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Therapy through climbing. Classes for children and teenagers on artificial wall climbing and selected rope techniques

Climbing is a form of a physical activity that gains more and more followers in Poland, especially among youth but also among adults. It is commonly associated with a group of sports that are considered extreme. Certainly, doing that in the mountains, especially high ones, is dangerous and may have a direct influence on our health and life. For many climbers it is precisely this factor that is most attractive in climbing.

Versatility impact of climbing on human organism, the possibility of gradual intensification and attractiveness resulted in climbing being adopted as one of the forms of physical activities in sport, recreation or even rehabilitation. The risk factor has been limited. Nowadays, the most popular variations of climbing, e.g. rock climbing, climbing on artificial objects or bouldering, do not pose a great risk for health or life of a climber. Technological advances and accessibility of climbing equipment resulted in climbing becoming much safer.

The advantages of climbing as a form of recreation and sport have been appreciated in many countries worldwide. The last 30 years have seen a real explosion in the popularity of climbing. In France alone, almost 8 thousand indoor walls have been built. In the US and Western Europe, indoor climbing walls have become an indispensable element of gyms, sports centres and school gyms. Small climbing walls are also installed in kindergartens as a standard option. In Poland there are around 450 such facilities – mostly in the south of Poland, but this situation is changing as new ones are added.¹

There are initiatives undertaken that are aimed at popularizing climbing. An example of such activities is a project realised by the Polish Mountaineering Association in Bytom. 60 pupils from primary schools

¹ http://www.monolitsport.com.pl/index.php?content=sciany_w [access: 12.12.2014].

have already used this option. During a 50-hour course children have learnt the secrets of climbing, including belaying technique and styles of climbing. The culmination of the course was the show of acquired skills during a sports competition.²

It needs to be emphasised that climbing activity has many elements of educational character: it requires high concentration of attention, it teaches self-control in difficult situations and overcoming one's own fears and weaknesses. It builds up the ability to work in a team. As in no other sport, responsibility for another human being is stressed here. By holding a belay device and plugging a partner into it, we become directly responsible for his life and health. And these are not just high-flown words but the truth. Because of all that, climbing, even indoors, carries a huge amount of emotion and thanks to that, even more intensely than in other physical activities, influences the psyche of people involved in it.

Educational aspect of sport, illustrated by climbing, was analysed by Krzysztof Sas-Nowosielski. The author also stresses the extraordinary intensity of stimuli affecting a young sports person – not just physical, but also of psycho-social character, which results in the sport becoming an important factor shaping man's personality.³ Another undeniable benefit of climbing and bouldering is contact with nature and its positive influence on human psyche.⁴ As Andrzej Matuszyk writes:

The specificity of the aesthetic value of nature and mountain space in the climber's perception is outlined by the peculiarity of the aesthetic situation they are specified. This situation is a factor of a fight in the structure of which it has a material function.⁵

There are frequent activities undertaken in Poland which use rock and indoor climbing in rehabilitation. The level of difficulty of climbing can easily be adjusted to the possibilities of a disabled person so that he does not feel threatened or afraid. It is of huge importance because it improves comfort and – as a result – causes the increase of independence of the disabled. Climbing to the top – beating the climbing route – is a success and always an unforgettable experience that has a long-

² <http://www.bytom.pl/wspinanie-to-wyzwanie> [accessed: 12.12.2014].

³ K. Sas-Nowosielski, "Wychowanie poprzez sport – między nadzieją a zwątpieniem. O naturze wychowania i historii kształtowania się poglądów na wychowawczą funkcję sportu", *Sport Wyczynowy* 5-6/473-474 (2004), pp. 65-75.

⁴ A. Matuszyk, *Humanistyczne podstawy teorii sportów przestrzeni na przykładzie alpinizmu*, Studia i Monografie Series, Cracow: Academy of Physical Education, 1998, pp. 73-90.

⁵ *Ibidem*, p. 93.

term effect on further development. Everyone who experienced this begins to believe that if he could do what seemed impossible, he can also handle other challenges that life brings. A Warsaw Domin Foundation from Warsaw is an organiser of such activities for the disabled. They organise rehabilitation-climbing camps for children and youth at the Centre of Education and Psycho-physical Development in Podlesice in the region of Jura Chain. There are also autistic children and youth at the camps, also those with loco-motor dysfunctions and cerebral palsy. Initially, children just familiarize themselves with the wall and the height. Climbing instructors trained in work with the disabled watch the whole process. Also people without disabilities take part in camps. There are bonfires organised and games which favours integration and greater understanding of mutual needs and expectations.⁶ In children who take part in the climbing classes for the first time, it is easy to notice a change in behaviour – joy and courage, easiness in contacts with other participants. In most cases they come back because progress is much better seen than during the tedious everyday rehabilitation. Especially autistic children become more active, make contact with environment, and at least to some extent, they restore their joy of life.

