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Article · July 2018

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# Adventure education, a method to prevent antisocial behavior

## *Educația prin aventură, o metodă de prevenire a comportamentelor antisociale*

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### **Abstract**

Antisocial behavior seems to be influenced by low self-esteem and caused by a person's inability to adapt to a social situation. This inability to adapt is caused by a lack of social skills, also named interpersonal skills. Adventure education is a form of education aimed at developing intrapersonal and interpersonal skills, and research shows that this form of education has proven successful at developing skills such as communication, teamwork, leadership and the self-concept. Studies performed on the use of adventure education in therapy have shown that it can change the attitude of problematic students and stop recidivism. Adventure education could prove to be the tool needed in order to prevent the development of antisocial behavior in the new generations.

**Keywords:** adventure education, antisocial behavior

### **Rezumat**

Comportamentele antisociale par a fi influențate de o stimă de sine scăzută și cauzate de inabilitatea unei persoane de a se adapta unei situații sociale. Această inabilitate de a se adapta este cauzată de lipsa unor deprinderi sociale, numite și interpersonale. Educația prin aventură este o formă de educație care urmărește dezvoltarea deprinderilor intrapersonale și interpersonale, iar cercetarea a arătat că această formă de educație a reușit să dezvolte deprinderi de comunicare, lucru în echipă, leadership precum și conceptul de sine. Studiile privind utilizarea educației prin aventură în terapie au arătat că aceasta poate schimba atitudinea elevilor problematici și poate stopa recidivismul. Educația prin aventură ar putea fi instrumentul necesar pentru a preveni dezvoltarea comportamentelor antisociale la noua generație.

**Cuvinte cheie:** educația prin aventură, comportament antisocial

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## **Introduction**

There seems to be an increase of antisocial behavior among Romanian teenagers in recent years and schools find it difficult to find solutions other than punishing offenders. If we are to grow and develop as a country, we need a long-term solution, and adventure education could be it. This form of education has existed for some time now in the world and has been implemented in schools with what seem to be successful results in the development of various skills and the prevention or correction of antisocial behavior. This article highlights in brief the reasons why adventure education could be the solution to the prevention of antisocial behavior in teenagers.

## **What is Adventure Education?**

Adventure Education is a relatively recent discipline compared to other forms of education and is often confused with Environmental Education and Outdoor Education (Medina, 2009). Walsh & Aubry (2007) considered that

Adventure Education has evolved from Experiential Education, and Daniel (2009) thinks it has been influenced by sociology, psychology, progressive education, organized camping and programs that organize expeditions in the wild.

This form of education has been defined as “direct, active, and engaging learning experiences that involve the whole person and have real consequences” (Prouty, 2007). According to Walsh & Golins, (1976) it is a type of educational experience in which the one learning is involved in adventure activities, is confronted with challenges, and navigates a unique physical and social setting. Wikipedia describes it as form of learning through practical experiences based on adventure activities (1). Referring to its objectives, Priest & Gass (1997, quoted by Furman, 2011) said that Adventure Education aims at personal development through the use of specific activities.

It is agreed by most specialists that the birth of adventure education took place in 1941, when Kurt Hahn, Lawrence

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*Received:* 2018, April 6; *Accepted for publication:* 2018, April 24

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<https://doi.org/10.26659/pm3.2018.19.2.116>

Holt and Jim Hogan created a program named Outward Bound (Wilson, 1981, quoted by Ewert & Sibthorp, 2014). The course took a month and was looking to develop independence, initiative, ingenuity, self-confidence and physical condition for sailors (Hattie et al., 1997; Richards, 1991). Adventure education programs have continued aiming towards one or all of the objectives named above, and new objectives have been defined and targeted later in time. If we are to generalize the main objective of Adventure Education, this is best done by Hattie et al. (1997), who found that it aims to create conditions for the development of inter- and intrapersonal skills. A study conducted by Sibthorp (2000) on instruments used in adventure education research performed from 1988 to 2000 identified self-esteem and self-concept as the main objectives since they were listed by one third of the programs.

