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RESILIENCE IN THE LIGHT OF POSITIVE PSYCHOLOGY — ADVENTURE EDUCATION AND ADVENTURE THERAPY

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Summary

Positive psychology is the next example of the optimistic point of view of the human possibilities, similarly to salutogenetic concept. There are used such terms as character strengths and virtues. The virtue especially connected with resilience is courage understood as emotional strength, will for achieving the goals. Courage contains four strengths: perseverance as completion of chosen aims, bravery as coping with obstacles and anxiety, honesty as authentic being and vitality as experiencing of excitation and liveliness. The purpose of the paper is to present resilience in the positive psychology perspective using the Circle of Courage Concept and its implementation in adventure education and adventure therapy. Development of the four resilience factors pointed in the Circle of Courage Concept: attachment, autonomy, altruism and achievement is possible throughout meeting the universal human needs as belonging, mastery, independence and generosity. Adventure education and adventure therapy enable enhancing resilience traits in face of medium risk level situations. Active learning and dealing with challenges activate processes responsible for positive growth. Chosen educational projects and therapeutic programmes for youth have been presented in the paper.

Resilience According to Positive Psychology

The concept of resilience was adopted by medical and social sciences on the wave of interest in resilience and positive growth despite adversity among children and young people [1–3]. The concept has been in use in the fields of psychiatry, health psychology, crisis intervention, and positive psychology for more than 50 years now [2, 4]. The very term of *resilience* derives from Latin, *resilire* denoting bouncing back or a rebound, a return to the beginning and regaining an equilibrium [5]. The term has attracted a number of interpretations in Polish, and the following terms were minted: *prężność osobowa* (pesonal resilience) [6], *prężność ego* (ego resilience) [7], *prężność* (resilience) [8], *sprężystość* (springiness) [4, 9], *odporność psychiczna* (mental endurance) [10–12], *rezyliencja* (resiliency) [13]. The notion of resilience describes a phenomenon whereby recovery from danger or destruction occurs; it is defined as the ability to cope in adversity or bounce back with little to no injury from mental

difficulty. It denotes flexibility and confidence described as inner strength and a self-righting tendency [1, 2, 14].

Positive psychology, together with the salutogenesis concept, offers a positive outlook on human capability by providing terms such as the strength of character, gifts, or virtues [15–17]. According to positive psychology, healthy living is determined not only by the absence of disease, but also by subjective well-being. Positive mental health [18] is defined as subjective well-being. One of the virtues that particularly correlates with resilience is courage, the term being defined as emotional strength and determination to achieve goals. The concept encompasses four strengths: 1) Perseverance, or the ability to achieve one's goals, 2) Bravery, or resistance to anxiety or difficulties, 3) Honesty, or being authentic and genuine, 4) Vitality, or the ability to feel excitement and vigour [17, 19].

The understanding of resilience furnished by positive psychology is well reflected by the Circle of Courage, which is based on the assumption that healthy development in children and young people has visible manifestations [20]. The development of the four components of resilience elucidated on by the Circle of Courage, that is Attachment, Autonomy, Altruism, and Achievement, occurs when the following universal needs are met: Belonging, Mastery, Independence, and Generosity [20, 21]. The process occurs in the four major micro-systems of young people's lives: family, school, peer group, and community [22]. The authors of the concept work on the assumption that the human brain has a programme to stimulate resilience, that is, maps that develop Belonging, Independence, Generosity, and Mastery. If the needs of a child are met in these micro-systems, inner strength may later flourish in the young individual, which fosters their bravery and determination. The Circle of Courage furnishes a model for stimulating positive development and mental health in young people. Developed by American researchers, the model was derived from the following sources: a) traditional upbringing of Native American children, b) therapeutic input on disaffected youth, c) contemporary research outcomes from positive psychology [20, 21].

Table 1. **Circle of Courage (based on Brendtro, Brokenleg, & Van Bockern, 2005 [20])**

Resilience Components	Need for Growth
Attachment	Belonging
Autonomy	Independence
Altruism	Generosity
Achievement	Mastery

The concept is represented as a circle consisting of four quadrants that match the four corners of the world. The colours in the circle stand for four major human races and four

elements: earth, wind, fire, and water. The circle describes positive growth in young people with four universal human needs: Belonging, Mastery, Independence, and Generosity, which should be met in exactly the same order.