All of the above were the reasons why rock climbing and climbing on artificial objects began to be used as an element of therapeutic influence. Academic centres in the USA are a wonderful example in this area, e.g. Princeton University in the programme Outdoor Action and Peak Potential, University of Utah – Splore's Rock On and many others.⁷

In Poland activities of this kind were undertaken in the Jura Chain as early as the 1990s. Youth with drug problems and socially maladjusted were included in the climbing classes then. The trainings were conducted by instructors from the Academic Mountaineering Association in Łódź.⁸

Currently, classes for children, teenagers and adults who, for different reasons, feel excluded from the mainstream of social life are organised by Czarodziejska Góra Foundation.⁹ It organises rehabilitation-climbing camps in Rudawy Janowickie and Sokole Mountains

⁶ <http://www.niepelnosprawni.pl/ledge/x/5238> [accessed: 9.12.2014].

⁷ <http://www.examiner.com/article/rock-climbing-s-therapeutic-benefits-for-people-with-autism-and-asperger-s> [accessed: 2.12.2014].

⁸ <http://www.akglodz.org> [accessed: 9.12.2014].

⁹ http://www.czarodziejskagora.org.pl/pl/strona_glowna/obozy [accessed: 5.12.2014].

– some of the most beautiful climbing regions in Poland. Autistic children and youth are among the participants as well as the young people with educational problems, from environments facing marginalisation and already marginalised, but also youth undergoing addiction treatment. Every year, there are about 200 children and youth from all over Poland participates in rehabilitation camps. Participants climb secure routes, under the supervision of instructors and their helpers. The results meet with positive opinions from parents and carers. Most of them sees in their wards the increased willingness to participate in social life, they observe their wards making friends more easily and these friendships are reported to be long-lasting. For people with social development disorder, climbing is mostly of emotional character. Overcoming one's own fears improves the sense of self-esteem. The statement – I climb and I can do it like everyone else – is a ennobling one.¹⁰

Below, there are examples of lesson plans in the area of basics in movement, belaying and rope techniques. Classes are prepared for teenagers between 12–15. The group cannot exceed 12 people. For safety reasons, an instructor should have an assistant.

I. LESSON PLAN FOR THE CLASS ON CLIMBING TECHNIQUE FOR TEENAGERS 12–15

Main task: familiarising the participants with the basic motor techniques used during indoor climbing.

Detailed aims:

- 1) teaching basic ways of holding and standing on the steps;
- 2) teaching frontal technique;
- 3) teaching dealing with jams and finding rest places – the so-called “no hand rest”.

Educational impact:

- 1) necessity to focus attention on the given motor task;
- 2) teaching overcoming one's own fear and self-discipline;
- 3) teaching team work.

Place: indoor climbing wall and thick mattresses enabling a safe jump.

Time: 1.5 hours (2 class hours).

Necessary equipment: climbing shoes, sacks with chalk.

¹⁰ *Pedagogiczno-terapeutyczna funkcja wspinaczki*, http://www.czarodziejskagora.org.pl/download/funkcja_wspinaczki.pdf [accessed: 9.12.2014].

Class scenario – 2 class hours

Types of tasks	Exercise description	Comments
1	2	3
Organisation and order activities	Ingathering, welcoming, checking readiness for class, stating aims of class.	Ingathering.
Animating game	“Magic tag” – children run around the gym and the tag is to catch as many people as possible. The “tagged” person takes on the magic position: frontal support, only a “not-tagged” person may disenchant the “tagged” person by doing one push-up.	The instructor pays attention to correct position in frontal support and push-ups.
Exercising pelvis, knees and feet	Standing randomly – hip circulation, swinging of the lower limbs in pairs, semi-squats and jumping on both legs.	The instructor pays attention to the width of the movement.
Exercising shoulders, arms and forearms	Standing randomly – arms and forearms circulation, a game called: “doughnut, leaf, flower”.	The leader watches the precision of a palm movement.
Exercises on standing on the steps	Exercises in frontal setting – attempt to climb the big steps and balancing the body from left to right. Feet perpendicularly to the wall. On smaller steps – feet on outer edges – attempting moving sideways, the so-called traversing.	Every participant finds a place on the floor by the climbing wall.
Exercises on grasping	Exercises in frontal setting – attempts to grasp different steps and holding them.	The instructor watches the correctness of performing the exercise.
Exercises in traversing	Participants traverse using a frontal technique, to the left and to the right. This is a varied exercise by different body positioning (sideways) and different ways of grasping and standing, and also different choice of steps to be held while traversing.	The instructor corrects mistakes in body positioning and in the foot or arm work.
Exercise in keeping rest position (no hand rest)	Students try to find places where they can stand without holding: in a rock formation and in a jam.	The instructor shows some selected positions and watches over the correctness of performing the exercise.
Exercise in traversing with an attempt to stop and rest	Students combine traversing with various techniques of rest in “no hand rest” position.	The instructor corrects mistakes in performing the exercise.

