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# PHYSICAL AND MENTAL WELLBEING & PERFORMING WELL UNDER PRESSURE

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# PHYSICAL ACTIVITY AND HEALTH





# PHYSICAL ACTIVITY: DEFINITION AND GUIDELINES

- ❖ **Physical Activity (PA):** any bodily movement produced by the contraction of skeletal muscles that requires energy expenditure (World Health Organization, 2011)
- ❖ **The World Health Organization (WHO, 2011)** recommends that children and youth aged 5–17 years:
  - ❖ engage in at least 60 minutes of moderate- to vigorous-intensity PA daily
  - ❖ an amount of PA greater than 60 daily minutes provides additional health benefits
  - ❖ most of the daily PA should be aerobic
- ❖ For children and young people PA includes play, games, sports, transportation, and physical education in the context of school, family, and community activities.



# PHYSICAL ACTIVITY: DEFINITION AND GUIDELINES

The WHO (2011) recommends that adults aged 18–64 years should engage in:

- ❖ at least 150 minutes of moderate–intensity PA or 75 minutes of vigorous–intensity PA throughout the week, or an equivalent combination of moderate– and vigorous–intensity PA
- ❖ for additional health benefits, adults should increase their moderate–intensity PA to 300 minutes per week



# PHYSICAL ACTIVITY: A PROTECTIVE FACTOR

PA represents a protective factor for physical and mental illness

(Coombes et al., 2015; Stanton, Happell & Reaburn, 2014)



PA plays a role in both physical and mental wellbeing

(Galper et al., 2006; Harvey et al., 2010)



# PHYSICAL ACTIVITY & PHYSICAL WELLBEING

In children and young people, appropriate levels of PA contribute to the development of:

- ❖ healthy musculoskeletal tissues (bones and muscles)
- ❖ healthy cardiovascular system
- ❖ neuromuscular awareness
- ❖ maintenance of a healthy body weight



# PHYSICAL ACTIVITY & PHYSICAL WELLBEING

PA reduces the risk and the probability of developing:

- ❖ type 2 diabetes
- ❖ hypertension
- ❖ obesity
- ❖ cardiovascular diseases
- ❖ osteoporosis
- ❖ some type of cancer
- ❖ cognitive impairment



# PHYSICAL ACTIVITY & PSYCHOLOGICAL WELLBEING

PA prevents the development of psychological disorders such as:

- ❖ anxiety and depression (Galper et al., 2006)
- ❖ PA is linked to the development of a **positive body image** and **high self-esteem** through the perception of **self-efficacy** and **physical competence** (Eime et al., 2013; Sonstroem & Morgan, 1989)
- ❖ Adolescence and young adulthood are times of changes. Such changes can be stressful for young individuals and expose to the risk of experiencing a decrease in **self-esteem** and general **self-worth** (Baldwin & Hoffmann, 2002; Robins & Trzesniewski, 2005; Sonstroem, 1998)  
promoting PA and sport participation in adolescents is crucial (Eime et al., 2013)

Person's evaluative judgment of the self (Rosenberg, 1979). Self-esteem is important for a satisfying life and constitutes a fundamental aspect of psychological wellbeing





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# THE ROLE OF PHYSICAL EDUCATION IN PROMOTING PHYSICAL ACTIVITY IN STUDENTS



# PHYSICAL EDUCATION (PE)

- ❖ Physical Education (PE) is a key factor in the promotion of young PA (Sallis & McKenzie, 1991)
- ❖ Positive experiences in PE could influence the adoption of active lifestyles
- ❖ PE curricula programs can foster positive changes in students motivation towards PA (Sallis & McKenzie, 1991)



# PHYSICAL EDUCATION (PE) TEACHERS

- ❖ PE teachers play a crucial role in facilitating students' perception of competence and enjoyment within an activity area (Treasure & Robert, 2001)
- ❖ The experience of **perceived competence** and **enjoyment** is a critical factor in determining one's motivation for and continued participation in PA and sport activity (Kremer, Trew, & Ogle, 1997)
- ❖ If PE teachers are able to increase students' **perceived competence** and **enjoyment** during the practice of PA, the outcome will be the motivation to adopt a **physically** active lifestyle out of school promotion of students' PA (Sallis & McKenzie, 1991)



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# PHYSICAL EDUCATION (PE) TEACHERS

- ❖ PE teachers can foster the engagement of students in PA and sport activity (Heath et al., 2012; Messing et al., 2019) by teaching the importance of PA and sport for physical and mental wellbeing
- ❖ It is crucial that PE teachers understand the benefits of PA and sport participation



# PRACTICE..

- ❖ Theory lessons about the importance of PA and sport participation on physical and mental wellbeing

## Frontal/Group lessons:

- ❖ Introduction to PA: Definition of PA, Physical Exercise (PE) and sport activity.
- ❖ Guidelines of the World Health Organization (WHO; 2010): Recommended amount of PA.
- ❖ Positive effects of PA on physical wellbeing: type 2 diabetes, hypertension, obesity, cardiovascular diseases, osteoporosis, and cognitive impairment.
- ❖ Positive effects of PA on mental wellbeing: development of a positive body image and high self-esteem through the perception of self-efficacy, and physical competence.
- ❖ Inclusion of other relevant topics in accordance with students' age.



