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Climbing Therapy

Tiziana De Vita
University of Bari
tittidevita@libero.it

Roberta Rosa
Department of Motor and Well- being Sciences - University of Naples "Parthenope"
roberta.rosa@uniparthenope.it

Abstract

Climbing therapy has been employed successfully as an intervention tool in orthopedic-traumatological, neurological, psychomotor pathologies, but its use is increasingly frequentin the field of didactics, and in pedagogy. The search for psychophysical balance, self-efficacy, problem-solving, and responsibility, are just some aspects that this sports activity favors. Climbing can be considered as an innovative intervention method compared to existing proposals in the field of school and social inclusion.

Keywords

Climbing Therapy, Motory Activity, Disability, Life Skills.

Introduction

Climbing is currently a sport that has been gaining increasing value, both in the field of sports and in that therapeutic and pedagogical. From being considered only an extreme sport, it is now considered as a sport accessible to all. Its use in the field of didactics, pedagogy and rehabilitation is increasingly frequent, since scientific evidence shows its effectiveness in the treatment of conditions of social and psychological distress, and of disability in general. In addition to stimulating the individual's musculoskeletal aspects, climbing is an activity that stimulates the emotional sphere. This activity allows expressing one's own potentialities, determining a greater sense of self-efficacy and self-esteem.

The pedagogical value of the climbing therapy consists in its ability to strengthen self-esteem, individual empowerment, self-confidence and knowledge of one's own limitations and potentialities, while also providing the opportunity to learn how to tolerate a defeat. Climbing therapy also allows learning a different way of being with others. One learns to listen to his own body, limits, and emotions; solutions must be found by facing fears, regulating forces, and integrating the body, the mind and the emotions.

1. Climbing

We can define climbing as the ascent of an obstacle, be it a rock wall, a stone, an artificial panel or any urban structure. It's a discipline characterized by a physical motor aspect and, above all, by a significant psychological and mental component.

It can be considered a laboratory to experiment with emotional components, learn and develop psycho-social and affective-emotional skills related to *Life Skills,* thus constituting a means for promoting well-being and health.

"*In 1986, in the Ottawa Charter for Health Promotion, the World Health Organization recognized Life Skills as the skills necessary for people to make health-oriented choices, and to develop and learn throughout their lives*". (Rosa R., De Vita T., 2018).

"*The World Health Organization has identified ten Life Skills that can facilitate the promotion and preservation of one's health, and they are (WHO, 1993):*

Decision-making, as the ability to implement decision-making processes to face and solve different situations, through an assessment of possible alternatives and the consequences that each of them implies.

Problem-solving, as a competence that allows solving problems in a positive and constructive way; problems that, if not resolved, can generate mental stress and physical tensions.

Creativity: competence that allows finding original solutions to deal with the situations of everyday life in an adaptive and flexible way, by analyzing the different solution possibilities.

Critical thinking: the ability to analyze experiences and situations in an objective way, by evaluating the influencing factors, i.e. the advantages and disadvantages. This ability allows assessing the different elements that condition the behavior.

Effective communication: competence related to the ability to know how to express verbally and non-verbally, in an effective way, depending on the situation and the interlocutor. It means being able to actively listen to the other and expressing one's own needs and feelings.

Interpersonal relationships skills: understood as the ability to enter into relationships with others by managing to create and maintain meaningful interpersonal relationships.

Self-knowledge (Self-awareness): competence related to the knowledge of oneself, by recognizing one's own resources and the limits of one's own behavior.

Empathy: ability to feel and understand the emotional world of the other, to "put oneself in his shoes", even in unfamiliar situations, to facilitate the understanding and acceptance of different people too.

Emotions management: competence related to the ability to recognize and regulate one's own emotions, and to recognize emotions in others.

Stress management: competence related to the ability to recognize and manage stressful events, and to implement strategies aimed at reducing their impact". (Rosa R., De Vita T., 2018).

Climbing is a sports activity that acts at mental and motor level. At mental level, it favors the improvement of dimensions such as self-esteem, concentration, and problem-solving. At that motor, on the other hand, it develops strength, tones up muscles, acts on joints by increasing its flexibility and mobility. It develops dimensions such as self-efficacy, self-esteem, internal locus of control, trust and responsibility in the other, body awareness, thus it develops those essential skills for achieving a state of physical, psychological and social well-being.

