CHAPTER 5

How to Promote a Physically Active Lifestyle Across the Lifespan

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PRINCIPLES OF BEHAVIOUR CHANGE

Overview

Numerous theories address behavioural change and the elements within – the desire to change into something more attractive including the ambiguity between pros and cons. Consciousness of one's own habits and status at the moment is one element. Consider, in addition, the experiences that have provided energy and self-efficacy, and belief in one's own power to change. All of these may be summarized as 'motivation to change'.

Actions and initiatives are opposite to passivism and conservatism. At first glance, motivation may overlap with optimism. Lack of motivation may be similar to discouragement. Is motivation contagious from one life area to another? Will a person who loses interest in education or learning also be unmotivated in other areas in life, possibly leading to loneliness, physical deterioration, and depression?

Human beings can be proactive and engaged or, alternatively, passive and alienated, largely as impacted by the social conditions in which they develop and function. Many factors are examined that enhance versus undermine intrinsic motivation, self-regulation, and well-being.

The simplicity of motivation in making small and large choices is both a beauty and a threat. Daniel Kahneman wisely postulated the brain's need to make a plan, reduce the degrees of freedom, and create structure in order to establish persistent habits (Kahneman 2011). This also holds in critical phases and grave and desperate life situations. The beauty lies in the process, which demands few or no external aids; the threat describes our disbelief in the everyday rhythm, the repetitions, and simplicity itself and the 'power of Tuesdays'.

One of the most powerful indicators of health is belief in the future (World Health Organization 1999). The conviction that an individual has the power to improve a certain situation is called empowerment, which is also described as the strength to actually make efforts in a desired direction. Being aware of one's own resources and regularly reminding ourselves about, and seeking experiences at, an adapted level, is regarded as substantial.

Theories and models of human behaviour have been derived from all disciplines of the social sciences. The various theories of how lifestyle is generated or changed are more complementary than conflicting, and focus on both the individual and environmental aspects of people's lives. The use of theories of behaviour holds for lifestyle, consumption, environmental sustainability, and responsibility (Jackson 2005).

In the famous dialogue *Meno*, Plato and Socrates argued that 'He who knows what good is will do good' (IvyPanda 2021). This provides a rather insufficient description of promoting behaviours. Therefore, Knowledge, Attitude, Practice remains just a theory. The multifactorial benefits of changing an inactive lifestyle into some physical activity are well known, and new international guidelines on physical activity and sedentary behaviour were recently launched by the World Health Organization (2020). Still, only 30% of the adult population in Norway fulfils the advice from national health authorities of 30 minutes of light physical activity daily (FHI 2022). Children are advised to be active for 1 hour every day. Six-year-olds mostly fulfil this, but activity levels are reduced to 50% and below at 15 years. However, assessing activity constitutes challenges regarding definition, self-report, and inadequate understanding of intensity and activity (FHI 2022) (see Chapter 4).

Theories of Behavioural Change

Individually focused theories of behaviour (change) are often criticized. Few, if any, individuals are considered isolated from the rest of the world. However, individual models of behaviour are strongly intuitive, evident, and explicit, especially when considered against the complex and diffuse impacts of social structures. The following theories of behaviour change are described in this chapter:

1. Stages of Change Model (Prochaska 1979)
2. Social Cognitive Theory (Bandura 1986)

3. Sense of Coherence Theory (Antonovsky 1996)
4. Self-determination Theory (Ryan and Deci 2000)
5. Theory of Planned Behaviour (Ajzen 1991)
6. Social Practice Theory (Chatterton 2011)
7. 4Es Model (Jackson 2005)
8. MINDSPACE Framework (Dolan et al. 2010).

(1) The **Stages of Change Model** (Prochaska 1979) is widely used in counselling and motivational interviewing for lifestyle change in young people and adults. Its use with small children has to our knowledge not been described. It uses (i) pre-contemplation, (ii) contemplation, (iii) preparation, (iv) action, and (v) maintenance as imaginary steps towards a change, making the individuals identify the pros and cons of changing behaviour, thereby proposing solutions and concrete actions themselves.

(2) Invaluable aspects of individual, social, and societal perspectives are included in the **Social Cognitive Theory** (Bandura 1986). The theoretical components are: **modelling, outcome expectancies, self-efficacy, and identification**. Modelling and defaulting what is tolerable and common in smaller or larger societies will play a role. Furthermore, what is meaningful for the individual and whether it actually works, in terms of being effective, will influence adherence to new habits. Sex, age, and cultural context will be crucial factors for what is meaningful to an individual person. Children will have totally different interests than adults.