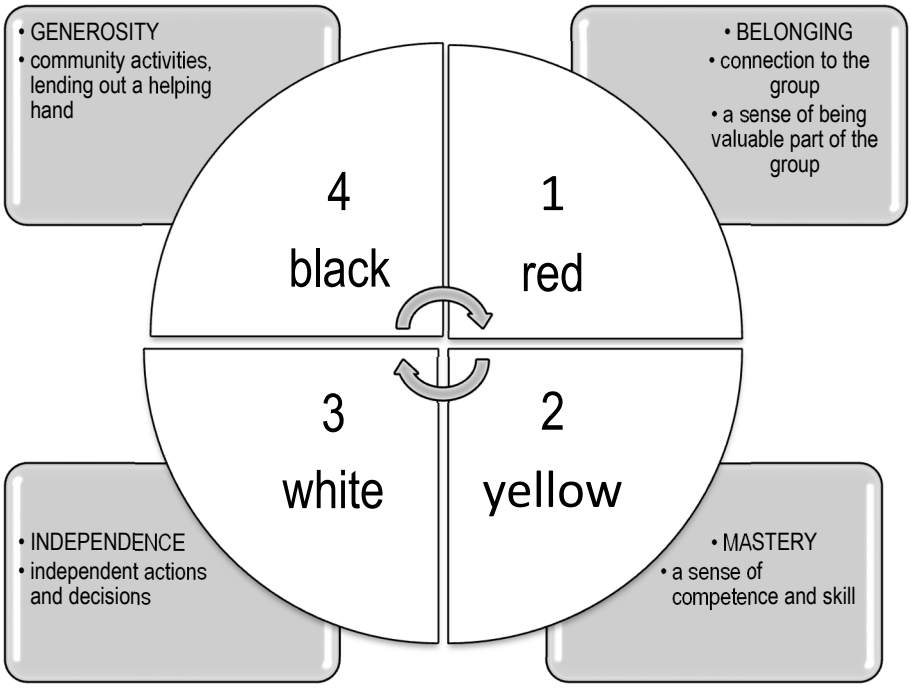

Figure 1. **Circle of Courage — a symbolic representation of the values underlying the concept** (based on Brendtro, Brokenleg, & Van Bockern, 2005 [20]).

The Circle of Courage has inspired a number of proposals that are meant to stimulate resilience through adventure education. The authors of the concept define adventure as a unique and exciting experience that produces uncertain results and is accompanied by a subjective sense of risk [23]. Education through challenge and adventure stimulates processes underlying positive growth. Activities of this kind are based on the assumption that challenge, adventure, and the ability to handle medium stress have a steeling and strengthening effect on young individuals [24, 25]. It is important to distinguish between distress as an experience of negative emotions such as fear or terror and eustress, which involves excitement and curiosity. Those who argue in favour of such activities work on the assumption that people who have positive memories of the situations in which they found a successful solution to the problem are more likely to seek similar experiences in the future. Growth through challenge is often compared to the inoculating agency of a vaccine. Apart from learning through challenge and adventure, young people should also be offered a group of support that creates a warm and friendly atmosphere Researchers argue that people change not because of programmes but because of other people, which goes on to show that social support is one of the major predictive factors for resilience [23].

David Hopkins [26] provides seven criteria for a successful intervention through adventure education. Firstly, activities for children and young people should involve real-life situations. Secondly, children's learning should match their physical, social and cultural needs. Thirdly, each individual and the group as a whole should be presented with challenging requirements. The fourth principle stipulates that empathy be fostered in the group, which alleviates stress. The fifth principle underscores the importance of group processes in developing communication and social skills in young people.

In his sixth suggestion the author emphasises the importance of situation awareness for the formation of aesthetic and creative attitudes. The final suggestion for effective development programmes is that adventure education should be conceived as a metaphor for change and life challenges to provide food for thought to young people.