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# DEVELOPMENT OF LIFE SKILLS THROUGH SPORT: THE ABILITY TO PERFORM WELL UNDER PRESSURE

# LIFE SKILLS: DEFINITION

- ❖ Life skills are **crucial abilities** that have been defined by the WHO (1999, p. 3) as:

the ability for adaptive and positive behaviour that enables individuals to deal effectively with the demands and challenges of everyday life

- ❖ Furthermore, life skills have been defined by UNICEF (2004) as:

a group of psychosocial and interpersonal skills which can help people make informed decisions, communicate effectively, and develop coping and self-management skills that may help individuals lead an healthy life



# LIFE SKILLS: TYPES

Life skills include (WHO, 1993):

- ❖ self-awareness
- ❖ decision-making
- ❖ problem-solving
- ❖ creative thinking
- ❖ critical thinking
- ❖ communication skills
- ❖ interpersonal skills
- ❖ empathy
- ❖ coping with emotions and stress
- ❖ performing well under pressure





# LIFE SKILLS, PHYSICAL ACTIVITY, AND SPORT

- ❖ PA and sport participation promote the development of life skills (Koh & Camiré, 2015)
- ❖ **sport is a metaphor of life** and there is a resemblance between mental skills needed for successful performance in sport and in non-sport domains (Danish, Forneris, & Wallace, 2005)
- ❖ life skills learned while participating in sport can be transferred to domains other than sport such as work (Goudas, 2010)
- ❖ physical education can be the ideal field for introducing and teach life skills (Goudas et al., 2006; Goudas & Giannoudis, 2008)



# PERFORMING WELL UNDER PRESSURE

The ability to perform well under pressure is one of the most important skills in life, and it is the result of the acquisition of other life skills. Indeed, many life skills such as:

- ❖ problem-solving skills
- ❖ decision-making skills
- ❖ communication skills

are necessary to perform well under pressure.

**Pressure** may be defined as a combination of factors that increases the importance of performing well on a particular occasion and/or environment such as school and job (Baumeister, 1984)



# PERFORMING WELL UNDER PRESSURE

- ❖ High levels of pressure could lead to choking (Baumeister, 1984)
- ❖ Choking under pressure describes **performance decrements** that occurs when people perceive pressure, despite their striving to perform well (Beckmann, Gropel, & Ehrlenspiel, 2013; Beilock, 2010)
- ❖ Pressure conditions result from individual perception of stress and include worries about competition, audience presence, and reward or punishment resulting from the performance (Baumeister & Showers, 1986; Beckmann et al., 2013; Festinger, 1954)



# PERFORMING WELL UNDER PRESSURE

Three possible outcomes occur when performing under pressure:

- ❖ decreased performance (i.e. choking)
- ❖ stable performance
- ❖ increased performance

Antecedents accompanying a choking episode were found within:

- ❖ the task (Beilock & Carr, 2001; Kinrade, Jackson, & Ashford, 2010)
- ❖ the situation (Baumeister, Hamilton, & Tice, 1985; Seta & Hassan, 1980)
- ❖ the performer (Kinrade et al., 2010; Mesagno, Harvey, & Janelle, 2012; Wang, Marchant, & Morris, 2004; Wang et al., 2004)



# THE PERFORMER

Individual features such as **self-esteem** and perceived **self-efficacy** (Allport, 1966) play a role in individuals' ability to perform well under pressure

Person's  
evaluative  
judgment of the  
self (Rosenberg,  
1979)

Belief in one's  
capabilities to  
produce expected  
attainments  
(Bandura, 1977)

Furthermore, **Locus Of Control (LOC)** and the **ability to cope with stress** play a role in the ability to perform well under pressure.

# SELF-ESTEEM AND SELF-EFFICACY: THE ROLE OF PE TEACHERS IN PRACTICE

Self-esteem and self-efficacy can be positively influenced by PE teachers by the means of different techniques (Williams & French, 2011):

- ❖ positive feedback → importance of reinforcing students' effort and progress
- ❖ specific instructions and goals → providing explanation (where, when, and how) of how goals could be reached

## Goal setting:

- ❖ PE teachers should set targets that are realistic, positive, achievable, challenging, time limited, measurable, flexible, and concrete, rather than abstract (Hays & Brown, 2004; Ravizza, 2006; Robbins & Judge, 2009)
- ❖ A distant goal should be also segmented into smaller goals to promote self-esteem and self-efficacy, as proximal goals are more manageable (Gould, 2006)
- ❖ PE teachers can set growing difficulties tasks in accordance with students' abilities and support students to find strategies to solve them



