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1

Young People and Exercise – Introduction and Overview

Lorraine Cale and Jo Harris

Children are one third of our population and all of our future. (Select Panel for the Promotion of Child Health, 1981)

The purpose of this chapter is to provide a rationale, case for and general chapter-by-chapter overview of this book, as well as to introduce the terms and concepts that are central to the area of young people, exercise and health.

About the book

The notion that young people are not as active, fit and healthy as they should be is not new and has attracted widespread interest from researchers, government, health practitioners, educationalists and the media in recent years. Some have gone so far as to label the youth of today as ‘couch kids’, and have referred to current concerns over young people’s inactivity as a ‘growing epidemic’. Similarly, the view that there are links between childhood physical activity and childhood and adult health, childhood activity and activity in adulthood, and between childhood activity and other health behaviours has become increasingly attractive. In other words, active children are more likely to be healthier (as children and adults), become active adults, and are also more likely to be non-smokers, eat more healthily, and so on.

One only has to observe the lifestyle and habits of Harry Enfield's 'infamous' teenage character, Kevin, to appreciate the concerns about today's youth. Kevin is addicted to TV, computer games, labour-saving gadgets and junk food. He is, furthermore, taxied everywhere by his devoted parents and will go to great lengths to escape active chores such as tidying his room or washing the car! He does of course, like most young people, own a pair of trainers, but these are evidently merely a fashion accessory – their only wear and tear comes from being dragged along the floor as he walks. Yes, even picking up his feet is too much of a physical effort for the tiresome teenager. Whilst it might be argued that many of these behaviours simply depict those of a 'typical' teenager from any generation, there is no doubt that the pressures upon and the opportunities for Kevin, as a young person growing up in today's society, to be sedentary are immense. Chapter 8 explores such pressures in some detail.

Surprisingly though, although we might all recognize the above and anecdotally have experiences and examples which we could share to illustrate how inactive, unfit and unhealthy today's youth are, there is little empirical evidence to confirm this picture. In contrast to adults, and as Chapter 2 highlights, the evidence base for young people is still relatively weak and there continues to be debate about the nature and extent of the problem and the range of possible solutions.

Broadly, this book aims to enhance our understanding of exercise and young people. Based on the evidence available on young people's physical activity and physical fitness, and their influence on health, the book explores the key issues, implications and initiatives associated with exercise and physical activity promotion in young people. Young people are a distinct group with specific health and physical activity needs. Despite this, however, and perhaps as a result of the limited evidence available, there appear to be a number of myths, misconceptions and confusions, and a general lack of guidance concerning young people's physical activity and fitness, and the promotion of physical activity in particular. Given this, the book draws together the available evidence to establish what precisely is known about young people's physical activity and fitness, and then explores the key issues and the implications of these facts for physical activity promotion practice. Indeed, 'application to practice' is a major and important focus of the book. In short, we hope that the book will provide a greater insight into some of the following important questions in the field:

- How important is physical activity to young people's health?
- How physically active and fit are young people?
- How do we measure young people's physical activity and physical fitness?
- How much physical activity should young people do?
- What factors influence young people's physical activity behaviour?
- How can schools and communities promote physical activity to young people?
- How effective are school and community-based physical activity interventions?
- What initiatives, strategies, resources and contacts are available to support the promotion of physical activity in young people?

In addition, the book explores many of the contentious and debated issues associated with the promotion of physical activity in young people, such as fitness testing and the application of physical activity guidelines to young people, again providing guidance and recommendations for practice.

We hope that the area and the focus of the book, on both theory and practice, will appeal to and satisfy the needs of undergraduate and post-graduate students studying physical education, sport or exercise science related courses, as well as physical education, sport and health practitioners (e.g. physical education teachers, school sport co-ordinators, health/exercise promotion officers, sports development officers, coaches) and others involved in working with young people (e.g. youth/community workers). Because the book is intended for a wide range of individuals and groups, interspersed through the text are a number of interactive activities, discussion points and case studies which we hope reflect the diversity of needs and interests. These aim to encourage reflection and debate and, where applicable, to enable the reader to apply the knowledge and understanding to their own practice.

Chapter-by-chapter overview

Following on from this introductory chapter, Chapter 2 explores the current evidence on young people's physical activity and fitness status and the association between physical activity, fitness, and current and future health. The evidence concerning the relationship between activity, fitness and health is reviewed with respect to various health outcomes and young people's physical activity is explored with respect to their

overall activity levels, patterns and habits. The consideration of young people's physical fitness is restricted to aerobic fitness (as measured in the laboratory) primarily because of its relationship to specific 'health' or disease outcomes. The key findings and issues concerning young people's physical activity and aerobic fitness are summarized, and consistent trends in the data are highlighted.

Chapter 3 considers the purposes and methods of monitoring physical fitness and physical activity in young people and the relative strengths and limitations of the different approaches. Particular attention is afforded to monitoring physical activity and the practical application of physical activity assessments. As explained, this emphasis reflects the public health and physical activity promotion perspective of this book, as well as current thinking in the area which has called for a shift away from the 'product' of physical fitness and physical fitness testing, towards the 'process' of being physically active and the promotion of physical activity.

If we are successfully to promote physical activity in young people, we need to understand why some young people are active and others are not. Chapter 4 uses an ecological perspective to structure a discussion of the determinants or correlates of physical activity in young people, and how this information can be used in applied settings. In addition, and more recently in response to calls to study sedentary behaviour as a concept distinct from physical activity, the chapter discusses the determinants of some of the most prevalent sedentary behaviours. This is based on the rationale that, by identifying consistent determinants of sedentary behaviours, more effective interventions to reduce them may be possible, resulting in increases in physical activity.