### Research results in Adventure Education

Research in the field supports the idea that adventure education develops several skills, and this is best viewed when studying the meta-analysis of the Adventure Education research and the related domains.

Cason & Gillis conducted a meta-analysis on the research carried out on adventure education programs that worked with people over 11 years old, and out of 43 studies, 62% of participants had a positive development as a result of the program in which they took part. The studies showed positive results on self-concept, behavior as evaluated by others, locus of control, academics, school attendance, attitude and also clinical aspects. Out of a total of 147 effect sizes taken from those studies, 23 analyzed behavior as assessed by others, and the statistic evidenced that based on the Effect Size a participant was better off than over 35% of those that did not take part in the studies (Cason & Gillis, 1994).

Hattie et al. (1997), in their meta-analysis of 96 research papers published between 1968 and 1994, identified 40 different items on which adventure education had positive contributions, and they grouped them in 6 categories: academic, leadership, self-concept, personality, interpersonal skills and adventuresome. Table I shows all 40 items found by Hattie and his colleagues. However, they also cautioned that not all the studies had statistically significant results.

**Table I**

Items on which adventure education had positive contributions (Hattie et al., 1997)

Category	Items
Academic	Academic general, Academic direct
Leadership	Conscientiousness, Decision-making, Leadership-general, Leadership-teamwork, Organization ability, Goals, Time management, Values
Self-concept	Physical ability, Peer relations, General self, Physical appearance, Academic, Confidence, Self-efficacy, Family, Self-understanding, Well-being, Independence
Personality	Femininity, Masculinity, Achievement Motivation, Emotional stability, Aggression, Assertiveness, Locus of control, Maturity, Neurosis reduction
Interpersonal skills	Cooperation, Interpersonal communication, Social competence, Behavior, Relating skills, Recidivism
Adventuresome	Challengeness, Flexibility, Physical fitness, Environmental awareness

Kellert (1998, quoted by Furman, 2011) conducted an overview of the studies performed on participants in NOLS, Outward Bound and Student Conservation Association programs, and was able to identify as benefits the development of self-esteem, self-concept and interpersonal relationships, as well as an increase in interest for community work.

A more recent meta-analysis, covering 197 studies of therapy administered through adventure education, identified positive effects on academics, behavior, social development, fitness, self-concept, family relations and clinical issues (Bowen & Neill, 2013). The studies used in this meta-analysis were published between 1967 and 2012. Studies on Adventure Therapy also found a significant reduction in substance use by the participants (Norton et al., 2014).

A study carried out in 196 participants in a 15 weeks program of adventure education came to the conclusion that adventure education may even improve moral and ethical reasoning (Smith et al., 2002).

Neill (2008) mentions that the impact of Outdoor Education programs on aspects such as self-concept, locus of control and social skills has been indicated on average to be small to moderate.

Goldenberg and his colleagues performed a qualitative study on participants in rope courses, an activity frequently used for adventure education, and noticed that the participants considered that they had developed leadership skills (5.9%), communication skills (9.4%), awareness of others and oneself (6.1%), trust (10.2%), and most considered that they had improved their teamwork skills (16.6%) (Goldenberg et al., 2000).

A later qualitative study conducted on 216 Outward Bound participants to see what they considered as outcomes, reported that they mentioned, listed in order of frequency, physical fitness (34.7%), relationships with others (20.8%), self-confidence (19.9%), self-reliance (16.7%), appreciation (16.7%), teamwork/cooperation (15.7%), personal growth related to challenges (15.7%) and knowledge/ awareness (15.3%). The students also mentioned that the transfer of skills to real life was the most important value of the program (Goldenberg et al., 2005).