Self-efficacy is 'the belief in one's capabilities to organize and execute the courses of action required to manage prospective situations' (Bandura 1986). This core belief affects each of the basic processes of personal change. From an early age, individual self-efficacy plays a major role in how goals, tasks, and challenges are approached and developed. Individuals who have developed high self-efficacy from early childhood are more likely to believe they can master challenging problems and recover more quickly from setbacks and disappointments (Bandura 1986). Individuals with low self-efficacy are characterized by lack of self-confidence, low expectations of one's own performance, and avoiding challenging tasks. Therefore, self-efficacy plays a central role in behaviour performance, including various health-related situations such as weight loss and quitting smoking. Self-efficacy has produced some of the most consistent results associated with an increase in participation in exercise (FHI 2022).

All individuals have experiences from early childhood. Earlier defeats or embarrassments, exclusion, and ridicule, are placed on the negative side of the mathematical equation of motivation. Thus, creating new experiences and constantly reminding oneself about good feelings and mastery makes the negative experiences vague, blurry, and less significant (Bandura 1986).

(3) According to Aaron Antonovsky's **Sense of Coherence Theory**, a sense of coherence develops from early childhood and consists of three components: **manageability, meaningfulness, and comprehensibility** (Antonovsky 1996). *Manageability* develops from early experiences of coping and mastery. When a child regularly and sufficiently experiences that the challenges in daily life are manageable with the available resources, a sense of manageability develops. *Meaningfulness* develops from early experiences of goal attainment. When a child sufficiently often reaches self-determined goals with available resources in daily life, a sense of meaningfulness develops, as the child learns that struggling is worthwhile. *Comprehensibility* develops from early experience of predictability. When a child regularly and sufficiently experiences having control over activities and events in everyday life with the available resources, a sense of comprehensibility develops (Antonovsky 1996). In sum, these experiences serve as 'general resistance resources', which develop early and are relatively stable through life. Thus, they can be useful when meeting challenges in daily life (Antonovsky 1996).

(4) In the **Self-determination Theory**, Deci and Ryan postulate three innate psychological needs: **competence, autonomy, and relatedness**. *Competence*, as in control and mastery and a felt sense of confidence in a social context, is not a skill or capability attained in an objective sense but is strongly related to self-efficacy, which is developed from early experiences (Ryan and Deci 2000).

Autonomy is related to initiatives and the feeling of representing one's own choices. Therefore, children should be asked about their preferences for different physical activities. This implies choosing physical activity regardless of rewards, enforcement, or punishment. The feeling of being an 'agent for your own actions' connects to an identity as 'being an active person', and contributes to the choices made. This identity is also a strong predictor of staying physically active as an adult (Ryan and Deci 2000; FHI 2022).

Relatedness implies a real bonding to others and the feeling of being a participant (Ryan and Deci 2000). Relatedness is one of the core elements in the recently developed model and framework of participation for persons with disabilities (Imms et al. 2017). The stories of the *Upturn* group and the *Beito-gang* (lived experiences later in this chapter), illustrate how the sense of belonging develops when being in a context where there are others with similar challenges. Both children and adults with disabilities sometimes need such 'safe contexts' to form experiences that nurture internalization of the sense of belonging (Imms et al. 2017). To meet 'someone like me' is also important in relation to perhaps having another role, not always being the only one who needs help or the last person to cross the line. Interventions need to create situations and processes where actors are free to reflect critically on their actions and the context in which they act. The relatedness and autonomy underlines this point (Ryan and Deci 2000).

(5) *Intention to act* has repeatedly predicted behaviour. Intention is itself a summary of the combination of attitudes towards a behaviour. This includes the evaluation of the positive or negative expected outcomes, the social pressures and perceptions of what others think they should do, and their likelihood to comply with these. A close parallel to self-efficacy was added in the **Theory of Planned Behaviour**, as a third set of factors that affects intention (and behaviour). Perceived behavioural control is a belief of level of difficulty with which the individual may perform the behaviour (Ajzen 1991). Evidence suggests that the planned behaviour can predict 20% to 30% of the variance in behaviour resulting from interventions and even a greater proportion of intention. Both the attitudes towards the behaviour and perceived behavioural control components of the theory show strong correlations to behaviour itself. To date, only weak correlations have been established between behaviour and subjective norms (Ajzen and Adden 1986). However, using the theory to explain and predict likely behaviour may be a useful method for identifying particular influences on behaviour that could be targeted for change (Munro et al. 2007).