Exposure to medium risk as a growth-promoting factor

Adventure education, or *Erlebnispädagogik*, adheres to activity-oriented methodology that fosters learning through exposure to physical, mental, and social challenges [27]. The approach is also described as outdoor education, experiential learning, and environmental education. *Erlebnispädagogik* was set up in the 1930s by the German educator Kurt Hahn, who adopted Plato's, Goethe's, and Rousseau's ideas for scouting and youth education [28]. Hahn's followers argue that young people develop by taking part in activities. The first step in the process is to have a taste of adventure outdoors, through sports, with a group, or through risk and challenges. Adventure leads to a lived experience, or *Erlebnis*, which is processed individually. This in turn — through conversation, discussion, and individual reflection — is later transformed into a known experience, or *Erfahrung*. The next step involves development in cognition: new experience becomes part of self-awareness, which extends or changes self-concept and self-esteem [27]. Participants in the process benefit in two ways: through personal growth and social interaction. By facing challenges and risk, they are able to strengthen their sense of agency and self-confidence while developing self-awareness, responsibility, and self-esteem. Participants develop their problem-solving skills, success stimulates their optimism, and physical activity improves their motor skills and coordination; they also learn how to go beyond their limitations (fatigue or fear). Social interaction helps them develop collaborative and leadership skills, as well as the ability to take feedback and respect the needs of other people. One learning that can be derived from adventure education is that all actions or lack thereof have certain consequences. By taking part in interesting activities, young people are encouraged to leave their comfort zone, find out more about their strengths and weaknesses,

and learn health-promoting behaviours. The summaries of the findings on the effects of adventure education highlight significant benefits it may bring to participants in physical, mental, social, and educational areas [23, 29].

Research on resilience often tries to explore whether resilience becomes apparent in successful recovery from massive stress or in the process of overcoming difficulty or is it strengthened through stress [2]. Michael Rutter believes that there is extensive evidence to prove that in certain circumstances the experience of stress or difficulty has a steeling effect on individuals, thereby supporting their resilience to stress in the future [30]. For Rutter, parachuting is a case in point. Repeated parachute jumps reduce subjective stress levels and help in reaching the adaptive level of physiological response. Norman Garmezy [31] describes the strengthening resilience process in his challenge model. The model is based on the assumption that medium risk levels have a hardening effect on individuals and may serve as a preparation for more difficult tasks in the future. If a child develops coping abilities early in his or her life, they will find it easier to face up to life's challenges. With low levels of experienced risk (e.g. due to helicopter parenting), a child may feel unfit to handle challenges and frustration. The absence of appropriate parental care may in turn put too much strain on a child and lead to developmental disorders. The *inoculation model* by Fergus and Zimmerman [32] furnishes yet another understanding of medium risk and its strengthening effect. The quantity and type of positive risk is individual: if it mobilises and adds to the experience of an individual, it is defined as a protective factor; if it causes a disruption to development, it is defined as an excessive risk factor. The model is based on the assumption that risk in little quantities from early on in life has a positive effect: with smaller challenges successfully resolved, a young individual will probably be better equipped to handle much more risk in the years to come. The ability to harness inner resources and ask for social support develops resilience in these cases.

Craig A. Olsson et al. [33] advise much caution when making such generalisations; they say there is little steeling quality to the experience of adversity for young people, who are yet to develop sufficient defence mechanisms. It is difficult to determine the size, quantity, and time of exposure to risk factors that may be considered negative for the individual. A simplistic understanding of the relationship between stress and resilience is likely to ignore defence mechanisms, how they are launched, and their buffering input [33].

Adventure education has been attracting researchers since the 1970s. Adventure education uses a variety of activities, including collaborative games and activities, trips and camping, problem-solving tasks, trust-building activities, as well as courses in kayaking, climbing, horse riding, and mountaineering. Several examples are provided below.

Research by the Australian Outward Bound Program found that 41 young adults taking part in a 22-day wildlife expedition reported an increase in their resilience levels, which were significantly higher after the programme than those reported by the controls [25]. Participants in the expedition were required to join the following activities: planning the provisions, a rope tying class, orienteering, hiking in the scrub, rock climbing, canoeing, a cross-country run, group activity planning sessions, and three-day solitary trips. The findings suggest that progress in resilience building is correlated with expected social support. The study revealed a significant impact of group support on developing individual coping abilities. One interesting outcome that was highlighted by the researchers was a significantly lower level of resilience at pre-test in 14 participants who failed to complete the expedition. They were unable to continue due to health, motivation, and emotional reasons. The researchers conclude that resilience measurements have a predictive capacity that allows them to capture risk factors [25].

The Anty-Bullying Initiative (ABI) from Santa Fe, CA, involved 13 meetings: both in classroom as well as trips outdoors and climbing courses [24]. The goal of the programme was to strengthen resilience in 51 twelve-year-olds. According to the study, girls reported a significantly higher growth in goals, aspirations, and self-agency than boys. The outcome was repeated four months after the programme. The ABI team observed that the finding matches those reported by other researchers, who established that pre-adolescent girls and early-adolescent girls are more willing to ask for social support and have higher inner protective factor levels [24, 34].