A study run by Martin (2001, quoted by Goldenberg et al., 2005) evidenced that most of the participants in the Outward Bound program felt they had developed personally and socially, especially in relation to self-confidence and interpersonal relations.

For participating groups, outcomes include increased trust between team members, better communication, conflict resolution, group leadership and teamwork (Sibthorp et al., 2007; Paisley et al., 2008).

Despite being one of the initial objectives of Outward Bound, the program that started Adventure Education, and despite being mentioned by participants in qualitative studies (Goldenberg et al., 2005), physical development is not listed as an objective in programs, seems to be ignored as an outcome, and is rarely approached in studies.

Based on available studies, the outcomes identified are reached by various people from children aged 11 to adults, from normal populations of students or managers to at risk

individuals or delinquents, from individuals signing up for a program to groups taking part together. No significant difference was recorded in Effect Size between the normal populations and delinquents, but Effect Sizes for adults were greater than for school-based students (Hattie et al., 1997; Bowen & Neill, 2013).

Schiraldi (2000, quoted by Ewert & Sibthorp, 2014) argued that adventure programs can also bring benefits to participants suffering from posttraumatic stress.

### **How Adventure Education works**

Walsh & Aubry (2007) mentioned that one advantage of adventure education programs is that they are fun and young people are willing to take part in the activities and are enthusiastic about it.

In adventure education the participants are placed in situations where they have to focus on their strengths and need to overcome increasingly difficult challenges by working as part of a team, creating in this way opportunities for the development of traits such as emotional stability, assertiveness and social competence (Hattie et al., 1997).

Reaching the objectives set during the course is considered to be an important requisite for the development of self-efficacy and self-esteem (Walsh & Aubry, 2007). Goldenberg and his team found in their qualitative study that as individuals challenge themselves and grow, they feel better about themselves (Goldenberg et al., 2005). The combination of challenge, assimilation and success leads to the development of character (McKenzie, 2000; Witman, 1995).

Richards (1977, quoted by Neill, 2008) considers that social skills are developed in this kind of programs by including the creation of a supportive atmosphere between the members of the group, providing opportunities for participants to experience different social roles and placing the participants in social situations that require active responses. Adventure activities are usually performed in a group and it is expected for the group members to develop interpersonal connections, to adopt normal group behaviors and to contribute to solving group tasks (Oakes et al., 1995, quoted by Neill, 2008).

The activities have a major role in the success of the programs, alongside the environment, the instructor, the group and the participants themselves (Walsh & Gollins, 1976). Most specialists agree with this, but some added that information processing is also very important (Ewert & Sibthorp, 2014).

Adventure education programs use activities such as rock climbing, mountain climbing, canoeing, cycling, rafting, camping, horse riding and caving (Priest & Gass, 1977, quoted by Furman, 2011), sailing and orienteering (Lubans et al., 2012), but the most often used activity is backpacking (Furman, 2011). Some authors say that the challenges given by these activities develop problem-solving skills and so the participants will be less affected by the problems that might appear in real life (Ebata & Moos, 1994; Herman-Stahl et al., 1995).

Goldenberg and his team conducted a study aimed at connecting the outcomes with different course components and found connections between rock climbing and teamwork/relationship with others, between expeditions

and physical fitness as well as leadership skills, between camping and awareness/ knowledge, and the solo experience was connected with self-reliance (Goldenberg et al., 2005).

In the urban setting, adventure education is predominantly performed through rope courses, which are a series of towers, cables, platforms and obstacles that create a physically challenging environment for the participants (Priest & Gass, 1997, quoted by Furman, 2011). The elements require good group communication and critical thinking and are used as a metaphor, which will help transfer the skills learned to real life (Furman, 2011). High rope courses use fear to help individual development, while the low elements are more about team work (Rohnke, 1989, quoted by Moote & Wodarski, 1997). Rope courses can be adjusted according to needs and space and can target improvement in communication, development of leadership skills, or they can work on trust or team work (Goldenberg et al., 2000). It has been said that rope courses create the right context for intra- and interpersonal development (Green et al., 2000). Some consider that high rope courses help participants to test their limits and to develop trust (Meier et al., 1980, quoted by Goldenberg et al., 2000). Conley et al. (2007) analyzed the research carried out on rope courses and identified positive results in teamwork, self-esteem, group cohesion and family satisfaction.