(6) **Social Practice Theory** is something of an umbrella approach under which various aspects of theory are pursued (Chatterton 2011). This theory addresses three elements: **materials, meanings, and procedures**. The *materials* are the physical objects that permit or facilitate certain activities to be performed in specific ways (sports equipment or transportation are good examples). The *meanings* are images, interpretations, or concepts associated with activities that determine how and when they might be performed. Education as a preparation for the preferred skill level, and creation of an inner picture of yourself in the activity, are important in order to develop an identity. The *procedures* are skills, knowledge, or competencies that permit or lead to activities being undertaken in certain ways. Learning the hard way and improving after struggling might be such procedures (Chatterton 2011). This holds for both children and adults. Experiences of making a change most often create pride and a possible transfer to other life arenas. An anxious person who manages to meet neighbours or classmates for a walk or to go to a café once a week will most probably feel general empowerment, activity competence, a new sense of self, and, eventually, a change of identity. 'I managed this, which I would have never thought 1 year ago, so now I might join the "gym group" as well.'

Our biology and body represent potentials, like more favourable characteristics, such as a robust immune system. Similarly, accumulating knowledge indicates that most physical traits are trainable, like speed, strength, endurance, coordination, and flexibility. In addition, learning from or imitating family members, friends, and colleagues may widen our perspectives on what is possible. This is of great importance when it comes to creating habits and building physical and mental strength. A child that observes a father who manages to quit smoking, or a mother who creates space and empowers herself to engage in some physical activity once a week, is learning that it is possible to change habits and promote better ones.

(7) The **4Es Model** is also applied in politics (Jackson 2005) and advocates behaviour change strategies under four categories: **enable, encourage, engage, and exemplify**. Additionally, the model states that in more examples where behaviour is entrenched or habitual, the government uses catalysts to enhance people to behave differently, like raising the price on cigarettes, sugar, and liquor, lowering the prices on vegetables, and an overall area plan that includes conservation of green areas and walking paths. All of these actions reflect values. Behaviours and attitudes of individual consumers are at the core of this model and the majority of interventions (information, education, incentives) are aimed at affecting individual choices.

(8) The **MINDSPACE Framework** is described by simple keywords that further describe central elements (Dolan et al. 2010). **Messenger:** Both children and adults are heavily influenced by who communicates information. A friend, a parent, a professional, a celebrity, someone we trust or dislike for any of many reasons will influence our choices. **Incentives:** Our responses to incentives are shaped by predictable mental shortcuts, such as strongly avoiding losses. What are my chances? What is in this for me? Does it work for someone like me, or my child? **Norms:** We are strongly influenced by what others of the same age, sex, and social class do. **Defaults:** We 'go with the flow' of pre-set options. Close relatives and relations are hiding or uncovering possibilities. Copying local actions may aid in ignoring or creating obstacles. **Salience:** Both children's and adults' attention is drawn to what is novel and seems relevant to us. What is new and interesting information that suits my identity and image? **Priming:** Our acts are often influenced by subconscious cues, brought along from early experiences during childhood or information that is processed and acted upon. **Affect:** Our emotional associations can powerfully shape our actions, as described in the 'engage' part of the 4Es Model. The experience of feeling calm and happy after shovelling snow, learning that an initial assumption of 'work – tired – boring', may in fact lead to 'meaningful – strong – fun'. **Commitments:** We seek to be consistent with our public promises and reciprocate acts. **Ego:** Both children and adults act in ways that make us feel better about ourselves. This brings along the need for creating our own experiences that will outline the theories and keywords.

Strategies for Overcoming Barriers to Being Physically Active

Studies on motivation and participation bring to the fore the larger perspectives of research on a population with physical disabilities and are often described as a magnifier of general findings. The variation within this group will most likely be just as large as in any other population. However, in recent large studies, both children and adults with chronic disabilities have been shown to be less physically active than their non-disabled peers (Saebu 2011). A belief has been established in rehabilitation services that high motivation for physical activity is caused by health benefits

for this population. Furthermore, an assumption of reduced physical health and poor accessibility to activity and activity aids has been a basis of knowledge (Saebu and Sorensen 2011). Access to facilities, recreational parks, forests, tracks and trails, weight rooms, gyms, aerobic or yoga classes, team sports, or creating possibility to cycle/walk to school or the workplace is often a political issue (Saebu and Sorensen 2011). If apples are offered at every corner, most people would eat apples; the same holds for offering a pint of beer. Accessibility will make the cognitive decision-making process shorter and promote autonomy. The same idea holds for preparation for participation: putting out food, clothes, and equipment, and making arrangement of transportation.

