


# MOVING TOWARDS SUCCESS: PHYSICAL ACTIVITY AS A CHANGING TOOL TO IMPROVE EDUCATIONAL GROWTH IN STUDENTS

## MUOVERSI VERSO IL SUCCESSO: L'ATTIVITÀ FISICA COME STRUMENTO DI CAMBIAMENTO PER FAVORIRE LA CRESCITA EDUCATIVA NEI BAMBINI

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### ABSTRACT

The study explores the role of physical activity in the educational development of children, emphasizing the role of educators in promoting their growth. Physical activity positively impacts the student's educational path by enhancing cognitive, emotional, and academic skills, and creating an engaging learning experience. It represents a protective factor against deviance and a preventive primary tool against school dropout since it helps to create a supportive environment, promoting personal development.

Il presente lavoro analizza il ruolo dell'educazione motoria nello sviluppo dei bambini, enfatizzando la responsabilità degli educatori nel promuovere la loro crescita educativa. L'attività fisica favorisce un miglioramento delle abilità cognitive, emotive e accademiche, creando un'esperienza di apprendimento coinvolgente. Inoltre, rappresenta un fattore protettivo e preventivo contro la devianza e la dispersione scolastica creando un ambiente supportivo e promuovendo la crescita personale.

### KEYWORDS

Inglese: Physical Activity; Educational strategies; School deviance  
Italiano: Attività fisica; Strategie educative; Devianza scolastica

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## Introduction

Educational processes are the result of a complex and articulated relationship involving various actors: in the first place, children followed by their families, the school, and all the extracurricular entities. All these actors are called upon to work together under a pact of shared responsibility, aiming to ensure the full development of relational and social autonomy of the child, as well as his/her cognitive and metacognitive skills, through the implementation of a genuine "educational change." (Capperucci, 2018)

However, the process of educational change does not solely depend on the actions of external agents or actors, it also requires an internal drive which is represented by motivation. Therefore, all the institutional entities must implement pedagogical and didactic strategies that enable children to remain focused on their goals and implement the growth and changes processes.

From a purely notional point of view, motivation is defined as the reason behind a behaviour (Guay et al., 2010) or as that factor that drives us to perform a certain action or not. In educational setting, motivation plays a fundamental role in guiding students towards learning and influencing their behaviour and attitudes at school. It represents a key factor necessary for educational success, especially for children living in challenging and/or risky situations due to various factors such as socio-economic difficulties, lack of resources in their living-area, or family violence. Thus, motivation becomes an essential educational tool able to implement the educational change. In such situations, the goal of the school and the educators, is to promote and foster in the child's motivational processes development which can serve as an essential resource to overcome obstacles and promote personal empowerment. A high level of motivation can enable children to develop resilience and self-determination which are necessary to overcome difficulties and progress in their educational journey (Ryan & Deci, 2000). For these reasons, educators must be aware of individual students' needs, and they have to create opportunities for personal success by providing appropriate challenges according to each student's level of competence and offering additional support to those who require it. Similarly, educators should encourage student autonomy by allowing them to make meaningful choices regarding their own learning. To this regard, it is the teacher's responsibility to be adequately prepared from a psychopedagogical point of view, about the theories and educational strategies that are most effective in

implementing the necessary students' educational change in order to achieve set objectives.

Physical education represents a suitable tool able to enhance the educational change in students. The inclusion of structured and targeted physical activity in the school routine can promote a more comprehensive and engaging educational approach. When students participate in stimulating and rewarding physical education experiences, they develop a positive interaction with learning and the school environment. Scientific literature consistently highlights that practicing physical education within the school context improves motivational processes, self-esteem, sense of self-efficacy, and goal achievement (Elliott & Dweck, 1988; Hodgins et al., 2007; Yusuf, 2011). Furthermore, it is now widely recognized that physical activity plays a role not only in improving physical health but also in cognitive and emotional aspects of individuals (Bidzan-Bluma & Lipowska, 2018). In the educational setting, physical education offers children the opportunity to experience the pleasure of movement by promoting the emotional well-being, the stress reduction, and the acquisition of social skills. At the same time, it strengthens peer-to-peer relationships with classmates and fosters the development of soft skills such as self-esteem, self-confidence, and adaptability. Similarly, physical education can be strategically used to promote motivational processes in school. Teachers and educators can design engaging and stimulating physical education lessons that encourage students to actively engage and develop a growth mindset that improve the process of integrated and organic development and educational change in the child.

The aim of the present paper is to provide a systematic analysis of the theories, methodological and didactic strategies that educators are called to implement in both school and extracurricular contexts to foster the social and individual growth and evolution of the child. Specifically, an in-depth look will be made at all those factors such as self-esteem, motivation, and self-efficacy, which are fundamental features that drive the child to achieve predefined objectives. Finally, it will be illustrated how, and through which processes physical activity can promote educational change in children, with particular attention to those who unfortunately grow up in risky environments and are more exposed to early school dropout risk.