The activities are followed by a period of processing, where the group members are encouraged to share their experience and say how they believe the skills used could apply to different contexts (Goldenberg et al., 2000). Smith et al. (2002) argued that the noncompetitive aspect of the adventure activities, the reflection and the opportunity for self-evaluation given by these activities create an environment that encourages the development of morals and ethics in the participating students.

### **The characteristics of a successful Adventure Education program**

The specialists insist that an Adventure Education program needs to always have the following 5 compulsory characteristics: uncertainty of outcome, risk, unavoidable consequences, energetic activities and voluntary participation (Horwood, 1999, quoted by Stremba, 2009). At the same time, the model of the Outward Bound process, drawn by Walsh and Gollins (1976), describes the key elements of a program, each one with its own characteristics: participant, environment, group, activities, interaction, instructor and mastery of skills. McKenzie (2000), however, considers that information processing should replace the mastery of skills, as it is more important.

Lukner and Nadler (1997, quoted by Sibthorp, 2000) highlighted the fact that in order to be able to generalize and transfer the skills learned, the participants need to be placed in a new situation and to confront themselves with unique problems to be solved. According to Walsh and Gollins (1976), the activities must offer a challenge that creates the state of mind required for transformation. The activities should not be straightforward and the participant should explore the boundaries of the activity in order to

find the answers to his/her task (Chapman, 1992, quoted by Newhouse, 2002).

Some specialists consider that physical strain is the most important aspect (Gass, 1995; Ewert & Sibthorp, 2014), but participants should also be under mental and emotional stress (Walsh & Gollins, 1976); however, the load should be progressive (Walsh & Gollins, 1976; Ewert & Sibthorp, 2014). A study performed by Bisson (1998, quoted by McKenzie, 2000) shows that the success of the program is related to the order of the activities.

It is also important that the activities are adapted to the necessities of the group (Hopkins & Putman, 1993, quoted by McKenzie, 2000) and the tasks are achievable (Walsh & Gollins, 1976). They should have a clear beginning and end, and the completion of the task should be probable (Walsh & Gollins, 1976). However, some argue that there is benefit from failure as well (Witman, 1995).

According to Ewert and Sibthorp (2014), an important aspect is that there should be clear consequences to any action. The activities should be selected in such a way that those involved will immediately see the connection between perseverance, effort, commitment and success, as well as that between laziness, ambiguity and failure (McGowan, 1986, quoted by Newhouse, 2002).

The adventure activities should take place in an unfamiliar environment (Walsh & Gollins, 1976), as this will induce positive stress (eustress) in the participants, which is beneficial to the development of the self-concept (Nadler, 1993, quoted by McKenzie, 2000). Specialists agree that the best environment is the natural one, as it comes with its own set of rules that have real consequences and cannot be ignored (McKenzie, 2000). Some even go as far as to say that nature has spiritual powers that help with the transformation process (Bacon, 1983, quoted by McKenzie, 2000). In the adventure therapy programs, nature has been called a "co-facilitator of change" (Taylor et al., 2010, quoted by Norton et al., 2014)

The group size is recommended to be between 7 and 15 members as this allows for character diversity but group problems can still be solved easily (Walsh & Gollins, 1976). For the success of the program it is considered to be important to have clear goals set up from the beginning for both individuals and the group (Meyer & Wegner, 1998, quoted by McKenzie, 2000). However, the efficiency of the group also depends on the cohesion and the trust created between the group members (McKenzie, 2003).