However, Saebu and Sorensen (2011) showed that individual factors like intrinsic motivation and identity have far more influence than previously believed, and suggest the need for more interventions aimed at strengthening the individual factors from an early age, in addition to the physical and social environmental factors. Having fun, being with friends and 'owning' responsibility for the initiative are of far greater importance than a doctor who tells you to exercise, or establishing and nourishing bad conscience for not eating enough carrots. Degree of disability and rewards were also of less importance than presumed (Saebu et al. 2013).

Motivated persons are proud to overcome barriers, while the others may blame the barrier itself. If finances are a barrier, seek second-hand equipment on the internet or set up a list of activities that demand fewer investments. Inner motivation may be strengthened within a rehabilitation programme where the autonomy and experience and being agent for one's own priorities and choices are emphasized in addition to social support by being part of a group (Saebu et al. 2013). Parents, peers, coaches, and health care professionals may play an extrinsic role as primers and facilitators for a focus on benefits. The individual question could be phrased: 'Who would (I like to) support me in this process?'

It is well known that high socioeconomic status is a reliable predictor for choosing an active lifestyle. One should be careful drawing direct conclusions about causality. Whether it is the academic performance or wealth itself, or more probably an indirect consequence of more flexible working hours, as opposed to scheduled/blue-collar-labour that gives excess energy, is unknown (World Health Organization 2020).

Being aware of the power of good feelings in order to remain motivated and achieve goals is called the golden window of opportunity. Identification of these may be a prerequisite for change instead of being in the 'Monday, I'll initiate another strict diet programme' lane. Windows of opportunity give a boost of energy and self-confidence that may fuel and propel a desired change. The right moment might be after a vacation or rehabilitation programme.

At Every Intersection: You Have a Choice

Well known in Norway, Kristian Fjellanger has developed a talk-show about 'my life as a fat-so'. Weighing 183kg at age 30 years, he figured that something needed to be done. Interestingly, on his way 'up' to 183kg, decisions regarding eating and inactivity behaviour had been taken for more than a decade, probably unconsciously and automatically. Being aware that every time he decides to eat or sit down he is at an intersection, which may be a first step towards empowerment – being in charge of own decisions – and motivation for change, means that each time he may choose differently.

He started reading and started to prepare. He learned that creating a new habit would take 60 days. He expected the first 60 days to be painful. He had a 4-week vacation due to working additional hours, and claimed this point to be crucial: 'In order to manage the change I needed energy.'

In the 1990s the Hungarian psychologist, Mihyaly Csíkszentmihályi, often mentioned as the most prominent researcher within the field of positive psychology, created the idea of 'flow' as a situation where a person was fully in accordance with abilities and challenges (Csíkszentmihályi 1998). Matching the relation (ability–challenge) is a prerequisite, and underlines the adaptation of the activity for children or adults with or without disabilities. Although the terminology has been used for high performance situations, flow is used on a daily basis by everyone. Finding that optimal level for each individual will never go out of style. However, it is increasingly difficult to set internal goals when research, health authorities, and commercial forces constantly communicate efficient training programmes, optimal weight loss, and 'what is best for you'. This poses the following important question: 'what is possible, desirable, and achievable for me – now – with my resources?'

Basic Steps for Initiating Behavioural Change Towards a More Active Lifestyle

An analysis of one's own life situation will most often be a necessary initial step to identify network, resources, time, facilities, and one's own preferences and goals.

- What are my own, or my child's, old negative experiences to be dealt with?
- When do I, or my child, feel successful? What are my, or my child's, resources?
  - Continue and complete the following sentence: 'I am good at …'
- Who can help me by giving advice, holding my hand, making appointments, making me strong?
- Is it possible for me to go for a short walk? Can I do floor exercises indoors while watching the news? Only 20 minutes would break the normal routine and establish new ones.
- What are my short-term goals for myself and my child?