# THE PERFORMER: LOCUS OF CONTROL

## Locus Of Control:

Degree to which individuals perceive that reinforcements are contingent on their actions (Hiroto, 1974; Rotter, 1966)

- ❖ a person with an internal LOC perceive reinforcements as consequences of his/her actions and to attribute consequences to his/her skills and abilities students with internal LOC are able to sustain goal-related behaviours, take responsibility, and adjust their behaviour to reach aims (Garger, Thomas & Jacques, 2010)
- ❖ a person with an external LOC tends to perceive reinforcement as unrelated (i.e. independent of his/her behaviours) and attribute outcomes to chance, luck or to another person



# LOCUS OF CONTROL: THE ROLE OF PE TEACHERS IN PRACTICE

- ❖ PE teachers should explain to students the importance of LOC style and provide feedbacks able to promote students' internal LOC attributing success to efforts and failures to lack of efforts allows students to adapt their behaviours to achieve greater competence (Masui & De Corte 2005; Throndsen 2011; McClure et al., 2011)
- ❖ PE teachers can conduct groups after PA and sport activities to critically reflect on successes and failures (i.e. explanation of what was successful and what was not in a game activity) and provide feedbacks to promote the development of internal LOC





# THE PERFORMER: THE ABILITY TO COPE WITH STRESS

- ❖ **Stress:** is experienced when individuals perceive the outcome of a task as important and when they are uncertain about meeting the task demands because of their level of competence, the possible lack of access to proper tools or external support, or due to the absence of confidence in their own skills (Bakker et al., 2003; Karasek & Theorell, 1990; Lazarus & Folkman, 1984; McGrath, 1970)
- ❖ **Coping with stress:** cognitive and behavioural efforts that master, minimize, tolerate, or reduce internal and environmental demands (Lazarus, 1982)

# STRESS APPRAISAL

The way in which individuals appraises stressors (i.e., as challenge stressors or negative stressors) have different impacts on task execution (Cavanaugh et al., 2000):

- ❖ a challenge stressor is a type of stress where individual appraises the stress as potentially promoting his/her personal growth (Podsakoff, LePine, & LePine, 2007) and responds with a sense of meaning and hope (Nelson & Cooper, 2005)
- ❖ a negative stressor is a type of stress when individual appraises the stress as influencing negatively his or her ability to succeed (Podsakoff et al., 2007). It results in maladaptive coping or adaptation to the stressor (Selye, 1973)



# COPING STRATEGIES

Two classes of coping responses (Billings & Moos, 1982; Folkman & Lazarus, 1980; Pearlin & Schooler, 1978):

- ❖ **Problem–focused strategies:** aim at removing the source of distress. Problem–focused strategies can be directed outward (to alter some aspect of the environment) or inward (to alter some aspect of the self). The first include cognitions and behaviours directed toward solving a problem and may include seeking information. The second are forms of reappraisals such as changing the meaning of the situation/event or recognizing the existence of personal resources.
- ❖ **Emotion–focused strategies:** aimed at decreasing emotional distress. They include strategies such as expression or suppression of emotions as well as seeking emotional support from others.



# THE ROLE OF PE TEACHERS IN PRACTICE

- ❖ PE teachers can promote students' functional appraisal of stressful events and their ability to cope with stress by engaging in problem-focused coping strategies → increase students' ability to perform well under pressure



# GENERAL METHODOLOGY

- ❖ implementing activities within the sport environment to intentionally coach life skills
- ❖ group activities
- ❖ active learning
- ❖ experiential learning
- ❖ implementing activities to coach how skills could be transferred to other contexts



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# GENERAL CONCLUSIONS



- ❖ PA and sport participation are crucial activities in terms of physical and mental wellbeing, especially in young people (Galper et al., 2006; Harvey et al., 2010)
- ❖ PA and sport participation promote the development of skills that can be used in life: the life skills (Koh & Camiré, 2015)
- ❖ the ability to perform well under pressure is a learned skill that can be improved with training (Andersen, 2009; Harmison, 2006; Hays, 2009; Williams & Harris, 2006)
- ❖ crucial role played by PE teachers in promoting the ability to perform well under pressure
- ❖ strategies employed by PE teachers have both indirect and direct effect in life skill development



**Indirect strategies include:**

- creating a sport environment to prevent young people from engaging in risky behaviours
- acting as a role model by displaying positive behaviours and attitudes

**Direct strategies consist of:**

- implementing activities within sport environment to intentionally coach life skills (e.g. having clear rules, providing opportunities for leadership and decision making)
- implementing activities to coach young people how to transfer skills learned in sport to other contexts



In practical terms, students could transfer life skills by closing their eyes, taking deep breaths, and visualizing themselves in a scenario where they are using life skill beyond PE lessons (Pierce et al., 2018)





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