educational impact of children and youth's participation in sports;
- Use a "high-quality" experimental research design;
- Comparing the educational outcomes of youths who participated in sports to those who did not;
- Measuring educational outcomes of youths before and after participation in the sports program;
- Have quantitative results of the educational impacts.

- An interpretation framework was used to identify which types of sports participation "work" to deliver an improvement in the educational performance of youths; and
- The pooled "effect sizes" were translated into hypothetical changes in test scores.

Findings

Four studies were included in the systematic review. Two of these studies examined sporting initiatives in the UK and two focused on programs in the U.S. The study populations included young people between 4- and 16-years-old.

The impacts of organized sports

"Organized sports" refers to sporting activities guided by a teacher or other facilitator. The review found some evidence that participation in organized sports improves young people's numerical skills. However, due to the limited number of studies, the educational benefits reported here are based on a narrow set of sports: Taekwondo and sports organized in afterschool clubs. There was insufficient evidence about the impacts of organized sports on other aspects of students' educational achievement.

The impacts of extra-curricular activities linked to organized sports

"Extra-curricular activities linked to organized sports" refers to educational activities that take place within a sports setting or following a sporting activity. Youths participating in these programs, therefore, are not only engaging in sports but also taking part in more formal educational activities. Playing for Success is one such example. This was a UK-based, nationwide initiative directed at underachieving students from urban areas. The program aimed to improve literacy, numeracy, and technology skills by establishing study support centers in local soccer clubs or other sports venues. A U.S. equivalent is the Promoting Achievement Through Sport' initiative. This was an afterschool program which combined soccer training sessions with educational classes.

The review found some evidence that participation in extra-curricular activities for underachieving students:

- Improves their numerical skills; and
- Improves their transferable skills (specifically independent study skills).

There was insufficient evidence about the impacts on other aspects of students' educational performance. Again, these findings are based on only a few research studies.

Conclusions and implications

There is some evidence that organized sports and extra-curricular educational activities linked to sports "work" to deliver improvements in the numerical and transferable skills of youths. These improvements can be quantified as follows: • By playing organized sports, youths could increase their numeracy scores, on average, by 8% above that of their peers who do not participate in such activities; and

Better: Evidence-based Education SPRING 2012

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POLICY AND PRACTICE





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- The participation of underachieving youths in extra-curricular learning activities linked to sports could increase their
- Numerical skills, on average, by 29% above that of non-participants;
- Transferable skills, on average, by between 12% and 16% above that of nonparticipants.

Although these findings are interesting, it is important to be cautious when interpreting them. The review included

What we know

- Organized sports or educational activities linked to organized sports may "work" to deliver educational improvements for youths.
- Playing organized sports may improve youth's numerical skills.
- Participation in extra-curricular learning activities linked to sports may provide educational benefits for underachieving students. These include improvements in numeracy and transferable skills.

only a few studies. This means that the findings are based on a narrow set of "sports," relate to only select aspects of educational achievement, and relate to certain subgroups of youth. We do not know whether young people more generally will derive educational benefits from taking part in any type of organized sport. Also, the review offers insights on the impacts of organized sports rather than sports per se, and includes programs that are not simply sports but educational activities that take place alongside organized sports. Sports are used as an incentive for youths to undertake educational activities.

About the author

Karen Schucan Bird is research officer at the EPPI-Centre, University of London. She undertakes systematic reviews in topical and policy relevant areas to support the use of evidence in decision making and practice. Mark Newman is reader at the Institute of Education, University of London, where he is assistant director: health and well-being. He is also assistant director of the EPPI-Centre. His research and teaching interests include the design of effective learning environments and the use of research evidence to inform policy and practice decision making

Janice Tripney has conducted systematic reviews for various national and international bodies, provides training on methodological and practical aspects of systematic research synthesis, and is involved in an ongoing two-year European collaborative project on evidence-informed policy and practice.

Further reading

Newman M et al (2010), Understanding the Impact of Engagement in Culture and Sport: A Systematic Review of the Learning Impacts for Young People. London: Department for Culture, Media and Sport.

Tripney J et al (2010), Understanding the Drivers, Impact and Value of Engagement in Culture and Sport: Technical Report for the Systematic Reviews and Research Database. London: Department for Culture, Media and Sport.

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