Getting to know yourself and your family's habits will create routines that are easy to adhere to. Some of the most successful weight-reduction programmes start with this writing-down-awareness-strategy. This needs to be followed by a simple set of routines that includes: sit down when eating, eat slowly, write down what you eat and ask yourself: Why do I, or my child, need to eat more now? Do we need more food?

Recognition of the power of everyday habits must be underlined. Books, shows, speeches, articles about 'I lost 100kg', 'I climbed Kilimanjaro without legs', or 'I cross-country skied across the South Pole being blind' may be of some importance, but focus instead on an awareness of one's own habits, schedules, barriers, and mastering arenas. Being aware of motivational 'risk periods' is necessary, such as a restart after a flu or an injury, or storing sweets and crisps in the house if you wish to eat more healthily. According to Kahneman's philosophy, eating a banana or a sandwich in advance prevents both children and adults from cravings while passing the shelves of chocolate in the grocery store. However, it requires planning and the banana needs to be right there (Kahneman 2011).

Campaigns seem to have limited effects, although some are better than others: 'I am not fast, but I am 100% sure that I am better than the ones staying on the couch.' Avoiding bad breath and having kissable lips are probably more graspable and short-term goals for a teenager when it comes to quitting smoking than lecturing on the statistical risk for obtaining lung cancer at age 76 years (Kahneman 2011).

In rehabilitation at Beitostølen Healthsports Center, the invaluable element of 'free space – closed place' is specifically mentioned by all users with a large variation in disabilities or their parents, from preschool children to elderly people. The repetitive practice: you fall, hurt yourself, look silly – and try again intensively, and eventually succeed, all the while with peers with different disabilities around. Pedagogues and health professionals are present. Getting used to clothing, food, adjustments, what to bring 'in case of …' creates lots of learning and experiences. This seeks to promote lower thresholds, autonomy, and self-efficacy, which are transferrable geographically and to other life arenas (Willis et al. 2018).

USING ASSISTIVE DEVICES AND OTHER TECHNOLOGY TO DO PHYSICAL ACTIVITY

For many people with disabilities, a well-adjusted assistive device is essential for their opportunity to participate in an activity regardless of age. Studies show that lack of suitable equipment is one of several reasons for low activity levels both in children and adults (Engel-Yeger et al. 2009; Bedell et al. 2013). Assistive devices for leisure activities are equipment that is specifically designed to help individuals with disabilities to participate in play and sports (Gjessing et al. 2018). Examples are an arm-propelled cycle, a bicycle with an assistive motor, a motorized chair for floor ball, and a sit-ski and balance-frame for cross-country skiing. Many individuals with childhood-onset physical disabilities need adaptation of activities in order to participate satisfactorily.

The availability of assistive devices differs from country to country. Several countries have systems for public funding of such devices, seeking to give equal opportunities of assistive devices regardless of socioeconomic status.

Principles for Device Selection

When acquiring an assistive device (i.e. if a wheelchair user wants an arm-cycle for participation reasons), selection of an appropriate bicycle and proper adaptation of this bicycle are essential (Gjessing et al. 2018). Individuals have different needs based on demographics, geography, activity preference, and individual capacity. A number of arm-cycle alternatives exist. Cooperation between a professional and the user is essential in order to find the most suitable equipment. The professional is often a physiotherapist or occupational therapist. Local variation in competence regarding assistive devices is significant. Educating professionals in order to enhance knowledge of selecting and adapting assistive devices has to be emphasized. Giving more people with physical disabilities the opportunity to participate in physical activities and the selection of the best equipment to support this is vital.

A study on the experiences of children and young people with acquiring and using assistive devices showed the variation when trying new equipment (Gjessing et al. 2018). Some expressed that it is obvious how to use the equipment and initiate the activity immediately, while others were sceptical about trying out new equipment. 'How fast will I go? Will I manage it? What if I don't? Can anyone see me?' are among their explicit concerns. In such situations, presence of a confident and experienced professional or a peer role model can be very helpful. A role model is often an older person with a comparable disability or situation, who may manage the same assistive device.

> Jacob is about to learn sit-ski with his father in the alpine area. An instructor on alpine skis is telling him how to do it, but Jacob does not quite manage. He is starting to be a bit frustrated when another man in a sit-ski comes towards him and says 'hi!' Jacob recognizes the fellow from the day before and knows that he uses a wheelchair, just like himself. The man willingly offers to show Jacob how to ski. Jacob observes with great enjoyment, especially how he uses his crutch skis when performing downhill turns. Jacob thinks that the task is difficult, but now he is determined to make it!