A particular area of interest is how much physical activity young people should do, and how much is enough? These questions are addressed in Chapter 5 which explores the major developments in exercise recommendations for young people in recent years. A brief historical overview of exercise recommendations for young people is provided but the chapter focuses primarily on the most recent UK guidelines which have been developed for England (HEA, 1998) and Scotland (Scottish Executive, 2003). The background, nature, evidence and rationale for the recommendations are considered and their value and practical application discussed. Ideas as to how they can be implemented by physical educators, health and other professionals in the promotion of physical activity are presented, as well as some general cautions and key messages concerning their implementation.

Having reviewed the evidence base surrounding young people's physical activity and fitness, and the factors influencing such status, the latter chapters in the book are concerned with how we might address these issues via effective physical activity promotion practice. Chapter 6 considers the different theoretical approaches and models of exercise or physical activity behaviour change available (from psychological to social theories). The key components and theoretical features of the dominant models are explored and a range of the contemporary theoretical and practical concerns are addressed. By so doing, the chapter aims to highlight useful opportunities for innovative developments in both theory and practice.

Chapters 7 and 8 explore the promotion of physical activity in young people within two key contexts, the school and the community, and consider their role, their potential and some of the major issues and considerations for promoting activity within both contexts. The former chapter advocates a whole-school approach and philosophy to the promotion of physical activity and health, and explores the concepts and characteristics of a 'healthy' and 'active' school. The many avenues through which physical activity can be promoted within the school are highlighted, and particular attention is paid to the promotion of physical activity through the PE curriculum. An analysis and discussion of the key issues and debates concerning meeting the health and fitness requirements of the National Curriculum for physical education are provided.

Chapter 8 explores the concept of a community and the characteristics of communities that might compromise or promote young people's physical activity. The chapter then turns attention to the potential critical role of the community 'environment' and concludes with an overview of a selection of community-based initiatives or strategies that may enhance young people's physical activity opportunities. Both chapters consider recommendations for promoting physical activity within the school or community context.

Fitness testing is commonplace in both the school and the community setting and has been a topic of much debate in recent years. A number of questions have been raised and concerns expressed over the purpose, value and appropriateness of fitness testing young people. Chapter 9, therefore, considers the key facts, issues and debates on fitness testing, as they relate to encouraging participation in a physically active lifestyle. Given the widespread practice of physical fitness testing in schools in particular, the focus of much of the discussion is on fitness testing within the PE curriculum. To conclude, the chapter provides

a series of recommendations on the appropriate use of fitness testing with young people, as well as some alternatives to traditional fitness testing.

The final chapter is divided into two parts. Part one provides an overview and critique of a range of school- and community-based physical activity interventions that have been designed to increase young people's physical activity participation. The outcomes of these initiatives in terms of their impact upon physical, behavioural, cognitive and affective indicators is reviewed, and their trends and characteristics, together with a number of related issues, are highlighted. Finally, in an attempt to assist readers further in the promotion of physical activity in young people, the concluding part of the chapter turns attention to a range of UK initiatives, resources and contact organizations which can support the promotion of physical activity in young people.

Working definitions

The terminology adopted in the area of exercise, health and young people has not always been consistent, and a range of definitions of key terms can be found in the literature. These have been explored to produce the following list of working definitions for the terms that are used throughout this book. Where appropriate, however, some terms are revisited in subsequent chapters in order to debate, clarify and/or extend our understanding of concepts.

Young people

All people aged 5 to 18 years.

Childhood

The period from the first birthday to the onset of puberty.

Adolescence

Adolescence is sometimes used to refer to the psychological changes associated with puberty. Within this text, however, adolescence and puberty are assumed to be synonymous and refer to the period during which a young person experiences the somatic, physical and psychological changes that occur as they develop into adults.

Health

A multifactorial concept which includes dimensions of the physical, mental, social and, some might argue, the spiritual. The World Health Organization has defined health as a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. It is thus seen as a resource for everyday life and as a positive concept emphasizing social and personal resources, as well as physical capacities.

Physical activity

Any bodily movement produced by skeletal muscles that results in energy expenditure. It has dimensions of volume (how much), duration (how long), frequency (how often), intensity (how hard) and mode (what type).

Exercise

A subcomponent of physical activity which is volitional, planned, structured, repetitive and carried out to improve or maintain any aspect of fitness or health.

Sport

A subcomponent of exercise that is rule-governed, structured and competitive, and involves gross motor movement characterized by physical strategy, prowess and chance. In Europe, sport is often used in a wider context to include all exercise and leisure physical activity.

Physical fitness

A set of attributes that people have or achieve that relates to the ability to perform physical activity. Physical fitness has health-related components and performance (skill)-related components. The health-related components of physical fitness include cardiovascular fitness, muscular strength and endurance, flexibility and body composition. The performance-related aspects include agility, balance, co-ordination, power, reaction time and speed. This type of fitness is also sometimes referred to as motor fitness.

Health-related exercise (HRE)

The area of the PE curriculum associated with health and fitness. HRE is physical activity associated with health enhancement and involves the teaching of knowledge, understanding, physical competence and behavioural skills, and the creation of positive attitudes and confidence associated with current and lifelong participation in physical activity.

Health and physical activity promotion

Health promotion incorporates all measures deliberately designed to promote health. It includes health education, plus healthy public policy which aims to achieve social change via legislation, and fiscal, economic and other forms of environmental engineering. Health promotion is concerned with making healthier choices easier choices. In the same vein, and by the same means, physical activity promotion is concerned with making active choices easier choices.

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