## **1. Motivational strategies in school settings to enhance educational growth.**

It is well known that in the school environment, for each order and grade of education, the motivational component is essential to ensure the success of each student. Motivated students are more engaged, focused and predisposed to overcome obstacles throughout their learning path. However, nurturing and maintaining student motivation can be a challenge for many educators and educational institutions. Motivation can be influenced by multiple factors, including subject's interest, perceived competence and a sense of relevance to learning objectives. For these reasons is fundamental that the teachers and the educators place themselves as motivators able to recognize and enhance intrinsic and extrinsic motivational factors that distinguish each child. In this perspective, the educator becomes an active agent of socialization capable of stimulating the student to grow within the learning environment (Fisher, 2003).

Motivational strategies in the school context play an essential role in fostering students' interest in learning and promoting their active engagement. It is the teacher's responsibility to choose, based on the class's needs and the individual students, the most suitable motivational strategies to achieve the set objectives. In 1992, Renchler identified seven effective motivational strategies for promoting educational growth in school settings (Renchler, 1992). In particular, he stated that it is the educator's job to define clear and achievable goals and teach students self-regulation techniques in order to manage and control stress factors, planning their school programs, and monitoring their progresses in order to ensure a greater sense of autonomy and responsibility in learning. To this regard, a greater sense of autonomy is an important feature able to increase intrinsic motivation through active participation in the design of educational activities (Guthrie et al., 2000; Pintrich, 2003; Pintrich & De Groot, 1990). For example, Hidi and Harackiewicz showed that giving students more control over their learning paths can lead to the development of more stable and enduring interest over time. It is important for the educator to emphasize the individual progress and achievements of their students, especially for particularly challenging tasks. In this case, the combination of intrinsic motivation and extrinsic rewards can be a particularly effective strategies to achieve objectives (Hidi & Harackiewicz, 2000). This encourages students towards self-determination, focusing on overcoming their own limitations rather than comparing themselves to others. Similarly, it is essential for students to work in

groups and develop problem-solving skills to promote cooperative learning and a sense of belonging to the class. According to Turner et al., peer-to-peer learning methods represent an opportunity for students to cultivate curiosity and interest, as well as develop a greater sense of responsibility towards the group (Turner, 1995).

Focusing on the goal, providing choices and participation opportunities, recognising and rewarding individual progress, fostering teamwork, encouraging self-assessment, teaching time management skills, and adopting self-paced approaches, are just a few of the many strategies that educators can employ to support intrinsic motivation and sustained growth of students in their learning journey. These strategies, when applied with care and awareness, may help to create a stimulating and engaging learning environment that enables students to reach their full academic and personal potential.

## **2. How physical activity promotes educational change.**

The implementation of structured physical education programs in schools is now a widely practiced approach due to the benefits it brings on multiple levels: physical, cognitive/behavioural, and psychological determinants such as attitude and motivation (Demetriou, 2011). Therefore, physical education can be considered a suitable educational tool able to promote students' social and individual growth, since it contributes to overall well-being and inevitably improve their quality of life.

Regular participation in motor activities in both curricular and extracurricular settings, contributes to enhancing students' overall performance by increasing attention, memory, self-esteem, and self-efficacy, making them more focused on achieving their goals (Latino et al., 2020). Indeed, according to current scientific literature, regular physical activity is positively correlated with improved academic performance (Latino et al., 2020). One possible explanation lies in the effects that physical activity exerts at the biological and physiological level. Indeed, it has been demonstrated that practicing regular exercise improves blood flow to the brain, enhances synaptic plasticity by promoting the growth of new neurons and the formation of neural connections through the production of various neurochemical growth factors such as the BDNF (i.e., the brain-derived neurotrophic factor). As a consequence, the brain will adapt more easily to cognitive tasks in which it is involved (Galván, 2010).

Furthermore, combining academic content with physical activities can improve the learning experience, making it more engaging and memorable for students. Hence, introducing physical activity into the child's school routine becomes an essential task for both teachers and educators. For instance, teachers can adopt active learning techniques, such as kinaesthetic activities and outdoor lessons. In this regard, a successful strategy could involve introducing "active breaks" (Masini et al., 2020), defined as small interruptions during regular curricular activities. Active breaks allow and help children to stay focused, avoiding boredom and disengagement in the long term (Donnelly et al., 2016). These innovative approaches not only increase motivation but also accommodate different learning styles and represent a successful approach which ensure students the possibility to pursue their academic achievements and their education growth.