Self-efficacy is a product of experiences, skill, feedback, persuasion, and intentions. Therefore, individuals with low self-efficacy benefit from additional time in a safe environment, with professionals and preferably also role models (Bandura1986; Willis et al. 2018). After mastering a task and getting confident, it is desirable to return to peers in the local environment and in real-life settings. Many children and adults with disabilities highlight the importance of activity devices that make them more independent while being active. Dependency on assistance with operating the assistive device, on the other hand, is reported to be a barrier for using the equipment (Gjessing et al. 2018).

In rehabilitation programmes for persons with physical disabilities, interventions are often based on principles of adapting the contextual factors (Darrah et al. 2011; Palisano et al. 2012; Rosenbaum and Gorter 2012). Darrah et al. (2011) describe 'context therapy' as a suitable approach. The focus is increasingly put on identifying each person's abilities, and on establishing procedures and treatments based on these abilities. The method is characterized not by changing the person's impairments but rather on facilitating the task and/or adapting the environment, so that the task can be implemented with success. This method has similarities with adapted physical activity, where the purpose is to adapt activities to the person's conditions (Sherrill 2004). Real-life experiences facilitate development of skills that optimize participation. Such competencies could be social, physical, or technical.

Assistive Devices in Activity: Bridging the Social Gap?

The importance of the environment for participation in physical activity is highlighted in an increasing number of scientific articles (Heah et al. 2007; Darrah et al. 2011; Palisano et al. 2012, Rosenbaum and Gorter 2012). One of the most important factors that motivate children and young people to use their assistive devices in leisure activities is being with friends and sharing experiences with them (Gjessing et al. 2018). Obviously, children depend on their family in the first years of their lives (Rosenbaum and Gorter 2012). The family is also the most important facilitator for both social interactions and activity for this population. When children turn 9 to 10 years old, it becomes increasingly important to join peers and 'significant others' at the expense of close family (Allender et al. 2006; Anaby et al. 2013; Nyquist et al. 2016). Several children with childhood-onset physical disabilities experience not being able to keep up with peers in activities (Heah et al. 2007). As they grow older, comparison with peers will most likely progress, which may lead to more isolation. Both children and adults with disabilities participate less frequently and have less environmental support in the community, compared to persons without disabilities (Darrah et al. 2011; Sebire et al. 2013). Simultaneously, it is agreed that support from peers promotes participation (Blair and Morris 2009; Sebire et al. 2013). Children with disabilities, who are less physically active with friends, lose the advantage of peer support in joint activities, and hence participate less in environments where friendships and an identity as physically active are developed. However, those who do participate with friends have better opportunities for peer support that might lead to even more and continuous participation. Relatedness and real bonding to others are prerequisites for sustained behaviour (Ryan and Deci 2000).

Assistive Devices and Intrinsic Motivation: Sliding Doors

Even though lack of equipment and facilities to perform activities are barriers for participation in physical activities, as said above, Saebu and Sorensen (2011) found that intrinsic motivation and development of an identity as a physically active person might be the most important factors for choosing to participate in physical activity as adults.

This is supported by Sebire et al. (2013), who found intrinsic motivation to be the only type of motivation that can be associated with children's physical activity levels. Since it is important to maintain physical activity from childhood into adulthood (Ryan and Deci 2000), it is beneficial to identify and encourage activity behaviours that are driven by intrinsic motivation. However, children who use adapted equipment in physical activity express that intrinsic motivation is just one of several factors that are important for being able to perform the activity (Darrah et al. 2011). Environmental factors like adaptation of the equipment and peer support seem equally important for maintaining physical activity into adulthood (Sebire et al. 2013). These two factors will potentially mutually enhance each other. Assistive devices and adapted equipment may play a key role in creating the window of opportunity to experience intrinsic motivation and the ability to participate with peers. These factors should therefore be examined carefully for each individual, regardless of age.

UPTURN: A PRACTICAL EXAMPLE OF A TRAINING GROUP FOR CHILDREN AND YOUNG PEOPLE WITH DISABILITIES

Cooperation Between Community Sports Clubs and Physiotherapists in a Local Municipality

Twenty years ago, adapted leisure activities for children with physical disabilities, in Bærum Municipality outside Oslo, were extremely limited. Some individual follow-up by physiotherapists during school hours was available. However, the ever-increasing budget constraints led to insufficient funding of organized exercise groups at the relevant schools. A physiotherapist and a rehabilitation coordinator in the municipality initiated a collaborative project with a community sports club, aiming at providing adapted recreational activities with the opportunity to create an active social community. They contacted Beitostølen Healthsports Centre (BHC) to book a stay for a group of children and young people with disabilities from Bærum. This fitted in well with the BHC project, which was called 'the local environment model'.