When it comes to length, after their meta-analysis of 47 studies, Cason and Gillis (1994) concluded that longer programs are more efficient; however, a study conducted by Neill found a weak positive relationship between the length of the programs and the outcomes (Neill, 2008).

A very important aspect of adventure education is exposure to risk, which facilitates personal development (Miles & Priest, 1990, quoted by Newhouse, 2002). However, there needs to be a balance between the level of perceived risk and the level of competence, or the program will fail to reach its objectives. It is also important to understand that emotional risk (not having the skills you thought you had) and social risk (appearing incompetent in front of others) are just as important as physical risk, during the program (Ewert & Sibthorp, 2014).

## **Prosocial and antisocial behavior**

E. Jolley, translated by Florean D (2007), defines in the Psychology Dictionary the term sociability as "a quality of the individual to appreciate, search and bond socially with ease", but he says it also refers to the overall capacity to communicate and interact. Walker et al. (1995, quoted by Quinn et al., 1995) defined social skills as a set of competences needed for the initiation and maintenance of positive social relations with other people, and Ewert & Sibthorp (2014) maintained that social competences, also known as interpersonal or social skills and interpersonal intelligence, refer to the skills required to navigate social situations. These skills or behaviors are considered desired or necessary in order to interact efficiently in society (2).

Moscovici (1998) considered that the main components of social competence are assertiveness, communication, both verbal and nonverbal, empathy, cooperation, attention towards others, gratification or support, problem solving skills and projection of the self-image.

A prosocial behavior is considered to be an action meant to help others (Selfe, 2013). Prosocial behavior is defined as voluntary actions that bring benefits to one or more people or to society in general (Carlo et al., 2007; Eisenberg et al., 2005). In their paper, Scourfield and his colleagues describe prosocial behavior as being a positive interaction with other people that includes help, cooperation, comforting and sharing (Scourfield et al., 2004).

Prosocial tendencies are influenced in children by both genetics and the environment in which they grow (Scourfield et al., 2004). Colleagues of the same age are a source of inspiration when it comes to moral behavior and development of social skills (Hart & Atkins, 2002; Chung-Hall & Chen, 2009). Carlo et al. (2007) carried out a study on 600 students over 5 years and their research showed that prosocial behavior dropped during high school, only to return around grade 12. Prosocial behavior can be motivated by empathy and sympathy, internal moral standards, but also by the attempt to gain social recognition in a group (Selfe, 2013). Several studies have shown that self-efficacy also has a positive impact on prosocial attitudes (Bandura, 1997, quoted by Walsh & Aubry, 2007; Vancouver et al., 2002). Even though most specialists agree that prosocial behavior develops in childhood and adolescence, some studies argue that it does not actually change in time (Furman, 2011).

Research shows that a low level of prosocial behavior is usually accompanied by high levels of antisocial behavior (Veenstra et al., 2008). Solomon and his colleagues consider that the lack of consideration for peers, social alienation and a self centered attitude can lead to an increase in violence, delinquency, vandalism and school indiscipline in teenagers (Solomon et al., 1985, quoted by Furman 2011). Similarly, following a review of the studies conducted on this topic, Lonigro and his colleagues (Lonigro et al., 2014) came to the conclusion that antisocial behavior is directly related to weaknesses in social-cognitive skills. Patterson (1986, quoted by Quinn et al., 1995) maintained that antisocial behavior starts at home when inappropriate behavior is not challenged, but then it develops in school,

when the child uses the same behavior that was successful at home. Walker et al. (1995, quoted by Quinn et al., 1995) said that social skills contribute to the school integration of the students, and antisocial students have problems either because they do not understand the social contexts or because they do not have the skills needed to deal with a certain situation.

Donellan et al. (2005) found a robust relationship between low self-esteem and externalizing problems, considering that low-self esteem could foretell future antisocial behavior.