Polish experience with adventure education is chiefly that of scouting, camping, sailing, and hiking, the movement starting in the 1920s. A Polish study involving several hundred participants in a sailing school programme called “Szkoła pod Żaglami” found that training sailboat cruises can have a positive educational effect. The positive aspects of sailing experience included: a growth in self-agency, responsibility for others, leadership skills, a growth in self-esteem and self-confidence, the ability to bond with others, and a community experience [35].

Therapeutic effect of medium-risk exposure

Mentally ill patients may benefit from a form of therapy that is somewhere in between stationary treatment such as day or 24-hour care and adventure therapy. Such treatment is provided as therapeutic camps and rehabilitation holidays [36, 37]. For mentally ill patients, they serve as bridges between hospital treatment and the real world. The former is a more structured one. It follows an established programme such as training and leisure activities. Camps are considered part of therapy because they bring desired effects. Patients attending

therapeutic camps find it easier to express their thoughts and feelings and interact with other people; their life skills are also reported to improve. Since patients find this form of treatment attractive and they experience real success in recovery, their levels of activity and motivation to continue the programme of therapy are on the rise. In individual assessment surveys, patients describe therapeutic camps as one of the most promising ways to recovery [36]. The latter, that is, rehabilitation holidays, are focused on relaxation and leisure. Leisurely atmosphere and physical activity are proved to foster recovery. Motor and social activity among patients are significant health-promoting factors.

Eclectic in approach, adventure therapy combines the elements of cognitive-behavioural, family systems, existential and psychodynamic therapies, but its focus is on experience. The method uses adventure activities to provide treatment to people with behavioural and emotional disorders, addicts, and socially maladjusted individuals to provide them with positive experience that helps them to alter their lives. One of the advanced techniques used by adventure therapists is metaphor, which helps clients to discover a relationship between the experience of adventure and real life. Adventure therapy follows suggestions from Milton Erikson (metaphor), Jacob Moreno (drama), Fritz Perls, Virginia Satir, and Carl Whitaker [38]. The rules that govern this particular form of therapy can be summarised in six points that resemble the principles for adventure education formulated by Hopkins [28]. The first rule is to confront the client with various real-life situations that are relevant to their problems. The second is to provide the client with a new perspective and self-reflection through achievements that stand in contrast with their previous experience (e.g. success in climbing against their previous dismal sporting record at school). The third important factor is eustress, or an experience of happiness and contentment that encourage individuals to change. The fourth is to help the client to learn new change-promoting ways to resolve conflict. The fifth stipulates that adventure therapy be a solution-oriented approach. The sixth says that the role of the therapist changes according to the goals of the group and therapy's duration [38]. The therapy is usually provided in three different forms. The first offers climbing courses, paperchase, and explorations that bring about novelty, challenge, and a certain amount of risk. The second is camping and hiking in the woods that extend up to 60 days. A case in point is Wilderness Adventure Therapy (WAT), a therapeutic proposal by Simon Crisp [39]. The therapy is designed as a ten-day intervention by three therapists for six to eight people. The third form involves more stationary ways such as camping, which makes participants organise their lives without any creature comforts, in primitive conditions and scant supplies.

These forms of therapy are recommended for the majority of disorders in children and young people, including emotional and behavioural disorders, addictions, eating and anxiety disorders, depression, bereavement, and post-traumatic stress disorders [40].

The initial finding on the therapeutic effect of the activities outside of hospital was obtained during a camping programme for TB patients organised in a hospital park [41]. The participants reported a rise in their physical and emotional well-being levels. The environment and the novel and unique therapeutic situation were found to be protective factors.

A summer camp for young people with cancer organised by Canadian therapists is also a case in point. The goal of the therapy was to strengthen self-image in young people as a recovery-promoting factor for physical, cognitive, emotional, and spiritual areas [42]. Since young people with cancer were more prone to anxiety and depression than their healthy peers, a particular focus was placed on prevention to improve their quality of life. The therapy brought about a number of positive effects such as making new friends, an opportunity to share cancer-related experience, and finding social support. The participants reported a rise in their higher cognitive and social competence levels, and a better self-esteem [42].