Next, the local initiators and the municipality invited a group of children and young people to weekly training sessions in order to motivate them to apply for a group stay at BHC and to become a confident and tight-knit group prior to the stay. The municipality did an excellent job during several information meetings in the period ahead of the application deadline. All the children who participated in the activity group applied for the stay.

The publicly funded stay at BHC was a fantastic experience for the children and parents involved. The parents were also given sufficient time to become acquainted with each other and to discuss how to continue the activity group. It was clearly communicated that in the long-term the group could no longer continue under the auspices of the municipality. Therefore, it was necessary that a sports team was established based on

voluntary efforts. Fossum Sports Association welcomed the group, and three parents took responsibility for managing the activities in the group. *Upturn* was established as part of Fossum Sports Association in 2004.

Upturn

Upturn was marketed as an adapted all-sports group for children with physical impairments from 7 to 17 years. The programme consisted of one exercise session per week, and the activities on offer rotated between sports-hall-based and outdoor activities. The activities were varied and play-centred, with a focus on accomplishment, social interaction, and cooperation. One of the goals was that the participants should be able to try out many different activities. Besides the typical sports-hall activities, others included climbing, rowing, skating sessions, bowling, curling, golf, swimming, archery, tae kwon do, and fishing trips.

The underlying idea was that *Upturn* should be a door opener into regular groups in Fossum Sports Association, with football, orienteering, as well as cross-country and alpine skiing. However, it soon became clear that the atmosphere in the group became so strong and tightly knit that everyone in the group preferred to continue training within the safe parameters created by *Upturn*. Although the other groups in Fossum Sports Association were extremely positive and inclusive, it was the *Upturn* group that 'kept to themselves'. Cooperation with other groups in Fossum Sports Association resulted in events, such as biathlon and star orienteering, as well as adapted cross-country skiing and slalom training during the course of 4 weeks every winter.

Upturn worked as a platform that generated further activity groups and small networks. Some of those involved started climbing, horseback riding, swimming, or training together at fitness centres. Several also became good friends and spent a great deal of spare time together.

The young people, who 'grew out of' *Upturn* were offered the opportunity to continue their training in another local sports club, Friskis & Svettis, which means Fit & Sweaty. There, around 15 young people with disabilities meet once a week for strength training with qualified guidance by instructors and assistant coaches. One assistant coach has cerebral palsy himself and was previously part of *Upturn*. Like *Upturn*, this is a low-threshold activity with focus on social interaction, safe boundaries, enthusiasm for exercise, and accomplishment of training goals. Even though the programme is facilitated, all activities take place at the same time as the other activities in the sports club.

What Did *Upturn* Mean for the Participants?

It is easy for young people with disabilities to become excluded at school because they are unable to keep up physically. They often cannot take part in the social settings formed by groups walking to and from school, nor are they able to join in the same leisure

activities. Social networks fail them. *Upturn* is an extremely important social arena for the children and young people involved. Many have made friends with whom they still spend a great deal of time.

The good team spirit in the group meant they dared to take on more challenges. They were motivated to try new things without fear of embarrassing themselves. For participants in the *Upturn* group, many exciting activities were offered in addition to more ordinary sports-hall activities. This is what their typically developing peers experienced during physical education classes, while those with disabilities previously sat on the side line or experienced painful defeats. The experiences from *Upturn* served as discussion points at school; they conferred status among their fellow students.

There was a focus on mastery experiences in *Upturn*. However, the coach was extremely confident in his role and was able to motivate, challenge, and be considerate. There was structure and order to the training sessions. The children had to relate to each other and adhere to rules – they were simply treated like any other children. In *Upturn*, it was possible to compete – play as a team and bring out the best in each other. During physical education at school, many felt that they were the reason for the team's defeat. For the first time, many gained the experience of 'achieving' at a higher level than others, and they could, with great satisfaction, lend a helping hand to those who needed and wanted it. The adapted training made it possible to 'exert oneself' in the right way and gain a feeling of mastery in doing a little better than the time before.