### **Adventure Education and social behavior**

In order to change their antisocial behavior, children need to learn how to use interpersonal skills and how to influence their environment through prosocial behavior (Quinn et al., 1995). According to Neill (2008), good expedition behavior, developed during adventure expeditions, is quite similar to prosocial behavior.

The development of interpersonal skills or social skills and competences has been an objective of adventure education from the creation of the Outward Bound program (Hattie et al., 1997) and is a major objective of most outdoor education programs (Barret & Greenaway, 1995, quoted by Neill, 2008). A 2012 analysis of the impact of physical activity programs on the social and emotional state of children and young people that do not have the skills and values necessary to become responsible members of society found 15 relevant studies, of which 7 were based on outdoor adventure (Lubans et al., 2012). The National Outdoor Leadership School was created on the initiative of Paul Petzoldt, because he considered that the lack of adventure is the main cause of antisocial behavior in the young generation (Bisson, 2009).

A meta-analysis of 150 studies in 2004 showed that there is enough evidence for the association of outdoor adventure programs with positive effects on interpersonal relationships and social skills such as communication, group cohesion and team work (\*\*\*, 2005). Qualitative research performed by Martin (2001, quoted by Goldenberg et al., 2005) on participants in the Outward Bound program has evidenced that most of the participants feel that they have developed personally and socially, especially regarding aspects such as self-confidence and interpersonal relationships. The study conducted by Goldenberg and his colleagues highlighted similar results, with the participants naming "the relations with others" and "team spirit" as an outcome more often than any other (Goldenberg et al., 2005).

Different programs have started using adventure as a means of stopping antisocial behavior. One example is Behavior Management through Adventure, a program based on 4 components: adventure activities, therapy, positive group processing and evaluation, which had very good results in a study on recidivism, carried out between 1991 and 2001 in Georgia (Walsh & Aubry, 2007). At the same time, Project Adventure has organized counseling programs based on adventure for young offenders since 1981, with the intention to stop antisocial behavior and develop prosocial behavior in the participants (Walsh & Aubry, 2007). Rope courses seem to be often used with

at risk teenagers exposed to emotional and behavioral problems (Conley et al., 2007).

Research has shown that adventure education programs are successful in inducing changes in at risk populations. West & Crompton (2001) conducted an overview of 16 studies on young people considered at risk and found that 14 of them had significant positive changes regarding the self-concept. A later study found 5 papers supporting the idea that adventure education programs have beneficial effects on young people considered at risk. Some of the benefits identified are an improvement of self-concept, personal value, resilience and self-control (Lubans et al., 2012). In a qualitative study, as part of a program based on adventure activities implemented among problem students from 3 London schools, the teachers observed a reduction in disturbing behaviors, better teamwork and better relations between the participants and their teachers or colleagues (Sandford et al., 2008). The American Institute for Research also performed a study to see the outcomes of outdoor education programs in grade 6 students from California, and included in the list of identified benefits both an improvement of social skills and a reduction of problematic behaviors (\*\*\*, 2005). A meta-analysis of 28 studies, focused on the impact of outdoor expeditions on the delinquent behavior of problematic children, also reached the conclusion that the intensity of physical activities positively influenced the participants (Wilson & Lipsey, 2000, quoted by Neill, 2008).

### **Conclusions**

1. Adventure Education is a form of education directed at the development of intra- and interpersonal skills. This form of education is considered successful in reaching outcomes such as improved communication, teamwork, leadership, conflict resolution, self-concept, self-control, resilience, self-confidence and self-esteem.

2. The absence of interpersonal skills, a low self-esteem and a negative self-concept seem to be three of the main reasons for the development of antisocial behavior in students.

3. Adventure Education programs have managed to reduce antisocial behavior in participants, which we consider could in fact prevent the development of such behavior in the young generations and furthermore, might actually help develop prosocial behavior.

### **Conflicts of interests**

There are no conflicts of interest.

### **Acknowledgments**

The paper is based on the theoretical foundations of the first author's ongoing thesis.

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