1	2	3
Exercising climbing in jam	Ways of climbing a concave formation – body position, foot work, ways of grasping. Exercises are performed low over the mattress. There are attempts to climb higher and come down.	The instructor shows exactly what is expected and corrects mistakes.
Stretching exercises on the selected muscle parts – chest and forearms	Participants stand randomly facing the wall – they perform torso fall forward, arms spread wide, they bend their elbows and place their chest to the wall – repeated 6 times and stop in the final position. In pairs, facing each other, the students do a similar exercise but they stop of the partner's shoulders and deepen their fall. Repeated 6 times.	The instructor helps to perform the exercise correctly.
Organisation and order activities	Clearing up the equipment. Discussing the class. Good-bye.	Ingathering in random order.

Source: own work (teaching methodology in compliance with the guidelines of the Polish Mountaineering Association).

II. LESSON PLAN ON THE CLASS OF BASIC BELAYING FOR YOUTH 12–15

Main task: familiarising the participants with the rules of belaying most frequently used in artificial indoor climbing facilities – the so-called “fishing belaying”.

Detailed aims:

- 1) teaching how to wear a climbing harness and tying a rope;
- 2) teaching how to handle belaying device;
- 3) teaching “fishing” belaying rope dragging, abseiling the partner, blocking the device;
- 4) basic commands used while climbing.

Educational impact:

- 1) establishing the sense of direct responsibility for the health and life of the partner;
- 2) teaching team work in pairs;
- 3) shaping self-control and discipline;
- 4) overcoming fears and inhibitions;
- 5) shaping trust in others.

Place: indoor climbing wall and thick mattresses allowing a safe jump.

Time: 1.5 hours (2 class hours).

Necessary equipment:

- climbing shoes,
- sacks with chalk,
- climbing harness,
- top belaying ropes,
- belaying equipment and locking carabiner.

Class scenario - 2 class hours

Types of tasks	Exercise description	Comments
1	2	3
Organisation and order activities	Ingathering, welcoming, checking readiness for class, stating aims of class.	Ingathering.
Animating game	Students run around the gym. They stop on a signal in a previously agreed position, e.g. frontal lying, frontal support, supported kneeling, etc. The last person to finish or whoever makes a mistake - makes three push-ups.	The instructor pays attention to correct position in frontal support and push-ups.
Exercising pelvis, knees and feet	Standing randomly - hip circulation, swinging of the lower limbs in pairs, semi-squats and jumping on both legs.	The instructor pays attention to the width of the movement.
Exercising shoulders, arms and forearms	Standing randomly - arms and fore-arms circulation, a game called: "doughnut, leaf, flower".	The leader watches the precision of a palm movement.
Climbing in an easy terrain, traversing	Participants traverse using the motor techniques known to them.	The leader corrects any mistakes.
Teaching how to wear a climbing harness	Each participant familiarizes himself with the structure of the harness and how it is used. After they have seen the instructor put it on, they try themselves.	The instructor pays special attention to locking the harness, the so-called "return interlace" and proper fitting of the hip belt and thigh belts.
Teaching how to join the belaying rope and the harness - tying the rope	The leader shows how to tie a figure-eight knot and how to join it to the harness. The participants try to copy the knot and the entire connection.	The leader emphasises the importance of performing the above activities and their precision - e.g. nice placement of the knot and proper length of the rope ending which comes out of the knot.