How was it Operated?

Two main factors contributed to the success of *Upturn*: the close cooperation between the municipality and the reliable coaches with a high level of expertise in the field of adaptation.

The municipality provided economic support by employing two assistant coaches, and the municipality's physiotherapists actively recruited new children into the group. At the same time, they contributed their expertise as professionals when necessary. The physiotherapists' active participation provided reassurance for parents unsure whether sports were appropriate for their children.

The municipality was also an active promoter of visits by *Upturn* to BHC. These stays were inspirational and improved cohesion among the children as well as among the parents, creating a sense of belonging and experiences of new social roles, and learning new skills that could be continued at home. The freedom of choice regarding activities, increased activity competence, and sense of self along with good team spirit were important factors behind the *Upturn* group's participation in a series of sporting events and social trips (Ryan and Deci 2000; Imms et al. 2017).

Ever since its inception, there has been a focus in *Upturn* on employing young, cool coaches with robust expertise in adaptation, as well as on reinforcing the coaching team

with assistants in order for parents to avoid participating and assisting during training. Thanks to financial support from the municipality, the coaches received competitive wages for their work, and they were reliable and brilliant role models. They were creative with organizing activities and were confident in their role of both providing challenges and being considerate. The role of the parents consisted largely of administering the group and applying for funds, as well as marketing the programme in cooperation with the municipality.

Challenging Factors

The activities on offer in *Upturn* were adapted for children and young people with primarily physical impairments. An ever-growing proportion of participants with significant cognitive challenges made it difficult to create a satisfactory training programme for everyone. The composition of the group became unclear, and parents of children with motor challenges hesitated to send their children to exercise with peers with intellectual disability.

The original core group of children and parents left *Upturn* as the children grew out of the programme. Filling the vacant positions with new recruits was not successful, neither with children nor with enthusiastic parents. *Upturn* no longer falls under the specific tasks of the physiotherapist in Bærum municipality.

The experiences gained from *Upturn* demonstrate the importance of providing an adapted training programme embedded in an established sports club, which is able to assist with any necessary administrative help, showing that both individual and environmental factors and structures are important for sustained adapted physical activity (Saebu and Sorensen 2011). At its peak, there were almost 35 children and young people in *Upturn*, which continued for 15 years.

THE *BEITO-GANG*

In 1996 a group of 14 adults with different disabilities from the same local municipality, Hurum, were at a rehabilitation stay at BHC (www.bhss.no/aktuelt/). During this stay, the group members developed friendships, common engagement, and importantly, confidence that their experiences had to be shared with others in similar life situations. After 4 weeks at BHC more than 20 years ago, the group returned home with a lot of inspiration and started to train together once a week with local professionals. The *Beito-gang*, which they called themselves, had initiated a popular training group, and more people joined the training sessions. This openness to new members was an important factor for the sustainability of the group.

After a while, the group got financial support from the county administration and was formalized as Hurum Healthsports Club. Since then, 550 persons have been members of

this healthsports club, and in 2016, the club had 300 paying members. The club organizes weekly training in a sports hall, outdoor walks, as well as sessions in a swimming pool. In addition, they arrange six excursions yearly, sometimes to BHC for a 'first love revival'. Through all these years, a small enthusiastic team has hosted this club.

The enthusiastic team behind this initiative is proud of having been able to accomplish this dream. There is no doubt that this is a good example of collaboration between a rehabilitation institution in the specialist health care system, local health professionals, and voluntary enthusiasts in the local community. The competence of the professionals at BHC with adapted physical activity influenced the group from Hurum in 1996. What these group members learned they brought back to their local community, where adults with different special needs can still enjoy training together in everyday life. Again, participation in preferred activities, experiences of increased activity competence, and sense of self and social belonging, contributed to sustained physical activity (Ryan and Deci 2000; Imms et al. 2017).

CONCLUDING REMARKS

Asking older people who succeed in keeping a social network, appreciating life, embracing events, even if the physical limits are obvious to a younger population, would probably add to existing knowledge in the area.

In between academic theories and political facilitation, one should consider the Nike Inc. slogan 'Just Do It.' Attention should focus on the need to create experiences repeatedly. Bear in mind that the first 10 times, and the first 60 days may be painful, boring, and include additional hassle and minimal feelings of mastery. This is the reality for achieving physical activity goals and is how autonomous adherence to healthy behaviour should be communicated.

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