Adventure education is provided for therapeutic purposes to children and young people with poorer resources for coping. The American anti-bullying project used outdoor group activities to strengthen resilience in students affected by peer violence [24]. The project provided therapeutic activities to share coping strategies with young people exposed to bullying, as well as day trips featuring a climbing course. Following a series of 13 meetings, girls involved in the programme reported an increase in goals, aspirations, and self-agency that was significantly higher than that of the controls. An experience of success in a setting other than the classroom became an opportunity for growth for a large number of participants.

One more example of challenge therapy are group meetings for mothers and their adolescent sons. The goal of the meetings was to strengthen parental competence in mothers and provide them with skills that are necessary to prevent family conflict. Mothers would often compare their situation in the home with that of climbing or sharing a rope (providing a back-up and collaboration), which only showed that they were able to notice and reflect upon an upset family dynamic [43].

Adventure education in Poland is rooted in the scouting tradition. The Institute of Paediatrics, Medical Academy of Krakow, used scouting camps to provide such therapy. Children with psychosomatic disorders from alcoholic families took part in summer scouting camps with psychologists. Children spent a three-week camp in groups that provided constructive emotional feedback; they were also required to perform a number of resilience-

promoting tasks and activities, including meeting the challenges of camping, night watch, and cooking, as well as learning new scouting skills and hiking in the woods. Two editions of the programme provided therapy to 10 children, who joined a regular scouting camp in the summer. The participants experienced a drop in their psychosomatic symptoms (night-time incontinence, stutter, and ticks), an improvement in well-being, and a rise in bravery and resilience levels [44].

One example of socio-therapeutic programmes using adventure therapy is a project called "Wzbij się wyżej" [Up to the Skies], which combined workshops and therapy to benefit 45 children and young people from the Saint Brother Albert Centre for Youth Therapy in Szczecin. The goal of the project was to fight social exclusion by instilling active attitudes in young people. The project provided ice-breaking and therapeutic activities such as art therapy, aggression replacement training, and outdoor education (kayaking, sailing, climbing, cycling, windsurfing, rowing a boat, and raft building). In their assessment surveys, the trainers and therapists involved in the programme observed that young people improved a number of their social competences, including collaboration in the peer group and team leadership, conscious building and maintaining relationships with others and supporting others, the ability to speak about their own emotions and difficulties, communication skills, conflict management, and creative thinking [45].

The efficacy of adventure therapy has been measured by several meta-analyses. Some of the outcomes are provided below.

The overview of 197 studies on the subject (2,908 participants, 206 groups) demonstrates that the short-term effect of such therapy (Hedges' g = 0.47) is better than for other forms of treatment (0.14) or no treatment (0,08) in the controls [46].

The meta-analysis of 26 therapeutic interventions provided to vulnerable young people demonstrated a significant improvement reported by the observers (g = 1.38) as against poorer improvement in young people who did not take part in the outdoor programme (g = 0.74). Young people were assessed for their behaviour and the efficacy of their daily functioning [47].

The meta-analysis of 36 adventure therapy projects (paid by the participants) demonstrated a moderate effect, half a standard deviation for each of the six categories: self-esteem ((g = 0.49), locus of control (g = 0.55), observed behaviour (g = 0.75), self-agency (g = 0.46), clinical symptoms (g = 0.50), and interpersonal factors (g = 0.54 [38].

Conclusion

By way of summary, the experience of medium-risk situations is important for several areas that foster positive growth. The authors of the resilience concept agree that social competence, sense of agency, self-regulation, and optimism are protective factors for mental health [12, 48–51]. All these aspects of young people's functioning can develop in situations that involve a certain amount of risk. Arguments in favour of such experience are provided by the findings from assessment surveys completed by both therapists and their clients and the meta-analysis of the programmes. Such therapy is a practical application of theoretical concepts offered by Rutter, Garmezy, or Fergus & Zimmerman, who explain mechanisms underlying the formation of resilience [30–32].

The examples provided in the paper and the outcomes of therapeutic practice that confronts patients with medium-risk situations allow the following conclusions:

1. Challenges mounted by new, attractive, and demanding situations have a strengthening effect on individuals. Adventure encourages and helps individuals to transcend themselves.
2. Overcoming minor difficulties has a steeling effect, and it helps individuals to learn how to cope with larger threats. Since solving a problem brings success and happiness, this is likely to recur in the future.
3. Positive psychology would interpret the phenomenon in terms of building inner resources (inner strength) or developing oneself (virtues).
4. Adventure education and therapy seem to offer attractive ways to strengthen resilience in children, young people, and adults.

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