In this perspective of the child's educational growth and development, physical education becomes the means through which the educator implements numerous educational changes that inevitably affect children motivational component. In this regard, Kouli et al. investigated the effects of an aerobic activity program on the overall health and fitness wellbeing and the intrinsic motivation levels in primary school children. The study involved fifty-seven children aged between ten and eleven years old. Children were divided into an experimental group and a control group. The experimental group followed an aerobic dance program of forty-five minutes session, three times a week, for an overall duration of twelve week. On the contrary, the control group continued with regular curricular physical activity. The results showed that children who participated in the aerobic dance program demonstrated improvement in all investigated fitness parameters such as cardiorespiratory endurance, flexibility and strength. Importantly, students showed a significant improvement of their intrinsic motivation, measured through the Intrinsic Motivation Inventory (IMI) questionnaire. Specifically, children showed an increase in their levels of interest, enjoyment, and effort (Kouli et al., 2009)

Intriguingly, students who showed greater self-determined motivation, enjoyment and sense of autonomy in physical education settings are those who are more prone to transfer these behavioural features in different settings (Cox et al., 2008). Indeed, physical activity plays a fundamental role on academic performance. In particular, it has been shown a positive relationship between practising physical activity in school setting and: cognitive skills and attitude which include both basic cognitive abilities such as attention and memory and beliefs related to academic performance including motivation and self-concept; academic behaviours such as

the ability of organization and planning; and academic achievement which is generally assessed through standardized test score (Rasberry et al., 2011)

### **3. Physical activity as a tool to foster educational change in children: an in-depth look at risk contexts.**

The success of an educational change is indisputably linked to the environment to which it applies. Children growing up in risk contexts often face a range of challenges, such as poverty, unstable family environments, exposure to violence, and limited access to educational resources. These circumstances can significantly impact their academic performance and overall well-being, exposing them to a greater risk of deviance and future dropping out of school. Indeed, early school dropout represents a pedagogical emergency (Angelis et al., 2015). Thus, providing targeted interventions to support children's educational growth becomes essential and school becomes the privileged environment where to implement preventive social practices to face the spread of the maladjustment and deviance phenomena. Teachers and educators have to put in place curricular and extracurricular strategies in order to encourage the child to pursue the path of educational growth thus significantly reducing the risk of them dropping out of studies in the future. In order to do so, it is necessary to improve the students' engagement by showing them personal interest, focusing on the development of peer relationships and encouraging them to participate in school activities (Wilkins & Bost, 2016)

Physical activity especially when it is proposed in a recreational form, offers a promising avenue for addressing the unique needs of children in risk contexts. It can serve as a safe and inclusive space where children can experience a sense of belonging and community, irrespective of their background or challenges they may face outside of school. Participating in physical activities with peers can create a supportive network and offer a sense of normality for children dealing with adverse situations representing an essential drive to pursue educational growth paths able of pushing children away from the contexts of deviance from which they come. Hence, physical activities can serve as a protective factor by acting on a plethora of social, relational and personal features of children. Firstly, children can express and manage their emotions in a healthy and constructive way, alleviating stress and anxiety resulting from the difficulties of the environment in which they grow up (Biddle & Asare, 2011). Participating in structured and supervised physical activity programmes provides children with a safe and positive environment in which to

engage, thus reducing the likelihood of involvement in deviant behaviour, such as substance abuse or criminal activity. In addition, physical activity improves children's self-esteem and self-confidence and help them to feel more confident and capable in pursuing the goals and, consequently, to feel more focused. Moreover, it is important that the child feels part of a group. To this regard, practising physical activity improve teamwork and peer to peer communication. Children learn to cooperate with others, resolve conflicts and be part of a cohesive community. Indeed, Maradona et al., showed that, an implemented and structured physical education program in elementary 4<sup>th</sup> year significantly improved social skills in children (Gil Madrona et al., 2014). Specifically, the study involved twenty-four children aged between nine and ten years old. The physical education program was mostly based on game setting and includes a variety of didactic techniques such as cooperative learning, role-playing small group discussion and problem solving. Hence, these methodological approaches may be useful to develop social and leadership skills which may act as protection factor against the negative influence of deviant groups.

## **Conclusions**

The aim of the present paper is to offer a comprehensive description of the processes, and dynamics that influence the process of growth and educational change in children. With this in mind, we have focused on the role that the educator plays in the dichotomous relationship with his/her students. Educational processes involve a complex network of interactions and responsibilities among various actors, including children, families, schools, and extracurricular entities. Educators' ultimate goal is to ensure the child's full development of relational and social autonomy through genuine educational change. Strategies such as setting clear and achievable goals, teaching self-regulation techniques, emphasizing individual progress, and fostering teamwork can significantly impact students' intrinsic motivation and sense of autonomy which are essential to achieve successful educational growth. A stimulating and engaging learning environment can be created, encouraging students to flourish academically and personally.

Physical education emerges as an ideal tool to promote educational change in students. Structured physical activity not only enhances physical health but also positively influences cognitive, emotional and academic aspects of children's life. Combining academic content with movement creates a more enjoyable and effective learning experience, encouraging students to stay focused on their goals.



The process of educational change becomes even more important and meaningful for those children at risk of deviance. Engaging in physical activities within a supportive and inclusive environment fosters a sense of belonging and community. It represents a protective factor and a primary prevention tool, able to reduce the likelihood of involvement in deviant behaviours. Additionally, physical activities enhance social skills, teamwork, and leadership abilities, providing children with valuable tools to resist negative influences and pursue positive educational paths. The implementation of motivational strategies and physical activities in educational settings represents a powerful approach to enhance students' growth and create a supportive and empowering learning environment. Educators can effectively support students in their journey towards academic success and personal development, even in challenging circumstances.

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