The **benefits of sports climbing** involve the development of the body muscle structure, and also elements such as balance, psychology and motivations. Sports climbing is an activity that acts on the body tone, making it stronger and more agile. But climbing a wall requires more than strength and resistance: it also requires the ability to coordinate movements. From a psicological **and motivational** viewpoint, it allows facing fears and working on motivation for achieving goals.

2. Climbing therapy

Climbing is a sports activity that allows developing, strengthening and consolidating the subject's physical and psychological components in his totality, which is why it has been introduced with therapeutic and pedagogical purposes in the treatment of people with disabilities. Climbing is considered a discipline suitable for athletes with physical, sensory and intellectual disabilities.

The disabilities involved in this sports field are:

- of physical nature, such as amputations, paraplegia, and hemiparesis;
- of sensory nature, such as low vision;
- of cognitive/intellective nature, such as autism and Down syndrome.

The study carried out by Fleissner et al. (2010) showed that climbing therapy could be an innovative form of therapy, also used in the rehabilitation of geriatric patients, to improve walking balance and prevent falls for elderly persons.

Heitkamp and his colleagues (2005), in a study carried out on 19 adolescents with scoliosis, highlighted an improvement in muscle strength.

Climbing has also been successfully used to improve motor skills for students with cerebral palsy (Cheng, Resurreccion, Tzeng, & Diamond, 2004). Other studies suggested that climbing could improve self-esteem among students with motor coordination disorder (Hsieh et al., 2004).

Climbing requires high level of spatial planning and orientation skills. Draper et al. showed that the overall climbing times were significantly different between the first climb attempt and the subsequent ones (Draper et al., 2008). This implies that the activity provides for coordination skills and problem-solving strategies.

There is scientific evidence that considers the positive value of this activity also in subjects living in family and/or social disadvantage.

An important aspect of climbing is that of favoring "not only the individual's physical resources, but also the cognitive and emotional ones" (Luttenberger et al., 2015). This means that it increases self-confidence and self-esteem: it induces, in the participant, the feeling of having mastered a difficult challenge (Buechter and Fechtelpeter, 2011).

The overcoming of the fear of falling and reaching the top can promote the perception of a greater sense of self-efficacy. This sports activity grants its participants "opportunities to observe their own limits and strengths, both in psychological and physiological terms" (Aras and Ewert, 2016).

Luttenberger et al. pointed out that climbing has a positive influence as an adjunctive therapy for depression (Luttenberger et al., 2015).

Aras and Ewert studied the effects of climbing on anxiety. The study indicated decreased anxiety levels, as well as increased self-esteem levels for the experimental group (Aras and Ewert, 2016).

Climbing allows attaining objectives in the field of didactics, pedagogy and rehabilitation, such as:

- enhanced self-efficacy;
- strengthened internal locus of control;
- trust and responsibility in the other;
- body awareness;
- promotion of well-being and health.

Climbing offers the possibility of combining several important aspects; firstly, the difficulty can be varied through different dimensions, shape and number of grips and holds. Secondly, climbing requires a lot of body control, coordination and concentration skills. Furthermore, it is linked to emotions such as feelings of pride, fear and trust (Luttenberger et al., 2015).

Conclusions

In conclusion, climbing has a great positive value that involves the body and the mind, favoring elements that regulate motor functioning, coordination skills, concentration and, above all, the psychological and emotional aspects essential to undertake and develop psycho-social and affective-emotional skills related to *Life Skills,* thus representing a means for promoting well-being and health.

In view of the fact that this sport is able to promote health and well-being, it is considered useful in the treatment and management of various neurological and psychiatric diseases, by also takingon a value of social inclusion.

The pedagogical value of the climbing therapy consists in the ability to strengthen self-esteem, individual empowerment, self-confidence and the knowledge of one's own limitations and potentialities, while also providing the opportunity to learn how to tolerate a defeat. Climbing therapy also allows learning a different way of being with others. One learns to listen to his own body, limits, and emotions; solutions must be found by facing fears, regulating forces, and integrating the body, the mind and the emotions. From a pedagogical point of view, this sport can be considered an intervention and prevention methodologyin the context of youth deviance, early school leaving, and can be considered a useful means for articulating educational-training paths able to respond to people living in a state of psychological distress.

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