1	2	3
Teaching how to plug the belaying device into the rope and how to operate it	The participants stand in pairs. The rope is plugged into the anchor about 2 metres above the mattress. Every participant has a belaying device plugged into his harness. The exercise is based on loosening and dragging the rope through the belaying device. This element should be practised many times - until proper fluency of movement is achieved.	The instructor regulates the tempo of operating the device, depending on individual co-ordination of the participant. There is an absolute prohibition of letting the rope loose behind the device.
Climbing with "fishing" belaying a) while moving up	In trios participants make their first attempts of fishing climbing (in an easy terrain). The belay independently - after the instructor has presented the activity. The third participant is an extra safety measure, he holds the rope about one metre from the belaying person.	The exercise is performed under strict supervision of the leader. He must pay special attention to the negative consequences of any mistake in belaying - losing the health or life of the partner!
b) while lowering the partner	After the climbing, the belaying participants lower their partners. The body position is corrected as well as "work with the device".	The instructor pays attention to the hand position and any additional safety for the partner.
Climbing with top belaying ("fishing") in different formations	Mastering the belaying activities and motor techniques. Attempts to independently belay partners.	The leader controls the correctness of performing belaying activities.
Stretching exercises on the selected muscle parts - chest and forearms	Supported on the knees, the participants sit on their heels. Arms stretched far ahead. They try to reach as far as possible without lifting buttocks off the heels. The participants stand randomly facing the wall and fall toward - arms stretched, elbows bended, moving their chest close to the wall - repeated 6 times, stopping in the final position.	The instructor helps to perform the exercise correctly.
Organisation and order activities	Clearing up equipment. Discussing the class. Good-bye.	Ingathering in random order.

Source: own work (teaching methodology in compliance with the guidelines of the Polish Mountaineering Association).

III. LESSON PLAN ON THE SELECTED ROPE TECHNIQUES: CLIMBING AND SLIDING FOR YOUTH BETWEEN 12–15

Main task: familiarizing the participants with the technique of climbing and sliding using a rope.

Detailed aims:

- 1) teaching how to bind a lunge;
- 2) teaching how to tie a blocking knot;
- 3) teaching belaying during sliding and climbing;
- 4) teaching sliding and climbing using blocking knots.

Educational impact:

1) creating the sense of direct responsibility for the life and health of the partner;

- 2) teaching co-operation in a pair;
- 3) shaping self-control and discipline;
- 4) overcoming fear and inhibitions.
- 5) shaping trust to others.

Place: indoor climbing wall and thick mattresses allowing a safe jump.

Time: 1.5 hours (2 class hours).

Necessary equipment:

- climbing shoes,
- sacks with chalk,
- climbing harness,
- top belaying ropes,
- belaying devices and locking carabiners.

Class scenario – 2 class hours

Types of tasks	Exercise description	Comments
1	2	3
Organisation and order activities	Ingathering, welcoming, checking readiness for class, stating aims of class.	Ingathering.
Animating game	The participants perform an exercise called “clowns”.	The leader pays attention to correct performance of the exercise.
Exercising pelvis, knees and feet	Standing randomly – hip circulation, swinging of the lower limbs in pairs, semi-squats and jumping on both legs.	The instructor pays attention to the width of the movement.
Exercising shoulders, arms and forearms	Standing randomly – arms and fore-arms circulation, a game called: “doughnut, leaf, flower”.	The leader watches the precision of a palm movement.

1	2	3
Climbing in an easy terrain, traversing	Participants traverse right and left using the "no hand rest" technique.	The leader corrects any mistakes.
Teaching how to tie a lunge to the harness	Using tapes and screw carabiners, the participants tie their lunges to the harnesses.	The instructor shows and explains the correctness of performing the exercise.
Teaching how to tie blocking knots	The participants are in pairs or in trios and practice tying knots needed in belaying while sliding and climbing.	The leader shows how to tie a knot properly, describes their types and watches the correctness of performing the exercise.
Teaching how to "enter the slide"	The exercise is performed at a low belaying position. After the show, the participants attempt entering the slide. They repeat the activity several times. The leader uses appropriate commands.	The instructor uses the show and watches the correctness of performing the exercise.
Sliding from a low height	The participants enter the slide and slide from a low height so that it is possible to maintain the full control.	The leader informs about other activities and commands used during the slide.
Teaching how to climb using a rope and blocking knots	The participants use their skill to tie blocking knots in climbing. The instructor controls the length of the knots and their efficiency.	The exercising must be organised in such a way so as to lower the participant after he has climbed.
A show of how to climb and slide	Combining these two techniques is an advanced exercise and during the first class should be realised only in form of a show.	The instructor shows and explains further steps during the process of combining both techniques.
Stretching exercises on selected groups of muscles – chest and abdomen	In pairs, the participants stand with their backs to each other. One of them holds his partner's wrists and, while bending his knees, puts the partner on his back. He holds him like this for a few seconds, slightly pushing his arms. Then they swap. Standing sideways to the wall (or ladders), the participants place their hand against the wall – with a bended elbow at 90 degrees, so as the arm is positioned horizontally. They exercise left and right arm, minimum 3 times each.	The instructor helps to perform the exercise correctly.
Organisation and order activities	Clearing up equipment. Discussing class. Goodbye.	Ingathering in random order.

Source: own work (teaching methodology in compliance with the guidelines of the Polish Mountaineering Association).

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